5C.3.2.1 New Melones Storage

Table 5C.3.2.1.1 New Melones Reservoir, End of Month Storage

No Action Alternative

| Statistic | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,765 | 1,759 | 1,823 | 1,880 | 1,931 | 1,980 | 1,945 | 2,052 | 2,075 | 1,978 | 1,869 | 1,805 |
| 20\% | 1,612 | 1,631 | 1,647 | 1,687 | 1,768 | 1,799 | 1,834 | 1,901 | 1,876 | 1,798 | 1,691 | 1,633 |
| 30\% | 1,533 | 1,534 | 1,556 | 1,598 | 1,686 | 1,729 | 1,686 | 1,745 | 1,786 | 1,707 | 1,605 | 1,556 |
| 40\% | 1,271 | 1,274 | 1,432 | 1,514 | 1,594 | 1,618 | 1,592 | 1,533 | 1,539 | 1,433 | 1,333 | 1,273 |
| 50\% | 1,121 | 1,127 | 1,154 | 1,307 | 1,436 | 1,535 | 1,461 | 1,444 | 1,392 | 1,283 | 1,190 | 1,156 |
| 60\% | 1,024 | 1,043 | 1,080 | 1,146 | 1,199 | 1,273 | 1,278 | 1,335 | 1,277 | 1,199 | 1,102 | 1,054 |
| 70\% | 882 | 911 | 986 | 1,015 | 1,038 | 1,057 | 1,080 | 1,090 | 1,087 | 994 | 910 | 868 |
| 80\% | 646 | 658 | 684 | 684 | 735 | 808 | 835 | 878 | 872 | 808 | 733 | 693 |
| 90\% | 430 | 435 | 440 | 488 | 541 | 569 | 574 | 586 | 630 | 566 | 507 | 473 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,132 | 1,142 | 1,180 | 1,237 | 1,305 | 1,348 | 1,337 | 1,373 | 1,381 | 1,300 | 1,208 | 1,159 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,379 | 1,390 | 1,454 | 1,562 | 1,666 | 1,724 | 1,758 | 1,878 | 1,968 | 1,890 | 1,773 | 1,703 |
| Above Normal (24\%) | 1,029 | 1,060 | 1,125 | 1,214 | 1,317 | 1,406 | 1,413 | 1,484 | 1,467 | 1,372 | 1,277 | 1,232 |
| Below Normal (10\%) | 1,294 | 1,305 | 1,326 | 1,351 | 1,413 | 1,438 | 1,390 | 1,383 | 1,359 | 1,268 | 1,175 | 1,133 |
| Dry (16\%) | 1,094 | 1,094 | 1,106 | 1,121 | 1,156 | 1,188 | 1,154 | 1,132 | 1,087 | 997 | 914 | 871 |
| Critical (27\%) | 624 | 623 | 638 | 645 | 661 | 656 | 602 | 554 | 526 | 476 | 431 | 408 |

Revised Alternative 1

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,879 | 1,859 | 1,935 | 1,954 | 1,970 | 2,030 | 2,043 | 2,167 | 2,141 | 2,080 | 1,971 | 1,911 |
| 20\% | 1,775 | 1,776 | 1,788 | 1,823 | 1,966 | 1,979 | 1,955 | 1,999 | 2,045 | 1,947 | 1,838 | 1,781 |
| 30\% | 1,666 | 1,660 | 1,703 | 1,764 | 1,807 | 1,896 | 1,885 | 1,955 | 1,912 | 1,817 | 1,712 | 1,661 |
| 40\% | 1,508 | 1,514 | 1,596 | 1,693 | 1,771 | 1,801 | 1,788 | 1,756 | 1,711 | 1,634 | 1,541 | 1,496 |
| 50\% | 1,364 | 1,362 | 1,396 | 1,478 | 1,611 | 1,671 | 1,625 | 1,668 | 1,621 | 1,512 | 1,417 | 1,360 |
| 60\% | 1,257 | 1,260 | 1,320 | 1,353 | 1,393 | 1,474 | 1,492 | 1,532 | 1,474 | 1,381 | 1,300 | 1,249 |
| 70\% | 1,074 | 1,086 | 1,146 | 1,224 | 1,231 | 1,230 | 1,250 | 1,343 | 1,299 | 1,204 | 1,111 | 1,055 |
| 80\% | 843 | 824 | 852 | 894 | 999 | 1,049 | 1,078 | 1,094 | 1,039 | 975 | 902 | 861 |
| 90\% | 705 | 711 | 716 | 724 | 802 | 806 | 749 | 817 | 842 | 775 | 722 | 718 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,316 | 1,321 | 1,355 | 1,411 | 1,470 | 1,522 | 1,522 | 1,564 | 1,559 | 1,470 | 1,373 | 1,319 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,534 | 1,539 | 1,596 | 1,700 | 1,784 | 1,864 | 1,901 | 2,027 | 2,087 | 2,001 | 1,880 | 1,802 |
| Above Normal (24\%) | 1,225 | 1,252 | 1,315 | 1,405 | 1,501 | 1,594 | 1,613 | 1,686 | 1,664 | 1,566 | 1,468 | 1,420 |
| Below Normal (10\%) | 1,479 | 1,484 | 1,500 | 1,522 | 1,576 | 1,605 | 1,579 | 1,581 | 1,555 | 1,457 | 1,359 | 1,313 |
| Dry (16\%) | 1,285 | 1,280 | 1,287 | 1,303 | 1,335 | 1,369 | 1,351 | 1,338 | 1,291 | 1,197 | 1,112 | 1,067 |
| Critical (27\%) | 845 | 843 | 858 | 869 | 887 | 885 | 837 | 789 | 751 | 682 | 617 | 587 |

Revised Alternative 1 minus No Action Alternative

| Statistic | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 6\% | 6\% | 6\% | 4\% | 2\% | 3\% | 5\% | 6\% | 3\% | 5\% | 5\% | 6\% |
| 20\% | 10\% | 9\% | 9\% | 8\% | 11\% | 10\% | 7\% | 5\% | 9\% | 8\% | 9\% | 9\% |
| 30\% | 9\% | 8\% | 9\% | 10\% | 7\% | 10\% | 12\% | 12\% | 7\% | 6\% | 7\% | 7\% |
| 40\% | 19\% | 19\% | 11\% | 12\% | 11\% | 11\% | 12\% | 15\% | 11\% | 14\% | 16\% | 18\% |
| 50\% | 22\% | 21\% | 21\% | 13\% | 12\% | 9\% | 11\% | 15\% | 16\% | 18\% | 19\% | 18\% |
| 60\% | 23\% | 21\% | 22\% | 18\% | 16\% | 16\% | 17\% | 15\% | 15\% | 15\% | 18\% | 18\% |
| 70\% | 22\% | 19\% | 16\% | 21\% | 18\% | 16\% | 16\% | 23\% | 19\% | 21\% | 22\% | 21\% |
| 80\% | 31\% | 25\% | 25\% | 31\% | 36\% | 30\% | 29\% | 25\% | 19\% | 21\% | 23\% | 24\% |
| 90\% | 64\% | 63\% | 63\% | 48\% | 48\% | 42\% | 30\% | 39\% | 34\% | 37\% | 42\% | 52\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 16\% | 16\% | 15\% | 14\% | 13\% | 13\% | 14\% | 14\% | 13\% | 13\% | 14\% | 14\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 11\% | 11\% | 10\% | 9\% | 7\% | 8\% | 8\% | 8\% | 6\% | 6\% | 6\% | 6\% |
| Above Normal (24\%) | 19\% | 18\% | 17\% | 16\% | 14\% | 13\% | 14\% | 14\% | 13\% | 14\% | 15\% | 15\% |
| Below Normal (10\%) | 14\% | 14\% | 13\% | 13\% | 12\% | 12\% | 14\% | 14\% | 14\% | 15\% | 16\% | 16\% |
| Dry (16\%) | 17\% | 17\% | 16\% | 16\% | 15\% | 15\% | 17\% | 18\% | 19\% | 20\% | 22\% | 23\% |
| Critical (27\%) | 36\% | 35\% | 35\% | 35\% | 34\% | 35\% | 39\% | 43\% | 43\% | 43\% | 43\% | 44\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.1.2 New Melones Reservoir, End of Month Storage

Revised Second Basis of Comparison

| Statistic | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,879 | 1,859 | 1,935 | 1,954 | 1,970 | 2,030 | 2,043 | 2,167 | 2,141 | 2,080 | 1,971 | 1,911 |
| 20\% | 1,775 | 1,776 | 1,788 | 1,823 | 1,966 | 1,979 | 1,955 | 1,999 | 2,045 | 1,947 | 1,838 | 1,781 |
| 30\% | 1,666 | 1,660 | 1,703 | 1,764 | 1,807 | 1,896 | 1,885 | 1,955 | 1,912 | 1,817 | 1,712 | 1,661 |
| 40\% | 1,508 | 1,514 | 1,596 | 1,693 | 1,771 | 1,801 | 1,788 | 1,756 | 1,711 | 1,634 | 1,541 | 1,496 |
| 50\% | 1,364 | 1,362 | 1,396 | 1,478 | 1,611 | 1,671 | 1,625 | 1,668 | 1,621 | 1,512 | 1,417 | 1,360 |
| 60\% | 1,257 | 1,260 | 1,320 | 1,353 | 1,393 | 1,474 | 1,492 | 1,532 | 1,474 | 1,381 | 1,300 | 1,249 |
| 70\% | 1,074 | 1,086 | 1,146 | 1,224 | 1,231 | 1,230 | 1,250 | 1,343 | 1,299 | 1,204 | 1,111 | 1,055 |
| 80\% | 843 | 824 | 852 | 894 | 999 | 1,049 | 1,078 | 1,094 | 1,039 | 975 | 902 | 861 |
| 90\% | 705 | 711 | 716 | 724 | 802 | 806 | 749 | 817 | 842 | 775 | 722 | 718 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,316 | 1,321 | 1,355 | 1,411 | 1,470 | 1,522 | 1,522 | 1,564 | 1,559 | 1,470 | 1,373 | 1,319 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,534 | 1,539 | 1,596 | 1,700 | 1,784 | 1,864 | 1,901 | 2,027 | 2,087 | 2,001 | 1,880 | 1,802 |
| Above Normal (24\%) | 1,225 | 1,252 | 1,315 | 1,405 | 1,501 | 1,594 | 1,613 | 1,686 | 1,664 | 1,566 | 1,468 | 1,420 |
| Below Normal (10\%) | 1,479 | 1,484 | 1,500 | 1,522 | 1,576 | 1,605 | 1,579 | 1,581 | 1,555 | 1,457 | 1,359 | 1,313 |
| Dry (16\%) | 1,285 | 1,280 | 1,287 | 1,303 | 1,335 | 1,369 | 1,351 | 1,338 | 1,291 | 1,197 | 1,112 | 1,067 |
| Critical (27\%) | 845 | 843 | 858 | 869 | 887 | 885 | 837 | 789 | 751 | 682 | 617 | 587 |


|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,765 | 1,759 | 1,823 | 1,880 | 1,931 | 1,980 | 1,945 | 2,052 | 2,075 | 1,978 | 1,869 | 1,805 |
| 20\% | 1,612 | 1,631 | 1,647 | 1,687 | 1,768 | 1,799 | 1,834 | 1,901 | 1,876 | 1,798 | 1,691 | 1,633 |
| 30\% | 1,533 | 1,534 | 1,556 | 1,598 | 1,686 | 1,729 | 1,686 | 1,745 | 1,786 | 1,707 | 1,605 | 1,556 |
| 40\% | 1,271 | 1,274 | 1,432 | 1,514 | 1,594 | 1,618 | 1,592 | 1,533 | 1,539 | 1,433 | 1,333 | 1,273 |
| 50\% | 1,121 | 1,127 | 1,154 | 1,307 | 1,436 | 1,535 | 1,461 | 1,444 | 1,392 | 1,283 | 1,190 | 1,156 |
| 60\% | 1,024 | 1,043 | 1,080 | 1,146 | 1,199 | 1,273 | 1,278 | 1,335 | 1,277 | 1,199 | 1,102 | 1,054 |
| 70\% | 882 | 911 | 986 | 1,015 | 1,038 | 1,057 | 1,080 | 1,090 | 1,087 | 994 | 910 | 868 |
| 80\% | 646 | 658 | 684 | 684 | 735 | 808 | 835 | 878 | 872 | 808 | 733 | 693 |
| 90\% | 430 | 435 | 440 | 488 | 541 | 569 | 574 | 586 | 630 | 566 | 507 | 473 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,132 | 1,142 | 1,180 | 1,237 | 1,305 | 1,348 | 1,337 | 1,373 | 1,381 | 1,300 | 1,208 | 1,159 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,379 | 1,390 | 1,454 | 1,562 | 1,666 | 1,724 | 1,758 | 1,878 | 1,968 | 1,890 | 1,773 | 1,703 |
| Above Normal (24\%) | 1,029 | 1,060 | 1,125 | 1,214 | 1,317 | 1,406 | 1,413 | 1,484 | 1,467 | 1,372 | 1,277 | 1,232 |
| Below Normal (10\%) | 1,294 | 1,305 | 1,326 | 1,351 | 1,413 | 1,438 | 1,390 | 1,383 | 1,359 | 1,268 | 1,175 | 1,133 |
| Dry (16\%) | 1,094 | 1,094 | 1,106 | 1,121 | 1,156 | 1,188 | 1,154 | 1,132 | 1,087 | 997 | 914 | 871 |
| Critical (27\%) | 624 | 623 | 638 | 645 | 661 | 656 | 602 | 554 | 526 | 476 | 431 | 408 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -6\% | -5\% | -6\% | -4\% | -2\% | -2\% | -5\% | -5\% | -3\% | -5\% | -5\% | -6\% |
| 20\% | -9\% | -8\% | -8\% | -7\% | -10\% | -9\% | -6\% | -5\% | -8\% | -8\% | -8\% | -8\% |
| 30\% | -8\% | -8\% | -9\% | -9\% | -7\% | -9\% | -11\% | -11\% | -7\% | -6\% | -6\% | -6\% |
| 40\% | -16\% | -16\% | -10\% | -11\% | -10\% | -10\% | -11\% | -13\% | -10\% | -12\% | -14\% | -15\% |
| 50\% | -18\% | -17\% | -17\% | -12\% | -11\% | -8\% | -10\% | -13\% | -14\% | -15\% | -16\% | -15\% |
| 60\% | -19\% | -17\% | -18\% | -15\% | -14\% | -14\% | -14\% | -13\% | -13\% | -13\% | -15\% | -16\% |
| 70\% | -18\% | -16\% | -14\% | -17\% | -16\% | -14\% | -14\% | -19\% | -16\% | -17\% | -18\% | -18\% |
| 80\% | -23\% | -20\% | -20\% | -23\% | -26\% | -23\% | -23\% | -20\% | -16\% | -17\% | -19\% | -20\% |
| 90\% | -39\% | -39\% | -39\% | -33\% | -33\% | -29\% | -23\% | -28\% | -25\% | -27\% | -30\% | -34\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -14\% | -14\% | -13\% | -12\% | -11\% | -11\% | -12\% | -12\% | -11\% | -12\% | -12\% | -12\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -10\% | -10\% | -9\% | -8\% | -7\% | -8\% | -8\% | -7\% | -6\% | -6\% | -6\% | -5\% |
| Above Normal (24\%) | -16\% | -15\% | -14\% | -14\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -13\% | -13\% |
| Below Normal (10\%) | -12\% | -12\% | -12\% | -11\% | -10\% | -10\% | -12\% | -13\% | -13\% | -13\% | -14\% | -14\% |
| Dry (16\%) | -15\% | -15\% | -14\% | -14\% | -13\% | -13\% | -15\% | -15\% | -16\% | -17\% | -18\% | -18\% |
| Critical (27\%) | -26\% | -26\% | -26\% | -26\% | -25\% | -26\% | -28\% | -30\% | -30\% | -30\% | -30\% | -30\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.1.3 New Melones Reservoir, End of Month Storage

Revised Second Basis of Comparison

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,879 | 1,859 | 1,935 | 1,954 | 1,970 | 2,030 | 2,043 | 2,167 | 2,141 | 2,080 | 1,971 | 1,911 |
| 20\% | 1,775 | 1,776 | 1,788 | 1,823 | 1,966 | 1,979 | 1,955 | 1,999 | 2,045 | 1,947 | 1,838 | 1,781 |
| 30\% | 1,666 | 1,660 | 1,703 | 1,764 | 1,807 | 1,896 | 1,885 | 1,955 | 1,912 | 1,817 | 1,712 | 1,661 |
| 40\% | 1,508 | 1,514 | 1,596 | 1,693 | 1,771 | 1,801 | 1,788 | 1,756 | 1,711 | 1,634 | 1,541 | 1,496 |
| 50\% | 1,364 | 1,362 | 1,396 | 1,478 | 1,611 | 1,671 | 1,625 | 1,668 | 1,621 | 1,512 | 1,417 | 1,360 |
| 60\% | 1,257 | 1,260 | 1,320 | 1,353 | 1,393 | 1,474 | 1,492 | 1,532 | 1,474 | 1,381 | 1,300 | 1,249 |
| 70\% | 1,074 | 1,086 | 1,146 | 1,224 | 1,231 | 1,230 | 1,250 | 1,343 | 1,299 | 1,204 | 1,111 | 1,055 |
| 80\% | 843 | 824 | 852 | 894 | 999 | 1,049 | 1,078 | 1,094 | 1,039 | 975 | 902 | 861 |
| 90\% | 705 | 711 | 716 | 724 | 802 | 806 | 749 | 817 | 842 | 775 | 722 | 718 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,316 | 1,321 | 1,355 | 1,411 | 1,470 | 1,522 | 1,522 | 1,564 | 1,559 | 1,470 | 1,373 | 1,319 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,534 | 1,539 | 1,596 | 1,700 | 1,784 | 1,864 | 1,901 | 2,027 | 2,087 | 2,001 | 1,880 | 1,802 |
| Above Normal (24\%) | 1,225 | 1,252 | 1,315 | 1,405 | 1,501 | 1,594 | 1,613 | 1,686 | 1,664 | 1,566 | 1,468 | 1,420 |
| Below Normal (10\%) | 1,479 | 1,484 | 1,500 | 1,522 | 1,576 | 1,605 | 1,579 | 1,581 | 1,555 | 1,457 | 1,359 | 1,313 |
| Dry (16\%) | 1,285 | 1,280 | 1,287 | 1,303 | 1,335 | 1,369 | 1,351 | 1,338 | 1,291 | 1,197 | 1,112 | 1,067 |
| Critical (27\%) | 845 | 843 | 858 | 869 | 887 | 885 | 837 | 789 | 751 | 682 | 617 | 587 |

Alternative 3

| Statistic | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,967 | 1,954 | 1,970 | 1,970 | 1,970 | 2,030 | 2,062 | 2,198 | 2,284 | 2,209 | 2,103 | 2,000 |
| 20\% | 1,901 | 1,905 | 1,913 | 1,911 | 1,970 | 2,026 | 1,988 | 2,021 | 2,154 | 2,055 | 1,955 | 1,902 |
| 30\% | 1,729 | 1,727 | 1,790 | 1,857 | 1,925 | 1,975 | 1,910 | 1,972 | 1,983 | 1,877 | 1,785 | 1,736 |
| 40\% | 1,582 | 1,596 | 1,668 | 1,775 | 1,851 | 1,884 | 1,838 | 1,826 | 1,796 | 1,697 | 1,601 | 1,546 |
| 50\% | 1,427 | 1,416 | 1,439 | 1,556 | 1,660 | 1,719 | 1,674 | 1,721 | 1,675 | 1,561 | 1,460 | 1,409 |
| 60\% | 1,308 | 1,316 | 1,318 | 1,366 | 1,426 | 1,494 | 1,488 | 1,529 | 1,525 | 1,432 | 1,335 | 1,289 |
| 70\% | 1,049 | 1,073 | 1,187 | 1,210 | 1,289 | 1,269 | 1,265 | 1,343 | 1,276 | 1,180 | 1,092 | 1,043 |
| 80\% | 875 | 862 | 919 | 957 | 1,020 | 1,099 | 1,056 | 1,121 | 1,071 | 1,001 | 938 | 907 |
| 90\% | 635 | 646 | 646 | 681 | 779 | 803 | 734 | 731 | 835 | 756 | 682 | 639 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,347 | 1,351 | 1,382 | 1,436 | 1,491 | 1,541 | 1,534 | 1,580 | 1,595 | 1,506 | 1,408 | 1,353 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,562 | 1,567 | 1,618 | 1,720 | 1,792 | 1,871 | 1,906 | 2,049 | 2,146 | 2,057 | 1,934 | 1,855 |
| Above Normal (24\%) | 1,269 | 1,295 | 1,356 | 1,442 | 1,530 | 1,620 | 1,634 | 1,713 | 1,720 | 1,627 | 1,529 | 1,481 |
| Below Normal (10\%) | 1,530 | 1,536 | 1,550 | 1,570 | 1,620 | 1,650 | 1,614 | 1,617 | 1,599 | 1,501 | 1,403 | 1,357 |
| Dry (16\%) | 1,327 | 1,320 | 1,326 | 1,342 | 1,378 | 1,409 | 1,380 | 1,360 | 1,319 | 1,224 | 1,137 | 1,091 |
| Critical (27\%) | 828 | 824 | 836 | 846 | 866 | 860 | 803 | 751 | 719 | 653 | 593 | 563 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 5\% | 5\% | 2\% | 1\% | 0\% | 0\% | 1\% | 1\% | 7\% | 6\% | 7\% | 5\% |
| 20\% | 7\% | 7\% | 7\% | 5\% | 0\% | 2\% | 2\% | 1\% | 5\% | 6\% | 6\% | 7\% |
| 30\% | 4\% | 4\% | 5\% | 5\% | 7\% | 4\% | 1\% | 1\% | 4\% | 3\% | 4\% | 5\% |
| 40\% | 5\% | 5\% | 5\% | 5\% | 5\% | 5\% | 3\% | 4\% | 5\% | 4\% | 4\% | 3\% |
| 50\% | 5\% | 4\% | 3\% | 5\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 4\% |
| 60\% | 4\% | 4\% | 0\% | 1\% | 2\% | 1\% | 0\% | 0\% | 4\% | 4\% | 3\% | 3\% |
| 70\% | -2\% | -1\% | 4\% | -1\% | 5\% | 3\% | 1\% | 0\% | -2\% | -2\% | -2\% | -1\% |
| 80\% | 4\% | 5\% | 8\% | 7\% | 2\% | 5\% | -2\% | 2\% | 3\% | 3\% | 4\% | 5\% |
| 90\% | -10\% | -9\% | -10\% | -6\% | -3\% | 0\% | -2\% | -11\% | -1\% | -2\% | -6\% | -11\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 1\% | 1\% | 2\% | 2\% | 3\% | 3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2\% | 2\% | 1\% | 1\% | 0\% | 0\% | 0\% | 1\% | 3\% | 3\% | 3\% | 3\% |
| Above Normal (24\%) | 4\% | 3\% | 3\% | 3\% | 2\% | 2\% | 1\% | 2\% | 3\% | 4\% | 4\% | 4\% |
| Below Normal (10\%) | 3\% | 4\% | 3\% | 3\% | 3\% | 3\% | 2\% | 2\% | 3\% | 3\% | 3\% | 3\% |
| Dry (16\%) | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Critical (27\%) | -2\% | -2\% | -3\% | -3\% | -2\% | -3\% | -4\% | -5\% | -4\% | -4\% | -4\% | -4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.1.4 New Melones Reservoir, End of Month Storage
Revised Second Basis of Comparison

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,879 | 1,859 | 1,935 | 1,954 | 1,970 | 2,030 | 2,043 | 2,167 | 2,141 | 2,080 | 1,971 | 1,911 |
| 20\% | 1,775 | 1,776 | 1,788 | 1,823 | 1,966 | 1,979 | 1,955 | 1,999 | 2,045 | 1,947 | 1,838 | 1,781 |
| 30\% | 1,666 | 1,660 | 1,703 | 1,764 | 1,807 | 1,896 | 1,885 | 1,955 | 1,912 | 1,817 | 1,712 | 1,661 |
| 40\% | 1,508 | 1,514 | 1,596 | 1,693 | 1,771 | 1,801 | 1,788 | 1,756 | 1,711 | 1,634 | 1,541 | 1,496 |
| 50\% | 1,364 | 1,362 | 1,396 | 1,478 | 1,611 | 1,671 | 1,625 | 1,668 | 1,621 | 1,512 | 1,417 | 1,360 |
| 60\% | 1,257 | 1,260 | 1,320 | 1,353 | 1,393 | 1,474 | 1,492 | 1,532 | 1,474 | 1,381 | 1,300 | 1,249 |
| 70\% | 1,074 | 1,086 | 1,146 | 1,224 | 1,231 | 1,230 | 1,250 | 1,343 | 1,299 | 1,204 | 1,111 | 1,055 |
| 80\% | 843 | 824 | 852 | 894 | 999 | 1,049 | 1,078 | 1,094 | 1,039 | 975 | 902 | 861 |
| 90\% | 705 | 711 | 716 | 724 | 802 | 806 | 749 | 817 | 842 | 775 | 722 | 718 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,316 | 1,321 | 1,355 | 1,411 | 1,470 | 1,522 | 1,522 | 1,564 | 1,559 | 1,470 | 1,373 | 1,319 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,534 | 1,539 | 1,596 | 1,700 | 1,784 | 1,864 | 1,901 | 2,027 | 2,087 | 2,001 | 1,880 | 1,802 |
| Above Normal (24\%) | 1,225 | 1,252 | 1,315 | 1,405 | 1,501 | 1,594 | 1,613 | 1,686 | 1,664 | 1,566 | 1,468 | 1,420 |
| Below Normal (10\%) | 1,479 | 1,484 | 1,500 | 1,522 | 1,576 | 1,605 | 1,579 | 1,581 | 1,555 | 1,457 | 1,359 | 1,313 |
| Dry (16\%) | 1,285 | 1,280 | 1,287 | 1,303 | 1,335 | 1,369 | 1,351 | 1,338 | 1,291 | 1,197 | 1,112 | 1,067 |
| Critical (27\%) | 845 | 843 | 858 | 869 | 887 | 885 | 837 | 789 | 751 | 682 | 617 | 587 |

Alternative 5

| Statistic | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,765 | 1,759 | 1,831 | 1,881 | 1,949 | 1,969 | 1,908 | 2,012 | 2,117 | 2,013 | 1,900 | 1,826 |
| 20\% | 1,588 | 1,587 | 1,601 | 1,626 | 1,782 | 1,794 | 1,752 | 1,844 | 1,816 | 1,740 | 1,631 | 1,571 |
| 30\% | 1,468 | 1,459 | 1,490 | 1,544 | 1,630 | 1,672 | 1,679 | 1,693 | 1,721 | 1,633 | 1,531 | 1,489 |
| 40\% | 1,249 | 1,252 | 1,347 | 1,437 | 1,522 | 1,573 | 1,512 | 1,494 | 1,505 | 1,405 | 1,297 | 1,242 |
| 50\% | 1,040 | 1,058 | 1,142 | 1,227 | 1,437 | 1,455 | 1,393 | 1,357 | 1,289 | 1,190 | 1,100 | 1,074 |
| 60\% | 976 | 997 | 1,023 | 1,072 | 1,134 | 1,161 | 1,159 | 1,246 | 1,218 | 1,130 | 1,032 | 983 |
| 70\% | 766 | 802 | 855 | 907 | 938 | 973 | 1,006 | 978 | 991 | 900 | 821 | 783 |
| 80\% | 554 | 553 | 620 | 621 | 623 | 697 | 651 | 721 | 761 | 686 | 617 | 587 |
| 90\% | 285 | 298 | 299 | 377 | 429 | 449 | 386 | 452 | 492 | 423 | 349 | 308 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,063 | 1,073 | 1,112 | 1,169 | 1,239 | 1,284 | 1,265 | 1,287 | 1,299 | 1,221 | 1,134 | 1,086 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,309 | 1,321 | 1,388 | 1,496 | 1,602 | 1,668 | 1,704 | 1,812 | 1,906 | 1,833 | 1,722 | 1,653 |
| Above Normal (24\%) | 983 | 1,014 | 1,079 | 1,168 | 1,271 | 1,361 | 1,363 | 1,413 | 1,396 | 1,302 | 1,207 | 1,162 |
| Below Normal (10\%) | 1,210 | 1,220 | 1,242 | 1,267 | 1,329 | 1,354 | 1,298 | 1,276 | 1,254 | 1,163 | 1,071 | 1,028 |
| Dry (16\%) | 1,018 | 1,018 | 1,030 | 1,045 | 1,081 | 1,114 | 1,066 | 1,031 | 990 | 903 | 823 | 781 |
| Critical (27\%) | 558 | 559 | 570 | 578 | 597 | 591 | 506 | 449 | 433 | 391 | 355 | 336 |

Alternative 5 minus Revised Second Basis of Comparison

|  | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -6\% | -5\% | -5\% | -4\% | -1\% | -3\% | -7\% | -7\% | -1\% | -3\% | -4\% | -4\% |
| 20\% | -11\% | -11\% | -10\% | -11\% | -9\% | -9\% | -10\% | -8\% | -11\% | -11\% | -11\% | -12\% |
| 30\% | -12\% | -12\% | -12\% | -12\% | -10\% | -12\% | -11\% | -13\% | -10\% | -10\% | -11\% | -10\% |
| 40\% | -17\% | -17\% | -16\% | -15\% | -14\% | -13\% | -15\% | -15\% | -12\% | -14\% | -16\% | -17\% |
| 50\% | -24\% | -22\% | -18\% | -17\% | -11\% | -13\% | -14\% | -19\% | -21\% | -21\% | -22\% | -21\% |
| 60\% | -22\% | -21\% | -23\% | -21\% | -19\% | -21\% | -22\% | -19\% | -17\% | -18\% | -21\% | -21\% |
| 70\% | -29\% | -26\% | -25\% | -26\% | -24\% | -21\% | -20\% | -27\% | -24\% | -25\% | -26\% | -26\% |
| 80\% | -34\% | -33\% | -27\% | -31\% | -38\% | -34\% | -40\% | -34\% | -27\% | -30\% | -32\% | -32\% |
| 90\% | -60\% | -58\% | -58\% | -48\% | -47\% | -44\% | -48\% | -45\% | -42\% | -45\% | -52\% | -57\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -19\% | -19\% | -18\% | -17\% | -16\% | -16\% | -17\% | -18\% | -17\% | -17\% | -17\% | -18\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -15\% | -14\% | -13\% | -12\% | -10\% | -11\% | -10\% | -11\% | -9\% | -8\% | -8\% | -8\% |
| Above Normal (24\%) | -20\% | -19\% | -18\% | -17\% | -15\% | -15\% | -16\% | -16\% | -16\% | -17\% | -18\% | -18\% |
| Below Normal (10\%) | -18\% | -18\% | -17\% | -17\% | -16\% | -16\% | -18\% | -19\% | -19\% | -20\% | -21\% | -22\% |
| Dry (16\%) | -21\% | -20\% | -20\% | -20\% | -19\% | -19\% | -21\% | -23\% | -23\% | -25\% | -26\% | -27\% |
| Critical (27\%) | -34\% | -34\% | -34\% | -33\% | -33\% | -33\% | -39\% | -43\% | -42\% | -43\% | -43\% | -43\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.2 New Melones Elevation

Table 5C.3.2.2.1 New Melones Reservoir, End of Month Elevation

No Action Alternative

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,029 | 1,028 | 1,035 | 1,040 | 1,046 | 1,089 | 1,047 | 1,094 | 1,095 | 1,085 | 1,039 | 1,033 |
| 20\% | 1,013 | 1,015 | 1,017 | 1,021 | 1,029 | 1,032 | 1,036 | 1,043 | 1,040 | 1,032 | 1,021 | 1,016 |
| 30\% | 1,006 | 1,006 | 1,008 | 1,012 | 1,021 | 1,025 | 1,021 | 1,027 | 1,031 | 1,023 | 1,013 | 1,008 |
| 40\% | 975 | 976 | 995 | 1,004 | 1,012 | 1,014 | 1,011 | 1,006 | 1,006 | 995 | 983 | 976 |
| 50\% | 956 | 957 | 960 | 980 | 996 | 1,006 | 998 | 997 | 991 | 977 | 965 | 960 |
| 60\% | 943 | 946 | 950 | 959 | 966 | 976 | 976 | 984 | 976 | 966 | 953 | 947 |
| 70\% | 925 | 928 | 938 | 942 | 945 | 947 | 950 | 952 | 951 | 939 | 928 | 923 |
| 80\% | 879 | 881 | 887 | 887 | 897 | 912 | 918 | 924 | 923 | 912 | 897 | 888 |
| 90\% | 835 | 836 | 837 | 847 | 857 | 863 | 864 | 867 | 876 | 863 | 850 | 843 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 944 | 946 | 953 | 962 | 972 | 979 | 976 | 981 | 981 | 969 | 957 | 950 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 983 | 986 | 998 | 1,014 | 1,027 | 1,037 | 1,036 | 1,054 | 1,062 | 1,052 | 1,038 | 1,030 |
| Above Normal (24\%) | 932 | 937 | 945 | 960 | 974 | 986 | 988 | 997 | 996 | 985 | 973 | 967 |
| Below Normal (10\%) | 968 | 969 | 972 | 975 | 985 | 988 | 985 | 985 | 983 | 972 | 960 | 955 |
| Dry (16\%) | 943 | 943 | 944 | 947 | 951 | 957 | 955 | 953 | 948 | 934 | 922 | 915 |
| Critical (27\%) | 856 | 856 | 862 | 864 | 870 | 871 | 860 | 848 | 840 | 828 | 818 | 812 |

Revised Alternative 1

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,158 | 1,156 | 1,164 | 1,166 | 1,167 | 1,171 | 1,172 | 1,177 | 1,177 | 1,175 | 1,167 | 1,161 |
| 20\% | 1,147 | 1,147 | 1,149 | 1,152 | 1,167 | 1,168 | 1,166 | 1,168 | 1,165 | 1,165 | 1,154 | 1,148 |
| 30\% | 1,136 | 1,135 | 1,140 | 1,146 | 1,151 | 1,160 | 1,159 | 1,154 | 1,153 | 1,152 | 1,141 | 1,135 |
| 40\% | 1,119 | 1,120 | 1,128 | 1,139 | 1,147 | 1,150 | 1,149 | 1,143 | 1,135 | 1,132 | 1,123 | 1,118 |
| 50\% | 1,060 | 1,060 | 1,086 | 1,116 | 1,130 | 1,136 | 1,131 | 1,135 | 1,131 | 1,120 | 1,109 | 1,060 |
| 60\% | 1,046 | 1,046 | 1,054 | 1,059 | 1,064 | 1,116 | 1,117 | 1,122 | 1,115 | 1,062 | 1,052 | 1,045 |
| 70\% | 1,022 | 1,024 | 1,031 | 1,042 | 1,043 | 1,042 | 1,045 | 1,057 | 1,052 | 1,039 | 1,027 | 1,019 |
| 80\% | 933 | 930 | 993 | 998 | 1,012 | 1,019 | 1,022 | 1,025 | 1,017 | 1,009 | 999 | 994 |
| 90\% | 891 | 892 | 893 | 895 | 911 | 912 | 900 | 914 | 926 | 905 | 894 | 894 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,050 | 1,051 | 1,058 | 1,069 | 1,079 | 1,090 | 1,090 | 1,092 | 1,090 | 1,077 | 1,061 | 1,050 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,098 | 1,098 | 1,110 | 1,128 | 1,139 | 1,151 | 1,155 | 1,162 | 1,162 | 1,165 | 1,154 | 1,148 |
| Above Normal (24\%) | 1,037 | 1,037 | 1,049 | 1,075 | 1,090 | 1,105 | 1,111 | 1,123 | 1,127 | 1,111 | 1,090 | 1,081 |
| Below Normal (10\%) | 1,081 | 1,085 | 1,087 | 1,090 | 1,105 | 1,115 | 1,112 | 1,113 | 1,111 | 1,092 | 1,081 | 1,064 |
| Dry (16\%) | 1,052 | 1,051 | 1,053 | 1,055 | 1,061 | 1,075 | 1,074 | 1,069 | 1,060 | 1,035 | 1,013 | 1,000 |
| Critical (27\%) | 933 | 933 | 936 | 939 | 943 | 943 | 935 | 927 | 922 | 908 | 889 | 877 |

Revised Alternative 1 minus No Action Alternative

| Statistic | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 13\% | 12\% | 12\% | 12\% | 12\% | 8\% | 12\% | 8\% | 8\% | 8\% | 12\% | 12\% |
| 20\% | 13\% | 13\% | 13\% | 13\% | 13\% | 13\% | 13\% | 12\% | 12\% | 13\% | 13\% | 13\% |
| 30\% | 13\% | 13\% | 13\% | 13\% | 13\% | 13\% | 13\% | 12\% | 12\% | 13\% | 13\% | 13\% |
| 40\% | 15\% | 15\% | 13\% | 13\% | 13\% | 13\% | 14\% | 14\% | 13\% | 14\% | 14\% | 15\% |
| 50\% | 11\% | 11\% | 13\% | 14\% | 13\% | 13\% | 13\% | 14\% | 14\% | 15\% | 15\% | 10\% |
| 60\% | 11\% | 11\% | 11\% | 10\% | 10\% | 14\% | 14\% | 14\% | 14\% | 10\% | 10\% | 10\% |
| 70\% | 11\% | 10\% | 10\% | 11\% | 10\% | 10\% | 10\% | 11\% | 11\% | 11\% | 11\% | 10\% |
| 80\% | 6\% | 6\% | 12\% | 13\% | 13\% | 12\% | 11\% | 11\% | 10\% | 11\% | 11\% | 12\% |
| 90\% | 7\% | 7\% | 7\% | 6\% | 6\% | 6\% | 4\% | 5\% | 6\% | 5\% | 5\% | 6\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 11\% | 11\% | 11\% | 11\% | 11\% | 11\% | 12\% | 11\% | 11\% | 11\% | 11\% | 11\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 12\% | 11\% | 11\% | 11\% | 11\% | 11\% | 11\% | 10\% | 9\% | 11\% | 11\% | 11\% |
| Above Normal (24\%) | 11\% | 11\% | 11\% | 12\% | 12\% | 12\% | 12\% | 13\% | 13\% | 13\% | 12\% | 12\% |
| Below Normal (10\%) | 12\% | 12\% | 12\% | 12\% | 12\% | 13\% | 13\% | 13\% | 13\% | 12\% | 13\% | 12\% |
| Dry (16\%) | 12\% | 12\% | 11\% | 11\% | 12\% | 12\% | 12\% | 12\% | 12\% | 11\% | 10\% | 9\% |
| Critical (27\%) | 9\% | 9\% | 9\% | 9\% | 8\% | 8\% | 9\% | 9\% | 10\% | 10\% | 9\% | 8\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.2.2 New Melones Reservoir, End of Month Elevation

Revised Second Basis of Comparison

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,158 | 1,156 | 1,164 | 1,166 | 1,167 | 1,171 | 1,172 | 1,177 | 1,177 | 1,175 | 1,167 | 1,161 |
| 20\% | 1,147 | 1,147 | 1,149 | 1,152 | 1,167 | 1,168 | 1,166 | 1,168 | 1,165 | 1,165 | 1,154 | 1,148 |
| 30\% | 1,136 | 1,135 | 1,140 | 1,146 | 1,151 | 1,160 | 1,159 | 1,154 | 1,153 | 1,152 | 1,141 | 1,135 |
| 40\% | 1,119 | 1,120 | 1,128 | 1,139 | 1,147 | 1,150 | 1,149 | 1,143 | 1,135 | 1,132 | 1,123 | 1,118 |
| 50\% | 1,060 | 1,060 | 1,086 | 1,116 | 1,130 | 1,136 | 1,131 | 1,135 | 1,131 | 1,120 | 1,109 | 1,060 |
| 60\% | 1,046 | 1,046 | 1,054 | 1,059 | 1,064 | 1,116 | 1,117 | 1,122 | 1,115 | 1,062 | 1,052 | 1,045 |
| 70\% | 1,022 | 1,024 | 1,031 | 1,042 | 1,043 | 1,042 | 1,045 | 1,057 | 1,052 | 1,039 | 1,027 | 1,019 |
| 80\% | 933 | 930 | 993 | 998 | 1,012 | 1,019 | 1,022 | 1,025 | 1,017 | 1,009 | 999 | 994 |
| 90\% | 891 | 892 | 893 | 895 | 911 | 912 | 900 | 914 | 926 | 905 | 894 | 894 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,050 | 1,051 | 1,058 | 1,069 | 1,079 | 1,090 | 1,090 | 1,092 | 1,090 | 1,077 | 1,061 | 1,050 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,098 | 1,098 | 1,110 | 1,128 | 1,139 | 1,151 | 1,155 | 1,162 | 1,162 | 1,165 | 1,154 | 1,148 |
| Above Normal (24\%) | 1,037 | 1,037 | 1,049 | 1,075 | 1,090 | 1,105 | 1,111 | 1,123 | 1,127 | 1,111 | 1,090 | 1,081 |
| Below Normal (10\%) | 1,081 | 1,085 | 1,087 | 1,090 | 1,105 | 1,115 | 1,112 | 1,113 | 1,111 | 1,092 | 1,081 | 1,064 |
| Dry (16\%) | 1,052 | 1,051 | 1,053 | 1,055 | 1,061 | 1,075 | 1,074 | 1,069 | 1,060 | 1,035 | 1,013 | 1,000 |
| Critical (27\%) | 933 | 933 | 936 | 939 | 943 | 943 | 935 | 927 | 922 | 908 | 889 | 877 |

## No Action Alternative

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,029 | 1,028 | 1,035 | 1,040 | 1,046 | 1,089 | 1,047 | 1,094 | 1,095 | 1,085 | 1,039 | 1,033 |
| 20\% | 1,013 | 1,015 | 1,017 | 1,021 | 1,029 | 1,032 | 1,036 | 1,043 | 1,040 | 1,032 | 1,021 | 1,016 |
| 30\% | 1,006 | 1,006 | 1,008 | 1,012 | 1,021 | 1,025 | 1,021 | 1,027 | 1,031 | 1,023 | 1,013 | 1,008 |
| 40\% | 975 | 976 | 995 | 1,004 | 1,012 | 1,014 | 1,011 | 1,006 | 1,006 | 995 | 983 | 976 |
| 50\% | 956 | 957 | 960 | 980 | 996 | 1,006 | 998 | 997 | 991 | 977 | 965 | 960 |
| 60\% | 943 | 946 | 950 | 959 | 966 | 976 | 976 | 984 | 976 | 966 | 953 | 947 |
| 70\% | 925 | 928 | 938 | 942 | 945 | 947 | 950 | 952 | 951 | 939 | 928 | 923 |
| 80\% | 879 | 881 | 887 | 887 | 897 | 912 | 918 | 924 | 923 | 912 | 897 | 888 |
| 90\% | 835 | 836 | 837 | 847 | 857 | 863 | 864 | 867 | 876 | 863 | 850 | 843 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 944 | 946 | 953 | 962 | 972 | 979 | 976 | 981 | 981 | 969 | 957 | 950 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 983 | 986 | 998 | 1,014 | 1,027 | 1,037 | 1,036 | 1,054 | 1,062 | 1,052 | 1,038 | 1,030 |
| Above Normal (24\%) | 932 | 937 | 945 | 960 | 974 | 986 | 988 | 997 | 996 | 985 | 973 | 967 |
| Below Normal (10\%) | 968 | 969 | 972 | 975 | 985 | 988 | 985 | 985 | 983 | 972 | 960 | 955 |
| Dry (16\%) | 943 | 943 | 944 | 947 | 951 | 957 | 955 | 953 | 948 | 934 | 922 | 915 |
| Critical (27\%) | 856 | 856 | 862 | 864 | 870 | 871 | 860 | 848 | 840 | 828 | 818 | 812 |

No Action Alternative minus Revised Second Basis of Comparison

|  | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -11\% | -11\% | -11\% | -11\% | -10\% | -7\% | -11\% | -7\% | -7\% | -8\% | -11\% | -11\% |
| 20\% | -12\% | -12\% | -11\% | -11\% | -12\% | -12\% | -11\% | -11\% | -11\% | -11\% | -11\% | -12\% |
| 30\% | -11\% | -11\% | -12\% | -12\% | -11\% | -12\% | -12\% | -11\% | -11\% | -11\% | -11\% | -11\% |
| 40\% | -13\% | -13\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -11\% | -12\% | -12\% | -13\% |
| 50\% | -10\% | -10\% | -12\% | -12\% | -12\% | -11\% | -12\% | -12\% | -12\% | -13\% | -13\% | -9\% |
| 60\% | -10\% | -10\% | -10\% | -9\% | -9\% | -13\% | -13\% | -12\% | -12\% | -9\% | -9\% | -9\% |
| 70\% | -10\% | -9\% | -9\% | -10\% | -9\% | -9\% | -9\% | -10\% | -10\% | -10\% | -10\% | -9\% |
| 80\% | -6\% | -5\% | -11\% | -11\% | -11\% | -11\% | -10\% | -10\% | -9\% | -10\% | -10\% | -11\% |
| 90\% | -6\% | -6\% | -6\% | -5\% | -6\% | -5\% | -4\% | -5\% | -5\% | -5\% | -5\% | -6\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -10\% | -9\% | -9\% | -10\% | -10\% | -10\% |
| Above Normal (24\%) | -10\% | -10\% | -10\% | -11\% | -11\% | -11\% | -11\% | -11\% | -12\% | -11\% | -11\% | -11\% |
| Below Normal (10\%) | -10\% | -11\% | -11\% | -11\% | -11\% | -11\% | -11\% | -12\% | -11\% | -11\% | -11\% | -10\% |
| Dry (16\%) | -10\% | -10\% | -10\% | -10\% | -10\% | -11\% | -11\% | -11\% | -11\% | -10\% | -9\% | -9\% |
| Critical (27\%) | -8\% | -8\% | -8\% | -8\% | -8\% | -8\% | -8\% | -9\% | -9\% | -9\% | -8\% | -7\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.2.3 New Melones Reservoir, End of Month Elevation

Revised Second Basis of Comparison

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,158 | 1,156 | 1,164 | 1,166 | 1,167 | 1,171 | 1,172 | 1,177 | 1,177 | 1,175 | 1,167 | 1,161 |
| 20\% | 1,147 | 1,147 | 1,149 | 1,152 | 1,167 | 1,168 | 1,166 | 1,168 | 1,165 | 1,165 | 1,154 | 1,148 |
| 30\% | 1,136 | 1,135 | 1,140 | 1,146 | 1,151 | 1,160 | 1,159 | 1,154 | 1,153 | 1,152 | 1,141 | 1,135 |
| 40\% | 1,119 | 1,120 | 1,128 | 1,139 | 1,147 | 1,150 | 1,149 | 1,143 | 1,135 | 1,132 | 1,123 | 1,118 |
| 50\% | 1,060 | 1,060 | 1,086 | 1,116 | 1,130 | 1,136 | 1,131 | 1,135 | 1,131 | 1,120 | 1,109 | 1,060 |
| 60\% | 1,046 | 1,046 | 1,054 | 1,059 | 1,064 | 1,116 | 1,117 | 1,122 | 1,115 | 1,062 | 1,052 | 1,045 |
| 70\% | 1,022 | 1,024 | 1,031 | 1,042 | 1,043 | 1,042 | 1,045 | 1,057 | 1,052 | 1,039 | 1,027 | 1,019 |
| 80\% | 933 | 930 | 993 | 998 | 1,012 | 1,019 | 1,022 | 1,025 | 1,017 | 1,009 | 999 | 994 |
| 90\% | 891 | 892 | 893 | 895 | 911 | 912 | 900 | 914 | 926 | 905 | 894 | 894 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,050 | 1,051 | 1,058 | 1,069 | 1,079 | 1,090 | 1,090 | 1,092 | 1,090 | 1,077 | 1,061 | 1,050 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,098 | 1,098 | 1,110 | 1,128 | 1,139 | 1,151 | 1,155 | 1,162 | 1,162 | 1,165 | 1,154 | 1,148 |
| Above Normal (24\%) | 1,037 | 1,037 | 1,049 | 1,075 | 1,090 | 1,105 | 1,111 | 1,123 | 1,127 | 1,111 | 1,090 | 1,081 |
| Below Normal (10\%) | 1,081 | 1,085 | 1,087 | 1,090 | 1,105 | 1,115 | 1,112 | 1,113 | 1,111 | 1,092 | 1,081 | 1,064 |
| Dry (16\%) | 1,052 | 1,051 | 1,053 | 1,055 | 1,061 | 1,075 | 1,074 | 1,069 | 1,060 | 1,035 | 1,013 | 1,000 |
| Critical (27\%) | 933 | 933 | 936 | 939 | 943 | 943 | 935 | 927 | 922 | 908 | 889 | 877 |

Alternative 3

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,167 | 1,166 | 1,167 | 1,167 | 1,167 | 1,171 | 1,174 | 1,182 | 1,180 | 1,184 | 1,176 | 1,169 |
| 20\% | 1,160 | 1,161 | 1,162 | 1,161 | 1,167 | 1,171 | 1,168 | 1,170 | 1,168 | 1,173 | 1,166 | 1,161 |
| 30\% | 1,142 | 1,142 | 1,149 | 1,156 | 1,163 | 1,168 | 1,161 | 1,159 | 1,149 | 1,158 | 1,148 | 1,143 |
| 40\% | 1,127 | 1,128 | 1,136 | 1,147 | 1,155 | 1,159 | 1,154 | 1,150 | 1,137 | 1,139 | 1,129 | 1,123 |
| 50\% | 1,111 | 1,109 | 1,112 | 1,124 | 1,135 | 1,141 | 1,137 | 1,136 | 1,135 | 1,125 | 1,114 | 1,109 |
| 60\% | 1,053 | 1,054 | 1,054 | 1,060 | 1,111 | 1,118 | 1,117 | 1,121 | 1,121 | 1,111 | 1,056 | 1,050 |
| 70\% | 1,019 | 1,022 | 1,037 | 1,040 | 1,050 | 1,048 | 1,047 | 1,057 | 1,049 | 1,036 | 1,024 | 1,018 |
| 80\% | 996 | 994 | 1,002 | 1,007 | 1,015 | 1,025 | 1,020 | 1,028 | 1,022 | 1,012 | 1,004 | 1,000 |
| 90\% | 877 | 879 | 879 | 886 | 906 | 911 | 897 | 896 | 925 | 901 | 886 | 878 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,056 | 1,057 | 1,061 | 1,070 | 1,083 | 1,091 | 1,090 | 1,092 | 1,089 | 1,082 | 1,065 | 1,056 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,101 | 1,102 | 1,111 | 1,125 | 1,140 | 1,152 | 1,155 | 1,164 | 1,157 | 1,169 | 1,159 | 1,153 |
| Above Normal (24\%) | 1,051 | 1,058 | 1,065 | 1,082 | 1,096 | 1,107 | 1,113 | 1,125 | 1,132 | 1,119 | 1,096 | 1,088 |
| Below Normal (10\%) | 1,093 | 1,094 | 1,092 | 1,094 | 1,109 | 1,116 | 1,110 | 1,121 | 1,119 | 1,101 | 1,079 | 1,073 |
| Dry (16\%) | 1,055 | 1,054 | 1,055 | 1,062 | 1,072 | 1,079 | 1,077 | 1,065 | 1,061 | 1,041 | 1,026 | 1,011 |
| Critical (27\%) | 927 | 927 | 930 | 932 | 943 | 937 | 927 | 917 | 916 | 900 | 882 | 870 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% |
| 20\% | 1\% | 1\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% |
| 30\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% |
| 40\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% | 1\% | 0\% | 1\% | 1\% | 0\% |
| 50\% | 5\% | 5\% | 2\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 5\% |
| 60\% | 1\% | 1\% | 0\% | 0\% | 4\% | 0\% | 0\% | 0\% | 0\% | 5\% | 0\% | 1\% |
| 70\% | 0\% | 0\% | 1\% | 0\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 80\% | 7\% | 7\% | 1\% | 1\% | 0\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% |
| 90\% | -2\% | -1\% | -2\% | -1\% | 0\% | 0\% | 0\% | -2\% | 0\% | 0\% | -1\% | -2\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Above Normal (24\%) | 1\% | 2\% | 2\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% |
| Below Normal (10\%) | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 0\% | 1\% |
| Dry (16\%) | 0\% | 0\% | 0\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% |
| Critical (27\%) | -1\% | -1\% | -1\% | -1\% | 0\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.2.4 New Melones Reservoir, End of Month Elevation

Revised Second Basis of Comparison

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,158 | 1,156 | 1,164 | 1,166 | 1,167 | 1,171 | 1,172 | 1,177 | 1,177 | 1,175 | 1,167 | 1,161 |
| 20\% | 1,147 | 1,147 | 1,149 | 1,152 | 1,167 | 1,168 | 1,166 | 1,168 | 1,165 | 1,165 | 1,154 | 1,148 |
| 30\% | 1,136 | 1,135 | 1,140 | 1,146 | 1,151 | 1,160 | 1,159 | 1,154 | 1,153 | 1,152 | 1,141 | 1,135 |
| 40\% | 1,119 | 1,120 | 1,128 | 1,139 | 1,147 | 1,150 | 1,149 | 1,143 | 1,135 | 1,132 | 1,123 | 1,118 |
| 50\% | 1,060 | 1,060 | 1,086 | 1,116 | 1,130 | 1,136 | 1,131 | 1,135 | 1,131 | 1,120 | 1,109 | 1,060 |
| 60\% | 1,046 | 1,046 | 1,054 | 1,059 | 1,064 | 1,116 | 1,117 | 1,122 | 1,115 | 1,062 | 1,052 | 1,045 |
| 70\% | 1,022 | 1,024 | 1,031 | 1,042 | 1,043 | 1,042 | 1,045 | 1,057 | 1,052 | 1,039 | 1,027 | 1,019 |
| 80\% | 933 | 930 | 993 | 998 | 1,012 | 1,019 | 1,022 | 1,025 | 1,017 | 1,009 | 999 | 994 |
| 90\% | 891 | 892 | 893 | 895 | 911 | 912 | 900 | 914 | 926 | 905 | 894 | 894 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,050 | 1,051 | 1,058 | 1,069 | 1,079 | 1,090 | 1,090 | 1,092 | 1,090 | 1,077 | 1,061 | 1,050 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1,098 | 1,098 | 1,110 | 1,128 | 1,139 | 1,151 | 1,155 | 1,162 | 1,162 | 1,165 | 1,154 | 1,148 |
| Above Normal (24\%) | 1,037 | 1,037 | 1,049 | 1,075 | 1,090 | 1,105 | 1,111 | 1,123 | 1,127 | 1,111 | 1,090 | 1,081 |
| Below Normal (10\%) | 1,081 | 1,085 | 1,087 | 1,090 | 1,105 | 1,115 | 1,112 | 1,113 | 1,111 | 1,092 | 1,081 | 1,064 |
| Dry (16\%) | 1,052 | 1,051 | 1,053 | 1,055 | 1,061 | 1,075 | 1,074 | 1,069 | 1,060 | 1,035 | 1,013 | 1,000 |
| Critical (27\%) | 933 | 933 | 936 | 939 | 943 | 943 | 935 | 927 | 922 | 908 | 889 | 877 |

Alternative 5

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,029 | 1,028 | 1,036 | 1,041 | 1,047 | 1,049 | 1,043 | 1,053 | 1,062 | 1,053 | 1,043 | 1,035 |
| 20\% | 1,011 | 1,011 | 1,012 | 1,015 | 1,031 | 1,032 | 1,028 | 1,037 | 1,034 | 1,026 | 1,015 | 1,009 |
| 30\% | 999 | 998 | 1,001 | 1,007 | 1,015 | 1,019 | 1,020 | 1,022 | 1,024 | 1,016 | 1,005 | 1,001 |
| 40\% | 973 | 973 | 985 | 996 | 1,004 | 1,010 | 1,003 | 1,002 | 1,003 | 992 | 979 | 972 |
| 50\% | 945 | 948 | 959 | 970 | 996 | 998 | 991 | 987 | 978 | 965 | 953 | 950 |
| 60\% | 937 | 940 | 943 | 949 | 957 | 961 | 961 | 972 | 968 | 957 | 944 | 938 |
| 70\% | 904 | 911 | 921 | 928 | 932 | 936 | 941 | 937 | 939 | 927 | 915 | 907 |
| 80\% | 860 | 860 | 874 | 874 | 874 | 889 | 880 | 894 | 902 | 887 | 873 | 867 |
| 90\% | 803 | 807 | 808 | 824 | 834 | 838 | 826 | 839 | 847 | 833 | 818 | 810 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 931 | 933 | 939 | 947 | 957 | 964 | 961 | 962 | 963 | 952 | 941 | 934 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 969 | 971 | 980 | 995 | 1,007 | 1,016 | 1,020 | 1,031 | 1,040 | 1,033 | 1,022 | 1,015 |
| Above Normal (24\%) | 924 | 930 | 939 | 954 | 968 | 980 | 982 | 988 | 987 | 975 | 963 | 958 |
| Below Normal (10\%) | 954 | 956 | 959 | 962 | 973 | 977 | 972 | 970 | 968 | 957 | 944 | 938 |
| Dry (16\%) | 930 | 930 | 932 | 934 | 939 | 945 | 940 | 936 | 931 | 918 | 905 | 898 |
| Critical (27\%) | 837 | 838 | 842 | 845 | 853 | 855 | 834 | 818 | 815 | 804 | 796 | 791 |

Alternative 5 minus Revised Second Basis of Comparison

|  | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -11\% | -11\% | -11\% | -11\% | -10\% | -10\% | -11\% | -11\% | -10\% | -10\% | -11\% | -11\% |
| 20\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -11\% | -11\% | -12\% | -12\% | -12\% |
| 30\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -11\% | -11\% | -12\% | -12\% | -12\% |
| 40\% | -13\% | -13\% | -13\% | -13\% | -12\% | -12\% | -13\% | -12\% | -12\% | -12\% | -13\% | -13\% |
| 50\% | -11\% | -11\% | -12\% | -13\% | -12\% | -12\% | -12\% | -13\% | -14\% | -14\% | -14\% | -10\% |
| 60\% | -10\% | -10\% | -11\% | -10\% | -10\% | -14\% | -14\% | -13\% | -13\% | -10\% | -10\% | -10\% |
| 70\% | -12\% | -11\% | -11\% | -11\% | -11\% | -10\% | -10\% | -11\% | -11\% | -11\% | -11\% | -11\% |
| 80\% | -8\% | -8\% | -12\% | -12\% | -14\% | -13\% | -14\% | -13\% | -11\% | -12\% | -13\% | -13\% |
| 90\% | -10\% | -9\% | -10\% | -8\% | -8\% | -8\% | -8\% | -8\% | -8\% | -8\% | -9\% | -9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -11\% | -11\% | -11\% | -11\% | -11\% | -12\% | -12\% | -12\% | -12\% | -12\% | -11\% | -11\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -11\% | -10\% | -11\% | -11\% | -12\% |
| Above Normal (24\%) | -11\% | -10\% | -10\% | -11\% | -11\% | -11\% | -12\% | -12\% | -12\% | -12\% | -12\% | -11\% |
| Below Normal (10\%) | -12\% | -12\% | -12\% | -12\% | -12\% | -12\% | -13\% | -13\% | -13\% | -12\% | -13\% | -12\% |
| Dry (16\%) | -12\% | -12\% | -11\% | -11\% | -11\% | -12\% | -12\% | -12\% | -12\% | -11\% | -11\% | -10\% |
| Critical (27\%) | -10\% | -10\% | -10\% | -10\% | -10\% | -9\% | -11\% | -12\% | -12\% | -11\% | -10\% | -10\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.3 Stanislaus River below Goodwin Dam Flow

Table 5C.3.2.3.1 Stanislaus River below Goodwin, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 837 | 290 | 306 | 358 | 897 | 1,648 | 1,633 | 1,929 | 1,103 | 429 | 390 | 390 |
| 20\% | 797 | 200 | 218 | 232 | 409 | 1,521 | 1,553 | 1,555 | 1,090 | 310 | 300 | 300 |
| 30\% | 774 | 200 | 200 | 232 | 290 | 440 | 1,553 | 1,296 | 940 | 300 | 284 | 250 |
| 40\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 855 | 300 | 283 | 250 |
| 50\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 363 | 271 | 283 | 250 |
| 60\% | 636 | 200 | 200 | 219 | 229 | 200 | 812 | 918 | 363 | 265 | 283 | 249 |
| 70\% | 636 | 200 | 200 | 219 | 229 | 200 | 767 | 705 | 297 | 265 | 283 | 249 |
| 80\% | 578 | 200 | 200 | 214 | 221 | 200 | 767 | 631 | 261 | 265 | 283 | 249 |
| 90\% | 577 | 200 | 200 | 213 | 215 | 200 | 505 | 546 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 723 | 278 | 365 | 518 | 595 | 754 | 1,158 | 1,123 | 680 | 394 | 361 | 351 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 781 | 499 | 787 | 999 | 1,201 | 2,016 | 1,536 | 1,691 | 1,140 | 715 | 639 | 692 |
| Above Normal (24\%) | 714 | 216 | 282 | 663 | 676 | 645 | 1,224 | 1,146 | 962 | 353 | 292 | 267 |
| Below Normal (10\%) | 740 | 225 | 225 | 282 | 346 | 365 | 1,454 | 1,201 | 476 | 269 | 285 | 256 |
| Dry (16\%) | 707 | 208 | 216 | 234 | 313 | 200 | 1,030 | 930 | 374 | 275 | 277 | 245 |
| Critical (27\%) | 683 | 205 | 215 | 227 | 255 | 234 | 741 | 699 | 281 | 269 | 262 | 231 |

Revised Alternative 1

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 399 | 400 | 400 | 1,825 | 999 | 1,500 | 1,500 | 1,502 | 491 | 319 | 300 |
| 20\% | 349 | 356 | 358 | 359 | 863 | 400 | 1,500 | 1,498 | 1,243 | 313 | 300 | 300 |
| 30\% | 318 | 334 | 340 | 336 | 400 | 344 | 1,429 | 1,380 | 948 | 300 | 285 | 281 |
| 40\% | 260 | 305 | 323 | 318 | 364 | 312 | 1,241 | 1,134 | 713 | 296 | 283 | 250 |
| 50\% | 193 | 246 | 280 | 250 | 339 | 267 | 879 | 855 | 399 | 283 | 283 | 249 |
| 60\% | 146 | 217 | 230 | 183 | 304 | 200 | 649 | 725 | 300 | 271 | 283 | 249 |
| 70\% | 123 | 207 | 214 | 152 | 239 | 159 | 517 | 612 | 265 | 265 | 283 | 249 |
| 80\% | 115 | 202 | 206 | 136 | 176 | 140 | 462 | 507 | 255 | 265 | 283 | 249 |
| 90\% | 104 | 188 | 188 | 122 | 133 | 123 | 403 | 439 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 250 | 340 | 429 | 530 | 748 | 593 | 958 | 984 | 830 | 433 | 386 | 391 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 334 | 581 | 884 | 1,038 | 1,692 | 1,597 | 1,511 | 1,556 | 1,813 | 860 | 729 | 857 |
| Above Normal (24\%) | 248 | 269 | 331 | 666 | 712 | 484 | 1,051 | 1,062 | 986 | 352 | 287 | 268 |
| Below Normal (10\%) | 254 | 306 | 306 | 336 | 532 | 292 | 1,087 | 1,021 | 414 | 269 | 283 | 261 |
| Dry (16\%) | 245 | 282 | 290 | 253 | 387 | 185 | 686 | 743 | 346 | 276 | 283 | 249 |
| Critical (27\%) | 181 | 242 | 252 | 203 | 256 | 174 | 511 | 548 | 278 | 291 | 277 | 233 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -58\% | 38\% | 31\% | 12\% | 103\% | -39\% | -8\% | -22\% | 36\% | 14\% | -18\% | -23\% |
| 20\% | -56\% | 78\% | 64\% | 55\% | 111\% | -74\% | -3\% | -4\% | 14\% | 1\% | 0\% | 0\% |
| 30\% | -59\% | 67\% | 70\% | 44\% | 38\% | -22\% | -8\% | 7\% | 1\% | 0\% | 0\% | 12\% |
| 40\% | -66\% | 53\% | 61\% | 41\% | 54\% | 56\% | -11\% | -9\% | -17\% | -1\% | 0\% | 0\% |
| 50\% | -75\% | 23\% | 40\% | 11\% | 44\% | 34\% | -37\% | -31\% | 10\% | 4\% | 0\% | -1\% |
| 60\% | -77\% | 9\% | 15\% | -16\% | 33\% | 0\% | -20\% | -21\% | -17\% | 2\% | 0\% | 0\% |
| 70\% | -81\% | 3\% | 7\% | -31\% | 5\% | -21\% | -33\% | -13\% | -11\% | 0\% | 0\% | 0\% |
| 80\% | -80\% | 1\% | 3\% | -36\% | -21\% | -30\% | -40\% | -20\% | -2\% | 0\% | 0\% | 0\% |
| 90\% | -82\% | -6\% | -6\% | -43\% | -38\% | -39\% | -20\% | -20\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -65\% | 22\% | 18\% | 2\% | 26\% | -21\% | -17\% | -12\% | 22\% | 10\% | 7\% | 11\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -57\% | 17\% | 12\% | 4\% | 41\% | -21\% | -2\% | -8\% | 59\% | 20\% | 14\% | 24\% |
| Above Normal (24\%) | -65\% | 25\% | 17\% | 0\% | 5\% | -25\% | -14\% | -7\% | 2\% | 0\% | -2\% | 0\% |
| Below Normal (10\%) | -66\% | 36\% | 36\% | 19\% | 54\% | -20\% | -25\% | -15\% | -13\% | 0\% | -1\% | 2\% |
| Dry (16\%) | -65\% | 36\% | 35\% | 8\% | 23\% | -7\% | -33\% | -20\% | -7\% | 0\% | 2\% | 1\% |
| Critical (27\%) | -73\% | 18\% | 17\% | -10\% | 0\% | -26\% | -31\% | -22\% | -1\% | 8\% | 6\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.3.2 Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 399 | 400 | 400 | 1,825 | 999 | 1,500 | 1,500 | 1,502 | 491 | 319 | 300 |
| 20\% | 349 | 356 | 358 | 359 | 863 | 400 | 1,500 | 1,498 | 1,243 | 313 | 300 | 300 |
| 30\% | 318 | 334 | 340 | 336 | 400 | 344 | 1,429 | 1,380 | 948 | 300 | 285 | 281 |
| 40\% | 260 | 305 | 323 | 318 | 364 | 312 | 1,241 | 1,134 | 713 | 296 | 283 | 250 |
| 50\% | 193 | 246 | 280 | 250 | 339 | 267 | 879 | 855 | 399 | 283 | 283 | 249 |
| 60\% | 146 | 217 | 230 | 183 | 304 | 200 | 649 | 725 | 300 | 271 | 283 | 249 |
| 70\% | 123 | 207 | 214 | 152 | 239 | 159 | 517 | 612 | 265 | 265 | 283 | 249 |
| 80\% | 115 | 202 | 206 | 136 | 176 | 140 | 462 | 507 | 255 | 265 | 283 | 249 |
| 90\% | 104 | 188 | 188 | 122 | 133 | 123 | 403 | 439 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 250 | 340 | 429 | 530 | 748 | 593 | 958 | 984 | 830 | 433 | 386 | 391 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 334 | 581 | 884 | 1,038 | 1,692 | 1,597 | 1,511 | 1,556 | 1,813 | 860 | 729 | 857 |
| Above Normal (24\%) | 248 | 269 | 331 | 666 | 712 | 484 | 1,051 | 1,062 | 986 | 352 | 287 | 268 |
| Below Normal (10\%) | 254 | 306 | 306 | 336 | 532 | 292 | 1,087 | 1,021 | 414 | 269 | 283 | 261 |
| Dry (16\%) | 245 | 282 | 290 | 253 | 387 | 185 | 686 | 743 | 346 | 276 | 283 | 249 |
| Critical (27\%) | 181 | 242 | 252 | 203 | 256 | 174 | 511 | 548 | 278 | 291 | 277 | 233 |

No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 837 | 290 | 306 | 358 | 897 | 1,648 | 1,633 | 1,929 | 1,103 | 429 | 390 | 390 |
| 20\% | 797 | 200 | 218 | 232 | 409 | 1,521 | 1,553 | 1,555 | 1,090 | 310 | 300 | 300 |
| 30\% | 774 | 200 | 200 | 232 | 290 | 440 | 1,553 | 1,296 | 940 | 300 | 284 | 250 |
| 40\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 855 | 300 | 283 | 250 |
| 50\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 363 | 271 | 283 | 250 |
| 60\% | 636 | 200 | 200 | 219 | 229 | 200 | 812 | 918 | 363 | 265 | 283 | 249 |
| 70\% | 636 | 200 | 200 | 219 | 229 | 200 | 767 | 705 | 297 | 265 | 283 | 249 |
| 80\% | 578 | 200 | 200 | 214 | 221 | 200 | 767 | 631 | 261 | 265 | 283 | 249 |
| 90\% | 577 | 200 | 200 | 213 | 215 | 200 | 505 | 546 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 723 | 278 | 365 | 518 | 595 | 754 | 1,158 | 1,123 | 680 | 394 | 361 | 351 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 781 | 499 | 787 | 999 | 1,201 | 2,016 | 1,536 | 1,691 | 1,140 | 715 | 639 | 692 |
| Above Normal (24\%) | 714 | 216 | 282 | 663 | 676 | 645 | 1,224 | 1,146 | 962 | 353 | 292 | 267 |
| Below Normal (10\%) | 740 | 225 | 225 | 282 | 346 | 365 | 1,454 | 1,201 | 476 | 269 | 285 | 256 |
| Dry (16\%) | 707 | 208 | 216 | 234 | 313 | 200 | 1,030 | 930 | 374 | 275 | 277 | 245 |
| Critical (27\%) | 683 | 205 | 215 | 227 | 255 | 234 | 741 | 699 | 281 | 269 | 262 | 231 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 139\% | -27\% | -24\% | -11\% | -51\% | 65\% | 9\% | 29\% | -27\% | -13\% | 22\% | 30\% |
| 20\% | 128\% | -44\% | -39\% | -35\% | -53\% | 280\% | 4\% | 4\% | -12\% | -1\% | 0\% | 0\% |
| 30\% | 144\% | -40\% | -41\% | -31\% | -28\% | 28\% | 9\% | -6\% | -1\% | 0\% | 0\% | -11\% |
| 40\% | 197\% | -34\% | -38\% | -29\% | -35\% | -36\% | 13\% | 10\% | 20\% | 1\% | 0\% | 0\% |
| 50\% | 302\% | -19\% | -29\% | -10\% | -30\% | -25\% | 59\% | 45\% | -9\% | -4\% | 0\% | 1\% |
| 60\% | 337\% | -8\% | -13\% | 20\% | -25\% | 0\% | 25\% | 27\% | 21\% | -2\% | 0\% | 0\% |
| 70\% | 417\% | -3\% | -6\% | 44\% | -4\% | 26\% | 48\% | 15\% | 12\% | 0\% | 0\% | 0\% |
| 80\% | 403\% | -1\% | -3\% | 57\% | 26\% | 43\% | 66\% | 24\% | 2\% | 0\% | 0\% | 0\% |
| 90\% | 458\% | 6\% | 6\% | 75\% | 62\% | 63\% | 25\% | 24\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 189\% | -18\% | -15\% | -2\% | -20\% | 27\% | 21\% | 14\% | -18\% | -9\% | -6\% | -10\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 134\% | -14\% | -11\% | -4\% | -29\% | 26\% | 2\% | 9\% | -37\% | -17\% | -12\% | -19\% |
| Above Normal (24\%) | 188\% | -20\% | -15\% | 0\% | -5\% | 33\% | 17\% | 8\% | -2\% | 0\% | 2\% | 0\% |
| Below Normal (10\%) | 192\% | -26\% | -26\% | -16\% | -35\% | 25\% | 34\% | 18\% | 15\% | 0\% | 1\% | -2\% |
| Dry (16\%) | 189\% | -26\% | -26\% | -8\% | -19\% | 8\% | 50\% | 25\% | 8\% | 0\% | -2\% | -1\% |
| Critical (27\%) | 277\% | -15\% | -15\% | 12\% | 0\% | 35\% | 45\% | 28\% | 1\% | -7\% | -5\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030 .
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.3.3 Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 399 | 400 | 400 | 1,825 | 999 | 1,500 | 1,500 | 1,502 | 491 | 319 | 300 |
| 20\% | 349 | 356 | 358 | 359 | 863 | 400 | 1,500 | 1,498 | 1,243 | 313 | 300 | 300 |
| 30\% | 318 | 334 | 340 | 336 | 400 | 344 | 1,429 | 1,380 | 948 | 300 | 285 | 281 |
| 40\% | 260 | 305 | 323 | 318 | 364 | 312 | 1,241 | 1,134 | 713 | 296 | 283 | 250 |
| 50\% | 193 | 246 | 280 | 250 | 339 | 267 | 879 | 855 | 399 | 283 | 283 | 249 |
| 60\% | 146 | 217 | 230 | 183 | 304 | 200 | 649 | 725 | 300 | 271 | 283 | 249 |
| 70\% | 123 | 207 | 214 | 152 | 239 | 159 | 517 | 612 | 265 | 265 | 283 | 249 |
| 80\% | 115 | 202 | 206 | 136 | 176 | 140 | 462 | 507 | 255 | 265 | 283 | 249 |
| 90\% | 104 | 188 | 188 | 122 | 133 | 123 | 403 | 439 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 250 | 340 | 429 | 530 | 748 | 593 | 958 | 984 | 830 | 433 | 386 | 391 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 334 | 581 | 884 | 1,038 | 1,692 | 1,597 | 1,511 | 1,556 | 1,813 | 860 | 729 | 857 |
| Above Normal (24\%) | 248 | 269 | 331 | 666 | 712 | 484 | 1,051 | 1,062 | 986 | 352 | 287 | 268 |
| Below Normal (10\%) | 254 | 306 | 306 | 336 | 532 | 292 | 1,087 | 1,021 | 414 | 269 | 283 | 261 |
| Dry (16\%) | 245 | 282 | 290 | 253 | 387 | 185 | 686 | 743 | 346 | 276 | 283 | 249 |
| Critical (27\%) | 181 | 242 | 252 | 203 | 256 | 174 | 511 | 548 | 278 | 291 | 277 | 233 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 300 | 300 | 609 | 1,135 | 2,548 | 1,189 | 1,500 | 1,165 | 255 | 265 | 283 | 952 |
| 20\% | 300 | 300 | 305 | 300 | 1,157 | 344 | 1,500 | 1,165 | 255 | 265 | 283 | 249 |
| 30\% | 300 | 300 | 300 | 300 | 333 | 300 | 1,500 | 1,165 | 255 | 265 | 283 | 249 |
| 40\% | 252 | 300 | 300 | 300 | 300 | 300 | 1,034 | 963 | 255 | 265 | 283 | 249 |
| 50\% | 252 | 300 | 300 | 150 | 176 | 200 | 893 | 829 | 255 | 265 | 283 | 249 |
| 60\% | 252 | 300 | 300 | 150 | 173 | 200 | 893 | 829 | 255 | 265 | 283 | 249 |
| 70\% | 252 | 300 | 300 | 150 | 173 | 200 | 893 | 829 | 255 | 265 | 283 | 249 |
| 80\% | 200 | 200 | 220 | 150 | 173 | 200 | 528 | 466 | 255 | 265 | 283 | 249 |
| 90\% | 200 | 200 | 200 | 150 | 173 | 200 | 493 | 466 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 302 | 349 | 475 | 557 | 814 | 622 | 1,060 | 911 | 490 | 421 | 391 | 397 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 368 | 589 | 1,001 | 1,066 | 2,016 | 1,599 | 1,538 | 1,300 | 1,279 | 952 | 768 | 885 |
| Above Normal (24\%) | 323 | 287 | 394 | 705 | 732 | 552 | 1,155 | 955 | 255 | 265 | 283 | 260 |
| Below Normal (10\%) | 269 | 275 | 275 | 483 | 552 | 272 | 1,128 | 909 | 255 | 265 | 283 | 249 |
| Dry (16\%) | 285 | 285 | 293 | 251 | 371 | 200 | 815 | 730 | 255 | 265 | 283 | 249 |
| Critical (27\%) | 246 | 264 | 274 | 191 | 208 | 218 | 680 | 643 | 245 | 254 | 268 | 240 |

Alternative 3 minus Revised Second Basis of Comparison

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -14\% | -25\% | 52\% | 184\% | 40\% | 19\% | 0\% | -22\% | -83\% | -46\% | -11\% | 217\% |
| 20\% | -14\% | -16\% | -15\% | -17\% | 34\% | -14\% | 0\% | -22\% | -79\% | -15\% | -6\% | -17\% |
| 30\% | -6\% | -10\% | -12\% | -11\% | -17\% | -13\% | 5\% | -16\% | -73\% | -12\% | -1\% | -11\% |
| 40\% | -3\% | -2\% | -7\% | -6\% | -18\% | -4\% | -17\% | -15\% | -64\% | -10\% | 0\% | 0\% |
| 50\% | 31\% | 22\% | 7\% | -40\% | -48\% | -25\% | 2\% | -3\% | -36\% | -6\% | 0\% | 0\% |
| 60\% | 73\% | 38\% | 30\% | -18\% | -43\% | 0\% | 38\% | 14\% | -15\% | -2\% | 0\% | 0\% |
| 70\% | 105\% | 45\% | 40\% | -1\% | -28\% | 26\% | 73\% | 36\% | -3\% | 0\% | 0\% | 0\% |
| 80\% | 74\% | -1\% | 7\% | 10\% | -2\% | 43\% | 14\% | -8\% | 0\% | 0\% | 0\% | 0\% |
| 90\% | 93\% | 6\% | 6\% | 23\% | 30\% | 63\% | 22\% | 6\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 21\% | 3\% | 11\% | 5\% | 9\% | 5\% | 11\% | -7\% | -41\% | -3\% | 1\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 10\% | 1\% | 13\% | 3\% | 19\% | 0\% | 2\% | -16\% | -29\% | 11\% | 5\% | 3\% |
| Above Normal (24\%) | 30\% | 7\% | 19\% | 6\% | 3\% | 14\% | 10\% | -10\% | -74\% | -25\% | -1\% | -3\% |
| Below Normal (10\%) | 6\% | -10\% | -10\% | 44\% | 4\% | -7\% | 4\% | -11\% | -38\% | -1\% | 0\% | -5\% |
| Dry (16\%) | 17\% | 1\% | 1\% | -1\% | -4\% | 8\% | 19\% | -2\% | -26\% | -4\% | 0\% | 0\% |
| Critical (27\%) | 36\% | 9\% | 9\% | -6\% | -19\% | 26\% | 33\% | 17\% | -12\% | -13\% | -3\% | 3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.3.4 Stanislaus River below Goodwin, Monthly Flow

Revised Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 399 | 400 | 400 | 1,825 | 999 | 1,500 | 1,500 | 1,502 | 491 | 319 | 300 |
| 20\% | 349 | 356 | 358 | 359 | 863 | 400 | 1,500 | 1,498 | 1,243 | 313 | 300 | 300 |
| 30\% | 318 | 334 | 340 | 336 | 400 | 344 | 1,429 | 1,380 | 948 | 300 | 285 | 281 |
| 40\% | 260 | 305 | 323 | 318 | 364 | 312 | 1,241 | 1,134 | 713 | 296 | 283 | 250 |
| 50\% | 193 | 246 | 280 | 250 | 339 | 267 | 879 | 855 | 399 | 283 | 283 | 249 |
| 60\% | 146 | 217 | 230 | 183 | 304 | 200 | 649 | 725 | 300 | 271 | 283 | 249 |
| 70\% | 123 | 207 | 214 | 152 | 239 | 159 | 517 | 612 | 265 | 265 | 283 | 249 |
| 80\% | 115 | 202 | 206 | 136 | 176 | 140 | 462 | 507 | 255 | 265 | 283 | 249 |
| 90\% | 104 | 188 | 188 | 122 | 133 | 123 | 403 | 439 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 250 | 340 | 429 | 530 | 748 | 593 | 958 | 984 | 830 | 433 | 386 | 391 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 334 | 581 | 884 | 1,038 | 1,692 | 1,597 | 1,511 | 1,556 | 1,813 | 860 | 729 | 857 |
| Above Normal (24\%) | 248 | 269 | 331 | 666 | 712 | 484 | 1,051 | 1,062 | 986 | 352 | 287 | 268 |
| Below Normal (10\%) | 254 | 306 | 306 | 336 | 532 | 292 | 1,087 | 1,021 | 414 | 269 | 283 | 261 |
| Dry (16\%) | 245 | 282 | 290 | 253 | 387 | 185 | 686 | 743 | 346 | 276 | 283 | 249 |
| Critical (27\%) | 181 | 242 | 252 | 203 | 256 | 174 | 511 | 548 | 278 | 291 | 277 | 233 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 797 | 200 | 306 | 358 | 885 | 1,636 | 1,717 | 1,958 | 1,103 | 423 | 300 | 300 |
| 20\% | 797 | 200 | 211 | 232 | 415 | 1,521 | 1,633 | 1,815 | 979 | 307 | 300 | 300 |
| 30\% | 774 | 200 | 200 | 232 | 274 | 343 | 1,553 | 1,595 | 940 | 300 | 283 | 250 |
| 40\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,487 | 1,555 | 759 | 297 | 283 | 250 |
| 50\% | 636 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,341 | 363 | 265 | 283 | 249 |
| 60\% | 636 | 200 | 200 | 219 | 229 | 200 | 1,324 | 1,242 | 342 | 265 | 283 | 249 |
| 70\% | 636 | 200 | 200 | 219 | 222 | 200 | 1,134 | 1,068 | 270 | 265 | 283 | 249 |
| 80\% | 577 | 200 | 200 | 213 | 221 | 200 | 825 | 887 | 255 | 265 | 283 | 249 |
| 90\% | 577 | 200 | 200 | 213 | 214 | 200 | 767 | 798 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 711 | 276 | 345 | 520 | 580 | 712 | 1,317 | 1,375 | 660 | 369 | 332 | 341 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 766 | 499 | 690 | 998 | 1,169 | 1,831 | 1,502 | 1,730 | 1,093 | 619 | 523 | 655 |
| Above Normal (24\%) | 705 | 211 | 298 | 676 | 659 | 645 | 1,170 | 1,553 | 962 | 353 | 292 | 267 |
| Below Normal (10\%) | 733 | 225 | 225 | 281 | 345 | 365 | 1,416 | 1,267 | 462 | 269 | 285 | 256 |
| Dry (16\%) | 690 | 208 | 216 | 233 | 312 | 200 | 1,454 | 1,370 | 366 | 275 | 277 | 245 |
| Critical (27\%) | 674 | 200 | 210 | 221 | 242 | 234 | 1,175 | 948 | 257 | 260 | 253 | 224 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 128\% | -50\% | -24\% | -11\% | -52\% | 64\% | 14\% | 31\% | -27\% | -14\% | -6\% | 0\% |
| 20\% | 128\% | -44\% | -41\% | -35\% | -52\% | 280\% | 9\% | 21\% | -21\% | -2\% | 0\% | 0\% |
| 30\% | 144\% | -40\% | -41\% | -31\% | -31\% | 0\% | 9\% | 16\% | -1\% | 0\% | -1\% | -11\% |
| 40\% | 197\% | -34\% | -38\% | -29\% | -35\% | -36\% | 20\% | 37\% | 6\% | 0\% | 0\% | 0\% |
| 50\% | 230\% | -19\% | -29\% | -10\% | -30\% | -25\% | 59\% | 57\% | -9\% | -6\% | 0\% | 0\% |
| 60\% | 337\% | -8\% | -13\% | 20\% | -25\% | 0\% | 104\% | 71\% | 14\% | -2\% | 0\% | 0\% |
| 70\% | 417\% | -3\% | -6\% | 44\% | -7\% | 26\% | 120\% | 74\% | 2\% | 0\% | 0\% | 0\% |
| 80\% | 402\% | -1\% | -3\% | 56\% | 26\% | 43\% | 79\% | 75\% | 0\% | 0\% | 0\% | 0\% |
| 90\% | 458\% | 6\% | 6\% | 75\% | 61\% | 63\% | 90\% | 82\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 185\% | -19\% | -20\% | -2\% | -22\% | 20\% | 37\% | 40\% | -21\% | -15\% | -14\% | -13\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 129\% | -14\% | -22\% | -4\% | -31\% | 15\% | -1\% | 11\% | -40\% | -28\% | -28\% | -24\% |
| Above Normal (24\%) | 185\% | -22\% | -10\% | 2\% | -7\% | 33\% | 11\% | 46\% | -2\% | 0\% | 2\% | 0\% |
| Below Normal (10\%) | 189\% | -26\% | -26\% | -16\% | -35\% | 25\% | 30\% | 24\% | 12\% | 0\% | 1\% | -2\% |
| Dry (16\%) | 182\% | -26\% | -26\% | -8\% | -19\% | 8\% | 112\% | 84\% | 6\% | 0\% | -2\% | -1\% |
| Critical (27\%) | 272\% | -17\% | -16\% | 9\% | -5\% | 35\% | 130\% | 73\% | -8\% | -11\% | -9\% | -4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.4 Stanislaus River at Mouth Flow

Table 5C.3.2.4.1 Stanislaus River at Mouth, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,122 | 463 | 442 | 576 | 1,084 | 1,969 | 1,886 | 1,989 | 1,536 | 751 | 587 | 646 |
| 20\% | 1,029 | 384 | 368 | 427 | 643 | 1,708 | 1,769 | 1,647 | 1,334 | 606 | 488 | 507 |
| 30\% | 982 | 348 | 319 | 368 | 472 | 520 | 1,696 | 1,536 | 1,221 | 502 | 462 | 473 |
| 40\% | 958 | 337 | 304 | 347 | 406 | 433 | 1,610 | 1,362 | 1,053 | 442 | 445 | 443 |
| 50\% | 879 | 319 | 290 | 337 | 369 | 367 | 1,485 | 1,289 | 635 | 412 | 445 | 439 |
| 60\% | 826 | 292 | 281 | 326 | 331 | 336 | 936 | 873 | 510 | 383 | 416 | 428 |
| 70\% | 772 | 267 | 262 | 312 | 279 | 314 | 806 | 755 | 406 | 372 | 395 | 389 |
| 80\% | 755 | 260 | 241 | 295 | 253 | 241 | 686 | 646 | 358 | 341 | 371 | 360 |
| 90\% | 676 | 248 | 224 | 273 | 230 | 207 | 572 | 576 | 311 | 308 | 331 | 318 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 903 | 398 | 448 | 630 | 719 | 903 | 1,279 | 1,207 | 883 | 546 | 505 | 533 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 952 | 624 | 881 | 1,115 | 1,412 | 2,258 | 1,779 | 1,828 | 1,456 | 976 | 831 | 946 |
| Above Normal (24\%) | 907 | 347 | 357 | 776 | 786 | 801 | 1,410 | 1,244 | 1,257 | 534 | 467 | 480 |
| Below Normal (10\%) | 932 | 354 | 358 | 430 | 517 | 539 | 1,556 | 1,378 | 669 | 449 | 440 | 429 |
| Dry (16\%) | 916 | 322 | 300 | 349 | 405 | 345 | 1,064 | 1,002 | 530 | 375 | 397 | 399 |
| Critical (27\%) | 837 | 310 | 277 | 317 | 319 | 286 | 754 | 695 | 335 | 321 | 346 | 342 |

Revised Alternative 1

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 653 | 567 | 590 | 624 | 2,437 | 1,243 | 1,824 | 1,680 | 1,791 | 932 | 588 | 706 |
| 20\% | 577 | 482 | 480 | 506 | 987 | 615 | 1,626 | 1,588 | 1,545 | 564 | 488 | 506 |
| 30\% | 491 | 441 | 431 | 462 | 560 | 531 | 1,495 | 1,515 | 1,261 | 499 | 458 | 473 |
| 40\% | 424 | 409 | 382 | 434 | 498 | 458 | 1,303 | 1,285 | 1,041 | 443 | 445 | 446 |
| 50\% | 377 | 386 | 336 | 392 | 442 | 405 | 1,022 | 903 | 726 | 412 | 441 | 439 |
| 60\% | 314 | 344 | 312 | 279 | 399 | 311 | 716 | 756 | 418 | 389 | 420 | 431 |
| 70\% | 284 | 313 | 291 | 248 | 320 | 277 | 584 | 601 | 375 | 374 | 396 | 397 |
| 80\% | 248 | 270 | 270 | 229 | 232 | 226 | 469 | 541 | 347 | 349 | 374 | 370 |
| 90\% | 185 | 243 | 204 | 199 | 178 | 146 | 424 | 471 | 312 | 317 | 347 | 320 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 430 | 460 | 512 | 642 | 872 | 741 | 1,079 | 1,067 | 1,034 | 585 | 530 | 573 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 505 | 706 | 978 | 1,155 | 1,903 | 1,839 | 1,754 | 1,693 | 2,130 | 1,121 | 921 | 1,111 |
| Above Normal (24\%) | 441 | 400 | 406 | 779 | 822 | 641 | 1,237 | 1,160 | 1,281 | 533 | 461 | 480 |
| Below Normal (10\%) | 445 | 435 | 438 | 484 | 703 | 466 | 1,189 | 1,197 | 607 | 449 | 438 | 434 |
| Dry (16\%) | 454 | 397 | 375 | 368 | 479 | 330 | 720 | 816 | 502 | 376 | 404 | 402 |
| Critical (27\%) | 336 | 347 | 314 | 294 | 320 | 226 | 524 | 544 | 332 | 343 | 361 | 344 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -42\% | 22\% | 33\% | 8\% | 125\% | -37\% | -3\% | -16\% | 17\% | 24\% | 0\% | 9\% |
| 20\% | -44\% | 26\% | 31\% | 19\% | 54\% | -64\% | -8\% | -4\% | 16\% | -7\% | 0\% | 0\% |
| 30\% | -50\% | 27\% | 35\% | 26\% | 19\% | 2\% | -12\% | -1\% | 3\% | -1\% | -1\% | 0\% |
| 40\% | -56\% | 21\% | 25\% | 25\% | 23\% | 6\% | -19\% | -6\% | -1\% | 0\% | 0\% | 1\% |
| 50\% | -57\% | 21\% | 16\% | 16\% | 20\% | 10\% | -31\% | -30\% | 14\% | 0\% | -1\% | 0\% |
| 60\% | -62\% | 18\% | 11\% | -14\% | 21\% | -7\% | -23\% | -13\% | -18\% | 1\% | 1\% | 1\% |
| 70\% | -63\% | 18\% | 11\% | -20\% | 14\% | -12\% | -28\% | -20\% | -8\% | 0\% | 0\% | 2\% |
| 80\% | -67\% | 4\% | 12\% | -22\% | -8\% | -6\% | -32\% | -16\% | -3\% | 3\% | 1\% | 3\% |
| 90\% | -73\% | -2\% | -9\% | -27\% | -22\% | -29\% | -26\% | -18\% | 0\% | 3\% | 5\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -52\% | 16\% | 14\% | 2\% | 21\% | -18\% | -16\% | -12\% | 17\% | 7\% | 5\% | 7\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -47\% | 13\% | 11\% | 4\% | 35\% | -19\% | -1\% | -7\% | 46\% | 15\% | 11\% | 17\% |
| Above Normal (24\%) | -51\% | 15\% | 14\% | 0\% | 5\% | -20\% | -12\% | -7\% | 2\% | 0\% | -1\% | 0\% |
| Below Normal (10\%) | -52\% | 23\% | 23\% | 13\% | 36\% | -14\% | -24\% | -13\% | -9\% | 0\% | 0\% | 1\% |
| Dry (16\%) | -50\% | 23\% | 25\% | 5\% | 18\% | -4\% | -32\% | -19\% | -5\% | 0\% | 2\% | 1\% |
| Critical (27\%) | -60\% | 12\% | 13\% | -7\% | 0\% | -21\% | -30\% | -22\% | -1\% | 7\% | 4\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.4.2 Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 653 | 567 | 590 | 624 | 2,437 | 1,243 | 1,824 | 1,680 | 1,791 | 932 | 588 | 706 |
| 20\% | 577 | 482 | 480 | 506 | 987 | 615 | 1,626 | 1,588 | 1,545 | 564 | 488 | 506 |
| 30\% | 491 | 441 | 431 | 462 | 560 | 531 | 1,495 | 1,515 | 1,261 | 499 | 458 | 473 |
| 40\% | 424 | 409 | 382 | 434 | 498 | 458 | 1,303 | 1,285 | 1,041 | 443 | 445 | 446 |
| 50\% | 377 | 386 | 336 | 392 | 442 | 405 | 1,022 | 903 | 726 | 412 | 441 | 439 |
| 60\% | 314 | 344 | 312 | 279 | 399 | 311 | 716 | 756 | 418 | 389 | 420 | 431 |
| 70\% | 284 | 313 | 291 | 248 | 320 | 277 | 584 | 601 | 375 | 374 | 396 | 397 |
| 80\% | 248 | 270 | 270 | 229 | 232 | 226 | 469 | 541 | 347 | 349 | 374 | 370 |
| 90\% | 185 | 243 | 204 | 199 | 178 | 146 | 424 | 471 | 312 | 317 | 347 | 320 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 430 | 460 | 512 | 642 | 872 | 741 | 1,079 | 1,067 | 1,034 | 585 | 530 | 573 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 505 | 706 | 978 | 1,155 | 1,903 | 1,839 | 1,754 | 1,693 | 2,130 | 1,121 | 921 | 1,111 |
| Above Normal (24\%) | 441 | 400 | 406 | 779 | 822 | 641 | 1,237 | 1,160 | 1,281 | 533 | 461 | 480 |
| Below Normal (10\%) | 445 | 435 | 438 | 484 | 703 | 466 | 1,189 | 1,197 | 607 | 449 | 438 | 434 |
| Dry (16\%) | 454 | 397 | 375 | 368 | 479 | 330 | 720 | 816 | 502 | 376 | 404 | 402 |
| Critical (27\%) | 336 | 347 | 314 | 294 | 320 | 226 | 524 | 544 | 332 | 343 | 361 | 344 |

## No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,122 | 463 | 442 | 576 | 1,084 | 1,969 | 1,886 | 1,989 | 1,536 | 751 | 587 | 646 |
| 20\% | 1,029 | 384 | 368 | 427 | 643 | 1,708 | 1,769 | 1,647 | 1,334 | 606 | 488 | 507 |
| 30\% | 982 | 348 | 319 | 368 | 472 | 520 | 1,696 | 1,536 | 1,221 | 502 | 462 | 473 |
| 40\% | 958 | 337 | 304 | 347 | 406 | 433 | 1,610 | 1,362 | 1,053 | 442 | 445 | 443 |
| 50\% | 879 | 319 | 290 | 337 | 369 | 367 | 1,485 | 1,289 | 635 | 412 | 445 | 439 |
| 60\% | 826 | 292 | 281 | 326 | 331 | 336 | 936 | 873 | 510 | 383 | 416 | 428 |
| 70\% | 772 | 267 | 262 | 312 | 279 | 314 | 806 | 755 | 406 | 372 | 395 | 389 |
| 80\% | 755 | 260 | 241 | 295 | 253 | 241 | 686 | 646 | 358 | 341 | 371 | 360 |
| 90\% | 676 | 248 | 224 | 273 | 230 | 207 | 572 | 576 | 311 | 308 | 331 | 318 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 903 | 398 | 448 | 630 | 719 | 903 | 1,279 | 1,207 | 883 | 546 | 505 | 533 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 952 | 624 | 881 | 1,115 | 1,412 | 2,258 | 1,779 | 1,828 | 1,456 | 976 | 831 | 946 |
| Above Normal (24\%) | 907 | 347 | 357 | 776 | 786 | 801 | 1,410 | 1,244 | 1,257 | 534 | 467 | 480 |
| Below Normal (10\%) | 932 | 354 | 358 | 430 | 517 | 539 | 1,556 | 1,378 | 669 | 449 | 440 | 429 |
| Dry (16\%) | 916 | 322 | 300 | 349 | 405 | 345 | 1,064 | 1,002 | 530 | 375 | 397 | 399 |
| Critical (27\%) | 837 | 310 | 277 | 317 | 319 | 286 | 754 | 695 | 335 | 321 | 346 | 342 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 72\% | -18\% | -25\% | -8\% | -56\% | 58\% | 3\% | 18\% | -14\% | -19\% | 0\% | -9\% |
| 20\% | 78\% | -20\% | -23\% | -16\% | -35\% | 178\% | 9\% | 4\% | -14\% | 7\% | 0\% | 0\% |
| 30\% | 100\% | -21\% | -26\% | -20\% | -16\% | -2\% | 13\% | 1\% | -3\% | 1\% | 1\% | 0\% |
| 40\% | 126\% | -18\% | -20\% | -20\% | -19\% | -5\% | 24\% | 6\% | 1\% | 0\% | 0\% | -1\% |
| 50\% | 133\% | -17\% | -14\% | -14\% | -16\% | -9\% | 45\% | 43\% | -13\% | 0\% | 1\% | 0\% |
| 60\% | 163\% | -15\% | -10\% | 17\% | -17\% | 8\% | 31\% | 15\% | 22\% | -1\% | -1\% | -1\% |
| 70\% | 171\% | -15\% | -10\% | 26\% | -13\% | 13\% | 38\% | 26\% | 8\% | 0\% | 0\% | -2\% |
| 80\% | 204\% | -4\% | -11\% | 29\% | 9\% | 7\% | 46\% | 19\% | 3\% | -2\% | -1\% | -3\% |
| 90\% | 265\% | 2\% | 10\% | 37\% | 29\% | 42\% | 35\% | 22\% | 0\% | -3\% | -5\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 110\% | -13\% | -13\% | -2\% | -18\% | 22\% | 19\% | 13\% | -15\% | -7\% | -5\% | -7\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88\% | -12\% | -10\% | -3\% | -26\% | 23\% | 1\% | 8\% | -32\% | -13\% | -10\% | -15\% |
| Above Normal (24\%) | 106\% | -13\% | -12\% | 0\% | -4\% | 25\% | 14\% | 7\% | -2\% | 0\% | 1\% | 0\% |
| Below Normal (10\%) | 109\% | -19\% | -18\% | -11\% | -26\% | 16\% | 31\% | 15\% | 10\% | 0\% | 0\% | -1\% |
| Dry (16\%) | 102\% | -19\% | -20\% | -5\% | -15\% | 4\% | 48\% | 23\% | 6\% | 0\% | -2\% | -1\% |
| Critical (27\%) | 149\% | -11\% | -12\% | 8\% | 0\% | 27\% | 44\% | 28\% | 1\% | -6\% | -4\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.4.3 Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 653 | 567 | 590 | 624 | 2,437 | 1,243 | 1,824 | 1,680 | 1,791 | 932 | 588 | 706 |
| 20\% | 577 | 482 | 480 | 506 | 987 | 615 | 1,626 | 1,588 | 1,545 | 564 | 488 | 506 |
| 30\% | 491 | 441 | 431 | 462 | 560 | 531 | 1,495 | 1,515 | 1,261 | 499 | 458 | 473 |
| 40\% | 424 | 409 | 382 | 434 | 498 | 458 | 1,303 | 1,285 | 1,041 | 443 | 445 | 446 |
| 50\% | 377 | 386 | 336 | 392 | 442 | 405 | 1,022 | 903 | 726 | 412 | 441 | 439 |
| 60\% | 314 | 344 | 312 | 279 | 399 | 311 | 716 | 756 | 418 | 389 | 420 | 431 |
| 70\% | 284 | 313 | 291 | 248 | 320 | 277 | 584 | 601 | 375 | 374 | 396 | 397 |
| 80\% | 248 | 270 | 270 | 229 | 232 | 226 | 469 | 541 | 347 | 349 | 374 | 370 |
| 90\% | 185 | 243 | 204 | 199 | 178 | 146 | 424 | 471 | 312 | 317 | 347 | 320 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 430 | 460 | 512 | 642 | 872 | 741 | 1,079 | 1,067 | 1,034 | 585 | 530 | 573 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 505 | 706 | 978 | 1,155 | 1,903 | 1,839 | 1,754 | 1,693 | 2,130 | 1,121 | 921 | 1,111 |
| Above Normal (24\%) | 441 | 400 | 406 | 779 | 822 | 641 | 1,237 | 1,160 | 1,281 | 533 | 461 | 480 |
| Below Normal (10\%) | 445 | 435 | 438 | 484 | 703 | 466 | 1,189 | 1,197 | 607 | 449 | 438 | 434 |
| Dry (16\%) | 454 | 397 | 375 | 368 | 479 | 330 | 720 | 816 | 502 | 376 | 404 | 402 |
| Critical (27\%) | 336 | 347 | 314 | 294 | 320 | 226 | 524 | 544 | 332 | 343 | 361 | 344 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 679 | 485 | 722 | 1,267 | 2,628 | 1,444 | 1,865 | 1,414 | 950 | 885 | 571 | 1,146 |
| 20\% | 557 | 456 | 438 | 518 | 1,301 | 734 | 1,634 | 1,306 | 679 | 535 | 480 | 489 |
| 30\% | 482 | 441 | 411 | 410 | 502 | 486 | 1,552 | 1,233 | 558 | 476 | 457 | 450 |
| 40\% | 448 | 424 | 400 | 374 | 416 | 419 | 1,240 | 1,043 | 428 | 424 | 445 | 439 |
| 50\% | 435 | 402 | 381 | 311 | 366 | 367 | 1,064 | 920 | 413 | 382 | 440 | 435 |
| 60\% | 392 | 372 | 362 | 275 | 308 | 334 | 996 | 882 | 374 | 374 | 410 | 415 |
| 70\% | 377 | 359 | 325 | 251 | 238 | 312 | 893 | 829 | 352 | 350 | 390 | 384 |
| 80\% | 360 | 333 | 300 | 232 | 201 | 238 | 575 | 550 | 304 | 327 | 367 | 360 |
| 90\% | 293 | 260 | 239 | 198 | 180 | 203 | 493 | 489 | 273 | 290 | 347 | 320 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 482 | 469 | 558 | 669 | 938 | 770 | 1,180 | 995 | 693 | 573 | 535 | 578 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 539 | 714 | 1,096 | 1,183 | 2,227 | 1,841 | 1,781 | 1,437 | 1,596 | 1,213 | 961 | 1,139 |
| Above Normal (24\%) | 516 | 418 | 468 | 818 | 843 | 708 | 1,341 | 1,054 | 550 | 446 | 457 | 473 |
| Below Normal (10\%) | 461 | 404 | 408 | 632 | 723 | 446 | 1,230 | 1,086 | 449 | 445 | 438 | 422 |
| Dry (16\%) | 495 | 399 | 377 | 365 | 463 | 345 | 849 | 803 | 411 | 365 | 404 | 402 |
| Critical (27\%) | 401 | 369 | 336 | 282 | 272 | 271 | 692 | 639 | 299 | 305 | 351 | 351 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 4\% | -14\% | 22\% | 103\% | 8\% | 16\% | 2\% | -16\% | -47\% | -5\% | -3\% | 62\% |
| 20\% | -3\% | -5\% | -9\% | 2\% | 32\% | 19\% | 1\% | -18\% | -56\% | -5\% | -2\% | -3\% |
| 30\% | -2\% | 0\% | -5\% | -11\% | -10\% | -8\% | 4\% | -19\% | -56\% | -4\% | 0\% | -5\% |
| 40\% | 6\% | 4\% | 5\% | -14\% | -16\% | -8\% | -5\% | -19\% | -59\% | -4\% | 0\% | -1\% |
| 50\% | 15\% | 4\% | 13\% | -21\% | -17\% | -9\% | 4\% | 2\% | -43\% | -7\% | 0\% | -1\% |
| 60\% | 25\% | 8\% | 16\% | -2\% | -23\% | 7\% | 39\% | 17\% | -11\% | -4\% | -2\% | -4\% |
| 70\% | 33\% | 15\% | 12\% | 1\% | -25\% | 12\% | 53\% | 38\% | -6\% | -6\% | -2\% | -3\% |
| 80\% | 45\% | 23\% | 11\% | 1\% | -13\% | 6\% | 23\% | 2\% | -13\% | -6\% | -2\% | -3\% |
| 90\% | 58\% | 7\% | 17\% | 0\% | 1\% | 39\% | 16\% | 4\% | -13\% | -9\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 12\% | 2\% | 9\% | 4\% | 8\% | 4\% | 9\% | -7\% | -33\% | -2\% | 1\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 7\% | 1\% | 12\% | 2\% | 17\% | 0\% | 2\% | -15\% | -25\% | 8\% | 4\% | 2\% |
| Above Normal (24\%) | 17\% | 5\% | 15\% | 5\% | 3\% | 11\% | 8\% | -9\% | -57\% | -16\% | -1\% | -2\% |
| Below Normal (10\%) | 3\% | -7\% | -7\% | 30\% | 3\% | -4\% | 3\% | -9\% | -26\% | -1\% | 0\% | -3\% |
| Dry (16\%) | 9\% | 1\% | 1\% | -1\% | -3\% | 4\% | 18\% | -2\% | -18\% | -3\% | 0\% | 0\% |
| Critical (27\%) | 19\% | 6\% | 7\% | -4\% | -15\% | 20\% | 32\% | 17\% | -10\% | -11\% | -3\% | 2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.4.4 Stanislaus River at Mouth, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 653 | 567 | 590 | 624 | 2,437 | 1,243 | 1,824 | 1,680 | 1,791 | 932 | 588 | 706 |
| 20\% | 577 | 482 | 480 | 506 | 987 | 615 | 1,626 | 1,588 | 1,545 | 564 | 488 | 506 |
| 30\% | 491 | 441 | 431 | 462 | 560 | 531 | 1,495 | 1,515 | 1,261 | 499 | 458 | 473 |
| 40\% | 424 | 409 | 382 | 434 | 498 | 458 | 1,303 | 1,285 | 1,041 | 443 | 445 | 446 |
| 50\% | 377 | 386 | 336 | 392 | 442 | 405 | 1,022 | 903 | 726 | 412 | 441 | 439 |
| 60\% | 314 | 344 | 312 | 279 | 399 | 311 | 716 | 756 | 418 | 389 | 420 | 431 |
| 70\% | 284 | 313 | 291 | 248 | 320 | 277 | 584 | 601 | 375 | 374 | 396 | 397 |
| 80\% | 248 | 270 | 270 | 229 | 232 | 226 | 469 | 541 | 347 | 349 | 374 | 370 |
| 90\% | 185 | 243 | 204 | 199 | 178 | 146 | 424 | 471 | 312 | 317 | 347 | 320 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 430 | 460 | 512 | 642 | 872 | 741 | 1,079 | 1,067 | 1,034 | 585 | 530 | 573 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 505 | 706 | 978 | 1,155 | 1,903 | 1,839 | 1,754 | 1,693 | 2,130 | 1,121 | 921 | 1,111 |
| Above Normal (24\%) | 441 | 400 | 406 | 779 | 822 | 641 | 1,237 | 1,160 | 1,281 | 533 | 461 | 480 |
| Below Normal (10\%) | 445 | 435 | 438 | 484 | 703 | 466 | 1,189 | 1,197 | 607 | 449 | 438 | 434 |
| Dry (16\%) | 454 | 397 | 375 | 368 | 479 | 330 | 720 | 816 | 502 | 376 | 404 | 402 |
| Critical (27\%) | 336 | 347 | 314 | 294 | 320 | 226 | 524 | 544 | 332 | 343 | 361 | 344 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,121 | 456 | 442 | 570 | 1,081 | 1,952 | 1,950 | 2,148 | 1,536 | 719 | 571 | 659 |
| 20\% | 1,029 | 382 | 378 | 416 | 586 | 1,708 | 1,815 | 1,974 | 1,319 | 564 | 488 | 501 |
| 30\% | 979 | 348 | 319 | 363 | 483 | 495 | 1,707 | 1,806 | 1,139 | 502 | 461 | 473 |
| 40\% | 903 | 336 | 304 | 347 | 401 | 415 | 1,630 | 1,672 | 1,034 | 442 | 445 | 443 |
| 50\% | 854 | 318 | 290 | 337 | 368 | 365 | 1,529 | 1,434 | 635 | 407 | 443 | 439 |
| 60\% | 818 | 292 | 281 | 326 | 319 | 333 | 1,311 | 1,290 | 485 | 382 | 413 | 428 |
| 70\% | 764 | 267 | 262 | 312 | 272 | 312 | 1,168 | 1,183 | 383 | 371 | 389 | 389 |
| 80\% | 748 | 260 | 241 | 295 | 245 | 241 | 1,044 | 962 | 343 | 339 | 367 | 356 |
| 90\% | 681 | 248 | 224 | 270 | 230 | 207 | 865 | 752 | 300 | 307 | 305 | 316 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 891 | 396 | 428 | 631 | 704 | 860 | 1,437 | 1,458 | 863 | 521 | 476 | 522 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 937 | 624 | 784 | 1,115 | 1,380 | 2,073 | 1,744 | 1,866 | 1,409 | 880 | 716 | 909 |
| Above Normal (24\%) | 898 | 342 | 372 | 790 | 770 | 801 | 1,356 | 1,651 | 1,257 | 534 | 467 | 480 |
| Below Normal (10\%) | 925 | 354 | 358 | 430 | 516 | 539 | 1,518 | 1,444 | 656 | 449 | 440 | 429 |
| Dry (16\%) | 900 | 322 | 300 | 347 | 403 | 345 | 1,488 | 1,442 | 522 | 375 | 397 | 399 |
| Critical (27\%) | 829 | 306 | 272 | 311 | 306 | 286 | 1,187 | 944 | 310 | 311 | 337 | 335 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 72\% | -20\% | -25\% | -9\% | -56\% | 57\% | 7\% | 28\% | -14\% | -23\% | -3\% | -7\% |
| 20\% | 78\% | -21\% | -21\% | -18\% | -41\% | 178\% | 12\% | 24\% | -15\% | 0\% | 0\% | -1\% |
| 30\% | 99\% | -21\% | -26\% | -22\% | -14\% | -7\% | 14\% | 19\% | -10\% | 1\% | 1\% | 0\% |
| 40\% | 113\% | -18\% | -20\% | -20\% | -19\% | -9\% | 25\% | 30\% | -1\% | 0\% | 0\% | -1\% |
| 50\% | 127\% | -18\% | -14\% | -14\% | -17\% | -10\% | 50\% | 59\% | -13\% | -1\% | 0\% | 0\% |
| 60\% | 160\% | -15\% | -10\% | 17\% | -20\% | 7\% | 83\% | 71\% | 16\% | -2\% | -2\% | -1\% |
| 70\% | 169\% | -15\% | -10\% | 26\% | -15\% | 12\% | 100\% | 97\% | 2\% | -1\% | -2\% | -2\% |
| 80\% | 201\% | -4\% | -11\% | 29\% | 6\% | 7\% | 122\% | 78\% | -1\% | -3\% | -2\% | -4\% |
| 90\% | 268\% | 2\% | 10\% | 36\% | 29\% | 42\% | 104\% | 60\% | -4\% | -3\% | -12\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 107\% | -14\% | -16\% | -2\% | -19\% | 16\% | 33\% | 37\% | -17\% | -11\% | -10\% | -9\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 85\% | -12\% | -20\% | -3\% | -28\% | 13\% | -1\% | 10\% | -34\% | -21\% | -22\% | -18\% |
| Above Normal (24\%) | 104\% | -15\% | -8\% | 1\% | -6\% | 25\% | 10\% | 42\% | -2\% | 0\% | 1\% | 0\% |
| Below Normal (10\%) | 108\% | -19\% | -18\% | -11\% | -27\% | 16\% | 28\% | 21\% | 8\% | 0\% | 0\% | -1\% |
| Dry (16\%) | 98\% | -19\% | -20\% | -6\% | -16\% | 4\% | 107\% | 77\% | 4\% | 0\% | -2\% | -1\% |
| Critical (27\%) | 147\% | -12\% | -13\% | 6\% | -4\% | 27\% | 127\% | 74\% | -6\% | -9\% | -7\% | -3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.5 Stanislaus River below New Melones Temperature

Table 5C.3.2.5.1 Stanislaus River below New Melones Reservoir, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 56.0 | 53.6 | 52.1 | 51.1 | 50.7 | 51.0 | 51.6 | 52.6 | 53.7 | 55.1 | 57.5 |
| 20\% | 55.6 | 54.6 | 52.7 | 51.5 | 50.4 | 49.9 | 50.2 | 51.1 | 51.8 | 52.5 | 53.0 | 54.4 |
| 30\% | 53.4 | 53.3 | 52.3 | 50.9 | 49.7 | 49.5 | 49.9 | 50.5 | 51.1 | 51.8 | 52.5 | 53.0 |
| 40\% | 52.9 | 52.8 | 51.8 | 50.6 | 49.4 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.5 |
| 50\% | 52.4 | 52.5 | 51.6 | 50.2 | 49.2 | 49.0 | 49.3 | 49.7 | 50.3 | 51.1 | 51.6 | 52.0 |
| 60\% | 52.0 | 52.1 | 51.4 | 49.9 | 48.9 | 48.7 | 48.9 | 49.3 | 49.7 | 50.4 | 50.9 | 51.4 |
| 70\% | 51.4 | 51.6 | 51.0 | 49.6 | 48.7 | 48.1 | 48.4 | 49.0 | 49.3 | 50.0 | 50.5 | 51.0 |
| 80\% | 51.1 | 51.2 | 50.3 | 49.2 | 48.0 | 47.5 | 48.0 | 48.4 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.9 | 49.9 | 49.8 | 48.3 | 47.0 | 46.8 | 46.9 | 47.2 | 47.5 | 48.5 | 48.9 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.4 | 52.8 | 51.7 | 50.2 | 49.1 | 48.8 | 49.2 | 49.9 | 50.6 | 51.3 | 52.2 | 53.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 49.6 | 49.6 | 48.7 | 49.4 | 48.1 | 47.9 | 47.8 | 48.1 | 48.5 | 49.0 | 49.5 | 49.9 |
| Above Normal (24\%) | 53.8 | 52.7 | 51.2 | 49.5 | 48.2 | 48.0 | 48.4 | 48.9 | 49.6 | 50.4 | 51.4 | 52.2 |
| Below Normal (10\%) | 52.6 | 52.2 | 51.3 | 50.2 | 49.2 | 48.8 | 49.1 | 49.6 | 50.2 | 50.9 | 51.5 | 52.1 |
| Dry (16\%) | 52.3 | 52.4 | 51.8 | 50.7 | 49.8 | 49.4 | 49.7 | 50.3 | 51.0 | 51.9 | 52.9 | 53.8 |
| Critical (27\%) | 54.8 | 53.7 | 52.5 | 51.2 | 50.4 | 50.0 | 50.8 | 52.1 | 53.1 | 53.9 | 54.9 | 56.8 |

Revised Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 54.7 | 54.8 | 53.5 | 52.1 | 51.2 | 50.7 | 51.0 | 51.5 | 52.1 | 53.0 | 53.7 | 54.1 |
| 20\% | 53.8 | 53.9 | 52.7 | 51.5 | 50.4 | 50.1 | 50.2 | 50.9 | 51.5 | 52.0 | 52.7 | 53.1 |
| 30\% | 52.8 | 52.8 | 52.3 | 50.9 | 50.0 | 49.6 | 49.9 | 50.4 | 50.9 | 51.4 | 52.2 | 52.5 |
| 40\% | 52.3 | 52.3 | 51.7 | 50.7 | 49.6 | 49.3 | 49.7 | 50.2 | 50.6 | 51.1 | 51.7 | 52.0 |
| 50\% | 51.8 | 51.9 | 51.4 | 50.3 | 49.4 | 49.1 | 49.3 | 49.6 | 50.1 | 50.7 | 51.3 | 51.6 |
| 60\% | 51.3 | 51.6 | 51.3 | 50.1 | 49.1 | 48.7 | 48.9 | 49.3 | 49.8 | 50.3 | 50.7 | 51.1 |
| 70\% | 51.1 | 51.4 | 51.0 | 49.8 | 48.9 | 48.4 | 48.7 | 49.0 | 49.4 | 50.0 | 50.5 | 50.8 |
| 80\% | 50.6 | 50.9 | 50.6 | 49.4 | 48.5 | 48.0 | 47.9 | 48.4 | 49.1 | 49.5 | 50.0 | 50.4 |
| 90\% | 49.8 | 50.0 | 50.1 | 49.1 | 47.6 | 47.1 | 47.2 | 47.5 | 48.0 | 48.6 | 49.1 | 49.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 52.5 | 52.4 | 51.6 | 50.4 | 49.4 | 49.0 | 49.2 | 49.7 | 50.2 | 50.9 | 51.8 | 52.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 48.9 | 49.0 | 48.5 | 49.5 | 48.2 | 47.9 | 48.0 | 48.3 | 48.7 | 49.1 | 49.6 | 50.0 |
| Above Normal (24\%) | 53.1 | 52.8 | 51.6 | 49.9 | 48.7 | 48.2 | 48.4 | 48.8 | 49.4 | 50.0 | 50.8 | 51.4 |
| Below Normal (10\%) | 51.5 | 51.6 | 51.1 | 50.4 | 49.4 | 49.0 | 49.2 | 49.6 | 50.1 | 50.6 | 51.1 | 51.6 |
| Dry (16\%) | 51.5 | 51.7 | 51.4 | 50.6 | 49.9 | 49.6 | 49.8 | 50.2 | 50.8 | 51.3 | 51.9 | 52.5 |
| Critical (27\%) | 53.6 | 53.4 | 52.4 | 51.4 | 50.7 | 50.2 | 50.6 | 51.4 | 52.2 | 53.2 | 54.8 | 55.0 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -4.1 | -1.3 | -0.2 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | -0.5 | -0.7 | -1.4 | -3.4 |
| 20\% | -1.9 | -0.7 | -0.1 | 0.0 | 0.0 | 0.2 | 0.0 | -0.2 | -0.3 | -0.5 | -0.3 | -1.3 |
| 30\% | -0.6 | -0.4 | 0.0 | 0.0 | 0.2 | 0.1 | 0.0 | -0.1 | -0.2 | -0.4 | -0.3 | -0.5 |
| 40\% | -0.7 | -0.5 | -0.2 | 0.1 | 0.2 | 0.1 | 0.0 | -0.1 | -0.2 | -0.3 | -0.2 | -0.5 |
| 50\% | -0.6 | -0.6 | -0.1 | 0.1 | 0.2 | 0.1 | 0.0 | -0.1 | -0.2 | -0.4 | -0.3 | -0.4 |
| 60\% | -0.7 | -0.5 | 0.0 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | -0.3 |
| 70\% | -0.2 | -0.2 | 0.0 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 | -0.1 | 0.0 | -0.2 |
| 80\% | -0.5 | -0.3 | 0.2 | 0.2 | 0.5 | 0.5 | -0.1 | 0.0 | 0.2 | -0.1 | -0.1 | -0.4 |
| 90\% | -0.1 | 0.1 | 0.3 | 0.8 | 0.6 | 0.2 | 0.2 | 0.3 | 0.4 | 0.1 | 0.2 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.9 | -0.4 | 0.0 | 0.2 | 0.3 | 0.2 | 0.0 | -0.2 | -0.3 | -0.4 | -0.4 | -0.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.7 | -0.6 | -0.2 | 0.1 | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 | 0.0 |
| Above Normal (24\%) | -0.7 | 0.1 | 0.4 | 0.4 | 0.5 | 0.2 | 0.0 | -0.1 | -0.2 | -0.4 | -0.6 | -0.8 |
| Below Normal (10\%) | -1.1 | -0.6 | -0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.0 | -0.1 | -0.3 | -0.4 | -0.5 |
| Dry (16\%) | -0.8 | -0.7 | -0.4 | -0.1 | 0.1 | 0.2 | 0.1 | -0.1 | -0.2 | -0.6 | -1.0 | -1.3 |
| Critical (27\%) | -1.2 | -0.2 | 0.0 | 0.2 | 0.3 | 0.3 | -0.2 | -0.7 | -1.0 | -0.7 | -0.2 | -1.8 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed
Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.5.2 Stanislaus River below New Melones Reservoir, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 54.7 | 54.8 | 53.5 | 52.1 | 51.2 | 50.7 | 51.0 | 51.5 | 52.1 | 53.0 | 53.7 | 54.1 |
| 20\% | 53.8 | 53.9 | 52.7 | 51.5 | 50.4 | 50.1 | 50.2 | 50.9 | 51.5 | 52.0 | 52.7 | 53.1 |
| 30\% | 52.8 | 52.8 | 52.3 | 50.9 | 50.0 | 49.6 | 49.9 | 50.4 | 50.9 | 51.4 | 52.2 | 52.5 |
| 40\% | 52.3 | 52.3 | 51.7 | 50.7 | 49.6 | 49.3 | 49.7 | 50.2 | 50.6 | 51.1 | 51.7 | 52.0 |
| 50\% | 51.8 | 51.9 | 51.4 | 50.3 | 49.4 | 49.1 | 49.3 | 49.6 | 50.1 | 50.7 | 51.3 | 51.6 |
| 60\% | 51.3 | 51.6 | 51.3 | 50.1 | 49.1 | 48.7 | 48.9 | 49.3 | 49.8 | 50.3 | 50.7 | 51.1 |
| 70\% | 51.1 | 51.4 | 51.0 | 49.8 | 48.9 | 48.4 | 48.7 | 49.0 | 49.4 | 50.0 | 50.5 | 50.8 |
| 80\% | 50.6 | 50.9 | 50.6 | 49.4 | 48.5 | 48.0 | 47.9 | 48.4 | 49.1 | 49.5 | 50.0 | 50.4 |
| 90\% | 49.8 | 50.0 | 50.1 | 49.1 | 47.6 | 47.1 | 47.2 | 47.5 | 48.0 | 48.6 | 49.1 | 49.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 52.5 | 52.4 | 51.6 | 50.4 | 49.4 | 49.0 | 49.2 | 49.7 | 50.2 | 50.9 | 51.8 | 52.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 48.9 | 49.0 | 48.5 | 49.5 | 48.2 | 47.9 | 48.0 | 48.3 | 48.7 | 49.1 | 49.6 | 50.0 |
| Above Normal (24\%) | 53.1 | 52.8 | 51.6 | 49.9 | 48.7 | 48.2 | 48.4 | 48.8 | 49.4 | 50.0 | 50.8 | 51.4 |
| Below Normal (10\%) | 51.5 | 51.6 | 51.1 | 50.4 | 49.4 | 49.0 | 49.2 | 49.6 | 50.1 | 50.6 | 51.1 | 51.6 |
| Dry (16\%) | 51.5 | 51.7 | 51.4 | 50.6 | 49.9 | 49.6 | 49.8 | 50.2 | 50.8 | 51.3 | 51.9 | 52.5 |
| Critical (27\%) | 53.6 | 53.4 | 52.4 | 51.4 | 50.7 | 50.2 | 50.6 | 51.4 | 52.2 | 53.2 | 54.8 | 55.0 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 56.0 | 53.6 | 52.1 | 51.1 | 50.7 | 51.0 | 51.6 | 52.6 | 53.7 | 55.1 | 57.5 |
| 20\% | 55.6 | 54.6 | 52.7 | 51.5 | 50.4 | 49.9 | 50.2 | 51.1 | 51.8 | 52.5 | 53.0 | 54.4 |
| 30\% | 53.4 | 53.3 | 52.3 | 50.9 | 49.7 | 49.5 | 49.9 | 50.5 | 51.1 | 51.8 | 52.5 | 53.0 |
| 40\% | 52.9 | 52.8 | 51.8 | 50.6 | 49.4 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.5 |
| 50\% | 52.4 | 52.5 | 51.6 | 50.2 | 49.2 | 49.0 | 49.3 | 49.7 | 50.3 | 51.1 | 51.6 | 52.0 |
| 60\% | 52.0 | 52.1 | 51.4 | 49.9 | 48.9 | 48.7 | 48.9 | 49.3 | 49.7 | 50.4 | 50.9 | 51.4 |
| 70\% | 51.4 | 51.6 | 51.0 | 49.6 | 48.7 | 48.1 | 48.4 | 49.0 | 49.3 | 50.0 | 50.5 | 51.0 |
| 80\% | 51.1 | 51.2 | 50.3 | 49.2 | 48.0 | 47.5 | 48.0 | 48.4 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.9 | 49.9 | 49.8 | 48.3 | 47.0 | 46.8 | 46.9 | 47.2 | 47.5 | 48.5 | 48.9 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.4 | 52.8 | 51.7 | 50.2 | 49.1 | 48.8 | 49.2 | 49.9 | 50.6 | 51.3 | 52.2 | 53.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 49.6 | 49.6 | 48.7 | 49.4 | 48.1 | 47.9 | 47.8 | 48.1 | 48.5 | 49.0 | 49.5 | 49.9 |
| Above Normal (24\%) | 53.8 | 52.7 | 51.2 | 49.5 | 48.2 | 48.0 | 48.4 | 48.9 | 49.6 | 50.4 | 51.4 | 52.2 |
| Below Normal (10\%) | 52.6 | 52.2 | 51.3 | 50.2 | 49.2 | 48.8 | 49.1 | 49.6 | 50.2 | 50.9 | 51.5 | 52.1 |
| Dry (16\%) | 52.3 | 52.4 | 51.8 | 50.7 | 49.8 | 49.4 | 49.7 | 50.3 | 51.0 | 51.9 | 52.9 | 53.8 |
| Critical (27\%) | 54.8 | 53.7 | 52.5 | 51.2 | 50.4 | 50.0 | 50.8 | 52.1 | 53.1 | 53.9 | 54.9 | 56.8 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 4.1 | 1.3 | 0.2 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.5 | 0.7 | 1.4 | 3.4 |
| 20\% | 1.9 | 0.7 | 0.1 | 0.0 | 0.0 | -0.2 | 0.0 | 0.2 | 0.3 | 0.5 | 0.3 | 1.3 |
| 30\% | 0.6 | 0.4 | 0.0 | 0.0 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 | 0.5 |
| 40\% | 0.7 | 0.5 | 0.2 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.2 | 0.5 |
| 50\% | 0.6 | 0.6 | 0.1 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.4 | 0.3 | 0.4 |
| 60\% | 0.7 | 0.5 | 0.0 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 |
| 70\% | 0.2 | 0.2 | 0.0 | -0.2 | -0.2 | -0.3 | -0.3 | -0.1 | -0.1 | 0.1 | 0.0 | 0.2 |
| 80\% | 0.5 | 0.3 | -0.2 | -0.2 | -0.5 | -0.5 | 0.1 | 0.0 | -0.2 | 0.1 | 0.1 | 0.4 |
| 90\% | 0.1 | -0.1 | -0.3 | -0.8 | -0.6 | -0.2 | -0.2 | -0.3 | -0.4 | -0.1 | -0.2 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.9 | 0.4 | 0.0 | -0.2 | -0.3 | -0.2 | 0.0 | 0.2 | 0.3 | 0.4 | 0.4 | 0.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.7 | 0.6 | 0.2 | -0.1 | -0.2 | -0.1 | -0.2 | -0.2 | -0.2 | -0.1 | -0.1 | 0.0 |
| Above Normal (24\%) | 0.7 | -0.1 | -0.4 | -0.4 | -0.5 | -0.2 | 0.0 | 0.1 | 0.2 | 0.4 | 0.6 | 0.8 |
| Below Normal (10\%) | 1.1 | 0.6 | 0.2 | -0.1 | -0.2 | -0.2 | -0.2 | 0.0 | 0.1 | 0.3 | 0.4 | 0.5 |
| Dry (16\%) | 0.8 | 0.7 | 0.4 | 0.1 | -0.1 | -0.2 | -0.1 | 0.1 | 0.2 | 0.6 | 1.0 | 1.3 |
| Critical (27\%) | 1.2 | 0.2 | 0.0 | -0.2 | -0.3 | -0.3 | 0.2 | 0.7 | 1.0 | 0.7 | 0.2 | 1.8 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.5.3 Stanislaus River below New Melones Reservoir, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 54.7 | 54.8 | 53.5 | 52.1 | 51.2 | 50.7 | 51.0 | 51.5 | 52.1 | 53.0 | 53.7 | 54.1 |
| 20\% | 53.8 | 53.9 | 52.7 | 51.5 | 50.4 | 50.1 | 50.2 | 50.9 | 51.5 | 52.0 | 52.7 | 53.1 |
| 30\% | 52.8 | 52.8 | 52.3 | 50.9 | 50.0 | 49.6 | 49.9 | 50.4 | 50.9 | 51.4 | 52.2 | 52.5 |
| 40\% | 52.3 | 52.3 | 51.7 | 50.7 | 49.6 | 49.3 | 49.7 | 50.2 | 50.6 | 51.1 | 51.7 | 52.0 |
| 50\% | 51.8 | 51.9 | 51.4 | 50.3 | 49.4 | 49.1 | 49.3 | 49.6 | 50.1 | 50.7 | 51.3 | 51.6 |
| 60\% | 51.3 | 51.6 | 51.3 | 50.1 | 49.1 | 48.7 | 48.9 | 49.3 | 49.8 | 50.3 | 50.7 | 51.1 |
| 70\% | 51.1 | 51.4 | 51.0 | 49.8 | 48.9 | 48.4 | 48.7 | 49.0 | 49.4 | 50.0 | 50.5 | 50.8 |
| 80\% | 50.6 | 50.9 | 50.6 | 49.4 | 48.5 | 48.0 | 47.9 | 48.4 | 49.1 | 49.5 | 50.0 | 50.4 |
| 90\% | 49.8 | 50.0 | 50.1 | 49.1 | 47.6 | 47.1 | 47.2 | 47.5 | 48.0 | 48.6 | 49.1 | 49.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 52.5 | 52.4 | 51.6 | 50.4 | 49.4 | 49.0 | 49.2 | 49.7 | 50.2 | 50.9 | 51.8 | 52.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 48.9 | 49.0 | 48.5 | 49.5 | 48.2 | 47.9 | 48.0 | 48.3 | 48.7 | 49.1 | 49.6 | 50.0 |
| Above Normal (24\%) | 53.1 | 52.8 | 51.6 | 49.9 | 48.7 | 48.2 | 48.4 | 48.8 | 49.4 | 50.0 | 50.8 | 51.4 |
| Below Normal (10\%) | 51.5 | 51.6 | 51.1 | 50.4 | 49.4 | 49.0 | 49.2 | 49.6 | 50.1 | 50.6 | 51.1 | 51.6 |
| Dry (16\%) | 51.5 | 51.7 | 51.4 | 50.6 | 49.9 | 49.6 | 49.8 | 50.2 | 50.8 | 51.3 | 51.9 | 52.5 |
| Critical (27\%) | 53.6 | 53.4 | 52.4 | 51.4 | 50.7 | 50.2 | 50.6 | 51.4 | 52.2 | 53.2 | 54.8 | 55.0 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 55.7 | 55.3 | 53.2 | 52.3 | 51.1 | 50.8 | 51.1 | 51.6 | 52.2 | 53.0 | 53.7 | 54.9 |
| 20\% | 53.6 | 53.7 | 52.5 | 51.4 | 50.4 | 50.1 | 50.3 | 50.9 | 51.6 | 52.1 | 52.6 | 53.3 |
| 30\% | 52.6 | 52.7 | 52.1 | 51.0 | 49.9 | 49.6 | 50.0 | 50.4 | 50.9 | 51.5 | 52.0 | 52.5 |
| 40\% | 52.1 | 52.3 | 51.7 | 50.6 | 49.5 | 49.3 | 49.7 | 50.2 | 50.5 | 51.2 | 51.6 | 52.0 |
| 50\% | 51.7 | 51.9 | 51.4 | 50.3 | 49.5 | 49.2 | 49.3 | 49.6 | 50.0 | 50.6 | 51.1 | 51.5 |
| 60\% | 51.3 | 51.6 | 51.3 | 50.0 | 49.1 | 48.7 | 49.0 | 49.3 | 49.7 | 50.2 | 50.7 | 51.2 |
| 70\% | 51.1 | 51.3 | 51.0 | 49.7 | 48.8 | 48.5 | 48.7 | 49.1 | 49.5 | 49.9 | 50.4 | 50.8 |
| 80\% | 50.6 | 50.8 | 50.5 | 49.3 | 48.4 | 48.1 | 48.2 | 48.5 | 48.9 | 49.3 | 49.7 | 50.4 |
| 90\% | 49.7 | 49.9 | 50.0 | 48.4 | 47.3 | 47.1 | 47.3 | 47.6 | 48.0 | 48.5 | 48.9 | 49.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 52.5 | 52.4 | 51.6 | 50.3 | 49.3 | 49.0 | 49.3 | 49.7 | 50.3 | 51.1 | 51.6 | 52.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 48.8 | 49.0 | 48.5 | 49.4 | 48.3 | 47.9 | 48.0 | 48.3 | 48.6 | 49.0 | 49.5 | 49.9 |
| Above Normal (24\%) | 53.4 | 52.8 | 51.4 | 49.7 | 48.4 | 48.2 | 48.5 | 48.8 | 49.3 | 50.0 | 50.7 | 51.3 |
| Below Normal (10\%) | 51.5 | 51.5 | 51.0 | 50.4 | 49.4 | 49.0 | 49.2 | 49.6 | 50.1 | 50.6 | 51.1 | 51.5 |
| Dry (16\%) | 51.4 | 51.6 | 51.3 | 50.5 | 49.8 | 49.5 | 49.8 | 50.2 | 50.7 | 51.3 | 51.9 | 52.5 |
| Critical (27\%) | 53.3 | 53.3 | 52.4 | 51.4 | 50.7 | 50.3 | 50.8 | 51.5 | 52.6 | 53.9 | 54.4 | 54.7 |

Alternative 3 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.9 | 0.5 | -0.2 | 0.2 | -0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.8 |
| 20\% | -0.1 | -0.2 | -0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 |
| 30\% | -0.1 | -0.1 | -0.2 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | 0.0 |
| 40\% | -0.2 | -0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | -0.1 | -0.1 |
| 50\% | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | -0.2 | -0.1 |
| 60\% | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 |
| 70\% | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 |
| 80\% | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | 0.0 | 0.3 | 0.1 | -0.1 | -0.2 | -0.3 | 0.0 |
| 90\% | -0.2 | -0.1 | -0.1 | -0.7 | -0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.2 | 0.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | -0.1 | -0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 |
| Above Normal (24\%) | 0.3 | 0.0 | -0.2 | -0.2 | -0.3 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 |
| Below Normal (10\%) | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dry (16\%) | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Critical (27\%) | -0.3 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.4 | 0.7 | -0.4 | -0.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.5.4 Stanislaus River below New Melones Reservoir, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 54.7 | 54.8 | 53.5 | 52.1 | 51.2 | 50.7 | 51.0 | 51.5 | 52.1 | 53.0 | 53.7 | 54.1 |
| 20\% | 53.8 | 53.9 | 52.7 | 51.5 | 50.4 | 50.1 | 50.2 | 50.9 | 51.5 | 52.0 | 52.7 | 53.1 |
| 30\% | 52.8 | 52.8 | 52.3 | 50.9 | 50.0 | 49.6 | 49.9 | 50.4 | 50.9 | 51.4 | 52.2 | 52.5 |
| 40\% | 52.3 | 52.3 | 51.7 | 50.7 | 49.6 | 49.3 | 49.7 | 50.2 | 50.6 | 51.1 | 51.7 | 52.0 |
| 50\% | 51.8 | 51.9 | 51.4 | 50.3 | 49.4 | 49.1 | 49.3 | 49.6 | 50.1 | 50.7 | 51.3 | 51.6 |
| 60\% | 51.3 | 51.6 | 51.3 | 50.1 | 49.1 | 48.7 | 48.9 | 49.3 | 49.8 | 50.3 | 50.7 | 51.1 |
| 70\% | 51.1 | 51.4 | 51.0 | 49.8 | 48.9 | 48.4 | 48.7 | 49.0 | 49.4 | 50.0 | 50.5 | 50.8 |
| 80\% | 50.6 | 50.9 | 50.6 | 49.4 | 48.5 | 48.0 | 47.9 | 48.4 | 49.1 | 49.5 | 50.0 | 50.4 |
| 90\% | 49.8 | 50.0 | 50.1 | 49.1 | 47.6 | 47.1 | 47.2 | 47.5 | 48.0 | 48.6 | 49.1 | 49.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 52.5 | 52.4 | 51.6 | 50.4 | 49.4 | 49.0 | 49.2 | 49.7 | 50.2 | 50.9 | 51.8 | 52.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 48.9 | 49.0 | 48.5 | 49.5 | 48.2 | 47.9 | 48.0 | 48.3 | 48.7 | 49.1 | 49.6 | 50.0 |
| Above Normal (24\%) | 53.1 | 52.8 | 51.6 | 49.9 | 48.7 | 48.2 | 48.4 | 48.8 | 49.4 | 50.0 | 50.8 | 51.4 |
| Below Normal (10\%) | 51.5 | 51.6 | 51.1 | 50.4 | 49.4 | 49.0 | 49.2 | 49.6 | 50.1 | 50.6 | 51.1 | 51.6 |
| Dry (16\%) | 51.5 | 51.7 | 51.4 | 50.6 | 49.9 | 49.6 | 49.8 | 50.2 | 50.8 | 51.3 | 51.9 | 52.5 |
| Critical (27\%) | 53.6 | 53.4 | 52.4 | 51.4 | 50.7 | 50.2 | 50.6 | 51.4 | 52.2 | 53.2 | 54.8 | 55.0 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.7 | 57.0 | 53.9 | 52.0 | 51.0 | 50.7 | 51.2 | 52.3 | 53.1 | 55.4 | 59.8 | 63.1 |
| 20\% | 56.7 | 55.0 | 52.8 | 51.4 | 50.3 | 50.0 | 50.4 | 51.4 | 52.0 | 53.4 | 54.4 | 55.9 |
| 30\% | 54.4 | 53.7 | 52.3 | 50.9 | 49.6 | 49.5 | 50.0 | 50.7 | 51.3 | 52.2 | 53.1 | 53.8 |
| 40\% | 53.2 | 53.1 | 51.9 | 50.4 | 49.4 | 49.1 | 49.8 | 50.3 | 50.8 | 51.5 | 52.1 | 52.8 |
| 50\% | 52.5 | 52.6 | 51.6 | 50.2 | 49.0 | 49.0 | 49.3 | 49.9 | 50.3 | 51.2 | 51.7 | 52.1 |
| 60\% | 52.1 | 52.3 | 51.2 | 49.7 | 48.7 | 48.6 | 48.9 | 49.4 | 49.7 | 50.4 | 50.9 | 51.5 |
| 70\% | 51.5 | 51.8 | 51.0 | 49.4 | 48.3 | 48.0 | 48.5 | 48.9 | 49.3 | 50.0 | 50.6 | 51.1 |
| 80\% | 51.1 | 51.3 | 50.2 | 48.9 | 47.3 | 47.3 | 47.6 | 48.1 | 48.5 | 49.5 | 50.1 | 50.7 |
| 90\% | 49.9 | 50.1 | 49.5 | 47.8 | 46.3 | 46.3 | 46.7 | 47.1 | 47.4 | 48.4 | 48.9 | 49.5 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.0 | 53.1 | 51.7 | 50.0 | 48.9 | 48.7 | 49.2 | 50.0 | 50.4 | 51.7 | 52.8 | 53.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 50.1 | 49.7 | 48.7 | 49.3 | 47.9 | 47.7 | 47.6 | 48.0 | 48.4 | 48.9 | 49.4 | 49.9 |
| Above Normal (24\%) | 54.7 | 53.3 | 51.2 | 49.3 | 47.9 | 47.9 | 48.3 | 48.9 | 49.7 | 50.6 | 51.7 | 52.6 |
| Below Normal (10\%) | 52.9 | 51.6 | 50.7 | 49.7 | 48.9 | 48.6 | 49.1 | 49.8 | 50.4 | 51.2 | 52.1 | 52.9 |
| Dry (16\%) | 53.0 | 53.0 | 52.1 | 50.7 | 49.7 | 49.3 | 49.7 | 50.6 | 51.6 | 52.9 | 53.1 | 54.4 |
| Critical (27\%) | 55.3 | 54.0 | 52.4 | 50.9 | 50.0 | 50.0 | 51.1 | 52.6 | 52.0 | 54.5 | 56.8 | 58.5 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 6.0 | 2.2 | 0.4 | -0.1 | -0.1 | 0.0 | 0.2 | 0.7 | 1.0 | 2.4 | 6.1 | 9.0 |
| 20\% | 2.9 | 1.1 | 0.1 | -0.1 | -0.1 | -0.1 | 0.2 | 0.5 | 0.5 | 1.3 | 1.7 | 2.8 |
| 30\% | 1.6 | 0.9 | 0.0 | 0.0 | -0.3 | -0.1 | 0.1 | 0.3 | 0.4 | 0.8 | 0.8 | 1.3 |
| 40\% | 0.9 | 0.7 | 0.2 | -0.3 | -0.2 | -0.1 | 0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.8 |
| 50\% | 0.7 | 0.7 | 0.2 | -0.2 | -0.4 | -0.1 | 0.0 | 0.2 | 0.1 | 0.5 | 0.4 | 0.5 |
| 60\% | 0.8 | 0.6 | -0.1 | -0.4 | -0.4 | -0.1 | 0.0 | 0.1 | -0.1 | 0.1 | 0.2 | 0.4 |
| 70\% | 0.4 | 0.4 | 0.0 | -0.3 | -0.5 | -0.4 | -0.1 | -0.1 | -0.1 | 0.1 | 0.1 | 0.3 |
| 80\% | 0.5 | 0.4 | -0.3 | -0.5 | -1.2 | -0.7 | -0.2 | -0.3 | -0.5 | 0.0 | 0.1 | 0.4 |
| 90\% | 0.1 | 0.1 | -0.6 | -1.3 | -1.2 | -0.7 | -0.5 | -0.4 | -0.5 | -0.1 | -0.2 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1.5 | 0.7 | 0.0 | -0.4 | -0.5 | -0.3 | 0.0 | 0.4 | 0.1 | 0.8 | 1.0 | 1.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1.2 | 0.7 | 0.2 | -0.1 | -0.3 | -0.2 | -0.4 | -0.3 | -0.3 | -0.2 | -0.1 | 0.0 |
| Above Normal (24\%) | 1.6 | 0.5 | -0.4 | -0.7 | -0.8 | -0.3 | -0.1 | 0.1 | 0.3 | 0.6 | 1.0 | 1.2 |
| Below Normal (10\%) | 1.4 | 0.0 | -0.4 | -0.7 | -0.5 | -0.4 | -0.1 | 0.1 | 0.3 | 0.6 | 1.0 | 1.3 |
| Dry (16\%) | 1.5 | 1.3 | 0.7 | 0.1 | -0.2 | -0.3 | -0.1 | 0.4 | 0.8 | 1.6 | 1.2 | 2.0 |
| Critical (27\%) | 1.7 | 0.6 | 0.0 | -0.6 | -0.7 | -0.3 | 0.6 | 1.2 | -0.1 | 1.3 | 2.0 | 3.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.6 Stanislaus River below Tulloch Reservoir Temperature

Table 5C.3.2.6.1 Stanislaus River below Tulloch Reservoir, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.5 | 59.0 | 54.8 | 50.7 | 50.2 | 51.2 | 52.6 | 53.6 | 54.7 | 56.5 | 57.4 | 59.2 |
| 20\% | 57.4 | 56.6 | 53.3 | 50.3 | 49.5 | 50.6 | 52.1 | 53.0 | 54.1 | 55.0 | 55.7 | 56.7 |
| 30\% | 55.6 | 55.1 | 52.8 | 49.6 | 48.8 | 50.2 | 51.7 | 52.6 | 53.4 | 54.3 | 55.0 | 55.6 |
| 40\% | 55.1 | 54.6 | 52.0 | 49.1 | 48.5 | 49.8 | 51.3 | 52.4 | 52.9 | 53.9 | 54.5 | 55.0 |
| 50\% | 54.5 | 54.1 | 51.7 | 48.7 | 48.0 | 49.6 | 51.0 | 52.1 | 52.6 | 53.7 | 54.1 | 54.5 |
| 60\% | 54.1 | 53.9 | 51.4 | 48.3 | 47.8 | 49.3 | 50.6 | 51.6 | 52.2 | 52.8 | 53.5 | 54.0 |
| 70\% | 53.6 | 53.2 | 50.9 | 47.8 | 47.5 | 48.9 | 50.1 | 51.3 | 51.8 | 52.4 | 53.2 | 53.5 |
| 80\% | 53.2 | 52.6 | 50.4 | 47.1 | 46.7 | 48.4 | 49.7 | 51.0 | 51.4 | 51.8 | 52.8 | 53.1 |
| 90\% | 52.0 | 51.8 | 49.9 | 46.3 | 45.8 | 47.5 | 48.8 | 50.2 | 50.3 | 50.8 | 51.5 | 51.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.7 | 51.9 | 48.6 | 48.1 | 49.5 | 50.9 | 52.1 | 52.8 | 53.7 | 54.6 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.5 | 51.0 | 48.7 | 47.6 | 47.1 | 48.8 | 49.6 | 50.9 | 51.0 | 51.5 | 52.2 | 52.4 |
| Above Normal (24\%) | 56.3 | 54.9 | 51.5 | 48.1 | 47.4 | 48.7 | 50.1 | 51.4 | 51.9 | 52.7 | 53.7 | 54.5 |
| Below Normal (10\%) | 54.6 | 53.8 | 51.0 | 48.3 | 48.1 | 49.4 | 51.0 | 51.7 | 52.2 | 53.3 | 54.0 | 54.4 |
| Dry (16\%) | 54.5 | 54.1 | 51.9 | 49.0 | 48.6 | 50.0 | 51.6 | 52.3 | 53.2 | 54.3 | 55.2 | 56.0 |
| Critical (27\%) | 57.0 | 55.8 | 53.0 | 49.6 | 49.2 | 50.7 | 52.3 | 53.7 | 55.1 | 56.5 | 57.2 | 58.7 |

Revised Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 57.8 | 57.4 | 54.4 | 50.7 | 50.3 | 51.4 | 52.7 | 53.5 | 54.5 | 55.7 | 56.5 | 57.2 |
| 20\% | 56.0 | 55.9 | 53.4 | 50.0 | 49.6 | 50.7 | 52.0 | 52.8 | 53.8 | 54.8 | 55.3 | 55.7 |
| 30\% | 55.2 | 54.7 | 52.9 | 49.6 | 48.9 | 50.3 | 51.7 | 52.5 | 53.2 | 53.9 | 54.8 | 55.1 |
| 40\% | 54.7 | 54.4 | 51.9 | 49.1 | 48.7 | 49.9 | 51.3 | 52.3 | 53.0 | 53.7 | 54.2 | 54.6 |
| 50\% | 54.4 | 53.9 | 51.6 | 48.9 | 48.3 | 49.7 | 51.1 | 52.1 | 52.6 | 53.2 | 53.9 | 54.2 |
| 60\% | 53.9 | 53.4 | 51.4 | 48.4 | 47.9 | 49.4 | 50.8 | 51.7 | 52.2 | 52.7 | 53.4 | 53.6 |
| 70\% | 53.5 | 53.0 | 51.0 | 48.0 | 47.7 | 49.1 | 50.3 | 51.6 | 52.0 | 52.5 | 53.1 | 53.4 |
| 80\% | 53.1 | 52.7 | 50.6 | 47.5 | 47.3 | 48.6 | 49.9 | 51.0 | 51.5 | 51.8 | 52.6 | 52.9 |
| 90\% | 52.1 | 51.9 | 49.7 | 47.0 | 46.0 | 47.9 | 49.1 | 50.3 | 50.7 | 51.1 | 51.8 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.9 | 54.5 | 52.0 | 48.7 | 48.3 | 49.7 | 51.0 | 52.0 | 52.7 | 53.4 | 54.3 | 54.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.1 | 50.8 | 48.6 | 47.6 | 47.6 | 48.8 | 49.8 | 51.0 | 51.4 | 51.6 | 52.3 | 52.4 |
| Above Normal (24\%) | 55.4 | 55.0 | 52.0 | 48.5 | 47.7 | 49.0 | 50.3 | 51.4 | 51.8 | 52.4 | 53.3 | 53.8 |
| Below Normal (10\%) | 54.0 | 53.4 | 50.9 | 48.3 | 48.3 | 49.5 | 51.0 | 51.7 | 52.2 | 53.2 | 53.7 | 54.0 |
| Dry (16\%) | 54.0 | 53.7 | 51.6 | 48.9 | 48.6 | 50.1 | 51.5 | 52.3 | 53.1 | 53.9 | 54.5 | 54.9 |
| Critical (27\%) | 56.1 | 55.6 | 53.1 | 49.7 | 49.3 | 50.9 | 52.2 | 53.3 | 54.5 | 55.5 | 57.0 | 57.5 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2.7 | -1.6 | -0.3 | 0.0 | 0.1 | 0.2 | 0.1 | -0.1 | -0.2 | -0.8 | -0.9 | -2.0 |
| 20\% | -1.3 | -0.7 | 0.1 | -0.3 | 0.1 | 0.2 | -0.1 | -0.1 | -0.3 | -0.3 | -0.4 | -1.0 |
| 30\% | -0.5 | -0.4 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | -0.2 | -0.3 | -0.3 | -0.5 |
| 40\% | -0.4 | -0.2 | -0.1 | 0.1 | 0.2 | 0.1 | 0.0 | -0.1 | 0.1 | -0.2 | -0.3 | -0.4 |
| 50\% | -0.2 | -0.2 | -0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | -0.5 | -0.2 | -0.3 |
| 60\% | -0.2 | -0.4 | 0.0 | 0.2 | 0.1 | 0.1 | 0.2 | 0.0 | -0.1 | -0.1 | -0.1 | -0.3 |
| 70\% | -0.1 | -0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 | 0.0 | -0.1 | -0.1 |
| 80\% | -0.1 | 0.1 | 0.1 | 0.3 | 0.5 | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | -0.2 | -0.1 |
| 90\% | 0.0 | 0.1 | -0.2 | 0.7 | 0.2 | 0.4 | 0.3 | 0.1 | 0.4 | 0.3 | 0.3 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.7 | -0.2 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | -0.1 | -0.1 | -0.4 | -0.3 | -0.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.4 | -0.3 | -0.1 | 0.1 | 0.5 | 0.0 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 |
| Above Normal (24\%) | -0.8 | 0.0 | 0.5 | 0.4 | 0.3 | 0.3 | 0.1 | 0.0 | -0.1 | -0.3 | -0.5 | -0.7 |
| Below Normal (10\%) | -0.6 | -0.4 | -0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 | -0.3 | -0.4 |
| Dry (16\%) | -0.5 | -0.4 | -0.2 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.4 | -0.8 | -1.1 |
| Critical (27\%) | -1.0 | -0.2 | 0.0 | 0.1 | 0.1 | 0.2 | -0.1 | -0.5 | -0.6 | -0.9 | -0.2 | -1.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.6.2 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 57.8 | 57.4 | 54.4 | 50.7 | 50.3 | 51.4 | 52.7 | 53.5 | 54.5 | 55.7 | 56.5 | 57.2 |
| 20\% | 56.0 | 55.9 | 53.4 | 50.0 | 49.6 | 50.7 | 52.0 | 52.8 | 53.8 | 54.8 | 55.3 | 55.7 |
| 30\% | 55.2 | 54.7 | 52.9 | 49.6 | 48.9 | 50.3 | 51.7 | 52.5 | 53.2 | 53.9 | 54.8 | 55.1 |
| 40\% | 54.7 | 54.4 | 51.9 | 49.1 | 48.7 | 49.9 | 51.3 | 52.3 | 53.0 | 53.7 | 54.2 | 54.6 |
| 50\% | 54.4 | 53.9 | 51.6 | 48.9 | 48.3 | 49.7 | 51.1 | 52.1 | 52.6 | 53.2 | 53.9 | 54.2 |
| 60\% | 53.9 | 53.4 | 51.4 | 48.4 | 47.9 | 49.4 | 50.8 | 51.7 | 52.2 | 52.7 | 53.4 | 53.6 |
| 70\% | 53.5 | 53.0 | 51.0 | 48.0 | 47.7 | 49.1 | 50.3 | 51.6 | 52.0 | 52.5 | 53.1 | 53.4 |
| 80\% | 53.1 | 52.7 | 50.6 | 47.5 | 47.3 | 48.6 | 49.9 | 51.0 | 51.5 | 51.8 | 52.6 | 52.9 |
| 90\% | 52.1 | 51.9 | 49.7 | 47.0 | 46.0 | 47.9 | 49.1 | 50.3 | 50.7 | 51.1 | 51.8 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.9 | 54.5 | 52.0 | 48.7 | 48.3 | 49.7 | 51.0 | 52.0 | 52.7 | 53.4 | 54.3 | 54.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.1 | 50.8 | 48.6 | 47.6 | 47.6 | 48.8 | 49.8 | 51.0 | 51.4 | 51.6 | 52.3 | 52.4 |
| Above Normal (24\%) | 55.4 | 55.0 | 52.0 | 48.5 | 47.7 | 49.0 | 50.3 | 51.4 | 51.8 | 52.4 | 53.3 | 53.8 |
| Below Normal (10\%) | 54.0 | 53.4 | 50.9 | 48.3 | 48.3 | 49.5 | 51.0 | 51.7 | 52.2 | 53.2 | 53.7 | 54.0 |
| Dry (16\%) | 54.0 | 53.7 | 51.6 | 48.9 | 48.6 | 50.1 | 51.5 | 52.3 | 53.1 | 53.9 | 54.5 | 54.9 |
| Critical (27\%) | 56.1 | 55.6 | 53.1 | 49.7 | 49.3 | 50.9 | 52.2 | 53.3 | 54.5 | 55.5 | 57.0 | 57.5 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.5 | 59.0 | 54.8 | 50.7 | 50.2 | 51.2 | 52.6 | 53.6 | 54.7 | 56.5 | 57.4 | 59.2 |
| 20\% | 57.4 | 56.6 | 53.3 | 50.3 | 49.5 | 50.6 | 52.1 | 53.0 | 54.1 | 55.0 | 55.7 | 56.7 |
| 30\% | 55.6 | 55.1 | 52.8 | 49.6 | 48.8 | 50.2 | 51.7 | 52.6 | 53.4 | 54.3 | 55.0 | 55.6 |
| 40\% | 55.1 | 54.6 | 52.0 | 49.1 | 48.5 | 49.8 | 51.3 | 52.4 | 52.9 | 53.9 | 54.5 | 55.0 |
| 50\% | 54.5 | 54.1 | 51.7 | 48.7 | 48.0 | 49.6 | 51.0 | 52.1 | 52.6 | 53.7 | 54.1 | 54.5 |
| 60\% | 54.1 | 53.9 | 51.4 | 48.3 | 47.8 | 49.3 | 50.6 | 51.6 | 52.2 | 52.8 | 53.5 | 54.0 |
| 70\% | 53.6 | 53.2 | 50.9 | 47.8 | 47.5 | 48.9 | 50.1 | 51.3 | 51.8 | 52.4 | 53.2 | 53.5 |
| 80\% | 53.2 | 52.6 | 50.4 | 47.1 | 46.7 | 48.4 | 49.7 | 51.0 | 51.4 | 51.8 | 52.8 | 53.1 |
| 90\% | 52.0 | 51.8 | 49.9 | 46.3 | 45.8 | 47.5 | 48.8 | 50.2 | 50.3 | 50.8 | 51.5 | 51.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.7 | 51.9 | 48.6 | 48.1 | 49.5 | 50.9 | 52.1 | 52.8 | 53.7 | 54.6 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.5 | 51.0 | 48.7 | 47.6 | 47.1 | 48.8 | 49.6 | 50.9 | 51.0 | 51.5 | 52.2 | 52.4 |
| Above Normal (24\%) | 56.3 | 54.9 | 51.5 | 48.1 | 47.4 | 48.7 | 50.1 | 51.4 | 51.9 | 52.7 | 53.7 | 54.5 |
| Below Normal (10\%) | 54.6 | 53.8 | 51.0 | 48.3 | 48.1 | 49.4 | 51.0 | 51.7 | 52.2 | 53.3 | 54.0 | 54.4 |
| Dry (16\%) | 54.5 | 54.1 | 51.9 | 49.0 | 48.6 | 50.0 | 51.6 | 52.3 | 53.2 | 54.3 | 55.2 | 56.0 |
| Critical (27\%) | 57.0 | 55.8 | 53.0 | 49.6 | 49.2 | 50.7 | 52.3 | 53.7 | 55.1 | 56.5 | 57.2 | 58.7 |

No Action Alternative minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.7 | 1.6 | 0.3 | 0.0 | -0.1 | -0.2 | -0.1 | 0.1 | 0.2 | 0.8 | 0.9 | 2.0 |
| 20\% | 1.3 | 0.7 | -0.1 | 0.3 | -0.1 | -0.2 | 0.1 | 0.1 | 0.3 | 0.3 | 0.4 | 1.0 |
| 30\% | 0.5 | 0.4 | 0.0 | 0.0 | -0.1 | -0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.3 | 0.5 |
| 40\% | 0.4 | 0.2 | 0.1 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | -0.1 | 0.2 | 0.3 | 0.4 |
| 50\% | 0.2 | 0.2 | 0.1 | -0.1 | -0.3 | -0.1 | -0.1 | 0.0 | 0.0 | 0.5 | 0.2 | 0.3 |
| 60\% | 0.2 | 0.4 | 0.0 | -0.2 | -0.1 | -0.1 | -0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 |
| 70\% | 0.1 | 0.2 | -0.1 | -0.2 | -0.1 | -0.1 | -0.2 | -0.3 | -0.2 | 0.0 | 0.1 | 0.1 |
| 80\% | 0.1 | -0.1 | -0.1 | -0.3 | -0.5 | -0.2 | -0.2 | 0.0 | -0.1 | 0.0 | 0.2 | 0.1 |
| 90\% | 0.0 | -0.1 | 0.2 | -0.7 | -0.2 | -0.4 | -0.3 | -0.1 | -0.4 | -0.3 | -0.3 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.7 | 0.2 | -0.1 | -0.1 | -0.2 | -0.1 | -0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.4 | 0.3 | 0.1 | -0.1 | -0.5 | 0.0 | -0.3 | -0.1 | -0.3 | -0.1 | -0.1 | 0.0 |
| Above Normal (24\%) | 0.8 | 0.0 | -0.5 | -0.4 | -0.3 | -0.3 | -0.1 | 0.0 | 0.1 | 0.3 | 0.5 | 0.7 |
| Below Normal (10\%) | 0.6 | 0.4 | 0.1 | 0.0 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.3 | 0.4 |
| Dry (16\%) | 0.5 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.4 | 0.8 | 1.1 |
| Critical (27\%) | 1.0 | 0.2 | 0.0 | -0.1 | -0.1 | -0.2 | 0.1 | 0.5 | 0.6 | 0.9 | 0.2 | 1.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.6.3 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 57.8 | 57.4 | 54.4 | 50.7 | 50.3 | 51.4 | 52.7 | 53.5 | 54.5 | 55.7 | 56.5 | 57.2 |
| 20\% | 56.0 | 55.9 | 53.4 | 50.0 | 49.6 | 50.7 | 52.0 | 52.8 | 53.8 | 54.8 | 55.3 | 55.7 |
| 30\% | 55.2 | 54.7 | 52.9 | 49.6 | 48.9 | 50.3 | 51.7 | 52.5 | 53.2 | 53.9 | 54.8 | 55.1 |
| 40\% | 54.7 | 54.4 | 51.9 | 49.1 | 48.7 | 49.9 | 51.3 | 52.3 | 53.0 | 53.7 | 54.2 | 54.6 |
| 50\% | 54.4 | 53.9 | 51.6 | 48.9 | 48.3 | 49.7 | 51.1 | 52.1 | 52.6 | 53.2 | 53.9 | 54.2 |
| 60\% | 53.9 | 53.4 | 51.4 | 48.4 | 47.9 | 49.4 | 50.8 | 51.7 | 52.2 | 52.7 | 53.4 | 53.6 |
| 70\% | 53.5 | 53.0 | 51.0 | 48.0 | 47.7 | 49.1 | 50.3 | 51.6 | 52.0 | 52.5 | 53.1 | 53.4 |
| 80\% | 53.1 | 52.7 | 50.6 | 47.5 | 47.3 | 48.6 | 49.9 | 51.0 | 51.5 | 51.8 | 52.6 | 52.9 |
| 90\% | 52.1 | 51.9 | 49.7 | 47.0 | 46.0 | 47.9 | 49.1 | 50.3 | 50.7 | 51.1 | 51.8 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.9 | 54.5 | 52.0 | 48.7 | 48.3 | 49.7 | 51.0 | 52.0 | 52.7 | 53.4 | 54.3 | 54.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.1 | 50.8 | 48.6 | 47.6 | 47.6 | 48.8 | 49.8 | 51.0 | 51.4 | 51.6 | 52.3 | 52.4 |
| Above Normal (24\%) | 55.4 | 55.0 | 52.0 | 48.5 | 47.7 | 49.0 | 50.3 | 51.4 | 51.8 | 52.4 | 53.3 | 53.8 |
| Below Normal (10\%) | 54.0 | 53.4 | 50.9 | 48.3 | 48.3 | 49.5 | 51.0 | 51.7 | 52.2 | 53.2 | 53.7 | 54.0 |
| Dry (16\%) | 54.0 | 53.7 | 51.6 | 48.9 | 48.6 | 50.1 | 51.5 | 52.3 | 53.1 | 53.9 | 54.5 | 54.9 |
| Critical (27\%) | 56.1 | 55.6 | 53.1 | 49.7 | 49.3 | 50.9 | 52.2 | 53.3 | 54.5 | 55.5 | 57.0 | 57.5 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 57.8 | 57.5 | 54.3 | 50.8 | 50.3 | 51.3 | 52.7 | 53.5 | 54.5 | 55.7 | 56.4 | 57.3 |
| 20\% | 56.4 | 55.9 | 53.5 | 50.0 | 49.6 | 50.7 | 52.0 | 52.8 | 53.8 | 54.8 | 55.3 | 55.7 |
| 30\% | 55.1 | 54.5 | 52.8 | 49.5 | 49.1 | 50.3 | 51.5 | 52.4 | 53.2 | 54.0 | 54.7 | 55.1 |
| 40\% | 54.6 | 54.1 | 51.8 | 49.0 | 48.7 | 49.9 | 51.4 | 52.2 | 52.8 | 53.6 | 54.2 | 54.5 |
| 50\% | 54.2 | 53.7 | 51.5 | 48.7 | 48.2 | 49.7 | 51.0 | 51.9 | 52.5 | 53.3 | 53.8 | 54.1 |
| 60\% | 53.7 | 53.4 | 51.3 | 48.5 | 47.9 | 49.5 | 50.8 | 51.6 | 52.1 | 52.9 | 53.3 | 53.6 |
| 70\% | 53.5 | 53.0 | 50.9 | 48.0 | 47.6 | 49.0 | 50.4 | 51.4 | 51.7 | 52.6 | 53.0 | 53.2 |
| 80\% | 52.9 | 52.7 | 50.5 | 47.5 | 47.2 | 48.6 | 49.9 | 50.9 | 51.2 | 52.1 | 52.5 | 52.8 |
| 90\% | 51.9 | 51.8 | 49.6 | 46.8 | 46.2 | 47.8 | 49.2 | 50.1 | 50.7 | 51.3 | 51.7 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.8 | 54.3 | 51.8 | 48.6 | 48.3 | 49.6 | 51.0 | 51.9 | 52.6 | 53.6 | 54.3 | 54.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.0 | 50.7 | 48.5 | 47.6 | 47.7 | 48.8 | 49.8 | 50.8 | 51.3 | 51.8 | 52.2 | 52.3 |
| Above Normal (24\%) | 55.6 | 55.0 | 51.8 | 48.5 | 47.6 | 48.9 | 50.3 | 51.2 | 51.6 | 52.6 | 53.3 | 53.8 |
| Below Normal (10\%) | 53.9 | 53.3 | 50.8 | 48.5 | 48.3 | 49.5 | 51.0 | 51.6 | 52.3 | 53.2 | 53.7 | 54.0 |
| Dry (16\%) | 53.8 | 53.5 | 51.5 | 48.9 | 48.6 | 50.0 | 51.5 | 52.2 | 53.0 | 53.9 | 54.4 | 54.9 |
| Critical (27\%) | 55.8 | 55.3 | 52.9 | 49.6 | 49.2 | 50.9 | 52.3 | 53.3 | 54.5 | 56.1 | 56.9 | 57.2 |

Alternative 3 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.0 | 0.1 | -0.2 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 |
| 20\% | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| 30\% | -0.1 | -0.2 | -0.1 | -0.1 | 0.2 | 0.0 | -0.1 | -0.1 | -0.1 | 0.1 | 0.0 | 0.0 |
| 40\% | -0.1 | -0.3 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 |
| 50\% | -0.1 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.2 | -0.1 | 0.0 | -0.1 | -0.2 |
| 60\% | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.2 | -0.1 | 0.0 |
| 70\% | 0.0 | 0.0 | -0.2 | 0.0 | -0.1 | -0.1 | 0.1 | -0.1 | -0.3 | 0.2 | 0.0 | -0.2 |
| 80\% | -0.2 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.2 | 0.3 | -0.1 | -0.2 |
| 90\% | -0.1 | -0.1 | -0.1 | -0.2 | 0.2 | -0.1 | 0.1 | -0.2 | 0.0 | 0.2 | -0.1 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | -0.1 | 0.3 | 0.0 | -0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | -0.1 | 0.2 | 0.0 | -0.1 |
| Above Normal (24\%) | 0.2 | 0.0 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | -0.2 | 0.2 | 0.0 | 0.0 |
| Below Normal (10\%) | -0.1 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dry (16\%) | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 |
| Critical (27\%) | -0.3 | -0.2 | -0.2 | -0.1 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.6 | 0.0 | -0.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.6.4 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 57.8 | 57.4 | 54.4 | 50.7 | 50.3 | 51.4 | 52.7 | 53.5 | 54.5 | 55.7 | 56.5 | 57.2 |
| 20\% | 56.0 | 55.9 | 53.4 | 50.0 | 49.6 | 50.7 | 52.0 | 52.8 | 53.8 | 54.8 | 55.3 | 55.7 |
| 30\% | 55.2 | 54.7 | 52.9 | 49.6 | 48.9 | 50.3 | 51.7 | 52.5 | 53.2 | 53.9 | 54.8 | 55.1 |
| 40\% | 54.7 | 54.4 | 51.9 | 49.1 | 48.7 | 49.9 | 51.3 | 52.3 | 53.0 | 53.7 | 54.2 | 54.6 |
| 50\% | 54.4 | 53.9 | 51.6 | 48.9 | 48.3 | 49.7 | 51.1 | 52.1 | 52.6 | 53.2 | 53.9 | 54.2 |
| 60\% | 53.9 | 53.4 | 51.4 | 48.4 | 47.9 | 49.4 | 50.8 | 51.7 | 52.2 | 52.7 | 53.4 | 53.6 |
| 70\% | 53.5 | 53.0 | 51.0 | 48.0 | 47.7 | 49.1 | 50.3 | 51.6 | 52.0 | 52.5 | 53.1 | 53.4 |
| 80\% | 53.1 | 52.7 | 50.6 | 47.5 | 47.3 | 48.6 | 49.9 | 51.0 | 51.5 | 51.8 | 52.6 | 52.9 |
| 90\% | 52.1 | 51.9 | 49.7 | 47.0 | 46.0 | 47.9 | 49.1 | 50.3 | 50.7 | 51.1 | 51.8 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.9 | 54.5 | 52.0 | 48.7 | 48.3 | 49.7 | 51.0 | 52.0 | 52.7 | 53.4 | 54.3 | 54.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.1 | 50.8 | 48.6 | 47.6 | 47.6 | 48.8 | 49.8 | 51.0 | 51.4 | 51.6 | 52.3 | 52.4 |
| Above Normal (24\%) | 55.4 | 55.0 | 52.0 | 48.5 | 47.7 | 49.0 | 50.3 | 51.4 | 51.8 | 52.4 | 53.3 | 53.8 |
| Below Normal (10\%) | 54.0 | 53.4 | 50.9 | 48.3 | 48.3 | 49.5 | 51.0 | 51.7 | 52.2 | 53.2 | 53.7 | 54.0 |
| Dry (16\%) | 54.0 | 53.7 | 51.6 | 48.9 | 48.6 | 50.1 | 51.5 | 52.3 | 53.1 | 53.9 | 54.5 | 54.9 |
| Critical (27\%) | 56.1 | 55.6 | 53.1 | 49.7 | 49.3 | 50.9 | 52.2 | 53.3 | 54.5 | 55.5 | 57.0 | 57.5 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.5 | 60.2 | 55.1 | 51.0 | 50.0 | 51.1 | 52.9 | 53.9 | 55.2 | 57.1 | 60.8 | 63.2 |
| 20\% | 58.4 | 57.9 | 53.6 | 50.2 | 49.5 | 50.6 | 52.2 | 53.2 | 54.3 | 55.4 | 56.8 | 57.9 |
| 30\% | 56.4 | 55.7 | 52.7 | 49.4 | 48.8 | 50.0 | 51.8 | 52.6 | 53.4 | 54.7 | 55.5 | 56.1 |
| 40\% | 55.3 | 54.8 | 52.1 | 49.0 | 48.4 | 49.7 | 51.6 | 52.4 | 52.9 | 54.0 | 54.9 | 55.2 |
| 50\% | 54.7 | 54.2 | 51.8 | 48.7 | 48.0 | 49.5 | 51.0 | 52.2 | 52.6 | 53.7 | 54.2 | 54.6 |
| 60\% | 54.4 | 53.9 | 51.5 | 48.3 | 47.7 | 49.2 | 50.6 | 51.8 | 52.2 | 52.8 | 53.5 | 54.0 |
| 70\% | 53.7 | 53.4 | 50.9 | 47.9 | 47.2 | 48.8 | 50.1 | 51.4 | 51.7 | 52.4 | 53.2 | 53.6 |
| 80\% | 53.3 | 52.7 | 50.4 | 47.1 | 46.7 | 48.1 | 49.6 | 50.8 | 51.3 | 51.9 | 52.8 | 53.1 |
| 90\% | 52.1 | 51.8 | 49.8 | 45.9 | 45.6 | 47.4 | 48.7 | 50.1 | 50.1 | 50.7 | 51.4 | 52.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.2 | 55.1 | 52.0 | 48.6 | 48.0 | 49.4 | 50.9 | 52.2 | 52.6 | 53.9 | 55.1 | 56.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 52.0 | 51.3 | 48.8 | 47.6 | 47.0 | 48.7 | 49.5 | 50.8 | 50.9 | 51.4 | 52.1 | 52.4 |
| Above Normal (24\%) | 57.2 | 55.5 | 51.5 | 48.1 | 47.2 | 48.6 | 50.1 | 51.5 | 51.9 | 52.8 | 54.0 | 54.9 |
| Below Normal (10\%) | 55.4 | 53.7 | 50.9 | 48.1 | 48.0 | 49.2 | 51.0 | 51.8 | 52.4 | 53.6 | 54.5 | 55.1 |
| Dry (16\%) | 55.1 | 54.7 | 52.2 | 49.2 | 48.7 | 50.0 | 51.7 | 52.6 | 53.4 | 55.0 | 55.7 | 56.5 |
| Critical (27\%) | 57.4 | 56.3 | 53.1 | 49.6 | 49.1 | 50.6 | 52.6 | 54.1 | 54.5 | 56.5 | 58.5 | 60.3 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 6.7 | 2.8 | 0.7 | 0.3 | -0.3 | -0.3 | 0.2 | 0.4 | 0.8 | 1.4 | 4.3 | 6.0 |
| 20\% | 2.4 | 2.1 | 0.2 | 0.2 | -0.2 | -0.1 | 0.2 | 0.4 | 0.4 | 0.6 | 1.6 | 2.2 |
| 30\% | 1.2 | 1.0 | -0.1 | -0.2 | -0.2 | -0.3 | 0.2 | 0.2 | 0.2 | 0.8 | 0.8 | 1.0 |
| 40\% | 0.5 | 0.4 | 0.2 | -0.1 | -0.3 | -0.2 | 0.2 | 0.2 | 0.0 | 0.3 | 0.6 | 0.6 |
| 50\% | 0.4 | 0.3 | 0.2 | -0.2 | -0.3 | -0.2 | -0.1 | 0.2 | 0.0 | 0.5 | 0.3 | 0.3 |
| 60\% | 0.5 | 0.5 | 0.1 | -0.1 | -0.2 | -0.3 | -0.2 | 0.2 | 0.0 | 0.1 | 0.1 | 0.4 |
| 70\% | 0.2 | 0.3 | -0.1 | -0.1 | -0.4 | -0.3 | -0.2 | -0.2 | -0.3 | 0.0 | 0.1 | 0.3 |
| 80\% | 0.2 | 0.0 | -0.2 | -0.3 | -0.6 | -0.5 | -0.3 | -0.3 | -0.1 | 0.1 | 0.2 | 0.2 |
| 90\% | 0.0 | -0.1 | 0.1 | -1.0 | -0.4 | -0.5 | -0.4 | -0.2 | -0.6 | -0.4 | -0.4 | 0.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1.3 | 0.6 | 0.0 | -0.1 | -0.3 | -0.3 | 0.0 | 0.3 | 0.0 | 0.5 | 0.8 | 1.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.9 | 0.5 | 0.2 | 0.0 | -0.5 | -0.1 | -0.3 | -0.2 | -0.5 | -0.2 | -0.1 | 0.0 |
| Above Normal (24\%) | 1.8 | 0.5 | -0.5 | -0.4 | -0.5 | -0.5 | -0.2 | 0.1 | 0.0 | 0.5 | 0.7 | 1.0 |
| Below Normal (10\%) | 1.4 | 0.3 | 0.1 | -0.1 | -0.3 | -0.2 | 0.0 | 0.1 | 0.1 | 0.4 | 0.7 | 1.1 |
| Dry (16\%) | 1.1 | 1.0 | 0.6 | 0.2 | 0.1 | -0.1 | 0.1 | 0.3 | 0.4 | 1.1 | 1.2 | 1.6 |
| Critical (27\%) | 1.4 | 0.8 | 0.1 | -0.1 | -0.2 | -0.3 | 0.3 | 0.8 | 0.0 | 0.9 | 1.5 | 2.8 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.7 Stanislaus River below Goodwin Dam Temperature

Table 5C.3.2.7.1 Stanislaus River below Goodwin Dam, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.7 | 59.2 | 54.6 | 51.1 | 50.8 | 51.9 | 53.1 | 54.1 | 55.6 | 57.6 | 58.3 | 60.1 |
| 20\% | 58.0 | 56.6 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.8 | 55.9 | 56.5 | 57.4 |
| 30\% | 56.1 | 55.5 | 52.5 | 49.7 | 49.5 | 50.8 | 52.1 | 53.0 | 54.0 | 55.1 | 55.8 | 56.4 |
| 40\% | 55.5 | 54.8 | 51.9 | 49.3 | 48.9 | 50.6 | 51.7 | 52.8 | 53.7 | 54.6 | 55.3 | 55.7 |
| 50\% | 55.0 | 54.2 | 51.6 | 48.9 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.4 | 54.8 | 55.3 |
| 60\% | 54.5 | 54.0 | 51.3 | 48.4 | 48.4 | 50.0 | 51.0 | 52.1 | 52.8 | 53.5 | 54.2 | 54.6 |
| 70\% | 54.0 | 53.5 | 51.0 | 48.0 | 48.0 | 49.8 | 50.6 | 51.8 | 52.5 | 53.2 | 53.9 | 54.2 |
| 80\% | 53.5 | 52.9 | 50.4 | 47.3 | 47.4 | 49.0 | 50.1 | 51.5 | 52.0 | 52.6 | 53.3 | 53.8 |
| 90\% | 52.4 | 52.1 | 49.9 | 46.5 | 46.7 | 48.3 | 49.2 | 50.6 | 50.8 | 51.5 | 52.2 | 52.6 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.8 | 48.7 | 50.2 | 51.3 | 52.5 | 53.5 | 54.6 | 55.3 | 56.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.9 | 51.3 | 48.8 | 47.9 | 47.6 | 49.1 | 50.0 | 51.3 | 51.6 | 52.2 | 52.8 | 53.0 |
| Above Normal (24\%) | 56.7 | 55.2 | 51.5 | 48.4 | 48.0 | 49.6 | 50.6 | 51.9 | 52.5 | 53.5 | 54.5 | 55.2 |
| Below Normal (10\%) | 55.0 | 54.1 | 51.0 | 48.4 | 48.7 | 50.0 | 51.3 | 52.1 | 52.9 | 54.1 | 54.7 | 55.1 |
| Dry (16\%) | 54.9 | 54.3 | 51.8 | 49.2 | 49.2 | 50.9 | 51.9 | 52.8 | 53.9 | 55.1 | 56.0 | 56.7 |
| Critical (27\%) | 57.4 | 56.0 | 52.9 | 49.7 | 49.9 | 51.5 | 52.7 | 54.3 | 56.0 | 57.5 | 58.2 | 59.5 |

Revised Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 57.3 | 54.1 | 50.9 | 50.8 | 52.1 | 53.2 | 54.1 | 55.4 | 56.6 | 57.4 | 57.9 |
| 20\% | 57.0 | 56.0 | 53.4 | 50.1 | 50.2 | 51.4 | 52.4 | 53.5 | 54.6 | 55.6 | 56.0 | 56.7 |
| 30\% | 56.2 | 54.9 | 52.9 | 49.8 | 49.5 | 50.9 | 52.1 | 53.0 | 53.9 | 54.8 | 55.4 | 55.8 |
| 40\% | 55.5 | 54.6 | 51.9 | 49.2 | 49.1 | 50.7 | 51.7 | 52.7 | 53.6 | 54.5 | 55.0 | 55.3 |
| 50\% | 55.0 | 54.0 | 51.6 | 49.0 | 48.8 | 50.5 | 51.5 | 52.6 | 53.1 | 54.0 | 54.7 | 55.0 |
| 60\% | 54.6 | 53.8 | 51.4 | 48.5 | 48.5 | 50.2 | 51.2 | 52.1 | 52.8 | 53.4 | 54.1 | 54.4 |
| 70\% | 54.2 | 53.3 | 51.0 | 48.1 | 48.3 | 49.9 | 50.8 | 52.0 | 52.5 | 53.2 | 53.8 | 54.0 |
| 80\% | 53.6 | 52.9 | 50.6 | 47.6 | 47.8 | 49.2 | 50.3 | 51.6 | 52.0 | 52.5 | 53.3 | 53.5 |
| 90\% | 52.7 | 52.1 | 49.8 | 47.1 | 46.9 | 48.6 | 49.6 | 50.7 | 51.3 | 51.7 | 52.4 | 52.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.6 | 51.9 | 48.9 | 48.9 | 50.4 | 51.4 | 52.5 | 53.3 | 54.1 | 55.0 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.7 | 51.0 | 48.6 | 47.9 | 48.0 | 49.4 | 50.2 | 51.4 | 51.9 | 52.3 | 52.9 | 53.0 |
| Above Normal (24\%) | 56.2 | 55.1 | 51.9 | 48.7 | 48.4 | 49.9 | 50.7 | 51.9 | 52.4 | 53.1 | 54.0 | 54.5 |
| Below Normal (10\%) | 54.7 | 53.6 | 50.9 | 48.4 | 48.8 | 50.1 | 51.4 | 52.2 | 52.9 | 53.9 | 54.4 | 54.7 |
| Dry (16\%) | 54.7 | 53.9 | 51.6 | 49.1 | 49.2 | 50.9 | 51.9 | 52.8 | 53.8 | 54.7 | 55.2 | 55.6 |
| Critical (27\%) | 56.8 | 55.7 | 52.9 | 49.8 | 50.0 | 51.7 | 52.7 | 53.9 | 55.3 | 56.4 | 57.8 | 58.5 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2.0 | -1.8 | -0.5 | -0.1 | 0.0 | 0.2 | 0.1 | 0.0 | -0.2 | -1.0 | -1.0 | -2.2 |
| 20\% | -1.0 | -0.6 | 0.1 | -0.2 | 0.0 | 0.0 | 0.0 | -0.2 | -0.2 | -0.3 | -0.5 | -0.8 |
| 30\% | 0.1 | -0.6 | 0.3 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | -0.4 | -0.4 | -0.5 |
| 40\% | 0.1 | -0.2 | -0.1 | -0.1 | 0.1 | 0.2 | 0.0 | -0.1 | -0.1 | -0.2 | -0.3 | -0.4 |
| 50\% | 0.1 | -0.2 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | -0.2 | -0.5 | -0.2 | -0.3 |
| 60\% | 0.1 | -0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | -0.1 | -0.1 | -0.2 |
| 70\% | 0.2 | -0.2 | 0.0 | 0.1 | 0.3 | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | -0.1 | -0.2 |
| 80\% | 0.1 | 0.0 | 0.2 | 0.3 | 0.4 | 0.2 | 0.2 | 0.1 | 0.0 | -0.1 | -0.1 | -0.3 |
| 90\% | 0.3 | 0.0 | -0.1 | 0.6 | 0.2 | 0.3 | 0.4 | 0.1 | 0.5 | 0.2 | 0.2 | -0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.4 | -0.3 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | -0.1 | -0.2 | -0.4 | -0.4 | -0.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.1 | -0.3 | -0.1 | 0.0 | 0.3 | 0.2 | 0.3 | 0.1 | 0.3 | 0.0 | 0.1 | 0.0 |
| Above Normal (24\%) | -0.5 | 0.0 | 0.5 | 0.4 | 0.3 | 0.4 | 0.2 | 0.0 | -0.1 | -0.3 | -0.5 | -0.6 |
| Below Normal (10\%) | -0.3 | -0.4 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | -0.2 | -0.3 | -0.4 |
| Dry (16\%) | -0.2 | -0.4 | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.4 | -0.8 | -1.1 |
| Critical (27\%) | -0.6 | -0.3 | 0.0 | 0.1 | 0.1 | 0.2 | 0.0 | -0.4 | -0.7 | -1.1 | -0.4 | -1.0 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitaive differences, if applicable, are discussed
Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.7.2 Stanislaus River below Goodwin Dam, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 57.3 | 54.1 | 50.9 | 50.8 | 52.1 | 53.2 | 54.1 | 55.4 | 56.6 | 57.4 | 57.9 |
| 20\% | 57.0 | 56.0 | 53.4 | 50.1 | 50.2 | 51.4 | 52.4 | 53.5 | 54.6 | 55.6 | 56.0 | 56.7 |
| 30\% | 56.2 | 54.9 | 52.9 | 49.8 | 49.5 | 50.9 | 52.1 | 53.0 | 53.9 | 54.8 | 55.4 | 55.8 |
| 40\% | 55.5 | 54.6 | 51.9 | 49.2 | 49.1 | 50.7 | 51.7 | 52.7 | 53.6 | 54.5 | 55.0 | 55.3 |
| 50\% | 55.0 | 54.0 | 51.6 | 49.0 | 48.8 | 50.5 | 51.5 | 52.6 | 53.1 | 54.0 | 54.7 | 55.0 |
| 60\% | 54.6 | 53.8 | 51.4 | 48.5 | 48.5 | 50.2 | 51.2 | 52.1 | 52.8 | 53.4 | 54.1 | 54.4 |
| 70\% | 54.2 | 53.3 | 51.0 | 48.1 | 48.3 | 49.9 | 50.8 | 52.0 | 52.5 | 53.2 | 53.8 | 54.0 |
| 80\% | 53.6 | 52.9 | 50.6 | 47.6 | 47.8 | 49.2 | 50.3 | 51.6 | 52.0 | 52.5 | 53.3 | 53.5 |
| 90\% | 52.7 | 52.1 | 49.8 | 47.1 | 46.9 | 48.6 | 49.6 | 50.7 | 51.3 | 51.7 | 52.4 | 52.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.6 | 51.9 | 48.9 | 48.9 | 50.4 | 51.4 | 52.5 | 53.3 | 54.1 | 55.0 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.7 | 51.0 | 48.6 | 47.9 | 48.0 | 49.4 | 50.2 | 51.4 | 51.9 | 52.3 | 52.9 | 53.0 |
| Above Normal (24\%) | 56.2 | 55.1 | 51.9 | 48.7 | 48.4 | 49.9 | 50.7 | 51.9 | 52.4 | 53.1 | 54.0 | 54.5 |
| Below Normal (10\%) | 54.7 | 53.6 | 50.9 | 48.4 | 48.8 | 50.1 | 51.4 | 52.2 | 52.9 | 53.9 | 54.4 | 54.7 |
| Dry (16\%) | 54.7 | 53.9 | 51.6 | 49.1 | 49.2 | 50.9 | 51.9 | 52.8 | 53.8 | 54.7 | 55.2 | 55.6 |
| Critical (27\%) | 56.8 | 55.7 | 52.9 | 49.8 | 50.0 | 51.7 | 52.7 | 53.9 | 55.3 | 56.4 | 57.8 | 58.5 |


|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.7 | 59.2 | 54.6 | 51.1 | 50.8 | 51.9 | 53.1 | 54.1 | 55.6 | 57.6 | 58.3 | 60.1 |
| 20\% | 58.0 | 56.6 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.8 | 55.9 | 56.5 | 57.4 |
| 30\% | 56.1 | 55.5 | 52.5 | 49.7 | 49.5 | 50.8 | 52.1 | 53.0 | 54.0 | 55.1 | 55.8 | 56.4 |
| 40\% | 55.5 | 54.8 | 51.9 | 49.3 | 48.9 | 50.6 | 51.7 | 52.8 | 53.7 | 54.6 | 55.3 | 55.7 |
| 50\% | 55.0 | 54.2 | 51.6 | 48.9 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.4 | 54.8 | 55.3 |
| 60\% | 54.5 | 54.0 | 51.3 | 48.4 | 48.4 | 50.0 | 51.0 | 52.1 | 52.8 | 53.5 | 54.2 | 54.6 |
| 70\% | 54.0 | 53.5 | 51.0 | 48.0 | 48.0 | 49.8 | 50.6 | 51.8 | 52.5 | 53.2 | 53.9 | 54.2 |
| 80\% | 53.5 | 52.9 | 50.4 | 47.3 | 47.4 | 49.0 | 50.1 | 51.5 | 52.0 | 52.6 | 53.3 | 53.8 |
| 90\% | 52.4 | 52.1 | 49.9 | 46.5 | 46.7 | 48.3 | 49.2 | 50.6 | 50.8 | 51.5 | 52.2 | 52.6 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.8 | 48.7 | 50.2 | 51.3 | 52.5 | 53.5 | 54.6 | 55.3 | 56.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.9 | 51.3 | 48.8 | 47.9 | 47.6 | 49.1 | 50.0 | 51.3 | 51.6 | 52.2 | 52.8 | 53.0 |
| Above Normal (24\%) | 56.7 | 55.2 | 51.5 | 48.4 | 48.0 | 49.6 | 50.6 | 51.9 | 52.5 | 53.5 | 54.5 | 55.2 |
| Below Normal (10\%) | 55.0 | 54.1 | 51.0 | 48.4 | 48.7 | 50.0 | 51.3 | 52.1 | 52.9 | 54.1 | 54.7 | 55.1 |
| Dry (16\%) | 54.9 | 54.3 | 51.8 | 49.2 | 49.2 | 50.9 | 51.9 | 52.8 | 53.9 | 55.1 | 56.0 | 56.7 |
| Critical (27\%) | 57.4 | 56.0 | 52.9 | 49.7 | 49.9 | 51.5 | 52.7 | 54.3 | 56.0 | 57.5 | 58.2 | 59.5 |

No Action Alternative minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.0 | 1.8 | 0.5 | 0.1 | 0.0 | -0.2 | -0.1 | 0.0 | 0.2 | 1.0 | 1.0 | 2.2 |
| 20\% | 1.0 | 0.6 | -0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.3 | 0.5 | 0.8 |
| 30\% | -0.1 | 0.6 | -0.3 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.1 | 0.4 | 0.4 | 0.5 |
| 40\% | -0.1 | 0.2 | 0.1 | 0.1 | -0.1 | -0.2 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 | 0.4 |
| 50\% | -0.1 | 0.2 | 0.0 | -0.1 | 0.0 | -0.2 | -0.1 | 0.0 | 0.2 | 0.5 | 0.2 | 0.3 |
| 60\% | -0.1 | 0.2 | -0.2 | -0.1 | -0.1 | -0.2 | -0.2 | -0.1 | 0.0 | 0.1 | 0.1 | 0.2 |
| 70\% | -0.2 | 0.2 | 0.0 | -0.1 | -0.3 | -0.2 | -0.2 | -0.2 | 0.0 | 0.0 | 0.1 | 0.2 |
| 80\% | -0.1 | 0.0 | -0.2 | -0.3 | -0.4 | -0.2 | -0.2 | -0.1 | 0.0 | 0.1 | 0.1 | 0.3 |
| 90\% | -0.3 | 0.0 | 0.1 | -0.6 | -0.2 | -0.3 | -0.4 | -0.1 | -0.5 | -0.2 | -0.2 | 0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.4 | 0.3 | 0.0 | -0.1 | -0.2 | -0.2 | -0.1 | 0.1 | 0.2 | 0.4 | 0.4 | 0.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.1 | 0.3 | 0.1 | 0.0 | -0.3 | -0.2 | -0.3 | -0.1 | -0.3 | 0.0 | -0.1 | 0.0 |
| Above Normal (24\%) | 0.5 | 0.0 | -0.5 | -0.4 | -0.3 | -0.4 | -0.2 | 0.0 | 0.1 | 0.3 | 0.5 | 0.6 |
| Below Normal (10\%) | 0.3 | 0.4 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 0.2 | 0.3 | 0.4 |
| Dry (16\%) | 0.2 | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.4 | 0.8 | 1.1 |
| Critical (27\%) | 0.6 | 0.3 | 0.0 | -0.1 | -0.1 | -0.2 | 0.0 | 0.4 | 0.7 | 1.1 | 0.4 | 1.0 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.7.3 Stanislaus River below Goodwin Dam, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 57.3 | 54.1 | 50.9 | 50.8 | 52.1 | 53.2 | 54.1 | 55.4 | 56.6 | 57.4 | 57.9 |
| 20\% | 57.0 | 56.0 | 53.4 | 50.1 | 50.2 | 51.4 | 52.4 | 53.5 | 54.6 | 55.6 | 56.0 | 56.7 |
| 30\% | 56.2 | 54.9 | 52.9 | 49.8 | 49.5 | 50.9 | 52.1 | 53.0 | 53.9 | 54.8 | 55.4 | 55.8 |
| 40\% | 55.5 | 54.6 | 51.9 | 49.2 | 49.1 | 50.7 | 51.7 | 52.7 | 53.6 | 54.5 | 55.0 | 55.3 |
| 50\% | 55.0 | 54.0 | 51.6 | 49.0 | 48.8 | 50.5 | 51.5 | 52.6 | 53.1 | 54.0 | 54.7 | 55.0 |
| 60\% | 54.6 | 53.8 | 51.4 | 48.5 | 48.5 | 50.2 | 51.2 | 52.1 | 52.8 | 53.4 | 54.1 | 54.4 |
| 70\% | 54.2 | 53.3 | 51.0 | 48.1 | 48.3 | 49.9 | 50.8 | 52.0 | 52.5 | 53.2 | 53.8 | 54.0 |
| 80\% | 53.6 | 52.9 | 50.6 | 47.6 | 47.8 | 49.2 | 50.3 | 51.6 | 52.0 | 52.5 | 53.3 | 53.5 |
| 90\% | 52.7 | 52.1 | 49.8 | 47.1 | 46.9 | 48.6 | 49.6 | 50.7 | 51.3 | 51.7 | 52.4 | 52.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.6 | 51.9 | 48.9 | 48.9 | 50.4 | 51.4 | 52.5 | 53.3 | 54.1 | 55.0 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.7 | 51.0 | 48.6 | 47.9 | 48.0 | 49.4 | 50.2 | 51.4 | 51.9 | 52.3 | 52.9 | 53.0 |
| Above Normal (24\%) | 56.2 | 55.1 | 51.9 | 48.7 | 48.4 | 49.9 | 50.7 | 51.9 | 52.4 | 53.1 | 54.0 | 54.5 |
| Below Normal (10\%) | 54.7 | 53.6 | 50.9 | 48.4 | 48.8 | 50.1 | 51.4 | 52.2 | 52.9 | 53.9 | 54.4 | 54.7 |
| Dry (16\%) | 54.7 | 53.9 | 51.6 | 49.1 | 49.2 | 50.9 | 51.9 | 52.8 | 53.8 | 54.7 | 55.2 | 55.6 |
| Critical (27\%) | 56.8 | 55.7 | 52.9 | 49.8 | 50.0 | 51.7 | 52.7 | 53.9 | 55.3 | 56.4 | 57.8 | 58.5 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.5 | 57.6 | 54.1 | 50.9 | 50.8 | 52.1 | 53.1 | 54.0 | 55.3 | 56.7 | 57.3 | 58.2 |
| 20\% | 57.0 | 56.0 | 53.3 | 50.1 | 50.1 | 51.4 | 52.4 | 53.5 | 54.7 | 55.6 | 56.0 | 56.6 |
| 30\% | 56.0 | 54.7 | 52.8 | 49.7 | 49.5 | 50.9 | 52.0 | 52.9 | 53.9 | 54.8 | 55.4 | 55.9 |
| 40\% | 55.2 | 54.3 | 51.7 | 49.1 | 49.1 | 50.7 | 51.7 | 52.6 | 53.5 | 54.4 | 54.9 | 55.2 |
| 50\% | 54.8 | 53.9 | 51.5 | 48.9 | 48.8 | 50.4 | 51.4 | 52.4 | 53.2 | 54.0 | 54.5 | 54.8 |
| 60\% | 54.5 | 53.7 | 51.3 | 48.6 | 48.5 | 50.1 | 51.2 | 52.1 | 52.8 | 53.6 | 54.0 | 54.4 |
| 70\% | 54.1 | 53.2 | 50.8 | 48.1 | 48.1 | 49.8 | 50.8 | 51.9 | 52.5 | 53.3 | 53.7 | 53.9 |
| 80\% | 53.4 | 52.9 | 50.5 | 47.7 | 47.7 | 49.0 | 50.3 | 51.4 | 52.0 | 52.9 | 53.2 | 53.4 |
| 90\% | 52.6 | 52.1 | 49.7 | 47.1 | 46.9 | 48.6 | 49.6 | 50.6 | 51.4 | 51.9 | 52.4 | 52.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.5 | 54.5 | 51.8 | 48.8 | 48.9 | 50.4 | 51.4 | 52.4 | 53.4 | 54.4 | 55.0 | 55.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.6 | 50.9 | 48.6 | 48.0 | 48.1 | 49.3 | 50.2 | 51.3 | 51.9 | 52.5 | 52.9 | 52.9 |
| Above Normal (24\%) | 56.3 | 55.2 | 51.8 | 48.7 | 48.3 | 49.7 | 50.7 | 51.7 | 52.4 | 53.4 | 54.0 | 54.5 |
| Below Normal (10\%) | 54.6 | 53.6 | 50.9 | 48.6 | 48.8 | 50.1 | 51.3 | 52.1 | 53.0 | 54.0 | 54.4 | 54.7 |
| Dry (16\%) | 54.5 | 53.8 | 51.4 | 49.0 | 49.2 | 50.9 | 51.9 | 52.7 | 53.8 | 54.7 | 55.2 | 55.6 |
| Critical (27\%) | 56.5 | 55.5 | 52.8 | 49.7 | 49.9 | 51.6 | 52.7 | 53.9 | 55.4 | 57.0 | 57.8 | 57.9 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.1 | -0.1 | 0.3 |
| 20\% | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 |
| 30\% | -0.3 | -0.2 | 0.0 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 |
| 40\% | -0.3 | -0.2 | -0.1 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 |
| 50\% | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | -0.1 | -0.2 | 0.1 | 0.0 | -0.1 | -0.2 |
| 60\% | -0.1 | -0.1 | -0.1 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 |
| 70\% | -0.1 | 0.0 | -0.2 | 0.0 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.2 | -0.1 | -0.2 |
| 80\% | -0.2 | 0.0 | -0.1 | 0.1 | -0.1 | -0.2 | 0.0 | -0.1 | -0.1 | 0.4 | -0.1 | -0.1 |
| 90\% | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | 0.1 | 0.2 | 0.0 | 0.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.3 | 0.0 | -0.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.2 | 0.0 | 0.2 | 0.0 | -0.1 |
| Above Normal (24\%) | 0.1 | 0.1 | -0.1 | -0.1 | -0.1 | -0.2 | 0.0 | -0.1 | 0.0 | 0.3 | 0.0 | 0.0 |
| Below Normal (10\%) | -0.1 | -0.1 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Dry (16\%) | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Critical (27\%) | -0.4 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | 0.1 | 0.6 | 0.0 | -0.6 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.7.4 Stanislaus River below Goodwin Dam, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 57.3 | 54.1 | 50.9 | 50.8 | 52.1 | 53.2 | 54.1 | 55.4 | 56.6 | 57.4 | 57.9 |
| 20\% | 57.0 | 56.0 | 53.4 | 50.1 | 50.2 | 51.4 | 52.4 | 53.5 | 54.6 | 55.6 | 56.0 | 56.7 |
| 30\% | 56.2 | 54.9 | 52.9 | 49.8 | 49.5 | 50.9 | 52.1 | 53.0 | 53.9 | 54.8 | 55.4 | 55.8 |
| 40\% | 55.5 | 54.6 | 51.9 | 49.2 | 49.1 | 50.7 | 51.7 | 52.7 | 53.6 | 54.5 | 55.0 | 55.3 |
| 50\% | 55.0 | 54.0 | 51.6 | 49.0 | 48.8 | 50.5 | 51.5 | 52.6 | 53.1 | 54.0 | 54.7 | 55.0 |
| 60\% | 54.6 | 53.8 | 51.4 | 48.5 | 48.5 | 50.2 | 51.2 | 52.1 | 52.8 | 53.4 | 54.1 | 54.4 |
| 70\% | 54.2 | 53.3 | 51.0 | 48.1 | 48.3 | 49.9 | 50.8 | 52.0 | 52.5 | 53.2 | 53.8 | 54.0 |
| 80\% | 53.6 | 52.9 | 50.6 | 47.6 | 47.8 | 49.2 | 50.3 | 51.6 | 52.0 | 52.5 | 53.3 | 53.5 |
| 90\% | 52.7 | 52.1 | 49.8 | 47.1 | 46.9 | 48.6 | 49.6 | 50.7 | 51.3 | 51.7 | 52.4 | 52.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.6 | 51.9 | 48.9 | 48.9 | 50.4 | 51.4 | 52.5 | 53.3 | 54.1 | 55.0 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51.7 | 51.0 | 48.6 | 47.9 | 48.0 | 49.4 | 50.2 | 51.4 | 51.9 | 52.3 | 52.9 | 53.0 |
| Above Normal (24\%) | 56.2 | 55.1 | 51.9 | 48.7 | 48.4 | 49.9 | 50.7 | 51.9 | 52.4 | 53.1 | 54.0 | 54.5 |
| Below Normal (10\%) | 54.7 | 53.6 | 50.9 | 48.4 | 48.8 | 50.1 | 51.4 | 52.2 | 52.9 | 53.9 | 54.4 | 54.7 |
| Dry (16\%) | 54.7 | 53.9 | 51.6 | 49.1 | 49.2 | 50.9 | 51.9 | 52.8 | 53.8 | 54.7 | 55.2 | 55.6 |
| Critical (27\%) | 56.8 | 55.7 | 52.9 | 49.8 | 50.0 | 51.7 | 52.7 | 53.9 | 55.3 | 56.4 | 57.8 | 58.5 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.8 | 60.4 | 54.8 | 51.2 | 50.7 | 51.9 | 53.2 | 54.3 | 56.3 | 58.3 | 61.3 | 64.0 |
| 20\% | 58.8 | 58.0 | 53.4 | 50.3 | 50.2 | 51.3 | 52.5 | 53.7 | 55.1 | 56.6 | 57.6 | 58.7 |
| 30\% | 56.7 | 56.0 | 52.7 | 49.6 | 49.4 | 50.8 | 52.2 | 53.0 | 54.2 | 55.6 | 56.3 | 56.9 |
| 40\% | 55.7 | 54.9 | 52.0 | 49.1 | 48.9 | 50.5 | 51.9 | 52.9 | 53.8 | 54.7 | 55.6 | 55.9 |
| 50\% | 55.2 | 54.4 | 51.6 | 48.9 | 48.8 | 50.1 | 51.4 | 52.7 | 53.2 | 54.5 | 54.9 | 55.3 |
| 60\% | 54.8 | 54.1 | 51.5 | 48.4 | 48.3 | 49.9 | 51.0 | 52.2 | 52.8 | 53.5 | 54.2 | 54.7 |
| 70\% | 54.2 | 53.6 | 50.9 | 48.0 | 47.8 | 49.5 | 50.6 | 51.8 | 52.2 | 53.2 | 53.9 | 54.3 |
| 80\% | 53.6 | 53.0 | 50.5 | 47.3 | 47.4 | 48.9 | 50.0 | 51.2 | 52.0 | 52.6 | 53.4 | 53.7 |
| 90\% | 52.5 | 52.1 | 49.7 | 46.2 | 46.7 | 48.2 | 49.1 | 50.5 | 50.7 | 51.5 | 52.2 | 52.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.6 | 55.3 | 52.0 | 48.8 | 48.6 | 50.1 | 51.3 | 52.7 | 53.4 | 54.8 | 55.9 | 56.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 52.4 | 51.5 | 48.9 | 47.9 | 47.6 | 49.1 | 49.9 | 51.2 | 51.5 | 52.1 | 52.8 | 53.1 |
| Above Normal (24\%) | 57.6 | 55.7 | 51.5 | 48.3 | 47.9 | 49.5 | 50.5 | 51.9 | 52.5 | 53.6 | 54.7 | 55.6 |
| Below Normal (10\%) | 55.8 | 53.9 | 50.9 | 48.3 | 48.6 | 49.9 | 51.3 | 52.2 | 53.0 | 54.3 | 55.1 | 55.7 |
| Dry (16\%) | 55.5 | 54.9 | 52.1 | 49.3 | 49.3 | 50.8 | 52.0 | 53.0 | 54.2 | 55.8 | 56.4 | 57.2 |
| Critical (27\%) | 57.8 | 56.5 | 53.0 | 49.7 | 49.8 | 51.3 | 52.9 | 54.6 | 55.6 | 57.6 | 59.5 | 61.0 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 6.0 | 3.1 | 0.7 | 0.3 | -0.2 | -0.2 | 0.0 | 0.2 | 0.9 | 1.7 | 4.0 | 6.0 |
| 20\% | 1.8 | 2.0 | 0.0 | 0.2 | 0.0 | -0.1 | 0.1 | 0.3 | 0.5 | 1.0 | 1.6 | 2.0 |
| 30\% | 0.5 | 1.1 | -0.2 | -0.1 | -0.1 | -0.1 | 0.1 | 0.0 | 0.3 | 0.8 | 0.8 | 1.1 |
| 40\% | 0.2 | 0.4 | 0.1 | -0.1 | -0.1 | -0.3 | 0.1 | 0.1 | 0.2 | 0.2 | 0.6 | 0.6 |
| 50\% | 0.2 | 0.4 | 0.1 | -0.1 | -0.1 | -0.4 | -0.1 | 0.1 | 0.1 | 0.5 | 0.2 | 0.3 |
| 60\% | 0.2 | 0.3 | 0.0 | -0.1 | -0.2 | -0.3 | -0.2 | 0.0 | 0.0 | 0.2 | 0.1 | 0.4 |
| 70\% | 0.0 | 0.4 | -0.1 | 0.0 | -0.4 | -0.4 | -0.2 | -0.2 | -0.3 | 0.0 | 0.2 | 0.3 |
| 80\% | 0.0 | 0.1 | -0.1 | -0.4 | -0.4 | -0.3 | -0.3 | -0.3 | 0.0 | 0.1 | 0.2 | 0.2 |
| 90\% | -0.2 | 0.0 | -0.1 | -0.9 | -0.2 | -0.5 | -0.5 | -0.2 | -0.6 | -0.2 | -0.2 | 0.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1.0 | 0.6 | 0.1 | -0.1 | -0.3 | -0.3 | -0.1 | 0.2 | 0.1 | 0.6 | 0.9 | 1.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.7 | 0.5 | 0.2 | 0.0 | -0.4 | -0.3 | -0.3 | -0.2 | -0.4 | -0.2 | -0.1 | 0.1 |
| Above Normal (24\%) | 1.4 | 0.6 | -0.4 | -0.4 | -0.5 | -0.5 | -0.2 | 0.0 | 0.1 | 0.5 | 0.7 | 1.0 |
| Below Normal (10\%) | 1.1 | 0.3 | 0.0 | -0.1 | -0.2 | -0.2 | -0.1 | 0.1 | 0.1 | 0.4 | 0.7 | 1.0 |
| Dry (16\%) | 0.8 | 1.0 | 0.5 | 0.2 | 0.1 | -0.1 | 0.0 | 0.2 | 0.4 | 1.1 | 1.2 | 1.5 |
| Critical (27\%) | 1.0 | 0.8 | 0.1 | -0.1 | -0.2 | -0.4 | 0.2 | 0.7 | 0.3 | 1.2 | 1.7 | 2.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.8 Stanislaus River at Orange Blossom Bridge Temperature

Table 5C.3.2.8.1. Stanislaus River at Orange Blossom Bridge, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 61.6 | 58.7 | 53.5 | 51.3 | 52.5 | 55.8 | 55.3 | 57.7 | 63.9 | 65.6 | 65.4 | 64.5 |
| 20\% | 59.3 | 56.9 | 52.6 | 50.8 | 51.7 | 55.1 | 54.8 | 56.8 | 62.5 | 64.6 | 64.2 | 63.3 |
| 30\% | 57.6 | 56.2 | 52.3 | 50.1 | 51.2 | 54.6 | 54.1 | 56.0 | 61.6 | 64.1 | 63.4 | 62.0 |
| 40\% | 56.8 | 55.1 | 51.5 | 49.6 | 50.7 | 54.0 | 53.6 | 55.3 | 60.7 | 63.7 | 62.9 | 61.7 |
| 50\% | 56.4 | 54.9 | 51.1 | 49.1 | 50.3 | 53.7 | 53.1 | 55.0 | 59.3 | 63.2 | 62.5 | 61.2 |
| 60\% | 55.9 | 54.6 | 50.7 | 48.8 | 50.1 | 53.2 | 52.7 | 54.4 | 56.6 | 62.6 | 62.2 | 60.7 |
| 70\% | 55.2 | 54.1 | 50.5 | 48.4 | 49.6 | 52.1 | 52.2 | 53.9 | 55.9 | 62.1 | 61.9 | 60.4 |
| 80\% | 54.9 | 53.7 | 50.2 | 47.9 | 49.2 | 51.0 | 51.9 | 53.6 | 55.3 | 61.5 | 61.5 | 59.9 |
| 90\% | 54.0 | 52.7 | 49.8 | 47.1 | 48.4 | 49.7 | 50.8 | 52.6 | 54.4 | 58.6 | 59.8 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 57.2 | 55.3 | 51.4 | 49.2 | 50.4 | 53.2 | 53.2 | 55.1 | 59.0 | 62.9 | 62.7 | 61.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 53.1 | 51.8 | 48.6 | 48.7 | 49.3 | 50.2 | 51.3 | 53.2 | 55.2 | 59.5 | 59.4 | 57.8 |
| Above Normal (24\%) | 57.9 | 55.5 | 51.2 | 49.0 | 49.9 | 52.7 | 52.4 | 54.5 | 56.3 | 61.9 | 62.2 | 61.1 |
| Below Normal (10\%) | 56.2 | 54.7 | 50.7 | 48.9 | 50.3 | 53.4 | 52.9 | 54.2 | 58.8 | 63.3 | 62.4 | 61.0 |
| Dry (16\%) | 56.3 | 55.0 | 51.1 | 49.5 | 50.9 | 54.5 | 54.0 | 55.4 | 61.2 | 64.2 | 63.5 | 62.4 |
| Critical (27\%) | 58.6 | 56.2 | 52.1 | 49.8 | 51.6 | 55.2 | 55.2 | 57.4 | 63.4 | 65.9 | 65.5 | 64.6 |

Revised Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.9 | 57.4 | 53.0 | 51.1 | 52.6 | 56.7 | 56.1 | 58.0 | 63.1 | 65.2 | 64.6 | 63.3 |
| 20\% | 61.5 | 56.4 | 52.6 | 50.6 | 51.7 | 55.8 | 55.4 | 57.4 | 62.6 | 64.3 | 63.6 | 62.4 |
| 30\% | 61.0 | 55.5 | 52.0 | 50.0 | 51.2 | 55.2 | 54.9 | 56.5 | 62.1 | 63.8 | 63.0 | 61.9 |
| 40\% | 59.5 | 55.0 | 51.5 | 49.6 | 50.8 | 54.4 | 54.2 | 56.0 | 61.5 | 63.5 | 62.7 | 61.4 |
| 50\% | 59.0 | 54.6 | 51.1 | 49.1 | 50.5 | 53.7 | 53.5 | 55.5 | 59.2 | 63.1 | 62.4 | 60.9 |
| 60\% | 57.9 | 54.3 | 50.8 | 49.0 | 50.0 | 53.3 | 53.2 | 54.8 | 56.4 | 62.6 | 62.1 | 60.6 |
| 70\% | 56.8 | 54.0 | 50.6 | 48.4 | 49.8 | 52.5 | 52.6 | 54.3 | 55.8 | 62.1 | 61.8 | 60.0 |
| 80\% | 56.4 | 53.5 | 50.3 | 48.0 | 49.3 | 51.6 | 51.9 | 53.8 | 55.1 | 61.5 | 61.5 | 59.5 |
| 90\% | 55.7 | 52.8 | 49.9 | 47.5 | 48.4 | 50.3 | 51.2 | 52.9 | 53.9 | 58.6 | 60.4 | 57.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59.2 | 55.1 | 51.4 | 49.3 | 50.5 | 53.8 | 53.8 | 55.5 | 58.9 | 62.4 | 62.3 | 60.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 54.9 | 51.5 | 48.5 | 48.7 | 49.1 | 51.1 | 51.6 | 53.4 | 54.8 | 59.2 | 59.1 | 57.3 |
| Above Normal (24\%) | 59.8 | 55.3 | 51.4 | 49.3 | 50.3 | 53.2 | 52.9 | 54.9 | 56.1 | 61.7 | 62.0 | 60.7 |
| Below Normal (10\%) | 58.0 | 54.2 | 50.6 | 48.9 | 50.1 | 53.1 | 53.2 | 54.7 | 59.4 | 63.3 | 62.2 | 60.7 |
| Dry (16\%) | 58.4 | 54.6 | 51.0 | 49.4 | 50.7 | 54.9 | 54.7 | 55.9 | 61.7 | 64.0 | 63.0 | 61.6 |
| Critical (27\%) | 60.6 | 56.0 | 52.1 | 49.8 | 51.9 | 56.4 | 56.0 | 57.8 | 63.0 | 64.7 | 64.8 | 64.0 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1.3 | -1.3 | -0.5 | -0.2 | 0.1 | 1.0 | 0.9 | 0.3 | -0.8 | -0.3 | -0.8 | -1.2 |
| 20\% | 2.1 | -0.5 | 0.0 | -0.1 | 0.0 | 0.8 | 0.6 | 0.5 | 0.1 | -0.3 | -0.6 | -0.8 |
| 30\% | 3.5 | -0.6 | -0.4 | -0.1 | 0.0 | 0.6 | 0.8 | 0.5 | 0.5 | -0.3 | -0.4 | -0.2 |
| 40\% | 2.7 | 0.0 | 0.1 | 0.0 | 0.1 | 0.4 | 0.5 | 0.7 | 0.8 | -0.2 | -0.2 | -0.3 |
| 50\% | 2.6 | -0.3 | 0.0 | 0.0 | 0.1 | 0.0 | 0.4 | 0.5 | 0.0 | -0.1 | -0.1 | -0.3 |
| 60\% | 2.1 | -0.3 | 0.1 | 0.2 | 0.0 | 0.0 | 0.5 | 0.4 | -0.3 | -0.1 | -0.1 | -0.2 |
| 70\% | 1.6 | -0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.4 | 0.4 | -0.1 | 0.0 | 0.0 | -0.4 |
| 80\% | 1.5 | -0.1 | 0.1 | 0.2 | 0.1 | 0.7 | 0.1 | 0.2 | -0.2 | -0.1 | 0.0 | -0.4 |
| 90\% | 1.7 | 0.1 | 0.1 | 0.4 | 0.1 | 0.7 | 0.4 | 0.3 | -0.5 | 0.0 | 0.5 | -0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1.9 | -0.3 | 0.0 | 0.1 | 0.1 | 0.7 | 0.6 | 0.4 | -0.1 | -0.5 | -0.4 | -0.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1.8 | -0.3 | -0.1 | 0.0 | -0.2 | 0.9 | 0.3 | 0.2 | -0.4 | -0.3 | -0.3 | -0.5 |
| Above Normal (24\%) | 1.9 | -0.1 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.3 | -0.2 | -0.2 | -0.2 | -0.4 |
| Below Normal (10\%) | 1.8 | -0.5 | -0.1 | 0.0 | -0.2 | -0.3 | 0.4 | 0.5 | 0.6 | 0.0 | -0.1 | -0.4 |
| Dry (16\%) | 2.1 | -0.4 | -0.1 | -0.1 | -0.2 | 0.3 | 0.8 | 0.5 | 0.5 | -0.2 | -0.6 | -0.7 |
| Critical (27\%) | 2.0 | -0.2 | 0.0 | 0.0 | 0.2 | 1.2 | 0.8 | 0.3 | -0.4 | -1.2 | -0.7 | -0.6 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.8.2 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.9 | 57.4 | 53.0 | 51.1 | 52.6 | 56.7 | 56.1 | 58.0 | 63.1 | 65.2 | 64.6 | 63.3 |
| 20\% | 61.5 | 56.4 | 52.6 | 50.6 | 51.7 | 55.8 | 55.4 | 57.4 | 62.6 | 64.3 | 63.6 | 62.4 |
| 30\% | 61.0 | 55.5 | 52.0 | 50.0 | 51.2 | 55.2 | 54.9 | 56.5 | 62.1 | 63.8 | 63.0 | 61.9 |
| 40\% | 59.5 | 55.0 | 51.5 | 49.6 | 50.8 | 54.4 | 54.2 | 56.0 | 61.5 | 63.5 | 62.7 | 61.4 |
| 50\% | 59.0 | 54.6 | 51.1 | 49.1 | 50.5 | 53.7 | 53.5 | 55.5 | 59.2 | 63.1 | 62.4 | 60.9 |
| 60\% | 57.9 | 54.3 | 50.8 | 49.0 | 50.0 | 53.3 | 53.2 | 54.8 | 56.4 | 62.6 | 62.1 | 60.6 |
| 70\% | 56.8 | 54.0 | 50.6 | 48.4 | 49.8 | 52.5 | 52.6 | 54.3 | 55.8 | 62.1 | 61.8 | 60.0 |
| 80\% | 56.4 | 53.5 | 50.3 | 48.0 | 49.3 | 51.6 | 51.9 | 53.8 | 55.1 | 61.5 | 61.5 | 59.5 |
| 90\% | 55.7 | 52.8 | 49.9 | 47.5 | 48.4 | 50.3 | 51.2 | 52.9 | 53.9 | 58.6 | 60.4 | 57.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59.2 | 55.1 | 51.4 | 49.3 | 50.5 | 53.8 | 53.8 | 55.5 | 58.9 | 62.4 | 62.3 | 60.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 54.9 | 51.5 | 48.5 | 48.7 | 49.1 | 51.1 | 51.6 | 53.4 | 54.8 | 59.2 | 59.1 | 57.3 |
| Above Normal (24\%) | 59.8 | 55.3 | 51.4 | 49.3 | 50.3 | 53.2 | 52.9 | 54.9 | 56.1 | 61.7 | 62.0 | 60.7 |
| Below Normal (10\%) | 58.0 | 54.2 | 50.6 | 48.9 | 50.1 | 53.1 | 53.2 | 54.7 | 59.4 | 63.3 | 62.2 | 60.7 |
| Dry (16\%) | 58.4 | 54.6 | 51.0 | 49.4 | 50.7 | 54.9 | 54.7 | 55.9 | 61.7 | 64.0 | 63.0 | 61.6 |
| Critical (27\%) | 60.6 | 56.0 | 52.1 | 49.8 | 51.9 | 56.4 | 56.0 | 57.8 | 63.0 | 64.7 | 64.8 | 64.0 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 61.6 | 58.7 | 53.5 | 51.3 | 52.5 | 55.8 | 55.3 | 57.7 | 63.9 | 65.6 | 65.4 | 64.5 |
| 20\% | 59.3 | 56.9 | 52.6 | 50.8 | 51.7 | 55.1 | 54.8 | 56.8 | 62.5 | 64.6 | 64.2 | 63.3 |
| 30\% | 57.6 | 56.2 | 52.3 | 50.1 | 51.2 | 54.6 | 54.1 | 56.0 | 61.6 | 64.1 | 63.4 | 62.0 |
| 40\% | 56.8 | 55.1 | 51.5 | 49.6 | 50.7 | 54.0 | 53.6 | 55.3 | 60.7 | 63.7 | 62.9 | 61.7 |
| 50\% | 56.4 | 54.9 | 51.1 | 49.1 | 50.3 | 53.7 | 53.1 | 55.0 | 59.3 | 63.2 | 62.5 | 61.2 |
| 60\% | 55.9 | 54.6 | 50.7 | 48.8 | 50.1 | 53.2 | 52.7 | 54.4 | 56.6 | 62.6 | 62.2 | 60.7 |
| 70\% | 55.2 | 54.1 | 50.5 | 48.4 | 49.6 | 52.1 | 52.2 | 53.9 | 55.9 | 62.1 | 61.9 | 60.4 |
| 80\% | 54.9 | 53.7 | 50.2 | 47.9 | 49.2 | 51.0 | 51.9 | 53.6 | 55.3 | 61.5 | 61.5 | 59.9 |
| 90\% | 54.0 | 52.7 | 49.8 | 47.1 | 48.4 | 49.7 | 50.8 | 52.6 | 54.4 | 58.6 | 59.8 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 57.2 | 55.3 | 51.4 | 49.2 | 50.4 | 53.2 | 53.2 | 55.1 | 59.0 | 62.9 | 62.7 | 61.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 53.1 | 51.8 | 48.6 | 48.7 | 49.3 | 50.2 | 51.3 | 53.2 | 55.2 | 59.5 | 59.4 | 57.8 |
| Above Normal (24\%) | 57.9 | 55.5 | 51.2 | 49.0 | 49.9 | 52.7 | 52.4 | 54.5 | 56.3 | 61.9 | 62.2 | 61.1 |
| Below Normal (10\%) | 56.2 | 54.7 | 50.7 | 48.9 | 50.3 | 53.4 | 52.9 | 54.2 | 58.8 | 63.3 | 62.4 | 61.0 |
| Dry (16\%) | 56.3 | 55.0 | 51.1 | 49.5 | 50.9 | 54.5 | 54.0 | 55.4 | 61.2 | 64.2 | 63.5 | 62.4 |
| Critical (27\%) | 58.6 | 56.2 | 52.1 | 49.8 | 51.6 | 55.2 | 55.2 | 57.4 | 63.4 | 65.9 | 65.5 | 64.6 |

No Action Alternative minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.3 | 1.3 | 0.5 | 0.2 | -0.1 | -1.0 | -0.9 | -0.3 | 0.8 | 0.3 | 0.8 | 1.2 |
| 20\% | -2.1 | 0.5 | 0.0 | 0.1 | 0.0 | -0.8 | -0.6 | -0.5 | -0.1 | 0.3 | 0.6 | 0.8 |
| 30\% | -3.5 | 0.6 | 0.4 | 0.1 | 0.0 | -0.6 | -0.8 | -0.5 | -0.5 | 0.3 | 0.4 | 0.2 |
| 40\% | -2.7 | 0.0 | -0.1 | 0.0 | -0.1 | -0.4 | -0.5 | -0.7 | -0.8 | 0.2 | 0.2 | 0.3 |
| 50\% | -2.6 | 0.3 | 0.0 | 0.0 | -0.1 | 0.0 | -0.4 | -0.5 | 0.0 | 0.1 | 0.1 | 0.3 |
| 60\% | -2.1 | 0.3 | -0.1 | -0.2 | 0.0 | 0.0 | -0.5 | -0.4 | 0.3 | 0.1 | 0.1 | 0.2 |
| 70\% | -1.6 | 0.1 | -0.1 | -0.1 | -0.1 | -0.4 | -0.4 | -0.4 | 0.1 | 0.0 | 0.0 | 0.4 |
| 80\% | -1.5 | 0.1 | -0.1 | -0.2 | -0.1 | -0.7 | -0.1 | -0.2 | 0.2 | 0.1 | 0.0 | 0.4 |
| 90\% | -1.7 | -0.1 | -0.1 | -0.4 | -0.1 | -0.7 | -0.4 | -0.3 | 0.5 | 0.0 | -0.5 | 0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1.9 | 0.3 | 0.0 | -0.1 | -0.1 | -0.7 | -0.6 | -0.4 | 0.1 | 0.5 | 0.4 | 0.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -1.8 | 0.3 | 0.1 | 0.0 | 0.2 | -0.9 | -0.3 | -0.2 | 0.4 | 0.3 | 0.3 | 0.5 |
| Above Normal (24\%) | -1.9 | 0.1 | -0.2 | -0.3 | -0.4 | -0.5 | -0.5 | -0.3 | 0.2 | 0.2 | 0.2 | 0.4 |
| Below Normal (10\%) | -1.8 | 0.5 | 0.1 | 0.0 | 0.2 | 0.3 | -0.4 | -0.5 | -0.6 | 0.0 | 0.1 | 0.4 |
| Dry (16\%) | -2.1 | 0.4 | 0.1 | 0.1 | 0.2 | -0.3 | -0.8 | -0.5 | -0.5 | 0.2 | 0.6 | 0.7 |
| Critical (27\%) | -2.0 | 0.2 | 0.0 | 0.0 | -0.2 | -1.2 | -0.8 | -0.3 | 0.4 | 1.2 | 0.7 | 0.6 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.8.3 Stanislaus River at Orange Blossom Bridge, Monthly Temperature
Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.9 | 57.4 | 53.0 | 51.1 | 52.6 | 56.7 | 56.1 | 58.0 | 63.1 | 65.2 | 64.6 | 63.3 |
| 20\% | 61.5 | 56.4 | 52.6 | 50.6 | 51.7 | 55.8 | 55.4 | 57.4 | 62.6 | 64.3 | 63.6 | 62.4 |
| 30\% | 61.0 | 55.5 | 52.0 | 50.0 | 51.2 | 55.2 | 54.9 | 56.5 | 62.1 | 63.8 | 63.0 | 61.9 |
| 40\% | 59.5 | 55.0 | 51.5 | 49.6 | 50.8 | 54.4 | 54.2 | 56.0 | 61.5 | 63.5 | 62.7 | 61.4 |
| 50\% | 59.0 | 54.6 | 51.1 | 49.1 | 50.5 | 53.7 | 53.5 | 55.5 | 59.2 | 63.1 | 62.4 | 60.9 |
| 60\% | 57.9 | 54.3 | 50.8 | 49.0 | 50.0 | 53.3 | 53.2 | 54.8 | 56.4 | 62.6 | 62.1 | 60.6 |
| 70\% | 56.8 | 54.0 | 50.6 | 48.4 | 49.8 | 52.5 | 52.6 | 54.3 | 55.8 | 62.1 | 61.8 | 60.0 |
| 80\% | 56.4 | 53.5 | 50.3 | 48.0 | 49.3 | 51.6 | 51.9 | 53.8 | 55.1 | 61.5 | 61.5 | 59.5 |
| 90\% | 55.7 | 52.8 | 49.9 | 47.5 | 48.4 | 50.3 | 51.2 | 52.9 | 53.9 | 58.6 | 60.4 | 57.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59.2 | 55.1 | 51.4 | 49.3 | 50.5 | 53.8 | 53.8 | 55.5 | 58.9 | 62.4 | 62.3 | 60.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 54.9 | 51.5 | 48.5 | 48.7 | 49.1 | 51.1 | 51.6 | 53.4 | 54.8 | 59.2 | 59.1 | 57.3 |
| Above Normal (24\%) | 59.8 | 55.3 | 51.4 | 49.3 | 50.3 | 53.2 | 52.9 | 54.9 | 56.1 | 61.7 | 62.0 | 60.7 |
| Below Normal (10\%) | 58.0 | 54.2 | 50.6 | 48.9 | 50.1 | 53.1 | 53.2 | 54.7 | 59.4 | 63.3 | 62.2 | 60.7 |
| Dry (16\%) | 58.4 | 54.6 | 51.0 | 49.4 | 50.7 | 54.9 | 54.7 | 55.9 | 61.7 | 64.0 | 63.0 | 61.6 |
| Critical (27\%) | 60.6 | 56.0 | 52.1 | 49.8 | 51.9 | 56.4 | 56.0 | 57.8 | 63.0 | 64.7 | 64.8 | 64.0 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 61.3 | 57.6 | 53.2 | 51.0 | 52.9 | 55.8 | 55.5 | 57.8 | 63.9 | 65.8 | 64.8 | 63.5 |
| 20\% | 60.0 | 56.6 | 52.7 | 50.7 | 51.9 | 55.2 | 54.8 | 56.7 | 63.2 | 64.8 | 63.8 | 62.6 |
| 30\% | 59.2 | 55.4 | 52.2 | 50.2 | 51.3 | 54.6 | 54.3 | 56.2 | 62.6 | 64.2 | 63.1 | 62.1 |
| 40\% | 58.3 | 54.8 | 51.6 | 49.5 | 50.9 | 54.1 | 53.8 | 55.6 | 62.1 | 63.9 | 62.8 | 61.4 |
| 50\% | 57.9 | 54.5 | 51.1 | 49.2 | 50.5 | 53.7 | 53.2 | 55.2 | 61.7 | 63.5 | 62.4 | 61.1 |
| 60\% | 57.4 | 54.1 | 50.9 | 48.8 | 50.1 | 53.4 | 52.8 | 54.7 | 61.3 | 63.3 | 62.1 | 60.8 |
| 70\% | 56.8 | 53.9 | 50.5 | 48.5 | 49.7 | 52.6 | 52.5 | 54.4 | 60.8 | 63.1 | 61.9 | 60.3 |
| 80\% | 56.4 | 53.5 | 50.2 | 48.2 | 49.4 | 51.6 | 51.8 | 53.8 | 60.3 | 62.7 | 61.6 | 60.0 |
| 90\% | 55.4 | 52.9 | 49.9 | 47.5 | 48.5 | 50.5 | 51.1 | 53.1 | 59.0 | 61.4 | 60.4 | 55.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58.3 | 55.0 | 51.4 | 49.3 | 50.6 | 53.4 | 53.4 | 55.3 | 61.3 | 63.3 | 62.4 | 60.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 54.3 | 51.4 | 48.5 | 48.8 | 49.3 | 51.2 | 51.6 | 53.5 | 58.0 | 59.6 | 59.0 | 57.3 |
| Above Normal (24\%) | 58.8 | 55.4 | 51.4 | 49.3 | 50.2 | 52.8 | 52.5 | 54.6 | 61.2 | 63.1 | 62.2 | 60.8 |
| Below Normal (10\%) | 57.5 | 54.2 | 50.6 | 48.8 | 50.2 | 53.2 | 53.1 | 54.8 | 61.3 | 63.5 | 62.2 | 60.9 |
| Dry (16\%) | 57.6 | 54.4 | 51.0 | 49.4 | 51.0 | 54.5 | 54.2 | 56.0 | 62.5 | 64.2 | 62.9 | 61.6 |
| Critical (27\%) | 59.4 | 55.8 | 52.1 | 49.8 | 52.0 | 55.4 | 55.3 | 57.4 | 63.6 | 65.9 | 65.1 | 63.4 |

Alternative 3 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.6 | 0.2 | 0.2 | -0.1 | 0.3 | -1.0 | -0.7 | -0.2 | 0.9 | 0.6 | 0.2 | 0.1 |
| 20\% | -1.5 | 0.1 | 0.1 | 0.1 | 0.3 | -0.6 | -0.6 | -0.7 | 0.5 | 0.5 | 0.2 | 0.2 |
| 30\% | -1.8 | -0.2 | 0.3 | 0.1 | 0.1 | -0.6 | -0.6 | -0.2 | 0.5 | 0.4 | 0.1 | 0.2 |
| 40\% | -1.3 | -0.2 | 0.0 | -0.1 | 0.1 | -0.3 | -0.4 | -0.4 | 0.6 | 0.4 | 0.1 | 0.0 |
| 50\% | -1.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.3 | 2.5 | 0.4 | 0.0 | 0.1 |
| 60\% | -0.5 | -0.2 | 0.1 | -0.1 | 0.1 | 0.1 | -0.4 | -0.1 | 4.9 | 0.7 | 0.0 | 0.2 |
| 70\% | 0.0 | -0.2 | -0.1 | 0.1 | -0.1 | 0.1 | -0.1 | 0.1 | 5.0 | 1.0 | 0.1 | 0.3 |
| 80\% | 0.0 | 0.0 | -0.1 | 0.1 | 0.1 | 0.0 | -0.1 | 0.0 | 5.2 | 1.3 | 0.1 | 0.5 |
| 90\% | -0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | 0.2 | 5.1 | 2.8 | 0.1 | -2.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.9 | -0.1 | 0.0 | 0.0 | 0.1 | -0.4 | -0.4 | -0.1 | 2.4 | 0.8 | 0.1 | -0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.5 | -0.1 | 0.0 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 3.1 | 0.4 | -0.1 | 0.0 |
| Above Normal (24\%) | -1.0 | 0.0 | 0.1 | 0.0 | 0.0 | -0.3 | -0.3 | -0.3 | 5.1 | 1.5 | 0.1 | 0.2 |
| Below Normal (10\%) | -0.5 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | 0.1 | 1.9 | 0.2 | 0.0 | 0.2 |
| Dry (16\%) | -0.8 | -0.1 | 0.0 | 0.0 | 0.2 | -0.3 | -0.6 | 0.0 | 0.8 | 0.3 | 0.0 | 0.0 |
| Critical (27\%) | -1.2 | -0.2 | 0.0 | 0.0 | 0.1 | -1.0 | -0.7 | -0.4 | 0.6 | 1.2 | 0.3 | -0.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.8.4 Stanislaus River at Orange Blossom Bridge, Monthly Temperature
Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.9 | 57.4 | 53.0 | 51.1 | 52.6 | 56.7 | 56.1 | 58.0 | 63.1 | 65.2 | 64.6 | 63.3 |
| 20\% | 61.5 | 56.4 | 52.6 | 50.6 | 51.7 | 55.8 | 55.4 | 57.4 | 62.6 | 64.3 | 63.6 | 62.4 |
| 30\% | 61.0 | 55.5 | 52.0 | 50.0 | 51.2 | 55.2 | 54.9 | 56.5 | 62.1 | 63.8 | 63.0 | 61.9 |
| 40\% | 59.5 | 55.0 | 51.5 | 49.6 | 50.8 | 54.4 | 54.2 | 56.0 | 61.5 | 63.5 | 62.7 | 61.4 |
| 50\% | 59.0 | 54.6 | 51.1 | 49.1 | 50.5 | 53.7 | 53.5 | 55.5 | 59.2 | 63.1 | 62.4 | 60.9 |
| 60\% | 57.9 | 54.3 | 50.8 | 49.0 | 50.0 | 53.3 | 53.2 | 54.8 | 56.4 | 62.6 | 62.1 | 60.6 |
| 70\% | 56.8 | 54.0 | 50.6 | 48.4 | 49.8 | 52.5 | 52.6 | 54.3 | 55.8 | 62.1 | 61.8 | 60.0 |
| 80\% | 56.4 | 53.5 | 50.3 | 48.0 | 49.3 | 51.6 | 51.9 | 53.8 | 55.1 | 61.5 | 61.5 | 59.5 |
| 90\% | 55.7 | 52.8 | 49.9 | 47.5 | 48.4 | 50.3 | 51.2 | 52.9 | 53.9 | 58.6 | 60.4 | 57.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59.2 | 55.1 | 51.4 | 49.3 | 50.5 | 53.8 | 53.8 | 55.5 | 58.9 | 62.4 | 62.3 | 60.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 54.9 | 51.5 | 48.5 | 48.7 | 49.1 | 51.1 | 51.6 | 53.4 | 54.8 | 59.2 | 59.1 | 57.3 |
| Above Normal (24\%) | 59.8 | 55.3 | 51.4 | 49.3 | 50.3 | 53.2 | 52.9 | 54.9 | 56.1 | 61.7 | 62.0 | 60.7 |
| Below Normal (10\%) | 58.0 | 54.2 | 50.6 | 48.9 | 50.1 | 53.1 | 53.2 | 54.7 | 59.4 | 63.3 | 62.2 | 60.7 |
| Dry (16\%) | 58.4 | 54.6 | 51.0 | 49.4 | 50.7 | 54.9 | 54.7 | 55.9 | 61.7 | 64.0 | 63.0 | 61.6 |
| Critical (27\%) | 60.6 | 56.0 | 52.1 | 49.8 | 51.9 | 56.4 | 56.0 | 57.8 | 63.0 | 64.7 | 64.8 | 64.0 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65.0 | 59.6 | 53.4 | 51.3 | 52.5 | 55.7 | 54.6 | 56.3 | 64.0 | 66.4 | 67.0 | 67.3 |
| 20\% | 60.0 | 58.0 | 52.6 | 50.6 | 51.7 | 55.0 | 54.1 | 55.8 | 62.7 | 65.1 | 65.0 | 64.2 |
| 30\% | 58.1 | 56.5 | 52.2 | 49.9 | 51.2 | 54.5 | 53.7 | 55.4 | 61.8 | 64.3 | 63.7 | 62.7 |
| 40\% | 57.1 | 55.3 | 51.6 | 49.6 | 50.7 | 54.0 | 53.5 | 55.0 | 61.0 | 63.7 | 63.0 | 61.8 |
| 50\% | 56.5 | 55.0 | 51.2 | 49.1 | 50.3 | 53.6 | 53.0 | 54.7 | 59.2 | 63.2 | 62.7 | 61.3 |
| 60\% | 55.9 | 54.6 | 50.8 | 48.9 | 50.1 | 53.3 | 52.6 | 54.3 | 57.0 | 62.7 | 62.3 | 60.9 |
| 70\% | 55.4 | 54.2 | 50.6 | 48.4 | 49.6 | 52.0 | 52.2 | 53.7 | 55.9 | 62.2 | 61.9 | 60.6 |
| 80\% | 55.0 | 53.7 | 50.3 | 47.9 | 49.2 | 51.0 | 51.8 | 53.4 | 55.3 | 61.6 | 61.5 | 60.0 |
| 90\% | 54.0 | 53.1 | 49.8 | 47.2 | 48.3 | 49.6 | 50.7 | 52.6 | 54.4 | 58.9 | 60.1 | 58.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 57.8 | 55.7 | 51.5 | 49.2 | 50.4 | 53.1 | 52.9 | 54.8 | 59.1 | 63.3 | 63.2 | 61.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 53.6 | 52.0 | 48.7 | 48.7 | 49.3 | 50.3 | 51.3 | 53.1 | 55.3 | 60.2 | 60.0 | 58.0 |
| Above Normal (24\%) | 58.6 | 56.0 | 51.2 | 48.9 | 49.8 | 52.6 | 52.4 | 54.0 | 56.3 | 62.0 | 62.4 | 61.4 |
| Below Normal (10\%) | 57.0 | 54.6 | 50.6 | 48.8 | 50.2 | 53.3 | 52.9 | 54.3 | 59.1 | 63.5 | 62.6 | 61.5 |
| Dry (16\%) | 56.8 | 55.4 | 51.4 | 49.6 | 51.0 | 54.5 | 53.5 | 54.9 | 61.5 | 64.6 | 63.9 | 62.7 |
| Critical (27\%) | 59.0 | 56.6 | 52.2 | 49.8 | 51.6 | 55.1 | 54.5 | 57.0 | 63.7 | 66.2 | 66.5 | 65.6 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.1 | 2.2 | 0.4 | 0.3 | -0.1 | -1.0 | -1.5 | -1.6 | 1.0 | 1.2 | 2.4 | 3.9 |
| 20\% | -1.5 | 1.6 | 0.0 | -0.1 | 0.0 | -0.8 | -1.3 | -1.6 | 0.1 | 0.9 | 1.4 | 1.7 |
| 30\% | -2.9 | 0.9 | 0.2 | -0.1 | 0.0 | -0.7 | -1.3 | -1.1 | -0.4 | 0.5 | 0.7 | 0.9 |
| 40\% | -2.4 | 0.2 | 0.1 | -0.1 | -0.1 | -0.5 | -0.7 | -1.0 | -0.5 | 0.2 | 0.3 | 0.4 |
| 50\% | -2.5 | 0.4 | 0.0 | -0.1 | -0.2 | -0.1 | -0.4 | -0.8 | 0.0 | 0.1 | 0.3 | 0.4 |
| 60\% | -2.0 | 0.4 | 0.0 | -0.1 | 0.0 | 0.0 | -0.5 | -0.5 | 0.7 | 0.2 | 0.2 | 0.3 |
| 70\% | -1.4 | 0.2 | 0.0 | 0.0 | -0.1 | -0.5 | -0.3 | -0.6 | 0.1 | 0.1 | 0.1 | 0.5 |
| 80\% | -1.4 | 0.2 | 0.0 | -0.1 | -0.1 | -0.6 | -0.1 | -0.4 | 0.3 | 0.2 | 0.0 | 0.4 |
| 90\% | -1.7 | 0.2 | -0.1 | -0.3 | -0.2 | -0.7 | -0.5 | -0.3 | 0.5 | 0.3 | -0.3 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1.4 | 0.6 | 0.1 | 0.0 | -0.1 | -0.7 | -0.8 | -0.7 | 0.3 | 0.8 | 0.9 | 1.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -1.3 | 0.5 | 0.2 | 0.1 | 0.2 | -0.8 | -0.3 | -0.4 | 0.5 | 1.0 | 0.9 | 0.7 |
| Above Normal (24\%) | -1.2 | 0.6 | -0.2 | -0.3 | -0.5 | -0.5 | -0.4 | -0.9 | 0.1 | 0.3 | 0.4 | 0.7 |
| Below Normal (10\%) | -1.0 | 0.4 | 0.0 | -0.1 | 0.1 | 0.2 | -0.3 | -0.4 | -0.3 | 0.2 | 0.4 | 0.8 |
| Dry (16\%) | -1.6 | 0.8 | 0.4 | 0.2 | 0.2 | -0.4 | -1.3 | -1.0 | -0.2 | 0.6 | 0.9 | 1.0 |
| Critical (27\%) | -1.7 | 0.6 | 0.1 | 0.0 | -0.2 | -1.3 | -1.5 | -0.7 | 0.7 | 1.5 | 1.7 | 1.7 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.9 Stanislaus River at Mouth Temperature

Table 5C.3.2.9.1 Stanislaus River at Mouth, Monthly Temperature

No Action Alternative

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.3 | 58.6 | 51.9 | 51.4 | 55.1 | 60.5 | 62.1 | 65.5 | 72.3 | 76.5 | 75.2 | 71.8 |
| 20\% | 62.9 | 57.4 | 51.6 | 50.8 | 54.3 | 59.7 | 61.1 | 64.6 | 71.7 | 75.5 | 74.4 | 70.7 |
| 30\% | 61.7 | 56.8 | 51.0 | 50.2 | 53.8 | 59.1 | 60.3 | 63.6 | 70.8 | 74.9 | 73.8 | 70.4 |
| 40\% | 60.6 | 56.5 | 50.7 | 49.7 | 53.2 | 58.7 | 58.8 | 62.1 | 70.2 | 74.3 | 73.4 | 69.8 |
| 50\% | 60.1 | 55.7 | 50.3 | 49.4 | 52.9 | 57.9 | 57.9 | 61.0 | 67.8 | 73.8 | 73.0 | 69.5 |
| 60\% | 59.6 | 55.2 | 49.9 | 49.0 | 52.6 | 57.0 | 57.1 | 60.7 | 65.3 | 73.1 | 72.6 | 69.0 |
| 70\% | 59.0 | 55.0 | 49.7 | 48.8 | 52.1 | 55.7 | 56.2 | 59.8 | 63.8 | 72.9 | 72.4 | 68.6 |
| 80\% | 58.7 | 54.7 | 49.3 | 48.5 | 51.5 | 53.6 | 55.7 | 58.7 | 62.7 | 71.7 | 71.9 | 68.1 |
| 90\% | 58.2 | 54.2 | 49.0 | 47.9 | 50.6 | 52.1 | 54.8 | 58.0 | 61.7 | 69.3 | 70.7 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 60.8 | 56.0 | 50.4 | 49.6 | 52.9 | 57.1 | 58.3 | 61.6 | 67.3 | 73.1 | 72.6 | 69.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 56.7 | 52.7 | 48.1 | 49.6 | 51.8 | 53.0 | 55.4 | 58.9 | 63.1 | 69.7 | 69.6 | 65.7 |
| Above Normal (24\%) | 61.1 | 56.0 | 50.4 | 49.5 | 52.5 | 56.8 | 57.2 | 61.2 | 64.2 | 72.1 | 72.6 | 69.2 |
| Below Normal (10\%) | 59.7 | 55.5 | 49.9 | 49.3 | 52.5 | 57.3 | 57.4 | 59.9 | 67.6 | 73.9 | 72.6 | 69.0 |
| Dry (16\%) | 60.3 | 56.0 | 49.9 | 49.7 | 53.3 | 58.6 | 59.6 | 62.1 | 70.3 | 75.0 | 73.4 | 70.0 |
| Critical (27\%) | 61.9 | 56.6 | 50.6 | 49.6 | 54.2 | 59.9 | 61.3 | 64.8 | 72.0 | 75.7 | 74.6 | 71.1 |

Revised Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.8 | 58.5 | 52.0 | 51.4 | 54.8 | 60.8 | 63.5 | 66.4 | 72.5 | 76.0 | 74.9 | 71.4 |
| 20\% | 65.8 | 57.8 | 51.4 | 50.7 | 54.1 | 60.1 | 62.8 | 65.6 | 72.2 | 75.4 | 74.2 | 70.4 |
| 30\% | 64.7 | 57.0 | 51.0 | 50.2 | 53.8 | 59.3 | 61.6 | 64.6 | 71.1 | 74.8 | 73.6 | 70.1 |
| 40\% | 64.1 | 56.5 | 50.7 | 49.7 | 53.2 | 58.9 | 60.2 | 63.7 | 70.6 | 74.3 | 73.3 | 69.7 |
| 50\% | 63.5 | 55.8 | 50.2 | 49.2 | 52.6 | 57.5 | 59.5 | 62.6 | 68.3 | 73.9 | 72.9 | 69.4 |
| 60\% | 62.5 | 55.5 | 50.0 | 49.0 | 52.3 | 57.1 | 57.8 | 61.7 | 65.2 | 73.2 | 72.5 | 68.8 |
| 70\% | 61.9 | 55.2 | 49.6 | 48.8 | 51.9 | 56.5 | 56.8 | 60.0 | 63.8 | 72.7 | 72.3 | 68.5 |
| 80\% | 61.2 | 54.8 | 49.4 | 48.5 | 51.0 | 55.8 | 56.1 | 59.1 | 62.4 | 71.8 | 72.0 | 68.0 |
| 90\% | 60.2 | 54.3 | 48.9 | 47.9 | 50.3 | 53.9 | 55.4 | 58.6 | 61.3 | 69.0 | 71.0 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.4 | 56.2 | 50.4 | 49.5 | 52.7 | 57.6 | 59.3 | 62.5 | 67.2 | 72.9 | 72.3 | 68.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59.2 | 52.8 | 48.0 | 49.6 | 51.0 | 54.5 | 55.8 | 59.3 | 61.8 | 68.8 | 68.9 | 64.7 |
| Above Normal (24\%) | 63.5 | 56.1 | 50.4 | 49.6 | 52.5 | 57.2 | 58.0 | 61.9 | 64.1 | 72.0 | 72.6 | 69.0 |
| Below Normal (10\%) | 62.4 | 55.5 | 49.9 | 49.2 | 52.1 | 57.1 | 58.3 | 60.9 | 68.2 | 74.0 | 72.6 | 68.9 |
| Dry (16\%) | 63.1 | 56.1 | 49.9 | 49.6 | 53.1 | 58.6 | 61.3 | 63.3 | 70.8 | 75.1 | 73.2 | 69.7 |
| Critical (27\%) | 64.6 | 56.9 | 50.6 | 49.5 | 54.2 | 60.3 | 62.8 | 65.9 | 72.1 | 75.4 | 74.3 | 70.8 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.5 | -0.1 | 0.1 | 0.0 | -0.2 | 0.3 | 1.4 | 0.9 | 0.2 | -0.5 | -0.4 | -0.5 |
| 20\% | 2.8 | 0.4 | -0.1 | 0.0 | -0.2 | 0.5 | 1.7 | 1.0 | 0.5 | 0.0 | -0.2 | -0.3 |
| 30\% | 3.0 | 0.1 | -0.1 | 0.0 | 0.0 | 0.2 | 1.4 | 1.1 | 0.4 | -0.1 | -0.2 | -0.3 |
| 40\% | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 1.5 | 1.5 | 0.4 | 0.1 | -0.2 | -0.2 |
| 50\% | 3.4 | 0.2 | 0.0 | -0.2 | -0.4 | -0.4 | 1.6 | 1.7 | 0.5 | 0.0 | -0.1 | -0.1 |
| 60\% | 2.9 | 0.2 | 0.1 | 0.0 | -0.3 | 0.2 | 0.7 | 1.0 | -0.1 | 0.1 | 0.0 | -0.2 |
| 70\% | 2.8 | 0.2 | 0.0 | -0.1 | -0.3 | 0.9 | 0.5 | 0.2 | 0.0 | -0.1 | 0.0 | -0.1 |
| 80\% | 2.5 | 0.1 | 0.1 | 0.0 | -0.5 | 2.2 | 0.4 | 0.4 | -0.3 | 0.1 | 0.1 | -0.1 |
| 90\% | 2.0 | 0.1 | -0.2 | 0.1 | -0.3 | 1.8 | 0.6 | 0.6 | -0.4 | -0.4 | 0.3 | 0.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2.6 | 0.1 | 0.0 | 0.0 | -0.2 | 0.5 | 1.0 | 0.9 | -0.2 | -0.3 | -0.3 | -0.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2.5 | 0.1 | 0.0 | -0.1 | -0.7 | 1.5 | 0.4 | 0.5 | -1.3 | -0.9 | -0.7 | -1.0 |
| Above Normal (24\%) | 2.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.4 | 0.8 | 0.6 | -0.1 | -0.1 | 0.0 | -0.1 |
| Below Normal (10\%) | 2.6 | -0.1 | 0.0 | -0.1 | -0.4 | -0.2 | 0.9 | 1.0 | 0.6 | 0.1 | 0.0 | -0.2 |
| Dry (16\%) | 2.8 | 0.1 | 0.0 | -0.1 | -0.2 | 0.0 | 1.7 | 1.2 | 0.5 | 0.0 | -0.2 | -0.2 |
| Critical (27\%) | 2.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 1.5 | 1.2 | 0.2 | -0.3 | -0.3 | -0.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.9.2 Stanislaus River at Mouth, Monthly Temperature

Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.8 | 58.5 | 52.0 | 51.4 | 54.8 | 60.8 | 63.5 | 66.4 | 72.5 | 76.0 | 74.9 | 71.4 |
| 20\% | 65.8 | 57.8 | 51.4 | 50.7 | 54.1 | 60.1 | 62.8 | 65.6 | 72.2 | 75.4 | 74.2 | 70.4 |
| 30\% | 64.7 | 57.0 | 51.0 | 50.2 | 53.8 | 59.3 | 61.6 | 64.6 | 71.1 | 74.8 | 73.6 | 70.1 |
| 40\% | 64.1 | 56.5 | 50.7 | 49.7 | 53.2 | 58.9 | 60.2 | 63.7 | 70.6 | 74.3 | 73.3 | 69.7 |
| 50\% | 63.5 | 55.8 | 50.2 | 49.2 | 52.6 | 57.5 | 59.5 | 62.6 | 68.3 | 73.9 | 72.9 | 69.4 |
| 60\% | 62.5 | 55.5 | 50.0 | 49.0 | 52.3 | 57.1 | 57.8 | 61.7 | 65.2 | 73.2 | 72.5 | 68.8 |
| 70\% | 61.9 | 55.2 | 49.6 | 48.8 | 51.9 | 56.5 | 56.8 | 60.0 | 63.8 | 72.7 | 72.3 | 68.5 |
| 80\% | 61.2 | 54.8 | 49.4 | 48.5 | 51.0 | 55.8 | 56.1 | 59.1 | 62.4 | 71.8 | 72.0 | 68.0 |
| 90\% | 60.2 | 54.3 | 48.9 | 47.9 | 50.3 | 53.9 | 55.4 | 58.6 | 61.3 | 69.0 | 71.0 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.4 | 56.2 | 50.4 | 49.5 | 52.7 | 57.6 | 59.3 | 62.5 | 67.2 | 72.9 | 72.3 | 68.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59.2 | 52.8 | 48.0 | 49.6 | 51.0 | 54.5 | 55.8 | 59.3 | 61.8 | 68.8 | 68.9 | 64.7 |
| Above Normal (24\%) | 63.5 | 56.1 | 50.4 | 49.6 | 52.5 | 57.2 | 58.0 | 61.9 | 64.1 | 72.0 | 72.6 | 69.0 |
| Below Normal (10\%) | 62.4 | 55.5 | 49.9 | 49.2 | 52.1 | 57.1 | 58.3 | 60.9 | 68.2 | 74.0 | 72.6 | 68.9 |
| Dry (16\%) | 63.1 | 56.1 | 49.9 | 49.6 | 53.1 | 58.6 | 61.3 | 63.3 | 70.8 | 75.1 | 73.2 | 69.7 |
| Critical (27\%) | 64.6 | 56.9 | 50.6 | 49.5 | 54.2 | 60.3 | 62.8 | 65.9 | 72.1 | 75.4 | 74.3 | 70.8 |


|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.3 | 58.6 | 51.9 | 51.4 | 55.1 | 60.5 | 62.1 | 65.5 | 72.3 | 76.5 | 75.2 | 71.8 |
| 20\% | 62.9 | 57.4 | 51.6 | 50.8 | 54.3 | 59.7 | 61.1 | 64.6 | 71.7 | 75.5 | 74.4 | 70.7 |
| 30\% | 61.7 | 56.8 | 51.0 | 50.2 | 53.8 | 59.1 | 60.3 | 63.6 | 70.8 | 74.9 | 73.8 | 70.4 |
| 40\% | 60.6 | 56.5 | 50.7 | 49.7 | 53.2 | 58.7 | 58.8 | 62.1 | 70.2 | 74.3 | 73.4 | 69.8 |
| 50\% | 60.1 | 55.7 | 50.3 | 49.4 | 52.9 | 57.9 | 57.9 | 61.0 | 67.8 | 73.8 | 73.0 | 69.5 |
| 60\% | 59.6 | 55.2 | 49.9 | 49.0 | 52.6 | 57.0 | 57.1 | 60.7 | 65.3 | 73.1 | 72.6 | 69.0 |
| 70\% | 59.0 | 55.0 | 49.7 | 48.8 | 52.1 | 55.7 | 56.2 | 59.8 | 63.8 | 72.9 | 72.4 | 68.6 |
| 80\% | 58.7 | 54.7 | 49.3 | 48.5 | 51.5 | 53.6 | 55.7 | 58.7 | 62.7 | 71.7 | 71.9 | 68.1 |
| 90\% | 58.2 | 54.2 | 49.0 | 47.9 | 50.6 | 52.1 | 54.8 | 58.0 | 61.7 | 69.3 | 70.7 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 60.8 | 56.0 | 50.4 | 49.6 | 52.9 | 57.1 | 58.3 | 61.6 | 67.3 | 73.1 | 72.6 | 69.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 56.7 | 52.7 | 48.1 | 49.6 | 51.8 | 53.0 | 55.4 | 58.9 | 63.1 | 69.7 | 69.6 | 65.7 |
| Above Normal (24\%) | 61.1 | 56.0 | 50.4 | 49.5 | 52.5 | 56.8 | 57.2 | 61.2 | 64.2 | 72.1 | 72.6 | 69.2 |
| Below Normal (10\%) | 59.7 | 55.5 | 49.9 | 49.3 | 52.5 | 57.3 | 57.4 | 59.9 | 67.6 | 73.9 | 72.6 | 69.0 |
| Dry (16\%) | 60.3 | 56.0 | 49.9 | 49.7 | 53.3 | 58.6 | 59.6 | 62.1 | 70.3 | 75.0 | 73.4 | 70.0 |
| Critical (27\%) | 61.9 | 56.6 | 50.6 | 49.6 | 54.2 | 59.9 | 61.3 | 64.8 | 72.0 | 75.7 | 74.6 | 71.1 |

No Action Alternative minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2.5 | 0.1 | -0.1 | 0.0 | 0.2 | -0.3 | -1.4 | -0.9 | -0.2 | 0.5 | 0.4 | 0.5 |
| 20\% | -2.8 | -0.4 | 0.1 | 0.0 | 0.2 | -0.5 | -1.7 | -1.0 | -0.5 | 0.0 | 0.2 | 0.3 |
| 30\% | -3.0 | -0.1 | 0.1 | 0.0 | 0.0 | -0.2 | -1.4 | -1.1 | -0.4 | 0.1 | 0.2 | 0.3 |
| 40\% | -3.5 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 | -1.5 | -1.5 | -0.4 | -0.1 | 0.2 | 0.2 |
| 50\% | -3.4 | -0.2 | 0.0 | 0.2 | 0.4 | 0.4 | -1.6 | -1.7 | -0.5 | 0.0 | 0.1 | 0.1 |
| 60\% | -2.9 | -0.2 | -0.1 | 0.0 | 0.3 | -0.2 | -0.7 | -1.0 | 0.1 | -0.1 | 0.0 | 0.2 |
| 70\% | -2.8 | -0.2 | 0.0 | 0.1 | 0.3 | -0.9 | -0.5 | -0.2 | 0.0 | 0.1 | 0.0 | 0.1 |
| 80\% | -2.5 | -0.1 | -0.1 | 0.0 | 0.5 | -2.2 | -0.4 | -0.4 | 0.3 | -0.1 | -0.1 | 0.1 |
| 90\% | -2.0 | -0.1 | 0.2 | -0.1 | 0.3 | -1.8 | -0.6 | -0.6 | 0.4 | 0.4 | -0.3 | 0.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2.6 | -0.1 | 0.0 | 0.0 | 0.2 | -0.5 | -1.0 | -0.9 | 0.2 | 0.3 | 0.3 | 0.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -2.5 | -0.1 | 0.0 | 0.1 | 0.7 | -1.5 | -0.4 | -0.5 | 1.3 | 0.9 | 0.7 | 1.0 |
| Above Normal (24\%) | -2.4 | -0.1 | 0.0 | -0.1 | 0.0 | -0.4 | -0.8 | -0.6 | 0.1 | 0.1 | 0.0 | 0.1 |
| Below Normal (10\%) | -2.6 | 0.1 | 0.0 | 0.1 | 0.4 | 0.2 | -0.9 | -1.0 | -0.6 | -0.1 | 0.0 | 0.2 |
| Dry (16\%) | -2.8 | -0.1 | 0.0 | 0.1 | 0.2 | 0.0 | -1.7 | -1.2 | -0.5 | 0.0 | 0.2 | 0.2 |
| Critical (27\%) | -2.7 | -0.2 | 0.0 | 0.0 | 0.0 | -0.4 | -1.5 | -1.2 | -0.2 | 0.3 | 0.3 | 0.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.9.3 Stanislaus River at Mouth, Monthly Temperature
Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.8 | 58.5 | 52.0 | 51.4 | 54.8 | 60.8 | 63.5 | 66.4 | 72.5 | 76.0 | 74.9 | 71.4 |
| 20\% | 65.8 | 57.8 | 51.4 | 50.7 | 54.1 | 60.1 | 62.8 | 65.6 | 72.2 | 75.4 | 74.2 | 70.4 |
| 30\% | 64.7 | 57.0 | 51.0 | 50.2 | 53.8 | 59.3 | 61.6 | 64.6 | 71.1 | 74.8 | 73.6 | 70.1 |
| 40\% | 64.1 | 56.5 | 50.7 | 49.7 | 53.2 | 58.9 | 60.2 | 63.7 | 70.6 | 74.3 | 73.3 | 69.7 |
| 50\% | 63.5 | 55.8 | 50.2 | 49.2 | 52.6 | 57.5 | 59.5 | 62.6 | 68.3 | 73.9 | 72.9 | 69.4 |
| 60\% | 62.5 | 55.5 | 50.0 | 49.0 | 52.3 | 57.1 | 57.8 | 61.7 | 65.2 | 73.2 | 72.5 | 68.8 |
| 70\% | 61.9 | 55.2 | 49.6 | 48.8 | 51.9 | 56.5 | 56.8 | 60.0 | 63.8 | 72.7 | 72.3 | 68.5 |
| 80\% | 61.2 | 54.8 | 49.4 | 48.5 | 51.0 | 55.8 | 56.1 | 59.1 | 62.4 | 71.8 | 72.0 | 68.0 |
| 90\% | 60.2 | 54.3 | 48.9 | 47.9 | 50.3 | 53.9 | 55.4 | 58.6 | 61.3 | 69.0 | 71.0 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.4 | 56.2 | 50.4 | 49.5 | 52.7 | 57.6 | 59.3 | 62.5 | 67.2 | 72.9 | 72.3 | 68.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59.2 | 52.8 | 48.0 | 49.6 | 51.0 | 54.5 | 55.8 | 59.3 | 61.8 | 68.8 | 68.9 | 64.7 |
| Above Normal (24\%) | 63.5 | 56.1 | 50.4 | 49.6 | 52.5 | 57.2 | 58.0 | 61.9 | 64.1 | 72.0 | 72.6 | 69.0 |
| Below Normal (10\%) | 62.4 | 55.5 | 49.9 | 49.2 | 52.1 | 57.1 | 58.3 | 60.9 | 68.2 | 74.0 | 72.6 | 68.9 |
| Dry (16\%) | 63.1 | 56.1 | 49.9 | 49.6 | 53.1 | 58.6 | 61.3 | 63.3 | 70.8 | 75.1 | 73.2 | 69.7 |
| Critical (27\%) | 64.6 | 56.9 | 50.6 | 49.5 | 54.2 | 60.3 | 62.8 | 65.9 | 72.1 | 75.4 | 74.3 | 70.8 |

Alternative 3

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65.7 | 58.3 | 51.9 | 51.6 | 55.2 | 60.9 | 62.6 | 65.8 | 73.2 | 76.9 | 75.3 | 71.7 |
| 20\% | 65.2 | 57.7 | 51.5 | 50.7 | 54.7 | 59.7 | 61.6 | 64.6 | 72.4 | 76.0 | 74.3 | 70.7 |
| 30\% | 64.0 | 56.7 | 51.0 | 50.2 | 53.8 | 59.2 | 60.4 | 63.7 | 72.1 | 75.5 | 73.8 | 70.2 |
| 40\% | 63.2 | 56.3 | 50.8 | 49.7 | 53.2 | 58.7 | 59.7 | 62.9 | 71.7 | 75.0 | 73.4 | 69.9 |
| 50\% | 62.9 | 55.6 | 50.4 | 49.4 | 52.8 | 58.2 | 58.3 | 62.5 | 71.1 | 74.7 | 73.1 | 69.4 |
| 60\% | 62.4 | 55.3 | 50.0 | 49.0 | 52.3 | 57.3 | 57.3 | 61.7 | 70.3 | 74.2 | 72.5 | 69.0 |
| 70\% | 61.7 | 55.0 | 49.6 | 48.8 | 52.0 | 56.7 | 56.6 | 60.9 | 69.3 | 73.8 | 72.4 | 68.7 |
| 80\% | 61.3 | 54.8 | 49.4 | 48.6 | 51.1 | 55.0 | 56.1 | 60.2 | 68.5 | 73.5 | 72.0 | 68.1 |
| 90\% | 60.6 | 54.3 | 49.0 | 47.9 | 50.3 | 53.5 | 55.4 | 59.0 | 67.4 | 73.0 | 71.3 | 62.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 62.9 | 56.0 | 50.4 | 49.6 | 52.8 | 57.5 | 58.7 | 62.5 | 69.9 | 73.7 | 72.4 | 68.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 58.8 | 52.7 | 48.1 | 49.7 | 51.1 | 54.6 | 55.7 | 60.0 | 65.7 | 69.2 | 68.6 | 64.6 |
| Above Normal (24\%) | 62.9 | 56.0 | 50.5 | 49.7 | 52.6 | 57.1 | 57.4 | 61.8 | 70.2 | 74.2 | 72.9 | 69.2 |
| Below Normal (10\%) | 62.3 | 55.5 | 49.9 | 49.1 | 52.1 | 57.3 | 58.2 | 61.2 | 70.0 | 74.4 | 72.6 | 69.0 |
| Dry (16\%) | 62.6 | 55.9 | 49.9 | 49.6 | 53.3 | 58.6 | 60.4 | 63.3 | 71.6 | 75.4 | 73.2 | 69.7 |
| Critical (27\%) | 64.0 | 56.6 | 50.7 | 49.5 | 54.4 | 60.0 | 61.6 | 65.1 | 72.3 | 76.0 | 74.5 | 70.8 |

Alternative 3 minus Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.1 | -0.2 | 0.0 | 0.2 | 0.4 | 0.0 | -0.9 | -0.6 | 0.6 | 1.0 | 0.4 | 0.4 |
| 20\% | -0.6 | -0.1 | 0.1 | 0.0 | 0.6 | -0.4 | -1.3 | -1.0 | 0.2 | 0.6 | 0.1 | 0.2 |
| 30\% | -0.7 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | -1.2 | -0.9 | 1.0 | 0.7 | 0.2 | 0.1 |
| 40\% | -0.9 | -0.2 | 0.1 | 0.0 | 0.0 | -0.2 | -0.5 | -0.7 | 1.1 | 0.7 | 0.1 | 0.2 |
| 50\% | -0.7 | -0.2 | 0.2 | 0.2 | 0.3 | 0.7 | -1.2 | -0.2 | 2.7 | 0.8 | 0.1 | 0.0 |
| 60\% | -0.1 | -0.1 | 0.0 | -0.1 | 0.1 | 0.2 | -0.5 | 0.0 | 5.1 | 1.0 | 0.0 | 0.2 |
| 70\% | -0.1 | -0.2 | 0.0 | 0.1 | 0.1 | 0.2 | -0.1 | 0.9 | 5.5 | 1.1 | 0.1 | 0.1 |
| 80\% | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | -0.8 | 0.0 | 1.1 | 6.1 | 1.8 | 0.0 | 0.0 |
| 90\% | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | -0.3 | 0.0 | 0.4 | 6.1 | 4.0 | 0.4 | -4.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.5 | -0.1 | 0.1 | 0.0 | 0.1 | -0.1 | -0.6 | -0.1 | 2.7 | 0.9 | 0.1 | 0.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -0.3 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | -0.1 | 0.6 | 3.9 | 0.4 | -0.3 | -0.1 |
| Above Normal (24\%) | -0.6 | -0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.5 | 0.0 | 6.1 | 2.2 | 0.3 | 0.1 |
| Below Normal (10\%) | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 | 0.2 | -0.2 | 0.3 | 1.8 | 0.4 | 0.0 | 0.2 |
| Dry (16\%) | -0.5 | -0.1 | 0.0 | 0.0 | 0.2 | 0.0 | -1.0 | 0.0 | 0.8 | 0.3 | 0.0 | 0.0 |
| Critical (27\%) | -0.6 | -0.2 | 0.1 | 0.0 | 0.2 | -0.2 | -1.2 | -0.8 | 0.2 | 0.6 | 0.3 | 0.0 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.9.4 Stanislaus River at Mouth, Monthly Temperature
Revised Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.8 | 58.5 | 52.0 | 51.4 | 54.8 | 60.8 | 63.5 | 66.4 | 72.5 | 76.0 | 74.9 | 71.4 |
| 20\% | 65.8 | 57.8 | 51.4 | 50.7 | 54.1 | 60.1 | 62.8 | 65.6 | 72.2 | 75.4 | 74.2 | 70.4 |
| 30\% | 64.7 | 57.0 | 51.0 | 50.2 | 53.8 | 59.3 | 61.6 | 64.6 | 71.1 | 74.8 | 73.6 | 70.1 |
| 40\% | 64.1 | 56.5 | 50.7 | 49.7 | 53.2 | 58.9 | 60.2 | 63.7 | 70.6 | 74.3 | 73.3 | 69.7 |
| 50\% | 63.5 | 55.8 | 50.2 | 49.2 | 52.6 | 57.5 | 59.5 | 62.6 | 68.3 | 73.9 | 72.9 | 69.4 |
| 60\% | 62.5 | 55.5 | 50.0 | 49.0 | 52.3 | 57.1 | 57.8 | 61.7 | 65.2 | 73.2 | 72.5 | 68.8 |
| 70\% | 61.9 | 55.2 | 49.6 | 48.8 | 51.9 | 56.5 | 56.8 | 60.0 | 63.8 | 72.7 | 72.3 | 68.5 |
| 80\% | 61.2 | 54.8 | 49.4 | 48.5 | 51.0 | 55.8 | 56.1 | 59.1 | 62.4 | 71.8 | 72.0 | 68.0 |
| 90\% | 60.2 | 54.3 | 48.9 | 47.9 | 50.3 | 53.9 | 55.4 | 58.6 | 61.3 | 69.0 | 71.0 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.4 | 56.2 | 50.4 | 49.5 | 52.7 | 57.6 | 59.3 | 62.5 | 67.2 | 72.9 | 72.3 | 68.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59.2 | 52.8 | 48.0 | 49.6 | 51.0 | 54.5 | 55.8 | 59.3 | 61.8 | 68.8 | 68.9 | 64.7 |
| Above Normal (24\%) | 63.5 | 56.1 | 50.4 | 49.6 | 52.5 | 57.2 | 58.0 | 61.9 | 64.1 | 72.0 | 72.6 | 69.0 |
| Below Normal (10\%) | 62.4 | 55.5 | 49.9 | 49.2 | 52.1 | 57.1 | 58.3 | 60.9 | 68.2 | 74.0 | 72.6 | 68.9 |
| Dry (16\%) | 63.1 | 56.1 | 49.9 | 49.6 | 53.1 | 58.6 | 61.3 | 63.3 | 70.8 | 75.1 | 73.2 | 69.7 |
| Critical (27\%) | 64.6 | 56.9 | 50.6 | 49.5 | 54.2 | 60.3 | 62.8 | 65.9 | 72.1 | 75.4 | 74.3 | 70.8 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65.4 | 58.6 | 52.2 | 51.4 | 55.1 | 60.5 | 60.1 | 64.4 | 72.3 | 76.3 | 75.4 | 72.0 |
| 20\% | 63.3 | 57.7 | 51.5 | 50.8 | 54.4 | 59.7 | 59.1 | 62.6 | 71.8 | 75.6 | 74.6 | 71.0 |
| 30\% | 62.0 | 57.0 | 51.0 | 50.3 | 53.7 | 59.2 | 58.7 | 61.5 | 70.9 | 75.0 | 73.9 | 70.5 |
| 40\% | 61.1 | 56.7 | 50.5 | 49.7 | 53.2 | 58.7 | 58.3 | 60.8 | 70.1 | 74.3 | 73.5 | 70.0 |
| 50\% | 60.4 | 56.0 | 50.3 | 49.3 | 52.9 | 57.9 | 57.7 | 60.1 | 67.6 | 73.9 | 73.1 | 69.7 |
| 60\% | 59.7 | 55.4 | 50.0 | 49.0 | 52.6 | 57.1 | 57.3 | 59.5 | 65.2 | 73.1 | 72.6 | 69.2 |
| 70\% | 59.2 | 55.1 | 49.7 | 48.9 | 52.0 | 55.9 | 56.3 | 59.0 | 64.0 | 72.9 | 72.4 | 68.7 |
| 80\% | 58.7 | 54.8 | 49.3 | 48.5 | 51.5 | 53.8 | 55.7 | 58.3 | 62.7 | 72.0 | 72.0 | 68.2 |
| 90\% | 58.2 | 54.2 | 48.9 | 47.9 | 50.6 | 52.1 | 55.0 | 57.9 | 61.5 | 69.4 | 71.3 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 61.1 | 56.2 | 50.4 | 49.6 | 52.9 | 57.1 | 57.6 | 60.6 | 67.4 | 73.4 | 72.9 | 69.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 57.0 | 52.8 | 48.1 | 49.7 | 51.8 | 53.3 | 55.4 | 58.8 | 63.4 | 70.6 | 70.6 | 66.0 |
| Above Normal (24\%) | 61.5 | 56.3 | 50.4 | 49.5 | 52.5 | 56.8 | 57.4 | 59.9 | 64.1 | 72.1 | 72.7 | 69.3 |
| Below Normal (10\%) | 60.2 | 55.5 | 49.9 | 49.3 | 52.5 | 57.2 | 57.5 | 59.9 | 67.8 | 73.9 | 72.6 | 69.1 |
| Dry (16\%) | 60.6 | 56.2 | 50.0 | 49.7 | 53.4 | 58.6 | 58.2 | 60.3 | 70.2 | 75.1 | 73.5 | 70.0 |
| Critical (27\%) | 62.1 | 56.8 | 50.7 | 49.6 | 54.2 | 59.9 | 59.4 | 63.4 | 72.0 | 75.9 | 74.8 | 71.5 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.3 | 0.2 | 0.2 | 0.0 | 0.3 | -0.3 | -3.4 | -2.0 | -0.2 | 0.4 | 0.5 | 0.7 |
| 20\% | -2.4 | -0.1 | 0.1 | 0.0 | 0.3 | -0.5 | -3.7 | -3.1 | -0.4 | 0.2 | 0.4 | 0.6 |
| 30\% | -2.7 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | -2.9 | -3.1 | -0.2 | 0.2 | 0.4 | 0.3 |
| 40\% | -3.1 | 0.2 | -0.2 | 0.0 | 0.1 | -0.2 | -1.9 | -2.9 | -0.4 | 0.0 | 0.2 | 0.3 |
| 50\% | -3.1 | 0.1 | 0.1 | 0.0 | 0.4 | 0.4 | -1.8 | -2.5 | -0.7 | 0.0 | 0.2 | 0.3 |
| 60\% | -2.8 | -0.1 | 0.0 | 0.0 | 0.3 | 0.0 | -0.5 | -2.2 | -0.1 | -0.1 | 0.1 | 0.4 |
| 70\% | -2.7 | -0.2 | 0.0 | 0.1 | 0.1 | -0.6 | -0.5 | -1.0 | 0.2 | 0.2 | 0.1 | 0.2 |
| 80\% | -2.5 | 0.0 | 0.0 | 0.0 | 0.5 | -2.0 | -0.4 | -0.7 | 0.3 | 0.3 | 0.0 | 0.2 |
| 90\% | -2.0 | 0.0 | 0.0 | 0.0 | 0.3 | -1.8 | -0.4 | -0.7 | 0.2 | 0.5 | 0.3 | 0.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2.3 | 0.0 | 0.1 | 0.0 | 0.3 | -0.5 | -1.7 | -1.9 | 0.2 | 0.6 | 0.6 | 0.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -2.2 | 0.0 | 0.1 | 0.1 | 0.7 | -1.2 | -0.4 | -0.6 | 1.6 | 1.8 | 1.7 | 1.3 |
| Above Normal (24\%) | -1.9 | 0.1 | 0.0 | -0.1 | 0.0 | -0.5 | -0.6 | -1.9 | 0.0 | 0.1 | 0.1 | 0.2 |
| Below Normal (10\%) | -2.1 | 0.0 | 0.0 | 0.1 | 0.4 | 0.1 | -0.8 | -1.0 | -0.4 | 0.0 | 0.1 | 0.3 |
| Dry (16\%) | -2.5 | 0.1 | 0.1 | 0.1 | 0.3 | 0.0 | -3.1 | -3.0 | -0.6 | 0.1 | 0.3 | 0.3 |
| Critical (27\%) | -2.4 | 0.0 | 0.1 | 0.1 | 0.1 | -0.4 | -3.3 | -2.6 | -0.1 | 0.5 | 0.6 | 0.6 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.10 San Joaquin River at Vernalis Flow

Table 5C.3.2.10.1 San Joaquin River at Vernalis, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,498 | 2,953 | 4,804 | 11,135 | 14,596 | 15,471 | 14,974 | 14,174 | 9,351 | 5,890 | 2,796 | 3,060 |
| 20\% | 3,161 | 2,777 | 2,857 | 4,812 | 10,143 | 10,197 | 10,637 | 8,318 | 4,690 | 2,628 | 2,589 | 2,654 |
| 30\% | 2,980 | 2,527 | 2,401 | 3,610 | 6,118 | 8,459 | 8,616 | 5,534 | 3,364 | 1,985 | 1,904 | 2,490 |
| 40\% | 2,796 | 2,395 | 2,215 | 2,629 | 4,232 | 5,570 | 7,564 | 4,609 | 2,947 | 1,735 | 1,666 | 2,125 |
| 50\% | 2,601 | 2,219 | 2,101 | 2,402 | 3,420 | 3,847 | 6,017 | 3,925 | 2,246 | 1,487 | 1,488 | 1,930 |
| 60\% | 2,401 | 2,169 | 2,046 | 2,293 | 2,683 | 3,459 | 4,832 | 3,062 | 1,859 | 1,366 | 1,403 | 1,835 |
| 70\% | 2,247 | 2,059 | 1,979 | 2,114 | 2,305 | 2,906 | 3,776 | 2,699 | 1,448 | 1,154 | 1,307 | 1,739 |
| 80\% | 1,994 | 1,951 | 1,829 | 1,884 | 2,150 | 2,371 | 2,789 | 2,153 | 1,293 | 1,087 | 1,202 | 1,611 |
| 90\% | 1,849 | 1,763 | 1,669 | 1,699 | 1,947 | 2,204 | 1,887 | 1,678 | 1,085 | 885 | 1,067 | 1,476 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,672 | 2,611 | 3,391 | 5,070 | 6,655 | 7,278 | 7,528 | 6,039 | 4,194 | 2,622 | 1,847 | 2,223 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,918 | 3,513 | 6,545 | 11,446 | 15,776 | 16,863 | 15,423 | 14,628 | 11,335 | 6,676 | 3,135 | 3,416 |
| Above Normal (24\%) | 2,700 | 2,416 | 2,663 | 4,883 | 6,881 | 7,536 | 8,542 | 5,264 | 3,280 | 1,989 | 1,975 | 2,345 |
| Below Normal (10\%) | 2,538 | 2,249 | 3,661 | 3,507 | 3,651 | 4,149 | 6,337 | 4,140 | 2,076 | 1,463 | 1,446 | 1,837 |
| Dry (16\%) | 2,767 | 2,569 | 2,232 | 2,402 | 2,549 | 3,241 | 3,996 | 2,805 | 1,680 | 1,254 | 1,347 | 1,776 |
| Critical (27\%) | 2,426 | 2,168 | 1,915 | 1,877 | 2,090 | 2,288 | 2,307 | 1,929 | 1,115 | 926 | 1,060 | 1,487 |

Revised Alternative 1

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,058 | 3,088 | 4,931 | 11,054 | 17,256 | 15,467 | 14,774 | 14,101 | 9,720 | 6,052 | 2,996 | 3,315 |
| 20\% | 2,699 | 2,813 | 2,924 | 4,859 | 10,259 | 9,401 | 10,359 | 8,202 | 4,768 | 2,636 | 2,599 | 2,659 |
| 30\% | 2,470 | 2,631 | 2,462 | 3,635 | 6,228 | 7,841 | 8,536 | 5,452 | 3,364 | 1,988 | 1,896 | 2,484 |
| 40\% | 2,326 | 2,448 | 2,299 | 2,606 | 4,252 | 5,343 | 7,507 | 4,488 | 2,947 | 1,742 | 1,675 | 2,152 |
| 50\% | 2,089 | 2,342 | 2,226 | 2,481 | 3,420 | 3,825 | 6,018 | 3,916 | 2,205 | 1,503 | 1,499 | 1,934 |
| 60\% | 1,895 | 2,218 | 2,100 | 2,247 | 2,681 | 3,460 | 4,432 | 2,913 | 1,824 | 1,384 | 1,415 | 1,837 |
| 70\% | 1,697 | 2,100 | 1,988 | 2,070 | 2,379 | 2,870 | 3,224 | 2,493 | 1,420 | 1,170 | 1,322 | 1,743 |
| 80\% | 1,511 | 1,954 | 1,866 | 1,827 | 2,153 | 2,327 | 2,452 | 1,994 | 1,271 | 1,087 | 1,211 | 1,611 |
| 90\% | 1,338 | 1,753 | 1,671 | 1,638 | 1,931 | 2,115 | 1,813 | 1,564 | 1,085 | 941 | 1,099 | 1,503 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,200 | 2,673 | 3,455 | 5,082 | 6,806 | 7,116 | 7,330 | 5,903 | 4,350 | 2,668 | 1,876 | 2,266 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,472 | 3,596 | 6,642 | 11,484 | 16,260 | 16,444 | 15,398 | 14,493 | 12,009 | 6,823 | 3,227 | 3,582 |
| Above Normal (24\%) | 2,234 | 2,469 | 2,712 | 4,887 | 6,916 | 7,376 | 8,371 | 5,184 | 3,310 | 1,997 | 1,976 | 2,348 |
| Below Normal (10\%) | 2,052 | 2,330 | 3,742 | 3,561 | 3,837 | 4,077 | 5,974 | 3,968 | 2,025 | 1,478 | 1,455 | 1,847 |
| Dry (16\%) | 2,305 | 2,644 | 2,306 | 2,421 | 2,623 | 3,227 | 3,656 | 2,625 | 1,661 | 1,266 | 1,362 | 1,783 |
| Critical (27\%) | 1,926 | 2,205 | 1,952 | 1,854 | 2,092 | 2,228 | 2,079 | 1,780 | 1,114 | 951 | 1,077 | 1,490 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -13\% | 5\% | 3\% | -1\% | 18\% | 0\% | -1\% | -1\% | 4\% | 3\% | 7\% | 8\% |
| 20\% | -15\% | 1\% | 2\% | 1\% | 1\% | -8\% | -3\% | -1\% | 2\% | 0\% | 0\% | 0\% |
| 30\% | -17\% | 4\% | 3\% | 1\% | 2\% | -7\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| 40\% | -17\% | 2\% | 4\% | -1\% | 0\% | -4\% | -1\% | -3\% | 0\% | 0\% | 1\% | 1\% |
| 50\% | -20\% | 6\% | 6\% | 3\% | 0\% | -1\% | 0\% | 0\% | -2\% | 1\% | 1\% | 0\% |
| 60\% | -21\% | 2\% | 3\% | -2\% | 0\% | 0\% | -8\% | -5\% | -2\% | 1\% | 1\% | 0\% |
| 70\% | -24\% | 2\% | 0\% | -2\% | 3\% | -1\% | -15\% | -8\% | -2\% | 1\% | 1\% | 0\% |
| 80\% | -24\% | 0\% | 2\% | -3\% | 0\% | -2\% | -12\% | -7\% | -2\% | 0\% | 1\% | 0\% |
| 90\% | -28\% | -1\% | 0\% | -4\% | -1\% | -4\% | -4\% | -7\% | 0\% | 6\% | 3\% | 2\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -18\% | 2\% | 2\% | 0\% | 2\% | -2\% | -3\% | -2\% | 4\% | 2\% | 2\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -15\% | 2\% | 1\% | 0\% | 3\% | -2\% | 0\% | -1\% | 6\% | 2\% | 3\% | 5\% |
| Above Normal (24\%) | -17\% | 2\% | 2\% | 0\% | 1\% | -2\% | -2\% | -2\% | 1\% | 0\% | 0\% | 0\% |
| Below Normal (10\%) | -19\% | 4\% | 2\% | 2\% | 5\% | -2\% | -6\% | -4\% | -2\% | 1\% | 1\% | 1\% |
| Dry (16\%) | -17\% | 3\% | 3\% | 1\% | 3\% | 0\% | -9\% | -6\% | -1\% | 1\% | 1\% | 0\% |
| Critical (27\%) | -21\% | 2\% | 2\% | -1\% | 0\% | -3\% | -10\% | -8\% | 0\% | 3\% | 2\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.10.2 San Joaquin River at Vernalis, Monthly Flow
Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,058 | 3,088 | 4,931 | 11,054 | 17,256 | 15,467 | 14,774 | 14,101 | 9,720 | 6,052 | 2,996 | 3,315 |
| 20\% | 2,699 | 2,813 | 2,924 | 4,859 | 10,259 | 9,401 | 10,359 | 8,202 | 4,768 | 2,636 | 2,599 | 2,659 |
| 30\% | 2,470 | 2,631 | 2,462 | 3,635 | 6,228 | 7,841 | 8,536 | 5,452 | 3,364 | 1,988 | 1,896 | 2,484 |
| 40\% | 2,326 | 2,448 | 2,299 | 2,606 | 4,252 | 5,343 | 7,507 | 4,488 | 2,947 | 1,742 | 1,675 | 2,152 |
| 50\% | 2,089 | 2,342 | 2,226 | 2,481 | 3,420 | 3,825 | 6,018 | 3,916 | 2,205 | 1,503 | 1,499 | 1,934 |
| 60\% | 1,895 | 2,218 | 2,100 | 2,247 | 2,681 | 3,460 | 4,432 | 2,913 | 1,824 | 1,384 | 1,415 | 1,837 |
| 70\% | 1,697 | 2,100 | 1,988 | 2,070 | 2,379 | 2,870 | 3,224 | 2,493 | 1,420 | 1,170 | 1,322 | 1,743 |
| 80\% | 1,511 | 1,954 | 1,866 | 1,827 | 2,153 | 2,327 | 2,452 | 1,994 | 1,271 | 1,087 | 1,211 | 1,611 |
| 90\% | 1,338 | 1,753 | 1,671 | 1,638 | 1,931 | 2,115 | 1,813 | 1,564 | 1,085 | 941 | 1,099 | 1,503 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,200 | 2,673 | 3,455 | 5,082 | 6,806 | 7,116 | 7,330 | 5,903 | 4,350 | 2,668 | 1,876 | 2,266 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,472 | 3,596 | 6,642 | 11,484 | 16,260 | 16,444 | 15,398 | 14,493 | 12,009 | 6,823 | 3,227 | 3,582 |
| Above Normal (24\%) | 2,234 | 2,469 | 2,712 | 4,887 | 6,916 | 7,376 | 8,371 | 5,184 | 3,310 | 1,997 | 1,976 | 2,348 |
| Below Normal (10\%) | 2,052 | 2,330 | 3,742 | 3,561 | 3,837 | 4,077 | 5,974 | 3,968 | 2,025 | 1,478 | 1,455 | 1,847 |
| Dry (16\%) | 2,305 | 2,644 | 2,306 | 2,421 | 2,623 | 3,227 | 3,656 | 2,625 | 1,661 | 1,266 | 1,362 | 1,783 |
| Critical (27\%) | 1,926 | 2,205 | 1,952 | 1,854 | 2,092 | 2,228 | 2,079 | 1,780 | 1,114 | 951 | 1,077 | 1,490 |

No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,498 | 2,953 | 4,804 | 11,135 | 14,596 | 15,471 | 14,974 | 14,174 | 9,351 | 5,890 | 2,796 | 3,060 |
| 20\% | 3,161 | 2,777 | 2,857 | 4,812 | 10,143 | 10,197 | 10,637 | 8,318 | 4,690 | 2,628 | 2,589 | 2,654 |
| 30\% | 2,980 | 2,527 | 2,401 | 3,610 | 6,118 | 8,459 | 8,616 | 5,534 | 3,364 | 1,985 | 1,904 | 2,490 |
| 40\% | 2,796 | 2,395 | 2,215 | 2,629 | 4,232 | 5,570 | 7,564 | 4,609 | 2,947 | 1,735 | 1,666 | 2,125 |
| 50\% | 2,601 | 2,219 | 2,101 | 2,402 | 3,420 | 3,847 | 6,017 | 3,925 | 2,246 | 1,487 | 1,488 | 1,930 |
| 60\% | 2,401 | 2,169 | 2,046 | 2,293 | 2,683 | 3,459 | 4,832 | 3,062 | 1,859 | 1,366 | 1,403 | 1,835 |
| 70\% | 2,247 | 2,059 | 1,979 | 2,114 | 2,305 | 2,906 | 3,776 | 2,699 | 1,448 | 1,154 | 1,307 | 1,739 |
| 80\% | 1,994 | 1,951 | 1,829 | 1,884 | 2,150 | 2,371 | 2,789 | 2,153 | 1,293 | 1,087 | 1,202 | 1,611 |
| 90\% | 1,849 | 1,763 | 1,669 | 1,699 | 1,947 | 2,204 | 1,887 | 1,678 | 1,085 | 885 | 1,067 | 1,476 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,672 | 2,611 | 3,391 | 5,070 | 6,655 | 7,278 | 7,528 | 6,039 | 4,194 | 2,622 | 1,847 | 2,223 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,918 | 3,513 | 6,545 | 11,446 | 15,776 | 16,863 | 15,423 | 14,628 | 11,335 | 6,676 | 3,135 | 3,416 |
| Above Normal (24\%) | 2,700 | 2,416 | 2,663 | 4,883 | 6,881 | 7,536 | 8,542 | 5,264 | 3,280 | 1,989 | 1,975 | 2,345 |
| Below Normal (10\%) | 2,538 | 2,249 | 3,661 | 3,507 | 3,651 | 4,149 | 6,337 | 4,140 | 2,076 | 1,463 | 1,446 | 1,837 |
| Dry (16\%) | 2,767 | 2,569 | 2,232 | 2,402 | 2,549 | 3,241 | 3,996 | 2,805 | 1,680 | 1,254 | 1,347 | 1,776 |
| Critical (27\%) | 2,426 | 2,168 | 1,915 | 1,877 | 2,090 | 2,288 | 2,307 | 1,929 | 1,115 | 926 | 1,060 | 1,487 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 14\% | -4\% | -3\% | 1\% | -15\% | 0\% | 1\% | 1\% | -4\% | -3\% | -7\% | -8\% |
| 20\% | 17\% | -1\% | -2\% | -1\% | -1\% | 8\% | 3\% | 1\% | -2\% | 0\% | 0\% | 0\% |
| 30\% | 21\% | -4\% | -3\% | -1\% | -2\% | 8\% | 1\% | 2\% | 0\% | 0\% | 0\% | 0\% |
| 40\% | 20\% | -2\% | -4\% | 1\% | 0\% | 4\% | 1\% | 3\% | 0\% | 0\% | -1\% | -1\% |
| 50\% | 25\% | -5\% | -6\% | -3\% | 0\% | 1\% | 0\% | 0\% | 2\% | -1\% | -1\% | 0\% |
| 60\% | 27\% | -2\% | -3\% | 2\% | 0\% | 0\% | 9\% | 5\% | 2\% | -1\% | -1\% | 0\% |
| 70\% | 32\% | -2\% | 0\% | 2\% | -3\% | 1\% | 17\% | 8\% | 2\% | -1\% | -1\% | 0\% |
| 80\% | 32\% | 0\% | -2\% | 3\% | 0\% | 2\% | 14\% | 8\% | 2\% | 0\% | -1\% | 0\% |
| 90\% | 38\% | 1\% | 0\% | 4\% | 1\% | 4\% | 4\% | 7\% | 0\% | -6\% | -3\% | -2\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 21\% | -2\% | -2\% | 0\% | -2\% | 2\% | 3\% | 2\% | -4\% | -2\% | -2\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 18\% | -2\% | -1\% | 0\% | -3\% | 3\% | 0\% | 1\% | -6\% | -2\% | -3\% | -5\% |
| Above Normal (24\%) | 21\% | -2\% | -2\% | 0\% | -1\% | 2\% | 2\% | 2\% | -1\% | 0\% | 0\% | 0\% |
| Below Normal (10\%) | 24\% | -3\% | -2\% | -2\% | -5\% | 2\% | 6\% | 4\% | 2\% | -1\% | -1\% | -1\% |
| Dry (16\%) | 20\% | -3\% | -3\% | -1\% | -3\% | 0\% | 9\% | 7\% | 1\% | -1\% | -1\% | 0\% |
| Critical (27\%) | 26\% | -2\% | -2\% | 1\% | 0\% | 3\% | 11\% | 8\% | 0\% | -3\% | -2\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.10.3 San Joaquin River at Vernalis, Monthly Flow
Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,058 | 3,088 | 4,931 | 11,054 | 17,256 | 15,467 | 14,774 | 14,101 | 9,720 | 6,052 | 2,996 | 3,315 |
| 20\% | 2,699 | 2,813 | 2,924 | 4,859 | 10,259 | 9,401 | 10,359 | 8,202 | 4,768 | 2,636 | 2,599 | 2,659 |
| 30\% | 2,470 | 2,631 | 2,462 | 3,635 | 6,228 | 7,841 | 8,536 | 5,452 | 3,364 | 1,988 | 1,896 | 2,484 |
| 40\% | 2,326 | 2,448 | 2,299 | 2,606 | 4,252 | 5,343 | 7,507 | 4,488 | 2,947 | 1,742 | 1,675 | 2,152 |
| 50\% | 2,089 | 2,342 | 2,226 | 2,481 | 3,420 | 3,825 | 6,018 | 3,916 | 2,205 | 1,503 | 1,499 | 1,934 |
| 60\% | 1,895 | 2,218 | 2,100 | 2,247 | 2,681 | 3,460 | 4,432 | 2,913 | 1,824 | 1,384 | 1,415 | 1,837 |
| 70\% | 1,697 | 2,100 | 1,988 | 2,070 | 2,379 | 2,870 | 3,224 | 2,493 | 1,420 | 1,170 | 1,322 | 1,743 |
| 80\% | 1,511 | 1,954 | 1,866 | 1,827 | 2,153 | 2,327 | 2,452 | 1,994 | 1,271 | 1,087 | 1,211 | 1,611 |
| 90\% | 1,338 | 1,753 | 1,671 | 1,638 | 1,931 | 2,115 | 1,813 | 1,564 | 1,085 | 941 | 1,099 | 1,503 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,200 | 2,673 | 3,455 | 5,082 | 6,806 | 7,116 | 7,330 | 5,903 | 4,350 | 2,668 | 1,876 | 2,266 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,472 | 3,596 | 6,642 | 11,484 | 16,260 | 16,444 | 15,398 | 14,493 | 12,009 | 6,823 | 3,227 | 3,582 |
| Above Normal (24\%) | 2,234 | 2,469 | 2,712 | 4,887 | 6,916 | 7,376 | 8,371 | 5,184 | 3,310 | 1,997 | 1,976 | 2,348 |
| Below Normal (10\%) | 2,052 | 2,330 | 3,742 | 3,561 | 3,837 | 4,077 | 5,974 | 3,968 | 2,025 | 1,478 | 1,455 | 1,847 |
| Dry (16\%) | 2,305 | 2,644 | 2,306 | 2,421 | 2,623 | 3,227 | 3,656 | 2,625 | 1,661 | 1,266 | 1,362 | 1,783 |
| Critical (27\%) | 1,926 | 2,205 | 1,952 | 1,854 | 2,092 | 2,228 | 2,079 | 1,780 | 1,114 | 951 | 1,077 | 1,490 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,023 | 3,053 | 4,949 | 12,089 | 17,246 | 15,467 | 14,936 | 14,309 | 10,004 | 6,473 | 3,525 | 3,287 |
| 20\% | 2,667 | 2,830 | 2,938 | 4,833 | 10,213 | 9,874 | 10,251 | 7,931 | 4,627 | 2,495 | 2,587 | 2,623 |
| 30\% | 2,494 | 2,583 | 2,421 | 3,540 | 6,797 | 7,753 | 8,532 | 5,438 | 2,558 | 1,926 | 1,892 | 2,464 |
| 40\% | 2,328 | 2,478 | 2,304 | 2,753 | 4,210 | 5,305 | 7,580 | 4,344 | 2,294 | 1,722 | 1,667 | 2,125 |
| 50\% | 2,137 | 2,313 | 2,191 | 2,439 | 3,215 | 3,847 | 6,112 | 3,821 | 1,955 | 1,506 | 1,495 | 1,932 |
| 60\% | 1,956 | 2,244 | 2,140 | 2,236 | 2,668 | 3,440 | 4,501 | 2,907 | 1,700 | 1,361 | 1,415 | 1,838 |
| 70\% | 1,782 | 2,148 | 2,012 | 2,088 | 2,360 | 2,906 | 3,355 | 2,502 | 1,364 | 1,164 | 1,319 | 1,743 |
| 80\% | 1,609 | 1,974 | 1,886 | 1,824 | 2,090 | 2,371 | 2,581 | 2,158 | 1,241 | 1,026 | 1,211 | 1,612 |
| 90\% | 1,466 | 1,763 | 1,669 | 1,639 | 1,849 | 2,205 | 1,936 | 1,650 | 1,001 | 930 | 1,065 | 1,477 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,252 | 2,683 | 3,501 | 5,108 | 6,872 | 7,145 | 7,431 | 5,830 | 4,009 | 2,655 | 1,882 | 2,271 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,505 | 3,604 | 6,760 | 11,512 | 16,584 | 16,445 | 15,425 | 14,237 | 11,476 | 6,916 | 3,267 | 3,610 |
| Above Normal (24\%) | 2,310 | 2,488 | 2,775 | 4,925 | 6,937 | 7,444 | 8,476 | 5,078 | 2,579 | 1,910 | 1,972 | 2,341 |
| Below Normal (10\%) | 2,067 | 2,299 | 3,711 | 3,708 | 3,857 | 4,057 | 6,015 | 3,856 | 1,865 | 1,472 | 1,454 | 1,834 |
| Dry (16\%) | 2,346 | 2,646 | 2,309 | 2,419 | 2,607 | 3,241 | 3,785 | 2,611 | 1,568 | 1,253 | 1,360 | 1,782 |
| Critical (27\%) | 1,991 | 2,227 | 1,974 | 1,842 | 2,043 | 2,273 | 2,247 | 1,874 | 1,080 | 912 | 1,067 | 1,497 |

Alternative 3 minus Revised Second Basis of Comparison

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1\% | -1\% | 0\% | 9\% | 0\% | 0\% | 1\% | 1\% | 3\% | 7\% | 18\% | -1\% |
| 20\% | -1\% | 1\% | 0\% | -1\% | 0\% | 5\% | -1\% | -3\% | -3\% | -5\% | 0\% | -1\% |
| 30\% | 1\% | -2\% | -2\% | -3\% | 9\% | -1\% | 0\% | 0\% | -24\% | -3\% | 0\% | -1\% |
| 40\% | 0\% | 1\% | 0\% | 6\% | -1\% | -1\% | 1\% | -3\% | -22\% | -1\% | 0\% | -1\% |
| 50\% | 2\% | -1\% | -2\% | -2\% | -6\% | 1\% | 2\% | -2\% | -11\% | 0\% | 0\% | 0\% |
| 60\% | 3\% | 1\% | 2\% | 0\% | 0\% | -1\% | 2\% | 0\% | -7\% | -2\% | 0\% | 0\% |
| 70\% | 5\% | 2\% | 1\% | 1\% | -1\% | 1\% | 4\% | 0\% | -4\% | 0\% | 0\% | 0\% |
| 80\% | 6\% | 1\% | 1\% | 0\% | -3\% | 2\% | 5\% | 8\% | -2\% | -6\% | 0\% | 0\% |
| 90\% | 10\% | 1\% | 0\% | 0\% | -4\% | 4\% | 7\% | 5\% | -8\% | -1\% | -3\% | -2\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2\% | 0\% | 1\% | 1\% | 1\% | 0\% | 1\% | -1\% | -8\% | 0\% | 0\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1\% | 0\% | 2\% | 0\% | 2\% | 0\% | 0\% | -2\% | -4\% | 1\% | 1\% | 1\% |
| Above Normal (24\%) | 3\% | 1\% | 2\% | 1\% | 0\% | 1\% | 1\% | -2\% | -22\% | -4\% | 0\% | 0\% |
| Below Normal (10\%) | 1\% | -1\% | -1\% | 4\% | 1\% | 0\% | 1\% | -3\% | -8\% | 0\% | 0\% | -1\% |
| Dry (16\%) | 2\% | 0\% | 0\% | 0\% | -1\% | 0\% | 4\% | -1\% | -6\% | -1\% | 0\% | 0\% |
| Critical (27\%) | 3\% | 1\% | 1\% | -1\% | -2\% | 2\% | 8\% | 5\% | -3\% | -4\% | -1\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.10.4 San Joaquin River at Vernalis, Monthly Flow
Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,058 | 3,088 | 4,931 | 11,054 | 17,256 | 15,467 | 14,774 | 14,101 | 9,720 | 6,052 | 2,996 | 3,315 |
| 20\% | 2,699 | 2,813 | 2,924 | 4,859 | 10,259 | 9,401 | 10,359 | 8,202 | 4,768 | 2,636 | 2,599 | 2,659 |
| 30\% | 2,470 | 2,631 | 2,462 | 3,635 | 6,228 | 7,841 | 8,536 | 5,452 | 3,364 | 1,988 | 1,896 | 2,484 |
| 40\% | 2,326 | 2,448 | 2,299 | 2,606 | 4,252 | 5,343 | 7,507 | 4,488 | 2,947 | 1,742 | 1,675 | 2,152 |
| 50\% | 2,089 | 2,342 | 2,226 | 2,481 | 3,420 | 3,825 | 6,018 | 3,916 | 2,205 | 1,503 | 1,499 | 1,934 |
| 60\% | 1,895 | 2,218 | 2,100 | 2,247 | 2,681 | 3,460 | 4,432 | 2,913 | 1,824 | 1,384 | 1,415 | 1,837 |
| 70\% | 1,697 | 2,100 | 1,988 | 2,070 | 2,379 | 2,870 | 3,224 | 2,493 | 1,420 | 1,170 | 1,322 | 1,743 |
| 80\% | 1,511 | 1,954 | 1,866 | 1,827 | 2,153 | 2,327 | 2,452 | 1,994 | 1,271 | 1,087 | 1,211 | 1,611 |
| 90\% | 1,338 | 1,753 | 1,671 | 1,638 | 1,931 | 2,115 | 1,813 | 1,564 | 1,085 | 941 | 1,099 | 1,503 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,200 | 2,673 | 3,455 | 5,082 | 6,806 | 7,116 | 7,330 | 5,903 | 4,350 | 2,668 | 1,876 | 2,266 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,472 | 3,596 | 6,642 | 11,484 | 16,260 | 16,444 | 15,398 | 14,493 | 12,009 | 6,823 | 3,227 | 3,582 |
| Above Normal (24\%) | 2,234 | 2,469 | 2,712 | 4,887 | 6,916 | 7,376 | 8,371 | 5,184 | 3,310 | 1,997 | 1,976 | 2,348 |
| Below Normal (10\%) | 2,052 | 2,330 | 3,742 | 3,561 | 3,837 | 4,077 | 5,974 | 3,968 | 2,025 | 1,478 | 1,455 | 1,847 |
| Dry (16\%) | 2,305 | 2,644 | 2,306 | 2,421 | 2,623 | 3,227 | 3,656 | 2,625 | 1,661 | 1,266 | 1,362 | 1,783 |
| Critical (27\%) | 1,926 | 2,205 | 1,952 | 1,854 | 2,092 | 2,228 | 2,079 | 1,780 | 1,114 | 951 | 1,077 | 1,490 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,495 | 2,953 | 4,804 | 11,129 | 14,597 | 15,473 | 14,976 | 14,176 | 9,351 | 5,773 | 2,776 | 3,084 |
| 20\% | 3,146 | 2,777 | 2,897 | 4,811 | 10,142 | 9,856 | 10,265 | 8,232 | 4,688 | 2,628 | 2,589 | 2,654 |
| 30\% | 2,938 | 2,527 | 2,401 | 3,610 | 6,118 | 8,461 | 8,576 | 5,670 | 3,364 | 1,985 | 1,904 | 2,488 |
| 40\% | 2,763 | 2,395 | 2,204 | 2,629 | 4,232 | 5,570 | 7,567 | 5,162 | 2,947 | 1,735 | 1,666 | 2,125 |
| 50\% | 2,588 | 2,219 | 2,101 | 2,402 | 3,420 | 3,846 | 6,110 | 4,183 | 2,219 | 1,484 | 1,488 | 1,930 |
| 60\% | 2,385 | 2,169 | 2,046 | 2,289 | 2,683 | 3,459 | 5,047 | 3,554 | 1,860 | 1,365 | 1,402 | 1,835 |
| 70\% | 2,196 | 2,059 | 1,979 | 2,083 | 2,303 | 2,906 | 4,317 | 2,916 | 1,447 | 1,155 | 1,307 | 1,739 |
| 80\% | 1,988 | 1,951 | 1,829 | 1,883 | 2,145 | 2,371 | 3,100 | 2,401 | 1,283 | 1,052 | 1,202 | 1,611 |
| 90\% | 1,849 | 1,763 | 1,669 | 1,699 | 1,947 | 2,204 | 2,461 | 2,245 | 1,000 | 885 | 1,025 | 1,431 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,660 | 2,609 | 3,371 | 5,071 | 6,639 | 7,235 | 7,686 | 6,290 | 4,174 | 2,597 | 1,818 | 2,213 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,903 | 3,513 | 6,448 | 11,445 | 15,743 | 16,679 | 15,389 | 14,666 | 11,287 | 6,580 | 3,020 | 3,379 |
| Above Normal (24\%) | 2,691 | 2,411 | 2,679 | 4,897 | 6,864 | 7,536 | 8,487 | 5,671 | 3,280 | 1,989 | 1,975 | 2,345 |
| Below Normal (10\%) | 2,531 | 2,249 | 3,661 | 3,506 | 3,650 | 4,149 | 6,299 | 4,206 | 2,062 | 1,462 | 1,446 | 1,837 |
| Dry (16\%) | 2,750 | 2,569 | 2,232 | 2,400 | 2,547 | 3,241 | 4,420 | 3,245 | 1,672 | 1,253 | 1,346 | 1,776 |
| Critical (27\%) | 2,418 | 2,163 | 1,910 | 1,871 | 2,078 | 2,288 | 2,741 | 2,177 | 1,090 | 916 | 1,051 | 1,480 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 14\% | -4\% | -3\% | 1\% | -15\% | 0\% | 1\% | 1\% | -4\% | -5\% | -7\% | -7\% |
| 20\% | 17\% | -1\% | -1\% | -1\% | -1\% | 5\% | -1\% | 0\% | -2\% | 0\% | 0\% | 0\% |
| 30\% | 19\% | -4\% | -3\% | -1\% | -2\% | 8\% | 0\% | 4\% | 0\% | 0\% | 0\% | 0\% |
| 40\% | 19\% | -2\% | -4\% | 1\% | 0\% | 4\% | 1\% | 15\% | 0\% | 0\% | -1\% | -1\% |
| 50\% | 24\% | -5\% | -6\% | -3\% | 0\% | 1\% | 2\% | 7\% | 1\% | -1\% | -1\% | 0\% |
| 60\% | 26\% | -2\% | -3\% | 2\% | 0\% | 0\% | 14\% | 22\% | 2\% | -1\% | -1\% | 0\% |
| 70\% | 29\% | -2\% | 0\% | 1\% | -3\% | 1\% | 34\% | 17\% | 2\% | -1\% | -1\% | 0\% |
| 80\% | 32\% | 0\% | -2\% | 3\% | 0\% | 2\% | 26\% | 20\% | 1\% | -3\% | -1\% | 0\% |
| 90\% | 38\% | 1\% | 0\% | 4\% | 1\% | 4\% | 36\% | 44\% | -8\% | -6\% | -7\% | -5\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 21\% | -2\% | -2\% | 0\% | -2\% | 2\% | 5\% | 7\% | -4\% | -3\% | -3\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 17\% | -2\% | -3\% | 0\% | -3\% | 1\% | 0\% | 1\% | -6\% | -4\% | -6\% | -6\% |
| Above Normal (24\%) | 20\% | -2\% | -1\% | 0\% | -1\% | 2\% | 1\% | 9\% | -1\% | 0\% | 0\% | 0\% |
| Below Normal (10\%) | 23\% | -3\% | -2\% | -2\% | -5\% | 2\% | 5\% | 6\% | 2\% | -1\% | -1\% | -1\% |
| Dry (16\%) | 19\% | -3\% | -3\% | -1\% | -3\% | 0\% | 21\% | 24\% | 1\% | -1\% | -1\% | 0\% |
| Critical (27\%) | 26\% | -2\% | -2\% | 1\% | -1\% | 3\% | 32\% | 22\% | -2\% | -4\% | -2\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.11 Old and Middle River Flow

Table 5C.3.2.11.1 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

No Action Alternative

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 614 | 893 | 4,094 | 6,333 | 7,834 | 5,445 | 4,160 | 2,848 | 1,180 | 763 | 277 | 1,161 |
| 20\% | 586 | 874 | 2,112 | 4,323 | 4,927 | 4,179 | 2,834 | 1,727 | 609 | 688 | 259 | 1,134 |
| 30\% | 576 | 825 | 1,003 | 3,149 | 3,624 | 2,834 | 1,795 | 1,200 | 548 | 573 | 246 | 909 |
| 40\% | 423 | 657 | 761 | 1,793 | 2,868 | 2,092 | 1,504 | 1,004 | 465 | 497 | 246 | 656 |
| 50\% | 270 | 586 | 611 | 1,299 | 2,037 | 1,676 | 1,197 | 843 | 431 | 492 | 246 | 261 |
| 60\% | 246 | 368 | 359 | 1,050 | 1,407 | 1,204 | 946 | 731 | 422 | 400 | 246 | 201 |
| 70\% | 246 | 268 | 315 | 800 | 1,023 | 1,061 | 758 | 592 | 408 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 278 | 586 | 823 | 783 | 598 | 520 | 383 | 307 | 246 | 179 |
| 90\% | 184 | 210 | 277 | 486 | 633 | 662 | 564 | 446 | 334 | 246 | 240 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 401 | 686 | 1,416 | 2,720 | 3,186 | 2,697 | 1,812 | 1,281 | 648 | 495 | 258 | 565 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 520 | 1,020 | 2,913 | 5,509 | 5,771 | 5,000 | 3,288 | 2,394 | 1,120 | 655 | 273 | 1,133 |
| Above Normal (24\%) | 332 | 742 | 1,502 | 3,049 | 3,807 | 3,236 | 1,938 | 1,201 | 485 | 667 | 251 | 662 |
| Below Normal (10\%) | 471 | 650 | 582 | 1,077 | 2,048 | 1,113 | 1,019 | 789 | 445 | 508 | 254 | 211 |
| Dry (16\%) | 341 | 470 | 471 | 981 | 1,443 | 1,396 | 999 | 680 | 431 | 315 | 257 | 191 |
| Critical (27\%) | 253 | 296 | 418 | 723 | 861 | 747 | 559 | 410 | 348 | 249 | 235 | 179 |

Revised Alternative 1

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 373 | 895 | 4,048 | 6,551 | 8,106 | 5,795 | 3,956 | 2,541 | 1,141 | 670 | 271 | 259 |
| 20\% | 286 | 384 | 2,029 | 4,469 | 4,884 | 4,375 | 2,589 | 1,579 | 658 | 581 | 247 | 240 |
| 30\% | 269 | 329 | 947 | 2,826 | 3,377 | 2,686 | 1,466 | 952 | 591 | 508 | 246 | 234 |
| 40\% | 257 | 291 | 635 | 1,561 | 2,882 | 2,060 | 1,215 | 790 | 559 | 492 | 246 | 229 |
| 50\% | 246 | 269 | 464 | 1,078 | 1,898 | 1,614 | 859 | 715 | 512 | 461 | 246 | 221 |
| 60\% | 246 | 268 | 371 | 829 | 1,168 | 1,103 | 726 | 675 | 495 | 400 | 246 | 184 |
| 70\% | 246 | 268 | 312 | 665 | 918 | 899 | 599 | 560 | 439 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 501 | 720 | 751 | 565 | 533 | 422 | 307 | 236 | 179 |
| 90\% | 232 | 208 | 277 | 405 | 596 | 601 | 528 | 437 | 369 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 289 | 508 | 1,407 | 2,590 | 3,140 | 2,678 | 1,609 | 1,159 | 704 | 457 | 252 | 238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 345 | 794 | 3,009 | 5,453 | 5,819 | 5,073 | 3,004 | 2,182 | 1,199 | 607 | 271 | 321 |
| Above Normal (24\%) | 252 | 566 | 1,394 | 2,837 | 3,821 | 3,313 | 1,620 | 1,021 | 569 | 599 | 250 | 223 |
| Below Normal (10\%) | 294 | 433 | 540 | 878 | 2,078 | 1,075 | 812 | 715 | 532 | 429 | 254 | 208 |
| Dry (16\%) | 267 | 297 | 433 | 821 | 1,268 | 1,232 | 879 | 627 | 455 | 310 | 244 | 191 |
| Critical (27\%) | 241 | 244 | 367 | 640 | 692 | 680 | 525 | 385 | 346 | 247 | 229 | 179 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -39\% | 0\% | -1\% | 3\% | 3\% | 6\% | -5\% | -11\% | -3\% | -12\% | -2\% | -78\% |
| 20\% | -51\% | -56\% | -4\% | 3\% | -1\% | 5\% | -9\% | -9\% | 8\% | -16\% | -5\% | -79\% |
| 30\% | -53\% | -60\% | -6\% | -10\% | -7\% | -5\% | -18\% | -21\% | 8\% | -11\% | 0\% | -74\% |
| 40\% | -39\% | -56\% | -17\% | -13\% | 0\% | -2\% | -19\% | -21\% | 20\% | -1\% | 0\% | -65\% |
| 50\% | -9\% | -54\% | -24\% | -17\% | -7\% | -4\% | -28\% | -15\% | 19\% | -6\% | 0\% | -15\% |
| 60\% | 0\% | -27\% | 4\% | -21\% | -17\% | -8\% | -23\% | -8\% | 17\% | 0\% | 0\% | -8\% |
| 70\% | 0\% | 0\% | -1\% | -17\% | -10\% | -15\% | -21\% | -5\% | 7\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | -14\% | -13\% | -4\% | -6\% | 2\% | 10\% | 0\% | -4\% | 0\% |
| 90\% | 26\% | -1\% | 0\% | -17\% | -6\% | -9\% | -6\% | -2\% | 11\% | 0\% | -10\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -28\% | -26\% | -1\% | -5\% | -1\% | -1\% | -11\% | -10\% | 9\% | -8\% | -2\% | -58\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -34\% | -22\% | 3\% | -1\% | 1\% | 1\% | -9\% | -9\% | 7\% | -7\% | -1\% | -72\% |
| Above Normal (24\%) | -24\% | -24\% | -7\% | -7\% | 0\% | 2\% | -16\% | -15\% | 17\% | -10\% | -1\% | -66\% |
| Below Normal (10\%) | -38\% | -33\% | -7\% | -18\% | 1\% | -3\% | -20\% | -9\% | 20\% | -16\% | 0\% | -1\% |
| Dry (16\%) | -22\% | -37\% | -8\% | -16\% | -12\% | -12\% | -12\% | -8\% | 6\% | -2\% | -5\% | 0\% |
| Critical (27\%) | -5\% | -18\% | -12\% | -12\% | -20\% | -9\% | -6\% | -6\% | -1\% | -1\% | -3\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.11.2 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 373 | 895 | 4,048 | 6,551 | 8,106 | 5,795 | 3,956 | 2,541 | 1,141 | 670 | 271 | 259 |
| 20\% | 286 | 384 | 2,029 | 4,469 | 4,884 | 4,375 | 2,589 | 1,579 | 658 | 581 | 247 | 240 |
| 30\% | 269 | 329 | 947 | 2,826 | 3,377 | 2,686 | 1,466 | 952 | 591 | 508 | 246 | 234 |
| 40\% | 257 | 291 | 635 | 1,561 | 2,882 | 2,060 | 1,215 | 790 | 559 | 492 | 246 | 229 |
| 50\% | 246 | 269 | 464 | 1,078 | 1,898 | 1,614 | 859 | 715 | 512 | 461 | 246 | 221 |
| 60\% | 246 | 268 | 371 | 829 | 1,168 | 1,103 | 726 | 675 | 495 | 400 | 246 | 184 |
| 70\% | 246 | 268 | 312 | 665 | 918 | 899 | 599 | 560 | 439 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 501 | 720 | 751 | 565 | 533 | 422 | 307 | 236 | 179 |
| 90\% | 232 | 208 | 277 | 405 | 596 | 601 | 528 | 437 | 369 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 289 | 508 | 1,407 | 2,590 | 3,140 | 2,678 | 1,609 | 1,159 | 704 | 457 | 252 | 238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 345 | 794 | 3,009 | 5,453 | 5,819 | 5,073 | 3,004 | 2,182 | 1,199 | 607 | 271 | 321 |
| Above Normal (24\%) | 252 | 566 | 1,394 | 2,837 | 3,821 | 3,313 | 1,620 | 1,021 | 569 | 599 | 250 | 223 |
| Below Normal (10\%) | 294 | 433 | 540 | 878 | 2,078 | 1,075 | 812 | 715 | 532 | 429 | 254 | 208 |
| Dry (16\%) | 267 | 297 | 433 | 821 | 1,268 | 1,232 | 879 | 627 | 455 | 310 | 244 | 191 |
| Critical (27\%) | 241 | 244 | 367 | 640 | 692 | 680 | 525 | 385 | 346 | 247 | 229 | 179 |

## No Action Alternative

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 614 | 893 | 4,094 | 6,333 | 7,834 | 5,445 | 4,160 | 2,848 | 1,180 | 763 | 277 | 1,161 |
| 20\% | 586 | 874 | 2,112 | 4,323 | 4,927 | 4,179 | 2,834 | 1,727 | 609 | 688 | 259 | 1,134 |
| 30\% | 576 | 825 | 1,003 | 3,149 | 3,624 | 2,834 | 1,795 | 1,200 | 548 | 573 | 246 | 909 |
| 40\% | 423 | 657 | 761 | 1,793 | 2,868 | 2,092 | 1,504 | 1,004 | 465 | 497 | 246 | 656 |
| 50\% | 270 | 586 | 611 | 1,299 | 2,037 | 1,676 | 1,197 | 843 | 431 | 492 | 246 | 261 |
| 60\% | 246 | 368 | 359 | 1,050 | 1,407 | 1,204 | 946 | 731 | 422 | 400 | 246 | 201 |
| 70\% | 246 | 268 | 315 | 800 | 1,023 | 1,061 | 758 | 592 | 408 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 278 | 586 | 823 | 783 | 598 | 520 | 383 | 307 | 246 | 179 |
| 90\% | 184 | 210 | 277 | 486 | 633 | 662 | 564 | 446 | 334 | 246 | 240 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 401 | 686 | 1,416 | 2,720 | 3,186 | 2,697 | 1,812 | 1,281 | 648 | 495 | 258 | 565 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 520 | 1,020 | 2,913 | 5,509 | 5,771 | 5,000 | 3,288 | 2,394 | 1,120 | 655 | 273 | 1,133 |
| Above Normal (24\%) | 332 | 742 | 1,502 | 3,049 | 3,807 | 3,236 | 1,938 | 1,201 | 485 | 667 | 251 | 662 |
| Below Normal (10\%) | 471 | 650 | 582 | 1,077 | 2,048 | 1,113 | 1,019 | 789 | 445 | 508 | 254 | 211 |
| Dry (16\%) | 341 | 470 | 471 | 981 | 1,443 | 1,396 | 999 | 680 | 431 | 315 | 257 | 191 |
| Critical (27\%) | 253 | 296 | 418 | 723 | 861 | 747 | 559 | 410 | 348 | 249 | 235 | 179 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65\% | 0\% | 1\% | -3\% | -3\% | -6\% | 5\% | 12\% | 3\% | 14\% | 2\% | 349\% |
| 20\% | 105\% | 128\% | 4\% | -3\% | 1\% | -4\% | 9\% | 9\% | -7\% | 18\% | 5\% | 372\% |
| 30\% | 114\% | 151\% | 6\% | 11\% | 7\% | 6\% | 22\% | 26\% | -7\% | 13\% | 0\% | 288\% |
| 40\% | 64\% | 126\% | 20\% | 15\% | 0\% | 2\% | 24\% | 27\% | -17\% | 1\% | 0\% | 187\% |
| 50\% | 10\% | 118\% | 32\% | 20\% | 7\% | 4\% | 39\% | 18\% | -16\% | 7\% | 0\% | 18\% |
| 60\% | 0\% | 37\% | -3\% | 27\% | 20\% | 9\% | 30\% | 8\% | -15\% | 0\% | 0\% | 9\% |
| 70\% | 0\% | 0\% | 1\% | 20\% | 11\% | 18\% | 26\% | 6\% | -7\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 17\% | 14\% | 4\% | 6\% | -2\% | -9\% | 0\% | 4\% | 0\% |
| 90\% | -20\% | 1\% | 0\% | 20\% | 6\% | 10\% | 7\% | 2\% | -10\% | 0\% | 11\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 39\% | 35\% | 1\% | 5\% | 1\% | 1\% | 13\% | 11\% | -8\% | 8\% | 2\% | 138\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 51\% | 28\% | -3\% | 1\% | -1\% | -1\% | 9\% | 10\% | -7\% | 8\% | 1\% | 253\% |
| Above Normal (24\%) | 32\% | 31\% | 8\% | 8\% | 0\% | -2\% | 20\% | 18\% | -15\% | 11\% | 1\% | 197\% |
| Below Normal (10\%) | 60\% | 50\% | 8\% | 23\% | -1\% | 4\% | 25\% | 10\% | -16\% | 18\% | 0\% | 2\% |
| Dry (16\%) | 28\% | 58\% | 9\% | 19\% | 14\% | 13\% | 14\% | 8\% | -5\% | 2\% | 5\% | 0\% |
| Critical (27\%) | 5\% | 21\% | 14\% | 13\% | 24\% | 10\% | 6\% | 6\% | 1\% | 1\% | 3\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.11.3 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 373 | 895 | 4,048 | 6,551 | 8,106 | 5,795 | 3,956 | 2,541 | 1,141 | 670 | 271 | 259 |
| 20\% | 286 | 384 | 2,029 | 4,469 | 4,884 | 4,375 | 2,589 | 1,579 | 658 | 581 | 247 | 240 |
| 30\% | 269 | 329 | 947 | 2,826 | 3,377 | 2,686 | 1,466 | 952 | 591 | 508 | 246 | 234 |
| 40\% | 257 | 291 | 635 | 1,561 | 2,882 | 2,060 | 1,215 | 790 | 559 | 492 | 246 | 229 |
| 50\% | 246 | 269 | 464 | 1,078 | 1,898 | 1,614 | 859 | 715 | 512 | 461 | 246 | 221 |
| 60\% | 246 | 268 | 371 | 829 | 1,168 | 1,103 | 726 | 675 | 495 | 400 | 246 | 184 |
| 70\% | 246 | 268 | 312 | 665 | 918 | 899 | 599 | 560 | 439 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 501 | 720 | 751 | 565 | 533 | 422 | 307 | 236 | 179 |
| 90\% | 232 | 208 | 277 | 405 | 596 | 601 | 528 | 437 | 369 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 289 | 508 | 1,407 | 2,590 | 3,140 | 2,678 | 1,609 | 1,159 | 704 | 457 | 252 | 238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 345 | 794 | 3,009 | 5,453 | 5,819 | 5,073 | 3,004 | 2,182 | 1,199 | 607 | 271 | 321 |
| Above Normal (24\%) | 252 | 566 | 1,394 | 2,837 | 3,821 | 3,313 | 1,620 | 1,021 | 569 | 599 | 250 | 223 |
| Below Normal (10\%) | 294 | 433 | 540 | 878 | 2,078 | 1,075 | 812 | 715 | 532 | 429 | 254 | 208 |
| Dry (16\%) | 267 | 297 | 433 | 821 | 1,268 | 1,232 | 879 | 627 | 455 | 310 | 244 | 191 |
| Critical (27\%) | 241 | 244 | 367 | 640 | 692 | 680 | 525 | 385 | 346 | 247 | 229 | 179 |

Alternative 3

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 298 | 902 | 4,155 | 6,646 | 7,924 | 5,788 | 3,812 | 2,471 | 1,066 | 729 | 265 | 261 |
| 20\% | 266 | 389 | 2,140 | 4,462 | 4,802 | 4,293 | 2,584 | 1,383 | 630 | 659 | 246 | 245 |
| 30\% | 257 | 319 | 1,154 | 3,104 | 3,795 | 2,714 | 1,525 | 913 | 572 | 575 | 246 | 235 |
| 40\% | 246 | 290 | 722 | 1,875 | 3,031 | 2,137 | 1,238 | 750 | 502 | 492 | 246 | 229 |
| 50\% | 246 | 268 | 480 | 1,398 | 2,079 | 1,678 | 867 | 704 | 477 | 492 | 246 | 222 |
| 60\% | 246 | 268 | 398 | 1,061 | 1,416 | 1,185 | 754 | 630 | 436 | 428 | 246 | 191 |
| 70\% | 246 | 268 | 336 | 768 | 1,078 | 1,032 | 601 | 579 | 422 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 599 | 821 | 789 | 566 | 493 | 409 | 307 | 241 | 179 |
| 90\% | 185 | 208 | 277 | 497 | 634 | 654 | 512 | 437 | 351 | 246 | 222 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 277 | 506 | 1,465 | 2,772 | 3,236 | 2,711 | 1,617 | 1,122 | 656 | 490 | 252 | 240 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 333 | 791 | 3,116 | 5,609 | 5,812 | 5,020 | 2,996 | 2,109 | 1,118 | 649 | 271 | 319 |
| Above Normal (24\%) | 242 | 568 | 1,461 | 3,096 | 3,903 | 3,292 | 1,636 | 960 | 514 | 645 | 246 | 228 |
| Below Normal (10\%) | 281 | 422 | 564 | 1,156 | 2,186 | 1,120 | 856 | 699 | 457 | 507 | 254 | 221 |
| Dry (16\%) | 250 | 297 | 457 | 992 | 1,459 | 1,384 | 882 | 612 | 445 | 321 | 245 | 191 |
| Critical (27\%) | 234 | 243 | 397 | 721 | 859 | 752 | 528 | 397 | 346 | 246 | 230 | 179 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -20\% | 1\% | 3\% | 1\% | -2\% | 0\% | -4\% | -3\% | -7\% | 9\% | -2\% | 1\% |
| 20\% | -7\% | 1\% | 5\% | 0\% | -2\% | -2\% | 0\% | -12\% | -4\% | 13\% | 0\% | 2\% |
| 30\% | -5\% | -3\% | 22\% | 10\% | 12\% | 1\% | 4\% | -4\% | -3\% | 13\% | 0\% | 0\% |
| 40\% | -4\% | 0\% | 14\% | 20\% | 5\% | 4\% | 2\% | -5\% | -10\% | 0\% | 0\% | 0\% |
| 50\% | 0\% | 0\% | 4\% | 30\% | 10\% | 4\% | 1\% | -2\% | -7\% | 7\% | 0\% | 0\% |
| 60\% | 0\% | 0\% | 7\% | 28\% | 21\% | 7\% | 4\% | -7\% | -12\% | 7\% | 0\% | 3\% |
| 70\% | 0\% | 0\% | 8\% | 15\% | 17\% | 15\% | 0\% | 3\% | -4\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 20\% | 14\% | 5\% | 0\% | -7\% | -3\% | 0\% | 2\% | 0\% |
| 90\% | -20\% | 0\% | 0\% | 23\% | 7\% | 9\% | -3\% | 0\% | -5\% | 0\% | 3\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -4\% | 0\% | 4\% | 7\% | 3\% | 1\% | 0\% | -3\% | -7\% | 7\% | 0\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -3\% | 0\% | 4\% | 3\% | 0\% | -1\% | 0\% | -3\% | -7\% | 7\% | 0\% | 0\% |
| Above Normal (24\%) | -4\% | 0\% | 5\% | 9\% | 2\% | -1\% | 1\% | -6\% | -10\% | 8\% | -1\% | 2\% |
| Below Normal (10\%) | -4\% | -3\% | 4\% | 32\% | 5\% | 4\% | 5\% | -2\% | -14\% | 18\% | 0\% | 6\% |
| Dry (16\%) | -6\% | 0\% | 5\% | 21\% | 15\% | 12\% | 0\% | -2\% | -2\% | 4\% | 0\% | 0\% |
| Critical (27\%) | -3\% | 0\% | 8\% | 13\% | 24\% | 11\% | 1\% | 3\% | 0\% | -1\% | 1\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.11.4 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Revised Second Basis of Comparison

| Statistic | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 373 | 895 | 4,048 | 6,551 | 8,106 | 5,795 | 3,956 | 2,541 | 1,141 | 670 | 271 | 259 |
| 20\% | 286 | 384 | 2,029 | 4,469 | 4,884 | 4,375 | 2,589 | 1,579 | 658 | 581 | 247 | 240 |
| 30\% | 269 | 329 | 947 | 2,826 | 3,377 | 2,686 | 1,466 | 952 | 591 | 508 | 246 | 234 |
| 40\% | 257 | 291 | 635 | 1,561 | 2,882 | 2,060 | 1,215 | 790 | 559 | 492 | 246 | 229 |
| 50\% | 246 | 269 | 464 | 1,078 | 1,898 | 1,614 | 859 | 715 | 512 | 461 | 246 | 221 |
| 60\% | 246 | 268 | 371 | 829 | 1,168 | 1,103 | 726 | 675 | 495 | 400 | 246 | 184 |
| 70\% | 246 | 268 | 312 | 665 | 918 | 899 | 599 | 560 | 439 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 501 | 720 | 751 | 565 | 533 | 422 | 307 | 236 | 179 |
| 90\% | 232 | 208 | 277 | 405 | 596 | 601 | 528 | 437 | 369 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 289 | 508 | 1,407 | 2,590 | 3,140 | 2,678 | 1,609 | 1,159 | 704 | 457 | 252 | 238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 345 | 794 | 3,009 | 5,453 | 5,819 | 5,073 | 3,004 | 2,182 | 1,199 | 607 | 271 | 321 |
| Above Normal (24\%) | 252 | 566 | 1,394 | 2,837 | 3,821 | 3,313 | 1,620 | 1,021 | 569 | 599 | 250 | 223 |
| Below Normal (10\%) | 294 | 433 | 540 | 878 | 2,078 | 1,075 | 812 | 715 | 532 | 429 | 254 | 208 |
| Dry (16\%) | 267 | 297 | 433 | 821 | 1,268 | 1,232 | 879 | 627 | 455 | 310 | 244 | 191 |
| Critical (27\%) | 241 | 244 | 367 | 640 | 692 | 680 | 525 | 385 | 346 | 247 | 229 | 179 |

Alternative 5

|  | Monthly Outtiow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 623 | 960 | 4,115 | 6,339 | 7,831 | 5,439 | 4,160 | 2,849 | 1,180 | 767 | 284 | 1,161 |
| 20\% | 594 | 874 | 2,112 | 4,319 | 4,907 | 4,174 | 2,807 | 1,763 | 606 | 688 | 256 | 1,134 |
| 30\% | 576 | 830 | 1,008 | 3,149 | 3,653 | 2,835 | 1,798 | 1,237 | 524 | 593 | 246 | 910 |
| 40\% | 423 | 660 | 762 | 1,785 | 2,869 | 2,092 | 1,542 | 1,002 | 453 | 501 | 246 | 651 |
| 50\% | 257 | 586 | 616 | 1,301 | 2,053 | 1,666 | 1,234 | 873 | 423 | 492 | 246 | 255 |
| 60\% | 246 | 369 | 359 | 1,048 | 1,406 | 1,203 | 1,028 | 776 | 422 | 400 | 246 | 204 |
| 70\% | 246 | 268 | 310 | 800 | 1,025 | 1,057 | 817 | 629 | 401 | 308 | 246 | 179 |
| 80\% | 246 | 268 | 286 | 585 | 823 | 783 | 712 | 561 | 370 | 307 | 246 | 179 |
| 90\% | 184 | 211 | 277 | 486 | 633 | 662 | 623 | 462 | 330 | 246 | 230 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 401 | 690 | 1,413 | 2,714 | 3,184 | 2,695 | 1,848 | 1,312 | 642 | 500 | 257 | 565 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 517 | 1,020 | 2,905 | 5,499 | 5,773 | 4,996 | 3,288 | 2,411 | 1,117 | 667 | 273 | 1,132 |
| Above Normal (24\%) | 334 | 767 | 1,505 | 3,048 | 3,795 | 3,232 | 1,947 | 1,223 | 482 | 668 | 251 | 661 |
| Below Normal (10\%) | 471 | 650 | 582 | 1,075 | 2,047 | 1,110 | 1,061 | 821 | 434 | 513 | 254 | 214 |
| Dry (16\%) | 342 | 471 | 467 | 980 | 1,444 | 1,396 | 1,081 | 720 | 423 | 316 | 256 | 191 |
| Critical (27\%) | 254 | 296 | 418 | 714 | 856 | 747 | 621 | 462 | 346 | 249 | 233 | 179 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 67\% | 7\% | 2\% | -3\% | -3\% | -6\% | 5\% | 12\% | 3\% | 14\% | 5\% | 349\% |
| 20\% | 108\% | 128\% | 4\% | -3\% | 0\% | -5\% | 8\% | 12\% | -8\% | 18\% | 4\% | 372\% |
| 30\% | 114\% | 152\% | 7\% | 11\% | 8\% | 6\% | 23\% | 30\% | -11\% | 17\% | 0\% | 288\% |
| 40\% | 64\% | 127\% | 20\% | 14\% | 0\% | 2\% | 27\% | 27\% | -19\% | 2\% | 0\% | 185\% |
| 50\% | 5\% | 118\% | 33\% | 21\% | 8\% | 3\% | 44\% | 22\% | -17\% | 7\% | 0\% | 16\% |
| 60\% | 0\% | 38\% | -3\% | 26\% | 20\% | 9\% | 42\% | 15\% | -15\% | 0\% | 0\% | 10\% |
| 70\% | 0\% | 0\% | -1\% | 20\% | 12\% | 18\% | 36\% | 12\% | -9\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 3\% | 17\% | 14\% | 4\% | 26\% | 5\% | -12\% | 0\% | 4\% | 0\% |
| 90\% | -20\% | 1\% | 0\% | 20\% | 6\% | 10\% | 18\% | 6\% | -11\% | 0\% | 7\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 39\% | 36\% | 0\% | 5\% | 1\% | 1\% | 15\% | 13\% | -9\% | 9\% | 2\% | 138\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 50\% | 28\% | -3\% | 1\% | -1\% | -2\% | 9\% | 11\% | -7\% | 10\% | 1\% | 253\% |
| Above Normal (24\%) | 32\% | 36\% | 8\% | 7\% | -1\% | -2\% | 20\% | 20\% | -15\% | 11\% | 1\% | 197\% |
| Below Normal (10\%) | 60\% | 50\% | 8\% | 22\% | -1\% | 3\% | 31\% | 15\% | -18\% | 20\% | 0\% | 3\% |
| Dry (16\%) | 28\% | 59\% | 8\% | 19\% | 14\% | 13\% | 23\% | 15\% | -7\% | 2\% | 5\% | 0\% |
| Critical (27\%) | 5\% | 21\% | 14\% | 12\% | 24\% | 10\% | 18\% | 20\% | 0\% | 1\% | 2\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.12 X2 Position

Table 5C.3.2.12.1 X2, End of Month Position
No Action Alternative

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.4 | 93.6 | 90.8 | 84.0 | 77.3 | 75.9 | 78.1 | 81.0 | 83.1 | 86.5 | 89.7 | 91.9 |
| 20\% | 91.8 | 91.4 | 87.6 | 82.3 | 71.7 | 72.8 | 73.6 | 79.3 | 81.8 | 84.9 | 88.1 | 91.1 |
| 30\% | 91.6 | 90.9 | 83.9 | 79.8 | 67.2 | 65.7 | 70.0 | 77.3 | 81.0 | 84.3 | 87.5 | 90.6 |
| 40\% | 91.1 | 88.1 | 82.5 | 73.5 | 64.0 | 64.5 | 66.7 | 72.3 | 80.2 | 82.4 | 86.2 | 90.1 |
| 50\% | 89.7 | 81.1 | 81.1 | 71.2 | 58.5 | 59.9 | 64.7 | 69.9 | 77.8 | 80.6 | 84.8 | 88.5 |
| 60\% | 81.0 | 81.0 | 79.7 | 64.4 | 55.2 | 58.0 | 60.9 | 66.3 | 76.6 | 78.1 | 84.6 | 81.0 |
| 70\% | 74.1 | 75.1 | 72.0 | 55.1 | 51.9 | 53.9 | 58.0 | 63.8 | 73.4 | 77.4 | 84.1 | 74.1 |
| 80\% | 74.0 | 74.0 | 62.2 | 51.3 | 49.4 | 50.6 | 53.8 | 59.1 | 69.8 | 76.8 | 82.7 | 74.0 |
| 90\% | 74.0 | 74.0 | 52.8 | 49.4 | 48.2 | 49.0 | 49.9 | 53.3 | 63.5 | 74.6 | 82.2 | 74.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84.2 | 82.3 | 76.4 | 68.0 | 61.1 | 61.4 | 64.2 | 68.8 | 75.9 | 80.4 | 85.4 | 83.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 80.6 | 76.8 | 63.7 | 54.8 | 51.2 | 53.1 | 55.1 | 58.4 | 67.4 | 74.9 | 82.7 | 73.9 |
| Above Normal (24\%) | 86.9 | 82.4 | 75.1 | 61.0 | 54.9 | 55.3 | 59.1 | 65.2 | 75.3 | 77.9 | 83.1 | 74.7 |
| Below Normal (10\%) | 80.4 | 80.3 | 80.4 | 74.6 | 64.3 | 66.9 | 69.0 | 72.9 | 79.1 | 81.1 | 85.1 | 89.3 |
| Dry (16\%) | 85.6 | 85.5 | 84.5 | 77.7 | 67.7 | 65.4 | 68.8 | 74.5 | 80.1 | 84.5 | 87.6 | 90.5 |
| Critical (27\%) | 90.4 | 90.7 | 88.2 | 82.0 | 75.3 | 74.6 | 77.7 | 82.3 | 85.2 | 87.9 | 90.3 | 92.1 |

Revised Alternative 1

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.3 | 92.5 | 91.0 | 87.3 | 80.4 | 78.2 | 78.5 | 81.5 | 83.5 | 86.6 | 90.0 | 92.1 |
| 20\% | 91.8 | 91.3 | 90.6 | 85.9 | 75.6 | 73.5 | 75.2 | 79.6 | 81.6 | 84.8 | 88.5 | 91.4 |
| 30\% | 91.2 | 91.0 | 89.5 | 83.6 | 72.1 | 68.3 | 73.3 | 78.6 | 80.5 | 84.3 | 88.0 | 90.8 |
| 40\% | 91.0 | 90.8 | 88.7 | 78.9 | 66.2 | 66.6 | 69.7 | 75.4 | 78.6 | 82.1 | 86.5 | 90.1 |
| 50\% | 90.6 | 90.3 | 86.8 | 75.6 | 61.5 | 61.7 | 67.3 | 72.9 | 77.9 | 81.1 | 85.6 | 89.4 |
| 60\% | 90.2 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.2 | 70.3 | 76.1 | 78.9 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.0 | 77.0 | 56.3 | 52.4 | 54.0 | 59.9 | 66.0 | 74.4 | 78.2 | 84.4 | 88.6 |
| 80\% | 89.6 | 88.0 | 65.9 | 51.9 | 49.4 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.1 | 88.4 |
| 90\% | 87.3 | 79.7 | 53.3 | 49.5 | 48.2 | 48.8 | 50.4 | 54.6 | 64.1 | 74.8 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.4 | 62.8 | 62.3 | 65.9 | 70.6 | 75.8 | 80.7 | 86.0 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88.1 | 83.7 | 66.3 | 55.7 | 51.6 | 53.0 | 56.4 | 60.3 | 67.3 | 75.3 | 83.3 | 86.6 |
| Above Normal (24\%) | 91.0 | 87.1 | 79.1 | 63.6 | 56.1 | 55.2 | 61.1 | 67.9 | 75.0 | 78.2 | 83.8 | 81.9 |
| Below Normal (10\%) | 89.6 | 87.3 | 84.5 | 78.8 | 66.0 | 67.3 | 71.3 | 74.9 | 78.2 | 81.4 | 86.0 | 89.7 |
| Dry (16\%) | 90.7 | 90.4 | 87.9 | 81.1 | 70.7 | 67.6 | 70.8 | 76.0 | 80.2 | 84.4 | 88.0 | 90.8 |
| Critical (27\%) | 91.9 | 92.1 | 90.0 | 84.0 | 78.5 | 76.8 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.4 |

Revised Alternative 1 minus No Action Alternative

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.1 | -1.1 | 0.2 | 3.3 | 3.1 | 2.3 | 0.4 | 0.5 | 0.3 | 0.1 | 0.3 | 0.1 |
| 20\% | 0.0 | -0.1 | 2.9 | 3.6 | 3.9 | 0.7 | 1.6 | 0.3 | -0.1 | -0.1 | 0.4 | 0.3 |
| 30\% | -0.4 | 0.1 | 5.5 | 3.8 | 4.8 | 2.6 | 3.2 | 1.3 | -0.5 | 0.1 | 0.5 | 0.3 |
| 40\% | -0.1 | 2.7 | 6.2 | 5.4 | 2.2 | 2.1 | 3.0 | 3.1 | -1.6 | -0.2 | 0.3 | 0.0 |
| 50\% | 0.9 | 9.2 | 5.7 | 4.4 | 3.0 | 1.8 | 2.6 | 3.0 | 0.2 | 0.5 | 0.8 | 0.9 |
| 60\% | 9.2 | 8.6 | 2.7 | 3.3 | 0.6 | -0.2 | 3.3 | 4.0 | -0.6 | 0.8 | 0.1 | 8.0 |
| 70\% | 15.9 | 13.9 | 5.1 | 1.1 | 0.5 | 0.1 | 1.9 | 2.2 | 1.0 | 0.8 | 0.3 | 14.6 |
| 80\% | 15.6 | 13.9 | 3.6 | 0.6 | 0.0 | -0.2 | 0.9 | 1.1 | 1.5 | 0.5 | 1.4 | 14.4 |
| 90\% | 13.3 | 5.8 | 0.5 | 0.1 | 0.0 | -0.2 | 0.5 | 1.2 | 0.7 | 0.2 | 0.7 | 13.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 5.7 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 7.5 | 6.9 | 2.7 | 1.0 | 0.4 | 0.0 | 1.3 | 1.9 | 0.0 | 0.4 | 0.5 | 12.7 |
| Above Normal (24\%) | 4.1 | 4.6 | 4.0 | 2.7 | 1.2 | 0.0 | 2.0 | 2.7 | -0.3 | 0.3 | 0.7 | 7.2 |
| Below Normal (10\%) | 9.2 | 7.0 | 4.1 | 4.2 | 1.7 | 0.5 | 2.3 | 2.0 | -0.9 | 0.3 | 0.9 | 0.4 |
| Dry (16\%) | 5.1 | 4.9 | 3.5 | 3.4 | 3.1 | 2.2 | 2.0 | 1.5 | 0.1 | -0.1 | 0.4 | 0.3 |
| Critical (27\%) | 1.4 | 1.4 | 1.8 | 2.1 | 3.2 | 2.2 | 1.2 | 1.0 | 0.5 | 0.3 | 0.3 | 0.2 |

[^0]Table 5C.3.2.12.2 X2, End of Month Position
Revised Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.3 | 92.5 | 91.0 | 87.3 | 80.4 | 78.2 | 78.5 | 81.5 | 83.5 | 86.6 | 90.0 | 92.1 |
| 20\% | 91.8 | 91.3 | 90.6 | 85.9 | 75.6 | 73.5 | 75.2 | 79.6 | 81.6 | 84.8 | 88.5 | 91.4 |
| 30\% | 91.2 | 91.0 | 89.5 | 83.6 | 72.1 | 68.3 | 73.3 | 78.6 | 80.5 | 84.3 | 88.0 | 90.8 |
| 40\% | 91.0 | 90.8 | 88.7 | 78.9 | 66.2 | 66.6 | 69.7 | 75.4 | 78.6 | 82.1 | 86.5 | 90.1 |
| 50\% | 90.6 | 90.3 | 86.8 | 75.6 | 61.5 | 61.7 | 67.3 | 72.9 | 77.9 | 81.1 | 85.6 | 89.4 |
| 60\% | 90.2 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.2 | 70.3 | 76.1 | 78.9 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.0 | 77.0 | 56.3 | 52.4 | 54.0 | 59.9 | 66.0 | 74.4 | 78.2 | 84.4 | 88.6 |
| 80\% | 89.6 | 88.0 | 65.9 | 51.9 | 49.4 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.1 | 88.4 |
| 90\% | 87.3 | 79.7 | 53.3 | 49.5 | 48.2 | 48.8 | 50.4 | 54.6 | 64.1 | 74.8 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.4 | 62.8 | 62.3 | 65.9 | 70.6 | 75.8 | 80.7 | 86.0 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88.1 | 83.7 | 66.3 | 55.7 | 51.6 | 53.0 | 56.4 | 60.3 | 67.3 | 75.3 | 83.3 | 86.6 |
| Above Normal (24\%) | 91.0 | 87.1 | 79.1 | 63.6 | 56.1 | 55.2 | 61.1 | 67.9 | 75.0 | 78.2 | 83.8 | 81.9 |
| Below Normal (10\%) | 89.6 | 87.3 | 84.5 | 78.8 | 66.0 | 67.3 | 71.3 | 74.9 | 78.2 | 81.4 | 86.0 | 89.7 |
| Dry (16\%) | 90.7 | 90.4 | 87.9 | 81.1 | 70.7 | 67.6 | 70.8 | 76.0 | 80.2 | 84.4 | 88.0 | 90.8 |
| Critical (27\%) | 91.9 | 92.1 | 90.0 | 84.0 | 78.5 | 76.8 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.4 |

No Action Alternative

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.4 | 93.6 | 90.8 | 84.0 | 77.3 | 75.9 | 78.1 | 81.0 | 83.1 | 86.5 | 89.7 | 91.9 |
| 20\% | 91.8 | 91.4 | 87.6 | 82.3 | 71.7 | 72.8 | 73.6 | 79.3 | 81.8 | 84.9 | 88.1 | 91.1 |
| 30\% | 91.6 | 90.9 | 83.9 | 79.8 | 67.2 | 65.7 | 70.0 | 77.3 | 81.0 | 84.3 | 87.5 | 90.6 |
| 40\% | 91.1 | 88.1 | 82.5 | 73.5 | 64.0 | 64.5 | 66.7 | 72.3 | 80.2 | 82.4 | 86.2 | 90.1 |
| 50\% | 89.7 | 81.1 | 81.1 | 71.2 | 58.5 | 59.9 | 64.7 | 69.9 | 77.8 | 80.6 | 84.8 | 88.5 |
| 60\% | 81.0 | 81.0 | 79.7 | 64.4 | 55.2 | 58.0 | 60.9 | 66.3 | 76.6 | 78.1 | 84.6 | 81.0 |
| 70\% | 74.1 | 75.1 | 72.0 | 55.1 | 51.9 | 53.9 | 58.0 | 63.8 | 73.4 | 77.4 | 84.1 | 74.1 |
| 80\% | 74.0 | 74.0 | 62.2 | 51.3 | 49.4 | 50.6 | 53.8 | 59.1 | 69.8 | 76.8 | 82.7 | 74.0 |
| 90\% | 74.0 | 74.0 | 52.8 | 49.4 | 48.2 | 49.0 | 49.9 | 53.3 | 63.5 | 74.6 | 82.2 | 74.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84.2 | 82.3 | 76.4 | 68.0 | 61.1 | 61.4 | 64.2 | 68.8 | 75.9 | 80.4 | 85.4 | 83.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 80.6 | 76.8 | 63.7 | 54.8 | 51.2 | 53.1 | 55.1 | 58.4 | 67.4 | 74.9 | 82.7 | 73.9 |
| Above Normal (24\%) | 86.9 | 82.4 | 75.1 | 61.0 | 54.9 | 55.3 | 59.1 | 65.2 | 75.3 | 77.9 | 83.1 | 74.7 |
| Below Normal (10\%) | 80.4 | 80.3 | 80.4 | 74.6 | 64.3 | 66.9 | 69.0 | 72.9 | 79.1 | 81.1 | 85.1 | 89.3 |
| Dry (16\%) | 85.6 | 85.5 | 84.5 | 77.7 | 67.7 | 65.4 | 68.8 | 74.5 | 80.1 | 84.5 | 87.6 | 90.5 |
| Critical (27\%) | 90.4 | 90.7 | 88.2 | 82.0 | 75.3 | 74.6 | 77.7 | 82.3 | 85.2 | 87.9 | 90.3 | 92.1 |

No Action Alternative minus Revised Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1.1 | 1.1 | -0.2 | -3.3 | -3.1 | -2.3 | -0.4 | -0.5 | -0.3 | -0.1 | -0.3 | -0.1 |
| 20\% | 0.0 | 0.1 | -2.9 | -3.6 | -3.9 | -0.7 | -1.6 | -0.3 | 0.1 | 0.1 | -0.4 | -0.3 |
| 30\% | 0.4 | -0.1 | -5.5 | -3.8 | -4.8 | -2.6 | -3.2 | -1.3 | 0.5 | -0.1 | -0.5 | -0.3 |
| 40\% | 0.1 | -2.7 | -6.2 | -5.4 | -2.2 | -2.1 | -3.0 | -3.1 | 1.6 | 0.2 | -0.3 | 0.0 |
| 50\% | -0.9 | -9.2 | -5.7 | -4.4 | -3.0 | -1.8 | -2.6 | -3.0 | -0.2 | -0.5 | -0.8 | -0.9 |
| 60\% | -9.2 | -8.6 | -2.7 | -3.3 | -0.6 | 0.2 | -3.3 | -4.0 | 0.6 | -0.8 | -0.1 | -8.0 |
| 70\% | -15.9 | -13.9 | -5.1 | -1.1 | -0.5 | -0.1 | -1.9 | -2.2 | -1.0 | -0.8 | -0.3 | -14.6 |
| 80\% | -15.6 | -13.9 | -3.6 | -0.6 | 0.0 | 0.2 | -0.9 | -1.1 | -1.5 | -0.5 | -1.4 | -14.4 |
| 90\% | -13.3 | -5.8 | -0.5 | -0.1 | 0.0 | 0.2 | -0.5 | -1.2 | -0.7 | -0.2 | -0.7 | -13.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7.5 | -6.9 | -2.7 | -1.0 | -0.4 | 0.0 | -1.3 | -1.9 | 0.0 | -0.4 | -0.5 | -12.7 |
| Above Normal (24\%) | -4.1 | -4.6 | -4.0 | -2.7 | -1.2 | 0.0 | -2.0 | -2.7 | 0.3 | -0.3 | -0.7 | -7.2 |
| Below Normal (10\%) | -9.2 | -7.0 | -4.1 | -4.2 | -1.7 | -0.5 | -2.3 | -2.0 | 0.9 | -0.3 | -0.9 | -0.4 |
| Dry (16\%) | -5.1 | -4.9 | -3.5 | -3.4 | -3.1 | -2.2 | -2.0 | -1.5 | -0.1 | 0.1 | -0.4 | -0.3 |
| Critical (27\%) | -1.4 | -1.4 | -1.8 | -2.1 | -3.2 | -2.2 | -1.2 | -1.0 | -0.5 | -0.3 | -0.3 | -0.2 |

[^1]Table 5C.3.2.12.3 X2, End of Month Position
Revised Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.3 | 92.5 | 91.0 | 87.3 | 80.4 | 78.2 | 78.5 | 81.5 | 83.5 | 86.6 | 90.0 | 92.1 |
| 20\% | 91.8 | 91.3 | 90.6 | 85.9 | 75.6 | 73.5 | 75.2 | 79.6 | 81.6 | 84.8 | 88.5 | 91.4 |
| 30\% | 91.2 | 91.0 | 89.5 | 83.6 | 72.1 | 68.3 | 73.3 | 78.6 | 80.5 | 84.3 | 88.0 | 90.8 |
| 40\% | 91.0 | 90.8 | 88.7 | 78.9 | 66.2 | 66.6 | 69.7 | 75.4 | 78.6 | 82.1 | 86.5 | 90.1 |
| 50\% | 90.6 | 90.3 | 86.8 | 75.6 | 61.5 | 61.7 | 67.3 | 72.9 | 77.9 | 81.1 | 85.6 | 89.4 |
| 60\% | 90.2 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.2 | 70.3 | 76.1 | 78.9 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.0 | 77.0 | 56.3 | 52.4 | 54.0 | 59.9 | 66.0 | 74.4 | 78.2 | 84.4 | 88.6 |
| 80\% | 89.6 | 88.0 | 65.9 | 51.9 | 49.4 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.1 | 88.4 |
| 90\% | 87.3 | 79.7 | 53.3 | 49.5 | 48.2 | 48.8 | 50.4 | 54.6 | 64.1 | 74.8 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.4 | 62.8 | 62.3 | 65.9 | 70.6 | 75.8 | 80.7 | 86.0 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88.1 | 83.7 | 66.3 | 55.7 | 51.6 | 53.0 | 56.4 | 60.3 | 67.3 | 75.3 | 83.3 | 86.6 |
| Above Normal (24\%) | 91.0 | 87.1 | 79.1 | 63.6 | 56.1 | 55.2 | 61.1 | 67.9 | 75.0 | 78.2 | 83.8 | 81.9 |
| Below Normal (10\%) | 89.6 | 87.3 | 84.5 | 78.8 | 66.0 | 67.3 | 71.3 | 74.9 | 78.2 | 81.4 | 86.0 | 89.7 |
| Dry (16\%) | 90.7 | 90.4 | 87.9 | 81.1 | 70.7 | 67.6 | 70.8 | 76.0 | 80.2 | 84.4 | 88.0 | 90.8 |
| Critical (27\%) | 91.9 | 92.1 | 90.0 | 84.0 | 78.5 | 76.8 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.4 |

Alternative 3

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.2 | 93.6 | 90.8 | 86.1 | 77.8 | 75.8 | 78.2 | 81.5 | 83.2 | 86.4 | 90.0 | 92.2 |
| 20\% | 91.9 | 91.5 | 90.5 | 83.7 | 71.7 | 72.5 | 74.6 | 79.6 | 82.0 | 84.8 | 88.4 | 91.3 |
| 30\% | 91.6 | 91.1 | 89.4 | 81.5 | 67.6 | 66.1 | 71.3 | 78.4 | 81.0 | 84.3 | 87.7 | 90.8 |
| 40\% | 91.2 | 90.8 | 88.5 | 74.8 | 64.1 | 64.5 | 69.7 | 75.6 | 80.3 | 81.7 | 86.0 | 89.8 |
| 50\% | 90.7 | 90.6 | 86.7 | 71.8 | 58.8 | 60.0 | 67.3 | 73.1 | 78.8 | 80.7 | 84.9 | 89.3 |
| 60\% | 90.2 | 89.8 | 82.6 | 64.6 | 54.4 | 58.0 | 63.6 | 70.4 | 77.1 | 78.4 | 84.6 | 88.7 |
| 70\% | 89.9 | 89.0 | 74.2 | 55.1 | 52.2 | 54.4 | 59.9 | 66.8 | 75.1 | 77.8 | 84.2 | 88.4 |
| 80\% | 89.6 | 87.9 | 65.1 | 51.2 | 49.3 | 50.4 | 54.8 | 61.7 | 71.8 | 77.1 | 83.2 | 88.2 |
| 90\% | 88.2 | 79.6 | 53.0 | 49.5 | 48.1 | 48.8 | 50.4 | 54.8 | 64.9 | 75.0 | 82.4 | 87.6 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.1 | 87.8 | 79.0 | 68.5 | 61.2 | 61.4 | 65.5 | 70.8 | 76.5 | 80.5 | 85.6 | 89.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88.1 | 83.9 | 65.6 | 54.8 | 51.3 | 53.1 | 56.5 | 60.8 | 68.3 | 75.1 | 82.9 | 86.6 |
| Above Normal ( $24 \%$ ) | 91.2 | 87.2 | 78.3 | 61.5 | 54.9 | 55.0 | 60.9 | 68.4 | 76.2 | 78.0 | 83.4 | 81.8 |
| Below Normal (10\%) | 89.9 | 87.7 | 84.4 | 75.4 | 64.0 | 66.6 | 70.5 | 74.9 | 79.6 | 81.0 | 85.1 | 89.2 |
| Dry (16\%) | 90.8 | 90.6 | 87.6 | 78.8 | 67.9 | 65.5 | 69.9 | 76.0 | 80.4 | 84.3 | 87.8 | 90.8 |
| Critical (27\%) | 92.1 | 92.2 | 89.5 | 82.7 | 75.6 | 74.6 | 78.1 | 82.8 | 85.4 | 88.0 | 90.5 | 92.3 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.9 | 1.0 | -0.1 | -1.2 | -2.6 | -2.4 | -0.3 | -0.1 | -0.3 | -0.2 | 0.0 | 0.2 |
| 20\% | 0.2 | 0.1 | -0.1 | -2.2 | -3.9 | -1.0 | -0.6 | 0.0 | 0.3 | 0.0 | -0.2 | -0.1 |
| 30\% | 0.4 | 0.1 | 0.0 | -2.1 | -4.5 | -2.2 | -2.0 | -0.1 | 0.5 | 0.0 | -0.3 | -0.1 |
| 40\% | 0.2 | 0.1 | -0.2 | -4.1 | -2.0 | -2.1 | 0.0 | 0.3 | 1.8 | -0.4 | -0.5 | -0.3 |
| 50\% | 0.1 | 0.3 | -0.1 | -3.8 | -2.6 | -1.7 | 0.0 | 0.3 | 0.9 | -0.4 | -0.7 | -0.1 |
| 60\% | 0.0 | 0.2 | 0.2 | -3.1 | -1.4 | 0.2 | -0.5 | 0.1 | 1.1 | -0.6 | -0.1 | -0.3 |
| 70\% | -0.1 | 0.0 | -2.8 | -1.1 | -0.2 | 0.3 | -0.1 | 0.8 | 0.7 | -0.5 | -0.1 | -0.2 |
| 80\% | 0.0 | -0.1 | -0.8 | -0.7 | 0.0 | 0.1 | 0.1 | 1.5 | 0.4 | -0.2 | -0.8 | -0.2 |
| 90\% | 0.8 | -0.1 | -0.3 | 0.0 | -0.1 | 0.0 | 0.0 | 0.2 | 0.7 | 0.1 | -0.6 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0.0 | 0.2 | -0.7 | -0.9 | -0.3 | 0.1 | 0.0 | 0.5 | 1.0 | -0.2 | -0.4 | -0.1 |
| Above Normal (24\%) | 0.3 | 0.1 | -0.8 | -2.2 | -1.2 | -0.2 | -0.2 | 0.5 | 1.1 | -0.2 | -0.4 | -0.2 |
| Below Normal (10\%) | 0.4 | 0.4 | -0.1 | -3.4 | -2.0 | -0.8 | -0.7 | 0.0 | 1.4 | -0.4 | -0.8 | -0.5 |
| Dry (16\%) | 0.1 | 0.2 | -0.3 | -2.3 | -2.8 | -2.1 | -0.8 | 0.0 | 0.3 | -0.1 | -0.2 | -0.1 |
| Critical (27\%) | 0.2 | 0.2 | -0.5 | -1.4 | -2.8 | -2.2 | -0.8 | -0.4 | -0.3 | -0.2 | -0.1 | -0.1 |

[^2]b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.12.4 X2, End of Month Position
Revised Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.3 | 92.5 | 91.0 | 87.3 | 80.4 | 78.2 | 78.5 | 81.5 | 83.5 | 86.6 | 90.0 | 92.1 |
| 20\% | 91.8 | 91.3 | 90.6 | 85.9 | 75.6 | 73.5 | 75.2 | 79.6 | 81.6 | 84.8 | 88.5 | 91.4 |
| 30\% | 91.2 | 91.0 | 89.5 | 83.6 | 72.1 | 68.3 | 73.3 | 78.6 | 80.5 | 84.3 | 88.0 | 90.8 |
| 40\% | 91.0 | 90.8 | 88.7 | 78.9 | 66.2 | 66.6 | 69.7 | 75.4 | 78.6 | 82.1 | 86.5 | 90.1 |
| 50\% | 90.6 | 90.3 | 86.8 | 75.6 | 61.5 | 61.7 | 67.3 | 72.9 | 77.9 | 81.1 | 85.6 | 89.4 |
| 60\% | 90.2 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.2 | 70.3 | 76.1 | 78.9 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.0 | 77.0 | 56.3 | 52.4 | 54.0 | 59.9 | 66.0 | 74.4 | 78.2 | 84.4 | 88.6 |
| 80\% | 89.6 | 88.0 | 65.9 | 51.9 | 49.4 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.1 | 88.4 |
| 90\% | 87.3 | 79.7 | 53.3 | 49.5 | 48.2 | 48.8 | 50.4 | 54.6 | 64.1 | 74.8 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.4 | 62.8 | 62.3 | 65.9 | 70.6 | 75.8 | 80.7 | 86.0 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88.1 | 83.7 | 66.3 | 55.7 | 51.6 | 53.0 | 56.4 | 60.3 | 67.3 | 75.3 | 83.3 | 86.6 |
| Above Normal (24\%) | 91.0 | 87.1 | 79.1 | 63.6 | 56.1 | 55.2 | 61.1 | 67.9 | 75.0 | 78.2 | 83.8 | 81.9 |
| Below Normal (10\%) | 89.6 | 87.3 | 84.5 | 78.8 | 66.0 | 67.3 | 71.3 | 74.9 | 78.2 | 81.4 | 86.0 | 89.7 |
| Dry (16\%) | 90.7 | 90.4 | 87.9 | 81.1 | 70.7 | 67.6 | 70.8 | 76.0 | 80.2 | 84.4 | 88.0 | 90.8 |
| Critical (27\%) | 91.9 | 92.1 | 90.0 | 84.0 | 78.5 | 76.8 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.4 |

Alternative 5

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.2 | 93.3 | 90.8 | 84.0 | 77.3 | 75.9 | 77.2 | 79.1 | 83.1 | 86.5 | 89.6 | 91.9 |
| 20\% | 91.9 | 91.5 | 87.6 | 82.3 | 71.7 | 72.8 | 72.5 | 77.9 | 81.4 | 84.9 | 88.1 | 91.1 |
| 30\% | 91.6 | 91.0 | 83.9 | 79.8 | 67.2 | 65.8 | 69.5 | 75.8 | 81.0 | 84.2 | 87.4 | 90.5 |
| 40\% | 91.0 | 88.0 | 82.4 | 73.5 | 63.9 | 64.5 | 66.4 | 71.5 | 79.6 | 82.3 | 86.1 | 90.0 |
| 50\% | 89.5 | 81.1 | 81.2 | 71.2 | 58.5 | 59.9 | 64.2 | 69.3 | 77.8 | 80.7 | 84.8 | 88.5 |
| 60\% | 81.0 | 81.0 | 79.7 | 64.4 | 55.1 | 57.9 | 60.8 | 66.4 | 76.6 | 78.2 | 84.6 | 81.0 |
| 70\% | 74.1 | 75.1 | 71.9 | 55.1 | 51.9 | 53.9 | 58.0 | 63.7 | 73.4 | 77.5 | 84.1 | 74.1 |
| 80\% | 74.0 | 74.1 | 62.2 | 51.3 | 49.4 | 50.6 | 53.5 | 58.9 | 69.8 | 76.8 | 82.6 | 74.0 |
| 90\% | 74.0 | 73.9 | 53.0 | 49.4 | 48.2 | 49.1 | 49.9 | 53.3 | 63.5 | 74.6 | 82.2 | 74.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84.2 | 82.3 | 76.4 | 68.0 | 61.1 | 61.4 | 63.8 | 68.2 | 75.7 | 80.4 | 85.3 | 83.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 80.6 | 76.9 | 63.7 | 54.7 | 51.2 | 53.1 | 55.1 | 58.2 | 67.3 | 74.7 | 82.6 | 73.9 |
| Above Normal (24\%) | 86.8 | 82.1 | 74.9 | 60.9 | 54.9 | 55.3 | 59.0 | 65.0 | 75.2 | 77.9 | 83.1 | 74.8 |
| Below Normal (10\%) | 80.4 | 80.3 | 80.4 | 74.6 | 64.3 | 66.9 | 68.4 | 72.1 | 79.0 | 81.1 | 85.0 | 89.3 |
| Dry (16\%) | 85.6 | 85.5 | 84.5 | 77.7 | 67.7 | 65.4 | 67.9 | 73.4 | 79.8 | 84.5 | 87.6 | 90.5 |
| Critical (27\%) | 90.4 | 90.6 | 88.2 | 82.1 | 75.5 | 74.6 | 76.7 | 80.8 | 84.5 | 87.7 | 90.2 | 92.1 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.9 | 0.8 | -0.1 | -3.2 | -3.1 | -2.3 | -1.4 | -2.4 | -0.4 | -0.1 | -0.4 | -0.1 |
| 20\% | 0.1 | 0.1 | -3.0 | -3.6 | -3.9 | -0.7 | -2.7 | -1.6 | -0.2 | 0.1 | -0.4 | -0.3 |
| 30\% | 0.4 | 0.0 | -5.5 | -3.8 | -4.8 | -2.5 | -3.7 | -2.7 | 0.4 | -0.2 | -0.6 | -0.3 |
| 40\% | 0.0 | -2.7 | -6.3 | -5.4 | -2.2 | -2.0 | -3.3 | -3.8 | 1.0 | 0.2 | -0.5 | 0.0 |
| 50\% | -1.0 | -9.2 | -5.6 | -4.4 | -3.0 | -1.8 | -3.1 | -3.5 | -0.2 | -0.4 | -0.8 | -0.9 |
| 60\% | -9.2 | -8.6 | -2.7 | -3.3 | -0.6 | 0.1 | -3.4 | -3.9 | 0.5 | -0.8 | -0.1 | -8.0 |
| 70\% | -15.9 | -13.9 | -5.2 | -1.2 | -0.5 | -0.1 | -1.9 | -2.3 | -1.0 | -0.7 | -0.3 | -14.6 |
| 80\% | -15.6 | -13.9 | -3.7 | -0.6 | 0.0 | 0.2 | -1.2 | -1.3 | -1.6 | -0.5 | -1.5 | -14.4 |
| 90\% | -13.4 | -5.8 | -0.3 | -0.1 | 0.0 | 0.3 | -0.5 | -1.2 | -0.7 | -0.2 | -0.8 | -13.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7.5 | -6.8 | -2.6 | -1.0 | -0.4 | 0.0 | -1.3 | -2.0 | 0.0 | -0.5 | -0.6 | -12.7 |
| Above Normal (24\%) | -4.1 | -5.0 | -4.2 | -2.7 | -1.2 | 0.0 | -2.1 | -2.9 | 0.2 | -0.3 | -0.7 | -7.2 |
| Below Normal (10\%) | -9.2 | -7.0 | -4.1 | -4.2 | -1.7 | -0.5 | -2.8 | -2.8 | 0.7 | -0.4 | -1.0 | -0.5 |
| Dry (16\%) | -5.1 | -4.9 | -3.4 | -3.4 | -3.1 | -2.2 | -2.9 | -2.6 | -0.4 | 0.1 | -0.4 | -0.3 |
| Critical (27\%) | -1.5 | -1.4 | -1.8 | -1.9 | -3.0 | -2.1 | -2.1 | -2.5 | -1.3 | -0.5 | -0.4 | -0.2 |

[^3]
## 5C.3.2.13 Delta Outflow

Table 5C.3.2.13.1 Old and Middle River, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,764 | -3,724 | -3,812 | -2,823 | -666 | -969 | 3,205 | 2,797 | -1,150 | -4,130 | -2,453 | -3,775 |
| 20\% | -4,076 | -4,560 | -4,673 | -2,823 | -1,771 | -1,394 | 2,207 | 1,304 | -1,570 | -6,849 | -4,032 | -5,147 |
| 30\% | -4,613 | -5,156 | -5,244 | -3,355 | -2,823 | -2,738 | 1,632 | 561 | -3,500 | -7,647 | -5,770 | -6,006 |
| 40\% | -4,820 | -5,627 | -5,871 | -4,392 | -3,314 | -3,500 | 1,268 | 108 | -3,500 | -8,888 | -7,996 | -7,621 |
| 50\% | -5,328 | -6,320 | -5,871 | -4,710 | -3,781 | -3,500 | 612 | -182 | -3,500 | -9,376 | -9,956 | -9,000 |
| 60\% | -5,589 | -6,564 | -5,871 | -5,000 | -4,878 | -4,568 | -102 | -483 | -4,487 | -9,746 | -10,630 | -9,256 |
| 70\% | -6,253 | -7,101 | -7,413 | -5,000 | -5,000 | -5,000 | -448 | -632 | -5,000 | -10,301 | -10,737 | -9,653 |
| 80\% | -6,560 | -8,185 | -9,537 | -5,000 | -5,000 | -5,000 | -995 | -1,129 | -5,000 | -10,602 | -10,853 | -9,884 |
| 90\% | -7,404 | -9,995 | -9,681 | -5,000 | -5,000 | -5,000 | -1,247 | -1,414 | -5,000 | -11,108 | -11,083 | -10,032 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5,476 | -6,380 | -6,228 | $-3,535$ | -2,905 | -2,690 | 919 | 310 | $-3,577$ | -8,496 | -7,975 | -7,706 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -5,847 | -7,229 | -5,526 | -1,900 | -1,991 | -1,552 | 3,110 | 2,011 | -4,274 | -8,957 | -10,532 | -9,358 |
| Above Normal (24\%) | -5,525 | -6,801 | -6,850 | -3,699 | -3,161 | -4,176 | 1,196 | 412 | -4,525 | -9,151 | -10,873 | -9,542 |
| Below Normal (10\%) | -5,488 | -6,749 | -7,669 | -4,380 | -3,477 | -3,919 | 165 | -316 | -3,445 | -10,539 | -9,624 | -8,178 |
| Dry (16\%) | -5,440 | -5,953 | -6,676 | -4,621 | -3,573 | -3,072 | -670 | -906 | -3,350 | -8,900 | -4,745 | -6,453 |
| Critical (27\%) | -4,671 | -4,458 | -5,006 | -4,314 | -2,968 | -1,780 | -786 | -887 | -1,539 | -4,242 | -3,168 | -3,793 |

Revised Alternative 1

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,213 | -4,272 | -3,968 | -2,854 | -824 | -160 | -2,064 | -1,634 | -2,112 | -3,246 | -3,105 | -3,732 |
| 20\% | -3,760 | -5,330 | -6,081 | -4,745 | -2,550 | -1,248 | -3,157 | -2,833 | -2,809 | -5,223 | -4,480 | -5,069 |
| 30\% | -4,915 | -6,950 | -6,787 | -6,261 | -4,041 | -3,273 | -4,168 | -3,932 | -3,314 | -6,217 | -5,712 | -6,231 |
| 40\% | -6,258 | -7,438 | -7,871 | -7,379 | -5,843 | -4,024 | -4,920 | -4,714 | -3,970 | -7,181 | -7,103 | -8,305 |
| 50\% | -7,278 | -8,669 | -8,406 | -8,289 | -6,429 | -4,945 | -5,965 | -5,153 | -5,163 | -8,021 | -8,109 | -9,168 |
| 60\% | -8,071 | -9,221 | -9,004 | -8,845 | -7,331 | -5,427 | -6,654 | -5,526 | -5,795 | -8,941 | -9,175 | -9,647 |
| 70\% | -9,158 | -9,706 | -9,347 | $-9,257$ | -8,356 | -6,217 | -7,180 | -5,865 | -6,068 | -9,445 | -9,861 | -9,963 |
| 80\% | -9,924 | -9,988 | -9,503 | -9,553 | -8,878 | -6,633 | -7,672 | -6,382 | -6,578 | -9,955 | -10,366 | -10,089 |
| 90\% | -10,188 | -10,067 | -9,686 | -9,795 | -9,516 | -7,604 | -8,033 | -7,291 | -7,016 | -10,733 | -10,684 | -10,164 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,927 | -7,828 | -7,459 | -6,669 | -4,977 | -3,763 | -5,451 | -4,776 | -4,655 | -7,520 | -7,457 | -7,883 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7,970 | -9,125 | -7,749 | -4,991 | -2,581 | -1,121 | -7,036 | -6,345 | -4,153 | -8,364 | -9,546 | -9,646 |
| Above Normal (24\%) | -6,298 | -7,886 | -7,998 | -8,337 | -6,176 | -5,288 | -7,062 | -5,723 | -5,991 | -8,950 | -9,951 | -9,844 |
| Below Normal (10\%) | -8,002 | -8,896 | -8,199 | -8,551 | -5,299 | -5,515 | -5,435 | -4,867 | -6,643 | -10,133 | -8,149 | -8,185 |
| Dry (16\%) | -6,476 | -7,093 | -7,256 | -7,215 | -6,840 | -5,661 | -4,200 | -3,734 | -4,589 | -6,796 | -5,151 | -6,536 |
| Critical (27\%) | -5,117 | -5,206 | -5,908 | -5,862 | -5,471 | -3,067 | -2,373 | -2,005 | -2,584 | -2,950 | -3,436 | -3,906 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 552 | -548 | -156 | -32 | -158 | 809 | -5270 | -4431 | -961 | 883 | -652 | 43 |
| 20\% | 317 | -770 | -1409 | -1922 | -779 | 146 | -5363 | -4137 | -1239 | 1626 | -448 | 78 |
| 30\% | -302 | -1794 | -1543 | -2906 | -1218 | -535 | -5800 | -4493 | 186 | 1429 | 57 | -226 |
| 40\% | -1437 | -1812 | -2000 | -2986 | -2529 | -524 | -6188 | -4822 | -470 | 1707 | 893 | -684 |
| 50\% | -1950 | -2349 | -2535 | -3579 | -2648 | -1445 | -6576 | -4971 | -1663 | 1355 | 1847 | -168 |
| 60\% | -2482 | -2657 | -3133 | -3845 | -2453 | -860 | -6552 | -5043 | -1309 | 805 | 1455 | -391 |
| 70\% | -2905 | -2605 | -1934 | -4257 | -3356 | -1217 | -6732 | -5233 | -1068 | 856 | 876 | -311 |
| 80\% | -3363 | -1803 | 34 | -4553 | -3878 | -1633 | -6677 | -5253 | -1578 | 647 | 488 | -205 |
| 90\% | -2784 | -71 | -5 | -4795 | -4516 | -2604 | -6786 | -5876 | -2016 | 375 | 399 | -133 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1451 | -1448 | -1232 | -3134 | -2072 | -1073 | -6371 | -5086 | -1078 | 976 | 518 | -177 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -2123 | -1895 | -2223 | -3091 | -590 | 432 | -10146 | -8356 | 121 | 593 | 986 | -288 |
| Above Normal (24\%) | -773 | -1085 | -1148 | -4637 | -3015 | -1112 | -8258 | -6134 | -1466 | 200 | 922 | -302 |
| Below Normal (10\%) | -2514 | -2147 | -530 | -4171 | -1823 | -1597 | -5601 | -4551 | -3198 | 407 | 1476 | -7 |
| Dry (16\%) | -1036 | -1140 | -581 | -2594 | -3267 | -2588 | -3531 | -2828 | -1240 | 2104 | -406 | -84 |
| Critical (27\%) | -446 | -748 | -902 | -1548 | -2503 | -1287 | -1587 | -1118 | -1045 | 1291 | -268 | -113 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.13.2 Old and Middle River, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,213 | -4,272 | -3,968 | -2,854 | -824 | -160 | -2,064 | -1,634 | -2,112 | -3,246 | -3,105 | -3,732 |
| 20\% | -3,760 | -5,330 | -6,081 | -4,745 | -2,550 | -1,248 | -3,157 | -2,833 | -2,809 | -5,223 | -4,480 | -5,069 |
| 30\% | -4,915 | -6,950 | -6,787 | -6,261 | -4,041 | -3,273 | -4,168 | -3,932 | -3,314 | -6,217 | -5,712 | -6,231 |
| 40\% | -6,258 | -7,438 | -7,871 | -7,379 | -5,843 | -4,024 | -4,920 | -4,714 | -3,970 | -7,181 | -7,103 | -8,305 |
| 50\% | -7,278 | -8,669 | -8,406 | -8,289 | -6,429 | -4,945 | -5,965 | -5,153 | -5,163 | -8,021 | -8,109 | -9,168 |
| 60\% | -8,071 | -9,221 | -9,004 | -8,845 | -7,331 | -5,427 | -6,654 | -5,526 | -5,795 | -8,941 | -9,175 | -9,647 |
| 70\% | -9,158 | -9,706 | -9,347 | -9,257 | -8,356 | -6,217 | -7,180 | -5,865 | -6,068 | -9,445 | -9,861 | -9,963 |
| 80\% | -9,924 | -9,988 | -9,503 | -9,553 | -8,878 | -6,633 | -7,672 | -6,382 | -6,578 | -9,955 | -10,366 | -10,089 |
| 90\% | -10,188 | -10,067 | -9,686 | -9,795 | -9,516 | -7,604 | -8,033 | -7,291 | -7,016 | -10,733 | -10,684 | -10,164 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,927 | -7,828 | -7,459 | -6,669 | -4,977 | -3,763 | -5,451 | -4,776 | -4,655 | -7,520 | -7,457 | -7,883 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7,970 | -9,125 | -7,749 | -4,991 | -2,581 | -1,121 | -7,036 | -6,345 | -4,153 | -8,364 | -9,546 | -9,646 |
| Above Normal (24\%) | -6,298 | -7,886 | -7,998 | -8,337 | -6,176 | -5,288 | -7,062 | -5,723 | -5,991 | -8,950 | -9,951 | -9,844 |
| Below Normal (10\%) | -8,002 | -8,896 | -8,199 | -8,551 | -5,299 | -5,515 | -5,435 | -4,867 | -6,643 | -10,133 | -8,149 | -8,185 |
| Dry (16\%) | -6,476 | -7,093 | -7,256 | -7,215 | -6,840 | -5,661 | -4,200 | -3,734 | -4,589 | -6,796 | -5,151 | -6,536 |
| Critical (27\%) | -5,117 | -5,206 | -5,908 | -5,862 | -5,471 | -3,067 | -2,373 | -2,005 | -2,584 | -2,950 | -3,436 | -3,906 |


| No Action Alternative |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,764 | -3,724 | -3,812 | -2,823 | -666 | -969 | 3,205 | 2,797 | -1,150 | -4,130 | -2,453 | -3,775 |
| 20\% | -4,076 | -4,560 | -4,673 | -2,823 | -1,771 | -1,394 | 2,207 | 1,304 | -1,570 | -6,849 | -4,032 | -5,147 |
| 30\% | -4,613 | -5,156 | -5,244 | -3,355 | -2,823 | -2,738 | 1,632 | 561 | -3,500 | -7,647 | -5,770 | -6,006 |
| 40\% | -4,820 | -5,627 | -5,871 | -4,392 | -3,314 | -3,500 | 1,268 | 108 | -3,500 | -8,888 | -7,996 | -7,621 |
| 50\% | -5,328 | -6,320 | -5,871 | -4,710 | -3,781 | -3,500 | 612 | -182 | -3,500 | -9,376 | -9,956 | -9,000 |
| 60\% | -5,589 | -6,564 | -5,871 | -5,000 | -4,878 | -4,568 | -102 | -483 | -4,487 | -9,746 | -10,630 | -9,256 |
| 70\% | -6,253 | -7,101 | -7,413 | -5,000 | -5,000 | -5,000 | -448 | -632 | -5,000 | $-10,301$ | -10,737 | -9,653 |
| 80\% | -6,560 | -8,185 | -9,537 | -5,000 | -5,000 | -5,000 | -995 | -1,129 | -5,000 | -10,602 | -10,853 | -9,884 |
| 90\% | -7,404 | -9,995 | -9,681 | -5,000 | -5,000 | -5,000 | -1,247 | -1,414 | -5,000 | -11,108 | -11,083 | -10,032 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | $-5,476$ | -6,380 | -6,228 | $-3,535$ | $-2,905$ | -2,690 | 919 | 310 | $-3,577$ | -8,496 | -7,975 | -7,706 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -5,847 | -7,229 | -5,526 | -1,900 | -1,991 | -1,552 | 3,110 | 2,011 | -4,274 | -8,957 | -10,532 | -9,358 |
| Above Normal (24\%) | -5,525 | -6,801 | -6,850 | -3,699 | -3,161 | -4,176 | 1,196 | 412 | -4,525 | -9,151 | -10,873 | -9,542 |
| Below Normal (10\%) | -5,488 | -6,749 | -7,669 | -4,380 | -3,477 | -3,919 | 165 | -316 | -3,445 | -10,539 | -9,624 | -8,178 |
| Dry (16\%) | -5,440 | -5,953 | -6,676 | -4,621 | -3,573 | -3,072 | -670 | -906 | -3,350 | -8,900 | -4,745 | -6,453 |
| Critical (27\%) | -4,671 | -4,458 | -5,006 | -4,314 | -2,968 | -1,780 | -786 | -887 | -1,539 | -4,242 | -3,168 | -3,793 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -552 | 548 | 156 | 32 | 158 | -809 | 5270 | 4431 | 961 | -883 | 652 | -43 |
| 20\% | -317 | 770 | 1409 | 1922 | 779 | -146 | 5363 | 4137 | 1239 | -1626 | 448 | -78 |
| 30\% | 302 | 1794 | 1543 | 2906 | 1218 | 535 | 5800 | 4493 | -186 | -1429 | -57 | 226 |
| 40\% | 1437 | 1812 | 2000 | 2986 | 2529 | 524 | 6188 | 4822 | 470 | -1707 | -893 | 684 |
| 50\% | 1950 | 2349 | 2535 | 3579 | 2648 | 1445 | 6576 | 4971 | 1663 | -1355 | -1847 | 168 |
| 60\% | 2482 | 2657 | 3133 | 3845 | 2453 | 860 | 6552 | 5043 | 1309 | -805 | -1455 | 391 |
| 70\% | 2905 | 2605 | 1934 | 4257 | 3356 | 1217 | 6732 | 5233 | 1068 | -856 | -876 | 311 |
| 80\% | 3363 | 1803 | -34 | 4553 | 3878 | 1633 | 6677 | 5253 | 1578 | -647 | -488 | 205 |
| 90\% | 2784 | 71 | 5 | 4795 | 4516 | 2604 | 6786 | 5876 | 2016 | -375 | -399 | 133 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1451 | 1448 | 1232 | 3134 | 2072 | 1073 | 6371 | 5086 | 1078 | -976 | -518 | 177 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2123 | 1895 | 2223 | 3091 | 590 | -432 | 10146 | 8356 | -121 | -593 | -986 | 288 |
| Above Normal (24\%) | 773 | 1085 | 1148 | 4637 | 3015 | 1112 | 8258 | 6134 | 1466 | -200 | -922 | 302 |
| Below Normal (10\%) | 2514 | 2147 | 530 | 4171 | 1823 | 1597 | 5601 | 4551 | 3198 | -407 | -1476 | 7 |
| Dry (16\%) | 1036 | 1140 | 581 | 2594 | 3267 | 2588 | 3531 | 2828 | 1240 | -2104 | 406 | 84 |
| Critical (27\%) | 446 | 748 | 902 | 1548 | 2503 | 1287 | 1587 | 1118 | 1045 | -1291 | 268 | 113 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.13.3 Old and Middle River, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,213 | -4,272 | -3,968 | -2,854 | -824 | -160 | -2,064 | -1,634 | -2,112 | -3,246 | -3,105 | -3,732 |
| 20\% | -3,760 | -5,330 | -6,081 | -4,745 | -2,550 | -1,248 | -3,157 | -2,833 | -2,809 | -5,223 | -4,480 | -5,069 |
| 30\% | -4,915 | -6,950 | -6,787 | -6,261 | -4,041 | -3,273 | -4,168 | -3,932 | -3,314 | -6,217 | -5,712 | -6,231 |
| 40\% | -6,258 | -7,438 | -7,871 | -7,379 | -5,843 | -4,024 | -4,920 | -4,714 | -3,970 | -7,181 | -7,103 | -8,305 |
| 50\% | -7,278 | -8,669 | -8,406 | -8,289 | -6,429 | -4,945 | -5,965 | -5,153 | -5,163 | -8,021 | -8,109 | -9,168 |
| 60\% | -8,071 | -9,221 | -9,004 | -8,845 | -7,331 | -5,427 | -6,654 | -5,526 | -5,795 | -8,941 | -9,175 | -9,647 |
| 70\% | -9,158 | -9,706 | -9,347 | -9,257 | -8,356 | -6,217 | -7,180 | -5,865 | -6,068 | -9,445 | -9,861 | -9,963 |
| 80\% | -9,924 | -9,988 | -9,503 | -9,553 | -8,878 | -6,633 | -7,672 | -6,382 | -6,578 | -9,955 | -10,366 | -10,089 |
| 90\% | -10,188 | -10,067 | -9,686 | -9,795 | -9,516 | -7,604 | -8,033 | -7,291 | -7,016 | -10,733 | -10,684 | -10,164 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,927 | -7,828 | -7,459 | -6,669 | -4,977 | $-3,763$ | -5,451 | -4,776 | -4,655 | -7,520 | -7,457 | -7,883 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7,970 | -9,125 | -7,749 | -4,991 | -2,581 | -1,121 | -7,036 | -6,345 | -4,153 | -8,364 | -9,546 | -9,646 |
| Above Normal (24\%) | -6,298 | -7,886 | -7,998 | -8,337 | -6,176 | -5,288 | -7,062 | -5,723 | -5,991 | -8,950 | -9,951 | -9,844 |
| Below Normal (10\%) | -8,002 | -8,896 | -8,199 | -8,551 | -5,299 | -5,515 | -5,435 | -4,867 | -6,643 | -10,133 | -8,149 | -8,185 |
| Dry (16\%) | -6,476 | -7,093 | -7,256 | -7,215 | -6,840 | -5,661 | -4,200 | -3,734 | -4,589 | -6,796 | -5,151 | -6,536 |
| Critical (27\%) | -5,117 | -5,206 | -5,908 | -5,862 | -5,471 | -3,067 | -2,373 | -2,005 | -2,584 | -2,950 | -3,436 | -3,906 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,471 | -4,154 | -3,935 | -2,361 | -447 | -819 | 405 | -673 | -2,098 | -3,660 | -3,007 | -3,495 |
| 20\% | -4,101 | -5,233 | -5,184 | -3,500 | -1,896 | -1,347 | -946 | -1,150 | -4,287 | -5,775 | -4,278 | -5,225 |
| 30\% | -4,803 | -6,947 | -6,403 | -3,500 | -2,838 | -2,283 | -1,200 | -1,150 | -4,625 | -7,093 | -6,258 | -6,437 |
| 40\% | -5,638 | -7,541 | -6,403 | -3,500 | -3,500 | -3,500 | -2,086 | -2,560 | -5,017 | -8,012 | -7,669 | -8,402 |
| 50\% | -7,049 | -8,326 | -6,403 | -5,000 | -3,500 | -3,500 | -2,787 | -3,326 | -5,526 | -8,990 | -9,396 | -9,192 |
| 60\% | -8,252 | -9,400 | -6,811 | -5,000 | -4,273 | -3,616 | -3,368 | -3,500 | -5,750 | -9,549 | -9,845 | -9,680 |
| 70\% | -8,982 | -9,810 | -7,677 | -5,000 | -5,000 | -5,061 | -3,526 | -3,500 | -5,750 | -10,046 | -10,212 | -9,842 |
| 80\% | -9,734 | -9,990 | -8,823 | -5,000 | -5,621 | -6,252 | -4,031 | -4,451 | -6,160 | -10,767 | -10,624 | -10,044 |
| 90\% | -10,085 | -10,084 | -9,552 | -6,976 | -7,500 | -7,499 | -4,474 | -5,149 | $-7,011$ | -11,148 | -10,797 | -10,177 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,888 | -7,771 | -6,494 | $-3,764$ | $-3,283$ | $-3,072$ | $-2,176$ | $-2,623$ | -4,997 | -8,112 | -7,831 | -7,917 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7,965 | -9,052 | -5,964 | -2,522 | -2,581 | -1,646 | -1,367 | -2,399 | -5,476 | -8,581 | -9,731 | -9,555 |
| Above Normal (24\%) | -6,452 | -8,078 | -6,997 | -3,789 | -4,137 | -5,220 | -3,630 | -4,226 | -5,981 | -9,160 | -10,444 | -9,839 |
| Below Normal (10\%) | -7,685 | -8,790 | -7,868 | -4,451 | -3,689 | -4,765 | -2,676 | -2,885 | -5,409 | -10,929 | -10,032 | -8,880 |
| Dry (16\%) | -6,546 | -7,086 | -6,848 | -4,588 | -3,582 | -3,358 | -2,517 | -2,670 | -4,927 | -8,172 | -5,079 | -6,457 |
| Critical (27\%) | -4,869 | -4,871 | -5,252 | -4,429 | -3,011 | -1,804 | -1,328 | -1,054 | -2,628 | -3,280 | -3,450 | -3,839 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -258 | 118 | 33 | 494 | 377 | -660 | 2469 | 960 | 13 | -413 | 98 | 237 |
| 20\% | -341 | 98 | 897 | 1245 | 654 | -99 | 2210 | 1682 | -1478 | -551 | 202 | -156 |
| 30\% | 112 | 3 | 384 | 2761 | 1203 | 990 | 2968 | 2782 | -1311 | -875 | -546 | -205 |
| 40\% | 620 | -103 | 1468 | 3879 | 2343 | 524 | 2834 | 2153 | -1047 | -831 | -566 | -97 |
| 50\% | 229 | 344 | 2002 | 3289 | 2929 | 1445 | 3178 | 1827 | -363 | -969 | -1287 | -24 |
| 60\% | -181 | -178 | 2193 | 3845 | 3058 | 1811 | 3287 | 2026 | 45 | -608 | -670 | -33 |
| 70\% | 176 | -104 | 1669 | 4257 | 3356 | 1156 | 3654 | 2365 | 318 | -601 | -351 | 121 |
| 80\% | 189 | -2 | 680 | 4553 | 3257 | 381 | 3641 | 1930 | 418 | -812 | -258 | 45 |
| 90\% | 103 | -17 | 134 | 2819 | 2016 | 105 | 3558 | 2141 | 5 | -414 | -113 | -13 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 39 | 57 | 965 | 2904 | 1694 | 692 | 3275 | 2153 | -341 | -593 | -374 | -34 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 5 | 73 | 1785 | 2469 | 0 | -525 | 5669 | 3946 | -1323 | -217 | -185 | 91 |
| Above Normal (24\%) | -154 | -192 | 1001 | 4548 | 2039 | 68 | 3432 | 1497 | 10 | -210 | -493 | 5 |
| Below Normal (10\%) | 317 | 106 | 331 | 4100 | 1611 | 751 | 2760 | 1982 | 1234 | -796 | -1883 | -695 |
| Dry (16\%) | -70 | 7 | 408 | 2627 | 3257 | 2303 | 1684 | 1064 | -337 | -1376 | 72 | 80 |
| Critical (27\%) | 248 | 334 | 656 | 1433 | 2460 | 1263 | 1046 | 951 | -44 | -330 | -14 | 68 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.13.4 Old and Middle River, Monthly Flow

Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,213 | -4,272 | -3,968 | -2,854 | -824 | -160 | -2,064 | -1,634 | -2,112 | -3,246 | -3,105 | -3,732 |
| 20\% | -3,760 | -5,330 | -6,081 | -4,745 | -2,550 | -1,248 | -3,157 | -2,833 | -2,809 | -5,223 | -4,480 | -5,069 |
| 30\% | -4,915 | -6,950 | -6,787 | -6,261 | -4,041 | -3,273 | -4,168 | -3,932 | -3,314 | -6,217 | -5,712 | -6,231 |
| 40\% | -6,258 | -7,438 | -7,871 | -7,379 | -5,843 | -4,024 | -4,920 | -4,714 | -3,970 | -7,181 | -7,103 | -8,305 |
| 50\% | -7,278 | -8,669 | -8,406 | -8,289 | -6,429 | -4,945 | -5,965 | -5,153 | -5,163 | -8,021 | -8,109 | -9,168 |
| 60\% | -8,071 | -9,221 | -9,004 | -8,845 | -7,331 | -5,427 | -6,654 | -5,526 | -5,795 | -8,941 | -9,175 | -9,647 |
| 70\% | -9,158 | -9,706 | -9,347 | -9,257 | -8,356 | -6,217 | -7,180 | -5,865 | -6,068 | -9,445 | -9,861 | -9,963 |
| 80\% | -9,924 | -9,988 | -9,503 | -9,553 | -8,878 | -6,633 | -7,672 | -6,382 | -6,578 | -9,955 | -10,366 | -10,089 |
| 90\% | -10,188 | -10,067 | -9,686 | -9,795 | -9,516 | -7,604 | -8,033 | -7,291 | -7,016 | -10,733 | -10,684 | -10,164 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,927 | -7,828 | -7,459 | -6,669 | -4,977 | -3,763 | -5,451 | -4,776 | -4,655 | -7,520 | -7,457 | -7,883 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -7,970 | -9,125 | -7,749 | -4,991 | -2,581 | -1,121 | -7,036 | -6,345 | -4,153 | -8,364 | -9,546 | -9,646 |
| Above Normal (24\%) | -6,298 | -7,886 | -7,998 | -8,337 | -6,176 | -5,288 | -7,062 | -5,723 | -5,991 | -8,950 | -9,951 | -9,844 |
| Below Normal (10\%) | -8,002 | -8,896 | -8,199 | -8,551 | -5,299 | -5,515 | -5,435 | -4,867 | -6,643 | -10,133 | -8,149 | -8,185 |
| Dry (16\%) | -6,476 | -7,093 | -7,256 | -7,215 | -6,840 | -5,661 | -4,200 | -3,734 | -4,589 | -6,796 | -5,151 | -6,536 |
| Critical (27\%) | -5,117 | -5,206 | -5,908 | -5,862 | -5,471 | -3,067 | -2,373 | -2,005 | -2,584 | -2,950 | -3,436 | -3,906 |

Alternative 5

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,722 | -3,722 | -3,826 | -2,823 | -641 | -965 | 3,206 | 2,797 | -1,150 | -4,455 | -3,295 | -3,913 |
| 20\% | -4,102 | -4,558 | -4,737 | -2,823 | -1,771 | -1,394 | 2,134 | 1,335 | -2,319 | -6,620 | -4,451 | -5,247 |
| 30\% | -4,583 | -5,162 | -5,150 | -3,355 | -2,820 | -2,738 | 1,566 | 712 | -3,500 | -8,001 | -6,361 | -6,304 |
| 40\% | -4,858 | -5,603 | -5,871 | -4,378 | -3,267 | -3,500 | 1,270 | 568 | -3,500 | -9,172 | -8,612 | -7,552 |
| 50\% | -5,145 | -6,098 | -5,871 | -4,710 | -3,513 | -3,500 | 623 | 381 | -3,500 | -9,522 | -10,244 | -8,864 |
| 60\% | -5,368 | -6,494 | -5,871 | -5,000 | -4,878 | -4,568 | 381 | 381 | -4,467 | -9,822 | -10,615 | -9,232 |
| 70\% | -6,237 | -7,087 | -7,453 | -5,000 | -5,000 | -5,000 | 381 | 381 | -5,000 | -10,430 | $-10,756$ | -9,654 |
| 80\% | -6,583 | -8,086 | -9,466 | -5,000 | -5,000 | -5,000 | 381 | 381 | -5,000 | -10,694 | -10,844 | -9,915 |
| 90\% | -7,355 | -9,871 | -9,681 | -5,000 | -5,000 | -5,000 | 381 | 381 | -5,000 | -11,168 | -11,076 | -10,031 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | $-5,443$ | $-6,337$ | $-6,246$ | $-3,551$ | $-2,904$ | $-2,710$ | 1,482 | 1,034 | $-3,631$ | -8,687 | -8,239 | -7,714 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -5,812 | -7,354 | -5,572 | -1,900 | -1,926 | -1,598 | 3,122 | 2,182 | -4,275 | -8,965 | -10,573 | -9,193 |
| Above Normal (24\%) | -5,543 | -6,368 | -6,838 | -3,716 | -3,222 | -4,174 | 1,292 | 780 | -4,521 | -9,187 | -10,817 | -9,491 |
| Below Normal (10\%) | -5,418 | -6,748 | -7,637 | -4,380 | -3,554 | -3,971 | 718 | 468 | -3,444 | -10,623 | -9,770 | -8,460 |
| Dry (16\%) | -5,380 | -5,893 | -6,731 | -4,620 | -3,578 | -3,074 | 565 | 453 | -3,523 | -9,446 | -5,313 | -6,571 |
| Critical (27\%) | -4,661 | -4,461 | -4,983 | -4,409 | -2,957 | -1,770 | 363 | 310 | -1,623 | -4,501 | -3,860 | -3,805 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -510 | 550 | 142 | 32 | 183 | -805 | 5270 | 4431 | 961 | -1209 | -189 | -181 |
| 20\% | -343 | 773 | 1345 | 1922 | 779 | -146 | 5291 | 4168 | 490 | -1397 | 30 | -178 |
| 30\% | 332 | 1788 | 1637 | 2906 | 1221 | 535 | 5733 | 4644 | -186 | -1784 | -648 | -73 |
| 40\% | 1400 | 1835 | 2000 | 3001 | 2576 | 524 | 6190 | 5281 | 470 | -1991 | -1509 | 752 |
| 50\% | 2132 | 2571 | 2535 | 3579 | 2916 | 1445 | 6588 | 5534 | 1663 | -1501 | -2135 | 305 |
| 60\% | 2703 | 2727 | 3133 | 3845 | 2453 | 860 | 7036 | 5907 | 1328 | -881 | -1440 | 415 |
| 70\% | 2921 | 2619 | 1893 | 4257 | 3356 | 1217 | 7562 | 6247 | 1068 | -985 | -895 | 309 |
| 80\% | 3340 | 1902 | 37 | 4553 | 3878 | 1633 | 8053 | 6763 | 1578 | -739 | -478 | 174 |
| 90\% | 2833 | 196 | 5 | 4795 | 4516 | 2604 | 8414 | 7672 | 2016 | -435 | -392 | 133 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1485 | 1492 | 1213 | 3118 | 2074 | 1053 | 6933 | 5811 | 1025 | -1167 | -782 | 169 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2158 | 1771 | 2177 | 3091 | 655 | -477 | 10158 | 8528 | -122 | -602 | -1027 | 453 |
| Above Normal (24\%) | 755 | 1517 | 1160 | 4621 | 2954 | 1114 | 8354 | 6502 | 1470 | -236 | -866 | 353 |
| Below Normal (10\%) | 2585 | 2148 | 562 | 4171 | 1746 | 1544 | 6153 | 5335 | 3199 | -490 | -1621 | -275 |
| Dry (16\%) | 1096 | 1200 | 525 | 2595 | 3262 | 2587 | 4766 | 4187 | 1067 | -2650 | -162 | -34 |
| Critical (27\%) | 456 | 744 | 925 | 1453 | 2514 | 1297 | 2737 | 2315 | 962 | -1551 | -424 | 102 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.14 Exports through Jones and Banks Pumping Plants

Table 5C.3.2.14.1 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

No Action Alternative

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 517 | 671 | 721 | 604 | 611 | 675 | 242 | 240 | 509 | 714 | 724 | 671 |
| 20\% | 454 | 572 | 717 | 490 | 532 | 617 | 181 | 151 | 359 | 708 | 724 | 664 |
| 30\% | 434 | 479 | 685 | 427 | 448 | 508 | 158 | 127 | 340 | 694 | 715 | 651 |
| 40\% | 400 | 443 | 558 | 419 | 409 | 479 | 138 | 104 | 318 | 667 | 707 | 623 |
| 50\% | 370 | 415 | 494 | 406 | 380 | 424 | 128 | 97 | 253 | 634 | 692 | 604 |
| 60\% | 336 | 381 | 477 | 396 | 363 | 349 | 121 | 92 | 207 | 588 | 519 | 509 |
| 70\% | 310 | 347 | 454 | 377 | 325 | 312 | 113 | 92 | 192 | 501 | 371 | 410 |
| 80\% | 286 | 302 | 379 | 321 | 267 | 283 | 104 | 92 | 150 | 444 | 240 | 335 |
| 90\% | 250 | 251 | 335 | 280 | 165 | 159 | 89 | 92 | 43 | 232 | 141 | 243 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 378 | 430 | 527 | 426 | 395 | 423 | 154 | 140 | 276 | 558 | 521 | 514 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 410 | 497 | 564 | 513 | 537 | 594 | 204 | 207 | 445 | 669 | 717 | 638 |
| Above Normal (24\%) | 376 | 450 | 562 | 406 | 401 | 496 | 130 | 105 | 315 | 587 | 709 | 628 |
| Below Normal (10\%) | 386 | 456 | 590 | 387 | 354 | 394 | 134 | 100 | 209 | 657 | 622 | 542 |
| Dry (16\%) | 374 | 398 | 510 | 392 | 315 | 318 | 153 | 126 | 194 | 541 | 296 | 426 |
| Critical (27\%) | 314 | 293 | 384 | 349 | 250 | 179 | 93 | 90 | 64 | 223 | 176 | 242 |

Revised Alternative 1

| Statistic | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 738 | 803 | 722 | 707 | 530 | 515 | 526 | 694 | 694 | 671 |
| 20\% | 681 | 671 | 723 | 769 | 684 | 619 | 508 | 417 | 450 | 694 | 694 | 671 |
| 30\% | 626 | 659 | 719 | 746 | 666 | 563 | 481 | 369 | 429 | 691 | 694 | 671 |
| 40\% | 551 | 622 | 717 | 738 | 602 | 542 | 433 | 351 | 408 | 609 | 621 | 668 |
| 50\% | 488 | 590 | 683 | 724 | 552 | 512 | 391 | 314 | 392 | 555 | 529 | 628 |
| 60\% | 426 | 502 | 609 | 645 | 512 | 489 | 336 | 277 | 353 | 474 | 468 | 549 |
| 70\% | 327 | 460 | 554 | 562 | 461 | 459 | 264 | 228 | 316 | 390 | 364 | 408 |
| 80\% | 249 | 349 | 492 | 499 | 393 | 373 | 189 | 169 | 176 | 306 | 281 | 338 |
| 90\% | 196 | 286 | 382 | 371 | 309 | 301 | 109 | 81 | 128 | 146 | 183 | 228 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 467 | 524 | 613 | 638 | 528 | 491 | 355 | 302 | 349 | 494 | 487 | 526 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 544 | 620 | 717 | 724 | 587 | 554 | 485 | 428 | 451 | 632 | 653 | 660 |
| Above Normal (24\%) | 419 | 520 | 641 | 719 | 590 | 568 | 455 | 359 | 411 | 574 | 647 | 648 |
| Below Normal (10\%) | 544 | 595 | 629 | 670 | 471 | 498 | 342 | 296 | 413 | 631 | 525 | 543 |
| Dry (16\%) | 434 | 472 | 550 | 567 | 516 | 491 | 262 | 221 | 273 | 401 | 323 | 431 |
| Critical (27\%) | 336 | 340 | 444 | 451 | 405 | 264 | 135 | 110 | 132 | 138 | 195 | 249 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 34\% | 0\% | 2\% | 33\% | 18\% | 5\% | 119\% | 115\% | 3\% | -3\% | -4\% | 0\% |
| 20\% | 50\% | 17\% | 1\% | 57\% | 29\% | 0\% | 180\% | 176\% | 25\% | -2\% | -4\% | 1\% |
| 30\% | 44\% | 38\% | 5\% | 75\% | 49\% | 11\% | 205\% | 189\% | 26\% | 0\% | -3\% | 3\% |
| 40\% | 38\% | 40\% | 28\% | 76\% | 47\% | 13\% | 214\% | 238\% | 28\% | -9\% | -12\% | 7\% |
| 50\% | 32\% | 42\% | 38\% | 79\% | 45\% | 21\% | 205\% | 225\% | 55\% | -12\% | -24\% | 4\% |
| 60\% | 27\% | 32\% | 28\% | 63\% | 41\% | 40\% | 179\% | 201\% | 70\% | -19\% | -10\% | 8\% |
| 70\% | 5\% | 33\% | 22\% | 49\% | 42\% | 47\% | 133\% | 147\% | 64\% | -22\% | -2\% | 0\% |
| 80\% | -13\% | 16\% | 30\% | 55\% | 48\% | 32\% | 82\% | 83\% | 17\% | -31\% | 17\% | 1\% |
| 90\% | -22\% | 14\% | 14\% | 33\% | 88\% | 89\% | 22\% | -12\% | 200\% | -37\% | 30\% | -6\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 23\% | 22\% | 16\% | 50\% | 34\% | 16\% | 130\% | 117\% | 27\% | -11\% | -6\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 33\% | 25\% | 27\% | 41\% | 9\% | -7\% | 138\% | 107\% | 1\% | -5\% | -9\% | 3\% |
| Above Normal (24\%) | 11\% | 16\% | 14\% | 77\% | 47\% | 14\% | 249\% | 241\% | 30\% | -2\% | -9\% | 3\% |
| Below Normal (10\%) | 41\% | 30\% | 7\% | 73\% | 33\% | 27\% | 154\% | 196\% | 98\% | -4\% | -16\% | 0\% |
| Dry (16\%) | 16\% | 19\% | 8\% | 45\% | 64\% | 55\% | 71\% | 76\% | 41\% | -26\% | 9\% | 1\% |
| Critical (27\%) | 7\% | 16\% | 16\% | 29\% | 62\% | 47\% | 46\% | 23\% | 105\% | -38\% | 11\% | 3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.14.2 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 738 | 803 | 722 | 707 | 530 | 515 | 526 | 694 | 694 | 671 |
| 20\% | 681 | 671 | 723 | 769 | 684 | 619 | 508 | 417 | 450 | 694 | 694 | 671 |
| 30\% | 626 | 659 | 719 | 746 | 666 | 563 | 481 | 369 | 429 | 691 | 694 | 671 |
| 40\% | 551 | 622 | 717 | 738 | 602 | 542 | 433 | 351 | 408 | 609 | 621 | 668 |
| 50\% | 488 | 590 | 683 | 724 | 552 | 512 | 391 | 314 | 392 | 555 | 529 | 628 |
| 60\% | 426 | 502 | 609 | 645 | 512 | 489 | 336 | 277 | 353 | 474 | 468 | 549 |
| 70\% | 327 | 460 | 554 | 562 | 461 | 459 | 264 | 228 | 316 | 390 | 364 | 408 |
| 80\% | 249 | 349 | 492 | 499 | 393 | 373 | 189 | 169 | 176 | 306 | 281 | 338 |
| 90\% | 196 | 286 | 382 | 371 | 309 | 301 | 109 | 81 | 128 | 146 | 183 | 228 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 467 | 524 | 613 | 638 | 528 | 491 | 355 | 302 | 349 | 494 | 487 | 526 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 544 | 620 | 717 | 724 | 587 | 554 | 485 | 428 | 451 | 632 | 653 | 660 |
| Above Normal (24\%) | 419 | 520 | 641 | 719 | 590 | 568 | 455 | 359 | 411 | 574 | 647 | 648 |
| Below Normal (10\%) | 544 | 595 | 629 | 670 | 471 | 498 | 342 | 296 | 413 | 631 | 525 | 543 |
| Dry (16\%) | 434 | 472 | 550 | 567 | 516 | 491 | 262 | 221 | 273 | 401 | 323 | 431 |
| Critical (27\%) | 336 | 340 | 444 | 451 | 405 | 264 | 135 | 110 | 132 | 138 | 195 | 249 |

## No Action Alternative

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 517 | 671 | 721 | 604 | 611 | 675 | 242 | 240 | 509 | 714 | 724 | 671 |
| 20\% | 454 | 572 | 717 | 490 | 532 | 617 | 181 | 151 | 359 | 708 | 724 | 664 |
| 30\% | 434 | 479 | 685 | 427 | 448 | 508 | 158 | 127 | 340 | 694 | 715 | 651 |
| 40\% | 400 | 443 | 558 | 419 | 409 | 479 | 138 | 104 | 318 | 667 | 707 | 623 |
| 50\% | 370 | 415 | 494 | 406 | 380 | 424 | 128 | 97 | 253 | 634 | 692 | 604 |
| 60\% | 336 | 381 | 477 | 396 | 363 | 349 | 121 | 92 | 207 | 588 | 519 | 509 |
| 70\% | 310 | 347 | 454 | 377 | 325 | 312 | 113 | 92 | 192 | 501 | 371 | 410 |
| 80\% | 286 | 302 | 379 | 321 | 267 | 283 | 104 | 92 | 150 | 444 | 240 | 335 |
| 90\% | 250 | 251 | 335 | 280 | 165 | 159 | 89 | 92 | 43 | 232 | 141 | 243 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 378 | 430 | 527 | 426 | 395 | 423 | 154 | 140 | 276 | 558 | 521 | 514 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 410 | 497 | 564 | 513 | 537 | 594 | 204 | 207 | 445 | 669 | 717 | 638 |
| Above Normal (24\%) | 376 | 450 | 562 | 406 | 401 | 496 | 130 | 105 | 315 | 587 | 709 | 628 |
| Below Normal (10\%) | 386 | 456 | 590 | 387 | 354 | 394 | 134 | 100 | 209 | 657 | 622 | 542 |
| Dry (16\%) | 374 | 398 | 510 | 392 | 315 | 318 | 153 | 126 | 194 | 541 | 296 | 426 |
| Critical (27\%) | 314 | 293 | 384 | 349 | 250 | 179 | 93 | 90 | 64 | 223 | 176 | 242 |

No Action Alternative minus Revised Second Basis of Comparison

|  | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -25\% | 0\% | -2\% | -25\% | -15\% | -5\% | -54\% | -53\% | -3\% | 3\% | 4\% | 0\% |
| 20\% | -33\% | -15\% | -1\% | -36\% | -22\% | 0\% | -64\% | -64\% | -20\% | 2\% | 4\% | -1\% |
| 30\% | -31\% | -27\% | -5\% | -43\% | -33\% | -10\% | -67\% | -65\% | -21\% | 0\% | 3\% | -3\% |
| 40\% | -27\% | -29\% | -22\% | -43\% | -32\% | -12\% | -68\% | -70\% | -22\% | 9\% | 14\% | -7\% |
| 50\% | -24\% | -30\% | -28\% | -44\% | -31\% | -17\% | -67\% | -69\% | -36\% | 14\% | 31\% | -4\% |
| 60\% | -21\% | -24\% | -22\% | -39\% | -29\% | -29\% | -64\% | -67\% | -41\% | 24\% | 11\% | -7\% |
| 70\% | -5\% | -25\% | -18\% | -33\% | -30\% | -32\% | -57\% | -60\% | -39\% | 29\% | 2\% | 0\% |
| 80\% | 15\% | -14\% | -23\% | -36\% | -32\% | -24\% | -45\% | -45\% | -14\% | 45\% | -14\% | -1\% |
| 90\% | 28\% | -12\% | -12\% | -25\% | -47\% | -47\% | -18\% | 14\% | -67\% | 58\% | -23\% | 7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -19\% | -18\% | -14\% | -33\% | -25\% | -14\% | -57\% | -54\% | -21\% | 13\% | 7\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -25\% | -20\% | -21\% | -29\% | -8\% | 7\% | -58\% | -52\% | -1\% | 6\% | 10\% | -3\% |
| Above Normal (24\%) | -10\% | -13\% | -12\% | -44\% | -32\% | -13\% | -71\% | -71\% | -23\% | 2\% | 9\% | -3\% |
| Below Normal (10\%) | -29\% | -23\% | -6\% | -42\% | -25\% | -21\% | -61\% | -66\% | -49\% | 4\% | 19\% | 0\% |
| Dry (16\%) | -14\% | -16\% | -7\% | -31\% | -39\% | -35\% | -41\% | -43\% | -29\% | 35\% | -8\% | -1\% |
| Critical (27\%) | -6\% | -14\% | -14\% | -23\% | -38\% | -32\% | -31\% | -18\% | -51\% | 62\% | -10\% | -3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.14.3 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 738 | 803 | 722 | 707 | 530 | 515 | 526 | 694 | 694 | 671 |
| 20\% | 681 | 671 | 723 | 769 | 684 | 619 | 508 | 417 | 450 | 694 | 694 | 671 |
| 30\% | 626 | 659 | 719 | 746 | 666 | 563 | 481 | 369 | 429 | 691 | 694 | 671 |
| 40\% | 551 | 622 | 717 | 738 | 602 | 542 | 433 | 351 | 408 | 609 | 621 | 668 |
| 50\% | 488 | 590 | 683 | 724 | 552 | 512 | 391 | 314 | 392 | 555 | 529 | 628 |
| 60\% | 426 | 502 | 609 | 645 | 512 | 489 | 336 | 277 | 353 | 474 | 468 | 549 |
| 70\% | 327 | 460 | 554 | 562 | 461 | 459 | 264 | 228 | 316 | 390 | 364 | 408 |
| 80\% | 249 | 349 | 492 | 499 | 393 | 373 | 189 | 169 | 176 | 306 | 281 | 338 |
| 90\% | 196 | 286 | 382 | 371 | 309 | 301 | 109 | 81 | 128 | 146 | 183 | 228 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 467 | 524 | 613 | 638 | 528 | 491 | 355 | 302 | 349 | 494 | 487 | 526 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 544 | 620 | 717 | 724 | 587 | 554 | 485 | 428 | 451 | 632 | 653 | 660 |
| Above Normal (24\%) | 419 | 520 | 641 | 719 | 590 | 568 | 455 | 359 | 411 | 574 | 647 | 648 |
| Below Normal (10\%) | 544 | 595 | 629 | 670 | 471 | 498 | 342 | 296 | 413 | 631 | 525 | 543 |
| Dry (16\%) | 434 | 472 | 550 | 567 | 516 | 491 | 262 | 221 | 273 | 401 | 323 | 431 |
| Critical (27\%) | 336 | 340 | 444 | 451 | 405 | 264 | 135 | 110 | 132 | 138 | 195 | 249 |

Alternative 3

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 718 | 653 | 725 | 722 | 547 | 563 | 667 | 694 | 694 | 671 |
| 20\% | 673 | 671 | 691 | 565 | 603 | 622 | 510 | 496 | 461 | 694 | 694 | 671 |
| 30\% | 627 | 652 | 628 | 440 | 524 | 577 | 465 | 452 | 399 | 694 | 694 | 671 |
| 40\% | 552 | 627 | 583 | 422 | 449 | 532 | 437 | 386 | 373 | 680 | 694 | 657 |
| 50\% | 476 | 571 | 546 | 411 | 393 | 460 | 369 | 329 | 355 | 628 | 624 | 640 |
| 60\% | 382 | 501 | 523 | 395 | 365 | 351 | 320 | 281 | 338 | 566 | 502 | 572 |
| 70\% | 322 | 467 | 505 | 377 | 320 | 316 | 255 | 230 | 311 | 448 | 396 | 417 |
| 80\% | 265 | 346 | 479 | 328 | 264 | 288 | 187 | 124 | 252 | 382 | 268 | 344 |
| 90\% | 218 | 276 | 378 | 304 | 202 | 159 | 124 | 102 | 138 | 190 | 170 | 228 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 465 | 520 | 549 | 442 | 426 | 445 | 353 | 330 | 362 | 533 | 513 | 529 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 544 | 615 | 601 | 559 | 594 | 589 | 494 | 490 | 519 | 648 | 667 | 654 |
| Above Normal (24\%) | 430 | 533 | 574 | 414 | 469 | 566 | 441 | 413 | 397 | 586 | 680 | 647 |
| Below Normal (10\%) | 524 | 587 | 607 | 394 | 373 | 448 | 312 | 266 | 330 | 683 | 650 | 588 |
| Dry (16\%) | 440 | 471 | 523 | 389 | 314 | 337 | 270 | 242 | 292 | 492 | 318 | 426 |
| Critical (27\%) | 321 | 319 | 401 | 355 | 251 | 180 | 127 | 100 | 131 | 158 | 196 | 245 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | -3\% | -19\% | 0\% | 2\% | 3\% | 9\% | 27\% | 0\% | 0\% | 0\% |
| 20\% | -1\% | 0\% | -4\% | -26\% | -12\% | 1\% | 0\% | 19\% | 2\% | 0\% | 0\% | 0\% |
| 30\% | 0\% | -1\% | -13\% | -41\% | -21\% | 2\% | -3\% | 22\% | -7\% | 0\% | 0\% | 0\% |
| 40\% | 0\% | 1\% | -19\% | -43\% | -25\% | -2\% | 1\% | 10\% | -9\% | 12\% | 12\% | -2\% |
| 50\% | -3\% | -3\% | -20\% | -43\% | -29\% | -10\% | -6\% | 5\% | -9\% | 13\% | 18\% | 2\% |
| 60\% | -10\% | 0\% | -14\% | -39\% | -29\% | -28\% | -5\% | 1\% | -4\% | 20\% | 7\% | 4\% |
| 70\% | -2\% | 1\% | -9\% | -33\% | -31\% | -31\% | -3\% | 1\% | -1\% | 15\% | 9\% | 2\% |
| 80\% | 7\% | -1\% | -3\% | -34\% | -33\% | -23\% | -1\% | -26\% | 43\% | 25\% | -5\% | 2\% |
| 90\% | 11\% | -3\% | -1\% | -18\% | -35\% | -47\% | 14\% | 25\% | 7\% | 30\% | -7\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | -1\% | -10\% | -31\% | -19\% | -9\% | -1\% | 9\% | 4\% | 8\% | 5\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | -1\% | -16\% | -23\% | 1\% | 6\% | 2\% | 14\% | 15\% | 2\% | 2\% | -1\% |
| Above Normal (24\%) | 3\% | 2\% | -10\% | -42\% | -21\% | 0\% | -3\% | 15\% | -3\% | 2\% | 5\% | 0\% |
| Below Normal (10\%) | -4\% | -1\% | -3\% | -41\% | -21\% | -10\% | -9\% | -10\% | -20\% | 8\% | 24\% | 8\% |
| Dry (16\%) | 1\% | 0\% | -5\% | -31\% | -39\% | -31\% | 3\% | 9\% | 7\% | 23\% | -1\% | -1\% |
| Critical (27\%) | -4\% | -6\% | -10\% | -21\% | -38\% | -32\% | -6\% | -9\% | 0\% | 15\% | 0\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.14.4 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Revised Second Basis of Comparison

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 738 | 803 | 722 | 707 | 530 | 515 | 526 | 694 | 694 | 671 |
| 20\% | 681 | 671 | 723 | 769 | 684 | 619 | 508 | 417 | 450 | 694 | 694 | 671 |
| 30\% | 626 | 659 | 719 | 746 | 666 | 563 | 481 | 369 | 429 | 691 | 694 | 671 |
| 40\% | 551 | 622 | 717 | 738 | 602 | 542 | 433 | 351 | 408 | 609 | 621 | 668 |
| 50\% | 488 | 590 | 683 | 724 | 552 | 512 | 391 | 314 | 392 | 555 | 529 | 628 |
| 60\% | 426 | 502 | 609 | 645 | 512 | 489 | 336 | 277 | 353 | 474 | 468 | 549 |
| 70\% | 327 | 460 | 554 | 562 | 461 | 459 | 264 | 228 | 316 | 390 | 364 | 408 |
| 80\% | 249 | 349 | 492 | 499 | 393 | 373 | 189 | 169 | 176 | 306 | 281 | 338 |
| 90\% | 196 | 286 | 382 | 371 | 309 | 301 | 109 | 81 | 128 | 146 | 183 | 228 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 467 | 524 | 613 | 638 | 528 | 491 | 355 | 302 | 349 | 494 | 487 | 526 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 544 | 620 | 717 | 724 | 587 | 554 | 485 | 428 | 451 | 632 | 653 | 660 |
| Above Normal (24\%) | 419 | 520 | 641 | 719 | 590 | 568 | 455 | 359 | 411 | 574 | 647 | 648 |
| Below Normal (10\%) | 544 | 595 | 629 | 670 | 471 | 498 | 342 | 296 | 413 | 631 | 525 | 543 |
| Dry (16\%) | 434 | 472 | 550 | 567 | 516 | 491 | 262 | 221 | 273 | 401 | 323 | 431 |
| Critical (27\%) | 336 | 340 | 444 | 451 | 405 | 264 | 135 | 110 | 132 | 138 | 195 | 249 |

Alternative 5

| Statistic | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 514 | 671 | 721 | 604 | 613 | 677 | 223 | 218 | 509 | 714 | 724 | 671 |
| 20\% | 454 | 553 | 717 | 490 | 528 | 612 | 165 | 127 | 359 | 709 | 724 | 662 |
| 30\% | 429 | 479 | 685 | 427 | 448 | 528 | 134 | 91 | 340 | 696 | 715 | 648 |
| 40\% | 378 | 443 | 558 | 419 | 416 | 479 | 122 | 83 | 318 | 678 | 705 | 626 |
| 50\% | 360 | 408 | 496 | 405 | 380 | 424 | 111 | 71 | 251 | 646 | 693 | 598 |
| 60\% | 334 | 375 | 481 | 396 | 363 | 349 | 97 | 50 | 207 | 606 | 571 | 508 |
| 70\% | 311 | 347 | 452 | 377 | 323 | 312 | 80 | 38 | 193 | 568 | 401 | 415 |
| 80\% | 289 | 302 | 387 | 319 | 267 | 283 | 45 | 23 | 178 | 445 | 278 | 347 |
| 90\% | 245 | 250 | 337 | 280 | 165 | 159 | 30 | 7 | 42 | 271 | 192 | 254 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 376 | 427 | 528 | 427 | 394 | 423 | 122 | 99 | 279 | 570 | 538 | 514 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 408 | 505 | 564 | 514 | 532 | 592 | 202 | 202 | 444 | 667 | 718 | 627 |
| Above Normal (24\%) | 376 | 423 | 561 | 407 | 405 | 496 | 127 | 92 | 315 | 590 | 705 | 625 |
| Below Normal (10\%) | 381 | 456 | 588 | 387 | 359 | 397 | 103 | 55 | 208 | 663 | 632 | 561 |
| Dry (16\%) | 370 | 394 | 513 | 392 | 315 | 318 | 80 | 41 | 205 | 577 | 333 | 433 |
| Critical (27\%) | 313 | 293 | 382 | 355 | 249 | 179 | 34 | 20 | 69 | 239 | 222 | 243 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -26\% | 0\% | -2\% | -25\% | -15\% | -4\% | -58\% | -58\% | -3\% | 3\% | 4\% | 0\% |
| 20\% | -33\% | -18\% | -1\% | -36\% | -23\% | -1\% | -67\% | -70\% | -20\% | 2\% | 4\% | -1\% |
| 30\% | -32\% | -27\% | -5\% | -43\% | -33\% | -6\% | -72\% | -75\% | -21\% | 1\% | 3\% | -4\% |
| 40\% | -31\% | -29\% | -22\% | -43\% | -31\% | -12\% | -72\% | -77\% | -22\% | 11\% | 14\% | -6\% |
| 50\% | -26\% | -31\% | -27\% | -44\% | -31\% | -17\% | -72\% | -77\% | -36\% | 16\% | 31\% | -5\% |
| 60\% | -22\% | -25\% | -21\% | -39\% | -29\% | -29\% | -71\% | -82\% | -41\% | 28\% | 22\% | -8\% |
| 70\% | -5\% | -25\% | -18\% | -33\% | -30\% | -32\% | -70\% | -84\% | -39\% | 46\% | 10\% | 2\% |
| 80\% | 16\% | -14\% | -21\% | -36\% | -32\% | -24\% | -76\% | -86\% | 1\% | 45\% | -1\% | 3\% |
| 90\% | 25\% | -13\% | -12\% | -25\% | -47\% | -47\% | -72\% | -91\% | -67\% | 85\% | 5\% | 11\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -19\% | -18\% | -14\% | -33\% | -25\% | -14\% | -66\% | -67\% | -20\% | 15\% | 10\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -25\% | -19\% | -21\% | -29\% | -9\% | 7\% | -58\% | -53\% | -1\% | 6\% | 10\% | -5\% |
| Above Normal (24\%) | -10\% | -19\% | -12\% | -43\% | -31\% | -13\% | -72\% | -74\% | -23\% | 3\% | 9\% | -4\% |
| Below Normal (10\%) | -30\% | -23\% | -6\% | -42\% | -24\% | -20\% | -70\% | -82\% | -50\% | 5\% | 21\% | 3\% |
| Dry (16\%) | -15\% | -16\% | -7\% | -31\% | -39\% | -35\% | -69\% | -81\% | -25\% | 44\% | 3\% | 0\% |
| Critical (27\%) | -7\% | -14\% | -14\% | -21\% | -38\% | -32\% | -75\% | -82\% | -48\% | 74\% | 14\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.15 CVP Deliveries

| Table SC.3.2.15.1.1 CALS | , |  | 兂 | Revised Alternative 1 | No Action Alternative | Revised Alternative 1 minus No Action Alternative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,858 | 1,859 | -1 |
|  |  |  | Dry | 1,905 | 1,906 | -1 |
|  |  |  | Critical | 1,732 | 1,737 | -5 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 155 | 146 | 8 |
|  |  |  | Dry | 151 | 146 | 5 |
|  |  |  | Critical | 105 | 102 | 3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 214 | 207 | 7 |
|  |  |  | Dry | 192 | 186 | 5 |
|  |  |  | Critical | 151 | 152 | -1 |
| CVP Ag | Contract Delivery (annual average does not include Settlement contractors) | (TAF/year) | Long Term | 219 | 185 | 34 |
|  |  |  | Dry | 122 | 86 | 37 |
|  |  |  | Critical | 35 | 24 | 12 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 260 | 261 | 0 |
|  |  |  | Dry | 268 | 269 | -1 |
|  |  |  | Critical | 221 | 224 | -3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 348 | 269 | 79 |
|  |  |  | Dry | 203 | 140 | 63 |
|  |  |  | Critical | 61 | 41 | 20 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 288 | 275 | 13 |
|  |  |  | Dry | 284 | 274 | 10 |
|  |  |  | Critical | 269 | 264 | 4 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 43 | 33 | 11 |
|  |  |  | Dry | 25 | 17 | 8 |
|  |  |  | Critical | 7 | 5 | 2 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 709 | 545 | 164 |
|  |  |  | Dry | 422 | 288 | 134 |
|  |  |  | Critical | 127 | 85 | 41 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,959 | 4,646 | 313 |
|  |  |  | Dry | 4,459 3,460 | 4,198 | 261 74 |
|  |  |  |  | 3,460 | 3,385 |  |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

|  |  |  |  | Revised Alternative 1 | No Action Alternative | Revised Alternative 1 minus No Action Alternative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} 219 \\ 122 \\ 35 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 185 \\ 86 \\ 24 \\ \hline \end{gathered}$ | $\begin{aligned} & 34 \\ & 37 \\ & 12 \\ & \hline \end{aligned}$ |
| CVP M\& (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 485 \\ & 461 \\ & 408 \\ & \hline \end{aligned}$ | $\begin{aligned} & 467 \\ & 447 \\ & 405 \\ & \hline \end{aligned}$ | $\begin{gathered} 18 \\ 14 \\ 3 \\ \hline \end{gathered}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 120 \\ 105 \\ 79 \\ \hline \end{gathered}$ | $\begin{gathered} 113 \\ 97 \\ 75 \\ \hline \end{gathered}$ | $\begin{aligned} & 7 \\ & 8 \\ & 5 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 1,858 \\ & 1,905 \\ & 1,732 \end{aligned}$ | $\begin{aligned} & 1,859 \\ & 1,906 \\ & 1,737 \end{aligned}$ | $\begin{aligned} & -1 \\ & -1 \\ & -5 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & 146 \\ & 146 \\ & 102 \\ & \hline \end{aligned}$ | $\begin{aligned} & 8 \\ & 5 \\ & 3 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 2,717 \\ & 2,639 \\ & 2,281 \end{aligned}$ | $\begin{aligned} & 2,658 \\ & 2,584 \\ & 2,268 \end{aligned}$ | $\begin{aligned} & 59 \\ & 55 \\ & 13 \\ & \hline \end{aligned}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 1,100 \\ 650 \\ 195 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 847 \\ & 445 \\ & 131 \\ & \hline \end{aligned}$ | $\begin{gathered} 253 \\ 206 \\ 64 \\ \hline \end{gathered}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & 15 \\ & 14 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \\ & 1 \\ & 1 \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 260 \\ & 268 \\ & 221 \\ & \hline \end{aligned}$ | $\begin{aligned} & 261 \\ & 269 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 0 \\ -1 \\ -3 \\ \hline \end{gathered}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} 1,377 \\ 933 \\ 428 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,123 \\ 727 \\ 366 \\ \hline \end{gathered}$ | $\begin{gathered} 254 \\ 206 \\ 62 \\ \hline \end{gathered}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 514 \\ & 524 \\ & 486 \\ & \hline \end{aligned}$ | $\begin{aligned} & 508 \\ & 524 \\ & 445 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 6 \\ 0 \\ 42 \\ \hline \end{gathered}$ |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 118 \\ 98 \\ 25 \end{gathered}$ | $\begin{gathered} 104 \\ 84 \\ 4 \end{gathered}$ | $\begin{aligned} & 15 \\ & 13 \\ & 21 \end{aligned}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & 632 \\ & 621 \\ & 511 \\ & \hline \end{aligned}$ | $\begin{aligned} & 611 \\ & 608 \\ & 449 \\ & \hline \end{aligned}$ | $\begin{aligned} & 21 \\ & 13 \\ & 63 \\ & \hline \end{aligned}$ |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley $40-30-30$ Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

| .3.2.15.2.1 | ry Reporting Metrics, Long-T | ver | Dry an | Year Aver <br> No Action Alternative | s, CVP Deliver <br> Revised Second Basis of Comparison |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,859 | 1,858 | 1 |
|  |  |  | Dry | 1,906 | 1,905 | 1 |
|  |  |  | Critical | 1,737 | 1,732 | 5 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 146 | 155 | -8 |
|  |  |  | Dry | 146 | 151 | -5 |
|  |  |  | Critical | 102 | 105 | -3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 207 | 214 | -7 |
|  |  |  | Dry | 186 | 192 | -5 |
|  |  |  | Critical | 152 | 151 | 1 |
| CVP Ag | Contract Delivery (annual average does not include Settlement contractors) | (TAF/year) | Long Term | 185 | 219 | -34 |
|  |  |  | Dry | 86 24 | 122 35 | -37 -12 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 260 | 0 |
|  |  |  | Dry | 269 | 268 | 1 |
|  |  |  | Critical | 224 | 221 | 3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) |  | 269 | 348 | -79 |
|  |  |  | Dry | 140 | 203 | -63 |
|  |  |  | Critical | 41 | 61 | -20 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 275 | 288 | -13 |
|  |  |  | Dry | 274 | 284 | -10 |
|  |  |  | Critical | 264 | 269 | -4 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 33 | 43 | -11 |
|  |  |  |  | 17 | 25 | -8 |
|  |  |  | Critical | 5 | 7 | -2 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 545 | 709 | -164 |
|  |  |  | Dry | 288 | 422 | -134 |
|  |  |  | Critical | 85 | 127 | -41 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,646 | 4,959 | -313 |
|  |  |  | Dry Critical | 4,198 3,385 | 4,459 3,460 | $\begin{aligned} & -261 \\ & -74 \\ & \hline \end{aligned}$ |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

| Table SC.3.2.15.2.2 CALSIM II Sum | Reporting Metrics, Long-T | Averag | Dry | Year Aver <br> No Action Alternative | s, CVP Deliveri <br> Revised Second Basis of Comparison | No Action Alternative minus Revised Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{gathered} 185 \\ 86 \\ 24 \end{gathered}$ | $\begin{gathered} 219 \\ 122 \\ 35 \end{gathered}$ | $\begin{aligned} & -34 \\ & -37 \\ & -12 \end{aligned}$ |
| CVP M\&I <br> (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & \quad 267 \\ & 4647 \\ & 405 \\ & \hline \end{aligned}$ | $\begin{aligned} & 485 \\ & 461 \\ & 408 \end{aligned}$ | $\begin{aligned} & -18 \\ & -14 \\ & -3 \end{aligned}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & 113 \\ & 97 \\ & 75 \end{aligned}$ | $\begin{aligned} & 120 \\ & 105 \\ & 79 \\ & \hline \end{aligned}$ | $\begin{aligned} & -7 \\ & -8 \\ & -5 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 1,859 \\ & 1,906 \\ & 1,737 \end{aligned}$ | $\begin{aligned} & 1,858 \\ & 1,905 \\ & 1,732 \end{aligned}$ | $\begin{aligned} & 1 \\ & \hline 1 \\ & 1 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & 146 \\ & 146 \\ & 102 \end{aligned}$ | $\begin{aligned} & 155 \\ & 151 \\ & 105 \end{aligned}$ | $\begin{aligned} & \hline-8 \\ & -5 \\ & -3 \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & 2,658 \\ & 2,584 \\ & 2,268 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2,717 \\ & 2,639 \\ & 2,281 \end{aligned}$ | $\begin{aligned} & \hline-59 \\ & -55 \\ & -13 \end{aligned}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & 847 \\ & 445 \\ & 131 \end{aligned}$ | $\begin{gathered} 1,100 \\ 650 \\ 195 \\ \hline \end{gathered}$ | $\begin{aligned} & -253 \\ & -206 \\ & -64 \end{aligned}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 15 \\ & 14 \\ & 11 \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \\ & 12 \end{aligned}$ | $\begin{aligned} & \hline-2 \\ & -1 \\ & -1 \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & 261 \\ & 269 \\ & 224 \end{aligned}$ | $\begin{aligned} & 260 \\ & 268 \\ & 221 \end{aligned}$ | $\begin{aligned} & 10 \\ & 1 \\ & 3 \\ & \hline \end{aligned}$ |
|  |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 1,123 \\ & 727 \\ & 366 \end{aligned}$ | $\begin{aligned} & 1,377 \\ & 933 \\ & 428 \end{aligned}$ | $\begin{aligned} & -254 \\ & -206 \\ & -62 \end{aligned}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry | 508 524 | 514 524 | -6 0 |
|  |  |  | Critical | 445 | 486 | -42 |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 104 \\ 84 \\ 4 \end{gathered}$ | $\begin{gathered} 118 \\ 98 \\ 25 \end{gathered}$ | $\begin{aligned} & \hline-15 \\ & -13 \\ & -21 \end{aligned}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term <br> Dry <br> Critical | $\begin{aligned} & 611 \\ & 608 \\ & 449 \end{aligned}$ | $\begin{aligned} & 632 \\ & 621 \end{aligned}$ | $\begin{aligned} & \hline-21 \\ & -13 \\ & -63 \end{aligned}$ |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.3.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

|  |  |  |  | Alternative 3 | Revised Second Basis of Comparison | Alternative 3 minus Revised Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,860 | 1,858 | 2 |
|  |  |  | Dry | 1,906 | 1,905 | 1 |
|  |  |  | Critical | 1,742 | 1,732 | 10 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 153 | 155 | -1 |
|  |  |  | Dry | 149 | 151 | -2 |
|  |  |  | Critical | 103 | 105 | -2 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 214 | 214 | 0 |
|  |  |  | Dry | 192 | 192 | 0 |
|  |  |  | Critical | 152 | 151 | 2 |
| CVP Ag | Contract Delivery (annual average does not include Settlement contractors) | (TAF/year) | Long Term | 209 | 219 | -10 |
|  |  |  | Dry Critical | 111 31 | 122 35 | -11 -4 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 260 | 1 |
|  |  |  | Dry | 269 | 268 | 1 |
|  |  |  | Critical | 224 | 221 | 3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 342 | 348 | -6 |
|  |  |  | Dry | 185 | 203 | -17 |
|  |  |  | Critical | 53 | 61 | -8 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 286 | 288 | -2 |
|  |  |  | Dry | 283 | 284 | -1 |
|  |  |  | Critical | 267 | 269 | -2 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 42 | 43 | -1 |
|  |  |  | Dry | 23 | 25 | -2 |
|  |  |  | Critical | 6 | 7 | -1 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 696 | 709 | -13 |
|  |  |  | Dry | 387 | 422 | -35 |
|  |  |  | Critical | 108 | 127 | -18 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,927 | 4,959 | -32 |
|  |  |  | Dry | 4,392 | 4,459 | -67 |
|  |  |  | Critical | 3,437 | 3,460 | -22 |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.3.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

| Table 5 .3.15.3.2 |  |  |  | Alternative 3 | Revised Second Basis of Comparison | Alternative 3 minus Revised Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 209 \\ 111 \\ 31 \\ \hline \end{gathered}$ | $\begin{gathered} 219 \\ 122 \\ 35 \\ \hline \end{gathered}$ | $\begin{gathered} -10 \\ -11 \\ -4 \end{gathered}$ |
| CVP M\& (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 483 \\ & 460 \\ & 408 \\ & \hline \end{aligned}$ | $\begin{aligned} & 485 \\ & 461 \\ & 408 \\ & \hline \end{aligned}$ | $\begin{gathered} -2 \\ -1 \\ 0 \\ \hline \end{gathered}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 118 \\ 104 \\ 78 \\ \hline \end{gathered}$ | $\begin{aligned} & 120 \\ & 105 \\ & 79 \\ & \hline \end{aligned}$ | $\begin{aligned} & -2 \\ & -1 \\ & -2 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 1,860 \\ & 1,906 \\ & 1,742 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,858 \\ & 1,905 \\ & 1,732 \\ & \hline \end{aligned}$ | $\begin{gathered} 2 \\ 1 \\ 10 \\ \hline \end{gathered}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 153 \\ & 149 \\ & 103 \\ & \hline \end{aligned}$ | $\begin{aligned} & 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & -1 \\ & -2 \\ & -2 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 2,706 \\ & 2,626 \\ & 2,284 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2,717 \\ & 2,639 \\ & 2,281 \\ & \hline \end{aligned}$ | $\begin{gathered} -11 \\ -13 \\ 3 \\ \hline \end{gathered}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 1,079 \\ 596 \\ 168 \\ \hline \end{gathered}$ | $\begin{gathered} 1,100 \\ 650 \\ 195 \\ \hline \end{gathered}$ | $\begin{aligned} & -20 \\ & -55 \\ & -28 \\ & \hline \end{aligned}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 17 \\ & 15 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 261 \\ & 269 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & 260 \\ & 268 \\ & 221 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 3 \end{aligned}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} 1,357 \\ 879 \\ 403 \end{gathered}$ | $\begin{gathered} \hline 1,377 \\ 933 \\ 428 \end{gathered}$ | $\begin{aligned} & -20 \\ & -54 \\ & -25 \end{aligned}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 513 \\ & 524 \\ & 478 \\ & \hline \end{aligned}$ | $\begin{aligned} & 514 \\ & 524 \\ & 486 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-1 \\ 0 \\ -8 \\ \hline \end{gathered}$ |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 123 \\ 109 \\ 36 \end{gathered}$ | $\begin{gathered} 118 \\ 98 \\ 25 \end{gathered}$ | $\begin{gathered} 5 \\ 12 \\ 11 \end{gathered}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & \hline 636 \\ & 633 \\ & 514 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 632 \\ & 621 \\ & 511 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 4 \\ 12 \\ 3 \\ \hline \end{gathered}$ |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.4.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

|  |  |  |  | Alternative 5 | Revised Second Basis of Comparison | Alternative 5 minus Revised Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,861 | 1,858 | 3 |
|  |  |  | Dry | 1,906 | 1,905 | 1 |
|  |  |  | Critical | 1,747 | 1,732 | 15 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 146 | 155 | -8 |
|  |  |  | Dry | 145 | 151 | -6 |
|  |  |  | Critical | 103 | 105 | -2 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 207 | 214 | -6 |
|  |  |  | Dry | 186 | 192 | -6 |
|  |  |  | Critical | 152 | 151 | 1 |
| CVP Ag | Contract Delivery (annual average does not include Settlement contractors) | (TAF/year) | Long Term | 185 | 219 | -34 |
|  |  |  | Dry Critical | 85 24 | 122 35 | -37 -11 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 260 | 0 |
|  |  |  | Dry | 269 | 268 | 1 |
|  |  |  | Critical | 222 | 221 | 0 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 264 | 348 | -84 |
|  |  |  | Dry | 135 | 203 | -68 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 275 | 288 | -13 |
|  |  |  | Dry | 275 | 284 | -9 |
|  |  |  | Critical | 264 | 269 | -5 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 32 | 43 | -11 |
|  |  |  | Dry | 17 | 25 | -8 |
|  |  |  | Critical | 5 | 7 | -2 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 538 | 709 | -171 |
|  |  |  |  | 281 | 422 | -141 |
|  |  |  | Critical | 85 | 127 | -42 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,634 | 4,959 | -324 |
|  |  |  | Dry | 4,186 | 4,459 | -273 |
|  |  |  | Critical | 3,393 | 3,460 | -67 |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.4.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP Deliveries

| ( ${ }^{\text {a }}$ | Reporting Metrics, Long-T |  |  | Alternative 5 | Revised Second Basis of Comparison | Alternative 5 minus Revised Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 185 \\ 85 \\ 24 \\ \hline \end{gathered}$ | $\begin{gathered} 219 \\ 122 \\ 35 \\ \hline \end{gathered}$ | $\begin{aligned} & -34 \\ & -37 \\ & -11 \end{aligned}$ |
| CVP M\&I (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 467 \\ & 447 \\ & 405 \end{aligned}$ | $\begin{aligned} & 485 \\ & 461 \\ & 408 \\ & \hline \end{aligned}$ | $\begin{gathered} -18 \\ -14 \\ -3 \\ \hline \end{gathered}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 112 \\ 96 \\ 74 \\ \hline \end{gathered}$ | $\begin{aligned} & 120 \\ & 105 \\ & 79 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-7 \\ & -9 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 1,861 \\ & 1,906 \\ & 1,747 \end{aligned}$ | $\begin{aligned} & 1,858 \\ & 1,905 \\ & 1,732 \end{aligned}$ | $\begin{gathered} 3 \\ 1 \\ 15 \end{gathered}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 146 \\ & 145 \\ & 103 \\ & \hline \end{aligned}$ | $\begin{aligned} & 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-8 \\ & -6 \\ & -2 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & \hline 2,660 \\ & 2,584 \\ & 2,279 \end{aligned}$ | $\begin{aligned} & \hline 2,717 \\ & 2,639 \\ & 2,281 \\ & \hline \end{aligned}$ | $\begin{aligned} & -57 \\ & -55 \\ & -2 \\ & \hline \end{aligned}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 834 \\ & 433 \\ & 130 \\ & \hline \end{aligned}$ | $\begin{gathered} 1,100 \\ 650 \\ 195 \\ \hline \end{gathered}$ | $\begin{aligned} & -266 \\ & -217 \\ & -65 \\ & \hline \end{aligned}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 15 \\ & 14 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & -2 \\ & -1 \\ & -1 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 261 \\ & 269 \\ & 222 \\ & \hline \end{aligned}$ | $\begin{aligned} & 260 \\ & 268 \\ & 221 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & 1 \\ & 0 \\ & \hline \end{aligned}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 1,110 \\ 715 \\ 363 \end{gathered}$ | $\begin{gathered} 1,377 \\ 933 \\ 428 \end{gathered}$ | $\begin{gathered} \hline-267 \\ -217 \\ -65 \end{gathered}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 502 \\ & 524 \\ & 406 \\ & \hline \end{aligned}$ | $\begin{aligned} & 514 \\ & 524 \\ & 486 \\ & \hline \end{aligned}$ | $\begin{gathered} -12 \\ 0 \\ -80 \\ \hline \end{gathered}$ |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 100 \\ 69 \\ 8 \end{gathered}$ | $\begin{gathered} 118 \\ 98 \\ 25 \end{gathered}$ | $\begin{aligned} & -19 \\ & -29 \\ & -17 \end{aligned}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 602 \\ & 593 \\ & 414 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 632 \\ & 621 \\ & 511 \\ & \hline \end{aligned}$ | $\begin{aligned} & -31 \\ & -29 \\ & -97 \end{aligned}$ |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley $40-30-30$ Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text. 6) Annual deliveries are based on March to February Average.

Table 5C.3.2.15.5 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Av

|  | Stanislaus Deliveries |  | Difference from No Action <br> Alternative |  | Difference from Second Basis <br> of Comparison |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CVP | Water Rights | CVP | Water Rights | CVP | Water Rights |
|  | (TAF) | (TAF) | (TAF) | (TAF) | (TAF) | (TAF) |
|  | 103.5 | 507.8 |  |  |  |  |
| Revised Second Basis of <br> Comparison | 118.3 | 514.0 | 14.8 | 6.2 |  |  |
| Alternative 2 | 103.5 | 507.8 |  |  | -14.8 | -6.2 |
| Alternative 3 | 123.2 | 512.7 | 19.6 | 4.9 | 4.8 | -1.2 |
| Alternative 5 | 99.7 | 502.1 | -3.8 | -5.7 | -18.6 | -11.9 |

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.16 CVP Total Generating Capacity

Table 5C.3.2.16.1 CVP Total Capacity, Monthly Capacity

No Action Alternative

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,688 | 1,743 | 1,810 | 1,854 | 1,883 | 1,895 | 1,877 | 1,848 | 1,785 | 1,749 | 1,670 | 1,647 |
| 20\% | 1,638 | 1,724 | 1,772 | 1,829 | 1,858 | 1,872 | 1,842 | 1,806 | 1,719 | 1,695 | 1,623 | 1,615 |
| 30\% | 1,600 | 1,694 | 1,744 | 1,802 | 1,837 | 1,842 | 1,825 | 1,782 | 1,671 | 1,623 | 1,585 | 1,599 |
| 40\% | 1,579 | 1,635 | 1,710 | 1,776 | 1,811 | 1,812 | 1,793 | 1,736 | 1,634 | 1,583 | 1,545 | 1,553 |
| 50\% | 1,550 | 1,611 | 1,681 | 1,732 | 1,778 | 1,782 | 1,757 | 1,711 | 1,607 | 1,543 | 1,510 | 1,516 |
| 60\% | 1,529 | 1,556 | 1,622 | 1,700 | 1,749 | 1,752 | 1,725 | 1,652 | 1,564 | 1,504 | 1,481 | 1,473 |
| 70\% | 1,465 | 1,519 | 1,588 | 1,661 | 1,712 | 1,714 | 1,685 | 1,618 | 1,524 | 1,457 | 1,433 | 1,432 |
| 80\% | 1,354 | 1,428 | 1,521 | 1,584 | 1,666 | 1,675 | 1,637 | 1,578 | 1,440 | 1,353 | 1,332 | 1,342 |
| 90\% | 1,137 | 1,293 | 1,403 | 1,455 | 1,476 | 1,502 | 1,454 | 1,384 | 1,203 | 1,120 | 1,085 | 1,103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,476 | 1,542 | 1,612 | 1,685 | 1,727 | 1,734 | 1,705 | 1,648 | 1,542 | 1,468 | 1,429 | 1,430 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,621 | 1,696 | 1,761 | 1,824 | 1,860 | 1,877 | 1,859 | 1,831 | 1,753 | 1,717 | 1,645 | 1,628 |
| Above Normal (16\%) | 1,465 | 1,580 | 1,676 | 1,762 | 1,814 | 1,814 | 1,793 | 1,741 | 1,633 | 1,590 | 1,545 | 1,541 |
| Below Normal (13\%) | 1,530 | 1,580 | 1,669 | 1,719 | 1,764 | 1,757 | 1,728 | 1,665 | 1,559 | 1,491 | 1,478 | 1,483 |
| Dry (24\%) | 1,441 | 1,491 | 1,556 | 1,637 | 1,690 | 1,709 | 1,680 | 1,607 | 1,508 | 1,434 | 1,418 | 1,433 |
| Critical (15\%) | 1,180 | 1,221 | 1,264 | 1,348 | 1,374 | 1,355 | 1,299 | 1,205 | 1,025 | 832 | 808 | 825 |

Revised Alternative 1

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,773 | 1,820 | 1,859 | 1,890 | 1,911 | 1,950 | 1,942 | 1,907 | 1,822 | 1,762 | 1,756 | 1,742 |
| 20\% | 1,746 | 1,799 | 1,838 | 1,869 | 1,899 | 1,930 | 1,918 | 1,861 | 1,752 | 1,690 | 1,682 | 1,693 |
| 30\% | 1,701 | 1,778 | 1,823 | 1,859 | 1,892 | 1,909 | 1,897 | 1,824 | 1,699 | 1,626 | 1,621 | 1,658 |
| 40\% | 1,661 | 1,742 | 1,796 | 1,842 | 1,878 | 1,889 | 1,873 | 1,787 | 1,665 | 1,606 | 1,584 | 1,581 |
| 50\% | 1,594 | 1,703 | 1,761 | 1,819 | 1,858 | 1,874 | 1,840 | 1,764 | 1,622 | 1,557 | 1,552 | 1,553 |
| 60\% | 1,570 | 1,647 | 1,720 | 1,783 | 1,829 | 1,842 | 1,802 | 1,721 | 1,598 | 1,527 | 1,501 | 1,508 |
| 70\% | 1,501 | 1,573 | 1,664 | 1,726 | 1,786 | 1,799 | 1,774 | 1,681 | 1,567 | 1,491 | 1,453 | 1,460 |
| 80\% | 1,393 | 1,469 | 1,589 | 1,659 | 1,739 | 1,761 | 1,728 | 1,632 | 1,488 | 1,403 | 1,408 | 1,393 |
| 90\% | 1,235 | 1,374 | 1,447 | 1,554 | 1,588 | 1,576 | 1,546 | 1,454 | 1,350 | 1,236 | 1,196 | 1,227 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,550 | 1,626 | 1,698 | 1,754 | 1,797 | 1,814 | 1,791 | 1,712 | 1,590 | 1,509 | 1,486 | 1,494 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,688 | 1,765 | 1,818 | 1,863 | 1,898 | 1,932 | 1,925 | 1,876 | 1,780 | 1,724 | 1,701 | 1,708 |
| Above Normal (16\%) | 1,537 | 1,667 | 1,774 | 1,825 | 1,869 | 1,891 | 1,874 | 1,791 | 1,664 | 1,598 | 1,583 | 1,580 |
| Below Normal (13\%) | 1,622 | 1,684 | 1,766 | 1,803 | 1,842 | 1,850 | 1,819 | 1,730 | 1,602 | 1,512 | 1,494 | 1,500 |
| Dry (24\%) | 1,490 | 1,558 | 1,629 | 1,711 | 1,769 | 1,789 | 1,763 | 1,670 | 1,550 | 1,482 | 1,464 | 1,473 |
| Critical (15\%) | 1,297 | 1,340 | 1,408 | 1,470 | 1,506 | 1,485 | 1,429 | 1,323 | 1,155 | 987 | 948 | 968 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 5\% | 4\% | 3\% | 2\% | 1\% | 3\% | 3\% | 3\% | 2\% | 1\% | 5\% | 6\% |
| 20\% | 7\% | 4\% | 4\% | 2\% | 2\% | 3\% | 4\% | 3\% | 2\% | 0\% | 4\% | 5\% |
| 30\% | 6\% | 5\% | 5\% | 3\% | 3\% | 4\% | 4\% | 2\% | 2\% | 0\% | 2\% | 4\% |
| 40\% | 5\% | 7\% | 5\% | 4\% | 4\% | 4\% | 4\% | 3\% | 2\% | 1\% | 3\% | 2\% |
| 50\% | 3\% | 6\% | 5\% | 5\% | 4\% | 5\% | 5\% | 3\% | 1\% | 1\% | 3\% | 2\% |
| 60\% | 3\% | 6\% | 6\% | 5\% | 5\% | 5\% | 4\% | 4\% | 2\% | 2\% | 1\% | 2\% |
| 70\% | 2\% | 4\% | 5\% | 4\% | 4\% | 5\% | 5\% | 4\% | 3\% | 2\% | 1\% | 2\% |
| 80\% | 3\% | 3\% | 5\% | 5\% | 4\% | 5\% | 6\% | 3\% | 3\% | 4\% | 6\% | 4\% |
| 90\% | 9\% | 6\% | 3\% | 7\% | 8\% | 5\% | 6\% | 5\% | 12\% | 10\% | 10\% | 11\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 5\% | 5\% | 5\% | 4\% | 4\% | 5\% | 5\% | 4\% | 3\% | 3\% | 4\% | 5\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 4\% | 4\% | 3\% | 2\% | 2\% | 3\% | 4\% | 2\% | 1\% | 0\% | 3\% | 5\% |
| Above Normal (16\%) | 5\% | 5\% | 6\% | 4\% | 3\% | 4\% | 5\% | 3\% | 2\% | 0\% | 2\% | 3\% |
| Below Normal (13\%) | 6\% | 7\% | 6\% | 5\% | 4\% | 5\% | 5\% | 4\% | 3\% | 1\% | 1\% | 1\% |
| Dry (24\%) | 3\% | 4\% | 5\% | 5\% | 5\% | 5\% | 5\% | 4\% | 3\% | 3\% | 3\% | 3\% |
| Critical (15\%) | 10\% | 10\% | 11\% | 9\% | 10\% | 10\% | 10\% | 10\% | 13\% | 19\% | 17\% | 17\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the
Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.16.2 CVP Total Capacity, Monthly Capacity

Revised Second Basis of Comparison

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,773 | 1,820 | 1,859 | 1,890 | 1,911 | 1,950 | 1,942 | 1,907 | 1,822 | 1,762 | 1,756 | 1,742 |
| 20\% | 1,746 | 1,799 | 1,838 | 1,869 | 1,899 | 1,930 | 1,918 | 1,861 | 1,752 | 1,690 | 1,682 | 1,693 |
| 30\% | 1,701 | 1,778 | 1,823 | 1,859 | 1,892 | 1,909 | 1,897 | 1,824 | 1,699 | 1,626 | 1,621 | 1,658 |
| 40\% | 1,661 | 1,742 | 1,796 | 1,842 | 1,878 | 1,889 | 1,873 | 1,787 | 1,665 | 1,606 | 1,584 | 1,581 |
| 50\% | 1,594 | 1,703 | 1,761 | 1,819 | 1,858 | 1,874 | 1,840 | 1,764 | 1,622 | 1,557 | 1,552 | 1,553 |
| 60\% | 1,570 | 1,647 | 1,720 | 1,783 | 1,829 | 1,842 | 1,802 | 1,721 | 1,598 | 1,527 | 1,501 | 1,508 |
| 70\% | 1,501 | 1,573 | 1,664 | 1,726 | 1,786 | 1,799 | 1,774 | 1,681 | 1,567 | 1,491 | 1,453 | 1,460 |
| 80\% | 1,393 | 1,469 | 1,589 | 1,659 | 1,739 | 1,761 | 1,728 | 1,632 | 1,488 | 1,403 | 1,408 | 1,393 |
| 90\% | 1,235 | 1,374 | 1,447 | 1,554 | 1,588 | 1,576 | 1,546 | 1,454 | 1,350 | 1,236 | 1,196 | 1,227 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,550 | 1,626 | 1,698 | 1,754 | 1,797 | 1,814 | 1,791 | 1,712 | 1,590 | 1,509 | 1,486 | 1,494 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,688 | 1,765 | 1,818 | 1,863 | 1,898 | 1,932 | 1,925 | 1,876 | 1,780 | 1,724 | 1,701 | 1,708 |
| Above Normal (16\%) | 1,537 | 1,667 | 1,774 | 1,825 | 1,869 | 1,891 | 1,874 | 1,791 | 1,664 | 1,598 | 1,583 | 1,580 |
| Below Normal (13\%) | 1,622 | 1,684 | 1,766 | 1,803 | 1,842 | 1,850 | 1,819 | 1,730 | 1,602 | 1,512 | 1,494 | 1,500 |
| Dry (24\%) | 1,490 | 1,558 | 1,629 | 1,711 | 1,769 | 1,789 | 1,763 | 1,670 | 1,550 | 1,482 | 1,464 | 1,473 |
| Critical (15\%) | 1,297 | 1,340 | 1,408 | 1,470 | 1,506 | 1,485 | 1,429 | 1,323 | 1,155 | 987 | 948 | 968 |

## No Action Alternative

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,688 | 1,743 | 1,810 | 1,854 | 1,883 | 1,895 | 1,877 | 1,848 | 1,785 | 1,749 | 1,670 | 1,647 |
| 20\% | 1,638 | 1,724 | 1,772 | 1,829 | 1,858 | 1,872 | 1,842 | 1,806 | 1,719 | 1,695 | 1,623 | 1,615 |
| 30\% | 1,600 | 1,694 | 1,744 | 1,802 | 1,837 | 1,842 | 1,825 | 1,782 | 1,671 | 1,623 | 1,585 | 1,599 |
| 40\% | 1,579 | 1,635 | 1,710 | 1,776 | 1,811 | 1,812 | 1,793 | 1,736 | 1,634 | 1,583 | 1,545 | 1,553 |
| 50\% | 1,550 | 1,611 | 1,681 | 1,732 | 1,778 | 1,782 | 1,757 | 1,711 | 1,607 | 1,543 | 1,510 | 1,516 |
| 60\% | 1,529 | 1,556 | 1,622 | 1,700 | 1,749 | 1,752 | 1,725 | 1,652 | 1,564 | 1,504 | 1,481 | 1,473 |
| 70\% | 1,465 | 1,519 | 1,588 | 1,661 | 1,712 | 1,714 | 1,685 | 1,618 | 1,524 | 1,457 | 1,433 | 1,432 |
| 80\% | 1,354 | 1,428 | 1,521 | 1,584 | 1,666 | 1,675 | 1,637 | 1,578 | 1,440 | 1,353 | 1,332 | 1,342 |
| 90\% | 1,137 | 1,293 | 1,403 | 1,455 | 1,476 | 1,502 | 1,454 | 1,384 | 1,203 | 1,120 | 1,085 | 1,103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,476 | 1,542 | 1,612 | 1,685 | 1,727 | 1,734 | 1,705 | 1,648 | 1,542 | 1,468 | 1,429 | 1,430 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,621 | 1,696 | 1,761 | 1,824 | 1,860 | 1,877 | 1,859 | 1,831 | 1,753 | 1,717 | 1,645 | 1,628 |
| Above Normal (16\%) | 1,465 | 1,580 | 1,676 | 1,762 | 1,814 | 1,814 | 1,793 | 1,741 | 1,633 | 1,590 | 1,545 | 1,541 |
| Below Normal (13\%) | 1,530 | 1,580 | 1,669 | 1,719 | 1,764 | 1,757 | 1,728 | 1,665 | 1,559 | 1,491 | 1,478 | 1,483 |
| Dry (24\%) | 1,441 | 1,491 | 1,556 | 1,637 | 1,690 | 1,709 | 1,680 | 1,607 | 1,508 | 1,434 | 1,418 | 1,433 |
| Critical (15\%) | 1,180 | 1,221 | 1,264 | 1,348 | 1,374 | 1,355 | 1,299 | 1,205 | 1,025 | 832 | 808 | 825 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -5\% | -4\% | -3\% | -2\% | -1\% | -3\% | -3\% | -3\% | -2\% | -1\% | -5\% | -5\% |
| 20\% | -6\% | -4\% | -4\% | -2\% | -2\% | -3\% | -4\% | -3\% | -2\% | 0\% | -4\% | -5\% |
| 30\% | -6\% | -5\% | -4\% | -3\% | -3\% | -3\% | -4\% | -2\% | -2\% | 0\% | -2\% | -4\% |
| 40\% | -5\% | -6\% | -5\% | -4\% | -4\% | -4\% | -4\% | -3\% | -2\% | -1\% | -2\% | -2\% |
| 50\% | -3\% | -5\% | -5\% | -5\% | -4\% | -5\% | -5\% | -3\% | -1\% | -1\% | -3\% | -2\% |
| 60\% | -3\% | -6\% | -6\% | -5\% | -4\% | -5\% | -4\% | -4\% | -2\% | -1\% | -1\% | -2\% |
| 70\% | -2\% | -3\% | -5\% | -4\% | -4\% | -5\% | -5\% | -4\% | -3\% | -2\% | -1\% | -2\% |
| 80\% | -3\% | -3\% | -4\% | -5\% | -4\% | -5\% | -5\% | -3\% | -3\% | -4\% | -5\% | -4\% |
| 90\% | -8\% | -6\% | -3\% | -6\% | -7\% | -5\% | -6\% | -5\% | -11\% | -9\% | -9\% | -10\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5\% | -5\% | -5\% | -4\% | -4\% | -4\% | -5\% | -4\% | -3\% | -3\% | -4\% | -4\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -4\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% | -2\% | -1\% | 0\% | -3\% | -5\% |
| Above Normal (16\%) | -5\% | -5\% | -5\% | -3\% | -3\% | -4\% | -4\% | -3\% | -2\% | 0\% | -2\% | -2\% |
| Below Normal (13\%) | -6\% | -6\% | -6\% | -5\% | -4\% | -5\% | -5\% | -4\% | -3\% | -1\% | -1\% | -1\% |
| Dry (24\%) | -3\% | -4\% | -4\% | -4\% | -4\% | -4\% | -5\% | -4\% | -3\% | -3\% | -3\% | -3\% |
| Critical (15\%) | -9\% | -9\% | -10\% | -8\% | -9\% | -9\% | -9\% | -9\% | -11\% | -16\% | -15\% | -15\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.16.3 CVP Total Capacity, Monthly Capacity

Revised Second Basis of Comparison

| Statistic | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,773 | 1,820 | 1,859 | 1,890 | 1,911 | 1,950 | 1,942 | 1,907 | 1,822 | 1,762 | 1,756 | 1,742 |
| 20\% | 1,746 | 1,799 | 1,838 | 1,869 | 1,899 | 1,930 | 1,918 | 1,861 | 1,752 | 1,690 | 1,682 | 1,693 |
| 30\% | 1,701 | 1,778 | 1,823 | 1,859 | 1,892 | 1,909 | 1,897 | 1,824 | 1,699 | 1,626 | 1,621 | 1,658 |
| 40\% | 1,661 | 1,742 | 1,796 | 1,842 | 1,878 | 1,889 | 1,873 | 1,787 | 1,665 | 1,606 | 1,584 | 1,581 |
| 50\% | 1,594 | 1,703 | 1,761 | 1,819 | 1,858 | 1,874 | 1,840 | 1,764 | 1,622 | 1,557 | 1,552 | 1,553 |
| 60\% | 1,570 | 1,647 | 1,720 | 1,783 | 1,829 | 1,842 | 1,802 | 1,721 | 1,598 | 1,527 | 1,501 | 1,508 |
| 70\% | 1,501 | 1,573 | 1,664 | 1,726 | 1,786 | 1,799 | 1,774 | 1,681 | 1,567 | 1,491 | 1,453 | 1,460 |
| 80\% | 1,393 | 1,469 | 1,589 | 1,659 | 1,739 | 1,761 | 1,728 | 1,632 | 1,488 | 1,403 | 1,408 | 1,393 |
| 90\% | 1,235 | 1,374 | 1,447 | 1,554 | 1,588 | 1,576 | 1,546 | 1,454 | 1,350 | 1,236 | 1,196 | 1,227 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,550 | 1,626 | 1,698 | 1,754 | 1,797 | 1,814 | 1,791 | 1,712 | 1,590 | 1,509 | 1,486 | 1,494 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,688 | 1,765 | 1,818 | 1,863 | 1,898 | 1,932 | 1,925 | 1,876 | 1,780 | 1,724 | 1,701 | 1,708 |
| Above Normal (16\%) | 1,537 | 1,667 | 1,774 | 1,825 | 1,869 | 1,891 | 1,874 | 1,791 | 1,664 | 1,598 | 1,583 | 1,580 |
| Below Normal (13\%) | 1,622 | 1,684 | 1,766 | 1,803 | 1,842 | 1,850 | 1,819 | 1,730 | 1,602 | 1,512 | 1,494 | 1,500 |
| Dry (24\%) | 1,490 | 1,558 | 1,629 | 1,711 | 1,769 | 1,789 | 1,763 | 1,670 | 1,550 | 1,482 | 1,464 | 1,473 |
| Critical (15\%) | 1,297 | 1,340 | 1,408 | 1,470 | 1,506 | 1,485 | 1,429 | 1,323 | 1,155 | 987 | 948 | 968 |

Alternative 3

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,778 | 1,818 | 1,852 | 1,884 | 1,910 | 1,945 | 1,947 | 1,910 | 1,837 | 1,777 | 1,759 | 1,753 |
| 20\% | 1,749 | 1,789 | 1,828 | 1,860 | 1,894 | 1,930 | 1,930 | 1,883 | 1,766 | 1,692 | 1,687 | 1,696 |
| 30\% | 1,708 | 1,772 | 1,814 | 1,851 | 1,884 | 1,900 | 1,895 | 1,828 | 1,717 | 1,654 | 1,633 | 1,659 |
| 40\% | 1,663 | 1,741 | 1,781 | 1,838 | 1,866 | 1,882 | 1,849 | 1,777 | 1,670 | 1,601 | 1,604 | 1,600 |
| 50\% | 1,609 | 1,689 | 1,744 | 1,800 | 1,840 | 1,851 | 1,821 | 1,760 | 1,644 | 1,572 | 1,554 | 1,569 |
| 60\% | 1,579 | 1,639 | 1,695 | 1,748 | 1,797 | 1,814 | 1,781 | 1,711 | 1,603 | 1,542 | 1,511 | 1,510 |
| 70\% | 1,499 | 1,557 | 1,632 | 1,703 | 1,768 | 1,784 | 1,755 | 1,665 | 1,567 | 1,487 | 1,453 | 1,465 |
| 80\% | 1,394 | 1,457 | 1,570 | 1,624 | 1,708 | 1,738 | 1,707 | 1,620 | 1,506 | 1,408 | 1,378 | 1,372 |
| 90\% | 1,231 | 1,365 | 1,434 | 1,496 | 1,518 | 1,545 | 1,519 | 1,453 | 1,343 | 1,229 | 1,190 | 1,181 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,551 | 1,613 | 1,676 | 1,732 | 1,777 | 1,794 | 1,775 | 1,705 | 1,592 | 1,512 | 1,486 | 1,493 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,690 | 1,756 | 1,806 | 1,856 | 1,894 | 1,929 | 1,928 | 1,885 | 1,791 | 1,730 | 1,713 | 1,716 |
| Above Normal (16\%) | 1,527 | 1,640 | 1,746 | 1,802 | 1,852 | 1,875 | 1,862 | 1,786 | 1,679 | 1,615 | 1,591 | 1,589 |
| Below Normal (13\%) | 1,629 | 1,676 | 1,751 | 1,790 | 1,829 | 1,832 | 1,788 | 1,718 | 1,607 | 1,529 | 1,504 | 1,501 |
| Dry (24\%) | 1,504 | 1,551 | 1,612 | 1,686 | 1,748 | 1,768 | 1,745 | 1,660 | 1,555 | 1,479 | 1,459 | 1,475 |
| Critical (15\%) | 1,283 | 1,319 | 1,355 | 1,411 | 1,444 | 1,422 | 1,386 | 1,288 | 1,113 | 967 | 909 | 930 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 0\% | 1\% |
| 20\% | 0\% | -1\% | -1\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 0\% | 0\% | 0\% |
| 30\% | 0\% | 0\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 2\% | 1\% | 0\% |
| 40\% | 0\% | 0\% | -1\% | 0\% | -1\% | 0\% | -1\% | -1\% | 0\% | 0\% | 1\% | 1\% |
| 50\% | 1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 1\% | 1\% | 0\% | 1\% |
| 60\% | 1\% | -1\% | -1\% | -2\% | -2\% | -2\% | -1\% | -1\% | 0\% | 1\% | 1\% | 0\% |
| 70\% | 0\% | -1\% | -2\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | -1\% | -1\% | -2\% | -2\% | -1\% | -1\% | -1\% | 1\% | 0\% | -2\% | -2\% |
| 90\% | 0\% | -1\% | -1\% | -4\% | -4\% | -2\% | -2\% | 0\% | -1\% | -1\% | 0\% | -4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 1\% | 0\% |
| Above Normal (16\%) | -1\% | -2\% | -2\% | -1\% | -1\% | -1\% | -1\% | 0\% | 1\% | 1\% | 0\% | 1\% |
| Below Normal (13\%) | 0\% | 0\% | -1\% | -1\% | -1\% | -1\% | -2\% | -1\% | 0\% | 1\% | 1\% | 0\% |
| Dry (24\%) | 1\% | 0\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| Critical (15\%) | -1\% | -2\% | -4\% | -4\% | -4\% | -4\% | -3\% | -3\% | -4\% | -2\% | -4\% | -4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.16.4 CVP Total Capacity, Monthly Capacity

Revised Second Basis of Comparison

| Statistic | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,773 | 1,820 | 1,859 | 1,890 | 1,911 | 1,950 | 1,942 | 1,907 | 1,822 | 1,762 | 1,756 | 1,742 |
| 20\% | 1,746 | 1,799 | 1,838 | 1,869 | 1,899 | 1,930 | 1,918 | 1,861 | 1,752 | 1,690 | 1,682 | 1,693 |
| 30\% | 1,701 | 1,778 | 1,823 | 1,859 | 1,892 | 1,909 | 1,897 | 1,824 | 1,699 | 1,626 | 1,621 | 1,658 |
| 40\% | 1,661 | 1,742 | 1,796 | 1,842 | 1,878 | 1,889 | 1,873 | 1,787 | 1,665 | 1,606 | 1,584 | 1,581 |
| 50\% | 1,594 | 1,703 | 1,761 | 1,819 | 1,858 | 1,874 | 1,840 | 1,764 | 1,622 | 1,557 | 1,552 | 1,553 |
| 60\% | 1,570 | 1,647 | 1,720 | 1,783 | 1,829 | 1,842 | 1,802 | 1,721 | 1,598 | 1,527 | 1,501 | 1,508 |
| 70\% | 1,501 | 1,573 | 1,664 | 1,726 | 1,786 | 1,799 | 1,774 | 1,681 | 1,567 | 1,491 | 1,453 | 1,460 |
| 80\% | 1,393 | 1,469 | 1,589 | 1,659 | 1,739 | 1,761 | 1,728 | 1,632 | 1,488 | 1,403 | 1,408 | 1,393 |
| 90\% | 1,235 | 1,374 | 1,447 | 1,554 | 1,588 | 1,576 | 1,546 | 1,454 | 1,350 | 1,236 | 1,196 | 1,227 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,550 | 1,626 | 1,698 | 1,754 | 1,797 | 1,814 | 1,791 | 1,712 | 1,590 | 1,509 | 1,486 | 1,494 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,688 | 1,765 | 1,818 | 1,863 | 1,898 | 1,932 | 1,925 | 1,876 | 1,780 | 1,724 | 1,701 | 1,708 |
| Above Normal (16\%) | 1,537 | 1,667 | 1,774 | 1,825 | 1,869 | 1,891 | 1,874 | 1,791 | 1,664 | 1,598 | 1,583 | 1,580 |
| Below Normal (13\%) | 1,622 | 1,684 | 1,766 | 1,803 | 1,842 | 1,850 | 1,819 | 1,730 | 1,602 | 1,512 | 1,494 | 1,500 |
| Dry (24\%) | 1,490 | 1,558 | 1,629 | 1,711 | 1,769 | 1,789 | 1,763 | 1,670 | 1,550 | 1,482 | 1,464 | 1,473 |
| Critical (15\%) | 1,297 | 1,340 | 1,408 | 1,470 | 1,506 | 1,485 | 1,429 | 1,323 | 1,155 | 987 | 948 | 968 |

Alternative 5

| Statistic | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,693 | 1,746 | 1,805 | 1,849 | 1,882 | 1,891 | 1,879 | 1,849 | 1,777 | 1,748 | 1,671 | 1,650 |
| 20\% | 1,635 | 1,721 | 1,772 | 1,829 | 1,859 | 1,867 | 1,843 | 1,806 | 1,725 | 1,690 | 1,624 | 1,612 |
| 30\% | 1,599 | 1,680 | 1,744 | 1,797 | 1,836 | 1,839 | 1,816 | 1,766 | 1,655 | 1,616 | 1,576 | 1,579 |
| 40\% | 1,566 | 1,638 | 1,710 | 1,767 | 1,801 | 1,801 | 1,785 | 1,732 | 1,619 | 1,571 | 1,538 | 1,547 |
| 50\% | 1,538 | 1,596 | 1,668 | 1,726 | 1,775 | 1,774 | 1,737 | 1,700 | 1,598 | 1,555 | 1,504 | 1,510 |
| 60\% | 1,516 | 1,552 | 1,617 | 1,687 | 1,737 | 1,733 | 1,701 | 1,643 | 1,537 | 1,484 | 1,460 | 1,457 |
| 70\% | 1,458 | 1,512 | 1,571 | 1,650 | 1,694 | 1,699 | 1,673 | 1,596 | 1,506 | 1,415 | 1,413 | 1,413 |
| 80\% | 1,327 | 1,399 | 1,504 | 1,574 | 1,644 | 1,639 | 1,616 | 1,532 | 1,439 | 1,324 | 1,302 | 1,310 |
| 90\% | 1,044 | 1,242 | 1,372 | 1,427 | 1,440 | 1,483 | 1,450 | 1,351 | 1,173 | 1,061 | 1,046 | 1,029 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,460 | 1,532 | 1,603 | 1,672 | 1,716 | 1,717 | 1,692 | 1,633 | 1,525 | 1,450 | 1,410 | 1,410 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,609 | 1,690 | 1,755 | 1,819 | 1,856 | 1,873 | 1,858 | 1,830 | 1,748 | 1,715 | 1,641 | 1,625 |
| Above Normal (16\%) | 1,458 | 1,576 | 1,671 | 1,757 | 1,808 | 1,806 | 1,785 | 1,735 | 1,624 | 1,577 | 1,536 | 1,532 |
| Below Normal (13\%) | 1,504 | 1,559 | 1,648 | 1,712 | 1,755 | 1,743 | 1,710 | 1,653 | 1,546 | 1,474 | 1,465 | 1,468 |
| Dry (24\%) | 1,428 | 1,478 | 1,545 | 1,622 | 1,676 | 1,686 | 1,657 | 1,585 | 1,485 | 1,403 | 1,383 | 1,391 |
| Critical (15\%) | 1,152 | 1,205 | 1,253 | 1,308 | 1,344 | 1,310 | 1,274 | 1,159 | 985 | 793 | 768 | 794 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -5\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% | -3\% | -2\% | -1\% | -5\% | -5\% |
| 20\% | -6\% | -4\% | -4\% | -2\% | -2\% | -3\% | -4\% | -3\% | -2\% | 0\% | -3\% | -5\% |
| 30\% | -6\% | -6\% | -4\% | -3\% | -3\% | -4\% | -4\% | -3\% | -3\% | -1\% | -3\% | -5\% |
| 40\% | -6\% | -6\% | -5\% | -4\% | -4\% | -5\% | -5\% | -3\% | -3\% | -2\% | -3\% | -2\% |
| 50\% | -4\% | -6\% | -5\% | -5\% | -4\% | -5\% | -6\% | -4\% | -1\% | 0\% | -3\% | -3\% |
| 60\% | -3\% | -6\% | -6\% | -5\% | -5\% | -6\% | -6\% | -5\% | -4\% | -3\% | -3\% | -3\% |
| 70\% | -3\% | -4\% | -6\% | -4\% | -5\% | -6\% | -6\% | -5\% | -4\% | -5\% | -3\% | -3\% |
| 80\% | -5\% | -5\% | -5\% | -5\% | -5\% | -7\% | -6\% | -6\% | -3\% | -6\% | -8\% | -6\% |
| 90\% | -15\% | -10\% | -5\% | -8\% | -9\% | -6\% | -6\% | -7\% | -13\% | -14\% | -12\% | -16\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6\% | -6\% | -6\% | -5\% | -5\% | -5\% | -6\% | -5\% | -4\% | -4\% | -5\% | -6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -5\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% | -2\% | -2\% | 0\% | -4\% | -5\% |
| Above Normal (16\%) | -5\% | -5\% | -6\% | -4\% | -3\% | -4\% | -5\% | -3\% | -2\% | -1\% | -3\% | -3\% |
| Below Normal (13\%) | -7\% | -7\% | -7\% | -5\% | -5\% | -6\% | -6\% | -4\% | -3\% | -3\% | -2\% | -2\% |
| Dry (24\%) | -4\% | -5\% | -5\% | -5\% | -5\% | -6\% | -6\% | -5\% | -4\% | -5\% | -6\% | -6\% |
| Critical (15\%) | -11\% | -10\% | -11\% | -11\% | -11\% | -12\% | -11\% | -12\% | -15\% | -20\% | -19\% | -18\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.2.17 CVP Total Generation

Table 5C.3.2.17.1 CVP Total Generation, Monthly Generation

No Action Alternative

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 409 | 413 | 641 | 689 | 671 | 696 | 492 | 616 | 619 | 756 | 585 | 630 |
| 20\% | 372 | 380 | 338 | 490 | 622 | 569 | 397 | 549 | 577 | 729 | 549 | 597 |
| 30\% | 329 | 310 | 240 | 381 | 471 | 363 | 358 | 514 | 561 | 705 | 536 | 469 |
| 40\% | 292 | 274 | 190 | 235 | 245 | 267 | 334 | 478 | 544 | 662 | 511 | 414 |
| 50\% | 270 | 231 | 175 | 201 | 205 | 229 | 318 | 464 | 527 | 644 | 496 | 342 |
| 60\% | 239 | 183 | 167 | 179 | 173 | 194 | 302 | 442 | 495 | 630 | 476 | 285 |
| 70\% | 210 | 162 | 146 | 152 | 141 | 171 | 282 | 415 | 479 | 598 | 451 | 250 |
| 80\% | 186 | 140 | 131 | 137 | 130 | 151 | 249 | 350 | 435 | 551 | 421 | 215 |
| 90\% | 159 | 118 | 105 | 120 | 110 | 141 | 217 | 291 | 350 | 474 | 359 | 184 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 273 | 255 | 260 | 317 | 322 | 329 | 343 | 461 | 514 | 631 | 487 | 376 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 317 | 318 | 441 | 558 | 513 | 557 | 447 | 580 | 568 | 683 | 542 | 598 |
| Above Normal (16\%) | 268 | 263 | 259 | 320 | 454 | 367 | 370 | 484 | 544 | 708 | 527 | 421 |
| Below Normal (13\%) | 310 | 258 | 175 | 186 | 266 | 220 | 318 | 455 | 540 | 679 | 529 | 289 |
| Dry (24\%) | 254 | 232 | 154 | 183 | 145 | 183 | 263 | 406 | 511 | 607 | 457 | 246 |
| Critical (15\%) | 184 | 149 | 123 | 134 | 111 | 135 | 242 | 271 | 345 | 431 | 333 | 145 |

Revised Alternative 1

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 416 | 296 | 658 | 692 | 692 | 710 | 488 | 631 | 701 | 773 | 637 | 443 |
| 20\% | 334 | 254 | 432 | 581 | 649 | 584 | 390 | 566 | 658 | 755 | 593 | 370 |
| 30\% | 302 | 232 | 240 | 439 | 446 | 368 | 347 | 535 | 619 | 732 | 570 | 337 |
| 40\% | 278 | 219 | 195 | 265 | 286 | 261 | 327 | 507 | 590 | 708 | 550 | 316 |
| 50\% | 237 | 206 | 181 | 207 | 219 | 226 | 312 | 492 | 565 | 688 | 527 | 298 |
| 60\% | 218 | 179 | 170 | 175 | 173 | 192 | 294 | 464 | 551 | 662 | 503 | 280 |
| 70\% | 199 | 167 | 147 | 153 | 144 | 175 | 280 | 442 | 531 | 628 | 479 | 259 |
| 80\% | 172 | 138 | 133 | 138 | 134 | 153 | 252 | 372 | 481 | 582 | 436 | 226 |
| 90\% | 152 | 124 | 113 | 121 | 115 | 139 | 221 | 314 | 389 | 472 | 392 | 191 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 257 | 215 | 278 | 334 | 335 | 335 | 337 | 481 | 566 | 659 | 517 | 307 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 296 | 269 | 491 | 581 | 531 | 551 | 430 | 588 | 624 | 700 | 577 | 402 |
| Above Normal (16\%) | 241 | 215 | 246 | 359 | 481 | 398 | 345 | 511 | 615 | 741 | 572 | 340 |
| Below Normal (13\%) | 285 | 221 | 186 | 227 | 282 | 245 | 326 | 490 | 612 | 724 | 577 | 303 |
| Dry (24\%) | 248 | 183 | 158 | 177 | 150 | 179 | 266 | 429 | 543 | 639 | 462 | 252 |
| Critical (15\%) | 181 | 148 | 134 | 133 | 109 | 141 | 257 | 297 | 386 | 452 | 362 | 161 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2\% | -28\% | 3\% | 0\% | 3\% | 2\% | -1\% | 2\% | 13\% | 2\% | 9\% | -30\% |
| 20\% | -10\% | -33\% | 28\% | 19\% | 4\% | 3\% | -2\% | 3\% | 14\% | 4\% | 8\% | -38\% |
| 30\% | -8\% | -25\% | 0\% | 15\% | -5\% | 1\% | -3\% | 4\% | 10\% | 4\% | 6\% | -28\% |
| 40\% | -5\% | -20\% | 3\% | 13\% | 17\% | -2\% | -2\% | 6\% | 8\% | 7\% | 8\% | -24\% |
| 50\% | -12\% | -11\% | 3\% | 3\% | 7\% | -1\% | -2\% | 6\% | 7\% | 7\% | 6\% | -13\% |
| 60\% | -9\% | -2\% | 2\% | -2\% | 0\% | -1\% | -3\% | 5\% | 11\% | 5\% | 6\% | -2\% |
| 70\% | -5\% | 3\% | 0\% | 1\% | 2\% | 2\% | -1\% | 6\% | 11\% | 5\% | 6\% | 3\% |
| 80\% | -8\% | -2\% | 2\% | 1\% | 4\% | 1\% | 1\% | 6\% | 11\% | 6\% | 4\% | 5\% |
| 90\% | -4\% | 5\% | 8\% | 1\% | 5\% | -1\% | 2\% | 8\% | 11\% | -1\% | 9\% | 4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6\% | -16\% | 7\% | 6\% | 4\% | 2\% | -2\% | 4\% | 10\% | 4\% | 6\% | -18\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -7\% | -15\% | 12\% | 4\% | 3\% | -1\% | -4\% | 1\% | 10\% | 3\% | 6\% | -33\% |
| Above Normal (16\%) | -10\% | -18\% | -5\% | 12\% | 6\% | 8\% | -7\% | 6\% | 13\% | 5\% | 8\% | -19\% |
| Below Normal (13\%) | -8\% | -14\% | 6\% | 22\% | 6\% | 11\% | 3\% | 8\% | 13\% | 7\% | 9\% | 5\% |
| Dry (24\%) | -2\% | -21\% | 3\% | -3\% | 4\% | -2\% | 1\% | 6\% | 6\% | 5\% | 1\% | 2\% |
| Critical (15\%) | -1\% | -1\% | 9\% | 0\% | -2\% | 5\% | 6\% | 10\% | 12\% | 5\% | 9\% | 11\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Altermative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.17.2 CVP Total Generation, Monthly Generation

Revised Second Basis of Comparison

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 416 | 296 | 658 | 692 | 692 | 710 | 488 | 631 | 701 | 773 | 637 | 443 |
| 20\% | 334 | 254 | 432 | 581 | 649 | 584 | 390 | 566 | 658 | 755 | 593 | 370 |
| 30\% | 302 | 232 | 240 | 439 | 446 | 368 | 347 | 535 | 619 | 732 | 570 | 337 |
| 40\% | 278 | 219 | 195 | 265 | 286 | 261 | 327 | 507 | 590 | 708 | 550 | 316 |
| 50\% | 237 | 206 | 181 | 207 | 219 | 226 | 312 | 492 | 565 | 688 | 527 | 298 |
| 60\% | 218 | 179 | 170 | 175 | 173 | 192 | 294 | 464 | 551 | 662 | 503 | 280 |
| 70\% | 199 | 167 | 147 | 153 | 144 | 175 | 280 | 442 | 531 | 628 | 479 | 259 |
| 80\% | 172 | 138 | 133 | 138 | 134 | 153 | 252 | 372 | 481 | 582 | 436 | 226 |
| 90\% | 152 | 124 | 113 | 121 | 115 | 139 | 221 | 314 | 389 | 472 | 392 | 191 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 257 | 215 | 278 | 334 | 335 | 335 | 337 | 481 | 566 | 659 | 517 | 307 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 296 | 269 | 491 | 581 | 531 | 551 | 430 | 588 | 624 | 700 | 577 | 402 |
| Above Normal (16\%) | 241 | 215 | 246 | 359 | 481 | 398 | 345 | 511 | 615 | 741 | 572 | 340 |
| Below Normal (13\%) | 285 | 221 | 186 | 227 | 282 | 245 | 326 | 490 | 612 | 724 | 577 | 303 |
| Dry (24\%) | 248 | 183 | 158 | 177 | 150 | 179 | 266 | 429 | 543 | 639 | 462 | 252 |
| Critical (15\%) | 181 | 148 | 134 | 133 | 109 | 141 | 257 | 297 | 386 | 452 | 362 | 161 |

No Action Alternative

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 409 | 413 | 641 | 689 | 671 | 696 | 492 | 616 | 619 | 756 | 585 | 630 |
| 20\% | 372 | 380 | 338 | 490 | 622 | 569 | 397 | 549 | 577 | 729 | 549 | 597 |
| 30\% | 329 | 310 | 240 | 381 | 471 | 363 | 358 | 514 | 561 | 705 | 536 | 469 |
| 40\% | 292 | 274 | 190 | 235 | 245 | 267 | 334 | 478 | 544 | 662 | 511 | 414 |
| 50\% | 270 | 231 | 175 | 201 | 205 | 229 | 318 | 464 | 527 | 644 | 496 | 342 |
| 60\% | 239 | 183 | 167 | 179 | 173 | 194 | 302 | 442 | 495 | 630 | 476 | 285 |
| 70\% | 210 | 162 | 146 | 152 | 141 | 171 | 282 | 415 | 479 | 598 | 451 | 250 |
| 80\% | 186 | 140 | 131 | 137 | 130 | 151 | 249 | 350 | 435 | 551 | 421 | 215 |
| 90\% | 159 | 118 | 105 | 120 | 110 | 141 | 217 | 291 | 350 | 474 | 359 | 184 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 273 | 255 | 260 | 317 | 322 | 329 | 343 | 461 | 514 | 631 | 487 | 376 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 317 | 318 | 441 | 558 | 513 | 557 | 447 | 580 | 568 | 683 | 542 | 598 |
| Above Normal (16\%) | 268 | 263 | 259 | 320 | 454 | 367 | 370 | 484 | 544 | 708 | 527 | 421 |
| Below Normal (13\%) | 310 | 258 | 175 | 186 | 266 | 220 | 318 | 455 | 540 | 679 | 529 | 289 |
| Dry (24\%) | 254 | 232 | 154 | 183 | 145 | 183 | 263 | 406 | 511 | 607 | 457 | 246 |
| Critical (15\%) | 184 | 149 | 123 | 134 | 111 | 135 | 242 | 271 | 345 | 431 | 333 | 145 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2\% | 39\% | -3\% | 0\% | -3\% | -2\% | 1\% | -2\% | -12\% | -2\% | -8\% | 42\% |
| 20\% | 11\% | 49\% | -22\% | -16\% | -4\% | -2\% | 2\% | -3\% | -12\% | -3\% | -7\% | 61\% |
| 30\% | 9\% | 33\% | 0\% | -13\% | 6\% | -1\% | 3\% | -4\% | -9\% | -4\% | -6\% | 39\% |
| 40\% | 5\% | 25\% | -3\% | -11\% | -14\% | 2\% | 2\% | -6\% | -8\% | -7\% | -7\% | 31\% |
| 50\% | 14\% | 12\% | -3\% | -3\% | -6\% | 1\% | 2\% | -6\% | -7\% | -6\% | -6\% | 15\% |
| 60\% | 10\% | 2\% | -2\% | 2\% | 0\% | 1\% | 3\% | -5\% | -10\% | -5\% | -5\% | 2\% |
| 70\% | 5\% | -3\% | 0\% | -1\% | -2\% | -2\% | 1\% | -6\% | -10\% | -5\% | -6\% | -3\% |
| 80\% | 8\% | 2\% | -2\% | -1\% | -3\% | -1\% | -1\% | -6\% | -10\% | -5\% | -3\% | -5\% |
| 90\% | 5\% | -5\% | -7\% | -1\% | -5\% | 1\% | -2\% | -7\% | -10\% | 1\% | -8\% | -4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 6\% | 19\% | -6\% | -5\% | -4\% | -2\% | 2\% | -4\% | -9\% | -4\% | -6\% | 23\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 7\% | 18\% | -10\% | -4\% | -3\% | 1\% | 4\% | -1\% | -9\% | -2\% | -6\% | 49\% |
| Above Normal (16\%) | 11\% | 22\% | 6\% | -11\% | -6\% | -8\% | 7\% | -5\% | -12\% | -4\% | -8\% | 24\% |
| Below Normal (13\%) | 9\% | 17\% | -6\% | -18\% | -6\% | -10\% | -2\% | -7\% | -12\% | -6\% | -8\% | -5\% |
| Dry (24\%) | 2\% | 27\% | -3\% | 3\% | -3\% | 2\% | -1\% | -5\% | -6\% | -5\% | -1\% | -2\% |
| Critical (15\%) | 1\% | 1\% | -8\% | 0\% | 2\% | -4\% | -6\% | -9\% | -11\% | -5\% | -8\% | -10\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.17.3 CVP Total Generation, Monthly Generation

Revised Second Basis of Comparison

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 416 | 296 | 658 | 692 | 692 | 710 | 488 | 631 | 701 | 773 | 637 | 443 |
| 20\% | 334 | 254 | 432 | 581 | 649 | 584 | 390 | 566 | 658 | 755 | 593 | 370 |
| 30\% | 302 | 232 | 240 | 439 | 446 | 368 | 347 | 535 | 619 | 732 | 570 | 337 |
| 40\% | 278 | 219 | 195 | 265 | 286 | 261 | 327 | 507 | 590 | 708 | 550 | 316 |
| 50\% | 237 | 206 | 181 | 207 | 219 | 226 | 312 | 492 | 565 | 688 | 527 | 298 |
| 60\% | 218 | 179 | 170 | 175 | 173 | 192 | 294 | 464 | 551 | 662 | 503 | 280 |
| 70\% | 199 | 167 | 147 | 153 | 144 | 175 | 280 | 442 | 531 | 628 | 479 | 259 |
| 80\% | 172 | 138 | 133 | 138 | 134 | 153 | 252 | 372 | 481 | 582 | 436 | 226 |
| 90\% | 152 | 124 | 113 | 121 | 115 | 139 | 221 | 314 | 389 | 472 | 392 | 191 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 257 | 215 | 278 | 334 | 335 | 335 | 337 | 481 | 566 | 659 | 517 | 307 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 296 | 269 | 491 | 581 | 531 | 551 | 430 | 588 | 624 | 700 | 577 | 402 |
| Above Normal (16\%) | 241 | 215 | 246 | 359 | 481 | 398 | 345 | 511 | 615 | 741 | 572 | 340 |
| Below Normal (13\%) | 285 | 221 | 186 | 227 | 282 | 245 | 326 | 490 | 612 | 724 | 577 | 303 |
| Dry (24\%) | 248 | 183 | 158 | 177 | 150 | 179 | 266 | 429 | 543 | 639 | 462 | 252 |
| Critical (15\%) | 181 | 148 | 134 | 133 | 109 | 141 | 257 | 297 | 386 | 452 | 362 | 161 |

Alternative 3

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 415 | 306 | 662 | 691 | 701 | 710 | 489 | 598 | 648 | 775 | 610 | 459 |
| 20\% | 342 | 256 | 426 | 590 | 650 | 583 | 393 | 551 | 635 | 759 | 578 | 387 |
| 30\% | 314 | 227 | 242 | 427 | 458 | 367 | 360 | 507 | 590 | 741 | 557 | 358 |
| 40\% | 275 | 216 | 199 | 254 | 283 | 258 | 330 | 493 | 564 | 720 | 538 | 328 |
| 50\% | 245 | 204 | 181 | 203 | 220 | 223 | 314 | 469 | 548 | 678 | 525 | 302 |
| 60\% | 222 | 180 | 170 | 173 | 179 | 192 | 291 | 442 | 518 | 657 | 513 | 279 |
| 70\% | 202 | 164 | 149 | 156 | 142 | 171 | 271 | 421 | 511 | 624 | 482 | 257 |
| 80\% | 176 | 145 | 133 | 134 | 128 | 153 | 250 | 363 | 453 | 561 | 445 | 227 |
| 90\% | 158 | 124 | 113 | 122 | 109 | 136 | 222 | 300 | 381 | 474 | 387 | 191 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 262 | 215 | 279 | 333 | 336 | 335 | 338 | 462 | 542 | 658 | 512 | 314 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 298 | 268 | 493 | 584 | 537 | 551 | 430 | 562 | 593 | 712 | 576 | 407 |
| Above Normal (16\%) | 249 | 222 | 245 | 350 | 477 | 401 | 346 | 482 | 580 | 736 | 550 | 341 |
| Below Normal (13\%) | 284 | 211 | 187 | 228 | 283 | 245 | 332 | 476 | 580 | 711 | 557 | 347 |
| Dry (24\%) | 256 | 184 | 162 | 175 | 146 | 180 | 265 | 416 | 532 | 635 | 471 | 251 |
| Critical (15\%) | 189 | 150 | 132 | 130 | 113 | 139 | 253 | 285 | 373 | 445 | 360 | 160 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 3\% | 1\% | 0\% | 1\% | 0\% | 0\% | -5\% | -7\% | 0\% | -4\% | 4\% |
| 20\% | 2\% | 0\% | -1\% | 1\% | 0\% | 0\% | 1\% | -3\% | -3\% | 0\% | -2\% | 5\% |
| 30\% | 4\% | -2\% | 1\% | -3\% | 3\% | 0\% | 4\% | -5\% | -5\% | 1\% | -2\% | 6\% |
| 40\% | -1\% | -1\% | 2\% | -4\% | -1\% | -1\% | 1\% | -3\% | -4\% | 2\% | -2\% | 4\% |
| 50\% | 4\% | -1\% | 0\% | -2\% | 1\% | -2\% | 0\% | -5\% | -3\% | -1\% | 0\% | 1\% |
| 60\% | 2\% | 1\% | 0\% | -2\% | 3\% | 0\% | -1\% | -5\% | -6\% | -1\% | 2\% | 0\% |
| 70\% | 2\% | -1\% | 2\% | 2\% | -2\% | -2\% | -3\% | -5\% | -4\% | -1\% | 1\% | -1\% |
| 80\% | 2\% | 5\% | 0\% | -3\% | -5\% | 0\% | -1\% | -3\% | -6\% | -3\% | 2\% | 0\% |
| 90\% | 4\% | 0\% | 1\% | 0\% | -5\% | -2\% | 0\% | -4\% | -2\% | 0\% | -1\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -4\% | -4\% | 0\% | -1\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1\% | -1\% | 0\% | 1\% | 1\% | 0\% | 0\% | -4\% | -5\% | 2\% | 0\% | 1\% |
| Above Normal (16\%) | 3\% | 3\% | 0\% | -2\% | -1\% | 1\% | 0\% | -6\% | -6\% | -1\% | -4\% | 0\% |
| Below Normal (13\%) | 0\% | -4\% | 0\% | 1\% | 0\% | 0\% | 2\% | -3\% | -5\% | -2\% | -4\% | 14\% |
| Dry (24\%) | 3\% | 1\% | 2\% | -1\% | -3\% | 1\% | 0\% | -3\% | -2\% | -1\% | 2\% | 0\% |
| Critical (15\%) | 4\% | 1\% | -2\% | -2\% | 4\% | -1\% | -2\% | -4\% | -3\% | -2\% | -1\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.17.4 CVP Total Generation, Monthly Generation

Revised Second Basis of Comparison

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 416 | 296 | 658 | 692 | 692 | 710 | 488 | 631 | 701 | 773 | 637 | 443 |
| 20\% | 334 | 254 | 432 | 581 | 649 | 584 | 390 | 566 | 658 | 755 | 593 | 370 |
| 30\% | 302 | 232 | 240 | 439 | 446 | 368 | 347 | 535 | 619 | 732 | 570 | 337 |
| 40\% | 278 | 219 | 195 | 265 | 286 | 261 | 327 | 507 | 590 | 708 | 550 | 316 |
| 50\% | 237 | 206 | 181 | 207 | 219 | 226 | 312 | 492 | 565 | 688 | 527 | 298 |
| 60\% | 218 | 179 | 170 | 175 | 173 | 192 | 294 | 464 | 551 | 662 | 503 | 280 |
| 70\% | 199 | 167 | 147 | 153 | 144 | 175 | 280 | 442 | 531 | 628 | 479 | 259 |
| 80\% | 172 | 138 | 133 | 138 | 134 | 153 | 252 | 372 | 481 | 582 | 436 | 226 |
| 90\% | 152 | 124 | 113 | 121 | 115 | 139 | 221 | 314 | 389 | 472 | 392 | 191 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 257 | 215 | 278 | 334 | 335 | 335 | 337 | 481 | 566 | 659 | 517 | 307 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 296 | 269 | 491 | 581 | 531 | 551 | 430 | 588 | 624 | 700 | 577 | 402 |
| Above Normal (16\%) | 241 | 215 | 246 | 359 | 481 | 398 | 345 | 511 | 615 | 741 | 572 | 340 |
| Below Normal (13\%) | 285 | 221 | 186 | 227 | 282 | 245 | 326 | 490 | 612 | 724 | 577 | 303 |
| Dry (24\%) | 248 | 183 | 158 | 177 | 150 | 179 | 266 | 429 | 543 | 639 | 462 | 252 |
| Critical (15\%) | 181 | 148 | 134 | 133 | 109 | 141 | 257 | 297 | 386 | 452 | 362 | 161 |

Alternative 5

| Statistic | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 404 | 410 | 647 | 689 | 671 | 694 | 491 | 627 | 618 | 752 | 574 | 628 |
| 20\% | 365 | 380 | 341 | 486 | 622 | 563 | 404 | 562 | 578 | 722 | 553 | 598 |
| 30\% | 328 | 316 | 236 | 381 | 459 | 362 | 368 | 513 | 557 | 705 | 534 | 468 |
| 40\% | 284 | 281 | 188 | 233 | 245 | 266 | 334 | 482 | 541 | 660 | 514 | 418 |
| 50\% | 269 | 226 | 173 | 201 | 205 | 229 | 327 | 460 | 525 | 648 | 498 | 351 |
| 60\% | 244 | 182 | 163 | 178 | 173 | 199 | 304 | 439 | 493 | 634 | 471 | 277 |
| 70\% | 220 | 161 | 145 | 153 | 139 | 170 | 281 | 412 | 472 | 601 | 451 | 248 |
| 80\% | 183 | 140 | 131 | 137 | 127 | 151 | 258 | 343 | 432 | 548 | 416 | 217 |
| 90\% | 155 | 113 | 102 | 120 | 108 | 136 | 233 | 308 | 350 | 463 | 365 | 184 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 273 | 254 | 258 | 317 | 321 | 328 | 348 | 463 | 509 | 628 | 485 | 378 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 313 | 320 | 438 | 558 | 512 | 554 | 446 | 585 | 567 | 685 | 538 | 598 |
| Above Normal (16\%) | 266 | 254 | 259 | 321 | 454 | 368 | 370 | 489 | 542 | 708 | 523 | 419 |
| Below Normal (13\%) | 307 | 257 | 173 | 186 | 265 | 221 | 334 | 458 | 533 | 675 | 520 | 294 |
| Dry (24\%) | 254 | 231 | 153 | 183 | 145 | 183 | 273 | 404 | 505 | 604 | 459 | 247 |
| Critical (15\%) | 192 | 149 | 120 | 135 | 110 | 132 | 250 | 270 | 336 | 414 | 337 | 153 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3\% | 38\% | -2\% | 0\% | -3\% | -2\% | 1\% | -1\% | -12\% | -3\% | -10\% | 42\% |
| 20\% | 9\% | 49\% | -21\% | -16\% | -4\% | -4\% | 4\% | -1\% | -12\% | -4\% | -7\% | 62\% |
| 30\% | 9\% | 36\% | -1\% | -13\% | 3\% | -2\% | 6\% | -4\% | -10\% | -4\% | -6\% | 39\% |
| 40\% | 2\% | 28\% | -3\% | -12\% | -14\% | 2\% | 2\% | -5\% | -8\% | -7\% | -7\% | 32\% |
| 50\% | 14\% | 10\% | -4\% | -3\% | -6\% | 1\% | 5\% | -7\% | -7\% | -6\% | -6\% | 18\% |
| 60\% | 12\% | 2\% | -4\% | 2\% | 0\% | 3\% | 3\% | -5\% | -11\% | -4\% | -6\% | -1\% |
| 70\% | 11\% | -3\% | -1\% | 0\% | -4\% | -3\% | 0\% | -7\% | -11\% | -4\% | -6\% | -4\% |
| 80\% | 7\% | 1\% | -2\% | -1\% | -5\% | -1\% | 3\% | -8\% | -10\% | -6\% | -5\% | -4\% |
| 90\% | 2\% | -9\% | -9\% | -1\% | -6\% | -2\% | 5\% | -2\% | -10\% | -2\% | -7\% | -4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 6\% | 18\% | -7\% | -5\% | -4\% | -2\% | 3\% | -4\% | -10\% | -5\% | -6\% | 23\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 6\% | 19\% | -11\% | -4\% | -4\% | 1\% | 4\% | 0\% | -9\% | -2\% | -7\% | 49\% |
| Above Normal (16\%) | 10\% | 18\% | 5\% | -11\% | -6\% | -8\% | 7\% | -4\% | -12\% | -4\% | -9\% | 23\% |
| Below Normal (13\%) | 8\% | 16\% | -7\% | -18\% | -6\% | -10\% | 2\% | -7\% | -13\% | -7\% | -10\% | -3\% |
| Dry (24\%) | 2\% | 26\% | -3\% | 3\% | -3\% | 2\% | 2\% | -6\% | -7\% | -6\% | -1\% | -2\% |
| Critical (15\%) | 6\% | 1\% | -10\% | 1\% | 1\% | -6\% | -3\% | -9\% | -13\% | -8\% | -7\% | -5\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.2.18 CVP Total Energy Use

Table 5C.3.2.18.1 CVP Total Energy Use, Monthly Energy Use

No Action Alternative

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 111 | 171 | 154 | 153 | 146 | 149 | 60 | 69 | 128 | 153 | 133 | 106 |
| 20\% | 95 | 150 | 149 | 131 | 133 | 138 | 43 | 46 | 103 | 139 | 122 | 105 |
| 30\% | 85 | 139 | 142 | 118 | 115 | 109 | 37 | 41 | 88 | 122 | 114 | 103 |
| 40\% | 76 | 129 | 134 | 113 | 99 | 98 | 35 | 39 | 78 | 114 | 109 | 96 |
| 50\% | 72 | 105 | 129 | 110 | 94 | 75 | 32 | 36 | 65 | 104 | 102 | 87 |
| 60\% | 67 | 93 | 123 | 105 | 85 | 65 | 31 | 33 | 58 | 93 | 94 | 76 |
| 70\% | 62 | 81 | 115 | 95 | 72 | 61 | 29 | 30 | 44 | 84 | 79 | 68 |
| 80\% | 57 | 65 | 96 | 83 | 47 | 46 | 25 | 26 | 34 | 69 | 59 | 58 |
| 90\% | 54 | 58 | 74 | 71 | 31 | 22 | 21 | 21 | 21 | 42 | 36 | 45 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 76 | 111 | 121 | 108 | 92 | 86 | 36 | 40 | 71 | 101 | 93 | 82 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 81 | 125 | 130 | 124 | 125 | 122 | 50 | 58 | 113 | 132 | 119 | 94 |
| Above Normal (16\%) | 74 | 120 | 123 | 97 | 91 | 104 | 36 | 40 | 85 | 99 | 108 | 87 |
| Below Normal (13\%) | 79 | 122 | 132 | 107 | 84 | 76 | 30 | 33 | 61 | 106 | 106 | 92 |
| Dry (24\%) | 76 | 103 | 120 | 108 | 77 | 64 | 30 | 30 | 42 | 90 | 65 | 72 |
| Critical (15\%) | 65 | 73 | 89 | 85 | 52 | 31 | 21 | 22 | 22 | 51 | 56 | 57 |

Revised Alternative 1

| Statistic | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 152 | 163 | 173 | 189 | 145 | 83 | 90 | 114 | 163 | 178 | 109 |
| 20\% | 121 | 140 | 159 | 167 | 148 | 128 | 81 | 64 | 103 | 156 | 153 | 108 |
| 30\% | 118 | 139 | 157 | 163 | 142 | 103 | 80 | 59 | 96 | 148 | 132 | 107 |
| 40\% | 96 | 131 | 155 | 162 | 138 | 82 | 75 | 53 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 123 | 152 | 160 | 135 | 68 | 69 | 46 | 87 | 131 | 123 | 105 |
| 60\% | 65 | 108 | 143 | 157 | 99 | 67 | 63 | 43 | 78 | 117 | 110 | 90 |
| 70\% | 54 | 96 | 128 | 147 | 77 | 62 | 49 | 38 | 64 | 97 | 85 | 83 |
| 80\% | 44 | 77 | 119 | 123 | 48 | 52 | 36 | 28 | 43 | 86 | 54 | 68 |
| 90\% | 32 | 67 | 86 | 74 | 25 | 28 | 22 | 23 | 25 | 42 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84 | 114 | 136 | 148 | 114 | 84 | 61 | 50 | 77 | 118 | 113 | 92 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 99 | 131 | 154 | 168 | 137 | 96 | 79 | 69 | 102 | 145 | 149 | 109 |
| Above Normal (16\%) | 73 | 115 | 136 | 148 | 133 | 93 | 79 | 57 | 100 | 129 | 135 | 115 |
| Below Normal (13\%) | 93 | 135 | 149 | 157 | 99 | 85 | 61 | 51 | 83 | 147 | 139 | 93 |
| Dry (24\%) | 86 | 101 | 125 | 139 | 103 | 84 | 43 | 36 | 55 | 105 | 67 | 75 |
| Critical (15\%) | 52 | 76 | 106 | 109 | 78 | 50 | 30 | 24 | 30 | 45 | 61 | 58 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 23\% | -11\% | 5\% | 13\% | 30\% | -2\% | 39\% | 31\% | -11\% | 7\% | 34\% | 3\% |
| 20\% | 27\% | -7\% | 7\% | 27\% | 11\% | -8\% | 90\% | 40\% | 1\% | 12\% | 25\% | 3\% |
| 30\% | 39\% | -1\% | 11\% | 39\% | 23\% | -6\% | 114\% | 44\% | 9\% | 21\% | 16\% | 3\% |
| 40\% | 27\% | 2\% | 16\% | 43\% | 39\% | -17\% | 118\% | 37\% | 17\% | 23\% | 18\% | 10\% |
| 50\% | 3\% | 17\% | 18\% | 46\% | 44\% | -8\% | 113\% | 30\% | 34\% | 26\% | 21\% | 20\% |
| 60\% | -3\% | 16\% | 16\% | 49\% | 17\% | 2\% | 106\% | 33\% | 34\% | 26\% | 17\% | 18\% |
| 70\% | -13\% | 18\% | 11\% | 54\% | 8\% | 2\% | 68\% | 26\% | 44\% | 14\% | 7\% | 23\% |
| 80\% | -23\% | 18\% | 24\% | 49\% | 3\% | 13\% | 44\% | 8\% | 29\% | 25\% | -8\% | 17\% |
| 90\% | -42\% | 14\% | 16\% | 5\% | -20\% | 27\% | 2\% | 6\% | 20\% | 0\% | 7\% | 9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 10\% | 3\% | 13\% | 36\% | 25\% | -1\% | 69\% | 25\% | 9\% | 17\% | 21\% | 13\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 21\% | 5\% | 19\% | 35\% | 10\% | -21\% | 59\% | 18\% | -10\% | 9\% | 25\% | 16\% |
| Above Normal (16\%) | -1\% | -4\% | 11\% | 53\% | 46\% | -11\% | 119\% | 42\% | 18\% | 30\% | 25\% | 32\% |
| Below Normal (13\%) | 18\% | 11\% | 13\% | 46\% | 17\% | 11\% | 105\% | 53\% | 35\% | 39\% | 32\% | 1\% |
| Dry (24\%) | 13\% | -3\% | 4\% | 28\% | 34\% | 31\% | 42\% | 20\% | 31\% | 18\% | 3\% | 4\% |
| Critical (15\%) | -20\% | 4\% | 19\% | 27\% | 51\% | 63\% | 47\% | 8\% | 33\% | -12\% | 9\% | 3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Altermative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.18.2 CVP Total Energy Use, Monthly Energy Use

Revised Second Basis of Comparison

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 152 | 163 | 173 | 189 | 145 | 83 | 90 | 114 | 163 | 178 | 109 |
| 20\% | 121 | 140 | 159 | 167 | 148 | 128 | 81 | 64 | 103 | 156 | 153 | 108 |
| 30\% | 118 | 139 | 157 | 163 | 142 | 103 | 80 | 59 | 96 | 148 | 132 | 107 |
| 40\% | 96 | 131 | 155 | 162 | 138 | 82 | 75 | 53 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 123 | 152 | 160 | 135 | 68 | 69 | 46 | 87 | 131 | 123 | 105 |
| 60\% | 65 | 108 | 143 | 157 | 99 | 67 | 63 | 43 | 78 | 117 | 110 | 90 |
| 70\% | 54 | 96 | 128 | 147 | 77 | 62 | 49 | 38 | 64 | 97 | 85 | 83 |
| 80\% | 44 | 77 | 119 | 123 | 48 | 52 | 36 | 28 | 43 | 86 | 54 | 68 |
| 90\% | 32 | 67 | 86 | 74 | 25 | 28 | 22 | 23 | 25 | 42 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84 | 114 | 136 | 148 | 114 | 84 | 61 | 50 | 77 | 118 | 113 | 92 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 99 | 131 | 154 | 168 | 137 | 96 | 79 | 69 | 102 | 145 | 149 | 109 |
| Above Normal (16\%) | 73 | 115 | 136 | 148 | 133 | 93 | 79 | 57 | 100 | 129 | 135 | 115 |
| Below Normal (13\%) | 93 | 135 | 149 | 157 | 99 | 85 | 61 | 51 | 83 | 147 | 139 | 93 |
| Dry (24\%) | 86 | 101 | 125 | 139 | 103 | 84 | 43 | 36 | 55 | 105 | 67 | 75 |
| Critical (15\%) | 52 | 76 | 106 | 109 | 78 | 50 | 30 | 24 | 30 | 45 | 61 | 58 |

## No Action Alternative

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 111 | 171 | 154 | 153 | 146 | 149 | 60 | 69 | 128 | 153 | 133 | 106 |
| 20\% | 95 | 150 | 149 | 131 | 133 | 138 | 43 | 46 | 103 | 139 | 122 | 105 |
| 30\% | 85 | 139 | 142 | 118 | 115 | 109 | 37 | 41 | 88 | 122 | 114 | 103 |
| 40\% | 76 | 129 | 134 | 113 | 99 | 98 | 35 | 39 | 78 | 114 | 109 | 96 |
| 50\% | 72 | 105 | 129 | 110 | 94 | 75 | 32 | 36 | 65 | 104 | 102 | 87 |
| 60\% | 67 | 93 | 123 | 105 | 85 | 65 | 31 | 33 | 58 | 93 | 94 | 76 |
| 70\% | 62 | 81 | 115 | 95 | 72 | 61 | 29 | 30 | 44 | 84 | 79 | 68 |
| 80\% | 57 | 65 | 96 | 83 | 47 | 46 | 25 | 26 | 34 | 69 | 59 | 58 |
| 90\% | 54 | 58 | 74 | 71 | 31 | 22 | 21 | 21 | 21 | 42 | 36 | 45 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 76 | 111 | 121 | 108 | 92 | 86 | 36 | 40 | 71 | 101 | 93 | 82 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 81 | 125 | 130 | 124 | 125 | 122 | 50 | 58 | 113 | 132 | 119 | 94 |
| Above Normal (16\%) | 74 | 120 | 123 | 97 | 91 | 104 | 36 | 40 | 85 | 99 | 108 | 87 |
| Below Normal (13\%) | 79 | 122 | 132 | 107 | 84 | 76 | 30 | 33 | 61 | 106 | 106 | 92 |
| Dry (24\%) | 76 | 103 | 120 | 108 | 77 | 64 | 30 | 30 | 42 | 90 | 65 | 72 |
| Critical (15\%) | 65 | 73 | 89 | 85 | 52 | 31 | 21 | 22 | 22 | 51 | 56 | 57 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -19\% | 13\% | -5\% | -12\% | -23\% | 2\% | -28\% | -24\% | 12\% | -6\% | -26\% | -3\% |
| 20\% | -21\% | 7\% | -6\% | -21\% | -10\% | 8\% | -47\% | -29\% | -1\% | -11\% | -20\% | -2\% |
| 30\% | -28\% | 1\% | -10\% | -28\% | -19\% | 6\% | -53\% | -31\% | -8\% | -18\% | -14\% | -3\% |
| 40\% | -21\% | -2\% | -13\% | -30\% | -28\% | 21\% | -54\% | -27\% | -14\% | -19\% | -15\% | -9\% |
| 50\% | -3\% | -14\% | -15\% | -31\% | -30\% | 9\% | -53\% | -23\% | -25\% | -21\% | -17\% | -17\% |
| 60\% | 3\% | -14\% | -14\% | -33\% | -14\% | -2\% | -51\% | -25\% | -25\% | -21\% | -15\% | -15\% |
| 70\% | 14\% | -15\% | -10\% | -35\% | -7\% | -2\% | -41\% | -21\% | -30\% | -13\% | -7\% | -18\% |
| 80\% | 30\% | -15\% | -19\% | -33\% | -3\% | -11\% | -30\% | -7\% | -22\% | -20\% | 9\% | -14\% |
| 90\% | 72\% | -12\% | -14\% | -5\% | 25\% | -21\% | -2\% | -6\% | -17\% | 0\% | -7\% | -8\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -9\% | -3\% | -12\% | -27\% | -20\% | 1\% | -41\% | -20\% | -8\% | -15\% | -17\% | -11\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -17\% | -5\% | -16\% | -26\% | -9\% | 27\% | -37\% | -15\% | 11\% | -9\% | -20\% | -14\% |
| Above Normal (16\%) | 1\% | 4\% | -10\% | -34\% | -32\% | 12\% | -54\% | -29\% | -15\% | -23\% | -20\% | -24\% |
| Below Normal (13\%) | -15\% | -10\% | -11\% | -32\% | -15\% | -10\% | -51\% | -34\% | -26\% | -28\% | -24\% | -1\% |
| Dry (24\%) | -11\% | 3\% | -4\% | -22\% | -25\% | -24\% | -30\% | -17\% | -23\% | -15\% | -3\% | -4\% |
| Critical (15\%) | 25\% | -4\% | -16\% | -21\% | -34\% | -39\% | -32\% | -7\% | -25\% | 14\% | -8\% | -3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.18.3 CVP Total Energy Use, Monthly Energy Use

Revised Second Basis of Comparison

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 152 | 163 | 173 | 189 | 145 | 83 | 90 | 114 | 163 | 178 | 109 |
| 20\% | 121 | 140 | 159 | 167 | 148 | 128 | 81 | 64 | 103 | 156 | 153 | 108 |
| 30\% | 118 | 139 | 157 | 163 | 142 | 103 | 80 | 59 | 96 | 148 | 132 | 107 |
| 40\% | 96 | 131 | 155 | 162 | 138 | 82 | 75 | 53 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 123 | 152 | 160 | 135 | 68 | 69 | 46 | 87 | 131 | 123 | 105 |
| 60\% | 65 | 108 | 143 | 157 | 99 | 67 | 63 | 43 | 78 | 117 | 110 | 90 |
| 70\% | 54 | 96 | 128 | 147 | 77 | 62 | 49 | 38 | 64 | 97 | 85 | 83 |
| 80\% | 44 | 77 | 119 | 123 | 48 | 52 | 36 | 28 | 43 | 86 | 54 | 68 |
| 90\% | 32 | 67 | 86 | 74 | 25 | 28 | 22 | 23 | 25 | 42 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84 | 114 | 136 | 148 | 114 | 84 | 61 | 50 | 77 | 118 | 113 | 92 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 99 | 131 | 154 | 168 | 137 | 96 | 79 | 69 | 102 | 145 | 149 | 109 |
| Above Normal (16\%) | 73 | 115 | 136 | 148 | 133 | 93 | 79 | 57 | 100 | 129 | 135 | 115 |
| Below Normal (13\%) | 93 | 135 | 149 | 157 | 99 | 85 | 61 | 51 | 83 | 147 | 139 | 93 |
| Dry (24\%) | 86 | 101 | 125 | 139 | 103 | 84 | 43 | 36 | 55 | 105 | 67 | 75 |
| Critical (15\%) | 52 | 76 | 106 | 109 | 78 | 50 | 30 | 24 | 30 | 45 | 61 | 58 |

Alternative 3

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 143 | 149 | 161 | 165 | 151 | 147 | 87 | 99 | 142 | 154 | 156 | 139 |
| 20\% | 124 | 140 | 157 | 131 | 142 | 139 | 82 | 89 | 122 | 146 | 134 | 112 |
| 30\% | 119 | 138 | 154 | 120 | 126 | 100 | 81 | 79 | 106 | 139 | 132 | 107 |
| 40\% | 108 | 128 | 143 | 117 | 105 | 78 | 79 | 72 | 100 | 128 | 128 | 106 |
| 50\% | 86 | 118 | 140 | 110 | 91 | 72 | 72 | 66 | 91 | 118 | 113 | 105 |
| 60\% | 70 | 107 | 131 | 104 | 75 | 64 | 64 | 53 | 80 | 103 | 99 | 95 |
| 70\% | 63 | 95 | 122 | 93 | 65 | 62 | 46 | 40 | 59 | 87 | 83 | 85 |
| 80\% | 52 | 82 | 102 | 84 | 54 | 51 | 35 | 30 | 41 | 71 | 62 | 63 |
| 90\% | 46 | 66 | 73 | 76 | 31 | 24 | 23 | 23 | 24 | 46 | 41 | 45 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 91 | 113 | 129 | 109 | 95 | 85 | 62 | 62 | 85 | 109 | 106 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 101 | 130 | 144 | 128 | 135 | 108 | 83 | 87 | 125 | 139 | 140 | 113 |
| Above Normal (16\%) | 83 | 113 | 122 | 93 | 96 | 125 | 77 | 74 | 105 | 115 | 121 | 111 |
| Below Normal (13\%) | 94 | 130 | 144 | 111 | 85 | 78 | 56 | 58 | 86 | 123 | 117 | 126 |
| Dry (24\%) | 97 | 104 | 126 | 108 | 75 | 65 | 49 | 44 | 54 | 98 | 75 | 74 |
| Critical (15\%) | 64 | 78 | 97 | 85 | 53 | 31 | 30 | 25 | 27 | 43 | 55 | 58 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 4\% | -2\% | -1\% | -5\% | -20\% | 1\% | 5\% | 11\% | 24\% | -5\% | -12\% | 27\% |
| 20\% | 2\% | 0\% | -1\% | -21\% | -4\% | 9\% | 1\% | 38\% | 18\% | -6\% | -13\% | 4\% |
| 30\% | 1\% | 0\% | -2\% | -27\% | -11\% | -2\% | 2\% | 34\% | 11\% | -6\% | 0\% | 1\% |
| 40\% | 12\% | -3\% | -8\% | -27\% | -24\% | -4\% | 5\% | 35\% | 10\% | -9\% | 0\% | 0\% |
| 50\% | 16\% | -4\% | -8\% | -31\% | -32\% | 5\% | 4\% | 43\% | 4\% | -10\% | -8\% | 0\% |
| 60\% | 8\% | -1\% | -8\% | -34\% | -24\% | -4\% | 1\% | 22\% | 3\% | -12\% | -10\% | 6\% |
| 70\% | 16\% | -1\% | -4\% | -37\% | -16\% | 0\% | -5\% | 4\% | -8\% | -10\% | -2\% | 3\% |
| 80\% | 18\% | 8\% | -15\% | -31\% | 12\% | -2\% | -2\% | 8\% | -5\% | -18\% | 15\% | -7\% |
| 90\% | 45\% | -1\% | -16\% | 2\% | 21\% | -17\% | 8\% | 2\% | -5\% | 11\% | 7\% | -7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 8\% | 0\% | -5\% | -26\% | -17\% | 1\% | 2\% | 23\% | 10\% | -8\% | -6\% | 5\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 3\% | -1\% | -7\% | -24\% | -2\% | 12\% | 5\% | 27\% | 23\% | -4\% | -6\% | 4\% |
| Above Normal (16\%) | 13\% | -2\% | -10\% | -37\% | -27\% | 34\% | -3\% | 30\% | 5\% | -11\% | -10\% | -4\% |
| Below Normal (13\%) | 1\% | -4\% | -3\% | -29\% | -14\% | -8\% | -9\% | 15\% | 4\% | -16\% | -16\% | 36\% |
| Dry (24\%) | 13\% | 3\% | 1\% | -22\% | -27\% | -22\% | 13\% | 20\% | -2\% | -7\% | 12\% | -1\% |
| Critical (15\%) | 22\% | 2\% | -8\% | -21\% | -33\% | -39\% | -1\% | 5\% | -10\% | -4\% | -9\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.18.4 CVP Total Energy Use, Monthly Energy Use

Revised Second Basis of Comparison

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 152 | 163 | 173 | 189 | 145 | 83 | 90 | 114 | 163 | 178 | 109 |
| 20\% | 121 | 140 | 159 | 167 | 148 | 128 | 81 | 64 | 103 | 156 | 153 | 108 |
| 30\% | 118 | 139 | 157 | 163 | 142 | 103 | 80 | 59 | 96 | 148 | 132 | 107 |
| 40\% | 96 | 131 | 155 | 162 | 138 | 82 | 75 | 53 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 123 | 152 | 160 | 135 | 68 | 69 | 46 | 87 | 131 | 123 | 105 |
| 60\% | 65 | 108 | 143 | 157 | 99 | 67 | 63 | 43 | 78 | 117 | 110 | 90 |
| 70\% | 54 | 96 | 128 | 147 | 77 | 62 | 49 | 38 | 64 | 97 | 85 | 83 |
| 80\% | 44 | 77 | 119 | 123 | 48 | 52 | 36 | 28 | 43 | 86 | 54 | 68 |
| 90\% | 32 | 67 | 86 | 74 | 25 | 28 | 22 | 23 | 25 | 42 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84 | 114 | 136 | 148 | 114 | 84 | 61 | 50 | 77 | 118 | 113 | 92 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 99 | 131 | 154 | 168 | 137 | 96 | 79 | 69 | 102 | 145 | 149 | 109 |
| Above Normal (16\%) | 73 | 115 | 136 | 148 | 133 | 93 | 79 | 57 | 100 | 129 | 135 | 115 |
| Below Normal (13\%) | 93 | 135 | 149 | 157 | 99 | 85 | 61 | 51 | 83 | 147 | 139 | 93 |
| Dry (24\%) | 86 | 101 | 125 | 139 | 103 | 84 | 43 | 36 | 55 | 105 | 67 | 75 |
| Critical (15\%) | 52 | 76 | 106 | 109 | 78 | 50 | 30 | 24 | 30 | 45 | 61 | 58 |

Alternative 5

| Statistic | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 106 | 174 | 154 | 153 | 146 | 153 | 59 | 68 | 128 | 155 | 132 | 106 |
| 20\% | 94 | 153 | 151 | 134 | 134 | 138 | 41 | 44 | 103 | 140 | 121 | 105 |
| 30\% | 85 | 140 | 142 | 120 | 116 | 109 | 35 | 40 | 86 | 122 | 113 | 102 |
| 40\% | 75 | 126 | 135 | 114 | 104 | 99 | 32 | 37 | 77 | 115 | 110 | 95 |
| 50\% | 72 | 106 | 128 | 110 | 94 | 75 | 30 | 33 | 65 | 105 | 102 | 90 |
| 60\% | 69 | 92 | 123 | 104 | 86 | 65 | 29 | 30 | 57 | 94 | 94 | 76 |
| 70\% | 63 | 74 | 115 | 95 | 71 | 61 | 24 | 22 | 46 | 88 | 80 | 70 |
| 80\% | 59 | 65 | 92 | 83 | 46 | 48 | 18 | 16 | 32 | 74 | 63 | 58 |
| 90\% | 54 | 56 | 68 | 71 | 32 | 22 | 13 | 12 | 24 | 50 | 49 | 47 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 76 | 110 | 121 | 109 | 92 | 86 | 33 | 36 | 71 | 103 | 95 | 82 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 81 | 129 | 131 | 125 | 124 | 123 | 50 | 58 | 113 | 132 | 119 | 93 |
| Above Normal (16\%) | 75 | 112 | 122 | 100 | 90 | 104 | 35 | 40 | 84 | 100 | 107 | 86 |
| Below Normal (13\%) | 76 | 122 | 132 | 107 | 90 | 77 | 28 | 30 | 62 | 106 | 100 | 96 |
| Dry (24\%) | 74 | 101 | 121 | 108 | 77 | 64 | 23 | 21 | 43 | 96 | 71 | 74 |
| Critical (15\%) | 69 | 73 | 86 | 88 | 54 | 30 | 13 | 13 | 22 | 56 | 64 | 56 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -23\% | 14\% | -5\% | -12\% | -23\% | 5\% | -29\% | -25\% | 12\% | -5\% | -26\% | -3\% |
| 20\% | -22\% | 9\% | -5\% | -20\% | -10\% | 8\% | -49\% | -31\% | 0\% | -10\% | -21\% | -2\% |
| 30\% | -28\% | 1\% | -10\% | -27\% | -18\% | 6\% | -56\% | -32\% | -10\% | -17\% | -15\% | -4\% |
| 40\% | -22\% | -4\% | -13\% | -30\% | -25\% | 21\% | -57\% | -31\% | -16\% | -18\% | -14\% | -10\% |
| 50\% | -2\% | -14\% | -16\% | -31\% | -30\% | 9\% | -57\% | -29\% | -25\% | -20\% | -17\% | -14\% |
| 60\% | 7\% | -15\% | -14\% | -34\% | -13\% | -2\% | -55\% | -32\% | -26\% | -20\% | -15\% | -15\% |
| 70\% | 16\% | -22\% | -10\% | -35\% | -8\% | -2\% | -52\% | -42\% | -28\% | -9\% | -5\% | -16\% |
| 80\% | 33\% | -16\% | -23\% | -33\% | -4\% | -8\% | -49\% | -42\% | -26\% | -15\% | 16\% | -15\% |
| 90\% | 70\% | -16\% | -21\% | -4\% | 27\% | -22\% | -40\% | -48\% | -6\% | 20\% | 27\% | -4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -10\% | -3\% | -12\% | -26\% | -19\% | 2\% | -47\% | -28\% | -8\% | -13\% | -16\% | -11\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -18\% | -2\% | -16\% | -26\% | -10\% | 27\% | -37\% | -15\% | 10\% | -9\% | -20\% | -15\% |
| Above Normal (16\%) | 3\% | -3\% | -10\% | -32\% | -32\% | 12\% | -56\% | -31\% | -16\% | -23\% | -21\% | -25\% |
| Below Normal (13\%) | -18\% | -10\% | -11\% | -32\% | -9\% | -9\% | -54\% | -42\% | -25\% | -28\% | -28\% | 3\% |
| Dry (24\%) | -14\% | 0\% | -3\% | -22\% | -25\% | -24\% | -47\% | -41\% | -21\% | -9\% | 6\% | -2\% |
| Critical (15\%) | 31\% | -4\% | -18\% | -19\% | -31\% | -39\% | -57\% | -44\% | -25\% | 24\% | 5\% | -4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.2.19 CVP Net Energy Use

Table 5C.3.2.19.1 CVP Net Generation, Monthly Net Generation

No Action Alternative

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 324 | 257 | 523 | 556 | 567 | 564 | 449 | 560 | 543 | 664 | 474 | 528 |
| 20\% | 283 | 220 | 218 | 372 | 491 | 444 | 355 | 513 | 500 | 624 | 446 | 491 |
| 30\% | 249 | 195 | 116 | 257 | 358 | 262 | 325 | 468 | 476 | 596 | 427 | 366 |
| 40\% | 216 | 162 | 72 | 147 | 163 | 169 | 304 | 441 | 452 | 558 | 418 | 344 |
| 50\% | 200 | 112 | 49 | 104 | 110 | 150 | 285 | 424 | 438 | 537 | 405 | 246 |
| 60\% | 154 | 96 | 42 | 71 | 94 | 133 | 270 | 404 | 426 | 508 | 381 | 198 |
| 70\% | 134 | 71 | 30 | 50 | 71 | 109 | 248 | 383 | 410 | 480 | 366 | 183 |
| 80\% | 119 | 56 | 18 | 37 | 54 | 95 | 225 | 327 | 377 | 450 | 347 | 150 |
| 90\% | 86 | 40 | -1 | 24 | 36 | 72 | 198 | 262 | 332 | 400 | 302 | 104 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 197 | 145 | 139 | 209 | 230 | 243 | 307 | 420 | 443 | 530 | 393 | 295 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 236 | 193 | 311 | 433 | 389 | 435 | 397 | 522 | 455 | 551 | 423 | 504 |
| Above Normal (16\%) | 193 | 143 | 136 | 223 | 363 | 263 | 334 | 443 | 459 | 608 | 419 | 334 |
| Below Normal (13\%) | 231 | 137 | 43 | 79 | 181 | 144 | 288 | 422 | 478 | 573 | 423 | 198 |
| Dry (24\%) | 178 | 128 | 34 | 74 | 67 | 119 | 233 | 376 | 469 | 518 | 391 | 174 |
| Critical (15\%) | 118 | 76 | 34 | 48 | 59 | 104 | 221 | 249 | 323 | 380 | 276 | 89 |

Revised Alternative 1

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 284 | 162 | 524 | 558 | 598 | 565 | 406 | 564 | 602 | 639 | 479 | 291 |
| 20\% | 242 | 130 | 268 | 409 | 492 | 482 | 323 | 519 | 571 | 620 | 466 | 257 |
| 30\% | 197 | 106 | 114 | 286 | 291 | 296 | 292 | 481 | 531 | 602 | 441 | 228 |
| 40\% | 172 | 88 | 75 | 135 | 201 | 194 | 272 | 463 | 503 | 585 | 423 | 217 |
| 50\% | 164 | 81 | 46 | 72 | 113 | 155 | 255 | 436 | 482 | 549 | 408 | 203 |
| 60\% | 154 | 74 | 32 | 37 | 81 | 129 | 236 | 407 | 465 | 524 | 395 | 191 |
| 70\% | 141 | 61 | 21 | 19 | 58 | 106 | 215 | 386 | 452 | 497 | 372 | 181 |
| 80\% | 115 | 51 | 9 | 11 | 24 | 83 | 199 | 340 | 410 | 463 | 358 | 156 |
| 90\% | 97 | 33 | -13 | -10 | -6 | 63 | 170 | 288 | 366 | 399 | 319 | 103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 173 | 102 | 142 | 187 | 220 | 251 | 277 | 431 | 489 | 540 | 404 | 215 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 198 | 138 | 337 | 413 | 394 | 455 | 351 | 519 | 522 | 555 | 428 | 293 |
| Above Normal (16\%) | 167 | 99 | 110 | 211 | 348 | 305 | 266 | 454 | 515 | 612 | 437 | 225 |
| Below Normal (13\%) | 192 | 85 | 37 | 70 | 183 | 160 | 265 | 440 | 529 | 577 | 438 | 210 |
| Dry (24\%) | 162 | 82 | 34 | 39 | 46 | 95 | 223 | 393 | 488 | 534 | 395 | 177 |
| Critical (15\%) | 129 | 72 | 28 | 25 | 30 | 91 | 227 | 273 | 356 | 407 | 301 | 103 |

Revised Alternative 1 minus No Action Alternative

|  | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -12\% | -37\% | 0\% | 0\% | 5\% | 0\% | -10\% | 1\% | 11\% | -4\% | 1\% | -45\% |
| 20\% | -14\% | -41\% | 23\% | 10\% | 0\% | 9\% | -9\% | 1\% | 14\% | -1\% | 5\% | -48\% |
| 30\% | -21\% | -45\% | -2\% | 11\% | -19\% | 13\% | -10\% | 3\% | 11\% | 1\% | 3\% | -38\% |
| 40\% | -20\% | -45\% | 4\% | -8\% | 24\% | 15\% | -11\% | 5\% | 11\% | 5\% | 1\% | -37\% |
| 50\% | -18\% | -28\% | -6\% | -31\% | 3\% | 3\% | -10\% | 3\% | 10\% | 2\% | 1\% | -18\% |
| 60\% | 0\% | -23\% | -24\% | -48\% | -14\% | -3\% | -13\% | 1\% | 9\% | 3\% | 4\% | -4\% |
| 70\% | 5\% | -14\% | -30\% | -62\% | -18\% | -3\% | -13\% | 1\% | 10\% | 4\% | 2\% | -1\% |
| 80\% | -4\% | -8\% | -47\% | -72\% | -56\% | -13\% | -12\% | 4\% | 9\% | 3\% | 3\% | 4\% |
| 90\% | 13\% | -18\% | 1847\% | -141\% | -117\% | -14\% | -14\% | 10\% | 10\% | 0\% | 6\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -12\% | -30\% | 2\% | -10\% | -4\% | 3\% | -10\% | 3\% | 10\% | 2\% | 3\% | -27\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -16\% | -29\% | 8\% | -5\% | 1\% | 5\% | -12\% | -1\% | 15\% | 1\% | 1\% | -42\% |
| Above Normal (16\%) | -13\% | -31\% | -20\% | -5\% | -4\% | 16\% | -20\% | 2\% | 12\% | 1\% | 4\% | -33\% |
| Below Normal (13\%) | -17\% | -37\% | -13\% | -12\% | 1\% | 11\% | -8\% | 4\% | 11\% | 1\% | 4\% | 6\% |
| Dry (24\%) | -9\% | -36\% | -1\% | -48\% | -31\% | -20\% | -4\% | 4\% | 4\% | 3\% | 1\% | 2\% |
| Critical (15\%) | 9\% | -5\% | -16\% | -49\% | -49\% | -13\% | 3\% | 10\% | 10\% | 7\% | 9\% | 16\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.19.2 CVP Net Generation, Monthly Net Generation

Revised Second Basis of Comparison

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 284 | 162 | 524 | 558 | 598 | 565 | 406 | 564 | 602 | 639 | 479 | 291 |
| 20\% | 242 | 130 | 268 | 409 | 492 | 482 | 323 | 519 | 571 | 620 | 466 | 257 |
| 30\% | 197 | 106 | 114 | 286 | 291 | 296 | 292 | 481 | 531 | 602 | 441 | 228 |
| 40\% | 172 | 88 | 75 | 135 | 201 | 194 | 272 | 463 | 503 | 585 | 423 | 217 |
| 50\% | 164 | 81 | 46 | 72 | 113 | 155 | 255 | 436 | 482 | 549 | 408 | 203 |
| 60\% | 154 | 74 | 32 | 37 | 81 | 129 | 236 | 407 | 465 | 524 | 395 | 191 |
| 70\% | 141 | 61 | 21 | 19 | 58 | 106 | 215 | 386 | 452 | 497 | 372 | 181 |
| 80\% | 115 | 51 | 9 | 11 | 24 | 83 | 199 | 340 | 410 | 463 | 358 | 156 |
| 90\% | 97 | 33 | -13 | -10 | -6 | 63 | 170 | 288 | 366 | 399 | 319 | 103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 173 | 102 | 142 | 187 | 220 | 251 | 277 | 431 | 489 | 540 | 404 | 215 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 198 | 138 | 337 | 413 | 394 | 455 | 351 | 519 | 522 | 555 | 428 | 293 |
| Above Normal (16\%) | 167 | 99 | 110 | 211 | 348 | 305 | 266 | 454 | 515 | 612 | 437 | 225 |
| Below Normal (13\%) | 192 | 85 | 37 | 70 | 183 | 160 | 265 | 440 | 529 | 577 | 438 | 210 |
| Dry (24\%) | 162 | 82 | 34 | 39 | 46 | 95 | 223 | 393 | 488 | 534 | 395 | 177 |
| Critical (15\%) | 129 | 72 | 28 | 25 | 30 | 91 | 227 | 273 | 356 | 407 | 301 | 103 |

## No Action Alternative

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 324 | 257 | 523 | 556 | 567 | 564 | 449 | 560 | 543 | 664 | 474 | 528 |
| 20\% | 283 | 220 | 218 | 372 | 491 | 444 | 355 | 513 | 500 | 624 | 446 | 491 |
| 30\% | 249 | 195 | 116 | 257 | 358 | 262 | 325 | 468 | 476 | 596 | 427 | 366 |
| 40\% | 216 | 162 | 72 | 147 | 163 | 169 | 304 | 441 | 452 | 558 | 418 | 344 |
| 50\% | 200 | 112 | 49 | 104 | 110 | 150 | 285 | 424 | 438 | 537 | 405 | 246 |
| 60\% | 154 | 96 | 42 | 71 | 94 | 133 | 270 | 404 | 426 | 508 | 381 | 198 |
| 70\% | 134 | 71 | 30 | 50 | 71 | 109 | 248 | 383 | 410 | 480 | 366 | 183 |
| 80\% | 119 | 56 | 18 | 37 | 54 | 95 | 225 | 327 | 377 | 450 | 347 | 150 |
| 90\% | 86 | 40 | -1 | 24 | 36 | 72 | 198 | 262 | 332 | 400 | 302 | 104 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 197 | 145 | 139 | 209 | 230 | 243 | 307 | 420 | 443 | 530 | 393 | 295 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 236 | 193 | 311 | 433 | 389 | 435 | 397 | 522 | 455 | 551 | 423 | 504 |
| Above Normal (16\%) | 193 | 143 | 136 | 223 | 363 | 263 | 334 | 443 | 459 | 608 | 419 | 334 |
| Below Normal (13\%) | 231 | 137 | 43 | 79 | 181 | 144 | 288 | 422 | 478 | 573 | 423 | 198 |
| Dry (24\%) | 178 | 128 | 34 | 74 | 67 | 119 | 233 | 376 | 469 | 518 | 391 | 174 |
| Critical (15\%) | 118 | 76 | 34 | 48 | 59 | 104 | 221 | 249 | 323 | 380 | 276 | 89 |

No Action Alternative minus Revised Second Basis of Comparison

|  | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 14\% | 59\% | 0\% | 0\% | -5\% | 0\% | 11\% | -1\% | -10\% | 4\% | -1\% | 81\% |
| 20\% | 17\% | 69\% | -19\% | -9\% | 0\% | -8\% | 10\% | -1\% | -12\% | 1\% | -4\% | 91\% |
| 30\% | 26\% | 83\% | 2\% | -10\% | 23\% | -11\% | 11\% | -3\% | -10\% | -1\% | -3\% | 61\% |
| 40\% | 26\% | 83\% | -4\% | 8\% | -19\% | -13\% | 12\% | -5\% | -10\% | -5\% | -1\% | 59\% |
| 50\% | 22\% | 38\% | 7\% | 45\% | -3\% | -3\% | 12\% | -3\% | -9\% | -2\% | -1\% | 21\% |
| 60\% | 0\% | 30\% | 31\% | 91\% | 16\% | 3\% | 14\% | -1\% | -8\% | -3\% | -3\% | 4\% |
| 70\% | -5\% | 16\% | 43\% | 162\% | 22\% | 3\% | 16\% | -1\% | -9\% | -3\% | -2\% | 1\% |
| 80\% | 4\% | 9\% | 89\% | 254\% | 130\% | 15\% | 13\% | -4\% | -8\% | -3\% | -3\% | -4\% |
| 90\% | -11\% | 21\% | -95\% | -341\% | -681\% | 16\% | 16\% | -9\% | -9\% | 0\% | -5\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 14\% | 42\% | -2\% | 12\% | 4\% | -3\% | 11\% | -2\% | -9\% | -2\% | -3\% | 37\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 19\% | 40\% | -8\% | 5\% | -1\% | -4\% | 13\% | 1\% | -13\% | -1\% | -1\% | 72\% |
| Above Normal (16\%) | 15\% | 44\% | 24\% | 6\% | 4\% | -14\% | 26\% | -2\% | -11\% | -1\% | -4\% | 49\% |
| Below Normal (13\%) | 20\% | 60\% | 15\% | 14\% | -1\% | -10\% | 9\% | -4\% | -10\% | -1\% | -3\% | -6\% |
| Dry (24\%) | 10\% | 56\% | 1\% | 93\% | 45\% | 25\% | 4\% | -4\% | -4\% | -3\% | -1\% | -2\% |
| Critical (15\%) | -8\% | 5\% | 20\% | 96\% | 95\% | 14\% | -3\% | -9\% | -9\% | -7\% | -8\% | -14\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.19.3 CVP Net Generation, Monthly Net Generation

Revised Second Basis of Comparison

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 284 | 162 | 524 | 558 | 598 | 565 | 406 | 564 | 602 | 639 | 479 | 291 |
| 20\% | 242 | 130 | 268 | 409 | 492 | 482 | 323 | 519 | 571 | 620 | 466 | 257 |
| 30\% | 197 | 106 | 114 | 286 | 291 | 296 | 292 | 481 | 531 | 602 | 441 | 228 |
| 40\% | 172 | 88 | 75 | 135 | 201 | 194 | 272 | 463 | 503 | 585 | 423 | 217 |
| 50\% | 164 | 81 | 46 | 72 | 113 | 155 | 255 | 436 | 482 | 549 | 408 | 203 |
| 60\% | 154 | 74 | 32 | 37 | 81 | 129 | 236 | 407 | 465 | 524 | 395 | 191 |
| 70\% | 141 | 61 | 21 | 19 | 58 | 106 | 215 | 386 | 452 | 497 | 372 | 181 |
| 80\% | 115 | 51 | 9 | 11 | 24 | 83 | 199 | 340 | 410 | 463 | 358 | 156 |
| 90\% | 97 | 33 | -13 | -10 | -6 | 63 | 170 | 288 | 366 | 399 | 319 | 103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 173 | 102 | 142 | 187 | 220 | 251 | 277 | 431 | 489 | 540 | 404 | 215 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 198 | 138 | 337 | 413 | 394 | 455 | 351 | 519 | 522 | 555 | 428 | 293 |
| Above Normal (16\%) | 167 | 99 | 110 | 211 | 348 | 305 | 266 | 454 | 515 | 612 | 437 | 225 |
| Below Normal (13\%) | 192 | 85 | 37 | 70 | 183 | 160 | 265 | 440 | 529 | 577 | 438 | 210 |
| Dry (24\%) | 162 | 82 | 34 | 39 | 46 | 95 | 223 | 393 | 488 | 534 | 395 | 177 |
| Critical (15\%) | 129 | 72 | 28 | 25 | 30 | 91 | 227 | 273 | 356 | 407 | 301 | 103 |

Alternative 3

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 291 | 182 | 530 | 558 | 606 | 583 | 437 | 534 | 563 | 674 | 481 | 336 |
| 20\% | 235 | 125 | 266 | 480 | 511 | 511 | 316 | 479 | 531 | 638 | 465 | 266 |
| 30\% | 193 | 104 | 114 | 332 | 334 | 287 | 298 | 459 | 508 | 622 | 441 | 246 |
| 40\% | 173 | 91 | 74 | 160 | 183 | 189 | 268 | 439 | 473 | 596 | 424 | 216 |
| 50\% | 158 | 77 | 52 | 112 | 122 | 150 | 251 | 392 | 448 | 544 | 409 | 205 |
| 60\% | 147 | 66 | 39 | 72 | 84 | 122 | 229 | 374 | 433 | 528 | 387 | 195 |
| 70\% | 133 | 60 | 25 | 51 | 71 | 106 | 216 | 348 | 411 | 506 | 374 | 181 |
| 80\% | 113 | 52 | 12 | 36 | 56 | 92 | 200 | 316 | 387 | 469 | 362 | 155 |
| 90\% | 88 | 31 | -6 | 18 | 41 | 71 | 174 | 260 | 340 | 397 | 326 | 104 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 172 | 102 | 150 | 224 | 241 | 250 | 275 | 400 | 457 | 549 | 406 | 217 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 197 | 137 | 349 | 456 | 402 | 443 | 347 | 475 | 467 | 572 | 436 | 294 |
| Above Normal (16\%) | 166 | 109 | 123 | 257 | 381 | 276 | 269 | 408 | 475 | 621 | 429 | 230 |
| Below Normal (13\%) | 190 | 81 | 42 | 117 | 198 | 167 | 276 | 418 | 493 | 588 | 440 | 221 |
| Dry (24\%) | 160 | 81 | 36 | 67 | 71 | 115 | 217 | 372 | 478 | 537 | 396 | 177 |
| Critical (15\%) | 125 | 73 | 35 | 45 | 60 | 108 | 223 | 260 | 346 | 402 | 305 | 101 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2\% | 13\% | 1\% | 0\% | 1\% | 3\% | 8\% | -5\% | -6\% | 5\% | 0\% | 15\% |
| 20\% | -3\% | -4\% | -1\% | 17\% | 4\% | 6\% | -2\% | -8\% | -7\% | 3\% | 0\% | 3\% |
| 30\% | -2\% | -2\% | 0\% | 16\% | 15\% | -3\% | 2\% | -4\% | -4\% | 3\% | 0\% | 8\% |
| 40\% | 1\% | 3\% | -2\% | 18\% | -9\% | -2\% | -1\% | -5\% | -6\% | 2\% | 0\% | -1\% |
| 50\% | -4\% | -4\% | 12\% | 56\% | 8\% | -3\% | -2\% | -10\% | -7\% | -1\% | 0\% | 1\% |
| 60\% | -5\% | -11\% | 20\% | 94\% | 3\% | -5\% | -3\% | -8\% | -7\% | 1\% | -2\% | 2\% |
| 70\% | -6\% | -2\% | 19\% | 166\% | 23\% | -1\% | 1\% | -10\% | -9\% | 2\% | 1\% | 0\% |
| 80\% | -2\% | 1\% | 23\% | 241\% | 136\% | 11\% | 0\% | -7\% | -6\% | 1\% | 1\% | 0\% |
| 90\% | -9\% | -5\% | -57\% | -278\% | -768\% | 14\% | 3\% | -10\% | -7\% | -1\% | 2\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1\% | 0\% | 6\% | 20\% | 9\% | 0\% | -1\% | -7\% | -7\% | 2\% | 1\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0\% | 0\% | 4\% | 11\% | 2\% | -3\% | -1\% | -8\% | -10\% | 3\% | 2\% | 0\% |
| Above Normal (16\%) | -1\% | 10\% | 12\% | 22\% | 9\% | -10\% | 1\% | -10\% | -8\% | 2\% | -2\% | 3\% |
| Below Normal (13\%) | -1\% | -5\% | 14\% | 68\% | 8\% | 4\% | 4\% | -5\% | -7\% | 2\% | 0\% | 5\% |
| Dry (24\%) | -2\% | -2\% | 7\% | 74\% | 53\% | 21\% | -3\% | -5\% | -2\% | 1\% | 0\% | 0\% |
| Critical (15\%) | -3\% | 0\% | 22\% | 83\% | 97\% | 19\% | -2\% | -5\% | -3\% | -1\% | 1\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.2.19.4 CVP Net Generation, Monthly Net Generation

Revised Second Basis of Comparison

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 284 | 162 | 524 | 558 | 598 | 565 | 406 | 564 | 602 | 639 | 479 | 291 |
| 20\% | 242 | 130 | 268 | 409 | 492 | 482 | 323 | 519 | 571 | 620 | 466 | 257 |
| 30\% | 197 | 106 | 114 | 286 | 291 | 296 | 292 | 481 | 531 | 602 | 441 | 228 |
| 40\% | 172 | 88 | 75 | 135 | 201 | 194 | 272 | 463 | 503 | 585 | 423 | 217 |
| 50\% | 164 | 81 | 46 | 72 | 113 | 155 | 255 | 436 | 482 | 549 | 408 | 203 |
| 60\% | 154 | 74 | 32 | 37 | 81 | 129 | 236 | 407 | 465 | 524 | 395 | 191 |
| 70\% | 141 | 61 | 21 | 19 | 58 | 106 | 215 | 386 | 452 | 497 | 372 | 181 |
| 80\% | 115 | 51 | 9 | 11 | 24 | 83 | 199 | 340 | 410 | 463 | 358 | 156 |
| 90\% | 97 | 33 | -13 | -10 | -6 | 63 | 170 | 288 | 366 | 399 | 319 | 103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 173 | 102 | 142 | 187 | 220 | 251 | 277 | 431 | 489 | 540 | 404 | 215 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 198 | 138 | 337 | 413 | 394 | 455 | 351 | 519 | 522 | 555 | 428 | 293 |
| Above Normal (16\%) | 167 | 99 | 110 | 211 | 348 | 305 | 266 | 454 | 515 | 612 | 437 | 225 |
| Below Normal (13\%) | 192 | 85 | 37 | 70 | 183 | 160 | 265 | 440 | 529 | 577 | 438 | 210 |
| Dry (24\%) | 162 | 82 | 34 | 39 | 46 | 95 | 223 | 393 | 488 | 534 | 395 | 177 |
| Critical (15\%) | 129 | 72 | 28 | 25 | 30 | 91 | 227 | 273 | 356 | 407 | 301 | 103 |

Alternative 5

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 323 | 255 | 511 | 557 | 567 | 559 | 451 | 559 | 528 | 654 | 468 | 527 |
| 20\% | 285 | 219 | 219 | 356 | 495 | 444 | 360 | 514 | 496 | 620 | 442 | 495 |
| 30\% | 233 | 186 | 113 | 253 | 363 | 270 | 330 | 469 | 475 | 589 | 426 | 365 |
| 40\% | 217 | 160 | 72 | 146 | 159 | 168 | 310 | 447 | 450 | 551 | 415 | 343 |
| 50\% | 194 | 116 | 48 | 104 | 107 | 148 | 294 | 426 | 437 | 531 | 402 | 243 |
| 60\% | 158 | 99 | 39 | 72 | 92 | 131 | 274 | 409 | 424 | 509 | 377 | 199 |
| 70\% | 134 | 71 | 28 | 52 | 67 | 105 | 254 | 389 | 404 | 485 | 366 | 177 |
| 80\% | 110 | 57 | 18 | 38 | 52 | 84 | 237 | 323 | 368 | 425 | 346 | 146 |
| 90\% | 84 | 31 | -2 | 25 | 35 | 72 | 210 | 288 | 322 | 396 | 304 | 107 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 197 | 144 | 137 | 208 | 229 | 242 | 315 | 427 | 438 | 524 | 390 | 296 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 233 | 191 | 307 | 433 | 388 | 431 | 397 | 527 | 454 | 553 | 419 | 506 |
| Above Normal (16\%) | 190 | 142 | 136 | 221 | 364 | 264 | 335 | 449 | 458 | 608 | 416 | 333 |
| Below Normal (13\%) | 230 | 135 | 42 | 79 | 175 | 144 | 305 | 428 | 471 | 569 | 420 | 198 |
| Dry (24\%) | 179 | 130 | 32 | 75 | 67 | 119 | 250 | 383 | 461 | 508 | 388 | 173 |
| Critical (15\%) | 123 | 76 | 34 | 47 | 56 | 102 | 237 | 257 | 314 | 358 | 273 | 97 |

Alternative 5 minus Revised Second Basis of Comparison

|  | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 14\% | 58\% | -2\% | 0\% | -5\% | -1\% | 11\% | -1\% | -12\% | 2\% | -2\% | 81\% |
| 20\% | 18\% | 68\% | -18\% | -13\% | 1\% | -8\% | 11\% | -1\% | -13\% | 0\% | -5\% | 92\% |
| 30\% | 18\% | 74\% | 0\% | -12\% | 25\% | -9\% | 13\% | -2\% | -10\% | -2\% | -4\% | 60\% |
| 40\% | 26\% | 80\% | -5\% | 8\% | -21\% | -14\% | 14\% | -3\% | -10\% | -6\% | -2\% | 58\% |
| 50\% | 18\% | 44\% | 3\% | 44\% | -6\% | -5\% | 15\% | -2\% | -9\% | -3\% | -1\% | 20\% |
| 60\% | 2\% | 33\% | 21\% | 94\% | 13\% | 2\% | 16\% | 1\% | -9\% | -3\% | -5\% | 4\% |
| 70\% | -5\% | 16\% | 31\% | 167\% | 15\% | -1\% | 18\% | 1\% | -11\% | -2\% | -2\% | -2\% |
| 80\% | -5\% | 11\% | 88\% | 259\% | 122\% | 1\% | 19\% | -5\% | -10\% | -8\% | -3\% | -6\% |
| 90\% | -13\% | -6\% | -86\% | -350\% | -678\% | 15\% | 24\% | 0\% | -12\% | -1\% | -5\% | 4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 13\% | 42\% | -3\% | 12\% | 4\% | -4\% | 14\% | -1\% | -10\% | -3\% | -4\% | 38\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 18\% | 39\% | -9\% | 5\% | -1\% | -5\% | 13\% | 1\% | -13\% | 0\% | -2\% | 73\% |
| Above Normal (16\%) | 14\% | 43\% | 24\% | 5\% | 4\% | -14\% | 26\% | -1\% | -11\% | -1\% | -5\% | 48\% |
| Below Normal (13\%) | 20\% | 58\% | 12\% | 13\% | -5\% | -10\% | 15\% | -3\% | -11\% | -1\% | -4\% | -6\% |
| Dry (24\%) | 11\% | 58\% | -5\% | 95\% | 45\% | 25\% | 12\% | -3\% | -6\% | -5\% | -2\% | -2\% |
| Critical (15\%) | -5\% | 6\% | 19\% | 91\% | 84\% | 12\% | 4\% | -6\% | -12\% | -12\% | -9\% | -6\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.2.20 Stanislaus River Percent Mortality - Fall-run Chinook Salmon

Table 5C.3.2.20 Stanislaus River Percent Mortality - Fall-Run Chinook Salmon

|  | Percent <br> Mortality | Difference from No Action Alternative | Difference from Second Basis of Comparison |
| :---: | :---: | :---: | :---: |
|  | \% | \% | \% |
| No Action Alternative |  |  |  |
| Long-term Average | 7.0 | --- | 0.4 |
| Wet | 1.6 | --- | 0.1 |
| Above Normal | 5.3 | --- | 1.1 |
| Below Normal | 4.4 | --- | 0.5 |
| Dry | 4.9 | --- | -0.3 |
| Critical | 14.4 | --- | 0.4 |
| Second Basis of Comparison |  |  |  |
| Long-term Average | 6.6 | -0.4 |  |
| Wet | 1.5 | -0.1 | --- |
| Above Normal | 4.3 | -1.1 | --- |
| Below Normal | 4.0 | -0.5 | --- |
| Dry | 5.1 | 0.3 | --- |
| Critical | 14.0 | -0.4 | --- |
| Alternative 3 |  |  |  |
| Long-term Average | 6.2 | -0.8 | -0.4 |
| Wet | 1.6 | 0.0 | 0.1 |
| Above Normal | 4.0 | -1.3 | -0.3 |
| Below Normal | 3.8 | -0.6 | -0.2 |
| Dry | 4.2 | -0.7 | -0.9 |
| Critical | 13.4 | -1.0 | -0.6 |
| Alternative 5 |  |  |  |
| Long-term Average | 8.5 | 1.5 | 1.9 |
| Wet | 1.8 | 0.2 | 0.3 |
| Above Normal | 6.4 | 1.1 | 2.1 |
| Below Normal | 6.1 | 1.6 | 2.1 |
| Dry | 7.0 | 2.2 | 1.9 |
| Critical | 16.9 | 2.5 | 2.9 |

Notes: All results are based on the 82-year simulation period. The water year types are defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

5C.3.2.21 New Melones Large Mouth Bass Nest Survival Percentage

Table 5C.3.2.21.1 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 66 | 38 | 80 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 49 | 30 | 64 |
| 30\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 25 | 59 |
| 40\% | 74 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 25 | 23 | 57 |
| 50\% | 67 | 100 | 100 | 100 | 100 | 100 | 80 | 100 | 98 | 22 | 20 | 55 |
| 60\% | 59 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 63 | 18 | 19 | 50 |
| 70\% | 50 | 100 | 100 | 100 | 100 | 100 | 49 | 40 | 42 | 13 | 16 | 43 |
| 80\% | 43 | 100 | 100 | 100 | 100 | 100 | 27 | 29 | 27 | 10 | 12 | 38 |
| 90\% | 29 | 100 | 100 | 100 | 100 | 100 | 13 | 14 | 15 | 1 | 4 | 34 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 66 | 99 | 100 | 100 | 97 | 95 | 68 | 72 | 69 | 29 | 23 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 67 | 100 | 100 | 100 | 96 | 94 | 83 | 98 | 95 | 47 | 24 | 51 |
| Above Normal (24\%) | 74 | 100 | 100 | 100 | 100 | 100 | 88 | 100 | 72 | 26 | 20 | 60 |
| Below Normal (10\%) | 60 | 100 | 100 | 100 | 98 | 95 | 58 | 65 | 61 | 22 | 19 | 58 |
| Dry (16\%) | 63 | 99 | 100 | 100 | 97 | 98 | 66 | 51 | 54 | 14 | 16 | 49 |
| Critical (27\%) | 65 | 97 | 100 | 100 | 93 | 87 | 29 | 25 | 43 | 28 | 37 | 58 |

Revised Alternative 1

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 53 | 33 | 74 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 38 | 30 | 65 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 29 | 59 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 26 | 57 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 24 | 23 | 54 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 86 | 100 | 63 | 22 | 21 | 51 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 69 | 53 | 44 | 19 | 17 | 47 |
| 80\% | 97 | 100 | 100 | 100 | 100 | 100 | 49 | 43 | 31 | 16 | 11 | 39 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 36 | 24 | 21 | 12 | 7 | 23 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 97 | 100 | 100 | 100 | 97 | 97 | 79 | 76 | 71 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 96 | 97 | 91 | 98 | 96 | 41 | 22 | 47 |
| Above Normal (24\%) | 96 | 99 | 100 | 100 | 100 | 100 | 93 | 100 | 72 | 29 | 23 | 61 |
| Below Normal (10\%) | 96 | 100 | 100 | 100 | 98 | 100 | 74 | 73 | 65 | 25 | 22 | 57 |
| Dry (16\%) | 96 | 99 | 100 | 100 | 96 | 98 | 81 | 60 | 58 | 20 | 21 | 53 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 96 | 87 | 42 | 34 | 40 | 19 | 20 | 57 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -20\% | -13\% | -8\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -24\% | 2\% | 1\% |
| 30\% | 19\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 15\% | 0\% |
| 40\% | 35\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 6\% | 16\% | 0\% |
| 50\% | 48\% | 0\% | 0\% | 0\% | 0\% | 0\% | 26\% | 0\% | -5\% | 5\% | 13\% | 0\% |
| 60\% | 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 20\% | 0\% | -1\% | 19\% | 11\% | 3\% |
| 70\% | 99\% | 0\% | 0\% | 0\% | 0\% | 0\% | 41\% | 32\% | 7\% | 50\% | 2\% | 8\% |
| 80\% | 126\% | 0\% | 0\% | 0\% | 0\% | 0\% | 85\% | 48\% | 12\% | 62\% | -4\% | 2\% |
| 90\% | 215\% | 0\% | 0\% | 0\% | 0\% | 0\% | 183\% | 75\% | 42\% | 888\% | 93\% | -32\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 48\% | 0\% | 0\% | 0\% | 0\% | 2\% | 17\% | 7\% | 2\% | -3\% | -4\% | -1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 49\% | 0\% | 0\% | 0\% | 0\% | 4\% | 10\% | 0\% | 2\% | -14\% | -7\% | -8\% |
| Above Normal (24\%) | 31\% | 0\% | 0\% | 0\% | 0\% | 0\% | 6\% | 0\% | 0\% | 13\% | 16\% | 1\% |
| Below Normal (10\%) | 59\% | 0\% | 0\% | 0\% | 0\% | 5\% | 28\% | 12\% | 6\% | 11\% | 16\% | 0\% |
| Dry (16\%) | 51\% | 0\% | 0\% | 0\% | 0\% | 0\% | 22\% | 18\% | 7\% | 48\% | 29\% | 8\% |
| Critical (27\%) | 53\% | 3\% | 0\% | 0\% | 3\% | 0\% | 47\% | 34\% | -7\% | -32\% | -45\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.21.2 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 53 | 33 | 74 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 38 | 30 | 65 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 29 | 59 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 26 | 57 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 24 | 23 | 54 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 86 | 100 | 63 | 22 | 21 | 51 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 69 | 53 | 44 | 19 | 17 | 47 |
| 80\% | 97 | 100 | 100 | 100 | 100 | 100 | 49 | 43 | 31 | 16 | 11 | 39 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 36 | 24 | 21 | 12 | 7 | 23 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 97 | 100 | 100 | 100 | 97 | 97 | 79 | 76 | 71 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 96 | 97 | 91 | 98 | 96 | 41 | 22 | 47 |
| Above Normal (24\%) | 96 | 99 | 100 | 100 | 100 | 100 | 93 | 100 | 72 | 29 | 23 | 61 |
| Below Normal (10\%) | 96 | 100 | 100 | 100 | 98 | 100 | 74 | 73 | 65 | 25 | 22 | 57 |
| Dry (16\%) | 96 | 99 | 100 | 100 | 96 | 98 | 81 | 60 | 58 | 20 | 21 | 53 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 96 | 87 | 42 | 34 | 40 | 19 | 20 | 57 |

## No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 66 | 38 | 80 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 49 | 30 | 64 |
| 30\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 25 | 59 |
| 40\% | 74 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 25 | 23 | 57 |
| 50\% | 67 | 100 | 100 | 100 | 100 | 100 | 80 | 100 | 98 | 22 | 20 | 55 |
| 60\% | 59 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 63 | 18 | 19 | 50 |
| 70\% | 50 | 100 | 100 | 100 | 100 | 100 | 49 | 40 | 42 | 13 | 16 | 43 |
| 80\% | 43 | 100 | 100 | 100 | 100 | 100 | 27 | 29 | 27 | 10 | 12 | 38 |
| 90\% | 29 | 100 | 100 | 100 | 100 | 100 | 13 | 14 | 15 | 1 | 4 | 34 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 66 | 99 | 100 | 100 | 97 | 95 | 68 | 72 | 69 | 29 | 23 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 67 | 100 | 100 | 100 | 96 | 94 | 83 | 98 | 95 | 47 | 24 | 51 |
| Above Normal (24\%) | 74 | 100 | 100 | 100 | 100 | 100 | 88 | 100 | 72 | 26 | 20 | 60 |
| Below Normal (10\%) | 60 | 100 | 100 | 100 | 98 | 95 | 58 | 65 | 61 | 22 | 19 | 58 |
| Dry (16\%) | 63 | 99 | 100 | 100 | 97 | 98 | 66 | 51 | 54 | 14 | 16 | 49 |
| Critical (27\%) | 65 | 97 | 100 | 100 | 93 | 87 | 29 | 25 | 43 | 28 | 37 | 58 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 25\% | 15\% | 8\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 32\% | -2\% | -1\% |
| 30\% | -16\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | 0\% |
| 40\% | -26\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | -14\% | 0\% |
| 50\% | -33\% | 0\% | 0\% | 0\% | 0\% | 0\% | -20\% | 0\% | 5\% | -5\% | -12\% | 0\% |
| 60\% | -41\% | 0\% | 0\% | 0\% | 0\% | 0\% | -17\% | 0\% | 1\% | -16\% | -10\% | -3\% |
| 70\% | -50\% | 0\% | 0\% | 0\% | 0\% | 0\% | -29\% | -24\% | -6\% | -33\% | -2\% | -7\% |
| 80\% | -56\% | 0\% | 0\% | 0\% | 0\% | 0\% | -46\% | -32\% | -11\% | -38\% | 5\% | -2\% |
| 90\% | -68\% | 0\% | 0\% | 0\% | 0\% | 0\% | -65\% | -43\% | -30\% | -90\% | -48\% | 47\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -32\% | 0\% | 0\% | 0\% | 0\% | -2\% | -14\% | -6\% | -2\% | 3\% | 4\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -33\% | 0\% | 0\% | 0\% | 0\% | -3\% | -9\% | 0\% | -2\% | 16\% | 8\% | 9\% |
| Above Normal (24\%) | -23\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | 0\% | 0\% | -12\% | -13\% | -1\% |
| Below Normal (10\%) | -37\% | 0\% | 0\% | 0\% | 0\% | -5\% | -22\% | -11\% | -6\% | -10\% | -14\% | 0\% |
| Dry (16\%) | -34\% | 0\% | 0\% | 0\% | 0\% | 0\% | -18\% | -16\% | -7\% | -32\% | -22\% | -7\% |
| Critical (27\%) | -35\% | -3\% | 0\% | 0\% | -3\% | 0\% | -32\% | -25\% | 7\% | 46\% | 81\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.21.3 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 53 | 33 | 74 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 38 | 30 | 65 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 29 | 59 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 26 | 57 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 24 | 23 | 54 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 86 | 100 | 63 | 22 | 21 | 51 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 69 | 53 | 44 | 19 | 17 | 47 |
| 80\% | 97 | 100 | 100 | 100 | 100 | 100 | 49 | 43 | 31 | 16 | 11 | 39 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 36 | 24 | 21 | 12 | 7 | 23 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 97 | 100 | 100 | 100 | 97 | 97 | 79 | 76 | 71 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 96 | 97 | 91 | 98 | 96 | 41 | 22 | 47 |
| Above Normal (24\%) | 96 | 99 | 100 | 100 | 100 | 100 | 93 | 100 | 72 | 29 | 23 | 61 |
| Below Normal (10\%) | 96 | 100 | 100 | 100 | 98 | 100 | 74 | 73 | 65 | 25 | 22 | 57 |
| Dry (16\%) | 96 | 99 | 100 | 100 | 96 | 98 | 81 | 60 | 58 | 20 | 21 | 53 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 96 | 87 | 42 | 34 | 40 | 19 | 20 | 57 |

Alternative 3

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 78 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 37 | 69 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 29 | 61 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 27 | 56 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 24 | 23 | 55 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 92 | 55 | 21 | 20 | 48 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 44 | 35 | 18 | 18 | 42 |
| 80\% | 94 | 100 | 100 | 100 | 100 | 100 | 43 | 21 | 28 | 11 | 11 | 31 |
| 90\% | 84 | 100 | 100 | 100 | 100 | 100 | 23 | 0 | 14 | 0 | 0 | 23 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 95 | 99 | 99 | 100 | 99 | 96 | 73 | 70 | 67 | 35 | 24 | 51 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 96 | 98 | 92 | 91 | 77 | 66 | 30 | 53 |
| Above Normal (24\%) | 98 | 99 | 100 | 100 | 100 | 100 | 94 | 100 | 90 | 34 | 22 | 58 |
| Below Normal (10\%) | 96 | 100 | 91 | 100 | 100 | 100 | 62 | 73 | 64 | 23 | 18 | 56 |
| Dry (16\%) | 89 | 100 | 100 | 100 | 100 | 98 | 68 | 46 | 59 | 16 | 20 | 42 |
| Critical (27\%) | 94 | 97 | 100 | 100 | 100 | 83 | 30 | 30 | 40 | 15 | 25 | 50 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 88\% | 33\% | 6\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 52\% | 21\% | 6\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 37\% | 2\% | 3\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 18\% | 2\% | -1\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -3\% | 0\% | 7\% | 1\% | 0\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | -8\% | -13\% | -5\% | -4\% | -6\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -18\% | -17\% | -21\% | -8\% | 8\% | -9\% |
| 80\% | -3\% | 0\% | 0\% | 0\% | 0\% | 0\% | -14\% | -53\% | -10\% | -29\% | -5\% | -20\% |
| 90\% | -7\% | 0\% | 0\% | 0\% | 0\% | 0\% | -36\% | -98\% | -34\% | -100\% | -99\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2\% | 0\% | -1\% | 0\% | 2\% | -1\% | -8\% | -8\% | -5\% | 24\% | 10\% | -4\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | -7\% | -20\% | 62\% | 34\% | 12\% |
| Above Normal (24\%) | 2\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 24\% | 17\% | -6\% | -4\% |
| Below Normal (10\%) | 0\% | 0\% | -9\% | 0\% | 2\% | 0\% | -17\% | -1\% | -1\% | -7\% | -18\% | -2\% |
| Dry (16\%) | -7\% | 1\% | 0\% | 0\% | 4\% | 0\% | -16\% | -23\% | 1\% | -22\% | -4\% | -20\% |
| Critical (27\%) | -5\% | -3\% | 0\% | 0\% | 4\% | -5\% | -28\% | -10\% | 2\% | -19\% | 25\% | -12\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.21.4 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 53 | 33 | 74 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 38 | 30 | 65 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 29 | 59 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 26 | 57 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 24 | 23 | 54 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 86 | 100 | 63 | 22 | 21 | 51 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 69 | 53 | 44 | 19 | 17 | 47 |
| 80\% | 97 | 100 | 100 | 100 | 100 | 100 | 49 | 43 | 31 | 16 | 11 | 39 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 36 | 24 | 21 | 12 | 7 | 23 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 97 | 100 | 100 | 100 | 97 | 97 | 79 | 76 | 71 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 96 | 97 | 91 | 98 | 96 | 41 | 22 | 47 |
| Above Normal (24\%) | 96 | 99 | 100 | 100 | 100 | 100 | 93 | 100 | 72 | 29 | 23 | 61 |
| Below Normal (10\%) | 96 | 100 | 100 | 100 | 98 | 100 | 74 | 73 | 65 | 25 | 22 | 57 |
| Dry (16\%) | 96 | 99 | 100 | 100 | 96 | 98 | 81 | 60 | 58 | 20 | 21 | 53 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 96 | 87 | 42 | 34 | 40 | 19 | 20 | 57 |

Alternative 5

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 36 | 98 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 42 | 24 | 62 |
| 30\% | 88 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 30 | 22 | 57 |
| 40\% | 75 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 20 | 55 |
| 50\% | 69 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 100 | 20 | 19 | 50 |
| 60\% | 57 | 100 | 100 | 100 | 100 | 100 | 43 | 60 | 79 | 16 | 16 | 44 |
| 70\% | 51 | 100 | 100 | 100 | 100 | 100 | 24 | 29 | 43 | 12 | 11 | 39 |
| 80\% | 46 | 100 | 100 | 100 | 100 | 100 | 10 | 1 | 25 | 5 | 5 | 35 |
| 90\% | 35 | 100 | 100 | 100 | 100 | 95 | 0 | 0 | 7 | 0 | 0 | 13 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 67 | 100 | 100 | 100 | 98 | 95 | 60 | 64 | 70 | 28 | 21 | 50 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 71 | 100 | 100 | 100 | 96 | 95 | 87 | 93 | 97 | 41 | 19 | 47 |
| Above Normal (24\%) | 73 | 99 | 100 | 100 | 100 | 100 | 79 | 94 | 61 | 21 | 17 | 53 |
| Below Normal (10\%) | 58 | 100 | 100 | 100 | 98 | 95 | 50 | 58 | 59 | 18 | 14 | 44 |
| Dry (16\%) | 58 | 99 | 100 | 100 | 100 | 98 | 45 | 37 | 52 | 10 | 13 | 45 |
| Critical (27\%) | 73 | 100 | 100 | 100 | 99 | 85 | 14 | 19 | 60 | 44 | 50 | 67 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 40\% | 10\% | 33\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 11\% | -21\% | -4\% |
| 30\% | -12\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -3\% | -24\% | -4\% |
| 40\% | -25\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | -25\% | -3\% |
| 50\% | -31\% | 0\% | 0\% | 0\% | 0\% | 0\% | -28\% | 0\% | 7\% | -16\% | -19\% | -8\% |
| 60\% | -43\% | 0\% | 0\% | 0\% | 0\% | 0\% | -50\% | -40\% | 26\% | -27\% | -21\% | -14\% |
| 70\% | -49\% | 0\% | 0\% | 0\% | 0\% | 0\% | -65\% | -45\% | -3\% | -38\% | -33\% | -16\% |
| 80\% | -53\% | 0\% | 0\% | 0\% | 0\% | 0\% | -80\% | -97\% | -19\% | -72\% | -53\% | -10\% |
| 90\% | -62\% | 0\% | 0\% | 0\% | 0\% | -5\% | -100\% | -100\% | -66\% | -99\% | -99\% | -44\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -31\% | 0\% | 0\% | 0\% | 1\% | -2\% | -25\% | -16\% | -1\% | -3\% | -3\% | -7\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -28\% | 0\% | 0\% | 0\% | 0\% | -3\% | -5\% | -5\% | 1\% | 1\% | -14\% | -1\% |
| Above Normal (24\%) | -24\% | 0\% | 0\% | 0\% | 0\% | 0\% | -15\% | -6\% | -16\% | -29\% | -27\% | -12\% |
| Below Normal (10\%) | -40\% | 0\% | 0\% | 0\% | 0\% | -5\% | -33\% | -21\% | -9\% | -27\% | -39\% | -24\% |
| Dry (16\%) | -39\% | 0\% | 0\% | 0\% | 4\% | 0\% | -45\% | -38\% | -9\% | -51\% | -39\% | -15\% |
| Critical (27\%) | -26\% | 0\% | 0\% | 0\% | 3\% | -2\% | -67\% | -43\% | 51\% | 134\% | 148\% | 17\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.2.22 New Melones Small Mouth Bass Nest Survival Percentage

Table 5C.3.2.22.1 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 56 | 32 | 67 |
| 20\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 42 | 26 | 54 |
| 30\% | 71 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 22 | 50 |
| 40\% | 62 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 22 | 20 | 48 |
| 50\% | 57 | 100 | 100 | 100 | 100 | 100 | 67 | 100 | 86 | 20 | 18 | 46 |
| 60\% | 50 | 100 | 100 | 100 | 100 | 100 | 60 | 91 | 53 | 16 | 17 | 42 |
| 70\% | 43 | 100 | 100 | 100 | 100 | 100 | 42 | 34 | 35 | 12 | 15 | 37 |
| 80\% | 37 | 100 | 100 | 100 | 100 | 100 | 23 | 25 | 24 | 9 | 11 | 33 |
| 90\% | 25 | 100 | 100 | 100 | 100 | 85 | 12 | 13 | 14 | 2 | 4 | 29 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{b}$ | 58 | 98 | 100 | 100 | 96 | 94 | 65 | 70 | 66 | 26 | 21 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59 | 100 | 100 | 100 | 96 | 93 | 81 | 97 | 93 | 42 | 21 | 43 |
| Above Normal (24\%) | 64 | 98 | 100 | 100 | 100 | 100 | 86 | 99 | 68 | 22 | 18 | 52 |
| Below Normal (10\%) | 54 | 100 | 100 | 100 | 97 | 94 | 55 | 63 | 59 | 19 | 17 | 50 |
| Dry (16\%) | 55 | 97 | 100 | 100 | 97 | 98 | 59 | 48 | 50 | 12 | 15 | 43 |
| Critical (27\%) | 58 | 95 | 100 | 99 | 92 | 82 | 26 | 23 | 40 | 25 | 36 | 53 |

Revised Alternative 1

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 45 | 28 | 62 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 32 | 26 | 55 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 25 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 23 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 78 | 21 | 20 | 46 |
| 60\% | 93 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 53 | 19 | 18 | 43 |
| 70\% | 88 | 100 | 100 | 100 | 100 | 100 | 58 | 45 | 38 | 17 | 15 | 40 |
| 80\% | 81 | 100 | 100 | 100 | 100 | 100 | 42 | 37 | 26 | 15 | 10 | 33 |
| 90\% | 76 | 92 | 100 | 100 | 100 | 100 | 31 | 21 | 19 | 11 | 7 | 20 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 92 | 98 | 100 | 100 | 96 | 96 | 75 | 74 | 67 | 25 | 19 | 46 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 94 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 94 | 36 | 20 | 40 |
| Above Normal (24\%) | 92 | 97 | 100 | 100 | 100 | 100 | 92 | 100 | 68 | 25 | 20 | 53 |
| Below Normal (10\%) | 86 | 99 | 100 | 100 | 97 | 100 | 69 | 70 | 62 | 22 | 20 | 50 |
| Dry (16\%) | 88 | 97 | 100 | 100 | 96 | 98 | 75 | 55 | 53 | 18 | 18 | 46 |
| Critical (27\%) | 98 | 96 | 100 | 100 | 94 | 83 | 37 | 30 | 37 | 17 | 18 | 49 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -19\% | -13\% | -8\% |
| 20\% | 19\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -23\% | 2\% | 1\% |
| 30\% | 42\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 14\% | 0\% |
| 40\% | 61\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 6\% | 15\% | 0\% |
| 50\% | 76\% | 0\% | 0\% | 0\% | 0\% | 0\% | 49\% | 0\% | -10\% | 5\% | 12\% | 0\% |
| 60\% | 87\% | 0\% | 0\% | 0\% | 0\% | 0\% | 20\% | 10\% | -1\% | 18\% | 11\% | 3\% |
| 70\% | 106\% | 0\% | 0\% | 0\% | 0\% | 0\% | 40\% | 31\% | 7\% | 45\% | 2\% | 7\% |
| 80\% | 122\% | 0\% | 0\% | 0\% | 0\% | 0\% | 81\% | 46\% | 11\% | 54\% | -4\% | 2\% |
| 90\% | 204\% | -8\% | 0\% | 0\% | 0\% | 18\% | 164\% | 67\% | 38\% | 399\% | 66\% | -31\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59\% | 0\% | 0\% | 0\% | 0\% | 2\% | 17\% | 6\% | 1\% | -4\% | -6\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 61\% | 0\% | 0\% | 0\% | 0\% | 4\% | 9\% | 0\% | 1\% | -14\% | -6\% | -8\% |
| Above Normal (24\%) | 44\% | -1\% | 0\% | 0\% | 0\% | 0\% | 8\% | 1\% | 1\% | 13\% | 14\% | 1\% |
| Below Normal (10\%) | 61\% | -1\% | 0\% | 0\% | 0\% | 6\% | 25\% | 13\% | 5\% | 10\% | 15\% | 0\% |
| Dry (16\%) | 59\% | 0\% | 0\% | 0\% | 0\% | 0\% | 28\% | 16\% | 6\% | 43\% | 26\% | 8\% |
| Critical (27\%) | 69\% | 2\% | 0\% | 1\% | 2\% | 1\% | 44\% | 30\% | -9\% | -34\% | -50\% | -7\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.22.2 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 45 | 28 | 62 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 32 | 26 | 55 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 25 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 23 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 78 | 21 | 20 | 46 |
| 60\% | 93 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 53 | 19 | 18 | 43 |
| 70\% | 88 | 100 | 100 | 100 | 100 | 100 | 58 | 45 | 38 | 17 | 15 | 40 |
| 80\% | 81 | 100 | 100 | 100 | 100 | 100 | 42 | 37 | 26 | 15 | 10 | 33 |
| 90\% | 76 | 92 | 100 | 100 | 100 | 100 | 31 | 21 | 19 | 11 | 7 | 20 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 92 | 98 | 100 | 100 | 96 | 96 | 75 | 74 | 67 | 25 | 19 | 46 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 94 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 94 | 36 | 20 | 40 |
| Above Normal (24\%) | 92 | 97 | 100 | 100 | 100 | 100 | 92 | 100 | 68 | 25 | 20 | 53 |
| Below Normal (10\%) | 86 | 99 | 100 | 100 | 97 | 100 | 69 | 70 | 62 | 22 | 20 | 50 |
| Dry (16\%) | 88 | 97 | 100 | 100 | 96 | 98 | 75 | 55 | 53 | 18 | 18 | 46 |
| Critical (27\%) | 98 | 96 | 100 | 100 | 94 | 83 | 37 | 30 | 37 | 17 | 18 | 49 |

## No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 56 | 32 | 67 |
| 20\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 42 | 26 | 54 |
| 30\% | 71 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 22 | 50 |
| 40\% | 62 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 22 | 20 | 48 |
| 50\% | 57 | 100 | 100 | 100 | 100 | 100 | 67 | 100 | 86 | 20 | 18 | 46 |
| 60\% | 50 | 100 | 100 | 100 | 100 | 100 | 60 | 91 | 53 | 16 | 17 | 42 |
| 70\% | 43 | 100 | 100 | 100 | 100 | 100 | 42 | 34 | 35 | 12 | 15 | 37 |
| 80\% | 37 | 100 | 100 | 100 | 100 | 100 | 23 | 25 | 24 | 9 | 11 | 33 |
| 90\% | 25 | 100 | 100 | 100 | 100 | 85 | 12 | 13 | 14 | 2 | 4 | 29 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58 | 98 | 100 | 100 | 96 | 94 | 65 | 70 | 66 | 26 | 21 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59 | 100 | 100 | 100 | 96 | 93 | 81 | 97 | 93 | 42 | 21 | 43 |
| Above Normal (24\%) | 64 | 98 | 100 | 100 | 100 | 100 | 86 | 99 | 68 | 22 | 18 | 52 |
| Below Normal (10\%) | 54 | 100 | 100 | 100 | 97 | 94 | 55 | 63 | 59 | 19 | 17 | 50 |
| Dry (16\%) | 55 | 97 | 100 | 100 | 97 | 98 | 59 | 48 | 50 | 12 | 15 | 43 |
| Critical (27\%) | 58 | 95 | 100 | 99 | 92 | 82 | 26 | 23 | 40 | 25 | 36 | 53 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 24\% | 15\% | 8\% |
| 20\% | -16\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 30\% | -2\% | -1\% |
| 30\% | -29\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -12\% | 0\% |
| 40\% | -38\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -5\% | -13\% | 0\% |
| 50\% | -43\% | 0\% | 0\% | 0\% | 0\% | 0\% | -33\% | 0\% | 11\% | -5\% | -11\% | 0\% |
| 60\% | -47\% | 0\% | 0\% | 0\% | 0\% | 0\% | -17\% | -9\% | 1\% | -15\% | -10\% | -3\% |
| 70\% | -51\% | 0\% | 0\% | 0\% | 0\% | 0\% | -28\% | -24\% | -6\% | -31\% | -2\% | -7\% |
| 80\% | -55\% | 0\% | 0\% | 0\% | 0\% | 0\% | -45\% | -31\% | -10\% | -35\% | 4\% | -2\% |
| 90\% | -67\% | 9\% | 0\% | 0\% | 0\% | -15\% | -62\% | -40\% | -28\% | -80\% | -40\% | 44\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -37\% | 0\% | 0\% | 0\% | 0\% | -2\% | -14\% | -6\% | -1\% | 4\% | 7\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -38\% | 0\% | 0\% | 0\% | 0\% | -4\% | -8\% | 0\% | -1\% | 16\% | 7\% | 8\% |
| Above Normal (24\%) | -30\% | 1\% | 0\% | 0\% | 0\% | 0\% | -7\% | -1\% | -1\% | -12\% | -13\% | -1\% |
| Below Normal (10\%) | -38\% | 1\% | 0\% | 0\% | 0\% | -6\% | -20\% | -11\% | -5\% | -10\% | -13\% | 0\% |
| Dry (16\%) | -37\% | 0\% | 0\% | 0\% | 0\% | 0\% | -22\% | -14\% | -6\% | -30\% | -21\% | -7\% |
| Critical (27\%) | -41\% | -2\% | 0\% | -1\% | -2\% | -1\% | -30\% | -23\% | 9\% | 51\% | 100\% | 8\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.22.3 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 45 | 28 | 62 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 32 | 26 | 55 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 25 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 23 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 78 | 21 | 20 | 46 |
| 60\% | 93 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 53 | 19 | 18 | 43 |
| 70\% | 88 | 100 | 100 | 100 | 100 | 100 | 58 | 45 | 38 | 17 | 15 | 40 |
| 80\% | 81 | 100 | 100 | 100 | 100 | 100 | 42 | 37 | 26 | 15 | 10 | 33 |
| 90\% | 76 | 92 | 100 | 100 | 100 | 100 | 31 | 21 | 19 | 11 | 7 | 20 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 92 | 98 | 100 | 100 | 96 | 96 | 75 | 74 | 67 | 25 | 19 | 46 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 94 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 94 | 36 | 20 | 40 |
| Above Normal (24\%) | 92 | 97 | 100 | 100 | 100 | 100 | 92 | 100 | 68 | 25 | 20 | 53 |
| Below Normal (10\%) | 86 | 99 | 100 | 100 | 97 | 100 | 69 | 70 | 62 | 22 | 20 | 50 |
| Dry (16\%) | 88 | 97 | 100 | 100 | 96 | 98 | 75 | 55 | 53 | 18 | 18 | 46 |
| Critical (27\%) | 98 | 96 | 100 | 100 | 94 | 83 | 37 | 30 | 37 | 17 | 18 | 49 |

Alternative 3

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 37 | 66 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 48 | 31 | 58 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 25 | 52 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 23 | 48 |
| 50\% | 99 | 100 | 100 | 100 | 100 | 100 | 81 | 100 | 100 | 21 | 20 | 46 |
| 60\% | 97 | 100 | 100 | 100 | 100 | 100 | 63 | 81 | 46 | 18 | 18 | 41 |
| 70\% | 84 | 100 | 100 | 100 | 100 | 100 | 48 | 38 | 30 | 16 | 16 | 36 |
| 80\% | 79 | 100 | 100 | 100 | 100 | 100 | 36 | 18 | 24 | 11 | 10 | 27 |
| 90\% | 70 | 88 | 100 | 100 | 100 | 100 | 20 | 0 | 13 | 0 | 0 | 20 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90 | 98 | 99 | 100 | 99 | 96 | 70 | 69 | 65 | 32 | 21 | 44 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 94 | 100 | 100 | 100 | 96 | 98 | 89 | 90 | 77 | 62 | 26 | 45 |
| Above Normal (24\%) | 93 | 98 | 100 | 100 | 100 | 100 | 93 | 100 | 88 | 30 | 19 | 50 |
| Below Normal (10\%) | 90 | 100 | 91 | 100 | 100 | 100 | 57 | 69 | 61 | 20 | 16 | 49 |
| Dry (16\%) | 81 | 96 | 100 | 100 | 100 | 97 | 62 | 44 | 54 | 14 | 18 | 37 |
| Critical (27\%) | 90 | 92 | 100 | 100 | 99 | 79 | 27 | 27 | 37 | 13 | 23 | 44 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 122\% | 31\% | 6\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 50\% | 20\% | 6\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 35\% | 2\% | 3\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 17\% | 2\% | -1\% |
| 50\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -19\% | 0\% | 28\% | 1\% | 0\% | 0\% |
| 60\% | 4\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | -19\% | -12\% | -5\% | -4\% | -6\% |
| 70\% | -5\% | 0\% | 0\% | 0\% | 0\% | 0\% | -17\% | -17\% | -21\% | -7\% | 8\% | -9\% |
| 80\% | -3\% | 0\% | 0\% | 0\% | 0\% | 0\% | -14\% | -51\% | -9\% | -27\% | -5\% | -19\% |
| 90\% | -7\% | -4\% | 0\% | 0\% | 0\% | 0\% | -35\% | -98\% | -32\% | -96\% | -98\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2\% | -1\% | -1\% | 0\% | 2\% | -1\% | -8\% | -8\% | -3\% | 29\% | 10\% | -4\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | -8\% | -18\% | 72\% | 32\% | 12\% |
| Above Normal (24\%) | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 28\% | 16\% | -7\% | -4\% |
| Below Normal (10\%) | 4\% | 1\% | -9\% | 0\% | 3\% | 0\% | -17\% | -1\% | -1\% | -8\% | -18\% | -2\% |
| Dry (16\%) | -7\% | -1\% | 0\% | 0\% | 4\% | 0\% | -18\% | -20\% | 1\% | -22\% | -4\% | -20\% |
| Critical (27\%) | -8\% | -4\% | 0\% | 0\% | 5\% | -5\% | -27\% | -9\% | 2\% | -20\% | 31\% | -11\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.22.4 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 45 | 28 | 62 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 32 | 26 | 55 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 25 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 23 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 78 | 21 | 20 | 46 |
| 60\% | 93 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 53 | 19 | 18 | 43 |
| 70\% | 88 | 100 | 100 | 100 | 100 | 100 | 58 | 45 | 38 | 17 | 15 | 40 |
| 80\% | 81 | 100 | 100 | 100 | 100 | 100 | 42 | 37 | 26 | 15 | 10 | 33 |
| 90\% | 76 | 92 | 100 | 100 | 100 | 100 | 31 | 21 | 19 | 11 | 7 | 20 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 92 | 98 | 100 | 100 | 96 | 96 | 75 | 74 | 67 | 25 | 19 | 46 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 94 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 94 | 36 | 20 | 40 |
| Above Normal (24\%) | 92 | 97 | 100 | 100 | 100 | 100 | 92 | 100 | 68 | 25 | 20 | 53 |
| Below Normal (10\%) | 86 | 99 | 100 | 100 | 97 | 100 | 69 | 70 | 62 | 22 | 20 | 50 |
| Dry (16\%) | 88 | 97 | 100 | 100 | 96 | 98 | 75 | 55 | 53 | 18 | 18 | 46 |
| Critical (27\%) | 98 | 96 | 100 | 100 | 94 | 83 | 37 | 30 | 37 | 17 | 18 | 49 |

Alternative 5

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 63 | 31 | 88 |
| 20\% | 87 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 21 | 53 |
| 30\% | 74 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 26 | 19 | 48 |
| 40\% | 63 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 20 | 17 | 47 |
| 50\% | 58 | 100 | 100 | 100 | 100 | 100 | 60 | 100 | 100 | 18 | 17 | 42 |
| 60\% | 48 | 100 | 100 | 100 | 100 | 100 | 37 | 51 | 66 | 14 | 15 | 37 |
| 70\% | 43 | 100 | 100 | 100 | 100 | 100 | 21 | 25 | 37 | 11 | 10 | 34 |
| 80\% | 39 | 100 | 100 | 100 | 100 | 100 | 9 | 2 | 22 | 5 | 6 | 30 |
| 90\% | 30 | 100 | 100 | 100 | 100 | 80 | 0 | 0 | 7 | 0 | 1 | 12 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59 | 99 | 100 | 100 | 98 | 94 | 57 | 62 | 67 | 25 | 20 | 44 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 61 | 100 | 100 | 100 | 96 | 95 | 84 | 90 | 94 | 36 | 17 | 40 |
| Above Normal (24\%) | 65 | 98 | 100 | 100 | 100 | 100 | 76 | 93 | 58 | 18 | 15 | 46 |
| Below Normal (10\%) | 51 | 100 | 100 | 100 | 97 | 94 | 47 | 56 | 57 | 16 | 12 | 39 |
| Dry (16\%) | 52 | 97 | 100 | 100 | 100 | 97 | 43 | 36 | 49 | 9 | 12 | 39 |
| Critical (27\%) | 68 | 98 | 100 | 100 | 98 | 81 | 13 | 19 | 58 | 43 | 50 | 63 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 39\% | 10\% | 41\% |
| 20\% | -13\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 11\% | -20\% | -4\% |
| 30\% | -26\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -3\% | -23\% | -4\% |
| 40\% | -37\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | -24\% | -3\% |
| 50\% | -42\% | 0\% | 0\% | 0\% | 0\% | 0\% | -40\% | 0\% | 28\% | -15\% | -18\% | -8\% |
| 60\% | -48\% | 0\% | 0\% | 0\% | 0\% | 0\% | -50\% | -49\% | 25\% | -25\% | -19\% | -14\% |
| 70\% | -51\% | 0\% | 0\% | 0\% | 0\% | 0\% | -64\% | -44\% | -3\% | -35\% | -30\% | -16\% |
| 80\% | -52\% | 0\% | 0\% | 0\% | 0\% | 0\% | -78\% | -94\% | -18\% | -66\% | -47\% | -10\% |
| 90\% | -61\% | 9\% | 0\% | 0\% | 0\% | -20\% | -100\% | -100\% | -62\% | -98\% | -82\% | -41\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -36\% | 1\% | 0\% | 0\% | 2\% | -2\% | -24\% | -16\% | 0\% | 0\% | 2\% | -5\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -35\% | 0\% | 0\% | 0\% | 0\% | -3\% | -4\% | -8\% | 1\% | 1\% | -13\% | -1\% |
| Above Normal (24\%) | -29\% | 1\% | 0\% | 0\% | 0\% | 0\% | -17\% | -7\% | -15\% | -29\% | -25\% | -12\% |
| Below Normal (10\%) | -41\% | 1\% | 0\% | 0\% | 0\% | -6\% | -32\% | -20\% | -7\% | -26\% | -37\% | -23\% |
| Dry (16\%) | -41\% | 0\% | 0\% | 0\% | 4\% | -1\% | -43\% | -36\% | -9\% | -48\% | -37\% | -14\% |
| Critical (27\%) | -31\% | 2\% | 0\% | 0\% | 4\% | -2\% | -65\% | -37\% | 60\% | 157\% | 179\% | 28\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.2.23 New Melones Spotted Bass Nest Survival Percentage

Table 5C.3.2.23.1 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 91 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 85 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 85 | 81 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 78 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 76 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 91 | 88 | 64 | 66 | 100 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 68 | 69 | 71 | 51 | 55 | 97 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 94 | 100 | 100 | 100 | 99 | 99 | 90 | 91 | 91 | 77 | 76 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88 | 100 | 100 | 100 | 98 | 96 | 88 | 100 | 96 | 84 | 79 | 96 |
| Above Normal (24\%) | 99 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 99 | 77 | 78 | 100 |
| Below Normal (10\%) | 91 | 100 | 100 | 100 | 100 | 100 | 90 | 90 | 94 | 80 | 77 | 99 |
| Dry (16\%) | 97 | 100 | 100 | 100 | 100 | 100 | 97 | 92 | 89 | 69 | 72 | 99 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 100 | 100 | 73 | 62 | 72 | 75 | 75 | 94 |

Revised Alternative 1

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 90 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 86 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 82 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 79 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 77 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 73 | 66 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 84 | 79 | 66 | 60 | 82 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 99 | 100 | 98 | 95 | 95 | 83 | 79 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 100 | 93 | 81 | 93 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 83 | 82 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 94 | 98 | 82 | 81 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 96 | 93 | 78 | 79 | 99 |
| Critical (27\%) | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 75 | 82 | 69 | 71 | 99 |

Revised Alternative 1 minus No Action Alternative

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -4\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 6\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 6\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 5\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 6\% | 4\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 13\% | 1\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 15\% | 10\% | 5\% | 14\% | -1\% | 0\% |
| 90\% | 11\% | 0\% | 0\% | 0\% | 0\% | 0\% | 48\% | 21\% | 12\% | 29\% | 9\% | -16\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 6\% | 0\% | 0\% | 0\% | 0\% | 1\% | 9\% | 4\% | 4\% | 7\% | 4\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 13\% | 0\% | 0\% | 0\% | -1\% | 4\% | 13\% | 0\% | 4\% | 11\% | 3\% | -2\% |
| Above Normal (24\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 0\% | 8\% | 6\% | 0\% |
| Below Normal (10\%) | 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 10\% | 4\% | 4\% | 3\% | 6\% | 0\% |
| Dry (16\%) | 3\% | 0\% | 0\% | 0\% | -1\% | 0\% | 3\% | 5\% | 4\% | 13\% | 9\% | 0\% |
| Critical (27\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 19\% | 21\% | 13\% | -7\% | -5\% | 5\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.23.2 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 90 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 86 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 82 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 79 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 77 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 73 | 66 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 84 | 79 | 66 | 60 | 82 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 99 | 100 | 98 | 95 | 95 | 83 | 79 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 100 | 93 | 81 | 93 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 83 | 82 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 94 | 98 | 82 | 81 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 96 | 93 | 78 | 79 | 99 |
| Critical (27\%) | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 75 | 82 | 69 | 71 | 99 |

## No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 91 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 85 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 85 | 81 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 78 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 76 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 91 | 88 | 64 | 66 | 100 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 68 | 69 | 71 | 51 | 55 | 97 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 94 | 100 | 100 | 100 | 99 | 99 | 90 | 91 | 91 | 77 | 76 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88 | 100 | 100 | 100 | 98 | 96 | 88 | 100 | 96 | 84 | 79 | 96 |
| Above Normal (24\%) | 99 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 99 | 77 | 78 | 100 |
| Below Normal (10\%) | 91 | 100 | 100 | 100 | 100 | 100 | 90 | 90 | 94 | 80 | 77 | 99 |
| Dry (16\%) | 97 | 100 | 100 | 100 | 100 | 100 | 97 | 92 | 89 | 69 | 72 | 99 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 100 | 100 | 73 | 62 | 72 | 75 | 75 | 94 |

No Action Alternative minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 4\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -6\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -5\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | -4\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -12\% | -1\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | -9\% | -5\% | -12\% | 1\% | 0\% |
| 90\% | -10\% | 0\% | 0\% | 0\% | 0\% | 0\% | -32\% | -17\% | -11\% | -23\% | -8\% | 18\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6\% | 0\% | 0\% | 0\% | 0\% | -1\% | -8\% | -4\% | -4\% | -7\% | -4\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -12\% | 0\% | 0\% | 0\% | 1\% | -4\% | -12\% | 0\% | -4\% | -10\% | -3\% | 2\% |
| Above Normal (24\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 0\% | 0\% | -7\% | -5\% | 0\% |
| Below Normal (10\%) | -9\% | 0\% | 0\% | 0\% | 0\% | 0\% | -9\% | -4\% | -4\% | -3\% | -5\% | 0\% |
| Dry (16\%) | -3\% | 0\% | 0\% | 0\% | 1\% | 0\% | -3\% | -5\% | -4\% | -12\% | -8\% | 0\% |
| Critical (27\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -16\% | -18\% | -12\% | 8\% | 5\% | -5\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.23.3 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 90 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 86 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 82 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 79 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 77 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 73 | 66 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 84 | 79 | 66 | 60 | 82 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 99 | 100 | 98 | 95 | 95 | 83 | 79 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 100 | 93 | 81 | 93 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 83 | 82 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 94 | 98 | 82 | 81 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 96 | 93 | 78 | 79 | 99 |
| Critical (27\%) | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 75 | 82 | 69 | 71 | 99 |

Alternative 3

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 91 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 94 | 87 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 82 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 78 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 75 | 75 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 88 | 66 | 65 | 94 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 82 | 38 | 69 | 48 | 38 | 82 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 99 | 100 | 99 | 99 | 94 | 86 | 88 | 78 | 75 | 91 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 98 | 100 | 100 | 92 | 77 | 98 | 87 | 98 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 80 | 68 | 92 |
| Below Normal (10\%) | 100 | 100 | 91 | 100 | 100 | 100 | 90 | 95 | 97 | 69 | 66 | 98 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 73 | 93 | 67 | 74 | 79 |
| Critical (27\%) | 100 | 100 | 100 | 100 | 100 | 92 | 79 | 71 | 83 | 63 | 70 | 89 |

Alternative 3 minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 4\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 7\% | 1\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 1\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -2\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -3\% | 3\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -21\% | -5\% | -9\% | -1\% | -6\% |
| 90\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -18\% | -55\% | -13\% | -27\% | -37\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | 0\% | -1\% | 0\% | 0\% | -1\% | -4\% | -9\% | -8\% | -5\% | -5\% | -6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 0\% | -8\% | -23\% | 5\% | 8\% | 5\% |
| Above Normal (24\%) | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 0\% | -3\% | -18\% | -8\% |
| Below Normal (10\%) | 0\% | 0\% | -9\% | 0\% | 0\% | 0\% | -9\% | 0\% | -1\% | -16\% | -18\% | 0\% |
| Dry (16\%) | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | -7\% | -24\% | 1\% | -14\% | -6\% | -20\% |
| Critical (27\%) | 0\% | 0\% | 0\% | 0\% | 0\% | -8\% | -9\% | -6\% | 1\% | -10\% | -2\% | -10\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.23.4 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Revised Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 90 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 86 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 82 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 79 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 77 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 73 | 66 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 84 | 79 | 66 | 60 | 82 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 99 | 100 | 98 | 95 | 95 | 83 | 79 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 100 | 93 | 81 | 93 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 83 | 82 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 94 | 98 | 82 | 81 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 99 | 100 | 100 | 96 | 93 | 78 | 79 | 99 |
| Critical (27\%) | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 75 | 82 | 69 | 71 | 99 |

Alternative 5

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 80 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 82 | 77 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 78 | 76 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 72 | 73 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 84 | 91 | 100 | 67 | 65 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 63 | 52 | 84 | 56 | 57 | 99 |
| 90\% | 98 | 100 | 100 | 100 | 100 | 100 | 27 | 9 | 60 | 33 | 50 | 68 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 96 | 100 | 100 | 100 | 99 | 100 | 81 | 80 | 88 | 72 | 71 | 91 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 97 | 99 | 99 | 100 | 100 | 90 | 76 | 94 |
| Above Normal (24\%) | 99 | 100 | 100 | 100 | 100 | 100 | 90 | 100 | 76 | 66 | 74 | 92 |
| Below Normal (10\%) | 87 | 100 | 100 | 100 | 100 | 100 | 78 | 74 | 92 | 65 | 65 | 79 |
| Dry (16\%) | 93 | 100 | 100 | 100 | 100 | 100 | 78 | 71 | 85 | 56 | 59 | 93 |
| Critical (27\%) | 97 | 100 | 100 | 100 | 100 | 100 | 38 | 38 | 80 | 73 | 80 | 92 |

Alternative 5 minus Revised Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 4\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -10\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -11\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | -11\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | -8\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -10\% | -8\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -16\% | -9\% | 0\% | -13\% | -11\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -37\% | -48\% | -9\% | -23\% | -13\% | -1\% |
| 90\% | -2\% | 0\% | 0\% | 0\% | 0\% | 0\% | -73\% | -89\% | -25\% | -50\% | -16\% | -17\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -4\% | 0\% | 0\% | 0\% | 0\% | 0\% | -17\% | -15\% | -7\% | -13\% | -11\% | -6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -1\% | 0\% | 0\% | 0\% | -1\% | -1\% | -1\% | 0\% | 0\% | -3\% | -6\% | 1\% |
| Above Normal (24\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -9\% | 0\% | -24\% | -21\% | -10\% | -8\% |
| Below Normal (10\%) | -13\% | 0\% | 0\% | 0\% | 0\% | 0\% | -22\% | -22\% | -6\% | -21\% | -21\% | -20\% |
| Dry (16\%) | -7\% | 0\% | 0\% | 0\% | 1\% | 0\% | -22\% | -26\% | -9\% | -28\% | -25\% | -6\% |
| Critical (27\%) | -3\% | 0\% | 0\% | 0\% | 0\% | 0\% | -56\% | -49\% | -2\% | 5\% | 13\% | -7\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.2.24 Temperature Threshold Exceedances

| Species | Lifestage | River | Reach | Water <br> Year <br> Type | Month | Temperature Objective (Degree F) | Temperature Objective Reference ${ }^{1}$ | No Action Alternative | Revised Second Basis of Comparison (Revised Alternative 1) | Alternative 3 | Alternative 5 |  | No Action Alternative minus Revised Second Basis of Comparison | Alternative 3 minus Revised Second Basis of Comparison | Alternative 5 minus Revised Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Steelhead | Adult Migration | Stanislaus | Orange Blossom Bridge | All | October | 56 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 57\% | 86\% | 87\% | 58\% | 29\% | -29\% | 1\% | -28\% |
| Steelhead | Adult Migration | Stanislaus | Orange Blossom Bridge | All | November | 56 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | $33 \%$ | 27\% | 24\% | 36\% | -6\% | 6\% | -3\% | 9\% |
| Steelhead | Adult Migration | Stanislaus | Orange Blossom Bridge | All | December | 56 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 3\% | 0\% | 0\% | 0\% | 3\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | January | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 3\% | 2\% | 2\% | 3\% | -3\% | -1\% | -1\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | February | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 3\% | 2\% | 0\% | 3\% | -3\% | -1\% | -3\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | March | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 8\% | 12\% | 12\% | 8\% | 4\% | -4\% | 0\% | -4\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | April | 52 | $\begin{aligned} & \text { NMFS BiOp } \\ & 2009 \end{aligned}$ | $33 \%$ | 34\% | 30\% | 37\% | 2\% | -2\% | -4\% | 3\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | May | 52 | $\begin{aligned} & \text { NMFS BiOp } \\ & 2009 \end{aligned}$ | 63\% | 68\% | 63\% | 68\% | 5\% | -5\% | -5\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | January | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | February | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | March | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 10\% | 0\% | 0\% | 10\% | -10\% | -10\% | -10\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | April | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 2\% | 7\% | 3\% | 0\% | 5\% | -5\% | -4\% | -7\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | May | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 18\% | 22\% | 17\% | 8\% | 4\% | -4\% | -5\% | -15\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | January | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | February | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 2\% | 1\% | 0\% | 2\% | -2\% | -1\% | -2\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | March | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 21\% | 35\% | 25\% | 21\% | 14\% | -14\% | -11\% | -15\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | April | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 16\% | 30\% | 17\% | 7\% | 14\% | -14\% | -12\% | -23\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | May | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 49\% | 57\% | 53\% | 40\% | 9\% | -9\% | -4\% | -17\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | June | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 6\% | 2\% | 4\% | 6\% | -3\% | 3\% | 2\% | 4\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | July | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 16\% | 15\% | 19\% | 21\% | -2\% | 2\% | 5\% | 7\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | August | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 15\% | 7\% | 9\% | 21\% | -8\% | 8\% | 2\% | 13\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | September | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 11\% | 7\% | 7\% | 18\% | -4\% | 4\% | 0\% | 11\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | October | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 7\% | 7\% | 4\% | 11\% | 0\% | 0\% | -3\% | 4\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | November | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |

Table 5C.3.2.25 CVP Annual Power Generation Summary

|  |  |  |  | No Action Alternative | Revised Second Basis of Comparison (Revised Alternative 1) | Alternative 3 | Alternative 5 | Revised Alternative 1 vs. No Action Altenative (Percent Difference) | No Action <br> Alternative <br> vs. Revised <br> Second Basis <br> of <br> Comparison <br> (Percent <br> Difference) | Alternative 3 vs. Revised <br> Second <br> Basis of Comparison <br> (Percent <br> Difference) | Alternative 5 vs. Revised <br> Second <br> Basis of Comparison <br> (Percent <br> Difference) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CVP Generation Facilities |  |  |  |  |  |  |  |  |  |  |  |
| Capacity | At load center | (MW) | Long Term Dry and Critical | $\begin{aligned} & 1,583 \\ & 1,203 \end{aligned}$ | $\begin{aligned} & 1,651 \\ & 1,327 \end{aligned}$ | $\begin{aligned} & 1,642 \\ & 1,291 \end{aligned}$ | $\begin{aligned} & 1,568 \\ & 1,173 \end{aligned}$ | $\begin{array}{r} \hline 4 \% \\ 10 \% \\ \hline \end{array}$ | $-4 \%$ $-9 \%$ | $-1 \%$ $-3 \%$ | $\begin{array}{r} \hline-5 \% \\ -12 \% \\ \hline \end{array}$ |
| Energy Generation | Total of all Facilities at load center | (GWh) | Long Term <br> Dry and Critical | $\begin{aligned} & \hline \text { 4,558 } \\ & 2,696 \end{aligned}$ | $\begin{aligned} & \hline \text { 4,617 } \\ & 2,823 \end{aligned}$ | $\begin{aligned} & \hline \text { 4,582 } \\ & 2,798 \end{aligned}$ | $\begin{aligned} & \hline \text { 4,552 } \\ & 2,684 \end{aligned}$ | $\begin{aligned} & \hline 1 \% \\ & 5 \% \\ & \hline \end{aligned}$ | $-1 \%$ $-4 \%$ | $-1 \%$ $-1 \%$ | $-1 \%$ $-5 \%$ |
| CVP Pumping Facilities |  |  |  |  |  |  |  |  |  |  |  |
| Energy Use | Total of all Facilities at load center | (GWh) | Long Term <br> Dry and Critical | $\begin{gathered} 1,113 \\ 699 \end{gathered}$ | $\begin{gathered} 1,285 \\ 769 \end{gathered}$ | $\begin{gathered} 1,238 \\ 715 \end{gathered}$ | $\begin{gathered} 1,110 \\ 699 \end{gathered}$ | $\begin{aligned} & \hline 15 \% \\ & 10 \% \\ & \hline \end{aligned}$ | $\begin{array}{r} \hline-13 \% \\ -9 \% \\ \hline \end{array}$ | $\begin{aligned} & \hline-4 \% \\ & -7 \% \\ & \hline \end{aligned}$ | $-14 \%$ $-9 \%$ |
| All CVP Facilities |  |  |  |  |  |  |  |  |  |  |  |
| Net Generation | Total of all Facilities | (GWh) | Long Term <br> Dry and Critical | $\begin{aligned} & 3,445 \\ & 1,997 \end{aligned}$ | $\begin{aligned} & 3,331 \\ & 2,054 \end{aligned}$ | $\begin{aligned} & 3,344 \\ & 2,084 \end{aligned}$ | $\begin{aligned} & 3,442 \\ & 1,986 \end{aligned}$ | $-3 \%$ $3 \%$ | $3 \%$ $-3 \%$ | $0 \%$ $1 \%$ | $3 \%$ $-3 \%$ |

 Classification (SWRCB D-1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in text.

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5C.3.3.1 New Melones Storage

Table 5C.3.3.1.1 New Melones Reservoir, End of Month Storage

No Action Alternative

| Statistic | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,765 | 1,759 | 1,823 | 1,880 | 1,931 | 1,980 | 1,945 | 2,052 | 2,075 | 1,978 | 1,869 | 1,805 |
| 20\% | 1,612 | 1,631 | 1,647 | 1,687 | 1,768 | 1,799 | 1,834 | 1,901 | 1,876 | 1,798 | 1,691 | 1,633 |
| 30\% | 1,533 | 1,534 | 1,556 | 1,598 | 1,686 | 1,729 | 1,686 | 1,745 | 1,786 | 1,707 | 1,605 | 1,556 |
| 40\% | 1,271 | 1,274 | 1,432 | 1,514 | 1,594 | 1,618 | 1,592 | 1,533 | 1,539 | 1,433 | 1,333 | 1,273 |
| 50\% | 1,121 | 1,127 | 1,154 | 1,307 | 1,436 | 1,535 | 1,461 | 1,444 | 1,392 | 1,283 | 1,190 | 1,156 |
| 60\% | 1,024 | 1,043 | 1,080 | 1,146 | 1,199 | 1,273 | 1,278 | 1,335 | 1,277 | 1,199 | 1,102 | 1,054 |
| 70\% | 882 | 911 | 986 | 1,015 | 1,038 | 1,057 | 1,080 | 1,090 | 1,087 | 994 | 910 | 868 |
| 80\% | 646 | 658 | 684 | 684 | 735 | 808 | 835 | 878 | 872 | 808 | 733 | 693 |
| 90\% | 430 | 435 | 440 | 488 | 541 | 569 | 574 | 586 | 630 | 566 | 507 | 473 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,132 | 1,142 | 1,180 | 1,237 | 1,305 | 1,348 | 1,337 | 1,373 | 1,381 | 1,300 | 1,208 | 1,159 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,379 | 1,390 | 1,454 | 1,562 | 1,666 | 1,724 | 1,758 | 1,878 | 1,968 | 1,890 | 1,773 | 1,703 |
| Above Normal (16\%) | 1,029 | 1,060 | 1,125 | 1,214 | 1,317 | 1,406 | 1,413 | 1,484 | 1,467 | 1,372 | 1,277 | 1,232 |
| Below Normal (13\%) | 1,294 | 1,305 | 1,326 | 1,351 | 1,413 | 1,438 | 1,390 | 1,383 | 1,359 | 1,268 | 1,175 | 1,133 |
| Dry (24\%) | 1,094 | 1,094 | 1,106 | 1,121 | 1,156 | 1,188 | 1,154 | 1,132 | 1,087 | 997 | 914 | 871 |
| Critical (15\%) | 624 | 623 | 638 | 645 | 661 | 656 | 602 | 554 | 526 | 476 | 431 | 408 |

Alternative 1

| Statistic | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,801 | 1,782 | 1,827 | 1,875 | 1,952 | 2,030 | 2,017 | 2,134 | 2,071 | 1,977 | 1,869 | 1,805 |
| 20\% | 1,657 | 1,655 | 1,665 | 1,690 | 1,847 | 1,928 | 1,884 | 1,963 | 1,884 | 1,830 | 1,719 | 1,663 |
| 30\% | 1,575 | 1,582 | 1,614 | 1,627 | 1,697 | 1,743 | 1,751 | 1,836 | 1,836 | 1,743 | 1,635 | 1,577 |
| 40\% | 1,366 | 1,372 | 1,472 | 1,556 | 1,621 | 1,675 | 1,649 | 1,601 | 1,619 | 1,510 | 1,415 | 1,362 |
| 50\% | 1,200 | 1,211 | 1,248 | 1,348 | 1,472 | 1,541 | 1,484 | 1,511 | 1,467 | 1,357 | 1,258 | 1,200 |
| 60\% | 1,089 | 1,093 | 1,124 | 1,209 | 1,259 | 1,341 | 1,373 | 1,379 | 1,317 | 1,224 | 1,134 | 1,089 |
| 70\% | 956 | 989 | 1,040 | 1,084 | 1,099 | 1,099 | 1,146 | 1,179 | 1,147 | 1,064 | 982 | 940 |
| 80\% | 711 | 712 | 730 | 753 | 825 | 932 | 914 | 945 | 903 | 837 | 758 | 712 |
| 90\% | 508 | 517 | 515 | 555 | 666 | 664 | 608 | 619 | 697 | 619 | 547 | 507 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,192 | 1,194 | 1,226 | 1,279 | 1,345 | 1,397 | 1,402 | 1,433 | 1,420 | 1,336 | 1,245 | 1,194 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,443 | 1,446 | 1,502 | 1,606 | 1,709 | 1,794 | 1,833 | 1,962 | 1,994 | 1,917 | 1,803 | 1,731 |
| Above Normal (16\%) | 1,092 | 1,116 | 1,175 | 1,261 | 1,360 | 1,455 | 1,481 | 1,543 | 1,516 | 1,419 | 1,321 | 1,274 |
| Below Normal (13\%) | 1,364 | 1,366 | 1,378 | 1,397 | 1,453 | 1,479 | 1,461 | 1,447 | 1,415 | 1,322 | 1,228 | 1,183 |
| Dry (24\%) | 1,149 | 1,143 | 1,149 | 1,161 | 1,191 | 1,221 | 1,210 | 1,176 | 1,131 | 1,039 | 956 | 912 |
| Critical (15\%) | 667 | 663 | 674 | 680 | 696 | 690 | 646 | 585 | 557 | 498 | 449 | 426 |

Alternative 1 minus No Action Alternative

| Statistic | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2\% | 1\% | 0\% | 0\% | 1\% | 3\% | 4\% | 4\% | 0\% | 0\% | 0\% | 0\% |
| 20\% | 3\% | 1\% | 1\% | 0\% | 4\% | 7\% | 3\% | 3\% | 0\% | 2\% | 2\% | 2\% |
| 30\% | 3\% | 3\% | 4\% | 2\% | 1\% | 1\% | 4\% | 5\% | 3\% | 2\% | 2\% | 1\% |
| 40\% | 7\% | 8\% | 3\% | 3\% | 2\% | 4\% | 4\% | 4\% | 5\% | 5\% | 6\% | 7\% |
| 50\% | 7\% | 7\% | 8\% | 3\% | 3\% | 0\% | 2\% | 5\% | 5\% | 6\% | 6\% | 4\% |
| 60\% | 6\% | 5\% | 4\% | 5\% | 5\% | 5\% | 7\% | 3\% | 3\% | 2\% | 3\% | 3\% |
| 70\% | 8\% | 9\% | 5\% | 7\% | 6\% | 4\% | 6\% | 8\% | 5\% | 7\% | 8\% | 8\% |
| 80\% | 10\% | 8\% | 7\% | 10\% | 12\% | 15\% | 9\% | 8\% | 4\% | 3\% | 3\% | 3\% |
| 90\% | 18\% | 19\% | 17\% | 14\% | 23\% | 17\% | 6\% | 6\% | 11\% | 9\% | 8\% | 7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 5\% | 5\% | 4\% | 3\% | 3\% | 4\% | 5\% | 4\% | 3\% | 3\% | 3\% | 3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 5\% | 4\% | 3\% | 3\% | 3\% | 4\% | 4\% | 4\% | 1\% | 1\% | 2\% | 2\% |
| Above Normal (16\%) | 6\% | 5\% | 4\% | 4\% | 3\% | 3\% | 5\% | 4\% | 3\% | 3\% | 3\% | 3\% |
| Below Normal (13\%) | 5\% | 5\% | 4\% | 3\% | 3\% | 3\% | 5\% | 5\% | 4\% | 4\% | 4\% | 4\% |
| Dry (24\%) | 5\% | 5\% | 4\% | 4\% | 3\% | 3\% | 5\% | 4\% | 4\% | 4\% | 5\% | 5\% |
| Critical (15\%) | 7\% | 6\% | 6\% | 6\% | 5\% | 5\% | 7\% | 6\% | 6\% | 5\% | 4\% | 4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.1.2 New Melones Reservoir, End of Month Storage
Second Basis of Comparison

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,801 | 1,782 | 1,827 | 1,875 | 1,952 | 2,030 | 2,017 | 2,134 | 2,071 | 1,977 | 1,869 | 1,805 |
| 20\% | 1,657 | 1,655 | 1,665 | 1,690 | 1,847 | 1,928 | 1,884 | 1,963 | 1,884 | 1,830 | 1,719 | 1,663 |
| 30\% | 1,575 | 1,582 | 1,614 | 1,627 | 1,697 | 1,743 | 1,751 | 1,836 | 1,836 | 1,743 | 1,635 | 1,577 |
| 40\% | 1,366 | 1,372 | 1,472 | 1,556 | 1,621 | 1,675 | 1,649 | 1,601 | 1,619 | 1,510 | 1,415 | 1,362 |
| 50\% | 1,200 | 1,211 | 1,248 | 1,348 | 1,472 | 1,541 | 1,484 | 1,511 | 1,467 | 1,357 | 1,258 | 1,200 |
| 60\% | 1,089 | 1,093 | 1,124 | 1,209 | 1,259 | 1,341 | 1,373 | 1,379 | 1,317 | 1,224 | 1,134 | 1,089 |
| 70\% | 956 | 989 | 1,040 | 1,084 | 1,099 | 1,099 | 1,146 | 1,179 | 1,147 | 1,064 | 982 | 940 |
| 80\% | 711 | 712 | 730 | 753 | 825 | 932 | 914 | 945 | 903 | 837 | 758 | 712 |
| 90\% | 508 | 517 | 515 | 555 | 666 | 664 | 608 | 619 | 697 | 619 | 547 | 507 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,192 | 1,194 | 1,226 | 1,279 | 1,345 | 1,397 | 1,402 | 1,433 | 1,420 | 1,336 | 1,245 | 1,194 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,443 | 1,446 | 1,502 | 1,606 | 1,709 | 1,794 | 1,833 | 1,962 | 1,994 | 1,917 | 1,803 | 1,731 |
| Above Normal (16\%) | 1,092 | 1,116 | 1,175 | 1,261 | 1,360 | 1,455 | 1,481 | 1,543 | 1,516 | 1,419 | 1,321 | 1,274 |
| Below Normal (13\%) | 1,364 | 1,366 | 1,378 | 1,397 | 1,453 | 1,479 | 1,461 | 1,447 | 1,415 | 1,322 | 1,228 | 1,183 |
| Dry (24\%) | 1,149 | 1,143 | 1,149 | 1,161 | 1,191 | 1,221 | 1,210 | 1,176 | 1,131 | 1,039 | 956 | 912 |
| Critical (15\%) | 667 | 663 | 674 | 680 | 696 | 690 | 646 | 585 | 557 | 498 | 449 | 426 |

No Action Alternative

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,765 | 1,759 | 1,823 | 1,880 | 1,931 | 1,980 | 1,945 | 2,052 | 2,075 | 1,978 | 1,869 | 1,805 |
| 20\% | 1,612 | 1,631 | 1,647 | 1,687 | 1,768 | 1,799 | 1,834 | 1,901 | 1,876 | 1,798 | 1,691 | 1,633 |
| 30\% | 1,533 | 1,534 | 1,556 | 1,598 | 1,686 | 1,729 | 1,686 | 1,745 | 1,786 | 1,707 | 1,605 | 1,556 |
| 40\% | 1,271 | 1,274 | 1,432 | 1,514 | 1,594 | 1,618 | 1,592 | 1,533 | 1,539 | 1,433 | 1,333 | 1,273 |
| 50\% | 1,121 | 1,127 | 1,154 | 1,307 | 1,436 | 1,535 | 1,461 | 1,444 | 1,392 | 1,283 | 1,190 | 1,156 |
| 60\% | 1,024 | 1,043 | 1,080 | 1,146 | 1,199 | 1,273 | 1,278 | 1,335 | 1,277 | 1,199 | 1,102 | 1,054 |
| 70\% | 882 | 911 | 986 | 1,015 | 1,038 | 1,057 | 1,080 | 1,090 | 1,087 | 994 | 910 | 868 |
| 80\% | 646 | 658 | 684 | 684 | 735 | 808 | 835 | 878 | 872 | 808 | 733 | 693 |
| 90\% | 430 | 435 | 440 | 488 | 541 | 569 | 574 | 586 | 630 | 566 | 507 | 473 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,132 | 1,142 | 1,180 | 1,237 | 1,305 | 1,348 | 1,337 | 1,373 | 1,381 | 1,300 | 1,208 | 1,159 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,379 | 1,390 | 1,454 | 1,562 | 1,666 | 1,724 | 1,758 | 1,878 | 1,968 | 1,890 | 1,773 | 1,703 |
| Above Normal (16\%) | 1,029 | 1,060 | 1,125 | 1,214 | 1,317 | 1,406 | 1,413 | 1,484 | 1,467 | 1,372 | 1,277 | 1,232 |
| Below Normal (13\%) | 1,294 | 1,305 | 1,326 | 1,351 | 1,413 | 1,438 | 1,390 | 1,383 | 1,359 | 1,268 | 1,175 | 1,133 |
| Dry (24\%) | 1,094 | 1,094 | 1,106 | 1,121 | 1,156 | 1,188 | 1,154 | 1,132 | 1,087 | 997 | 914 | 871 |
| Critical (15\%) | 624 | 623 | 638 | 645 | 661 | 656 | 602 | 554 | 526 | 476 | 431 | 408 |

No Action Alternative minus Second Basis of Comparison

|  | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2\% | -1\% | 0\% | 0\% | -1\% | -2\% | -4\% | -4\% | 0\% | 0\% | 0\% | 0\% |
| 20\% | -3\% | -1\% | -1\% | 0\% | -4\% | -7\% | -3\% | -3\% | 0\% | -2\% | -2\% | -2\% |
| 30\% | -3\% | -3\% | -4\% | -2\% | -1\% | -1\% | -4\% | -5\% | -3\% | -2\% | -2\% | -1\% |
| 40\% | -7\% | -7\% | -3\% | -3\% | -2\% | -3\% | -3\% | -4\% | -5\% | -5\% | -6\% | -7\% |
| 50\% | -7\% | -7\% | -8\% | -3\% | -2\% | 0\% | -2\% | -4\% | -5\% | -5\% | -5\% | -4\% |
| 60\% | -6\% | -5\% | -4\% | -5\% | -5\% | -5\% | -7\% | -3\% | -3\% | -2\% | -3\% | -3\% |
| 70\% | -8\% | -8\% | -5\% | -6\% | -6\% | -4\% | -6\% | -8\% | -5\% | -7\% | -7\% | -8\% |
| 80\% | -9\% | -8\% | -6\% | -9\% | -11\% | -13\% | -9\% | -7\% | -3\% | -3\% | -3\% | -3\% |
| 90\% | -15\% | -16\% | -15\% | -12\% | -19\% | -14\% | -6\% | -5\% | -10\% | -9\% | -7\% | -7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5\% | -4\% | -4\% | -3\% | -3\% | -3\% | -5\% | -4\% | -3\% | -3\% | -3\% | -3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -4\% | -4\% | -3\% | -3\% | -3\% | -4\% | -4\% | -4\% | -1\% | -1\% | -2\% | -2\% |
| Above Normal (16\%) | -6\% | -5\% | -4\% | -4\% | -3\% | -3\% | -5\% | -4\% | -3\% | -3\% | -3\% | -3\% |
| Below Normal (13\%) | -5\% | -4\% | -4\% | -3\% | -3\% | -3\% | -5\% | -4\% | -4\% | -4\% | -4\% | -4\% |
| Dry (24\%) | -5\% | -4\% | -4\% | -3\% | -3\% | -3\% | -5\% | -4\% | -4\% | -4\% | -4\% | -5\% |
| Critical (15\%) | -7\% | -6\% | -5\% | -5\% | -5\% | -5\% | -7\% | -5\% | -6\% | -5\% | -4\% | -4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.1.3 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,801 | 1,782 | 1,827 | 1,875 | 1,952 | 2,030 | 2,017 | 2,134 | 2,071 | 1,977 | 1,869 | 1,805 |
| 20\% | 1,657 | 1,655 | 1,665 | 1,690 | 1,847 | 1,928 | 1,884 | 1,963 | 1,884 | 1,830 | 1,719 | 1,663 |
| 30\% | 1,575 | 1,582 | 1,614 | 1,627 | 1,697 | 1,743 | 1,751 | 1,836 | 1,836 | 1,743 | 1,635 | 1,577 |
| 40\% | 1,366 | 1,372 | 1,472 | 1,556 | 1,621 | 1,675 | 1,649 | 1,601 | 1,619 | 1,510 | 1,415 | 1,362 |
| 50\% | 1,200 | 1,211 | 1,248 | 1,348 | 1,472 | 1,541 | 1,484 | 1,511 | 1,467 | 1,357 | 1,258 | 1,200 |
| 60\% | 1,089 | 1,093 | 1,124 | 1,209 | 1,259 | 1,341 | 1,373 | 1,379 | 1,317 | 1,224 | 1,134 | 1,089 |
| 70\% | 956 | 989 | 1,040 | 1,084 | 1,099 | 1,099 | 1,146 | 1,179 | 1,147 | 1,064 | 982 | 940 |
| 80\% | 711 | 712 | 730 | 753 | 825 | 932 | 914 | 945 | 903 | 837 | 758 | 712 |
| 90\% | 508 | 517 | 515 | 555 | 666 | 664 | 608 | 619 | 697 | 619 | 547 | 507 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,192 | 1,194 | 1,226 | 1,279 | 1,345 | 1,397 | 1,402 | 1,433 | 1,420 | 1,336 | 1,245 | 1,194 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,443 | 1,446 | 1,502 | 1,606 | 1,709 | 1,794 | 1,833 | 1,962 | 1,994 | 1,917 | 1,803 | 1,731 |
| Above Normal (16\%) | 1,092 | 1,116 | 1,175 | 1,261 | 1,360 | 1,455 | 1,481 | 1,543 | 1,516 | 1,419 | 1,321 | 1,274 |
| Below Normal (13\%) | 1,364 | 1,366 | 1,378 | 1,397 | 1,453 | 1,479 | 1,461 | 1,447 | 1,415 | 1,322 | 1,228 | 1,183 |
| Dry (24\%) | 1,149 | 1,143 | 1,149 | 1,161 | 1,191 | 1,221 | 1,210 | 1,176 | 1,131 | 1,039 | 956 | 912 |
| Critical (15\%) | 667 | 663 | 674 | 680 | 696 | 690 | 646 | 585 | 557 | 498 | 449 | 426 |

Alternative 3

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,967 | 1,954 | 1,970 | 1,970 | 1,970 | 2,030 | 2,062 | 2,198 | 2,284 | 2,209 | 2,103 | 2,000 |
| 20\% | 1,901 | 1,905 | 1,913 | 1,911 | 1,970 | 2,026 | 1,988 | 2,021 | 2,154 | 2,055 | 1,955 | 1,902 |
| 30\% | 1,729 | 1,727 | 1,790 | 1,857 | 1,925 | 1,975 | 1,910 | 1,972 | 1,983 | 1,877 | 1,785 | 1,736 |
| 40\% | 1,582 | 1,596 | 1,668 | 1,775 | 1,851 | 1,884 | 1,838 | 1,826 | 1,796 | 1,697 | 1,601 | 1,546 |
| 50\% | 1,427 | 1,416 | 1,439 | 1,556 | 1,660 | 1,719 | 1,674 | 1,721 | 1,675 | 1,561 | 1,460 | 1,409 |
| 60\% | 1,308 | 1,316 | 1,318 | 1,366 | 1,426 | 1,494 | 1,488 | 1,529 | 1,525 | 1,432 | 1,335 | 1,289 |
| 70\% | 1,049 | 1,073 | 1,187 | 1,210 | 1,289 | 1,269 | 1,265 | 1,343 | 1,276 | 1,180 | 1,092 | 1,043 |
| 80\% | 875 | 862 | 919 | 957 | 1,020 | 1,099 | 1,056 | 1,121 | 1,071 | 1,001 | 938 | 907 |
| 90\% | 635 | 646 | 646 | 681 | 779 | 803 | 734 | 731 | 835 | 756 | 682 | 639 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,347 | 1,351 | 1,382 | 1,436 | 1,491 | 1,541 | 1,534 | 1,580 | 1,595 | 1,506 | 1,408 | 1,353 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,562 | 1,567 | 1,618 | 1,720 | 1,792 | 1,871 | 1,906 | 2,049 | 2,146 | 2,057 | 1,934 | 1,855 |
| Above Normal (16\%) | 1,269 | 1,295 | 1,356 | 1,442 | 1,530 | 1,620 | 1,634 | 1,713 | 1,720 | 1,627 | 1,529 | 1,481 |
| Below Normal (13\%) | 1,530 | 1,536 | 1,550 | 1,570 | 1,620 | 1,650 | 1,614 | 1,617 | 1,599 | 1,501 | 1,403 | 1,357 |
| Dry (24\%) | 1,327 | 1,320 | 1,326 | 1,342 | 1,378 | 1,409 | 1,380 | 1,360 | 1,319 | 1,224 | 1,137 | 1,091 |
| Critical (15\%) | 828 | 824 | 836 | 846 | 866 | 860 | 803 | 751 | 719 | 653 | 593 | 563 |

Alternative 3 minus Second Basis of Comparison

| Statistic | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 9\% | 10\% | 8\% | 5\% | 1\% | 0\% | 2\% | 3\% | 10\% | 12\% | 13\% | 11\% |
| 20\% | 15\% | 15\% | 15\% | 13\% | 7\% | 5\% | 6\% | 3\% | 14\% | 12\% | 14\% | 14\% |
| 30\% | 10\% | 9\% | 11\% | 14\% | 13\% | 13\% | 9\% | 7\% | 8\% | 8\% | 9\% | 10\% |
| 40\% | 16\% | 16\% | 13\% | 14\% | 14\% | 12\% | 11\% | 14\% | 11\% | 12\% | 13\% | 14\% |
| 50\% | 19\% | 17\% | 15\% | 15\% | 13\% | 12\% | 13\% | 14\% | 14\% | 15\% | 16\% | 17\% |
| 60\% | 20\% | 20\% | 17\% | 13\% | 13\% | 11\% | 8\% | 11\% | 16\% | 17\% | 18\% | 18\% |
| 70\% | 10\% | 9\% | 14\% | 12\% | 17\% | 15\% | 10\% | 14\% | 11\% | 11\% | 11\% | 11\% |
| 80\% | 23\% | 21\% | 26\% | 27\% | 24\% | 18\% | 16\% | 19\% | 19\% | 20\% | 24\% | 27\% |
| 90\% | 25\% | 25\% | 25\% | 23\% | 17\% | 21\% | 21\% | 18\% | 20\% | 22\% | 25\% | 26\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 13\% | 13\% | 13\% | 12\% | 11\% | 10\% | 9\% | 10\% | 12\% | 13\% | 13\% | 13\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 8\% | 8\% | 8\% | 7\% | 5\% | 4\% | 4\% | 4\% | 8\% | 7\% | 7\% | 7\% |
| Above Normal (16\%) | 16\% | 16\% | 15\% | 14\% | 13\% | 11\% | 10\% | 11\% | 13\% | 15\% | 16\% | 16\% |
| Below Normal (13\%) | 12\% | 12\% | 12\% | 12\% | 11\% | 12\% | 10\% | 12\% | 13\% | 14\% | 14\% | 15\% |
| Dry (24\%) | 15\% | 15\% | 15\% | 16\% | 16\% | 15\% | 14\% | 16\% | 17\% | 18\% | 19\% | 20\% |
| Critical (15\%) | 24\% | 24\% | 24\% | 24\% | 24\% | 25\% | 24\% | 28\% | 29\% | 31\% | 32\% | 32\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.1.4 New Melones Reservoir, End of Month Storage

Second Basis of Comparison

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,801 | 1,782 | 1,827 | 1,875 | 1,952 | 2,030 | 2,017 | 2,134 | 2,071 | 1,977 | 1,869 | 1,805 |
| 20\% | 1,657 | 1,655 | 1,665 | 1,690 | 1,847 | 1,928 | 1,884 | 1,963 | 1,884 | 1,830 | 1,719 | 1,663 |
| 30\% | 1,575 | 1,582 | 1,614 | 1,627 | 1,697 | 1,743 | 1,751 | 1,836 | 1,836 | 1,743 | 1,635 | 1,577 |
| 40\% | 1,366 | 1,372 | 1,472 | 1,556 | 1,621 | 1,675 | 1,649 | 1,601 | 1,619 | 1,510 | 1,415 | 1,362 |
| 50\% | 1,200 | 1,211 | 1,248 | 1,348 | 1,472 | 1,541 | 1,484 | 1,511 | 1,467 | 1,357 | 1,258 | 1,200 |
| 60\% | 1,089 | 1,093 | 1,124 | 1,209 | 1,259 | 1,341 | 1,373 | 1,379 | 1,317 | 1,224 | 1,134 | 1,089 |
| 70\% | 956 | 989 | 1,040 | 1,084 | 1,099 | 1,099 | 1,146 | 1,179 | 1,147 | 1,064 | 982 | 940 |
| 80\% | 711 | 712 | 730 | 753 | 825 | 932 | 914 | 945 | 903 | 837 | 758 | 712 |
| 90\% | 508 | 517 | 515 | 555 | 666 | 664 | 608 | 619 | 697 | 619 | 547 | 507 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,192 | 1,194 | 1,226 | 1,279 | 1,345 | 1,397 | 1,402 | 1,433 | 1,420 | 1,336 | 1,245 | 1,194 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,443 | 1,446 | 1,502 | 1,606 | 1,709 | 1,794 | 1,833 | 1,962 | 1,994 | 1,917 | 1,803 | 1,731 |
| Above Normal (16\%) | 1,092 | 1,116 | 1,175 | 1,261 | 1,360 | 1,455 | 1,481 | 1,543 | 1,516 | 1,419 | 1,321 | 1,274 |
| Below Normal (13\%) | 1,364 | 1,366 | 1,378 | 1,397 | 1,453 | 1,479 | 1,461 | 1,447 | 1,415 | 1,322 | 1,228 | 1,183 |
| Dry (24\%) | 1,149 | 1,143 | 1,149 | 1,161 | 1,191 | 1,221 | 1,210 | 1,176 | 1,131 | 1,039 | 956 | 912 |
| Critical (15\%) | 667 | 663 | 674 | 680 | 696 | 690 | 646 | 585 | 557 | 498 | 449 | 426 |

Alternative 5

|  | End of Month Storage (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,765 | 1,759 | 1,831 | 1,881 | 1,949 | 1,969 | 1,908 | 2,012 | 2,117 | 2,013 | 1,900 | 1,826 |
| 20\% | 1,588 | 1,587 | 1,601 | 1,626 | 1,782 | 1,794 | 1,752 | 1,844 | 1,816 | 1,740 | 1,631 | 1,571 |
| 30\% | 1,468 | 1,459 | 1,490 | 1,544 | 1,630 | 1,672 | 1,679 | 1,693 | 1,721 | 1,633 | 1,531 | 1,489 |
| 40\% | 1,249 | 1,252 | 1,347 | 1,437 | 1,522 | 1,573 | 1,512 | 1,494 | 1,505 | 1,405 | 1,297 | 1,242 |
| 50\% | 1,040 | 1,058 | 1,142 | 1,227 | 1,437 | 1,455 | 1,393 | 1,357 | 1,289 | 1,190 | 1,100 | 1,074 |
| 60\% | 976 | 997 | 1,023 | 1,072 | 1,134 | 1,161 | 1,159 | 1,246 | 1,218 | 1,130 | 1,032 | 983 |
| 70\% | 766 | 802 | 855 | 907 | 938 | 973 | 1,006 | 978 | 991 | 900 | 821 | 783 |
| 80\% | 554 | 553 | 620 | 621 | 623 | 697 | 651 | 721 | 761 | 686 | 617 | 587 |
| 90\% | 285 | 298 | 299 | 377 | 429 | 449 | 386 | 452 | 492 | 423 | 349 | 308 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,063 | 1,073 | 1,112 | 1,169 | 1,239 | 1,284 | 1,265 | 1,287 | 1,299 | 1,221 | 1,134 | 1,086 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,309 | 1,321 | 1,388 | 1,496 | 1,602 | 1,668 | 1,704 | 1,812 | 1,906 | 1,833 | 1,722 | 1,653 |
| Above Normal (16\%) | 983 | 1,014 | 1,079 | 1,168 | 1,271 | 1,361 | 1,363 | 1,413 | 1,396 | 1,302 | 1,207 | 1,162 |
| Below Normal (13\%) | 1,210 | 1,220 | 1,242 | 1,267 | 1,329 | 1,354 | 1,298 | 1,276 | 1,254 | 1,163 | 1,071 | 1,028 |
| Dry (24\%) | 1,018 | 1,018 | 1,030 | 1,045 | 1,081 | 1,114 | 1,066 | 1,031 | 990 | 903 | 823 | 781 |
| Critical (15\%) | 558 | 559 | 570 | 578 | 597 | 591 | 506 | 449 | 433 | 391 | 355 | 336 |

Alternative 5 minus Second Basis of Comparison

| Statistic | End of Month Storage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2\% | -1\% | 0\% | 0\% | 0\% | -3\% | -5\% | -6\% | 2\% | 2\% | 2\% | 1\% |
| 20\% | -4\% | -4\% | -4\% | -4\% | -4\% | -7\% | -7\% | -6\% | -4\% | -5\% | -5\% | -6\% |
| 30\% | -7\% | -8\% | -8\% | -5\% | -4\% | -4\% | -4\% | -8\% | -6\% | -6\% | -6\% | -6\% |
| 40\% | -9\% | -9\% | -9\% | -8\% | -6\% | -6\% | -8\% | -7\% | -7\% | -7\% | -8\% | -9\% |
| 50\% | -13\% | -13\% | -8\% | -9\% | -2\% | -6\% | -6\% | -10\% | -12\% | -12\% | -13\% | -11\% |
| 60\% | -10\% | -9\% | -9\% | -11\% | -10\% | -13\% | -16\% | -10\% | -8\% | -8\% | -9\% | -10\% |
| 70\% | -20\% | -19\% | -18\% | -16\% | -15\% | -11\% | -12\% | -17\% | -14\% | -15\% | -16\% | -17\% |
| 80\% | -22\% | -22\% | -15\% | -17\% | -25\% | -25\% | -29\% | -24\% | -16\% | -18\% | -19\% | -18\% |
| 90\% | -44\% | -42\% | -42\% | -32\% | -36\% | -32\% | -36\% | -27\% | -29\% | -32\% | -36\% | -39\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -11\% | -10\% | -9\% | -9\% | -8\% | -8\% | -10\% | -10\% | -9\% | -9\% | -9\% | -9\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -9\% | -9\% | -8\% | -7\% | -6\% | -7\% | -7\% | -8\% | -4\% | -4\% | -4\% | -4\% |
| Above Normal (16\%) | -10\% | -9\% | -8\% | -7\% | -7\% | -6\% | -8\% | -8\% | -8\% | -8\% | -9\% | -9\% |
| Below Normal (13\%) | -11\% | -11\% | -10\% | -9\% | -9\% | -8\% | -11\% | -12\% | -11\% | -12\% | -13\% | -13\% |
| Dry (24\%) | -11\% | -11\% | -10\% | -10\% | -9\% | -9\% | -12\% | -12\% | -12\% | -13\% | -14\% | -14\% |
| Critical (15\%) | -16\% | -16\% | -15\% | -15\% | -14\% | -14\% | -22\% | -23\% | -22\% | -21\% | -21\% | -21\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.2 New Melones Elevation

Table 5C.3.3.2.1 New Melones Reservoir, End of Month Elevation

No Action Alternative

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,029 | 1,028 | 1,035 | 1,040 | 1,046 | 1,050 | 1,047 | 1,057 | 1,059 | 1,050 | 1,039 | 1,033 |
| 20\% | 1,013 | 1,015 | 1,017 | 1,021 | 1,029 | 1,032 | 1,036 | 1,043 | 1,040 | 1,032 | 1,021 | 1,016 |
| 30\% | 1,006 | 1,006 | 1,008 | 1,012 | 1,021 | 1,025 | 1,021 | 1,027 | 1,031 | 1,023 | 1,013 | 1,008 |
| 40\% | 975 | 976 | 995 | 1,004 | 1,012 | 1,014 | 1,011 | 1,006 | 1,006 | 995 | 983 | 976 |
| 50\% | 956 | 957 | 960 | 980 | 996 | 1,006 | 998 | 997 | 991 | 977 | 965 | 961 |
| 60\% | 943 | 946 | 950 | 959 | 966 | 976 | 976 | 984 | 976 | 966 | 953 | 947 |
| 70\% | 925 | 928 | 938 | 942 | 945 | 947 | 950 | 952 | 951 | 939 | 928 | 929 |
| 80\% | 879 | 881 | 887 | 887 | 897 | 912 | 918 | 924 | 923 | 912 | 897 | 888 |
| 90\% | 835 | 836 | 837 | 847 | 857 | 863 | 864 | 867 | 876 | 863 | 850 | 843 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 944 | 945 | 951 | 958 | 968 | 974 | 973 | 976 | 976 | 965 | 954 | 948 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 980 | 982 | 990 | 1,004 | 1,016 | 1,023 | 1,026 | 1,039 | 1,047 | 1,040 | 1,029 | 1,022 |
| Above Normal (16\%) | 932 | 937 | 945 | 960 | 974 | 986 | 988 | 997 | 996 | 985 | 973 | 897 |
| Below Normal (13\%) | 968 | 969 | 972 | 975 | 985 | 988 | 985 | 985 | 983 | 972 | 960 | 955 |
| Dry (24\%) | 943 | 943 | 944 | 947 | 951 | 957 | 955 | 953 | 948 | 934 | 922 | 915 |
| Critical (15\%) | 856 | 856 | 862 | 864 | 870 | 871 | 860 | 848 | 840 | 828 | 818 | 812 |

Alternative 1

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,032 | 1,031 | 1,035 | 1,040 | 1,048 | 1,055 | 1,054 | 1,064 | 1,058 | 1,050 | 1,039 | 1,033 |
| 20\% | 1,018 | 1,018 | 1,019 | 1,021 | 1,037 | 1,045 | 1,041 | 1,049 | 1,041 | 1,035 | 1,024 | 1,019 |
| 30\% | 1,010 | 1,010 | 1,014 | 1,015 | 1,022 | 1,027 | 1,027 | 1,036 | 1,036 | 1,027 | 1,016 | 1,010 |
| 40\% | 988 | 988 | 999 | 1,008 | 1,014 | 1,020 | 1,017 | 1,012 | 1,014 | 1,003 | 994 | 988 |
| 50\% | 966 | 968 | 972 | 985 | 999 | 1,006 | 1,001 | 1,003 | 999 | 986 | 974 | 968 |
| 60\% | 952 | 952 | 956 | 967 | 974 | 984 | 989 | 989 | 981 | 969 | 957 | 952 |
| 70\% | 934 | 939 | 945 | 951 | 953 | 953 | 959 | 963 | 959 | 948 | 938 | 933 |
| 80\% | 892 | 892 | 896 | 901 | 915 | 931 | 929 | 933 | 927 | 918 | 902 | 891 |
| 90\% | 851 | 852 | 852 | 860 | 883 | 883 | 871 | 873 | 889 | 873 | 859 | 849 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 952 | 953 | 957 | 965 | 974 | 981 | 981 | 984 | 982 | 971 | 959 | 953 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 989 | 990 | 997 | 1,009 | 1,021 | 1,030 | 1,034 | 1,047 | 1,050 | 1,043 | 1,032 | 1,025 |
| Above Normal (16\%) | 941 | 944 | 951 | 966 | 979 | 992 | 995 | 1,003 | 1,001 | 990 | 978 | 901 |
| Below Normal (13\%) | 977 | 977 | 979 | 982 | 991 | 994 | 994 | 993 | 991 | 980 | 968 | 962 |
| Dry (24\%) | 951 | 950 | 950 | 953 | 957 | 962 | 963 | 960 | 954 | 941 | 929 | 922 |
| Critical (15\%) | 866 | 866 | 870 | 872 | 878 | 879 | 871 | 856 | 850 | 835 | 823 | 817 |

Alternative 1 minus No Action Alternative

| Statistic | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 0\% | 1\% | 0\% | 0\% | 0\% | 0\% |
| 30\% | 0\% | 0\% | 1\% | 0\% | 0\% | 0\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% |
| 40\% | 1\% | 1\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| 50\% | 1\% | 1\% | 1\% | 1\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| 60\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% | 0\% | 0\% |
| 70\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% |
| 80\% | 2\% | 1\% | 1\% | 2\% | 2\% | 2\% | 1\% | 1\% | 0\% | 1\% | 1\% | 0\% |
| 90\% | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% |
| Above Normal (16\%) | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Below Normal (13\%) | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Dry (24\%) | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Critical (15\%) | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.2.2 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,032 | 1,031 | 1,035 | 1,040 | 1,048 | 1,055 | 1,054 | 1,064 | 1,058 | 1,050 | 1,039 | 1,033 |
| 20\% | 1,018 | 1,018 | 1,019 | 1,021 | 1,037 | 1,045 | 1,041 | 1,049 | 1,041 | 1,035 | 1,024 | 1,019 |
| 30\% | 1,010 | 1,010 | 1,014 | 1,015 | 1,022 | 1,027 | 1,027 | 1,036 | 1,036 | 1,027 | 1,016 | 1,010 |
| 40\% | 988 | 988 | 999 | 1,008 | 1,014 | 1,020 | 1,017 | 1,012 | 1,014 | 1,003 | 994 | 988 |
| 50\% | 966 | 968 | 972 | 985 | 999 | 1,006 | 1,001 | 1,003 | 999 | 986 | 974 | 968 |
| 60\% | 952 | 952 | 956 | 967 | 974 | 984 | 989 | 989 | 981 | 969 | 957 | 952 |
| 70\% | 934 | 939 | 945 | 951 | 953 | 953 | 959 | 963 | 959 | 948 | 938 | 933 |
| 80\% | 892 | 892 | 896 | 901 | 915 | 931 | 929 | 933 | 927 | 918 | 902 | 891 |
| 90\% | 851 | 852 | 852 | 860 | 883 | 883 | 871 | 873 | 889 | 873 | 859 | 849 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 952 | 953 | 957 | 965 | 974 | 981 | 981 | 984 | 982 | 971 | 959 | 953 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 989 | 990 | 997 | 1,009 | 1,021 | 1,030 | 1,034 | 1,047 | 1,050 | 1,043 | 1,032 | 1,025 |
| Above Normal (16\%) | 941 | 944 | 951 | 966 | 979 | 992 | 995 | 1,003 | 1,001 | 990 | 978 | 901 |
| Below Normal (13\%) | 977 | 977 | 979 | 982 | 991 | 994 | 994 | 993 | 991 | 980 | 968 | 962 |
| Dry (24\%) | 951 | 950 | 950 | 953 | 957 | 962 | 963 | 960 | 954 | 941 | 929 | 922 |
| Critical (15\%) | 866 | 866 | 870 | 872 | 878 | 879 | 871 | 856 | 850 | 835 | 823 | 817 |

## No Action Alternative

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,029 | 1,028 | 1,035 | 1,040 | 1,046 | 1,050 | 1,047 | 1,057 | 1,059 | 1,050 | 1,039 | 1,033 |
| 20\% | 1,013 | 1,015 | 1,017 | 1,021 | 1,029 | 1,032 | 1,036 | 1,043 | 1,040 | 1,032 | 1,021 | 1,016 |
| 30\% | 1,006 | 1,006 | 1,008 | 1,012 | 1,021 | 1,025 | 1,021 | 1,027 | 1,031 | 1,023 | 1,013 | 1,008 |
| 40\% | 975 | 976 | 995 | 1,004 | 1,012 | 1,014 | 1,011 | 1,006 | 1,006 | 995 | 983 | 976 |
| 50\% | 956 | 957 | 960 | 980 | 996 | 1,006 | 998 | 997 | 991 | 977 | 965 | 961 |
| 60\% | 943 | 946 | 950 | 959 | 966 | 976 | 976 | 984 | 976 | 966 | 953 | 947 |
| 70\% | 925 | 928 | 938 | 942 | 945 | 947 | 950 | 952 | 951 | 939 | 928 | 929 |
| 80\% | 879 | 881 | 887 | 887 | 897 | 912 | 918 | 924 | 923 | 912 | 897 | 888 |
| 90\% | 835 | 836 | 837 | 847 | 857 | 863 | 864 | 867 | 876 | 863 | 850 | 843 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 944 | 945 | 951 | 958 | 968 | 974 | 973 | 976 | 976 | 965 | 954 | 948 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 980 | 982 | 990 | 1,004 | 1,016 | 1,023 | 1,026 | 1,039 | 1,047 | 1,040 | 1,029 | 1,022 |
| Above Normal (16\%) | 932 | 937 | 945 | 960 | 974 | 986 | 988 | 997 | 996 | 985 | 973 | 897 |
| Below Normal (13\%) | 968 | 969 | 972 | 975 | 985 | 988 | 985 | 985 | 983 | 972 | 960 | 955 |
| Dry (24\%) | 943 | 943 | 944 | 947 | 951 | 957 | 955 | 953 | 948 | 934 | 922 | 915 |
| Critical (15\%) | 856 | 856 | 862 | 864 | 870 | 871 | 860 | 848 | 840 | 828 | 818 | 812 |

No Action Alternative minus Second Basis of Comparison

| Statistic | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | -1\% | -1\% | 0\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| 30\% | 0\% | 0\% | -1\% | 0\% | 0\% | 0\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| 40\% | -1\% | -1\% | 0\% | 0\% | 0\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| 50\% | -1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| 60\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% |
| 70\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% |
| 80\% | -2\% | -1\% | -1\% | -2\% | -2\% | -2\% | -1\% | -1\% | 0\% | -1\% | -1\% | 0\% |
| 90\% | -2\% | -2\% | -2\% | -2\% | -3\% | -2\% | -1\% | -1\% | -2\% | -1\% | -1\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| Above Normal (16\%) | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| Below Normal (13\%) | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| Dry (24\%) | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| Critical (15\%) | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.2.3 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,032 | 1,031 | 1,035 | 1,040 | 1,048 | 1,055 | 1,054 | 1,064 | 1,058 | 1,050 | 1,039 | 1,033 |
| 20\% | 1,018 | 1,018 | 1,019 | 1,021 | 1,037 | 1,045 | 1,041 | 1,049 | 1,041 | 1,035 | 1,024 | 1,019 |
| 30\% | 1,010 | 1,010 | 1,014 | 1,015 | 1,022 | 1,027 | 1,027 | 1,036 | 1,036 | 1,027 | 1,016 | 1,010 |
| 40\% | 988 | 988 | 999 | 1,008 | 1,014 | 1,020 | 1,017 | 1,012 | 1,014 | 1,003 | 994 | 988 |
| 50\% | 966 | 968 | 972 | 985 | 999 | 1,006 | 1,001 | 1,003 | 999 | 986 | 974 | 968 |
| 60\% | 952 | 952 | 956 | 967 | 974 | 984 | 989 | 989 | 981 | 969 | 957 | 952 |
| 70\% | 934 | 939 | 945 | 951 | 953 | 953 | 959 | 963 | 959 | 948 | 938 | 933 |
| 80\% | 892 | 892 | 896 | 901 | 915 | 931 | 929 | 933 | 927 | 918 | 902 | 891 |
| 90\% | 851 | 852 | 852 | 860 | 883 | 883 | 871 | 873 | 889 | 873 | 859 | 849 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 952 | 953 | 957 | 965 | 974 | 981 | 981 | 984 | 982 | 971 | 959 | 953 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 989 | 990 | 997 | 1,009 | 1,021 | 1,030 | 1,034 | 1,047 | 1,050 | 1,043 | 1,032 | 1,025 |
| Above Normal (16\%) | 941 | 944 | 951 | 966 | 979 | 992 | 995 | 1,003 | 1,001 | 990 | 978 | 901 |
| Below Normal (13\%) | 977 | 977 | 979 | 982 | 991 | 994 | 994 | 993 | 991 | 980 | 968 | 962 |
| Dry (24\%) | 951 | 950 | 950 | 953 | 957 | 962 | 963 | 960 | 954 | 941 | 929 | 922 |
| Critical (15\%) | 866 | 866 | 870 | 872 | 878 | 879 | 871 | 856 | 850 | 835 | 823 | 817 |

Alternative 3

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,049 | 1,048 | 1,050 | 1,050 | 1,050 | 1,055 | 1,057 | 1,069 | 1,076 | 1,070 | 1,061 | 1,052 |
| 20\% | 1,043 | 1,043 | 1,044 | 1,044 | 1,050 | 1,054 | 1,051 | 1,054 | 1,065 | 1,057 | 1,048 | 1,043 |
| 30\% | 1,025 | 1,025 | 1,031 | 1,038 | 1,045 | 1,050 | 1,044 | 1,050 | 1,051 | 1,040 | 1,031 | 1,027 |
| 40\% | 1,011 | 1,012 | 1,019 | 1,030 | 1,038 | 1,041 | 1,036 | 1,035 | 1,032 | 1,022 | 1,012 | 1,007 |
| 50\% | 995 | 994 | 996 | 1,008 | 1,018 | 1,024 | 1,020 | 1,024 | 1,020 | 1,008 | 998 | 994 |
| 60\% | 980 | 981 | 982 | 988 | 995 | 1,002 | 1,001 | 1,005 | 1,005 | 995 | 984 | 979 |
| 70\% | 946 | 950 | 964 | 967 | 978 | 975 | 974 | 985 | 976 | 963 | 952 | 945 |
| 80\% | 924 | 922 | 930 | 934 | 943 | 953 | 947 | 956 | 949 | 940 | 932 | 926 |
| 90\% | 877 | 879 | 879 | 886 | 906 | 911 | 897 | 896 | 918 | 901 | 886 | 876 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 974 | 974 | 978 | 985 | 993 | 999 | 998 | 1,002 | 1,003 | 992 | 981 | 975 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,003 | 1,004 | 1,010 | 1,022 | 1,030 | 1,038 | 1,042 | 1,055 | 1,064 | 1,056 | 1,045 | 1,037 |
| Above Normal (16\%) | 964 | 967 | 974 | 987 | 999 | 1,009 | 1,012 | 1,021 | 1,022 | 1,013 | 1,002 | 924 |
| Below Normal (13\%) | 998 | 998 | 1,000 | 1,002 | 1,011 | 1,014 | 1,011 | 1,012 | 1,010 | 1,000 | 989 | 983 |
| Dry (24\%) | 974 | 973 | 974 | 977 | 981 | 985 | 983 | 982 | 978 | 966 | 954 | 948 |
| Critical (15\%) | 899 | 899 | 902 | 904 | 909 | 909 | 899 | 889 | 883 | 870 | 858 | 852 |

Alternative 3 minus Second Basis of Comparison

| Statistic | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2\% | 2\% | 1\% | 1\% | 0\% | 0\% | 0\% | 1\% | 2\% | 2\% | 2\% | 2\% |
| 20\% | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 1\% | 0\% | 2\% | 2\% | 2\% | 2\% |
| 30\% | 2\% | 1\% | 2\% | 2\% | 2\% | 2\% | 2\% | 1\% | 1\% | 1\% | 1\% | 2\% |
| 40\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| 50\% | 3\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 3\% |
| 60\% | 3\% | 3\% | 3\% | 2\% | 2\% | 2\% | 1\% | 2\% | 2\% | 3\% | 3\% | 3\% |
| 70\% | 1\% | 1\% | 2\% | 2\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 1\% |
| 80\% | 4\% | 3\% | 4\% | 4\% | 3\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% | 4\% |
| 90\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% | 3\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Above Normal (16\%) | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 3\% |
| Below Normal (13\%) | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% | 2\% |
| Dry (24\%) | 2\% | 2\% | 2\% | 2\% | 3\% | 2\% | 2\% | 2\% | 3\% | 3\% | 3\% | 3\% |
| Critical (15\%) | 4\% | 4\% | 4\% | 4\% | 3\% | 3\% | 3\% | 4\% | 4\% | 4\% | 4\% | 4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.2.4 New Melones Reservoir, End of Month Elevation

Second Basis of Comparison

|  | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,032 | 1,031 | 1,035 | 1,040 | 1,048 | 1,055 | 1,054 | 1,064 | 1,058 | 1,050 | 1,039 | 1,033 |
| 20\% | 1,018 | 1,018 | 1,019 | 1,021 | 1,037 | 1,045 | 1,041 | 1,049 | 1,041 | 1,035 | 1,024 | 1,019 |
| 30\% | 1,010 | 1,010 | 1,014 | 1,015 | 1,022 | 1,027 | 1,027 | 1,036 | 1,036 | 1,027 | 1,016 | 1,010 |
| 40\% | 988 | 988 | 999 | 1,008 | 1,014 | 1,020 | 1,017 | 1,012 | 1,014 | 1,003 | 994 | 988 |
| 50\% | 966 | 968 | 972 | 985 | 999 | 1,006 | 1,001 | 1,003 | 999 | 986 | 974 | 968 |
| 60\% | 952 | 952 | 956 | 967 | 974 | 984 | 989 | 989 | 981 | 969 | 957 | 952 |
| 70\% | 934 | 939 | 945 | 951 | 953 | 953 | 959 | 963 | 959 | 948 | 938 | 933 |
| 80\% | 892 | 892 | 896 | 901 | 915 | 931 | 929 | 933 | 927 | 918 | 902 | 891 |
| 90\% | 851 | 852 | 852 | 860 | 883 | 883 | 871 | 873 | 889 | 873 | 859 | 849 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 952 | 953 | 957 | 965 | 974 | 981 | 981 | 984 | 982 | 971 | 959 | 953 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 989 | 990 | 997 | 1,009 | 1,021 | 1,030 | 1,034 | 1,047 | 1,050 | 1,043 | 1,032 | 1,025 |
| Above Normal (16\%) | 941 | 944 | 951 | 966 | 979 | 992 | 995 | 1,003 | 1,001 | 990 | 978 | 901 |
| Below Normal (13\%) | 977 | 977 | 979 | 982 | 991 | 994 | 994 | 993 | 991 | 980 | 968 | 962 |
| Dry (24\%) | 951 | 950 | 950 | 953 | 957 | 962 | 963 | 960 | 954 | 941 | 929 | 922 |
| Critical (15\%) | 866 | 866 | 870 | 872 | 878 | 879 | 871 | 856 | 850 | 835 | 823 | 817 |

Alternative 5

| Statistic | End of Month Elevation (Feet) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,029 | 1,028 | 1,036 | 1,041 | 1,047 | 1,049 | 1,043 | 1,053 | 1,062 | 1,053 | 1,043 | 1,035 |
| 20\% | 1,011 | 1,011 | 1,012 | 1,015 | 1,031 | 1,032 | 1,028 | 1,037 | 1,034 | 1,026 | 1,015 | 1,009 |
| 30\% | 999 | 998 | 1,001 | 1,007 | 1,015 | 1,019 | 1,020 | 1,022 | 1,024 | 1,016 | 1,005 | 1,002 |
| 40\% | 973 | 973 | 985 | 996 | 1,004 | 1,010 | 1,003 | 1,002 | 1,003 | 992 | 979 | 973 |
| 50\% | 945 | 948 | 959 | 970 | 996 | 998 | 991 | 987 | 978 | 965 | 953 | 951 |
| 60\% | 937 | 940 | 943 | 949 | 957 | 961 | 961 | 972 | 968 | 957 | 944 | 938 |
| 70\% | 904 | 911 | 921 | 928 | 932 | 936 | 941 | 937 | 939 | 927 | 915 | 909 |
| 80\% | 860 | 860 | 874 | 874 | 874 | 889 | 880 | 894 | 902 | 887 | 873 | 867 |
| 90\% | 803 | 807 | 808 | 824 | 834 | 838 | 826 | 839 | 847 | 833 | 818 | 810 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 931 | 933 | 939 | 947 | 957 | 964 | 961 | 962 | 963 | 952 | 941 | 935 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 969 | 971 | 980 | 995 | 1,007 | 1,016 | 1,020 | 1,031 | 1,040 | 1,033 | 1,022 | 1,015 |
| Above Normal (16\%) | 924 | 930 | 939 | 954 | 968 | 980 | 982 | 988 | 987 | 975 | 963 | 890 |
| Below Normal (13\%) | 954 | 956 | 959 | 962 | 973 | 977 | 972 | 970 | 968 | 957 | 944 | 938 |
| Dry (24\%) | 930 | 930 | 932 | 934 | 939 | 945 | 940 | 936 | 931 | 918 | 905 | 898 |
| Critical (15\%) | 837 | 838 | 842 | 845 | 853 | 855 | 834 | 818 | 815 | 804 | 796 | 791 |

Alternative 5 minus Second Basis of Comparison

| Statistic | End of Month Elevation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% |
| 20\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| 30\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| 40\% | -2\% | -2\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -2\% |
| 50\% | -2\% | -2\% | -1\% | -2\% | 0\% | -1\% | -1\% | -2\% | -2\% | -2\% | -2\% | -2\% |
| 60\% | -2\% | -1\% | -1\% | -2\% | -2\% | -2\% | -3\% | -2\% | -1\% | -1\% | -1\% | -1\% |
| 70\% | -3\% | -3\% | -3\% | -2\% | -2\% | -2\% | -2\% | -3\% | -2\% | -2\% | -2\% | -3\% |
| 80\% | -4\% | -4\% | -3\% | -3\% | -4\% | -4\% | -5\% | -4\% | -3\% | -3\% | -3\% | -3\% |
| 90\% | -6\% | -5\% | -5\% | -4\% | -6\% | -5\% | -5\% | -4\% | -5\% | -5\% | -5\% | -5\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -2\% | -2\% | -2\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% |
| Above Normal (16\%) | -2\% | -2\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -1\% | -2\% | -1\% |
| Below Normal (13\%) | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% |
| Dry (24\%) | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -2\% | -3\% | -3\% | -3\% |
| Critical (15\%) | -3\% | -3\% | -3\% | -3\% | -3\% | -3\% | -4\% | -4\% | -4\% | -4\% | -3\% | -3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.3 Stanislaus River below Goodwin Dam Flow

Table 5C.3.3.3.1 Stanislaus River below Goodwin, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 837 | 290 | 306 | 358 | 897 | 1,648 | 1,633 | 1,929 | 1,103 | 429 | 390 | 390 |
| 20\% | 797 | 200 | 218 | 232 | 409 | 1,521 | 1,553 | 1,555 | 1,090 | 310 | 300 | 300 |
| 30\% | 774 | 200 | 200 | 232 | 290 | 440 | 1,553 | 1,296 | 940 | 300 | 284 | 250 |
| 40\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 855 | 300 | 283 | 250 |
| 50\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 363 | 271 | 283 | 250 |
| 60\% | 636 | 200 | 200 | 219 | 229 | 200 | 812 | 918 | 363 | 265 | 283 | 249 |
| 70\% | 636 | 200 | 200 | 219 | 229 | 200 | 767 | 705 | 297 | 265 | 283 | 249 |
| 80\% | 578 | 200 | 200 | 214 | 221 | 200 | 767 | 631 | 261 | 265 | 283 | 249 |
| 90\% | 577 | 200 | 200 | 213 | 215 | 200 | 505 | 546 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 723 | 278 | 365 | 518 | 595 | 754 | 1,158 | 1,123 | 680 | 394 | 361 | 351 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 781 | 499 | 787 | 999 | 1,201 | 2,016 | 1,536 | 1,691 | 1,140 | 715 | 639 | 692 |
| Above Normal (24\%) | 714 | 216 | 282 | 663 | 676 | 645 | 1,224 | 1,146 | 962 | 353 | 292 | 267 |
| Below Normal (10\%) | 740 | 225 | 225 | 282 | 346 | 365 | 1,454 | 1,201 | 476 | 269 | 285 | 256 |
| Dry (16\%) | 707 | 208 | 216 | 234 | 313 | 200 | 1,030 | 930 | 374 | 275 | 277 | 245 |
| Critical (27\%) | 683 | 205 | 215 | 227 | 255 | 234 | 741 | 699 | 281 | 269 | 262 | 231 |

Alternative 1

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 499 | 508 | 508 | 907 | 709 | 1,500 | 1,500 | 2,887 | 360 | 300 | 300 |
| 20\% | 350 | 415 | 415 | 415 | 503 | 415 | 1,462 | 1,500 | 1,709 | 306 | 300 | 300 |
| 30\% | 331 | 386 | 415 | 408 | 415 | 415 | 1,337 | 1,434 | 1,571 | 300 | 296 | 268 |
| 40\% | 286 | 318 | 326 | 318 | 415 | 318 | 991 | 1,303 | 845 | 300 | 283 | 268 |
| 50\% | 286 | 318 | 318 | 318 | 318 | 318 | 664 | 1,303 | 450 | 284 | 283 | 268 |
| 60\% | 194 | 247 | 275 | 242 | 318 | 275 | 512 | 1,112 | 398 | 268 | 283 | 249 |
| 70\% | 194 | 247 | 247 | 242 | 260 | 242 | 461 | 920 | 289 | 268 | 283 | 249 |
| 80\% | 173 | 233 | 247 | 242 | 242 | 242 | 424 | 848 | 257 | 265 | 283 | 249 |
| 90\% | 164 | 230 | 230 | 200 | 239 | 200 | 378 | 760 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 291 | 388 | 466 | 584 | 642 | 607 | 884 | 1,181 | 1,028 | 390 | 347 | 363 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 360 | 612 | 886 | 1,060 | 1,196 | 1,462 | 1,488 | 1,497 | 2,316 | 678 | 580 | 731 |
| Above Normal (24\%) | 301 | 332 | 376 | 726 | 742 | 523 | 940 | 1,225 | 1,200 | 354 | 288 | 271 |
| Below Normal (10\%) | 288 | 373 | 373 | 383 | 418 | 316 | 955 | 1,266 | 613 | 272 | 285 | 270 |
| Dry (16\%) | 278 | 323 | 331 | 318 | 392 | 262 | 581 | 1,094 | 399 | 276 | 283 | 255 |
| Critical (27\%) | 230 | 287 | 298 | 275 | 303 | 256 | 464 | 890 | 280 | 283 | 259 | 228 |

Alternative 1 minus No Action Alternative

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -58\% | 72\% | 66\% | 42\% | 1\% | -57\% | -8\% | -22\% | 162\% | -16\% | -23\% | -23\% |
| 20\% | -56\% | 107\% | 90\% | 79\% | 23\% | -73\% | -6\% | -4\% | 57\% | -1\% | 0\% | 0\% |
| 30\% | -57\% | 93\% | 107\% | 76\% | 43\% | -6\% | -14\% | 11\% | 67\% | 0\% | 4\% | 7\% |
| 40\% | -63\% | 59\% | 63\% | 41\% | 76\% | 59\% | -29\% | 5\% | -1\% | 0\% | 0\% | 7\% |
| 50\% | -63\% | 59\% | 59\% | 41\% | 35\% | 59\% | -53\% | 5\% | 24\% | 5\% | 0\% | 7\% |
| 60\% | -69\% | 23\% | 38\% | 10\% | 39\% | 38\% | -37\% | 21\% | 10\% | 1\% | 0\% | 0\% |
| 70\% | -69\% | 23\% | 23\% | 10\% | 14\% | 21\% | -40\% | 30\% | -3\% | 1\% | 0\% | 0\% |
| 80\% | -70\% | 17\% | 23\% | 13\% | 9\% | 21\% | -45\% | 35\% | -2\% | 0\% | 0\% | 0\% |
| 90\% | -72\% | 15\% | 15\% | -6\% | 11\% | 0\% | -25\% | 39\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -60\% | 39\% | 28\% | 13\% | 8\% | -19\% | -24\% | 5\% | 51\% | -1\% | -4\% | 3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -54\% | 23\% | 13\% | 6\% | 0\% | -27\% | -3\% | -12\% | 103\% | -5\% | -9\% | 6\% |
| Above Normal (24\%) | -58\% | 54\% | 33\% | 10\% | 10\% | -19\% | -23\% | 7\% | 25\% | 0\% | -1\% | 1\% |
| Below Normal (10\%) | -61\% | 66\% | 66\% | 36\% | 21\% | -14\% | -34\% | 5\% | 29\% | 1\% | 0\% | 5\% |
| Dry (16\%) | -61\% | 55\% | 53\% | 36\% | 25\% | 31\% | -44\% | 18\% | 7\% | 0\% | 2\% | 4\% |
| Critical (27\%) | -66\% | 40\% | 39\% | 22\% | 19\% | 10\% | -37\% | 27\% | 0\% | 5\% | -1\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.3.2 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 499 | 508 | 508 | 907 | 709 | 1,500 | 1,500 | 2,887 | 360 | 300 | 300 |
| 20\% | 350 | 415 | 415 | 415 | 503 | 415 | 1,462 | 1,500 | 1,709 | 306 | 300 | 300 |
| 30\% | 331 | 386 | 415 | 408 | 415 | 415 | 1,337 | 1,434 | 1,571 | 300 | 296 | 268 |
| 40\% | 286 | 318 | 326 | 318 | 415 | 318 | 991 | 1,303 | 845 | 300 | 283 | 268 |
| 50\% | 286 | 318 | 318 | 318 | 318 | 318 | 664 | 1,303 | 450 | 284 | 283 | 268 |
| 60\% | 194 | 247 | 275 | 242 | 318 | 275 | 512 | 1,112 | 398 | 268 | 283 | 249 |
| 70\% | 194 | 247 | 247 | 242 | 260 | 242 | 461 | 920 | 289 | 268 | 283 | 249 |
| 80\% | 173 | 233 | 247 | 242 | 242 | 242 | 424 | 848 | 257 | 265 | 283 | 249 |
| 90\% | 164 | 230 | 230 | 200 | 239 | 200 | 378 | 760 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 291 | 388 | 466 | 584 | 642 | 607 | 884 | 1,181 | 1,028 | 390 | 347 | 363 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 360 | 612 | 886 | 1,060 | 1,196 | 1,462 | 1,488 | 1,497 | 2,316 | 678 | 580 | 731 |
| Above Normal (24\%) | 301 | 332 | 376 | 726 | 742 | 523 | 940 | 1,225 | 1,200 | 354 | 288 | 271 |
| Below Normal (10\%) | 288 | 373 | 373 | 383 | 418 | 316 | 955 | 1,266 | 613 | 272 | 285 | 270 |
| Dry (16\%) | 278 | 323 | 331 | 318 | 392 | 262 | 581 | 1,094 | 399 | 276 | 283 | 255 |
| Critical (27\%) | 230 | 287 | 298 | 275 | 303 | 256 | 464 | 890 | 280 | 283 | 259 | 228 |

## No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 837 | 290 | 306 | 358 | 897 | 1,648 | 1,633 | 1,929 | 1,103 | 429 | 390 | 390 |
| 20\% | 797 | 200 | 218 | 232 | 409 | 1,521 | 1,553 | 1,555 | 1,090 | 310 | 300 | 300 |
| 30\% | 774 | 200 | 200 | 232 | 290 | 440 | 1,553 | 1,296 | 940 | 300 | 284 | 250 |
| 40\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 855 | 300 | 283 | 250 |
| 50\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,242 | 363 | 271 | 283 | 250 |
| 60\% | 636 | 200 | 200 | 219 | 229 | 200 | 812 | 918 | 363 | 265 | 283 | 249 |
| 70\% | 636 | 200 | 200 | 219 | 229 | 200 | 767 | 705 | 297 | 265 | 283 | 249 |
| 80\% | 578 | 200 | 200 | 214 | 221 | 200 | 767 | 631 | 261 | 265 | 283 | 249 |
| 90\% | 577 | 200 | 200 | 213 | 215 | 200 | 505 | 546 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 723 | 278 | 365 | 518 | 595 | 754 | 1,158 | 1,123 | 680 | 394 | 361 | 351 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 781 | 499 | 787 | 999 | 1,201 | 2,016 | 1,536 | 1,691 | 1,140 | 715 | 639 | 692 |
| Above Normal (24\%) | 714 | 216 | 282 | 663 | 676 | 645 | 1,224 | 1,146 | 962 | 353 | 292 | 267 |
| Below Normal (10\%) | 740 | 225 | 225 | 282 | 346 | 365 | 1,454 | 1,201 | 476 | 269 | 285 | 256 |
| Dry (16\%) | 707 | 208 | 216 | 234 | 313 | 200 | 1,030 | 930 | 374 | 275 | 277 | 245 |
| Critical (27\%) | 683 | 205 | 215 | 227 | 255 | 234 | 741 | 699 | 281 | 269 | 262 | 231 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 139\% | -42\% | -40\% | -30\% | -1\% | 132\% | 9\% | 29\% | -62\% | 19\% | 30\% | 30\% |
| 20\% | 128\% | -52\% | -47\% | -44\% | -19\% | 267\% | 6\% | 4\% | -36\% | 1\% | 0\% | 0\% |
| 30\% | 134\% | -48\% | -52\% | -43\% | -30\% | 6\% | 16\% | -10\% | -40\% | 0\% | -4\% | -7\% |
| 40\% | 170\% | -37\% | -39\% | -29\% | -43\% | -37\% | 41\% | -5\% | 1\% | 0\% | 0\% | -7\% |
| 50\% | 170\% | -37\% | -37\% | -29\% | -26\% | -37\% | 111\% | -5\% | -19\% | -5\% | 0\% | -7\% |
| 60\% | 227\% | -19\% | -27\% | -9\% | -28\% | -27\% | 59\% | -17\% | -9\% | -1\% | 0\% | 0\% |
| 70\% | 227\% | -19\% | -19\% | -9\% | -12\% | -17\% | 66\% | -23\% | 3\% | -1\% | 0\% | 0\% |
| 80\% | 234\% | -14\% | -19\% | -12\% | -9\% | -17\% | 81\% | -26\% | 2\% | 0\% | 0\% | 0\% |
| 90\% | 252\% | -13\% | -13\% | 6\% | -10\% | 0\% | 34\% | -28\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 149\% | -28\% | -22\% | -11\% | -7\% | 24\% | 31\% | -5\% | -34\% | 1\% | 4\% | -3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 117\% | -19\% | -11\% | -6\% | 0\% | 38\% | 3\% | 13\% | -51\% | 5\% | 10\% | -5\% |
| Above Normal (24\%) | 137\% | -35\% | -25\% | -9\% | -9\% | 23\% | 30\% | -6\% | -20\% | 0\% | 1\% | -1\% |
| Below Normal (10\%) | 157\% | -40\% | -40\% | -26\% | -17\% | 16\% | 52\% | -5\% | -22\% | -1\% | 0\% | -5\% |
| Dry (16\%) | 154\% | -36\% | -35\% | -26\% | -20\% | -24\% | 77\% | -15\% | -6\% | 0\% | -2\% | -4\% |
| Critical (27\%) | 197\% | -29\% | -28\% | -18\% | -16\% | -9\% | 60\% | -22\% | 0\% | -5\% | 1\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.3.3 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 499 | 508 | 508 | 907 | 709 | 1,500 | 1,500 | 2,887 | 360 | 300 | 300 |
| 20\% | 350 | 415 | 415 | 415 | 503 | 415 | 1,462 | 1,500 | 1,709 | 306 | 300 | 300 |
| 30\% | 331 | 386 | 415 | 408 | 415 | 415 | 1,337 | 1,434 | 1,571 | 300 | 296 | 268 |
| 40\% | 286 | 318 | 326 | 318 | 415 | 318 | 991 | 1,303 | 845 | 300 | 283 | 268 |
| 50\% | 286 | 318 | 318 | 318 | 318 | 318 | 664 | 1,303 | 450 | 284 | 283 | 268 |
| 60\% | 194 | 247 | 275 | 242 | 318 | 275 | 512 | 1,112 | 398 | 268 | 283 | 249 |
| 70\% | 194 | 247 | 247 | 242 | 260 | 242 | 461 | 920 | 289 | 268 | 283 | 249 |
| 80\% | 173 | 233 | 247 | 242 | 242 | 242 | 424 | 848 | 257 | 265 | 283 | 249 |
| 90\% | 164 | 230 | 230 | 200 | 239 | 200 | 378 | 760 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 291 | 388 | 466 | 584 | 642 | 607 | 884 | 1,181 | 1,028 | 390 | 347 | 363 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 360 | 612 | 886 | 1,060 | 1,196 | 1,462 | 1,488 | 1,497 | 2,316 | 678 | 580 | 731 |
| Above Normal (24\%) | 301 | 332 | 376 | 726 | 742 | 523 | 940 | 1,225 | 1,200 | 354 | 288 | 271 |
| Below Normal (10\%) | 288 | 373 | 373 | 383 | 418 | 316 | 955 | 1,266 | 613 | 272 | 285 | 270 |
| Dry (16\%) | 278 | 323 | 331 | 318 | 392 | 262 | 581 | 1,094 | 399 | 276 | 283 | 255 |
| Critical (27\%) | 230 | 287 | 298 | 275 | 303 | 256 | 464 | 890 | 280 | 283 | 259 | 228 |

Alternative 3


Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -14\% | -40\% | 20\% | 123\% | 181\% | 68\% | 0\% | -22\% | -91\% | -26\% | -6\% | 217\% |
| 20\% | -14\% | -28\% | -27\% | -28\% | 130\% | -17\% | 3\% | -22\% | -85\% | -13\% | -6\% | -17\% |
| 30\% | -9\% | -22\% | -28\% | -27\% | -20\% | -28\% | 12\% | -19\% | -84\% | -12\% | -4\% | -7\% |
| 40\% | -12\% | -6\% | -8\% | -6\% | -28\% | -6\% | 4\% | -26\% | -70\% | -12\% | 0\% | -7\% |
| 50\% | -12\% | -6\% | -6\% | -53\% | -45\% | -37\% | 35\% | -36\% | -43\% | -7\% | 0\% | -7\% |
| 60\% | 30\% | 22\% | 9\% | -38\% | -46\% | -27\% | 74\% | -25\% | -36\% | -1\% | 0\% | 0\% |
| 70\% | 30\% | 22\% | 22\% | -38\% | -33\% | -17\% | 94\% | -10\% | -12\% | -1\% | 0\% | 0\% |
| 80\% | 15\% | -14\% | -11\% | -38\% | -29\% | -17\% | 25\% | -45\% | 0\% | 0\% | 0\% | 0\% |
| 90\% | 22\% | -13\% | -13\% | -25\% | -28\% | 0\% | 31\% | -39\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 4\% | -10\% | 2\% | -5\% | 27\% | 2\% | 20\% | -23\% | -52\% | 8\% | 13\% | 9\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2\% | -4\% | 13\% | 1\% | 69\% | 9\% | 3\% | -13\% | -45\% | 40\% | 33\% | 21\% |
| Above Normal (24\%) | 7\% | -13\% | 5\% | -3\% | -1\% | 5\% | 23\% | -22\% | -79\% | -25\% | -2\% | -4\% |
| Below Normal (10\%) | -7\% | -26\% | -26\% | 26\% | 32\% | -14\% | 18\% | -28\% | -58\% | -2\% | -1\% | -8\% |
| Dry (16\%) | 3\% | -12\% | -12\% | -21\% | -5\% | -24\% | 40\% | -33\% | -36\% | -4\% | 0\% | -2\% |
| Critical (27\%) | 7\% | -8\% | -8\% | -31\% | -31\% | -15\% | 47\% | -28\% | -12\% | -10\% | 3\% | 5\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.3.4 Stanislaus River below Goodwin, Monthly Flow

Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 350 | 499 | 508 | 508 | 907 | 709 | 1,500 | 1,500 | 2,887 | 360 | 300 | 300 |
| 20\% | 350 | 415 | 415 | 415 | 503 | 415 | 1,462 | 1,500 | 1,709 | 306 | 300 | 300 |
| 30\% | 331 | 386 | 415 | 408 | 415 | 415 | 1,337 | 1,434 | 1,571 | 300 | 296 | 268 |
| 40\% | 286 | 318 | 326 | 318 | 415 | 318 | 991 | 1,303 | 845 | 300 | 283 | 268 |
| 50\% | 286 | 318 | 318 | 318 | 318 | 318 | 664 | 1,303 | 450 | 284 | 283 | 268 |
| 60\% | 194 | 247 | 275 | 242 | 318 | 275 | 512 | 1,112 | 398 | 268 | 283 | 249 |
| 70\% | 194 | 247 | 247 | 242 | 260 | 242 | 461 | 920 | 289 | 268 | 283 | 249 |
| 80\% | 173 | 233 | 247 | 242 | 242 | 242 | 424 | 848 | 257 | 265 | 283 | 249 |
| 90\% | 164 | 230 | 230 | 200 | 239 | 200 | 378 | 760 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 291 | 388 | 466 | 584 | 642 | 607 | 884 | 1,181 | 1,028 | 390 | 347 | 363 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 360 | 612 | 886 | 1,060 | 1,196 | 1,462 | 1,488 | 1,497 | 2,316 | 678 | 580 | 731 |
| Above Normal (24\%) | 301 | 332 | 376 | 726 | 742 | 523 | 940 | 1,225 | 1,200 | 354 | 288 | 271 |
| Below Normal (10\%) | 288 | 373 | 373 | 383 | 418 | 316 | 955 | 1,266 | 613 | 272 | 285 | 270 |
| Dry (16\%) | 278 | 323 | 331 | 318 | 392 | 262 | 581 | 1,094 | 399 | 276 | 283 | 255 |
| Critical (27\%) | 230 | 287 | 298 | 275 | 303 | 256 | 464 | 890 | 280 | 283 | 259 | 228 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 797 | 200 | 306 | 358 | 885 | 1,636 | 1,717 | 1,958 | 1,103 | 423 | 300 | 300 |
| 20\% | 797 | 200 | 211 | 232 | 415 | 1,521 | 1,633 | 1,815 | 979 | 307 | 300 | 300 |
| 30\% | 774 | 200 | 200 | 232 | 274 | 343 | 1,553 | 1,595 | 940 | 300 | 283 | 250 |
| 40\% | 774 | 200 | 200 | 226 | 236 | 200 | 1,487 | 1,555 | 759 | 297 | 283 | 250 |
| 50\% | 636 | 200 | 200 | 226 | 236 | 200 | 1,400 | 1,341 | 363 | 265 | 283 | 249 |
| 60\% | 636 | 200 | 200 | 219 | 229 | 200 | 1,324 | 1,242 | 342 | 265 | 283 | 249 |
| 70\% | 636 | 200 | 200 | 219 | 222 | 200 | 1,134 | 1,068 | 270 | 265 | 283 | 249 |
| 80\% | 577 | 200 | 200 | 213 | 221 | 200 | 825 | 887 | 255 | 265 | 283 | 249 |
| 90\% | 577 | 200 | 200 | 213 | 214 | 200 | 767 | 798 | 255 | 265 | 283 | 249 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 711 | 276 | 345 | 520 | 580 | 712 | 1,317 | 1,375 | 660 | 369 | 332 | 341 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 766 | 499 | 690 | 998 | 1,169 | 1,831 | 1,502 | 1,730 | 1,093 | 619 | 523 | 655 |
| Above Normal (24\%) | 705 | 211 | 298 | 676 | 659 | 645 | 1,170 | 1,553 | 962 | 353 | 292 | 267 |
| Below Normal (10\%) | 733 | 225 | 225 | 281 | 345 | 365 | 1,416 | 1,267 | 462 | 269 | 285 | 256 |
| Dry (16\%) | 690 | 208 | 216 | 233 | 312 | 200 | 1,454 | 1,370 | 366 | 275 | 277 | 245 |
| Critical (27\%) | 674 | 200 | 210 | 221 | 242 | 234 | 1,175 | 948 | 257 | 260 | 253 | 224 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 128\% | -60\% | -40\% | -30\% | -2\% | 131\% | 14\% | 31\% | -62\% | 18\% | 0\% | 0\% |
| 20\% | 128\% | -52\% | -49\% | -44\% | -17\% | 267\% | 12\% | 21\% | -43\% | 0\% | 0\% | 0\% |
| 30\% | 134\% | -48\% | -52\% | -43\% | -34\% | -17\% | 16\% | 11\% | -40\% | 0\% | -4\% | -7\% |
| 40\% | 170\% | -37\% | -39\% | -29\% | -43\% | -37\% | 50\% | 19\% | -10\% | -1\% | 0\% | -7\% |
| 50\% | 122\% | -37\% | -37\% | -29\% | -26\% | -37\% | 111\% | 3\% | -19\% | -7\% | 0\% | -7\% |
| 60\% | 227\% | -19\% | -27\% | -9\% | -28\% | -27\% | 159\% | 12\% | -14\% | -1\% | 0\% | 0\% |
| 70\% | 227\% | -19\% | -19\% | -9\% | -15\% | -17\% | 146\% | 16\% | -7\% | -1\% | 0\% | 0\% |
| 80\% | 233\% | -14\% | -19\% | -12\% | -9\% | -17\% | 95\% | 5\% | 0\% | 0\% | 0\% | 0\% |
| 90\% | 252\% | -13\% | -13\% | 6\% | -11\% | 0\% | 103\% | 5\% | 0\% | 0\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 145\% | -29\% | -26\% | -11\% | -10\% | 17\% | 49\% | 16\% | -36\% | -5\% | -4\% | -6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 113\% | -19\% | -22\% | -6\% | -2\% | 25\% | 1\% | 16\% | -53\% | -9\% | -10\% | -10\% |
| Above Normal (24\%) | 134\% | -36\% | -21\% | -7\% | -11\% | 23\% | 24\% | 27\% | -20\% | 0\% | 1\% | -1\% |
| Below Normal (10\%) | 155\% | -40\% | -40\% | -27\% | -17\% | 16\% | 48\% | 0\% | -25\% | -1\% | 0\% | -5\% |
| Dry (16\%) | 148\% | -36\% | -35\% | -27\% | -20\% | -24\% | 150\% | 25\% | -8\% | 0\% | -2\% | -4\% |
| Critical (27\%) | 194\% | -30\% | -29\% | -20\% | -20\% | -9\% | 153\% | 7\% | -8\% | -8\% | -2\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.3.4 Stanislaus River at Mouth Flow

Table 5C.3.3.4.1 Stanislaus River at Mouth, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,122 | 463 | 442 | 576 | 1,084 | 1,969 | 1,886 | 1,989 | 1,536 | 751 | 587 | 646 |
| 20\% | 1,029 | 384 | 368 | 427 | 643 | 1,708 | 1,769 | 1,647 | 1,334 | 606 | 488 | 507 |
| 30\% | 982 | 348 | 319 | 368 | 472 | 520 | 1,696 | 1,536 | 1,221 | 502 | 462 | 473 |
| 40\% | 958 | 337 | 304 | 347 | 406 | 433 | 1,610 | 1,362 | 1,053 | 442 | 445 | 443 |
| 50\% | 879 | 319 | 290 | 337 | 369 | 367 | 1,485 | 1,289 | 635 | 412 | 445 | 439 |
| 60\% | 826 | 292 | 281 | 326 | 331 | 336 | 936 | 873 | 510 | 383 | 416 | 428 |
| 70\% | 772 | 267 | 262 | 312 | 279 | 314 | 806 | 755 | 406 | 372 | 395 | 389 |
| 80\% | 755 | 260 | 241 | 295 | 253 | 241 | 686 | 646 | 358 | 341 | 371 | 360 |
| 90\% | 676 | 248 | 224 | 273 | 230 | 207 | 572 | 576 | 311 | 308 | 331 | 318 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 903 | 398 | 448 | 630 | 719 | 903 | 1,279 | 1,207 | 883 | 546 | 505 | 533 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 952 | 624 | 881 | 1,115 | 1,412 | 2,258 | 1,779 | 1,828 | 1,456 | 976 | 831 | 946 |
| Above Normal (24\%) | 907 | 347 | 357 | 776 | 786 | 801 | 1,410 | 1,244 | 1,257 | 534 | 467 | 480 |
| Below Normal (10\%) | 932 | 354 | 358 | 430 | 517 | 539 | 1,556 | 1,378 | 669 | 449 | 440 | 429 |
| Dry (16\%) | 916 | 322 | 300 | 349 | 405 | 345 | 1,064 | 1,002 | 530 | 375 | 397 | 399 |
| Critical (27\%) | 837 | 310 | 277 | 317 | 319 | 286 | 754 | 695 | 335 | 321 | 346 | 342 |

Alternative 1

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 662 | 653 | 656 | 688 | 1,117 | 1,153 | 1,804 | 1,679 | 3,009 | 661 | 569 | 673 |
| 20\% | 582 | 548 | 522 | 557 | 694 | 613 | 1,608 | 1,592 | 2,016 | 555 | 485 | 508 |
| 30\% | 507 | 492 | 464 | 518 | 562 | 562 | 1,489 | 1,533 | 1,772 | 502 | 461 | 481 |
| 40\% | 471 | 459 | 427 | 473 | 512 | 522 | 1,040 | 1,423 | 1,092 | 444 | 445 | 457 |
| 50\% | 405 | 421 | 378 | 412 | 484 | 446 | 821 | 1,331 | 694 | 412 | 443 | 439 |
| 60\% | 377 | 388 | 341 | 364 | 423 | 394 | 637 | 1,049 | 572 | 386 | 416 | 431 |
| 70\% | 346 | 355 | 329 | 339 | 331 | 361 | 529 | 972 | 402 | 378 | 395 | 396 |
| 80\% | 327 | 312 | 311 | 318 | 296 | 295 | 440 | 865 | 352 | 350 | 373 | 373 |
| 90\% | 249 | 280 | 269 | 283 | 257 | 233 | 406 | 787 | 312 | 318 | 331 | 316 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 507 | 549 | 696 | 766 | 756 | 1,004 | 1,265 | 1,231 | 542 | 491 | 545 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 530 | 737 | 980 | 1,176 | 1,407 | 1,704 | 1,731 | 1,634 | 2,632 | 939 | 772 | 985 |
| Above Normal (24\%) | 494 | 463 | 451 | 840 | 852 | 680 | 1,126 | 1,323 | 1,495 | 535 | 463 | 484 |
| Below Normal (10\%) | 480 | 503 | 506 | 532 | 589 | 489 | 1,057 | 1,443 | 807 | 452 | 440 | 443 |
| Dry (16\%) | 487 | 437 | 415 | 433 | 484 | 407 | 616 | 1,166 | 555 | 377 | 404 | 408 |
| Critical (27\%) | 384 | 393 | 360 | 366 | 367 | 309 | 476 | 887 | 334 | 335 | 343 | 338 |

Alternative 1 minus No Action Alternative

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -41\% | 41\% | 48\% | 19\% | 3\% | -41\% | -4\% | -16\% | 96\% | -12\% | -3\% | 4\% |
| 20\% | -43\% | 43\% | 42\% | 31\% | 8\% | -64\% | -9\% | -3\% | 51\% | -8\% | -1\% | 0\% |
| 30\% | -48\% | 42\% | 46\% | 41\% | 19\% | 8\% | -12\% | 0\% | 45\% | 0\% | 0\% | 2\% |
| 40\% | -51\% | 36\% | 40\% | 36\% | 26\% | 21\% | -35\% | 4\% | 4\% | 0\% | 0\% | 3\% |
| 50\% | -54\% | 32\% | 30\% | 22\% | 31\% | 22\% | -45\% | 3\% | 9\% | 0\% | 0\% | 0\% |
| 60\% | -54\% | 33\% | 22\% | 12\% | 28\% | 17\% | -32\% | 20\% | 12\% | 1\% | 0\% | 1\% |
| 70\% | -55\% | 33\% | 26\% | 9\% | 19\% | 15\% | -34\% | 29\% | -1\% | 1\% | 0\% | 2\% |
| 80\% | -57\% | 20\% | 29\% | 8\% | 17\% | 22\% | -36\% | 34\% | -2\% | 3\% | 1\% | 3\% |
| 90\% | -63\% | 13\% | 20\% | 3\% | 12\% | 12\% | -29\% | 37\% | 0\% | 3\% | 0\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -48\% | 28\% | 23\% | 10\% | 7\% | -16\% | -21\% | 5\% | 39\% | -1\% | -3\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -44\% | 18\% | 11\% | 5\% | 0\% | -25\% | -3\% | -11\% | 81\% | -4\% | -7\% | 4\% |
| Above Normal (24\%) | -46\% | 33\% | 26\% | 8\% | 8\% | -15\% | -20\% | 6\% | 19\% | 0\% | -1\% | 1\% |
| Below Normal (10\%) | -49\% | 42\% | 41\% | 24\% | 14\% | -9\% | -32\% | 5\% | 21\% | 1\% | 0\% | 3\% |
| Dry (16\%) | -47\% | 36\% | 38\% | 24\% | 19\% | 18\% | -42\% | 16\% | 5\% | 0\% | 2\% | 2\% |
| Critical (27\%) | -54\% | 27\% | 30\% | 15\% | 15\% | 8\% | -37\% | 28\% | 0\% | 4\% | -1\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4.2 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 662 | 653 | 656 | 688 | 1,117 | 1,153 | 1,804 | 1,679 | 3,009 | 661 | 569 | 673 |
| 20\% | 582 | 548 | 522 | 557 | 694 | 613 | 1,608 | 1,592 | 2,016 | 555 | 485 | 508 |
| 30\% | 507 | 492 | 464 | 518 | 562 | 562 | 1,489 | 1,533 | 1,772 | 502 | 461 | 481 |
| 40\% | 471 | 459 | 427 | 473 | 512 | 522 | 1,040 | 1,423 | 1,092 | 444 | 445 | 457 |
| 50\% | 405 | 421 | 378 | 412 | 484 | 446 | 821 | 1,331 | 694 | 412 | 443 | 439 |
| 60\% | 377 | 388 | 341 | 364 | 423 | 394 | 637 | 1,049 | 572 | 386 | 416 | 431 |
| 70\% | 346 | 355 | 329 | 339 | 331 | 361 | 529 | 972 | 402 | 378 | 395 | 396 |
| 80\% | 327 | 312 | 311 | 318 | 296 | 295 | 440 | 865 | 352 | 350 | 373 | 373 |
| 90\% | 249 | 280 | 269 | 283 | 257 | 233 | 406 | 787 | 312 | 318 | 331 | 316 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 507 | 549 | 696 | 766 | 756 | 1,004 | 1,265 | 1,231 | 542 | 491 | 545 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 530 | 737 | 980 | 1,176 | 1,407 | 1,704 | 1,731 | 1,634 | 2,632 | 939 | 772 | 985 |
| Above Normal (24\%) | 494 | 463 | 451 | 840 | 852 | 680 | 1,126 | 1,323 | 1,495 | 535 | 463 | 484 |
| Below Normal (10\%) | 480 | 503 | 506 | 532 | 589 | 489 | 1,057 | 1,443 | 807 | 452 | 440 | 443 |
| Dry (16\%) | 487 | 437 | 415 | 433 | 484 | 407 | 616 | 1,166 | 555 | 377 | 404 | 408 |
| Critical (27\%) | 384 | 393 | 360 | 366 | 367 | 309 | 476 | 887 | 334 | 335 | 343 | 338 |

## No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,122 | 463 | 442 | 576 | 1,084 | 1,969 | 1,886 | 1,989 | 1,536 | 751 | 587 | 646 |
| 20\% | 1,029 | 384 | 368 | 427 | 643 | 1,708 | 1,769 | 1,647 | 1,334 | 606 | 488 | 507 |
| 30\% | 982 | 348 | 319 | 368 | 472 | 520 | 1,696 | 1,536 | 1,221 | 502 | 462 | 473 |
| 40\% | 958 | 337 | 304 | 347 | 406 | 433 | 1,610 | 1,362 | 1,053 | 442 | 445 | 443 |
| 50\% | 879 | 319 | 290 | 337 | 369 | 367 | 1,485 | 1,289 | 635 | 412 | 445 | 439 |
| 60\% | 826 | 292 | 281 | 326 | 331 | 336 | 936 | 873 | 510 | 383 | 416 | 428 |
| 70\% | 772 | 267 | 262 | 312 | 279 | 314 | 806 | 755 | 406 | 372 | 395 | 389 |
| 80\% | 755 | 260 | 241 | 295 | 253 | 241 | 686 | 646 | 358 | 341 | 371 | 360 |
| 90\% | 676 | 248 | 224 | 273 | 230 | 207 | 572 | 576 | 311 | 308 | 331 | 318 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 903 | 398 | 448 | 630 | 719 | 903 | 1,279 | 1,207 | 883 | 546 | 505 | 533 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 952 | 624 | 881 | 1,115 | 1,412 | 2,258 | 1,779 | 1,828 | 1,456 | 976 | 831 | 946 |
| Above Normal (24\%) | 907 | 347 | 357 | 776 | 786 | 801 | 1,410 | 1,244 | 1,257 | 534 | 467 | 480 |
| Below Normal (10\%) | 932 | 354 | 358 | 430 | 517 | 539 | 1,556 | 1,378 | 669 | 449 | 440 | 429 |
| Dry (16\%) | 916 | 322 | 300 | 349 | 405 | 345 | 1,064 | 1,002 | 530 | 375 | 397 | 399 |
| Critical (27\%) | 837 | 310 | 277 | 317 | 319 | 286 | 754 | 695 | 335 | 321 | 346 | 342 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 70\% | -29\% | -33\% | -16\% | -3\% | 71\% | 5\% | 19\% | -49\% | 14\% | 3\% | -4\% |
| 20\% | 77\% | -30\% | -30\% | -23\% | -7\% | 178\% | 10\% | 3\% | -34\% | 9\% | 1\% | 0\% |
| 30\% | 94\% | -29\% | -31\% | -29\% | -16\% | -8\% | 14\% | 0\% | -31\% | 0\% | 0\% | -2\% |
| 40\% | 104\% | -27\% | -29\% | -26\% | -21\% | -17\% | 55\% | -4\% | -4\% | 0\% | 0\% | -3\% |
| 50\% | 117\% | -24\% | -23\% | -18\% | -24\% | -18\% | 81\% | -3\% | -8\% | 0\% | 1\% | 0\% |
| 60\% | 119\% | -25\% | -18\% | -10\% | -22\% | -15\% | 47\% | -17\% | -11\% | -1\% | 0\% | -1\% |
| 70\% | 123\% | -25\% | -20\% | -8\% | -16\% | -13\% | 52\% | -22\% | 1\% | -1\% | 0\% | -2\% |
| 80\% | 130\% | -17\% | -22\% | -7\% | -14\% | -18\% | 56\% | -25\% | 2\% | -3\% | -1\% | -3\% |
| 90\% | 172\% | -12\% | -17\% | -3\% | -10\% | -11\% | 41\% | -27\% | 0\% | -3\% | 0\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 92\% | -22\% | -18\% | -9\% | -6\% | 19\% | 27\% | -5\% | -28\% | 1\% | 3\% | -2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 79\% | -15\% | -10\% | -5\% | 0\% | 33\% | 3\% | 12\% | -45\% | 4\% | 8\% | -4\% |
| Above Normal (24\%) | 84\% | -25\% | -21\% | -8\% | -8\% | 18\% | 25\% | -6\% | -16\% | 0\% | 1\% | -1\% |
| Below Normal (10\%) | 94\% | -29\% | -29\% | -19\% | -12\% | 10\% | 47\% | -4\% | -17\% | -1\% | 0\% | -3\% |
| Dry (16\%) | 88\% | -26\% | -28\% | -19\% | -16\% | -15\% | 73\% | -14\% | -5\% | 0\% | -2\% | -2\% |
| Critical (27\%) | 118\% | -21\% | -23\% | -13\% | -13\% | -7\% | 58\% | -22\% | 0\% | -4\% | 1\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4.3 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 662 | 653 | 656 | 688 | 1,117 | 1,153 | 1,804 | 1,679 | 3,009 | 661 | 569 | 673 |
| 20\% | 582 | 548 | 522 | 557 | 694 | 613 | 1,608 | 1,592 | 2,016 | 555 | 485 | 508 |
| 30\% | 507 | 492 | 464 | 518 | 562 | 562 | 1,489 | 1,533 | 1,772 | 502 | 461 | 481 |
| 40\% | 471 | 459 | 427 | 473 | 512 | 522 | 1,040 | 1,423 | 1,092 | 444 | 445 | 457 |
| 50\% | 405 | 421 | 378 | 412 | 484 | 446 | 821 | 1,331 | 694 | 412 | 443 | 439 |
| 60\% | 377 | 388 | 341 | 364 | 423 | 394 | 637 | 1,049 | 572 | 386 | 416 | 431 |
| 70\% | 346 | 355 | 329 | 339 | 331 | 361 | 529 | 972 | 402 | 378 | 395 | 396 |
| 80\% | 327 | 312 | 311 | 318 | 296 | 295 | 440 | 865 | 352 | 350 | 373 | 373 |
| 90\% | 249 | 280 | 269 | 283 | 257 | 233 | 406 | 787 | 312 | 318 | 331 | 316 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 507 | 549 | 696 | 766 | 756 | 1,004 | 1,265 | 1,231 | 542 | 491 | 545 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 530 | 737 | 980 | 1,176 | 1,407 | 1,704 | 1,731 | 1,634 | 2,632 | 939 | 772 | 985 |
| Above Normal (24\%) | 494 | 463 | 451 | 840 | 852 | 680 | 1,126 | 1,323 | 1,495 | 535 | 463 | 484 |
| Below Normal (10\%) | 480 | 503 | 506 | 532 | 589 | 489 | 1,057 | 1,443 | 807 | 452 | 440 | 443 |
| Dry (16\%) | 487 | 437 | 415 | 433 | 484 | 407 | 616 | 1,166 | 555 | 377 | 404 | 408 |
| Critical (27\%) | 384 | 393 | 360 | 366 | 367 | 309 | 476 | 887 | 334 | 335 | 343 | 338 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 679 | 485 | 722 | 1,267 | 2,628 | 1,444 | 1,865 | 1,414 | 950 | 885 | 571 | 1,146 |
| 20\% | 557 | 456 | 438 | 518 | 1,301 | 734 | 1,634 | 1,306 | 679 | 535 | 480 | 489 |
| 30\% | 482 | 441 | 411 | 410 | 502 | 486 | 1,552 | 1,233 | 558 | 476 | 457 | 450 |
| 40\% | 448 | 424 | 400 | 374 | 416 | 419 | 1,240 | 1,043 | 428 | 424 | 445 | 439 |
| 50\% | 435 | 402 | 381 | 311 | 366 | 367 | 1,064 | 920 | 413 | 382 | 440 | 435 |
| 60\% | 392 | 372 | 362 | 275 | 308 | 334 | 996 | 882 | 374 | 374 | 410 | 415 |
| 70\% | 377 | 359 | 325 | 251 | 238 | 312 | 893 | 829 | 352 | 350 | 390 | 384 |
| 80\% | 360 | 333 | 300 | 232 | 201 | 238 | 575 | 550 | 304 | 327 | 367 | 360 |
| 90\% | 293 | 260 | 239 | 198 | 180 | 203 | 493 | 489 | 273 | 290 | 347 | 320 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 482 | 469 | 558 | 669 | 938 | 770 | 1,180 | 995 | 693 | 573 | 535 | 578 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 539 | 714 | 1,096 | 1,183 | 2,227 | 1,841 | 1,781 | 1,437 | 1,596 | 1,213 | 961 | 1,139 |
| Above Normal (24\%) | 516 | 418 | 468 | 818 | 843 | 708 | 1,341 | 1,054 | 550 | 446 | 457 | 473 |
| Below Normal (10\%) | 461 | 404 | 408 | 632 | 723 | 446 | 1,230 | 1,086 | 449 | 445 | 438 | 422 |
| Dry (16\%) | 495 | 399 | 377 | 365 | 463 | 345 | 849 | 803 | 411 | 365 | 404 | 402 |
| Critical (27\%) | 401 | 369 | 336 | 282 | 272 | 271 | 692 | 639 | 299 | 305 | 351 | 351 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3\% | -26\% | 10\% | 84\% | 135\% | 25\% | 3\% | -16\% | -68\% | 34\% | 0\% | 70\% |
| 20\% | -4\% | -17\% | -16\% | -7\% | 87\% | 20\% | 2\% | -18\% | -66\% | -4\% | -1\% | -4\% |
| 30\% | -5\% | -10\% | -12\% | -21\% | -11\% | -14\% | 4\% | -20\% | -68\% | -5\% | -1\% | -7\% |
| 40\% | -5\% | -8\% | -6\% | -21\% | -19\% | -20\% | 19\% | -27\% | -61\% | -5\% | 0\% | -4\% |
| 50\% | 7\% | -5\% | 1\% | -24\% | -25\% | -18\% | 30\% | -31\% | -41\% | -7\% | -1\% | -1\% |
| 60\% | 4\% | -4\% | 6\% | -24\% | -27\% | -15\% | 56\% | -16\% | -35\% | -3\% | -1\% | -4\% |
| 70\% | 9\% | 1\% | -1\% | -26\% | -28\% | -14\% | 69\% | -15\% | -12\% | -7\% | -1\% | -3\% |
| 80\% | 10\% | 7\% | -4\% | -27\% | -32\% | -19\% | 31\% | -36\% | -14\% | -6\% | -1\% | -3\% |
| 90\% | 18\% | -7\% | -11\% | -30\% | -30\% | -13\% | 21\% | -38\% | -13\% | -9\% | 5\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2\% | -8\% | 2\% | -4\% | 22\% | 2\% | 18\% | -21\% | -44\% | 6\% | 9\% | 6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2\% | -3\% | 12\% | 1\% | 58\% | 8\% | 3\% | -12\% | -39\% | 29\% | 24\% | 16\% |
| Above Normal (24\%) | 4\% | -10\% | 4\% | -3\% | -1\% | 4\% | 19\% | -20\% | -63\% | -17\% | -1\% | -2\% |
| Below Normal (10\%) | -4\% | -20\% | -19\% | 19\% | 23\% | -9\% | 16\% | -25\% | -44\% | -1\% | 0\% | -5\% |
| Dry (16\%) | 2\% | -9\% | -9\% | -16\% | -4\% | -15\% | 38\% | -31\% | -26\% | -3\% | 0\% | -1\% |
| Critical (27\%) | 4\% | -6\% | -7\% | -23\% | -26\% | -12\% | 45\% | -28\% | -10\% | -9\% | 3\% | 4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.4.4 Stanislaus River at Mouth, Monthly Flow

Second Basis of Comparison

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 662 | 653 | 656 | 688 | 1,117 | 1,153 | 1,804 | 1,679 | 3,009 | 661 | 569 | 673 |
| 20\% | 582 | 548 | 522 | 557 | 694 | 613 | 1,608 | 1,592 | 2,016 | 555 | 485 | 508 |
| 30\% | 507 | 492 | 464 | 518 | 562 | 562 | 1,489 | 1,533 | 1,772 | 502 | 461 | 481 |
| 40\% | 471 | 459 | 427 | 473 | 512 | 522 | 1,040 | 1,423 | 1,092 | 444 | 445 | 457 |
| 50\% | 405 | 421 | 378 | 412 | 484 | 446 | 821 | 1,331 | 694 | 412 | 443 | 439 |
| 60\% | 377 | 388 | 341 | 364 | 423 | 394 | 637 | 1,049 | 572 | 386 | 416 | 431 |
| 70\% | 346 | 355 | 329 | 339 | 331 | 361 | 529 | 972 | 402 | 378 | 395 | 396 |
| 80\% | 327 | 312 | 311 | 318 | 296 | 295 | 440 | 865 | 352 | 350 | 373 | 373 |
| 90\% | 249 | 280 | 269 | 283 | 257 | 233 | 406 | 787 | 312 | 318 | 331 | 316 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 507 | 549 | 696 | 766 | 756 | 1,004 | 1,265 | 1,231 | 542 | 491 | 545 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 530 | 737 | 980 | 1,176 | 1,407 | 1,704 | 1,731 | 1,634 | 2,632 | 939 | 772 | 985 |
| Above Normal (24\%) | 494 | 463 | 451 | 840 | 852 | 680 | 1,126 | 1,323 | 1,495 | 535 | 463 | 484 |
| Below Normal (10\%) | 480 | 503 | 506 | 532 | 589 | 489 | 1,057 | 1,443 | 807 | 452 | 440 | 443 |
| Dry (16\%) | 487 | 437 | 415 | 433 | 484 | 407 | 616 | 1,166 | 555 | 377 | 404 | 408 |
| Critical (27\%) | 384 | 393 | 360 | 366 | 367 | 309 | 476 | 887 | 334 | 335 | 343 | 338 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,121 | 456 | 442 | 570 | 1,081 | 1,952 | 1,950 | 2,148 | 1,536 | 719 | 571 | 659 |
| 20\% | 1,029 | 382 | 378 | 416 | 586 | 1,708 | 1,815 | 1,974 | 1,319 | 564 | 488 | 501 |
| 30\% | 979 | 348 | 319 | 363 | 483 | 495 | 1,707 | 1,806 | 1,139 | 502 | 461 | 473 |
| 40\% | 903 | 336 | 304 | 347 | 401 | 415 | 1,630 | 1,672 | 1,034 | 442 | 445 | 443 |
| 50\% | 854 | 318 | 290 | 337 | 368 | 365 | 1,529 | 1,434 | 635 | 407 | 443 | 439 |
| 60\% | 818 | 292 | 281 | 326 | 319 | 333 | 1,311 | 1,290 | 485 | 382 | 413 | 428 |
| 70\% | 764 | 267 | 262 | 312 | 272 | 312 | 1,168 | 1,183 | 383 | 371 | 389 | 389 |
| 80\% | 748 | 260 | 241 | 295 | 245 | 241 | 1,044 | 962 | 343 | 339 | 367 | 356 |
| 90\% | 681 | 248 | 224 | 270 | 230 | 207 | 865 | 752 | 300 | 307 | 305 | 316 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 891 | 396 | 428 | 631 | 704 | 860 | 1,437 | 1,458 | 863 | 521 | 476 | 522 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 937 | 624 | 784 | 1,115 | 1,380 | 2,073 | 1,744 | 1,866 | 1,409 | 880 | 716 | 909 |
| Above Normal (24\%) | 898 | 342 | 372 | 790 | 770 | 801 | 1,356 | 1,651 | 1,257 | 534 | 467 | 480 |
| Below Normal (10\%) | 925 | 354 | 358 | 430 | 516 | 539 | 1,518 | 1,444 | 656 | 449 | 440 | 429 |
| Dry (16\%) | 900 | 322 | 300 | 347 | 403 | 345 | 1,488 | 1,442 | 522 | 375 | 397 | 399 |
| Critical (27\%) | 829 | 306 | 272 | 311 | 306 | 286 | 1,187 | 944 | 310 | 311 | 337 | 335 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 69\% | -30\% | -33\% | -17\% | -3\% | 69\% | 8\% | 28\% | -49\% | 9\% | 0\% | -2\% |
| 20\% | 77\% | -30\% | -28\% | -25\% | -16\% | 178\% | 13\% | 24\% | -35\% | 2\% | 1\% | -1\% |
| 30\% | 93\% | -29\% | -31\% | -30\% | -14\% | -12\% | 15\% | 18\% | -36\% | 0\% | 0\% | -2\% |
| 40\% | 92\% | -27\% | -29\% | -27\% | -22\% | -20\% | 57\% | 17\% | -5\% | 0\% | 0\% | -3\% |
| 50\% | 111\% | -25\% | -23\% | -18\% | -24\% | -18\% | 86\% | 8\% | -8\% | -1\% | 0\% | 0\% |
| 60\% | 117\% | -25\% | -18\% | -10\% | -25\% | -16\% | 106\% | 23\% | -15\% | -1\% | -1\% | -1\% |
| 70\% | 121\% | -25\% | -20\% | -8\% | -18\% | -14\% | 121\% | 22\% | -5\% | -2\% | -1\% | -2\% |
| 80\% | 129\% | -17\% | -22\% | -7\% | -17\% | -18\% | 137\% | 11\% | -3\% | -3\% | -1\% | -4\% |
| 90\% | 174\% | -12\% | -17\% | -4\% | -10\% | -11\% | 113\% | -4\% | -4\% | -3\% | -8\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 89\% | -22\% | -22\% | -9\% | -8\% | 14\% | 43\% | 15\% | -30\% | -4\% | -3\% | -4\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 77\% | -15\% | -20\% | -5\% | -2\% | 22\% | 1\% | 14\% | -46\% | -6\% | -7\% | -8\% |
| Above Normal (24\%) | 82\% | -26\% | -17\% | -6\% | -10\% | 18\% | 20\% | 25\% | -16\% | 0\% | 1\% | -1\% |
| Below Normal (10\%) | 93\% | -29\% | -29\% | -19\% | -12\% | 10\% | 44\% | 0\% | -19\% | -1\% | 0\% | -3\% |
| Dry (16\%) | 85\% | -26\% | -28\% | -20\% | -17\% | -15\% | 142\% | 24\% | -6\% | 0\% | -2\% | -2\% |
| Critical (27\%) | 116\% | -22\% | -24\% | -15\% | -16\% | -7\% | 149\% | 7\% | -7\% | -7\% | -2\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.5 Stanislaus River below New Melones Temperature

Table 5C.3.3.5.1 Stanislaus River below New Melones Reservoir, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 56.0 | 53.6 | 52.1 | 51.1 | 50.7 | 51.0 | 51.6 | 52.6 | 53.7 | 55.1 | 57.5 |
| 20\% | 55.6 | 54.6 | 52.7 | 51.5 | 50.4 | 49.9 | 50.2 | 51.1 | 51.8 | 52.5 | 53.0 | 54.4 |
| 30\% | 53.4 | 53.3 | 52.3 | 50.9 | 49.7 | 49.5 | 49.9 | 50.5 | 51.1 | 51.8 | 52.5 | 53.0 |
| 40\% | 52.9 | 52.8 | 51.8 | 50.6 | 49.4 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.5 |
| 50\% | 52.4 | 52.5 | 51.6 | 50.2 | 49.2 | 49.0 | 49.3 | 49.7 | 50.3 | 51.1 | 51.6 | 52.0 |
| 60\% | 52.0 | 52.1 | 51.4 | 49.9 | 48.9 | 48.7 | 48.9 | 49.3 | 49.7 | 50.4 | 50.9 | 51.4 |
| 70\% | 51.4 | 51.6 | 51.0 | 49.6 | 48.7 | 48.1 | 48.4 | 49.0 | 49.3 | 50.0 | 50.5 | 51.0 |
| 80\% | 51.1 | 51.2 | 50.3 | 49.2 | 48.0 | 47.5 | 48.0 | 48.4 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.9 | 49.9 | 49.8 | 48.3 | 47.0 | 46.8 | 46.9 | 47.2 | 47.5 | 48.5 | 48.9 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.4 | 52.8 | 51.7 | 50.2 | 49.1 | 48.8 | 49.2 | 49.9 | 50.6 | 51.3 | 52.2 | 53.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 50.0 | 50.0 | 49.1 | 49.4 | 48.3 | 48.1 | 48.1 | 48.4 | 48.9 | 49.3 | 49.9 | 50.3 |
| Above Normal (16\%) | 53.4 | 53.0 | 51.6 | 50.1 | 48.7 | 48.3 | 48.5 | 49.0 | 49.5 | 50.2 | 51.0 | 51.6 |
| Below Normal (13\%) | 52.8 | 52.5 | 51.6 | 50.5 | 49.4 | 48.9 | 49.2 | 49.8 | 50.4 | 51.1 | 51.9 | 52.4 |
| Dry (24\%) | 53.0 | 52.9 | 52.0 | 51.1 | 50.0 | 49.6 | 49.8 | 50.4 | 51.1 | 51.9 | 52.9 | 53.9 |
| Critical (15\%) | 57.4 | 54.4 | 52.4 | 50.4 | 49.7 | 49.5 | 51.0 | 53.0 | 54.6 | 55.8 | 57.4 | 60.4 |

Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.1 | 55.8 | 53.6 | 52.1 | 51.4 | 50.7 | 51.0 | 51.6 | 52.5 | 53.6 | 55.2 | 56.5 |
| 20\% | 54.2 | 54.2 | 52.7 | 51.4 | 50.5 | 50.0 | 50.2 | 51.1 | 51.7 | 52.4 | 52.9 | 53.5 |
| 30\% | 53.1 | 53.1 | 52.3 | 51.0 | 49.9 | 49.5 | 49.9 | 50.5 | 51.0 | 51.7 | 52.4 | 52.9 |
| 40\% | 52.5 | 52.7 | 51.9 | 50.7 | 49.5 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.3 |
| 50\% | 52.1 | 52.3 | 51.5 | 50.3 | 49.3 | 49.1 | 49.3 | 49.7 | 50.3 | 51.0 | 51.5 | 51.9 |
| 60\% | 51.8 | 52.0 | 51.3 | 50.0 | 49.0 | 48.7 | 48.9 | 49.3 | 49.7 | 50.3 | 50.9 | 51.4 |
| 70\% | 51.2 | 51.5 | 51.0 | 49.6 | 48.7 | 48.2 | 48.5 | 48.9 | 49.4 | 50.0 | 50.5 | 50.9 |
| 80\% | 51.0 | 51.2 | 50.4 | 49.3 | 48.2 | 47.6 | 48.0 | 48.5 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.6 | 49.9 | 49.8 | 48.5 | 47.0 | 46.9 | 47.0 | 47.2 | 47.6 | 48.4 | 48.7 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.0 | 52.7 | 51.7 | 50.3 | 49.2 | 48.8 | 49.2 | 49.9 | 50.4 | 51.3 | 52.1 | 52.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 49.7 | 49.8 | 49.1 | 49.5 | 48.4 | 48.0 | 48.2 | 48.5 | 48.9 | 49.4 | 49.9 | 50.3 |
| Above Normal (16\%) | 53.1 | 52.7 | 51.5 | 50.1 | 48.8 | 48.4 | 48.6 | 49.0 | 49.5 | 50.2 | 51.0 | 51.5 |
| Below Normal (13\%) | 52.2 | 52.1 | 51.5 | 50.6 | 49.5 | 48.9 | 49.2 | 49.7 | 50.3 | 51.0 | 51.7 | 52.2 |
| Dry (24\%) | 52.7 | 52.6 | 51.9 | 51.1 | 50.0 | 49.6 | 49.8 | 50.4 | 51.1 | 51.8 | 52.7 | 53.5 |
| Critical (15\%) | 57.3 | 55.4 | 52.8 | 50.7 | 49.9 | 49.8 | 50.8 | 53.2 | 53.2 | 56.4 | 57.2 | 58.3 |

Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -0.7 | -0.3 | 0.0 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | 0.1 | -0.9 |
| 20\% | -1.4 | -0.4 | 0.0 | -0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.1 | -0.1 | -0.9 |
| 30\% | -0.3 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.2 | -0.1 | -0.1 |
| 40\% | -0.4 | -0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.2 |
| 50\% | -0.3 | -0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.2 |
| 60\% | -0.2 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70\% | -0.2 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | -0.1 |
| 80\% | -0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | -0.1 |
| 90\% | -0.3 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.3 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | 0.1 | -0.1 | -0.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.3 | -0.2 | 0.0 | 0.1 | 0.1 | -0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| Above Normal (16\%) | -0.4 | -0.3 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 |
| Below Normal (13\%) | -0.6 | -0.4 | -0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | -0.3 |
| Dry (24\%) | -0.3 | -0.3 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | -0.2 | -0.3 |
| Critical (15\%) | -0.1 | 1.0 | 0.3 | 0.3 | 0.3 | 0.2 | -0.3 | 0.2 | -1.4 | 0.6 | -0.1 | -2.1 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.5.2 Stanislaus River below New Melones Reservoir, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.1 | 55.8 | 53.6 | 52.1 | 51.4 | 50.7 | 51.0 | 51.6 | 52.5 | 53.6 | 55.2 | 56.5 |
| 20\% | 54.2 | 54.2 | 52.7 | 51.4 | 50.5 | 50.0 | 50.2 | 51.1 | 51.7 | 52.4 | 52.9 | 53.5 |
| 30\% | 53.1 | 53.1 | 52.3 | 51.0 | 49.9 | 49.5 | 49.9 | 50.5 | 51.0 | 51.7 | 52.4 | 52.9 |
| 40\% | 52.5 | 52.7 | 51.9 | 50.7 | 49.5 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.3 |
| 50\% | 52.1 | 52.3 | 51.5 | 50.3 | 49.3 | 49.1 | 49.3 | 49.7 | 50.3 | 51.0 | 51.5 | 51.9 |
| 60\% | 51.8 | 52.0 | 51.3 | 50.0 | 49.0 | 48.7 | 48.9 | 49.3 | 49.7 | 50.3 | 50.9 | 51.4 |
| 70\% | 51.2 | 51.5 | 51.0 | 49.6 | 48.7 | 48.2 | 48.5 | 48.9 | 49.4 | 50.0 | 50.5 | 50.9 |
| 80\% | 51.0 | 51.2 | 50.4 | 49.3 | 48.2 | 47.6 | 48.0 | 48.5 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.6 | 49.9 | 49.8 | 48.5 | 47.0 | 46.9 | 47.0 | 47.2 | 47.6 | 48.4 | 48.7 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.0 | 52.7 | 51.7 | 50.3 | 49.2 | 48.8 | 49.2 | 49.9 | 50.4 | 51.3 | 52.1 | 52.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 49.7 | 49.8 | 49.1 | 49.5 | 48.4 | 48.0 | 48.2 | 48.5 | 48.9 | 49.4 | 49.9 | 50.3 |
| Above Normal (16\%) | 53.1 | 52.7 | 51.5 | 50.1 | 48.8 | 48.4 | 48.6 | 49.0 | 49.5 | 50.2 | 51.0 | 51.5 |
| Below Normal (13\%) | 52.2 | 52.1 | 51.5 | 50.6 | 49.5 | 48.9 | 49.2 | 49.7 | 50.3 | 51.0 | 51.7 | 52.2 |
| Dry (24\%) | 52.7 | 52.6 | 51.9 | 51.1 | 50.0 | 49.6 | 49.8 | 50.4 | 51.1 | 51.8 | 52.7 | 53.5 |
| Critical (15\%) | 57.3 | 55.4 | 52.8 | 50.7 | 49.9 | 49.8 | 50.8 | 53.2 | 53.2 | 56.4 | 57.2 | 58.3 |


|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.8 | 56.0 | 53.6 | 52.1 | 51.1 | 50.7 | 51.0 | 51.6 | 52.6 | 53.7 | 55.1 | 57.5 |
| 20\% | 55.6 | 54.6 | 52.7 | 51.5 | 50.4 | 49.9 | 50.2 | 51.1 | 51.8 | 52.5 | 53.0 | 54.4 |
| 30\% | 53.4 | 53.3 | 52.3 | 50.9 | 49.7 | 49.5 | 49.9 | 50.5 | 51.1 | 51.8 | 52.5 | 53.0 |
| 40\% | 52.9 | 52.8 | 51.8 | 50.6 | 49.4 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.5 |
| 50\% | 52.4 | 52.5 | 51.6 | 50.2 | 49.2 | 49.0 | 49.3 | 49.7 | 50.3 | 51.1 | 51.6 | 52.0 |
| 60\% | 52.0 | 52.1 | 51.4 | 49.9 | 48.9 | 48.7 | 48.9 | 49.3 | 49.7 | 50.4 | 50.9 | 51.4 |
| 70\% | 51.4 | 51.6 | 51.0 | 49.6 | 48.7 | 48.1 | 48.4 | 49.0 | 49.3 | 50.0 | 50.5 | 51.0 |
| 80\% | 51.1 | 51.2 | 50.3 | 49.2 | 48.0 | 47.5 | 48.0 | 48.4 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.9 | 49.9 | 49.8 | 48.3 | 47.0 | 46.8 | 46.9 | 47.2 | 47.5 | 48.5 | 48.9 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.4 | 52.8 | 51.7 | 50.2 | 49.1 | 48.8 | 49.2 | 49.9 | 50.6 | 51.3 | 52.2 | 53.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 50.0 | 50.0 | 49.1 | 49.4 | 48.3 | 48.1 | 48.1 | 48.4 | 48.9 | 49.3 | 49.9 | 50.3 |
| Above Normal (16\%) | 53.4 | 53.0 | 51.6 | 50.1 | 48.7 | 48.3 | 48.5 | 49.0 | 49.5 | 50.2 | 51.0 | 51.6 |
| Below Normal (13\%) | 52.8 | 52.5 | 51.6 | 50.5 | 49.4 | 48.9 | 49.2 | 49.8 | 50.4 | 51.1 | 51.9 | 52.4 |
| Dry (24\%) | 53.0 | 52.9 | 52.0 | 51.1 | 50.0 | 49.6 | 49.8 | 50.4 | 51.1 | 51.9 | 52.9 | 53.9 |
| Critical (15\%) | 57.4 | 54.4 | 52.4 | 50.4 | 49.7 | 49.5 | 51.0 | 53.0 | 54.6 | 55.8 | 57.4 | 60.4 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.7 | 0.3 | 0.0 | 0.0 | -0.3 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | -0.1 | 0.9 |
| 20\% | 1.4 | 0.4 | 0.0 | 0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.9 |
| 30\% | 0.3 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 |
| 40\% | 0.4 | 0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| 50\% | 0.3 | 0.2 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 |
| 60\% | 0.2 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70\% | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.1 |
| 80\% | 0.1 | 0.0 | 0.0 | -0.1 | -0.2 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | 0.1 |
| 90\% | 0.3 | 0.0 | 0.0 | -0.2 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.0 | 0.2 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.3 | 0.1 | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | 0.1 | 0.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0.3 | 0.2 | 0.0 | -0.1 | -0.1 | 0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 |
| Above Normal (16\%) | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Below Normal (13\%) | 0.6 | 0.4 | 0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.3 |
| Dry (24\%) | 0.3 | 0.3 | 0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3 |
| Critical (15\%) | 0.1 | -1.0 | -0.3 | -0.3 | -0.3 | -0.2 | 0.3 | -0.2 | 1.4 | -0.6 | 0.1 | 2.1 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.5.3 Stanislaus River below New Melones Reservoir, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.1 | 55.8 | 53.6 | 52.1 | 51.4 | 50.7 | 51.0 | 51.6 | 52.5 | 53.6 | 55.2 | 56.5 |
| 20\% | 54.2 | 54.2 | 52.7 | 51.4 | 50.5 | 50.0 | 50.2 | 51.1 | 51.7 | 52.4 | 52.9 | 53.5 |
| 30\% | 53.1 | 53.1 | 52.3 | 51.0 | 49.9 | 49.5 | 49.9 | 50.5 | 51.0 | 51.7 | 52.4 | 52.9 |
| 40\% | 52.5 | 52.7 | 51.9 | 50.7 | 49.5 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.3 |
| 50\% | 52.1 | 52.3 | 51.5 | 50.3 | 49.3 | 49.1 | 49.3 | 49.7 | 50.3 | 51.0 | 51.5 | 51.9 |
| 60\% | 51.8 | 52.0 | 51.3 | 50.0 | 49.0 | 48.7 | 48.9 | 49.3 | 49.7 | 50.3 | 50.9 | 51.4 |
| 70\% | 51.2 | 51.5 | 51.0 | 49.6 | 48.7 | 48.2 | 48.5 | 48.9 | 49.4 | 50.0 | 50.5 | 50.9 |
| 80\% | 51.0 | 51.2 | 50.4 | 49.3 | 48.2 | 47.6 | 48.0 | 48.5 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.6 | 49.9 | 49.8 | 48.5 | 47.0 | 46.9 | 47.0 | 47.2 | 47.6 | 48.4 | 48.7 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.0 | 52.7 | 51.7 | 50.3 | 49.2 | 48.8 | 49.2 | 49.9 | 50.4 | 51.3 | 52.1 | 52.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 49.7 | 49.8 | 49.1 | 49.5 | 48.4 | 48.0 | 48.2 | 48.5 | 48.9 | 49.4 | 49.9 | 50.3 |
| Above Normal (16\%) | 53.1 | 52.7 | 51.5 | 50.1 | 48.8 | 48.4 | 48.6 | 49.0 | 49.5 | 50.2 | 51.0 | 51.5 |
| Below Normal (13\%) | 52.2 | 52.1 | 51.5 | 50.6 | 49.5 | 48.9 | 49.2 | 49.7 | 50.3 | 51.0 | 51.7 | 52.2 |
| Dry (24\%) | 52.7 | 52.6 | 51.9 | 51.1 | 50.0 | 49.6 | 49.8 | 50.4 | 51.1 | 51.8 | 52.7 | 53.5 |
| Critical (15\%) | 57.3 | 55.4 | 52.8 | 50.7 | 49.9 | 49.8 | 50.8 | 53.2 | 53.2 | 56.4 | 57.2 | 58.3 |

Alternative 3

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 55.7 | 55.3 | 53.2 | 52.3 | 51.1 | 50.8 | 51.1 | 51.6 | 52.2 | 53.0 | 53.7 | 54.9 |
| 20\% | 53.6 | 53.7 | 52.5 | 51.4 | 50.4 | 50.1 | 50.3 | 50.9 | 51.6 | 52.1 | 52.6 | 53.3 |
| 30\% | 52.6 | 52.7 | 52.1 | 51.0 | 49.9 | 49.6 | 50.0 | 50.4 | 50.9 | 51.5 | 52.0 | 52.5 |
| 40\% | 52.1 | 52.3 | 51.7 | 50.6 | 49.5 | 49.3 | 49.7 | 50.2 | 50.5 | 51.2 | 51.6 | 52.0 |
| 50\% | 51.7 | 51.9 | 51.4 | 50.3 | 49.5 | 49.2 | 49.3 | 49.6 | 50.0 | 50.6 | 51.1 | 51.5 |
| 60\% | 51.3 | 51.6 | 51.3 | 50.0 | 49.1 | 48.7 | 49.0 | 49.3 | 49.7 | 50.2 | 50.7 | 51.2 |
| 70\% | 51.1 | 51.3 | 51.0 | 49.7 | 48.8 | 48.5 | 48.7 | 49.1 | 49.5 | 49.9 | 50.4 | 50.8 |
| 80\% | 50.6 | 50.8 | 50.5 | 49.3 | 48.4 | 48.1 | 48.2 | 48.5 | 48.9 | 49.3 | 49.7 | 50.4 |
| 90\% | 49.7 | 49.9 | 50.0 | 48.4 | 47.3 | 47.1 | 47.3 | 47.6 | 48.0 | 48.5 | 48.9 | 49.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 52.5 | 52.4 | 51.6 | 50.3 | 49.3 | 49.0 | 49.3 | 49.7 | 50.3 | 51.1 | 51.6 | 52.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 49.4 | 49.5 | 49.0 | 49.4 | 48.5 | 48.2 | 48.3 | 48.6 | 48.9 | 49.3 | 49.8 | 50.2 |
| Above Normal (16\%) | 52.4 | 52.2 | 51.3 | 50.1 | 48.9 | 48.5 | 48.8 | 49.1 | 49.5 | 50.1 | 50.6 | 51.1 |
| Below Normal (13\%) | 51.5 | 51.5 | 51.2 | 50.4 | 49.5 | 49.0 | 49.3 | 49.7 | 50.2 | 50.8 | 51.4 | 51.8 |
| Dry (24\%) | 52.3 | 52.4 | 51.8 | 50.9 | 50.0 | 49.6 | 49.9 | 50.3 | 50.9 | 51.5 | 52.1 | 52.7 |
| Critical (15\%) | 55.8 | 55.1 | 52.9 | 51.2 | 50.4 | 50.1 | 50.8 | 51.8 | 53.5 | 55.6 | 56.3 | 56.7 |

Alternative 3 minus Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2.5 | -0.5 | -0.4 | 0.1 | -0.3 | 0.1 | 0.1 | 0.0 | -0.3 | -0.6 | -1.5 | -1.6 |
| 20\% | -0.6 | -0.4 | -0.2 | 0.0 | 0.0 | 0.1 | 0.2 | -0.1 | -0.1 | -0.3 | -0.3 | -0.2 |
| 30\% | -0.5 | -0.4 | -0.2 | 0.0 | 0.0 | 0.1 | 0.0 | -0.1 | -0.2 | -0.2 | -0.4 | -0.4 |
| 40\% | -0.5 | -0.4 | -0.2 | -0.1 | 0.0 | 0.1 | 0.0 | -0.1 | -0.3 | -0.2 | -0.3 | -0.4 |
| 50\% | -0.4 | -0.3 | -0.1 | 0.0 | 0.1 | 0.1 | 0.0 | -0.1 | -0.3 | -0.5 | -0.4 | -0.4 |
| 60\% | -0.4 | -0.4 | -0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.2 | -0.2 |
| 70\% | -0.1 | -0.2 | 0.0 | 0.1 | 0.1 | 0.3 | 0.3 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 |
| 80\% | -0.4 | -0.4 | 0.2 | 0.0 | 0.2 | 0.4 | 0.2 | 0.0 | 0.1 | -0.3 | -0.4 | -0.3 |
| 90\% | 0.1 | 0.0 | 0.2 | -0.1 | 0.4 | 0.3 | 0.3 | 0.4 | 0.4 | 0.1 | 0.3 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.6 | -0.3 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | -0.2 | 0.0 | -0.3 | -0.4 | -0.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.3 | -0.2 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | -0.1 | -0.1 |
| Above Normal (16\%) | -0.6 | -0.5 | -0.2 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | -0.2 | -0.3 | -0.4 |
| Below Normal (13\%) | -0.7 | -0.6 | -0.3 | -0.2 | 0.0 | 0.1 | 0.1 | 0.0 | -0.1 | -0.2 | -0.3 | -0.4 |
| Dry (24\%) | -0.3 | -0.3 | -0.1 | -0.2 | 0.0 | 0.0 | 0.1 | -0.1 | -0.2 | -0.4 | -0.6 | -0.9 |
| Critical (15\%) | -1.5 | -0.3 | 0.2 | 0.5 | 0.5 | 0.3 | 0.0 | -1.4 | 0.3 | -0.7 | -1.0 | -1.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.5.4 Stanislaus River below New Melones Reservoir, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.1 | 55.8 | 53.6 | 52.1 | 51.4 | 50.7 | 51.0 | 51.6 | 52.5 | 53.6 | 55.2 | 56.5 |
| 20\% | 54.2 | 54.2 | 52.7 | 51.4 | 50.5 | 50.0 | 50.2 | 51.1 | 51.7 | 52.4 | 52.9 | 53.5 |
| 30\% | 53.1 | 53.1 | 52.3 | 51.0 | 49.9 | 49.5 | 49.9 | 50.5 | 51.0 | 51.7 | 52.4 | 52.9 |
| 40\% | 52.5 | 52.7 | 51.9 | 50.7 | 49.5 | 49.2 | 49.7 | 50.3 | 50.8 | 51.4 | 51.9 | 52.3 |
| 50\% | 52.1 | 52.3 | 51.5 | 50.3 | 49.3 | 49.1 | 49.3 | 49.7 | 50.3 | 51.0 | 51.5 | 51.9 |
| 60\% | 51.8 | 52.0 | 51.3 | 50.0 | 49.0 | 48.7 | 48.9 | 49.3 | 49.7 | 50.3 | 50.9 | 51.4 |
| 70\% | 51.2 | 51.5 | 51.0 | 49.6 | 48.7 | 48.2 | 48.5 | 48.9 | 49.4 | 50.0 | 50.5 | 50.9 |
| 80\% | 51.0 | 51.2 | 50.4 | 49.3 | 48.2 | 47.6 | 48.0 | 48.5 | 48.9 | 49.6 | 50.1 | 50.7 |
| 90\% | 49.6 | 49.9 | 49.8 | 48.5 | 47.0 | 46.9 | 47.0 | 47.2 | 47.6 | 48.4 | 48.7 | 49.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 53.0 | 52.7 | 51.7 | 50.3 | 49.2 | 48.8 | 49.2 | 49.9 | 50.4 | 51.3 | 52.1 | 52.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 49.7 | 49.8 | 49.1 | 49.5 | 48.4 | 48.0 | 48.2 | 48.5 | 48.9 | 49.4 | 49.9 | 50.3 |
| Above Normal (16\%) | 53.1 | 52.7 | 51.5 | 50.1 | 48.8 | 48.4 | 48.6 | 49.0 | 49.5 | 50.2 | 51.0 | 51.5 |
| Below Normal (13\%) | 52.2 | 52.1 | 51.5 | 50.6 | 49.5 | 48.9 | 49.2 | 49.7 | 50.3 | 51.0 | 51.7 | 52.2 |
| Dry (24\%) | 52.7 | 52.6 | 51.9 | 51.1 | 50.0 | 49.6 | 49.8 | 50.4 | 51.1 | 51.8 | 52.7 | 53.5 |
| Critical (15\%) | 57.3 | 55.4 | 52.8 | 50.7 | 49.9 | 49.8 | 50.8 | 53.2 | 53.2 | 56.4 | 57.2 | 58.3 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.7 | 57.0 | 53.9 | 52.0 | 51.0 | 50.7 | 51.2 | 52.3 | 53.1 | 55.4 | 59.8 | 63.1 |
| 20\% | 56.7 | 55.0 | 52.8 | 51.4 | 50.3 | 50.0 | 50.4 | 51.4 | 52.0 | 53.4 | 54.4 | 55.9 |
| 30\% | 54.4 | 53.7 | 52.3 | 50.9 | 49.6 | 49.5 | 50.0 | 50.7 | 51.3 | 52.2 | 53.1 | 53.8 |
| 40\% | 53.2 | 53.1 | 51.9 | 50.4 | 49.4 | 49.1 | 49.8 | 50.3 | 50.8 | 51.5 | 52.1 | 52.8 |
| 50\% | 52.5 | 52.6 | 51.6 | 50.2 | 49.0 | 49.0 | 49.3 | 49.9 | 50.3 | 51.2 | 51.7 | 52.1 |
| 60\% | 52.1 | 52.3 | 51.2 | 49.7 | 48.7 | 48.6 | 48.9 | 49.4 | 49.7 | 50.4 | 50.9 | 51.5 |
| 70\% | 51.5 | 51.8 | 51.0 | 49.4 | 48.3 | 48.0 | 48.5 | 48.9 | 49.3 | 50.0 | 50.6 | 51.1 |
| 80\% | 51.1 | 51.3 | 50.2 | 48.9 | 47.3 | 47.3 | 47.6 | 48.1 | 48.5 | 49.5 | 50.1 | 50.7 |
| 90\% | 49.9 | 50.1 | 49.5 | 47.8 | 46.3 | 46.3 | 46.7 | 47.1 | 47.4 | 48.4 | 48.9 | 49.5 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.0 | 53.1 | 51.7 | 50.0 | 48.9 | 48.7 | 49.2 | 50.0 | 50.4 | 51.7 | 52.8 | 53.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 50.7 | 50.1 | 49.0 | 49.2 | 48.1 | 47.9 | 47.9 | 48.3 | 48.8 | 49.3 | 49.9 | 50.5 |
| Above Normal (16\%) | 54.0 | 53.4 | 51.8 | 50.1 | 48.6 | 48.2 | 48.5 | 49.0 | 49.6 | 50.4 | 51.2 | 51.9 |
| Below Normal (13\%) | 53.1 | 52.3 | 51.3 | 50.1 | 49.1 | 48.7 | 49.2 | 50.0 | 50.8 | 51.6 | 52.6 | 53.4 |
| Dry (24\%) | 53.7 | 53.4 | 52.3 | 51.0 | 49.8 | 49.5 | 49.8 | 50.6 | 51.4 | 52.7 | 54.5 | 55.8 |
| Critical (15\%) | 57.9 | 55.0 | 52.3 | 49.7 | 49.0 | 49.8 | 51.8 | 54.1 | 52.5 | 56.5 | 58.2 | 60.7 |

Alternative 5 minus Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.6 | 1.2 | 0.3 | -0.2 | -0.3 | 0.0 | 0.2 | 0.6 | 0.6 | 1.9 | 4.6 | 6.6 |
| 20\% | 2.5 | 0.8 | 0.1 | 0.0 | -0.1 | 0.0 | 0.3 | 0.3 | 0.3 | 0.9 | 1.5 | 2.4 |
| 30\% | 1.3 | 0.6 | 0.0 | 0.0 | -0.2 | 0.0 | 0.1 | 0.2 | 0.3 | 0.6 | 0.6 | 0.9 |
| 40\% | 0.7 | 0.4 | 0.0 | -0.2 | -0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.2 | 0.5 |
| 50\% | 0.4 | 0.3 | 0.1 | -0.1 | -0.3 | -0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | 0.3 |
| 60\% | 0.3 | 0.3 | -0.1 | -0.3 | -0.3 | -0.1 | 0.0 | 0.1 | -0.1 | 0.1 | 0.0 | 0.1 |
| 70\% | 0.4 | 0.3 | 0.0 | -0.2 | -0.3 | -0.2 | 0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.2 |
| 80\% | 0.1 | 0.1 | -0.1 | -0.4 | -0.9 | -0.3 | -0.4 | -0.4 | -0.3 | -0.1 | 0.0 | 0.0 |
| 90\% | 0.3 | 0.1 | -0.3 | -0.7 | -0.6 | -0.5 | -0.3 | -0.1 | -0.2 | 0.0 | 0.2 | 0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1.0 | 0.4 | 0.0 | -0.3 | -0.4 | -0.1 | 0.0 | 0.2 | 0.0 | 0.3 | 0.8 | 1.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1.0 | 0.4 | -0.1 | -0.3 | -0.3 | -0.2 | -0.3 | -0.2 | -0.1 | 0.0 | 0.1 | 0.1 |
| Above Normal (16\%) | 0.9 | 0.7 | 0.2 | 0.0 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 0.2 | 0.3 | 0.4 |
| Below Normal (13\%) | 0.9 | 0.2 | -0.2 | -0.5 | -0.3 | -0.3 | 0.0 | 0.2 | 0.4 | 0.7 | 0.9 | 1.2 |
| Dry (24\%) | 1.0 | 0.8 | 0.4 | -0.1 | -0.2 | -0.1 | 0.0 | 0.1 | 0.4 | 0.9 | 1.8 | 2.3 |
| Critical (15\%) | 0.6 | -0.4 | -0.5 | -0.9 | -1.0 | 0.0 | 1.1 | 1.0 | -0.7 | 0.1 | 0.9 | 2.4 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.6 Stanislaus River below Tulloch Reservoir Temperature

Table 5C.3.3.6.1 Stanislaus River below Tulloch Reservoir, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.5 | 59.0 | 54.8 | 50.7 | 50.2 | 51.2 | 52.6 | 53.6 | 54.7 | 56.5 | 57.4 | 59.2 |
| 20\% | 57.4 | 56.6 | 53.3 | 50.3 | 49.5 | 50.6 | 52.1 | 53.0 | 54.1 | 55.0 | 55.7 | 56.7 |
| 30\% | 55.6 | 55.1 | 52.8 | 49.6 | 48.8 | 50.2 | 51.7 | 52.6 | 53.4 | 54.3 | 55.0 | 55.6 |
| 40\% | 55.1 | 54.6 | 52.0 | 49.1 | 48.5 | 49.8 | 51.3 | 52.4 | 52.9 | 53.9 | 54.5 | 55.0 |
| 50\% | 54.5 | 54.1 | 51.7 | 48.7 | 48.0 | 49.6 | 51.0 | 52.1 | 52.6 | 53.7 | 54.1 | 54.5 |
| 60\% | 54.1 | 53.9 | 51.4 | 48.3 | 47.8 | 49.3 | 50.6 | 51.6 | 52.2 | 52.8 | 53.5 | 54.0 |
| 70\% | 53.6 | 53.2 | 50.9 | 47.8 | 47.5 | 48.9 | 50.1 | 51.3 | 51.8 | 52.4 | 53.2 | 53.5 |
| 80\% | 53.2 | 52.6 | 50.4 | 47.1 | 46.7 | 48.4 | 49.7 | 51.0 | 51.4 | 51.8 | 52.8 | 53.1 |
| 90\% | 52.0 | 51.8 | 49.9 | 46.3 | 45.8 | 47.5 | 48.8 | 50.2 | 50.3 | 50.8 | 51.5 | 51.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.7 | 51.9 | 48.6 | 48.1 | 49.5 | 50.9 | 52.1 | 52.8 | 53.7 | 54.6 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.9 | 51.5 | 49.1 | 47.6 | 47.5 | 49.0 | 49.9 | 51.1 | 51.3 | 51.8 | 52.5 | 52.8 |
| Above Normal (16\%) | 55.8 | 54.8 | 51.9 | 48.5 | 47.9 | 49.3 | 50.6 | 51.4 | 52.0 | 52.7 | 53.5 | 54.0 |
| Below Normal (13\%) | 54.9 | 54.2 | 51.5 | 48.7 | 47.9 | 49.6 | 51.2 | 52.0 | 52.5 | 53.6 | 54.3 | 54.9 |
| Dry (24\%) | 55.2 | 54.7 | 52.1 | 48.9 | 48.3 | 49.8 | 51.5 | 52.4 | 53.3 | 54.4 | 55.3 | 56.1 |
| Critical (15\%) | 60.0 | 57.4 | 53.8 | 50.0 | 49.2 | 50.5 | 52.3 | 54.3 | 56.3 | 58.2 | 59.3 | 61.8 |

Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 59.7 | 59.0 | 54.7 | 50.9 | 50.3 | 51.4 | 52.7 | 53.7 | 54.6 | 56.4 | 57.2 | 58.4 |
| 20\% | 56.6 | 56.3 | 53.3 | 50.3 | 49.7 | 50.8 | 51.9 | 53.2 | 54.0 | 55.0 | 55.6 | 56.3 |
| 30\% | 55.6 | 55.1 | 52.7 | 49.6 | 49.0 | 50.3 | 51.6 | 52.8 | 53.3 | 54.1 | 54.9 | 55.5 |
| 40\% | 55.0 | 54.5 | 52.1 | 49.2 | 48.7 | 49.8 | 51.3 | 52.4 | 53.0 | 53.8 | 54.5 | 54.9 |
| 50\% | 54.6 | 54.2 | 51.7 | 48.9 | 48.2 | 49.7 | 51.0 | 52.2 | 52.7 | 53.5 | 54.0 | 54.4 |
| 60\% | 54.0 | 53.9 | 51.5 | 48.4 | 47.9 | 49.5 | 50.7 | 51.8 | 52.4 | 52.6 | 53.4 | 53.9 |
| 70\% | 53.7 | 53.3 | 51.1 | 48.0 | 47.7 | 49.0 | 50.2 | 51.5 | 51.9 | 52.3 | 53.1 | 53.5 |
| 80\% | 53.3 | 52.8 | 50.5 | 47.4 | 47.2 | 48.5 | 49.7 | 50.9 | 51.5 | 51.6 | 52.7 | 53.1 |
| 90\% | 52.1 | 51.9 | 49.8 | 46.6 | 46.1 | 47.6 | 48.9 | 50.2 | 50.7 | 50.7 | 51.5 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.4 | 54.7 | 52.0 | 48.7 | 48.3 | 49.6 | 50.9 | 52.2 | 52.8 | 53.6 | 54.5 | 55.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.8 | 51.4 | 49.0 | 47.8 | 47.7 | 49.0 | 50.0 | 51.2 | 51.7 | 51.6 | 52.4 | 52.8 |
| Above Normal (16\%) | 55.6 | 54.8 | 52.0 | 48.7 | 48.1 | 49.4 | 50.6 | 51.6 | 52.0 | 52.6 | 53.4 | 53.9 |
| Below Normal (13\%) | 54.7 | 54.0 | 51.4 | 48.8 | 48.2 | 49.7 | 50.9 | 52.2 | 52.4 | 53.4 | 54.2 | 54.6 |
| Dry (24\%) | 55.1 | 54.6 | 52.2 | 49.0 | 48.5 | 50.0 | 51.5 | 52.6 | 53.3 | 54.3 | 55.1 | 55.8 |
| Critical (15\%) | 59.4 | 58.1 | 54.1 | 50.2 | 49.5 | 50.7 | 52.2 | 54.5 | 55.4 | 58.0 | 59.5 | 60.4 |

Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -0.7 | -0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 0.0 | 0.1 | -0.1 | -0.1 | -0.2 | -0.7 |
| 20\% | -0.8 | -0.3 | 0.0 | 0.0 | 0.2 | 0.2 | -0.2 | 0.2 | -0.1 | 0.0 | -0.1 | -0.4 |
| 30\% | 0.0 | 0.0 | -0.1 | 0.0 | 0.2 | 0.1 | -0.1 | 0.2 | -0.1 | -0.2 | -0.1 | -0.1 |
| 40\% | -0.1 | -0.1 | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | -0.1 |
| 50\% | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | 0.1 | -0.2 | -0.1 | -0.2 |
| 60\% | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.1 | -0.1 | 0.0 |
| 70\% | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 | 0.1 | 0.2 | 0.2 | 0.1 | -0.2 | 0.0 | 0.0 |
| 80\% | 0.2 | 0.2 | 0.1 | 0.3 | 0.5 | 0.1 | 0.1 | -0.1 | 0.1 | -0.2 | 0.0 | 0.0 |
| 90\% | 0.1 | 0.1 | -0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.5 | 0.0 | 0.0 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.2 | -0.1 | -0.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.1 | -0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | 0.0 | 0.4 | -0.2 | 0.0 | 0.0 |
| Above Normal (16\%) | -0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | -0.1 | 0.2 | 0.0 | -0.1 | -0.1 | -0.1 |
| Below Normal (13\%) | -0.2 | -0.2 | -0.1 | 0.1 | 0.2 | 0.1 | -0.3 | 0.3 | -0.1 | -0.2 | -0.2 | -0.2 |
| Dry (24\%) | -0.2 | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.1 | -0.1 | -0.1 | -0.2 | -0.3 |
| Critical (15\%) | -0.6 | 0.7 | 0.3 | 0.2 | 0.2 | 0.2 | -0.1 | 0.2 | -0.9 | -0.2 | 0.2 | -1.4 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.6.2 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 59.7 | 59.0 | 54.7 | 50.9 | 50.3 | 51.4 | 52.7 | 53.7 | 54.6 | 56.4 | 57.2 | 58.4 |
| 20\% | 56.6 | 56.3 | 53.3 | 50.3 | 49.7 | 50.8 | 51.9 | 53.2 | 54.0 | 55.0 | 55.6 | 56.3 |
| 30\% | 55.6 | 55.1 | 52.7 | 49.6 | 49.0 | 50.3 | 51.6 | 52.8 | 53.3 | 54.1 | 54.9 | 55.5 |
| 40\% | 55.0 | 54.5 | 52.1 | 49.2 | 48.7 | 49.8 | 51.3 | 52.4 | 53.0 | 53.8 | 54.5 | 54.9 |
| 50\% | 54.6 | 54.2 | 51.7 | 48.9 | 48.2 | 49.7 | 51.0 | 52.2 | 52.7 | 53.5 | 54.0 | 54.4 |
| 60\% | 54.0 | 53.9 | 51.5 | 48.4 | 47.9 | 49.5 | 50.7 | 51.8 | 52.4 | 52.6 | 53.4 | 53.9 |
| 70\% | 53.7 | 53.3 | 51.1 | 48.0 | 47.7 | 49.0 | 50.2 | 51.5 | 51.9 | 52.3 | 53.1 | 53.5 |
| 80\% | 53.3 | 52.8 | 50.5 | 47.4 | 47.2 | 48.5 | 49.7 | 50.9 | 51.5 | 51.6 | 52.7 | 53.1 |
| 90\% | 52.1 | 51.9 | 49.8 | 46.6 | 46.1 | 47.6 | 48.9 | 50.2 | 50.7 | 50.7 | 51.5 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.4 | 54.7 | 52.0 | 48.7 | 48.3 | 49.6 | 50.9 | 52.2 | 52.8 | 53.6 | 54.5 | 55.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.8 | 51.4 | 49.0 | 47.8 | 47.7 | 49.0 | 50.0 | 51.2 | 51.7 | 51.6 | 52.4 | 52.8 |
| Above Normal (16\%) | 55.6 | 54.8 | 52.0 | 48.7 | 48.1 | 49.4 | 50.6 | 51.6 | 52.0 | 52.6 | 53.4 | 53.9 |
| Below Normal (13\%) | 54.7 | 54.0 | 51.4 | 48.8 | 48.2 | 49.7 | 50.9 | 52.2 | 52.4 | 53.4 | 54.2 | 54.6 |
| Dry (24\%) | 55.1 | 54.6 | 52.2 | 49.0 | 48.5 | 50.0 | 51.5 | 52.6 | 53.3 | 54.3 | 55.1 | 55.8 |
| Critical (15\%) | 59.4 | 58.1 | 54.1 | 50.2 | 49.5 | 50.7 | 52.2 | 54.5 | 55.4 | 58.0 | 59.5 | 60.4 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.5 | 59.0 | 54.8 | 50.7 | 50.2 | 51.2 | 52.6 | 53.6 | 54.7 | 56.5 | 57.4 | 59.2 |
| 20\% | 57.4 | 56.6 | 53.3 | 50.3 | 49.5 | 50.6 | 52.1 | 53.0 | 54.1 | 55.0 | 55.7 | 56.7 |
| 30\% | 55.6 | 55.1 | 52.8 | 49.6 | 48.8 | 50.2 | 51.7 | 52.6 | 53.4 | 54.3 | 55.0 | 55.6 |
| 40\% | 55.1 | 54.6 | 52.0 | 49.1 | 48.5 | 49.8 | 51.3 | 52.4 | 52.9 | 53.9 | 54.5 | 55.0 |
| 50\% | 54.5 | 54.1 | 51.7 | 48.7 | 48.0 | 49.6 | 51.0 | 52.1 | 52.6 | 53.7 | 54.1 | 54.5 |
| 60\% | 54.1 | 53.9 | 51.4 | 48.3 | 47.8 | 49.3 | 50.6 | 51.6 | 52.2 | 52.8 | 53.5 | 54.0 |
| 70\% | 53.6 | 53.2 | 50.9 | 47.8 | 47.5 | 48.9 | 50.1 | 51.3 | 51.8 | 52.4 | 53.2 | 53.5 |
| 80\% | 53.2 | 52.6 | 50.4 | 47.1 | 46.7 | 48.4 | 49.7 | 51.0 | 51.4 | 51.8 | 52.8 | 53.1 |
| 90\% | 52.0 | 51.8 | 49.9 | 46.3 | 45.8 | 47.5 | 48.8 | 50.2 | 50.3 | 50.8 | 51.5 | 51.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.6 | 54.7 | 51.9 | 48.6 | 48.1 | 49.5 | 50.9 | 52.1 | 52.8 | 53.7 | 54.6 | 55.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.9 | 51.5 | 49.1 | 47.6 | 47.5 | 49.0 | 49.9 | 51.1 | 51.3 | 51.8 | 52.5 | 52.8 |
| Above Normal (16\%) | 55.8 | 54.8 | 51.9 | 48.5 | 47.9 | 49.3 | 50.6 | 51.4 | 52.0 | 52.7 | 53.5 | 54.0 |
| Below Normal (13\%) | 54.9 | 54.2 | 51.5 | 48.7 | 47.9 | 49.6 | 51.2 | 52.0 | 52.5 | 53.6 | 54.3 | 54.9 |
| Dry (24\%) | 55.2 | 54.7 | 52.1 | 48.9 | 48.3 | 49.8 | 51.5 | 52.4 | 53.3 | 54.4 | 55.3 | 56.1 |
| Critical (15\%) | 60.0 | 57.4 | 53.8 | 50.0 | 49.2 | 50.5 | 52.3 | 54.3 | 56.3 | 58.2 | 59.3 | 61.8 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.7 | 0.1 | 0.0 | -0.2 | -0.1 | -0.2 | 0.0 | -0.1 | 0.1 | 0.1 | 0.2 | 0.7 |
| 20\% | 0.8 | 0.3 | 0.0 | 0.0 | -0.2 | -0.2 | 0.2 | -0.2 | 0.1 | 0.0 | 0.1 | 0.4 |
| 30\% | 0.0 | 0.0 | 0.1 | 0.0 | -0.2 | -0.1 | 0.1 | -0.2 | 0.1 | 0.2 | 0.1 | 0.1 |
| 40\% | 0.1 | 0.1 | -0.1 | -0.1 | -0.2 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | 0.1 |
| 50\% | -0.1 | -0.1 | -0.1 | -0.2 | -0.2 | -0.1 | 0.0 | -0.1 | -0.1 | 0.2 | 0.1 | 0.2 |
| 60\% | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | 0.1 | 0.1 | 0.0 |
| 70\% | 0.0 | 0.0 | -0.2 | -0.2 | -0.1 | -0.1 | -0.2 | -0.2 | -0.1 | 0.2 | 0.0 | 0.0 |
| 80\% | -0.2 | -0.2 | -0.1 | -0.3 | -0.5 | -0.1 | -0.1 | 0.1 | -0.1 | 0.2 | 0.0 | 0.0 |
| 90\% | -0.1 | -0.1 | 0.1 | -0.3 | -0.3 | -0.1 | -0.1 | 0.0 | -0.5 | 0.0 | 0.0 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.2 | -0.1 | -0.1 | -0.1 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.2 | 0.1 | 0.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0.1 | 0.1 | 0.0 | -0.1 | -0.2 | 0.0 | -0.1 | 0.0 | -0.4 | 0.2 | 0.0 | 0.0 |
| Above Normal (16\%) | 0.2 | -0.1 | -0.1 | -0.1 | -0.2 | -0.1 | 0.1 | -0.2 | 0.0 | 0.1 | 0.1 | 0.1 |
| Below Normal (13\%) | 0.2 | 0.2 | 0.1 | -0.1 | -0.2 | -0.1 | 0.3 | -0.3 | 0.1 | 0.2 | 0.2 | 0.2 |
| Dry (24\%) | 0.2 | 0.0 | -0.1 | -0.2 | -0.2 | -0.1 | 0.0 | -0.1 | 0.1 | 0.1 | 0.2 | 0.3 |
| Critical (15\%) | 0.6 | -0.7 | -0.3 | -0.2 | -0.2 | -0.2 | 0.1 | -0.2 | 0.9 | 0.2 | -0.2 | 1.4 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.6.3 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 59.7 | 59.0 | 54.7 | 50.9 | 50.3 | 51.4 | 52.7 | 53.7 | 54.6 | 56.4 | 57.2 | 58.4 |
| 20\% | 56.6 | 56.3 | 53.3 | 50.3 | 49.7 | 50.8 | 51.9 | 53.2 | 54.0 | 55.0 | 55.6 | 56.3 |
| 30\% | 55.6 | 55.1 | 52.7 | 49.6 | 49.0 | 50.3 | 51.6 | 52.8 | 53.3 | 54.1 | 54.9 | 55.5 |
| 40\% | 55.0 | 54.5 | 52.1 | 49.2 | 48.7 | 49.8 | 51.3 | 52.4 | 53.0 | 53.8 | 54.5 | 54.9 |
| 50\% | 54.6 | 54.2 | 51.7 | 48.9 | 48.2 | 49.7 | 51.0 | 52.2 | 52.7 | 53.5 | 54.0 | 54.4 |
| 60\% | 54.0 | 53.9 | 51.5 | 48.4 | 47.9 | 49.5 | 50.7 | 51.8 | 52.4 | 52.6 | 53.4 | 53.9 |
| 70\% | 53.7 | 53.3 | 51.1 | 48.0 | 47.7 | 49.0 | 50.2 | 51.5 | 51.9 | 52.3 | 53.1 | 53.5 |
| 80\% | 53.3 | 52.8 | 50.5 | 47.4 | 47.2 | 48.5 | 49.7 | 50.9 | 51.5 | 51.6 | 52.7 | 53.1 |
| 90\% | 52.1 | 51.9 | 49.8 | 46.6 | 46.1 | 47.6 | 48.9 | 50.2 | 50.7 | 50.7 | 51.5 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.4 | 54.7 | 52.0 | 48.7 | 48.3 | 49.6 | 50.9 | 52.2 | 52.8 | 53.6 | 54.5 | 55.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.8 | 51.4 | 49.0 | 47.8 | 47.7 | 49.0 | 50.0 | 51.2 | 51.7 | 51.6 | 52.4 | 52.8 |
| Above Normal (16\%) | 55.6 | 54.8 | 52.0 | 48.7 | 48.1 | 49.4 | 50.6 | 51.6 | 52.0 | 52.6 | 53.4 | 53.9 |
| Below Normal (13\%) | 54.7 | 54.0 | 51.4 | 48.8 | 48.2 | 49.7 | 50.9 | 52.2 | 52.4 | 53.4 | 54.2 | 54.6 |
| Dry (24\%) | 55.1 | 54.6 | 52.2 | 49.0 | 48.5 | 50.0 | 51.5 | 52.6 | 53.3 | 54.3 | 55.1 | 55.8 |
| Critical (15\%) | 59.4 | 58.1 | 54.1 | 50.2 | 49.5 | 50.7 | 52.2 | 54.5 | 55.4 | 58.0 | 59.5 | 60.4 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 57.8 | 57.5 | 54.3 | 50.8 | 50.3 | 51.3 | 52.7 | 53.5 | 54.5 | 55.7 | 56.4 | 57.3 |
| 20\% | 56.4 | 55.9 | 53.5 | 50.0 | 49.6 | 50.7 | 52.0 | 52.8 | 53.8 | 54.8 | 55.3 | 55.7 |
| 30\% | 55.1 | 54.5 | 52.8 | 49.5 | 49.1 | 50.3 | 51.5 | 52.4 | 53.2 | 54.0 | 54.7 | 55.1 |
| 40\% | 54.6 | 54.1 | 51.8 | 49.0 | 48.7 | 49.9 | 51.4 | 52.2 | 52.8 | 53.6 | 54.2 | 54.5 |
| 50\% | 54.2 | 53.7 | 51.5 | 48.7 | 48.2 | 49.7 | 51.0 | 51.9 | 52.5 | 53.3 | 53.8 | 54.1 |
| 60\% | 53.7 | 53.4 | 51.3 | 48.5 | 47.9 | 49.5 | 50.8 | 51.6 | 52.1 | 52.9 | 53.3 | 53.6 |
| 70\% | 53.5 | 53.0 | 50.9 | 48.0 | 47.6 | 49.0 | 50.4 | 51.4 | 51.7 | 52.6 | 53.0 | 53.2 |
| 80\% | 52.9 | 52.7 | 50.5 | 47.5 | 47.2 | 48.6 | 49.9 | 50.9 | 51.2 | 52.1 | 52.5 | 52.8 |
| 90\% | 51.9 | 51.8 | 49.6 | 46.8 | 46.2 | 47.8 | 49.2 | 50.1 | 50.7 | 51.3 | 51.7 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54.8 | 54.3 | 51.8 | 48.6 | 48.3 | 49.6 | 51.0 | 51.9 | 52.6 | 53.6 | 54.3 | 54.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.6 | 51.2 | 49.0 | 47.8 | 47.9 | 49.0 | 50.1 | 51.0 | 51.4 | 52.1 | 52.5 | 52.6 |
| Above Normal (16\%) | 55.0 | 54.4 | 51.9 | 48.7 | 48.1 | 49.4 | 50.7 | 51.4 | 51.9 | 52.8 | 53.3 | 53.6 |
| Below Normal (13\%) | 53.9 | 53.5 | 51.2 | 48.7 | 48.1 | 49.6 | 51.0 | 51.9 | 52.4 | 53.4 | 53.9 | 54.3 |
| Dry (24\%) | 54.8 | 54.3 | 52.0 | 48.9 | 48.3 | 49.9 | 51.5 | 52.4 | 53.2 | 54.1 | 54.7 | 55.1 |
| Critical (15\%) | 58.0 | 57.4 | 53.9 | 50.1 | 49.4 | 50.8 | 52.3 | 53.6 | 55.1 | 57.5 | 58.7 | 59.0 |

Alternative 3 minus Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2.0 | -1.5 | -0.4 | -0.1 | -0.1 | -0.1 | 0.1 | -0.2 | -0.1 | -0.7 | -0.8 | -1.2 |
| 20\% | -0.2 | -0.4 | 0.2 | -0.3 | -0.1 | 0.0 | 0.1 | -0.3 | -0.2 | -0.2 | -0.3 | -0.6 |
| 30\% | -0.5 | -0.6 | 0.1 | -0.1 | 0.1 | 0.0 | -0.1 | -0.4 | -0.1 | -0.1 | -0.2 | -0.4 |
| 40\% | -0.4 | -0.4 | -0.3 | -0.2 | 0.0 | 0.0 | 0.1 | -0.2 | -0.2 | -0.2 | -0.3 | -0.4 |
| 50\% | -0.4 | -0.4 | -0.2 | -0.2 | 0.0 | 0.0 | 0.0 | -0.3 | -0.2 | -0.2 | -0.3 | -0.3 |
| 60\% | -0.2 | -0.5 | -0.2 | 0.1 | -0.1 | 0.0 | 0.1 | -0.2 | -0.3 | 0.2 | -0.1 | -0.3 |
| 70\% | -0.2 | -0.2 | -0.3 | 0.0 | 0.0 | 0.0 | 0.2 | -0.1 | -0.2 | 0.4 | -0.1 | -0.3 |
| 80\% | -0.4 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | -0.3 | 0.5 | -0.2 | -0.3 |
| 90\% | -0.1 | -0.1 | -0.2 | 0.2 | 0.1 | 0.2 | 0.3 | -0.1 | -0.1 | 0.6 | 0.3 | 0.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.5 | -0.4 | -0.1 | -0.1 | 0.0 | 0.0 | 0.1 | -0.3 | -0.2 | 0.1 | -0.3 | -0.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.3 | -0.2 | -0.1 | 0.0 | 0.3 | 0.0 | 0.1 | -0.2 | -0.3 | 0.5 | 0.0 | -0.2 |
| Above Normal (16\%) | -0.5 | -0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.2 | -0.2 | -0.1 | 0.1 | -0.1 | -0.3 |
| Below Normal (13\%) | -0.7 | -0.5 | -0.2 | -0.1 | -0.1 | -0.1 | 0.1 | -0.3 | 0.0 | -0.1 | -0.2 | -0.3 |
| Dry (24\%) | -0.3 | -0.3 | -0.1 | -0.1 | -0.3 | -0.1 | 0.1 | -0.2 | -0.1 | -0.2 | -0.5 | -0.7 |
| Critical (15\%) | -1.3 | -0.8 | -0.2 | -0.1 | -0.1 | 0.1 | 0.1 | -0.9 | -0.2 | -0.5 | -0.8 | -1.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.6.4 Stanislaus River below Tulloch Reservoir, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 59.7 | 59.0 | 54.7 | 50.9 | 50.3 | 51.4 | 52.7 | 53.7 | 54.6 | 56.4 | 57.2 | 58.4 |
| 20\% | 56.6 | 56.3 | 53.3 | 50.3 | 49.7 | 50.8 | 51.9 | 53.2 | 54.0 | 55.0 | 55.6 | 56.3 |
| 30\% | 55.6 | 55.1 | 52.7 | 49.6 | 49.0 | 50.3 | 51.6 | 52.8 | 53.3 | 54.1 | 54.9 | 55.5 |
| 40\% | 55.0 | 54.5 | 52.1 | 49.2 | 48.7 | 49.8 | 51.3 | 52.4 | 53.0 | 53.8 | 54.5 | 54.9 |
| 50\% | 54.6 | 54.2 | 51.7 | 48.9 | 48.2 | 49.7 | 51.0 | 52.2 | 52.7 | 53.5 | 54.0 | 54.4 |
| 60\% | 54.0 | 53.9 | 51.5 | 48.4 | 47.9 | 49.5 | 50.7 | 51.8 | 52.4 | 52.6 | 53.4 | 53.9 |
| 70\% | 53.7 | 53.3 | 51.1 | 48.0 | 47.7 | 49.0 | 50.2 | 51.5 | 51.9 | 52.3 | 53.1 | 53.5 |
| 80\% | 53.3 | 52.8 | 50.5 | 47.4 | 47.2 | 48.5 | 49.7 | 50.9 | 51.5 | 51.6 | 52.7 | 53.1 |
| 90\% | 52.1 | 51.9 | 49.8 | 46.6 | 46.1 | 47.6 | 48.9 | 50.2 | 50.7 | 50.7 | 51.5 | 51.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.4 | 54.7 | 52.0 | 48.7 | 48.3 | 49.6 | 50.9 | 52.2 | 52.8 | 53.6 | 54.5 | 55.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 51.8 | 51.4 | 49.0 | 47.8 | 47.7 | 49.0 | 50.0 | 51.2 | 51.7 | 51.6 | 52.4 | 52.8 |
| Above Normal (16\%) | 55.6 | 54.8 | 52.0 | 48.7 | 48.1 | 49.4 | 50.6 | 51.6 | 52.0 | 52.6 | 53.4 | 53.9 |
| Below Normal (13\%) | 54.7 | 54.0 | 51.4 | 48.8 | 48.2 | 49.7 | 50.9 | 52.2 | 52.4 | 53.4 | 54.2 | 54.6 |
| Dry (24\%) | 55.1 | 54.6 | 52.2 | 49.0 | 48.5 | 50.0 | 51.5 | 52.6 | 53.3 | 54.3 | 55.1 | 55.8 |
| Critical (15\%) | 59.4 | 58.1 | 54.1 | 50.2 | 49.5 | 50.7 | 52.2 | 54.5 | 55.4 | 58.0 | 59.5 | 60.4 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.5 | 60.2 | 55.1 | 51.0 | 50.0 | 51.1 | 52.9 | 53.9 | 55.2 | 57.1 | 60.8 | 63.2 |
| 20\% | 58.4 | 57.9 | 53.6 | 50.2 | 49.5 | 50.6 | 52.2 | 53.2 | 54.3 | 55.4 | 56.8 | 57.9 |
| 30\% | 56.4 | 55.7 | 52.7 | 49.4 | 48.8 | 50.0 | 51.8 | 52.6 | 53.4 | 54.7 | 55.5 | 56.1 |
| 40\% | 55.3 | 54.8 | 52.1 | 49.0 | 48.4 | 49.7 | 51.6 | 52.4 | 52.9 | 54.0 | 54.9 | 55.2 |
| 50\% | 54.7 | 54.2 | 51.8 | 48.7 | 48.0 | 49.5 | 51.0 | 52.2 | 52.6 | 53.7 | 54.2 | 54.6 |
| 60\% | 54.4 | 53.9 | 51.5 | 48.3 | 47.7 | 49.2 | 50.6 | 51.8 | 52.2 | 52.8 | 53.5 | 54.0 |
| 70\% | 53.7 | 53.4 | 50.9 | 47.9 | 47.2 | 48.8 | 50.1 | 51.4 | 51.7 | 52.4 | 53.2 | 53.6 |
| 80\% | 53.3 | 52.7 | 50.4 | 47.1 | 46.7 | 48.1 | 49.6 | 50.8 | 51.3 | 51.9 | 52.8 | 53.1 |
| 90\% | 52.1 | 51.8 | 49.8 | 45.9 | 45.6 | 47.4 | 48.7 | 50.1 | 50.1 | 50.7 | 51.4 | 52.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.2 | 55.1 | 52.0 | 48.6 | 48.0 | 49.4 | 50.9 | 52.2 | 52.6 | 53.9 | 55.1 | 56.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.7 | 51.8 | 49.1 | 47.7 | 47.4 | 48.8 | 49.7 | 51.1 | 51.2 | 51.7 | 52.5 | 52.9 |
| Above Normal (16\%) | 56.2 | 55.2 | 52.1 | 48.6 | 47.9 | 49.2 | 50.5 | 51.5 | 51.9 | 52.8 | 53.7 | 54.3 |
| Below Normal (13\%) | 55.6 | 54.3 | 51.5 | 48.6 | 47.9 | 49.4 | 51.2 | 52.1 | 52.7 | 54.0 | 54.9 | 55.6 |
| Dry (24\%) | 55.9 | 55.1 | 52.3 | 49.0 | 48.3 | 49.7 | 51.5 | 52.5 | 53.5 | 54.9 | 56.4 | 57.7 |
| Critical (15\%) | 60.5 | 58.1 | 53.6 | 49.7 | 48.9 | 50.3 | 52.9 | 55.1 | 55.2 | 58.0 | 60.1 | 62.2 |

Alternative 5 minus Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 4.8 | 1.3 | 0.4 | 0.1 | -0.3 | -0.3 | 0.2 | 0.2 | 0.7 | 0.7 | 3.5 | 4.8 |
| 20\% | 1.8 | 1.7 | 0.3 | -0.1 | -0.2 | -0.2 | 0.3 | 0.1 | 0.2 | 0.4 | 1.3 | 1.6 |
| 30\% | 0.8 | 0.6 | 0.0 | -0.2 | -0.3 | -0.2 | 0.2 | -0.2 | 0.1 | 0.6 | 0.6 | 0.6 |
| 40\% | 0.3 | 0.3 | 0.0 | -0.2 | -0.3 | -0.1 | 0.3 | 0.0 | -0.1 | 0.2 | 0.4 | 0.3 |
| 50\% | 0.1 | 0.1 | 0.1 | -0.2 | -0.2 | -0.2 | 0.0 | 0.0 | -0.1 | 0.2 | 0.2 | 0.2 |
| 60\% | 0.4 | 0.0 | 0.0 | 0.0 | -0.2 | -0.3 | 0.0 | 0.0 | -0.2 | 0.2 | 0.1 | 0.1 |
| 70\% | 0.1 | 0.1 | -0.2 | -0.1 | -0.4 | -0.2 | -0.1 | -0.1 | -0.2 | 0.2 | 0.1 | 0.2 |
| 80\% | -0.1 | -0.1 | -0.1 | -0.3 | -0.5 | -0.4 | -0.1 | -0.2 | -0.2 | 0.2 | 0.1 | 0.0 |
| 90\% | 0.0 | -0.1 | 0.0 | -0.7 | -0.6 | -0.2 | -0.2 | -0.1 | -0.6 | 0.0 | 0.0 | 0.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.9 | 0.3 | 0.0 | -0.1 | -0.3 | -0.2 | 0.1 | 0.0 | -0.1 | 0.3 | 0.6 | 1.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0.9 | 0.4 | 0.1 | -0.1 | -0.2 | -0.1 | -0.2 | -0.1 | -0.5 | 0.2 | 0.1 | 0.1 |
| Above Normal (16\%) | 0.7 | 0.4 | 0.1 | -0.1 | -0.2 | -0.2 | 0.0 | 0.0 | -0.1 | 0.2 | 0.3 | 0.4 |
| Below Normal (13\%) | 0.9 | 0.2 | 0.1 | -0.2 | -0.3 | -0.2 | 0.2 | -0.1 | 0.3 | 0.6 | 0.8 | 1.0 |
| Dry (24\%) | 0.8 | 0.5 | 0.2 | -0.1 | -0.2 | -0.2 | 0.0 | 0.0 | 0.2 | 0.6 | 1.3 | 1.9 |
| Critical (15\%) | 1.1 | 0.0 | -0.5 | -0.5 | -0.6 | -0.4 | 0.7 | 0.7 | -0.2 | 0.0 | 0.6 | 1.7 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.7 Stanislaus River below Goodwin Dam Temperature

Table 5C.3.3.7.1 Stanislaus River below Goodwin Dam, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.7 | 59.2 | 54.6 | 51.1 | 50.8 | 51.9 | 53.1 | 54.1 | 55.6 | 57.6 | 58.3 | 60.1 |
| 20\% | 58.0 | 56.6 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.8 | 55.9 | 56.5 | 57.4 |
| 30\% | 56.1 | 55.5 | 52.5 | 49.7 | 49.5 | 50.8 | 52.1 | 53.0 | 54.0 | 55.1 | 55.8 | 56.4 |
| 40\% | 55.5 | 54.8 | 51.9 | 49.3 | 48.9 | 50.6 | 51.7 | 52.8 | 53.7 | 54.6 | 55.3 | 55.7 |
| 50\% | 55.0 | 54.2 | 51.6 | 48.9 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.4 | 54.8 | 55.3 |
| 60\% | 54.5 | 54.0 | 51.3 | 48.4 | 48.4 | 50.0 | 51.0 | 52.1 | 52.8 | 53.5 | 54.2 | 54.6 |
| 70\% | 54.0 | 53.5 | 51.0 | 48.0 | 48.0 | 49.8 | 50.6 | 51.8 | 52.5 | 53.2 | 53.9 | 54.2 |
| 80\% | 53.5 | 52.9 | 50.4 | 47.3 | 47.4 | 49.0 | 50.1 | 51.5 | 52.0 | 52.6 | 53.3 | 53.8 |
| 90\% | 52.4 | 52.1 | 49.9 | 46.5 | 46.7 | 48.3 | 49.2 | 50.6 | 50.8 | 51.5 | 52.2 | 52.6 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.8 | 48.7 | 50.2 | 51.3 | 52.5 | 53.5 | 54.6 | 55.3 | 56.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.3 | 51.8 | 49.1 | 47.9 | 48.0 | 49.4 | 50.2 | 51.5 | 51.8 | 52.5 | 53.2 | 53.4 |
| Above Normal (16\%) | 56.2 | 55.1 | 52.0 | 48.9 | 48.6 | 50.2 | 51.0 | 51.9 | 52.6 | 53.5 | 54.2 | 54.7 |
| Below Normal (13\%) | 55.3 | 54.4 | 51.4 | 48.8 | 48.6 | 50.3 | 51.5 | 52.4 | 53.2 | 54.4 | 55.1 | 55.6 |
| Dry (24\%) | 55.6 | 54.8 | 52.0 | 49.0 | 48.9 | 50.7 | 51.9 | 52.9 | 54.1 | 55.2 | 56.0 | 56.8 |
| Critical (15\%) | 60.4 | 57.6 | 53.6 | 50.1 | 49.9 | 51.3 | 52.8 | 54.9 | 57.2 | 59.4 | 60.4 | 62.6 |

Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.3 | 59.1 | 54.5 | 51.1 | 50.8 | 51.9 | 53.1 | 54.2 | 55.5 | 57.4 | 58.2 | 59.2 |
| 20\% | 57.3 | 56.5 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.9 | 55.9 | 56.4 | 57.0 |
| 30\% | 56.4 | 55.4 | 52.7 | 49.7 | 49.5 | 50.9 | 52.0 | 53.2 | 53.9 | 55.0 | 55.7 | 56.2 |
| 40\% | 55.7 | 54.7 | 52.1 | 49.3 | 49.1 | 50.7 | 51.7 | 52.8 | 53.6 | 54.6 | 55.2 | 55.6 |
| 50\% | 55.2 | 54.4 | 51.7 | 49.0 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.2 | 54.7 | 55.1 |
| 60\% | 54.9 | 54.1 | 51.5 | 48.5 | 48.5 | 50.1 | 51.1 | 52.2 | 53.0 | 53.4 | 54.1 | 54.6 |
| 70\% | 54.5 | 53.5 | 51.1 | 48.2 | 48.1 | 49.8 | 50.7 | 51.9 | 52.5 | 53.0 | 53.8 | 54.1 |
| 80\% | 53.9 | 52.9 | 50.5 | 47.6 | 47.7 | 49.1 | 50.2 | 51.5 | 52.0 | 52.4 | 53.4 | 53.8 |
| 90\% | 52.7 | 52.2 | 49.9 | 46.9 | 46.8 | 48.4 | 49.4 | 50.6 | 51.2 | 51.2 | 52.2 | 52.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.9 | 48.8 | 50.3 | 51.3 | 52.7 | 53.4 | 54.4 | 55.3 | 55.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.4 | 51.6 | 49.1 | 48.0 | 48.1 | 49.5 | 50.3 | 51.6 | 52.1 | 52.3 | 53.1 | 53.4 |
| Above Normal (16\%) | 56.3 | 55.1 | 52.1 | 49.0 | 48.8 | 50.3 | 51.0 | 52.0 | 52.6 | 53.4 | 54.1 | 54.6 |
| Below Normal (13\%) | 55.3 | 54.2 | 51.3 | 48.9 | 48.7 | 50.4 | 51.4 | 52.6 | 53.1 | 54.2 | 54.9 | 55.4 |
| Dry (24\%) | 55.7 | 54.8 | 52.1 | 49.1 | 49.1 | 50.7 | 52.0 | 53.0 | 54.0 | 55.1 | 55.9 | 56.5 |
| Critical (15\%) | 60.0 | 58.3 | 54.0 | 50.3 | 50.1 | 51.5 | 52.7 | 55.0 | 56.4 | 59.0 | 60.5 | 61.3 |

Alternative 1 minus No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -0.5 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | -0.2 | -0.2 | -0.9 |
| 20\% | -0.7 | -0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | -0.4 |
| 30\% | 0.3 | -0.1 | 0.2 | 0.1 | 0.1 | 0.1 | -0.1 | 0.2 | -0.1 | -0.2 | -0.1 | -0.2 |
| 40\% | 0.2 | -0.1 | 0.1 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 |
| 50\% | 0.3 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | -0.1 |
| 60\% | 0.3 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | -0.1 | -0.1 | 0.0 |
| 70\% | 0.5 | 0.0 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 |
| 80\% | 0.3 | 0.0 | 0.1 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.0 | -0.2 | 0.1 | 0.0 |
| 90\% | 0.3 | 0.1 | 0.0 | 0.4 | 0.1 | 0.0 | 0.1 | 0.0 | 0.3 | -0.3 | 0.0 | -0.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | -0.1 | -0.2 | -0.1 | -0.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0.1 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | -0.2 | 0.0 | 0.0 |
| Above Normal (16\%) | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.2 | 0.0 | -0.1 | -0.1 | -0.1 |
| Below Normal (13\%) | 0.0 | -0.2 | 0.0 | 0.1 | 0.1 | 0.1 | -0.2 | 0.2 | -0.1 | -0.2 | -0.2 | -0.2 |
| Dry (24\%) | 0.1 | -0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.1 | -0.1 | -0.1 | -0.3 |
| Critical (15\%) | -0.4 | 0.7 | 0.4 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | -0.8 | -0.3 | 0.1 | -1.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Altermative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.7.2 Stanislaus River below Goodwin Dam, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.3 | 59.1 | 54.5 | 51.1 | 50.8 | 51.9 | 53.1 | 54.2 | 55.5 | 57.4 | 58.2 | 59.2 |
| 20\% | 57.3 | 56.5 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.9 | 55.9 | 56.4 | 57.0 |
| 30\% | 56.4 | 55.4 | 52.7 | 49.7 | 49.5 | 50.9 | 52.0 | 53.2 | 53.9 | 55.0 | 55.7 | 56.2 |
| 40\% | 55.7 | 54.7 | 52.1 | 49.3 | 49.1 | 50.7 | 51.7 | 52.8 | 53.6 | 54.6 | 55.2 | 55.6 |
| 50\% | 55.2 | 54.4 | 51.7 | 49.0 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.2 | 54.7 | 55.1 |
| 60\% | 54.9 | 54.1 | 51.5 | 48.5 | 48.5 | 50.1 | 51.1 | 52.2 | 53.0 | 53.4 | 54.1 | 54.6 |
| 70\% | 54.5 | 53.5 | 51.1 | 48.2 | 48.1 | 49.8 | 50.7 | 51.9 | 52.5 | 53.0 | 53.8 | 54.1 |
| 80\% | 53.9 | 52.9 | 50.5 | 47.6 | 47.7 | 49.1 | 50.2 | 51.5 | 52.0 | 52.4 | 53.4 | 53.8 |
| 90\% | 52.7 | 52.2 | 49.9 | 46.9 | 46.8 | 48.4 | 49.4 | 50.6 | 51.2 | 51.2 | 52.2 | 52.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.9 | 48.8 | 50.3 | 51.3 | 52.7 | 53.4 | 54.4 | 55.3 | 55.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.4 | 51.6 | 49.1 | 48.0 | 48.1 | 49.5 | 50.3 | 51.6 | 52.1 | 52.3 | 53.1 | 53.4 |
| Above Normal (16\%) | 56.3 | 55.1 | 52.1 | 49.0 | 48.8 | 50.3 | 51.0 | 52.0 | 52.6 | 53.4 | 54.1 | 54.6 |
| Below Normal (13\%) | 55.3 | 54.2 | 51.3 | 48.9 | 48.7 | 50.4 | 51.4 | 52.6 | 53.1 | 54.2 | 54.9 | 55.4 |
| Dry (24\%) | 55.7 | 54.8 | 52.1 | 49.1 | 49.1 | 50.7 | 52.0 | 53.0 | 54.0 | 55.1 | 55.9 | 56.5 |
| Critical (15\%) | 60.0 | 58.3 | 54.0 | 50.3 | 50.1 | 51.5 | 52.7 | 55.0 | 56.4 | 59.0 | 60.5 | 61.3 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.7 | 59.2 | 54.6 | 51.1 | 50.8 | 51.9 | 53.1 | 54.1 | 55.6 | 57.6 | 58.3 | 60.1 |
| 20\% | 58.0 | 56.6 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.8 | 55.9 | 56.5 | 57.4 |
| 30\% | 56.1 | 55.5 | 52.5 | 49.7 | 49.5 | 50.8 | 52.1 | 53.0 | 54.0 | 55.1 | 55.8 | 56.4 |
| 40\% | 55.5 | 54.8 | 51.9 | 49.3 | 48.9 | 50.6 | 51.7 | 52.8 | 53.7 | 54.6 | 55.3 | 55.7 |
| 50\% | 55.0 | 54.2 | 51.6 | 48.9 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.4 | 54.8 | 55.3 |
| 60\% | 54.5 | 54.0 | 51.3 | 48.4 | 48.4 | 50.0 | 51.0 | 52.1 | 52.8 | 53.5 | 54.2 | 54.6 |
| 70\% | 54.0 | 53.5 | 51.0 | 48.0 | 48.0 | 49.8 | 50.6 | 51.8 | 52.5 | 53.2 | 53.9 | 54.2 |
| 80\% | 53.5 | 52.9 | 50.4 | 47.3 | 47.4 | 49.0 | 50.1 | 51.5 | 52.0 | 52.6 | 53.3 | 53.8 |
| 90\% | 52.4 | 52.1 | 49.9 | 46.5 | 46.7 | 48.3 | 49.2 | 50.6 | 50.8 | 51.5 | 52.2 | 52.6 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.8 | 48.7 | 50.2 | 51.3 | 52.5 | 53.5 | 54.6 | 55.3 | 56.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.3 | 51.8 | 49.1 | 47.9 | 48.0 | 49.4 | 50.2 | 51.5 | 51.8 | 52.5 | 53.2 | 53.4 |
| Above Normal (16\%) | 56.2 | 55.1 | 52.0 | 48.9 | 48.6 | 50.2 | 51.0 | 51.9 | 52.6 | 53.5 | 54.2 | 54.7 |
| Below Normal (13\%) | 55.3 | 54.4 | 51.4 | 48.8 | 48.6 | 50.3 | 51.5 | 52.4 | 53.2 | 54.4 | 55.1 | 55.6 |
| Dry (24\%) | 55.6 | 54.8 | 52.0 | 49.0 | 48.9 | 50.7 | 51.9 | 52.9 | 54.1 | 55.2 | 56.0 | 56.8 |
| Critical (15\%) | 60.4 | 57.6 | 53.6 | 50.1 | 49.9 | 51.3 | 52.8 | 54.9 | 57.2 | 59.4 | 60.4 | 62.6 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.5 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.2 | 0.2 | 0.9 |
| 20\% | 0.7 | 0.1 | 0.0 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | -0.1 | 0.1 | 0.4 |
| 30\% | -0.3 | 0.1 | -0.2 | -0.1 | -0.1 | -0.1 | 0.1 | -0.2 | 0.1 | 0.2 | 0.1 | 0.2 |
| 40\% | -0.2 | 0.1 | -0.1 | 0.0 | -0.2 | -0.1 | 0.0 | -0.1 | 0.0 | 0.1 | 0.0 | 0.1 |
| 50\% | -0.3 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.1 |
| 60\% | -0.3 | -0.1 | -0.2 | -0.1 | -0.2 | -0.1 | -0.1 | -0.1 | -0.3 | 0.1 | 0.1 | 0.0 |
| 70\% | -0.5 | 0.0 | -0.1 | -0.2 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| 80\% | -0.3 | 0.0 | -0.1 | -0.3 | -0.3 | -0.1 | -0.1 | 0.0 | 0.0 | 0.2 | -0.1 | 0.0 |
| 90\% | -0.3 | -0.1 | 0.0 | -0.4 | -0.1 | 0.0 | -0.1 | 0.0 | -0.3 | 0.3 | 0.0 | 0.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.0 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.1 | 0.1 | 0.2 | 0.1 | 0.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.1 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.3 | 0.2 | 0.0 | 0.0 |
| Above Normal (16\%) | -0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | 0.0 | -0.2 | 0.0 | 0.1 | 0.1 | 0.1 |
| Below Normal (13\%) | 0.0 | 0.2 | 0.0 | -0.1 | -0.1 | -0.1 | 0.2 | -0.2 | 0.1 | 0.2 | 0.2 | 0.2 |
| Dry (24\%) | -0.1 | 0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | 0.1 | 0.1 | 0.1 | 0.3 |
| Critical (15\%) | 0.4 | -0.7 | -0.4 | -0.2 | -0.2 | -0.2 | 0.0 | -0.1 | 0.8 | 0.3 | -0.1 | 1.3 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.7.3 Stanislaus River below Goodwin Dam, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.3 | 59.1 | 54.5 | 51.1 | 50.8 | 51.9 | 53.1 | 54.2 | 55.5 | 57.4 | 58.2 | 59.2 |
| 20\% | 57.3 | 56.5 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.9 | 55.9 | 56.4 | 57.0 |
| 30\% | 56.4 | 55.4 | 52.7 | 49.7 | 49.5 | 50.9 | 52.0 | 53.2 | 53.9 | 55.0 | 55.7 | 56.2 |
| 40\% | 55.7 | 54.7 | 52.1 | 49.3 | 49.1 | 50.7 | 51.7 | 52.8 | 53.6 | 54.6 | 55.2 | 55.6 |
| 50\% | 55.2 | 54.4 | 51.7 | 49.0 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.2 | 54.7 | 55.1 |
| 60\% | 54.9 | 54.1 | 51.5 | 48.5 | 48.5 | 50.1 | 51.1 | 52.2 | 53.0 | 53.4 | 54.1 | 54.6 |
| 70\% | 54.5 | 53.5 | 51.1 | 48.2 | 48.1 | 49.8 | 50.7 | 51.9 | 52.5 | 53.0 | 53.8 | 54.1 |
| 80\% | 53.9 | 52.9 | 50.5 | 47.6 | 47.7 | 49.1 | 50.2 | 51.5 | 52.0 | 52.4 | 53.4 | 53.8 |
| 90\% | 52.7 | 52.2 | 49.9 | 46.9 | 46.8 | 48.4 | 49.4 | 50.6 | 51.2 | 51.2 | 52.2 | 52.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.9 | 48.8 | 50.3 | 51.3 | 52.7 | 53.4 | 54.4 | 55.3 | 55.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.4 | 51.6 | 49.1 | 48.0 | 48.1 | 49.5 | 50.3 | 51.6 | 52.1 | 52.3 | 53.1 | 53.4 |
| Above Normal (16\%) | 56.3 | 55.1 | 52.1 | 49.0 | 48.8 | 50.3 | 51.0 | 52.0 | 52.6 | 53.4 | 54.1 | 54.6 |
| Below Normal (13\%) | 55.3 | 54.2 | 51.3 | 48.9 | 48.7 | 50.4 | 51.4 | 52.6 | 53.1 | 54.2 | 54.9 | 55.4 |
| Dry (24\%) | 55.7 | 54.8 | 52.1 | 49.1 | 49.1 | 50.7 | 52.0 | 53.0 | 54.0 | 55.1 | 55.9 | 56.5 |
| Critical (15\%) | 60.0 | 58.3 | 54.0 | 50.3 | 50.1 | 51.5 | 52.7 | 55.0 | 56.4 | 59.0 | 60.5 | 61.3 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 58.5 | 57.6 | 54.1 | 50.9 | 50.8 | 52.1 | 53.1 | 54.0 | 55.3 | 56.7 | 57.3 | 58.2 |
| 20\% | 57.0 | 56.0 | 53.3 | 50.1 | 50.1 | 51.4 | 52.4 | 53.5 | 54.7 | 55.6 | 56.0 | 56.6 |
| 30\% | 56.0 | 54.7 | 52.8 | 49.7 | 49.5 | 50.9 | 52.0 | 52.9 | 53.9 | 54.8 | 55.4 | 55.9 |
| 40\% | 55.2 | 54.3 | 51.7 | 49.1 | 49.1 | 50.7 | 51.7 | 52.6 | 53.5 | 54.4 | 54.9 | 55.2 |
| 50\% | 54.8 | 53.9 | 51.5 | 48.9 | 48.8 | 50.4 | 51.4 | 52.4 | 53.2 | 54.0 | 54.5 | 54.8 |
| 60\% | 54.5 | 53.7 | 51.3 | 48.6 | 48.5 | 50.1 | 51.2 | 52.1 | 52.8 | 53.6 | 54.0 | 54.4 |
| 70\% | 54.1 | 53.2 | 50.8 | 48.1 | 48.1 | 49.8 | 50.8 | 51.9 | 52.5 | 53.3 | 53.7 | 53.9 |
| 80\% | 53.4 | 52.9 | 50.5 | 47.7 | 47.7 | 49.0 | 50.3 | 51.4 | 52.0 | 52.9 | 53.2 | 53.4 |
| 90\% | 52.6 | 52.1 | 49.7 | 47.1 | 46.9 | 48.6 | 49.6 | 50.6 | 51.4 | 51.9 | 52.4 | 52.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 55.5 | 54.5 | 51.8 | 48.8 | 48.9 | 50.4 | 51.4 | 52.4 | 53.4 | 54.4 | 55.0 | 55.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.2 | 51.5 | 49.0 | 48.0 | 48.4 | 49.6 | 50.4 | 51.5 | 52.1 | 52.8 | 53.1 | 53.2 |
| Above Normal (16\%) | 55.8 | 54.7 | 51.9 | 49.0 | 48.8 | 50.2 | 51.1 | 51.9 | 52.7 | 53.6 | 54.0 | 54.3 |
| Below Normal (13\%) | 54.6 | 53.7 | 51.1 | 48.8 | 48.6 | 50.4 | 51.4 | 52.3 | 53.2 | 54.2 | 54.6 | 55.1 |
| Dry (24\%) | 55.4 | 54.5 | 52.0 | 49.0 | 48.9 | 50.7 | 51.9 | 52.9 | 54.0 | 54.9 | 55.4 | 55.9 |
| Critical (15\%) | 58.7 | 57.5 | 53.8 | 50.2 | 50.2 | 51.6 | 52.7 | 54.2 | 56.0 | 58.4 | 59.6 | 59.8 |

Alternative 3 minus Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.7 | -1.4 | -0.4 | -0.1 | 0.0 | 0.2 | 0.0 | -0.2 | -0.2 | -0.7 | -0.9 | -0.9 |
| 20\% | -0.3 | -0.5 | 0.1 | -0.3 | -0.1 | 0.0 | 0.1 | -0.1 | -0.2 | -0.3 | -0.4 | -0.4 |
| 30\% | -0.4 | -0.7 | 0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.3 | 0.0 | -0.2 | -0.3 | -0.3 |
| 40\% | -0.5 | -0.4 | -0.3 | -0.2 | 0.0 | 0.0 | 0.0 | -0.2 | -0.1 | -0.1 | -0.4 | -0.4 |
| 50\% | -0.4 | -0.5 | -0.2 | -0.1 | 0.0 | 0.1 | 0.0 | -0.2 | -0.1 | -0.2 | -0.2 | -0.3 |
| 60\% | -0.3 | -0.4 | -0.2 | 0.1 | -0.1 | -0.1 | 0.0 | -0.1 | -0.2 | 0.2 | 0.0 | -0.2 |
| 70\% | -0.4 | -0.2 | -0.2 | -0.1 | 0.0 | 0.0 | 0.1 | -0.1 | 0.0 | 0.3 | -0.1 | -0.3 |
| 80\% | -0.5 | -0.1 | -0.1 | 0.1 | 0.0 | -0.1 | 0.0 | -0.1 | 0.0 | 0.4 | -0.3 | -0.4 |
| 90\% | -0.1 | -0.1 | -0.1 | 0.3 | 0.1 | 0.2 | 0.3 | 0.0 | 0.2 | 0.6 | 0.2 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.5 | -0.4 | -0.1 | -0.1 | 0.0 | 0.0 | 0.0 | -0.3 | -0.1 | 0.0 | -0.3 | -0.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.3 | -0.2 | -0.1 | 0.0 | 0.2 | 0.1 | 0.1 | -0.1 | -0.1 | 0.5 | 0.0 | -0.2 |
| Above Normal (16\%) | -0.5 | -0.4 | -0.2 | 0.0 | 0.0 | 0.0 | 0.1 | -0.1 | 0.1 | 0.2 | -0.1 | -0.3 |
| Below Normal (13\%) | -0.7 | -0.5 | -0.2 | -0.1 | -0.1 | 0.0 | 0.0 | -0.3 | 0.1 | -0.1 | -0.2 | -0.3 |
| Dry (24\%) | -0.3 | -0.3 | -0.1 | -0.1 | -0.1 | 0.0 | 0.0 | -0.1 | -0.1 | -0.2 | -0.5 | -0.7 |
| Critical (15\%) | -1.3 | -0.8 | -0.2 | -0.1 | 0.0 | 0.1 | 0.0 | -0.8 | -0.4 | -0.6 | -0.9 | -1.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81-year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.7.4 Stanislaus River below Goodwin Dam, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 60.3 | 59.1 | 54.5 | 51.1 | 50.8 | 51.9 | 53.1 | 54.2 | 55.5 | 57.4 | 58.2 | 59.2 |
| 20\% | 57.3 | 56.5 | 53.3 | 50.3 | 50.2 | 51.4 | 52.4 | 53.6 | 54.9 | 55.9 | 56.4 | 57.0 |
| 30\% | 56.4 | 55.4 | 52.7 | 49.7 | 49.5 | 50.9 | 52.0 | 53.2 | 53.9 | 55.0 | 55.7 | 56.2 |
| 40\% | 55.7 | 54.7 | 52.1 | 49.3 | 49.1 | 50.7 | 51.7 | 52.8 | 53.6 | 54.6 | 55.2 | 55.6 |
| 50\% | 55.2 | 54.4 | 51.7 | 49.0 | 48.8 | 50.3 | 51.4 | 52.6 | 53.3 | 54.2 | 54.7 | 55.1 |
| 60\% | 54.9 | 54.1 | 51.5 | 48.5 | 48.5 | 50.1 | 51.1 | 52.2 | 53.0 | 53.4 | 54.1 | 54.6 |
| 70\% | 54.5 | 53.5 | 51.1 | 48.2 | 48.1 | 49.8 | 50.7 | 51.9 | 52.5 | 53.0 | 53.8 | 54.1 |
| 80\% | 53.9 | 52.9 | 50.5 | 47.6 | 47.7 | 49.1 | 50.2 | 51.5 | 52.0 | 52.4 | 53.4 | 53.8 |
| 90\% | 52.7 | 52.2 | 49.9 | 46.9 | 46.8 | 48.4 | 49.4 | 50.6 | 51.2 | 51.2 | 52.2 | 52.3 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.0 | 54.9 | 51.9 | 48.9 | 48.8 | 50.3 | 51.3 | 52.7 | 53.4 | 54.4 | 55.3 | 55.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52.4 | 51.6 | 49.1 | 48.0 | 48.1 | 49.5 | 50.3 | 51.6 | 52.1 | 52.3 | 53.1 | 53.4 |
| Above Normal (16\%) | 56.3 | 55.1 | 52.1 | 49.0 | 48.8 | 50.3 | 51.0 | 52.0 | 52.6 | 53.4 | 54.1 | 54.6 |
| Below Normal (13\%) | 55.3 | 54.2 | 51.3 | 48.9 | 48.7 | 50.4 | 51.4 | 52.6 | 53.1 | 54.2 | 54.9 | 55.4 |
| Dry (24\%) | 55.7 | 54.8 | 52.1 | 49.1 | 49.1 | 50.7 | 52.0 | 53.0 | 54.0 | 55.1 | 55.9 | 56.5 |
| Critical (15\%) | 60.0 | 58.3 | 54.0 | 50.3 | 50.1 | 51.5 | 52.7 | 55.0 | 56.4 | 59.0 | 60.5 | 61.3 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.8 | 60.4 | 54.8 | 51.2 | 50.7 | 51.9 | 53.2 | 54.3 | 56.3 | 58.3 | 61.3 | 64.0 |
| 20\% | 58.8 | 58.0 | 53.4 | 50.3 | 50.2 | 51.3 | 52.5 | 53.7 | 55.1 | 56.6 | 57.6 | 58.7 |
| 30\% | 56.7 | 56.0 | 52.7 | 49.6 | 49.4 | 50.8 | 52.2 | 53.0 | 54.2 | 55.6 | 56.3 | 56.9 |
| 40\% | 55.7 | 54.9 | 52.0 | 49.1 | 48.9 | 50.5 | 51.9 | 52.9 | 53.8 | 54.7 | 55.6 | 55.9 |
| 50\% | 55.2 | 54.4 | 51.6 | 48.9 | 48.8 | 50.1 | 51.4 | 52.7 | 53.2 | 54.5 | 54.9 | 55.3 |
| 60\% | 54.8 | 54.1 | 51.5 | 48.4 | 48.3 | 49.9 | 51.0 | 52.2 | 52.8 | 53.5 | 54.2 | 54.7 |
| 70\% | 54.2 | 53.6 | 50.9 | 48.0 | 47.8 | 49.5 | 50.6 | 51.8 | 52.2 | 53.2 | 53.9 | 54.3 |
| 80\% | 53.6 | 53.0 | 50.5 | 47.3 | 47.4 | 48.9 | 50.0 | 51.2 | 52.0 | 52.6 | 53.4 | 53.7 |
| 90\% | 52.5 | 52.1 | 49.7 | 46.2 | 46.7 | 48.2 | 49.1 | 50.5 | 50.7 | 51.5 | 52.2 | 52.7 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 56.6 | 55.3 | 52.0 | 48.8 | 48.6 | 50.1 | 51.3 | 52.7 | 53.4 | 54.8 | 55.9 | 56.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 53.1 | 52.1 | 49.2 | 47.9 | 47.9 | 49.3 | 50.1 | 51.4 | 51.7 | 52.5 | 53.2 | 53.6 |
| Above Normal (16\%) | 56.6 | 55.5 | 52.2 | 48.9 | 48.6 | 50.1 | 50.9 | 52.0 | 52.5 | 53.6 | 54.4 | 55.0 |
| Below Normal (13\%) | 56.0 | 54.4 | 51.5 | 48.7 | 48.5 | 50.2 | 51.5 | 52.5 | 53.4 | 54.8 | 55.6 | 56.4 |
| Dry (24\%) | 56.3 | 55.3 | 52.2 | 49.1 | 48.9 | 50.6 | 51.9 | 53.0 | 54.3 | 55.7 | 57.1 | 58.4 |
| Critical (15\%) | 60.9 | 58.3 | 53.5 | 49.8 | 49.7 | 51.1 | 53.3 | 55.7 | 56.5 | 59.3 | 61.3 | 63.0 |

Alternative 5 minus Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 4.5 | 1.4 | 0.3 | 0.1 | -0.2 | -0.1 | 0.1 | 0.1 | 0.8 | 1.0 | 3.2 | 4.8 |
| 20\% | 1.4 | 1.6 | 0.1 | -0.1 | -0.1 | -0.1 | 0.2 | 0.1 | 0.3 | 0.6 | 1.2 | 1.7 |
| 30\% | 0.3 | 0.6 | -0.1 | -0.1 | -0.1 | -0.1 | 0.2 | -0.2 | 0.3 | 0.6 | 0.6 | 0.7 |
| 40\% | 0.0 | 0.2 | -0.1 | -0.2 | -0.2 | -0.2 | 0.1 | 0.0 | 0.2 | 0.1 | 0.4 | 0.3 |
| 50\% | 0.0 | 0.1 | 0.0 | -0.1 | -0.1 | -0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.2 | 0.1 |
| 60\% | -0.1 | 0.0 | 0.0 | -0.1 | -0.2 | -0.2 | -0.1 | 0.0 | -0.2 | 0.2 | 0.1 | 0.1 |
| 70\% | -0.3 | 0.2 | -0.2 | -0.2 | -0.3 | -0.3 | -0.1 | -0.1 | -0.3 | 0.1 | 0.1 | 0.2 |
| 80\% | -0.2 | 0.0 | 0.0 | -0.3 | -0.3 | -0.2 | -0.2 | -0.2 | 0.0 | 0.2 | 0.0 | -0.1 |
| 90\% | -0.2 | -0.1 | -0.2 | -0.7 | -0.1 | -0.2 | -0.2 | -0.1 | -0.5 | 0.2 | 0.0 | 0.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.6 | 0.4 | 0.0 | -0.1 | -0.2 | -0.2 | 0.0 | 0.0 | 0.0 | 0.4 | 0.6 | 1.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0.6 | 0.4 | 0.1 | -0.1 | -0.2 | -0.2 | -0.2 | -0.1 | -0.4 | 0.2 | 0.1 | 0.2 |
| Above Normal (16\%) | 0.3 | 0.4 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | -0.1 | -0.1 | 0.2 | 0.3 | 0.4 |
| Below Normal (13\%) | 0.7 | 0.2 | 0.1 | -0.1 | -0.2 | -0.2 | 0.1 | -0.1 | 0.3 | 0.5 | 0.8 | 1.0 |
| Dry (24\%) | 0.5 | 0.5 | 0.1 | 0.0 | -0.1 | -0.1 | -0.1 | 0.0 | 0.2 | 0.6 | 1.2 | 1.9 |
| Critical (15\%) | 0.8 | 0.0 | -0.5 | -0.4 | -0.5 | -0.4 | 0.5 | 0.7 | 0.1 | 0.3 | 0.8 | 1.7 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030,
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

5C.3.3.8 Stanislaus River at Orange Blossom Bridge Temperature

Table 5C.3.3.8.1 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 61.6 | 58.7 | 53.5 | 51.3 | 52.5 | 55.8 | 55.3 | 57.7 | 63.9 | 65.6 | 65.4 | 64.5 |
| 20\% | 59.3 | 56.9 | 52.6 | 50.8 | 51.7 | 55.1 | 54.8 | 56.8 | 62.5 | 64.6 | 64.2 | 63.3 |
| 30\% | 57.6 | 56.2 | 52.3 | 50.1 | 51.2 | 54.6 | 54.1 | 56.0 | 61.6 | 64.1 | 63.4 | 62.0 |
| 40\% | 56.8 | 55.1 | 51.5 | 49.6 | 50.7 | 54.0 | 53.6 | 55.3 | 60.7 | 63.7 | 62.9 | 61.7 |
| 50\% | 56.4 | 54.9 | 51.1 | 49.1 | 50.3 | 53.7 | 53.1 | 55.0 | 59.3 | 63.2 | 62.5 | 61.2 |
| 60\% | 55.9 | 54.6 | 50.7 | 48.8 | 50.1 | 53.2 | 52.7 | 54.4 | 56.6 | 62.6 | 62.2 | 60.7 |
| 70\% | 55.2 | 54.1 | 50.5 | 48.4 | 49.6 | 52.1 | 52.2 | 53.9 | 55.9 | 62.1 | 61.9 | 60.4 |
| 80\% | 54.9 | 53.7 | 50.2 | 47.9 | 49.2 | 51.0 | 51.9 | 53.6 | 55.3 | 61.5 | 61.5 | 59.9 |
| 90\% | 54.0 | 52.7 | 49.8 | 47.1 | 48.4 | 49.7 | 50.8 | 52.6 | 54.4 | 58.6 | 59.8 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 57.2 | 55.3 | 51.4 | 49.2 | 50.4 | 53.2 | 53.2 | 55.1 | 59.0 | 62.9 | 62.7 | 61.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 53.6 | 52.3 | 49.0 | 48.6 | 49.5 | 50.8 | 51.5 | 53.3 | 55.2 | 60.0 | 60.0 | 58.5 |
| Above Normal (16\%) | 57.5 | 55.7 | 51.7 | 49.7 | 50.7 | 53.6 | 52.8 | 54.6 | 58.0 | 62.5 | 62.2 | 60.9 |
| Below Normal (13\%) | 56.5 | 54.7 | 50.9 | 49.1 | 50.4 | 53.9 | 53.4 | 54.8 | 59.5 | 63.4 | 62.8 | 61.5 |
| Dry (24\%) | 56.9 | 55.2 | 51.3 | 49.2 | 50.7 | 54.5 | 54.1 | 56.0 | 61.4 | 64.0 | 63.5 | 62.4 |
| Critical (15\%) | 61.4 | 57.7 | 52.6 | 50.1 | 51.7 | 54.9 | 55.5 | 58.2 | 63.7 | 67.5 | 67.5 | 66.9 |

Alternative 1

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.7 | 58.9 | 53.4 | 51.2 | 52.1 | 55.3 | 56.2 | 56.9 | 63.5 | 65.3 | 65.3 | 64.1 |
| 20\% | 60.8 | 57.0 | 52.7 | 50.8 | 51.5 | 54.8 | 55.6 | 55.9 | 62.4 | 64.5 | 64.1 | 62.9 |
| 30\% | 60.1 | 55.7 | 52.4 | 50.0 | 50.9 | 54.3 | 55.3 | 55.5 | 61.6 | 64.0 | 63.3 | 61.9 |
| 40\% | 58.9 | 55.2 | 51.7 | 49.5 | 50.5 | 53.6 | 54.6 | 55.2 | 60.0 | 63.6 | 62.9 | 61.5 |
| 50\% | 58.3 | 54.7 | 51.3 | 49.1 | 50.2 | 53.1 | 53.9 | 54.8 | 58.4 | 63.0 | 62.5 | 61.0 |
| 60\% | 57.6 | 54.4 | 51.0 | 49.0 | 49.8 | 52.8 | 53.3 | 54.4 | 56.3 | 62.5 | 62.2 | 60.6 |
| 70\% | 57.0 | 54.1 | 50.7 | 48.4 | 49.5 | 52.2 | 52.6 | 54.0 | 55.4 | 61.9 | 61.8 | 60.1 |
| 80\% | 56.5 | 53.4 | 50.3 | 48.0 | 49.1 | 51.5 | 51.9 | 53.7 | 54.8 | 61.3 | 61.4 | 59.6 |
| 90\% | 55.7 | 52.7 | 49.9 | 47.4 | 48.5 | 50.5 | 51.0 | 52.8 | 53.5 | 60.1 | 60.3 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58.8 | 55.2 | 51.5 | 49.2 | 50.3 | 53.1 | 53.9 | 54.9 | 58.5 | 62.8 | 62.7 | 61.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 55.0 | 52.1 | 49.0 | 48.6 | 49.3 | 51.2 | 51.7 | 53.5 | 54.5 | 60.1 | 60.3 | 58.4 |
| Above Normal (16\%) | 59.3 | 55.5 | 51.9 | 49.7 | 50.5 | 53.3 | 53.4 | 54.4 | 57.7 | 62.4 | 62.2 | 60.7 |
| Below Normal (13\%) | 57.9 | 54.4 | 50.9 | 49.1 | 50.0 | 53.3 | 54.1 | 54.8 | 58.9 | 63.3 | 62.7 | 61.1 |
| Dry (24\%) | 58.8 | 55.1 | 51.5 | 49.3 | 50.6 | 54.1 | 55.3 | 55.6 | 61.3 | 63.9 | 63.4 | 62.2 |
| Critical (15\%) | 62.6 | 58.2 | 53.1 | 50.3 | 51.8 | 55.0 | 56.5 | 57.6 | 63.3 | 66.8 | 67.6 | 66.5 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1.1 | 0.2 | -0.1 | 0.0 | -0.4 | -0.5 | 0.9 | -0.8 | -0.3 | -0.2 | -0.1 | -0.4 |
| 20\% | 1.5 | 0.1 | 0.0 | 0.0 | -0.1 | -0.2 | 0.8 | -0.9 | -0.1 | -0.1 | -0.1 | -0.4 |
| 30\% | 2.5 | -0.5 | 0.1 | -0.1 | -0.3 | -0.3 | 1.2 | -0.4 | -0.1 | -0.1 | -0.1 | -0.1 |
| 40\% | 2.1 | 0.2 | 0.3 | -0.1 | -0.2 | -0.4 | 1.0 | -0.1 | -0.7 | -0.1 | 0.0 | -0.2 |
| 50\% | 1.9 | -0.2 | 0.2 | 0.0 | -0.1 | -0.6 | 0.8 | -0.2 | -0.9 | -0.2 | 0.0 | -0.2 |
| 60\% | 1.7 | -0.1 | 0.3 | 0.2 | -0.3 | -0.4 | 0.6 | 0.0 | -0.3 | -0.1 | 0.0 | -0.1 |
| 70\% | 1.7 | 0.0 | 0.2 | 0.0 | -0.1 | 0.1 | 0.4 | 0.1 | -0.5 | -0.2 | 0.0 | -0.3 |
| 80\% | 1.6 | -0.2 | 0.1 | 0.1 | -0.2 | 0.6 | 0.1 | 0.1 | -0.5 | -0.2 | -0.1 | -0.3 |
| 90\% | 1.7 | 0.0 | 0.1 | 0.3 | 0.1 | 0.8 | 0.2 | 0.2 | -1.0 | 1.5 | 0.5 | 0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1.6 | -0.1 | 0.2 | 0.0 | -0.1 | -0.1 | 0.7 | -0.2 | -0.4 | -0.1 | 0.1 | -0.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1.4 | -0.2 | 0.0 | 0.0 | -0.1 | 0.5 | 0.2 | 0.1 | -0.7 | 0.2 | 0.3 | -0.1 |
| Above Normal (16\%) | 1.8 | -0.2 | 0.2 | 0.0 | -0.2 | -0.3 | 0.6 | -0.2 | -0.3 | -0.1 | -0.1 | -0.2 |
| Below Normal (13\%) | 1.4 | -0.3 | 0.1 | 0.0 | -0.3 | -0.6 | 0.8 | 0.0 | -0.6 | -0.2 | -0.1 | -0.3 |
| Dry (24\%) | 1.9 | -0.1 | 0.2 | 0.1 | -0.1 | -0.5 | 1.2 | -0.5 | -0.1 | -0.1 | -0.1 | -0.2 |
| Critical (15\%) | 1.2 | 0.5 | 0.4 | 0.2 | 0.1 | 0.1 | 1.0 | -0.7 | -0.4 | -0.7 | 0.1 | -0.4 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.8.2 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.7 | 58.9 | 53.4 | 51.2 | 52.1 | 55.3 | 56.2 | 56.9 | 63.5 | 65.3 | 65.3 | 64.1 |
| 20\% | 60.8 | 57.0 | 52.7 | 50.8 | 51.5 | 54.8 | 55.6 | 55.9 | 62.4 | 64.5 | 64.1 | 62.9 |
| 30\% | 60.1 | 55.7 | 52.4 | 50.0 | 50.9 | 54.3 | 55.3 | 55.5 | 61.6 | 64.0 | 63.3 | 61.9 |
| 40\% | 58.9 | 55.2 | 51.7 | 49.5 | 50.5 | 53.6 | 54.6 | 55.2 | 60.0 | 63.6 | 62.9 | 61.5 |
| 50\% | 58.3 | 54.7 | 51.3 | 49.1 | 50.2 | 53.1 | 53.9 | 54.8 | 58.4 | 63.0 | 62.5 | 61.0 |
| 60\% | 57.6 | 54.4 | 51.0 | 49.0 | 49.8 | 52.8 | 53.3 | 54.4 | 56.3 | 62.5 | 62.2 | 60.6 |
| 70\% | 57.0 | 54.1 | 50.7 | 48.4 | 49.5 | 52.2 | 52.6 | 54.0 | 55.4 | 61.9 | 61.8 | 60.1 |
| 80\% | 56.5 | 53.4 | 50.3 | 48.0 | 49.1 | 51.5 | 51.9 | 53.7 | 54.8 | 61.3 | 61.4 | 59.6 |
| 90\% | 55.7 | 52.7 | 49.9 | 47.4 | 48.5 | 50.5 | 51.0 | 52.8 | 53.5 | 60.1 | 60.3 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58.8 | 55.2 | 51.5 | 49.2 | 50.3 | 53.1 | 53.9 | 54.9 | 58.5 | 62.8 | 62.7 | 61.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 55.0 | 52.1 | 49.0 | 48.6 | 49.3 | 51.2 | 51.7 | 53.5 | 54.5 | 60.1 | 60.3 | 58.4 |
| Above Normal (16\%) | 59.3 | 55.5 | 51.9 | 49.7 | 50.5 | 53.3 | 53.4 | 54.4 | 57.7 | 62.4 | 62.2 | 60.7 |
| Below Normal (13\%) | 57.9 | 54.4 | 50.9 | 49.1 | 50.0 | 53.3 | 54.1 | 54.8 | 58.9 | 63.3 | 62.7 | 61.1 |
| Dry (24\%) | 58.8 | 55.1 | 51.5 | 49.3 | 50.6 | 54.1 | 55.3 | 55.6 | 61.3 | 63.9 | 63.4 | 62.2 |
| Critical (15\%) | 62.6 | 58.2 | 53.1 | 50.3 | 51.8 | 55.0 | 56.5 | 57.6 | 63.3 | 66.8 | 67.6 | 66.5 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 61.6 | 58.7 | 53.5 | 51.3 | 52.5 | 55.8 | 55.3 | 57.7 | 63.9 | 65.6 | 65.4 | 64.5 |
| 20\% | 59.3 | 56.9 | 52.6 | 50.8 | 51.7 | 55.1 | 54.8 | 56.8 | 62.5 | 64.6 | 64.2 | 63.3 |
| 30\% | 57.6 | 56.2 | 52.3 | 50.1 | 51.2 | 54.6 | 54.1 | 56.0 | 61.6 | 64.1 | 63.4 | 62.0 |
| 40\% | 56.8 | 55.1 | 51.5 | 49.6 | 50.7 | 54.0 | 53.6 | 55.3 | 60.7 | 63.7 | 62.9 | 61.7 |
| 50\% | 56.4 | 54.9 | 51.1 | 49.1 | 50.3 | 53.7 | 53.1 | 55.0 | 59.3 | 63.2 | 62.5 | 61.2 |
| 60\% | 55.9 | 54.6 | 50.7 | 48.8 | 50.1 | 53.2 | 52.7 | 54.4 | 56.6 | 62.6 | 62.2 | 60.7 |
| 70\% | 55.2 | 54.1 | 50.5 | 48.4 | 49.6 | 52.1 | 52.2 | 53.9 | 55.9 | 62.1 | 61.9 | 60.4 |
| 80\% | 54.9 | 53.7 | 50.2 | 47.9 | 49.2 | 51.0 | 51.9 | 53.6 | 55.3 | 61.5 | 61.5 | 59.9 |
| 90\% | 54.0 | 52.7 | 49.8 | 47.1 | 48.4 | 49.7 | 50.8 | 52.6 | 54.4 | 58.6 | 59.8 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 57.2 | 55.3 | 51.4 | 49.2 | 50.4 | 53.2 | 53.2 | 55.1 | 59.0 | 62.9 | 62.7 | 61.5 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 53.6 | 52.3 | 49.0 | 48.6 | 49.5 | 50.8 | 51.5 | 53.3 | 55.2 | 60.0 | 60.0 | 58.5 |
| Above Normal (16\%) | 57.5 | 55.7 | 51.7 | 49.7 | 50.7 | 53.6 | 52.8 | 54.6 | 58.0 | 62.5 | 62.2 | 60.9 |
| Below Normal (13\%) | 56.5 | 54.7 | 50.9 | 49.1 | 50.4 | 53.9 | 53.4 | 54.8 | 59.5 | 63.4 | 62.8 | 61.5 |
| Dry (24\%) | 56.9 | 55.2 | 51.3 | 49.2 | 50.7 | 54.5 | 54.1 | 56.0 | 61.4 | 64.0 | 63.5 | 62.4 |
| Critical (15\%) | 61.4 | 57.7 | 52.6 | 50.1 | 51.7 | 54.9 | 55.5 | 58.2 | 63.7 | 67.5 | 67.5 | 66.9 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.1 | -0.2 | 0.1 | 0.0 | 0.4 | 0.5 | -0.9 | 0.8 | 0.3 | 0.2 | 0.1 | 0.4 |
| 20\% | -1.5 | -0.1 | 0.0 | 0.0 | 0.1 | 0.2 | -0.8 | 0.9 | 0.1 | 0.1 | 0.1 | 0.4 |
| 30\% | -2.5 | 0.5 | -0.1 | 0.1 | 0.3 | 0.3 | -1.2 | 0.4 | 0.1 | 0.1 | 0.1 | 0.1 |
| 40\% | -2.1 | -0.2 | -0.3 | 0.1 | 0.2 | 0.4 | -1.0 | 0.1 | 0.7 | 0.1 | 0.0 | 0.2 |
| 50\% | -1.9 | 0.2 | -0.2 | 0.0 | 0.1 | 0.6 | -0.8 | 0.2 | 0.9 | 0.2 | 0.0 | 0.2 |
| 60\% | -1.7 | 0.1 | -0.3 | -0.2 | 0.3 | 0.4 | -0.6 | 0.0 | 0.3 | 0.1 | 0.0 | 0.1 |
| 70\% | -1.7 | 0.0 | -0.2 | 0.0 | 0.1 | -0.1 | -0.4 | -0.1 | 0.5 | 0.2 | 0.0 | 0.3 |
| 80\% | -1.6 | 0.2 | -0.1 | -0.1 | 0.2 | -0.6 | -0.1 | -0.1 | 0.5 | 0.2 | 0.1 | 0.3 |
| 90\% | -1.7 | 0.0 | -0.1 | -0.3 | -0.1 | -0.8 | -0.2 | -0.2 | 1.0 | -1.5 | -0.5 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1.6 | 0.1 | -0.2 | 0.0 | 0.1 | 0.1 | -0.7 | 0.2 | 0.4 | 0.1 | -0.1 | 0.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -1.4 | 0.2 | 0.0 | 0.0 | 0.1 | -0.5 | -0.2 | -0.1 | 0.7 | -0.2 | -0.3 | 0.1 |
| Above Normal (16\%) | -1.8 | 0.2 | -0.2 | 0.0 | 0.2 | 0.3 | -0.6 | 0.2 | 0.3 | 0.1 | 0.1 | 0.2 |
| Below Normal (13\%) | -1.4 | 0.3 | -0.1 | 0.0 | 0.3 | 0.6 | -0.8 | 0.0 | 0.6 | 0.2 | 0.1 | 0.3 |
| Dry (24\%) | -1.9 | 0.1 | -0.2 | -0.1 | 0.1 | 0.5 | -1.2 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 |
| Critical (15\%) | -1.2 | -0.5 | -0.4 | -0.2 | -0.1 | -0.1 | -1.0 | 0.7 | 0.4 | 0.7 | -0.1 | 0.4 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.8.3 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{a}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.7 | 58.9 | 53.4 | 51.2 | 52.1 | 55.3 | 56.2 | 56.9 | 63.5 | 65.3 | 65.3 | 64.1 |
| 20\% | 60.8 | 57.0 | 52.7 | 50.8 | 51.5 | 54.8 | 55.6 | 55.9 | 62.4 | 64.5 | 64.1 | 62.9 |
| 30\% | 60.1 | 55.7 | 52.4 | 50.0 | 50.9 | 54.3 | 55.3 | 55.5 | 61.6 | 64.0 | 63.3 | 61.9 |
| 40\% | 58.9 | 55.2 | 51.7 | 49.5 | 50.5 | 53.6 | 54.6 | 55.2 | 60.0 | 63.6 | 62.9 | 61.5 |
| 50\% | 58.3 | 54.7 | 51.3 | 49.1 | 50.2 | 53.1 | 53.9 | 54.8 | 58.4 | 63.0 | 62.5 | 61.0 |
| 60\% | 57.6 | 54.4 | 51.0 | 49.0 | 49.8 | 52.8 | 53.3 | 54.4 | 56.3 | 62.5 | 62.2 | 60.6 |
| 70\% | 57.0 | 54.1 | 50.7 | 48.4 | 49.5 | 52.2 | 52.6 | 54.0 | 55.4 | 61.9 | 61.8 | 60.1 |
| 80\% | 56.5 | 53.4 | 50.3 | 48.0 | 49.1 | 51.5 | 51.9 | 53.7 | 54.8 | 61.3 | 61.4 | 59.6 |
| 90\% | 55.7 | 52.7 | 49.9 | 47.4 | 48.5 | 50.5 | 51.0 | 52.8 | 53.5 | 60.1 | 60.3 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58.8 | 55.2 | 51.5 | 49.2 | 50.3 | 53.1 | 53.9 | 54.9 | 58.5 | 62.8 | 62.7 | 61.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 55.0 | 52.1 | 49.0 | 48.6 | 49.3 | 51.2 | 51.7 | 53.5 | 54.5 | 60.1 | 60.3 | 58.4 |
| Above Normal (16\%) | 59.3 | 55.5 | 51.9 | 49.7 | 50.5 | 53.3 | 53.4 | 54.4 | 57.7 | 62.4 | 62.2 | 60.7 |
| Below Normal (13\%) | 57.9 | 54.4 | 50.9 | 49.1 | 50.0 | 53.3 | 54.1 | 54.8 | 58.9 | 63.3 | 62.7 | 61.1 |
| Dry (24\%) | 58.8 | 55.1 | 51.5 | 49.3 | 50.6 | 54.1 | 55.3 | 55.6 | 61.3 | 63.9 | 63.4 | 62.2 |
| Critical (15\%) | 62.6 | 58.2 | 53.1 | 50.3 | 51.8 | 55.0 | 56.5 | 57.6 | 63.3 | 66.8 | 67.6 | 66.5 |

Alternative 3

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 61.3 | 57.6 | 53.2 | 51.0 | 52.9 | 55.8 | 55.5 | 57.8 | 63.9 | 65.8 | 64.8 | 63.5 |
| 20\% | 60.0 | 56.6 | 52.7 | 50.7 | 51.9 | 55.2 | 54.8 | 56.7 | 63.2 | 64.8 | 63.8 | 62.6 |
| 30\% | 59.2 | 55.4 | 52.2 | 50.2 | 51.3 | 54.6 | 54.3 | 56.2 | 62.6 | 64.2 | 63.1 | 62.1 |
| 40\% | 58.3 | 54.8 | 51.6 | 49.5 | 50.9 | 54.1 | 53.8 | 55.6 | 62.1 | 63.9 | 62.8 | 61.4 |
| 50\% | 57.9 | 54.5 | 51.1 | 49.2 | 50.5 | 53.7 | 53.2 | 55.2 | 61.7 | 63.5 | 62.4 | 61.1 |
| 60\% | 57.4 | 54.1 | 50.9 | 48.8 | 50.1 | 53.4 | 52.8 | 54.7 | 61.3 | 63.3 | 62.1 | 60.8 |
| 70\% | 56.8 | 53.9 | 50.5 | 48.5 | 49.7 | 52.6 | 52.5 | 54.4 | 60.8 | 63.1 | 61.9 | 60.3 |
| 80\% | 56.4 | 53.5 | 50.2 | 48.2 | 49.4 | 51.6 | 51.8 | 53.8 | 60.3 | 62.7 | 61.6 | 60.0 |
| 90\% | 55.4 | 52.9 | 49.9 | 47.5 | 48.5 | 50.5 | 51.1 | 53.1 | 59.0 | 61.4 | 60.4 | 55.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58.3 | 55.0 | 51.4 | 49.3 | 50.6 | 53.4 | 53.4 | 55.3 | 61.3 | 63.3 | 62.4 | 60.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 54.7 | 52.0 | 48.9 | 48.7 | 49.6 | 51.5 | 51.8 | 53.7 | 58.8 | 60.6 | 59.8 | 58.2 |
| Above Normal (16\%) | 58.9 | 55.3 | 51.7 | 49.8 | 50.7 | 53.4 | 53.1 | 55.0 | 61.7 | 63.5 | 62.2 | 60.8 |
| Below Normal (13\%) | 57.5 | 54.1 | 50.7 | 49.0 | 50.1 | 54.0 | 53.5 | 55.1 | 61.7 | 63.7 | 62.6 | 61.2 |
| Dry (24\%) | 58.4 | 54.9 | 51.4 | 49.3 | 51.0 | 54.6 | 54.3 | 56.3 | 62.5 | 64.2 | 63.1 | 61.8 |
| Critical (15\%) | 61.3 | 57.5 | 52.8 | 50.2 | 52.3 | 55.2 | 55.6 | 57.9 | 64.0 | 67.0 | 66.5 | 64.9 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.4 | -1.4 | -0.2 | -0.3 | 0.8 | 0.5 | -0.7 | 0.9 | 0.4 | 0.5 | -0.5 | -0.7 |
| 20\% | -0.8 | -0.5 | 0.0 | -0.1 | 0.4 | 0.4 | -0.8 | 0.8 | 0.7 | 0.3 | -0.3 | -0.3 |
| 30\% | -0.9 | -0.3 | -0.2 | 0.2 | 0.4 | 0.3 | -0.9 | 0.7 | 1.0 | 0.2 | -0.2 | 0.2 |
| 40\% | -0.7 | -0.4 | -0.1 | 0.0 | 0.4 | 0.5 | -0.8 | 0.4 | 2.1 | 0.3 | -0.1 | -0.1 |
| 50\% | -0.4 | -0.2 | -0.2 | 0.0 | 0.3 | 0.6 | -0.6 | 0.4 | 3.3 | 0.5 | -0.1 | 0.1 |
| 60\% | -0.2 | -0.3 | -0.1 | -0.1 | 0.3 | 0.6 | -0.5 | 0.3 | 5.0 | 0.7 | -0.1 | 0.2 |
| 70\% | -0.1 | -0.2 | -0.2 | 0.1 | 0.2 | 0.4 | -0.1 | 0.4 | 5.4 | 1.2 | 0.1 | 0.2 |
| 80\% | -0.1 | 0.1 | -0.1 | 0.2 | 0.3 | 0.1 | -0.1 | 0.1 | 5.5 | 1.4 | 0.2 | 0.4 |
| 90\% | -0.3 | 0.3 | -0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.3 | 5.5 | 1.3 | 0.1 | -2.4 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.5 | -0.3 | -0.1 | 0.1 | 0.3 | 0.4 | -0.5 | 0.4 | 2.8 | 0.5 | -0.4 | -0.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.3 | -0.1 | -0.1 | 0.1 | 0.3 | 0.3 | 0.0 | 0.2 | 4.3 | 0.4 | -0.5 | -0.3 |
| Above Normal (16\%) | -0.4 | -0.3 | -0.2 | 0.2 | 0.2 | 0.1 | -0.4 | 0.5 | 4.0 | 1.1 | 0.0 | 0.1 |
| Below Normal (13\%) | -0.4 | -0.3 | -0.2 | 0.0 | 0.1 | 0.7 | -0.6 | 0.4 | 2.9 | 0.4 | -0.1 | 0.1 |
| Dry (24\%) | -0.4 | -0.2 | -0.1 | 0.0 | 0.4 | 0.5 | -1.0 | 0.7 | 1.2 | 0.3 | -0.3 | -0.4 |
| Critical (15\%) | -1.2 | -0.7 | -0.3 | -0.1 | 0.5 | 0.2 | -0.9 | 0.3 | 0.7 | 0.2 | -1.1 | -1.6 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.8.4 Stanislaus River at Orange Blossom Bridge, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 62.7 | 58.9 | 53.4 | 51.2 | 52.1 | 55.3 | 56.2 | 56.9 | 63.5 | 65.3 | 65.3 | 64.1 |
| 20\% | 60.8 | 57.0 | 52.7 | 50.8 | 51.5 | 54.8 | 55.6 | 55.9 | 62.4 | 64.5 | 64.1 | 62.9 |
| 30\% | 60.1 | 55.7 | 52.4 | 50.0 | 50.9 | 54.3 | 55.3 | 55.5 | 61.6 | 64.0 | 63.3 | 61.9 |
| 40\% | 58.9 | 55.2 | 51.7 | 49.5 | 50.5 | 53.6 | 54.6 | 55.2 | 60.0 | 63.6 | 62.9 | 61.5 |
| 50\% | 58.3 | 54.7 | 51.3 | 49.1 | 50.2 | 53.1 | 53.9 | 54.8 | 58.4 | 63.0 | 62.5 | 61.0 |
| 60\% | 57.6 | 54.4 | 51.0 | 49.0 | 49.8 | 52.8 | 53.3 | 54.4 | 56.3 | 62.5 | 62.2 | 60.6 |
| 70\% | 57.0 | 54.1 | 50.7 | 48.4 | 49.5 | 52.2 | 52.6 | 54.0 | 55.4 | 61.9 | 61.8 | 60.1 |
| 80\% | 56.5 | 53.4 | 50.3 | 48.0 | 49.1 | 51.5 | 51.9 | 53.7 | 54.8 | 61.3 | 61.4 | 59.6 |
| 90\% | 55.7 | 52.7 | 49.9 | 47.4 | 48.5 | 50.5 | 51.0 | 52.8 | 53.5 | 60.1 | 60.3 | 58.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58.8 | 55.2 | 51.5 | 49.2 | 50.3 | 53.1 | 53.9 | 54.9 | 58.5 | 62.8 | 62.7 | 61.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 55.0 | 52.1 | 49.0 | 48.6 | 49.3 | 51.2 | 51.7 | 53.5 | 54.5 | 60.1 | 60.3 | 58.4 |
| Above Normal (16\%) | 59.3 | 55.5 | 51.9 | 49.7 | 50.5 | 53.3 | 53.4 | 54.4 | 57.7 | 62.4 | 62.2 | 60.7 |
| Below Normal (13\%) | 57.9 | 54.4 | 50.9 | 49.1 | 50.0 | 53.3 | 54.1 | 54.8 | 58.9 | 63.3 | 62.7 | 61.1 |
| Dry (24\%) | 58.8 | 55.1 | 51.5 | 49.3 | 50.6 | 54.1 | 55.3 | 55.6 | 61.3 | 63.9 | 63.4 | 62.2 |
| Critical (15\%) | 62.6 | 58.2 | 53.1 | 50.3 | 51.8 | 55.0 | 56.5 | 57.6 | 63.3 | 66.8 | 67.6 | 66.5 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65.0 | 59.6 | 53.4 | 51.3 | 52.5 | 55.7 | 54.6 | 56.3 | 64.0 | 66.4 | 67.0 | 67.3 |
| 20\% | 60.0 | 58.0 | 52.6 | 50.6 | 51.7 | 55.0 | 54.1 | 55.8 | 62.7 | 65.1 | 65.0 | 64.2 |
| 30\% | 58.1 | 56.5 | 52.2 | 49.9 | 51.2 | 54.5 | 53.7 | 55.4 | 61.8 | 64.3 | 63.7 | 62.7 |
| 40\% | 57.1 | 55.3 | 51.6 | 49.6 | 50.7 | 54.0 | 53.5 | 55.0 | 61.0 | 63.7 | 63.0 | 61.8 |
| 50\% | 56.5 | 55.0 | 51.2 | 49.1 | 50.3 | 53.6 | 53.0 | 54.7 | 59.2 | 63.2 | 62.7 | 61.3 |
| 60\% | 55.9 | 54.6 | 50.8 | 48.9 | 50.1 | 53.3 | 52.6 | 54.3 | 57.0 | 62.7 | 62.3 | 60.9 |
| 70\% | 55.4 | 54.2 | 50.6 | 48.4 | 49.6 | 52.0 | 52.2 | 53.7 | 55.9 | 62.2 | 61.9 | 60.6 |
| 80\% | 55.0 | 53.7 | 50.3 | 47.9 | 49.2 | 51.0 | 51.8 | 53.4 | 55.3 | 61.6 | 61.5 | 60.0 |
| 90\% | 54.0 | 53.1 | 49.8 | 47.2 | 48.3 | 49.6 | 50.7 | 52.6 | 54.4 | 58.9 | 60.1 | 58.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 57.8 | 55.7 | 51.5 | 49.2 | 50.4 | 53.1 | 52.9 | 54.8 | 59.1 | 63.3 | 63.2 | 61.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 54.2 | 52.6 | 49.0 | 48.6 | 49.4 | 50.8 | 51.5 | 53.1 | 55.2 | 60.5 | 60.5 | 58.8 |
| Above Normal (16\%) | 57.9 | 56.0 | 51.8 | 49.7 | 50.8 | 53.6 | 52.6 | 54.2 | 57.9 | 62.6 | 62.3 | 61.0 |
| Below Normal (13\%) | 57.2 | 54.7 | 50.9 | 49.0 | 50.3 | 53.8 | 53.2 | 54.6 | 59.9 | 63.7 | 63.1 | 62.0 |
| Dry (24\%) | 57.5 | 55.6 | 51.4 | 49.3 | 50.8 | 54.5 | 53.7 | 55.4 | 61.6 | 64.3 | 64.2 | 63.5 |
| Critical (15\%) | 61.7 | 58.3 | 52.6 | 50.0 | 51.6 | 54.7 | 54.9 | 58.0 | 64.2 | 68.0 | 68.4 | 67.3 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.3 | 0.7 | 0.0 | 0.1 | 0.4 | 0.4 | -1.6 | -0.6 | 0.5 | 1.1 | 1.7 | 3.1 |
| 20\% | -0.8 | 0.9 | 0.0 | -0.2 | 0.2 | 0.2 | -1.5 | -0.1 | 0.3 | 0.6 | 0.8 | 1.3 |
| 30\% | -2.0 | 0.8 | -0.2 | 0.0 | 0.3 | 0.3 | -1.6 | -0.1 | 0.2 | 0.3 | 0.4 | 0.8 |
| 40\% | -1.8 | 0.1 | -0.1 | 0.0 | 0.2 | 0.4 | -1.1 | -0.2 | 1.0 | 0.1 | 0.1 | 0.3 |
| 50\% | -1.8 | 0.3 | -0.1 | -0.1 | 0.1 | 0.5 | -0.8 | -0.1 | 0.8 | 0.2 | 0.2 | 0.3 |
| 60\% | -1.7 | 0.2 | -0.2 | -0.1 | 0.2 | 0.5 | -0.6 | 0.0 | 0.7 | 0.2 | 0.1 | 0.3 |
| 70\% | -1.5 | 0.2 | -0.1 | 0.1 | 0.2 | -0.2 | -0.3 | -0.4 | 0.5 | 0.3 | 0.1 | 0.4 |
| 80\% | -1.5 | 0.3 | 0.0 | -0.1 | 0.2 | -0.6 | -0.1 | -0.3 | 0.6 | 0.3 | 0.1 | 0.3 |
| 90\% | -1.7 | 0.4 | -0.1 | -0.2 | -0.2 | -0.9 | -0.3 | -0.2 | 0.9 | -1.2 | -0.3 | -0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1.0 | 0.4 | -0.1 | 0.0 | 0.1 | 0.0 | -0.9 | -0.1 | 0.6 | 0.4 | 0.5 | 0.7 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.8 | 0.5 | 0.1 | 0.0 | 0.1 | -0.4 | -0.2 | -0.4 | 0.8 | 0.3 | 0.2 | 0.3 |
| Above Normal (16\%) | -1.4 | 0.5 | 0.0 | 0.1 | 0.2 | 0.3 | -0.8 | -0.2 | 0.2 | 0.2 | 0.2 | 0.4 |
| Below Normal (13\%) | -0.7 | 0.4 | 0.0 | 0.0 | 0.3 | 0.5 | -0.9 | -0.2 | 1.0 | 0.4 | 0.5 | 0.8 |
| Dry (24\%) | -1.3 | 0.5 | 0.0 | 0.0 | 0.2 | 0.4 | -1.6 | -0.1 | 0.2 | 0.4 | 0.8 | 1.3 |
| Critical (15\%) | -0.8 | 0.1 | -0.5 | -0.3 | -0.2 | -0.2 | -1.5 | 0.5 | 0.9 | 1.1 | 0.8 | 0.8 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.9 Stanislaus River at Mouth Temperature

Table 5C.3.3.9.1 Stanislaus River at Mouth, Monthly Temperature

No Action Alternative

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.3 | 58.6 | 51.9 | 51.4 | 55.1 | 60.5 | 62.1 | 65.5 | 72.3 | 76.5 | 75.2 | 71.8 |
| 20\% | 62.9 | 57.4 | 51.6 | 50.8 | 54.3 | 59.7 | 61.1 | 64.6 | 71.7 | 75.5 | 74.4 | 70.7 |
| 30\% | 61.7 | 56.8 | 51.0 | 50.2 | 53.8 | 59.1 | 60.3 | 63.6 | 70.8 | 74.9 | 73.8 | 70.4 |
| 40\% | 60.6 | 56.5 | 50.7 | 49.7 | 53.2 | 58.7 | 58.8 | 62.1 | 70.2 | 74.3 | 73.4 | 69.8 |
| 50\% | 60.1 | 55.7 | 50.3 | 49.4 | 52.9 | 57.9 | 57.9 | 61.0 | 67.8 | 73.8 | 73.0 | 69.5 |
| 60\% | 59.6 | 55.2 | 49.9 | 49.0 | 52.6 | 57.0 | 57.1 | 60.7 | 65.3 | 73.1 | 72.6 | 69.0 |
| 70\% | 59.0 | 55.0 | 49.7 | 48.8 | 52.1 | 55.7 | 56.2 | 59.8 | 63.8 | 72.9 | 72.4 | 68.6 |
| 80\% | 58.7 | 54.7 | 49.3 | 48.5 | 51.5 | 53.6 | 55.7 | 58.7 | 62.7 | 71.7 | 71.9 | 68.1 |
| 90\% | 58.2 | 54.2 | 49.0 | 47.9 | 50.6 | 52.1 | 54.8 | 58.0 | 61.7 | 69.3 | 70.7 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 60.8 | 56.0 | 50.4 | 49.6 | 52.9 | 57.1 | 58.3 | 61.6 | 67.3 | 73.1 | 72.6 | 69.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 57.1 | 53.3 | 48.5 | 49.4 | 51.8 | 53.6 | 55.5 | 58.8 | 62.9 | 70.1 | 70.2 | 66.6 |
| Above Normal (16\%) | 61.2 | 56.5 | 51.0 | 50.5 | 53.4 | 57.9 | 57.9 | 61.6 | 66.7 | 73.1 | 72.9 | 69.0 |
| Below Normal (13\%) | 60.1 | 55.2 | 49.8 | 49.2 | 52.8 | 58.0 | 58.5 | 61.0 | 68.6 | 74.3 | 73.1 | 69.5 |
| Dry (24\%) | 60.7 | 55.8 | 50.1 | 49.2 | 53.2 | 58.9 | 59.8 | 63.3 | 70.3 | 74.7 | 73.4 | 70.0 |
| Critical (15\%) | 63.9 | 57.8 | 50.7 | 49.9 | 54.3 | 59.7 | 62.0 | 65.5 | 71.4 | 76.1 | 75.3 | 72.0 |

Alternative 1

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.5 | 58.4 | 52.0 | 51.3 | 54.5 | 60.3 | 63.6 | 64.1 | 72.1 | 76.2 | 75.1 | 71.5 |
| 20\% | 65.2 | 57.8 | 51.6 | 50.8 | 54.0 | 59.5 | 63.0 | 63.5 | 71.5 | 75.3 | 74.3 | 70.6 |
| 30\% | 64.4 | 56.9 | 51.1 | 50.2 | 53.6 | 58.7 | 62.2 | 62.7 | 70.4 | 74.8 | 73.8 | 70.2 |
| 40\% | 63.9 | 56.3 | 50.9 | 49.7 | 53.0 | 58.2 | 60.8 | 61.5 | 69.6 | 74.2 | 73.4 | 69.7 |
| 50\% | 62.9 | 55.9 | 50.5 | 49.3 | 52.5 | 57.3 | 60.0 | 61.2 | 67.2 | 73.6 | 73.0 | 69.4 |
| 60\% | 62.3 | 55.3 | 50.1 | 49.1 | 52.2 | 56.6 | 58.2 | 60.8 | 65.1 | 73.0 | 72.6 | 68.8 |
| 70\% | 61.8 | 55.1 | 49.7 | 48.8 | 51.9 | 56.3 | 56.8 | 59.8 | 62.3 | 72.7 | 72.4 | 68.5 |
| 80\% | 61.2 | 54.6 | 49.5 | 48.4 | 51.4 | 55.5 | 56.1 | 59.1 | 61.0 | 71.5 | 72.0 | 68.2 |
| 90\% | 60.8 | 54.2 | 49.1 | 47.9 | 50.4 | 54.2 | 55.3 | 58.5 | 59.1 | 70.4 | 71.3 | 67.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.1 | 56.1 | 50.5 | 49.5 | 52.7 | 57.3 | 59.6 | 61.3 | 66.3 | 73.0 | 72.7 | 68.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 59.3 | 53.2 | 48.6 | 49.3 | 51.6 | 54.7 | 55.9 | 59.2 | 60.6 | 70.1 | 70.7 | 66.4 |
| Above Normal (16\%) | 63.8 | 56.5 | 51.1 | 50.4 | 53.1 | 57.9 | 59.2 | 61.2 | 66.1 | 73.0 | 72.9 | 68.9 |
| Below Normal (13\%) | 62.3 | 55.1 | 49.9 | 49.1 | 52.4 | 57.7 | 60.4 | 60.8 | 67.8 | 74.1 | 73.1 | 69.3 |
| Dry (24\%) | 63.4 | 56.0 | 50.2 | 49.3 | 53.0 | 58.4 | 61.8 | 62.5 | 70.1 | 74.6 | 73.4 | 70.0 |
| Critical (15\%) | 65.8 | 58.2 | 51.0 | 49.9 | 54.2 | 59.7 | 63.5 | 64.3 | 71.1 | 75.9 | 75.2 | 71.9 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2.2 | -0.2 | 0.1 | -0.1 | -0.5 | -0.2 | 1.6 | -1.4 | -0.2 | -0.3 | -0.1 | -0.4 |
| 20\% | 2.3 | 0.3 | 0.1 | 0.0 | -0.2 | -0.2 | 1.9 | -1.1 | -0.2 | -0.1 | -0.1 | -0.1 |
| 30\% | 2.6 | 0.1 | 0.1 | 0.0 | -0.2 | -0.4 | 1.9 | -0.9 | -0.3 | -0.1 | 0.0 | -0.2 |
| 40\% | 3.2 | -0.2 | 0.1 | 0.0 | -0.2 | -0.5 | 2.0 | -0.7 | -0.6 | -0.1 | 0.0 | -0.2 |
| 50\% | 2.8 | 0.2 | 0.2 | -0.1 | -0.4 | -0.6 | 2.1 | 0.2 | -0.6 | -0.2 | 0.0 | -0.1 |
| 60\% | 2.6 | 0.1 | 0.2 | 0.0 | -0.4 | -0.3 | 1.1 | 0.1 | -0.2 | -0.1 | 0.0 | -0.2 |
| 70\% | 2.7 | 0.1 | 0.0 | 0.0 | -0.2 | 0.6 | 0.6 | 0.0 | -1.5 | -0.2 | 0.0 | -0.2 |
| 80\% | 2.6 | 0.0 | 0.2 | 0.0 | -0.1 | 1.9 | 0.4 | 0.4 | -1.6 | -0.2 | 0.1 | 0.0 |
| 90\% | 2.5 | 0.0 | 0.1 | 0.1 | -0.2 | 2.1 | 0.5 | 0.5 | -2.6 | 1.1 | 0.6 | 0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2.4 | 0.1 | 0.1 | 0.0 | -0.2 | 0.2 | 1.3 | -0.4 | -1.0 | -0.1 | 0.1 | -0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 2.2 | -0.1 | 0.0 | -0.1 | -0.2 | 1.1 | 0.4 | 0.4 | -2.4 | 0.0 | 0.5 | -0.1 |
| Above Normal (16\%) | 2.6 | 0.0 | 0.1 | -0.1 | -0.3 | 0.0 | 1.3 | -0.5 | -0.6 | -0.1 | 0.0 | -0.1 |
| Below Normal (13\%) | 2.2 | -0.2 | 0.1 | -0.1 | -0.4 | -0.4 | 1.9 | -0.2 | -0.7 | -0.2 | 0.0 | -0.2 |
| Dry (24\%) | 2.7 | 0.2 | 0.2 | 0.0 | -0.3 | -0.4 | 2.0 | -0.8 | -0.2 | 0.0 | 0.0 | -0.1 |
| Critical (15\%) | 1.8 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 1.5 | -1.2 | -0.3 | -0.2 | -0.1 | -0.1 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.9.2 Stanislaus River at Mouth, Monthly Temperature

Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.5 | 58.4 | 52.0 | 51.3 | 54.5 | 60.3 | 63.6 | 64.1 | 72.1 | 76.2 | 75.1 | 71.5 |
| 20\% | 65.2 | 57.8 | 51.6 | 50.8 | 54.0 | 59.5 | 63.0 | 63.5 | 71.5 | 75.3 | 74.3 | 70.6 |
| 30\% | 64.4 | 56.9 | 51.1 | 50.2 | 53.6 | 58.7 | 62.2 | 62.7 | 70.4 | 74.8 | 73.8 | 70.2 |
| 40\% | 63.9 | 56.3 | 50.9 | 49.7 | 53.0 | 58.2 | 60.8 | 61.5 | 69.6 | 74.2 | 73.4 | 69.7 |
| 50\% | 62.9 | 55.9 | 50.5 | 49.3 | 52.5 | 57.3 | 60.0 | 61.2 | 67.2 | 73.6 | 73.0 | 69.4 |
| 60\% | 62.3 | 55.3 | 50.1 | 49.1 | 52.2 | 56.6 | 58.2 | 60.8 | 65.1 | 73.0 | 72.6 | 68.8 |
| 70\% | 61.8 | 55.1 | 49.7 | 48.8 | 51.9 | 56.3 | 56.8 | 59.8 | 62.3 | 72.7 | 72.4 | 68.5 |
| 80\% | 61.2 | 54.6 | 49.5 | 48.4 | 51.4 | 55.5 | 56.1 | 59.1 | 61.0 | 71.5 | 72.0 | 68.2 |
| 90\% | 60.8 | 54.2 | 49.1 | 47.9 | 50.4 | 54.2 | 55.3 | 58.5 | 59.1 | 70.4 | 71.3 | 67.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.1 | 56.1 | 50.5 | 49.5 | 52.7 | 57.3 | 59.6 | 61.3 | 66.3 | 73.0 | 72.7 | 68.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 59.3 | 53.2 | 48.6 | 49.3 | 51.6 | 54.7 | 55.9 | 59.2 | 60.6 | 70.1 | 70.7 | 66.4 |
| Above Normal (16\%) | 63.8 | 56.5 | 51.1 | 50.4 | 53.1 | 57.9 | 59.2 | 61.2 | 66.1 | 73.0 | 72.9 | 68.9 |
| Below Normal (13\%) | 62.3 | 55.1 | 49.9 | 49.1 | 52.4 | 57.7 | 60.4 | 60.8 | 67.8 | 74.1 | 73.1 | 69.3 |
| Dry (24\%) | 63.4 | 56.0 | 50.2 | 49.3 | 53.0 | 58.4 | 61.8 | 62.5 | 70.1 | 74.6 | 73.4 | 70.0 |
| Critical (15\%) | 65.8 | 58.2 | 51.0 | 49.9 | 54.2 | 59.7 | 63.5 | 64.3 | 71.1 | 75.9 | 75.2 | 71.9 |

## No Action Alternative

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 64.3 | 58.6 | 51.9 | 51.4 | 55.1 | 60.5 | 62.1 | 65.5 | 72.3 | 76.5 | 75.2 | 71.8 |
| 20\% | 62.9 | 57.4 | 51.6 | 50.8 | 54.3 | 59.7 | 61.1 | 64.6 | 71.7 | 75.5 | 74.4 | 70.7 |
| 30\% | 61.7 | 56.8 | 51.0 | 50.2 | 53.8 | 59.1 | 60.3 | 63.6 | 70.8 | 74.9 | 73.8 | 70.4 |
| 40\% | 60.6 | 56.5 | 50.7 | 49.7 | 53.2 | 58.7 | 58.8 | 62.1 | 70.2 | 74.3 | 73.4 | 69.8 |
| 50\% | 60.1 | 55.7 | 50.3 | 49.4 | 52.9 | 57.9 | 57.9 | 61.0 | 67.8 | 73.8 | 73.0 | 69.5 |
| 60\% | 59.6 | 55.2 | 49.9 | 49.0 | 52.6 | 57.0 | 57.1 | 60.7 | 65.3 | 73.1 | 72.6 | 69.0 |
| 70\% | 59.0 | 55.0 | 49.7 | 48.8 | 52.1 | 55.7 | 56.2 | 59.8 | 63.8 | 72.9 | 72.4 | 68.6 |
| 80\% | 58.7 | 54.7 | 49.3 | 48.5 | 51.5 | 53.6 | 55.7 | 58.7 | 62.7 | 71.7 | 71.9 | 68.1 |
| 90\% | 58.2 | 54.2 | 49.0 | 47.9 | 50.6 | 52.1 | 54.8 | 58.0 | 61.7 | 69.3 | 70.7 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 60.8 | 56.0 | 50.4 | 49.6 | 52.9 | 57.1 | 58.3 | 61.6 | 67.3 | 73.1 | 72.6 | 69.0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 57.1 | 53.3 | 48.5 | 49.4 | 51.8 | 53.6 | 55.5 | 58.8 | 62.9 | 70.1 | 70.2 | 66.6 |
| Above Normal (16\%) | 61.2 | 56.5 | 51.0 | 50.5 | 53.4 | 57.9 | 57.9 | 61.6 | 66.7 | 73.1 | 72.9 | 69.0 |
| Below Normal (13\%) | 60.1 | 55.2 | 49.8 | 49.2 | 52.8 | 58.0 | 58.5 | 61.0 | 68.6 | 74.3 | 73.1 | 69.5 |
| Dry (24\%) | 60.7 | 55.8 | 50.1 | 49.2 | 53.2 | 58.9 | 59.8 | 63.3 | 70.3 | 74.7 | 73.4 | 70.0 |
| Critical (15\%) | 63.9 | 57.8 | 50.7 | 49.9 | 54.3 | 59.7 | 62.0 | 65.5 | 71.4 | 76.1 | 75.3 | 72.0 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2.2 | 0.2 | -0.1 | 0.1 | 0.5 | 0.2 | -1.6 | 1.4 | 0.2 | 0.3 | 0.1 | 0.4 |
| 20\% | -2.3 | -0.3 | -0.1 | 0.0 | 0.2 | 0.2 | -1.9 | 1.1 | 0.2 | 0.1 | 0.1 | 0.1 |
| 30\% | -2.6 | -0.1 | -0.1 | 0.0 | 0.2 | 0.4 | -1.9 | 0.9 | 0.3 | 0.1 | 0.0 | 0.2 |
| 40\% | -3.2 | 0.2 | -0.1 | 0.0 | 0.2 | 0.5 | -2.0 | 0.7 | 0.6 | 0.1 | 0.0 | 0.2 |
| 50\% | -2.8 | -0.2 | -0.2 | 0.1 | 0.4 | 0.6 | -2.1 | -0.2 | 0.6 | 0.2 | 0.0 | 0.1 |
| 60\% | -2.6 | -0.1 | -0.2 | 0.0 | 0.4 | 0.3 | -1.1 | -0.1 | 0.2 | 0.1 | 0.0 | 0.2 |
| 70\% | -2.7 | -0.1 | 0.0 | 0.0 | 0.2 | -0.6 | -0.6 | 0.0 | 1.5 | 0.2 | 0.0 | 0.2 |
| 80\% | -2.6 | 0.0 | -0.2 | 0.0 | 0.1 | -1.9 | -0.4 | -0.4 | 1.6 | 0.2 | -0.1 | 0.0 |
| 90\% | -2.5 | 0.0 | -0.1 | -0.1 | 0.2 | -2.1 | -0.5 | -0.5 | 2.6 | -1.1 | -0.6 | -0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2.4 | -0.1 | -0.1 | 0.0 | 0.2 | -0.2 | -1.3 | 0.4 | 1.0 | 0.1 | -0.1 | 0.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -2.2 | 0.1 | 0.0 | 0.1 | 0.2 | -1.1 | -0.4 | -0.4 | 2.4 | 0.0 | -0.5 | 0.1 |
| Above Normal (16\%) | -2.6 | 0.0 | -0.1 | 0.1 | 0.3 | 0.0 | -1.3 | 0.5 | 0.6 | 0.1 | 0.0 | 0.1 |
| Below Normal (13\%) | -2.2 | 0.2 | -0.1 | 0.1 | 0.4 | 0.4 | -1.9 | 0.2 | 0.7 | 0.2 | 0.0 | 0.2 |
| Dry (24\%) | -2.7 | -0.2 | -0.2 | 0.0 | 0.3 | 0.4 | -2.0 | 0.8 | 0.2 | 0.0 | 0.0 | 0.1 |
| Critical (15\%) | -1.8 | -0.4 | -0.3 | -0.1 | 0.0 | 0.0 | -1.5 | 1.2 | 0.3 | 0.2 | 0.1 | 0.1 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.9.3 Stanislaus River at Mouth, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.5 | 58.4 | 52.0 | 51.3 | 54.5 | 60.3 | 63.6 | 64.1 | 72.1 | 76.2 | 75.1 | 71.5 |
| 20\% | 65.2 | 57.8 | 51.6 | 50.8 | 54.0 | 59.5 | 63.0 | 63.5 | 71.5 | 75.3 | 74.3 | 70.6 |
| 30\% | 64.4 | 56.9 | 51.1 | 50.2 | 53.6 | 58.7 | 62.2 | 62.7 | 70.4 | 74.8 | 73.8 | 70.2 |
| 40\% | 63.9 | 56.3 | 50.9 | 49.7 | 53.0 | 58.2 | 60.8 | 61.5 | 69.6 | 74.2 | 73.4 | 69.7 |
| 50\% | 62.9 | 55.9 | 50.5 | 49.3 | 52.5 | 57.3 | 60.0 | 61.2 | 67.2 | 73.6 | 73.0 | 69.4 |
| 60\% | 62.3 | 55.3 | 50.1 | 49.1 | 52.2 | 56.6 | 58.2 | 60.8 | 65.1 | 73.0 | 72.6 | 68.8 |
| 70\% | 61.8 | 55.1 | 49.7 | 48.8 | 51.9 | 56.3 | 56.8 | 59.8 | 62.3 | 72.7 | 72.4 | 68.5 |
| 80\% | 61.2 | 54.6 | 49.5 | 48.4 | 51.4 | 55.5 | 56.1 | 59.1 | 61.0 | 71.5 | 72.0 | 68.2 |
| 90\% | 60.8 | 54.2 | 49.1 | 47.9 | 50.4 | 54.2 | 55.3 | 58.5 | 59.1 | 70.4 | 71.3 | 67.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.1 | 56.1 | 50.5 | 49.5 | 52.7 | 57.3 | 59.6 | 61.3 | 66.3 | 73.0 | 72.7 | 68.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 59.3 | 53.2 | 48.6 | 49.3 | 51.6 | 54.7 | 55.9 | 59.2 | 60.6 | 70.1 | 70.7 | 66.4 |
| Above Normal (16\%) | 63.8 | 56.5 | 51.1 | 50.4 | 53.1 | 57.9 | 59.2 | 61.2 | 66.1 | 73.0 | 72.9 | 68.9 |
| Below Normal (13\%) | 62.3 | 55.1 | 49.9 | 49.1 | 52.4 | 57.7 | 60.4 | 60.8 | 67.8 | 74.1 | 73.1 | 69.3 |
| Dry (24\%) | 63.4 | 56.0 | 50.2 | 49.3 | 53.0 | 58.4 | 61.8 | 62.5 | 70.1 | 74.6 | 73.4 | 70.0 |
| Critical (15\%) | 65.8 | 58.2 | 51.0 | 49.9 | 54.2 | 59.7 | 63.5 | 64.3 | 71.1 | 75.9 | 75.2 | 71.9 |

Alternative 3

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65.7 | 58.3 | 51.9 | 51.6 | 55.2 | 60.9 | 62.6 | 65.8 | 73.2 | 76.9 | 75.3 | 71.7 |
| 20\% | 65.2 | 57.7 | 51.5 | 50.7 | 54.7 | 59.7 | 61.6 | 64.6 | 72.4 | 76.0 | 74.3 | 70.7 |
| 30\% | 64.0 | 56.7 | 51.0 | 50.2 | 53.8 | 59.2 | 60.4 | 63.7 | 72.1 | 75.5 | 73.8 | 70.2 |
| 40\% | 63.2 | 56.3 | 50.8 | 49.7 | 53.2 | 58.7 | 59.7 | 62.9 | 71.7 | 75.0 | 73.4 | 69.9 |
| 50\% | 62.9 | 55.6 | 50.4 | 49.4 | 52.8 | 58.2 | 58.3 | 62.5 | 71.1 | 74.7 | 73.1 | 69.4 |
| 60\% | 62.4 | 55.3 | 50.0 | 49.0 | 52.3 | 57.3 | 57.3 | 61.7 | 70.3 | 74.2 | 72.5 | 69.0 |
| 70\% | 61.7 | 55.0 | 49.6 | 48.8 | 52.0 | 56.7 | 56.6 | 60.9 | 69.3 | 73.8 | 72.4 | 68.7 |
| 80\% | 61.3 | 54.8 | 49.4 | 48.6 | 51.1 | 55.0 | 56.1 | 60.2 | 68.5 | 73.5 | 72.0 | 68.1 |
| 90\% | 60.6 | 54.3 | 49.0 | 47.9 | 50.3 | 53.5 | 55.4 | 59.0 | 67.4 | 73.0 | 71.3 | 62.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 62.9 | 56.0 | 50.4 | 49.6 | 52.8 | 57.5 | 58.7 | 62.5 | 69.9 | 73.7 | 72.4 | 68.6 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 59.1 | 53.3 | 48.6 | 49.4 | 51.4 | 54.9 | 55.8 | 60.0 | 66.7 | 70.5 | 69.7 | 65.8 |
| Above Normal (16\%) | 63.8 | 56.5 | 51.0 | 50.5 | 53.1 | 57.7 | 58.3 | 62.4 | 70.9 | 74.8 | 73.1 | 69.1 |
| Below Normal (13\%) | 62.2 | 55.1 | 49.7 | 49.1 | 52.4 | 58.3 | 59.2 | 62.0 | 70.7 | 74.8 | 73.1 | 69.5 |
| Dry (24\%) | 63.2 | 55.9 | 50.2 | 49.2 | 53.5 | 59.0 | 60.2 | 63.9 | 71.6 | 75.0 | 73.4 | 69.9 |
| Critical (15\%) | 65.2 | 57.8 | 50.8 | 49.8 | 54.7 | 60.0 | 62.3 | 65.7 | 72.3 | 76.4 | 75.1 | 71.4 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -0.8 | -0.1 | 0.0 | 0.3 | 0.7 | 0.5 | -1.0 | 1.7 | 1.1 | 0.7 | 0.2 | 0.3 |
| 20\% | -0.1 | -0.1 | -0.1 | 0.0 | 0.6 | 0.2 | -1.5 | 1.1 | 0.9 | 0.6 | 0.0 | 0.1 |
| 30\% | -0.3 | -0.2 | -0.1 | 0.0 | 0.3 | 0.5 | -1.7 | 1.0 | 1.6 | 0.7 | 0.0 | 0.0 |
| 40\% | -0.6 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 | -1.1 | 1.5 | 2.1 | 0.8 | 0.0 | 0.3 |
| 50\% | 0.0 | -0.2 | -0.1 | 0.1 | 0.3 | 0.9 | -1.7 | 1.3 | 3.9 | 1.1 | 0.1 | 0.0 |
| 60\% | 0.1 | 0.0 | -0.1 | -0.1 | 0.1 | 0.7 | -1.0 | 0.9 | 5.2 | 1.2 | -0.1 | 0.2 |
| 70\% | 0.0 | -0.1 | -0.1 | 0.0 | 0.0 | 0.4 | -0.2 | 1.1 | 7.0 | 1.1 | 0.0 | 0.2 |
| 80\% | 0.1 | 0.1 | -0.1 | 0.1 | -0.4 | -0.4 | 0.0 | 1.1 | 7.5 | 2.0 | 0.0 | -0.1 |
| 90\% | -0.2 | 0.1 | -0.1 | 0.0 | -0.1 | -0.6 | 0.1 | 0.6 | 8.3 | 2.6 | 0.1 | -4.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -0.2 | -0.1 | -0.1 | 0.0 | 0.1 | 0.3 | -0.9 | 1.2 | 3.6 | 0.7 | -0.3 | -0.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -0.2 | 0.0 | 0.0 | 0.1 | -0.1 | 0.2 | -0.1 | 0.8 | 6.1 | 0.4 | -1.1 | -0.6 |
| Above Normal (16\%) | 0.0 | 0.0 | -0.1 | 0.1 | 0.0 | -0.1 | -0.9 | 1.2 | 4.9 | 1.8 | 0.2 | 0.2 |
| Below Normal (13\%) | -0.2 | 0.0 | -0.2 | 0.0 | 0.0 | 0.6 | -1.2 | 1.2 | 2.8 | 0.7 | 0.0 | 0.2 |
| Dry (24\%) | -0.2 | 0.0 | 0.0 | 0.0 | 0.5 | 0.5 | -1.6 | 1.4 | 1.5 | 0.4 | 0.0 | -0.1 |
| Critical (15\%) | -0.6 | -0.4 | -0.2 | -0.1 | 0.5 | 0.3 | -1.2 | 1.4 | 1.2 | 0.5 | -0.1 | -0.5 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.9.4 Stanislaus River at Mouth, Monthly Temperature

Second Basis of Comparison

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 66.5 | 58.4 | 52.0 | 51.3 | 54.5 | 60.3 | 63.6 | 64.1 | 72.1 | 76.2 | 75.1 | 71.5 |
| 20\% | 65.2 | 57.8 | 51.6 | 50.8 | 54.0 | 59.5 | 63.0 | 63.5 | 71.5 | 75.3 | 74.3 | 70.6 |
| 30\% | 64.4 | 56.9 | 51.1 | 50.2 | 53.6 | 58.7 | 62.2 | 62.7 | 70.4 | 74.8 | 73.8 | 70.2 |
| 40\% | 63.9 | 56.3 | 50.9 | 49.7 | 53.0 | 58.2 | 60.8 | 61.5 | 69.6 | 74.2 | 73.4 | 69.7 |
| 50\% | 62.9 | 55.9 | 50.5 | 49.3 | 52.5 | 57.3 | 60.0 | 61.2 | 67.2 | 73.6 | 73.0 | 69.4 |
| 60\% | 62.3 | 55.3 | 50.1 | 49.1 | 52.2 | 56.6 | 58.2 | 60.8 | 65.1 | 73.0 | 72.6 | 68.8 |
| 70\% | 61.8 | 55.1 | 49.7 | 48.8 | 51.9 | 56.3 | 56.8 | 59.8 | 62.3 | 72.7 | 72.4 | 68.5 |
| 80\% | 61.2 | 54.6 | 49.5 | 48.4 | 51.4 | 55.5 | 56.1 | 59.1 | 61.0 | 71.5 | 72.0 | 68.2 |
| 90\% | 60.8 | 54.2 | 49.1 | 47.9 | 50.4 | 54.2 | 55.3 | 58.5 | 59.1 | 70.4 | 71.3 | 67.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 63.1 | 56.1 | 50.5 | 49.5 | 52.7 | 57.3 | 59.6 | 61.3 | 66.3 | 73.0 | 72.7 | 68.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 59.3 | 53.2 | 48.6 | 49.3 | 51.6 | 54.7 | 55.9 | 59.2 | 60.6 | 70.1 | 70.7 | 66.4 |
| Above Normal (16\%) | 63.8 | 56.5 | 51.1 | 50.4 | 53.1 | 57.9 | 59.2 | 61.2 | 66.1 | 73.0 | 72.9 | 68.9 |
| Below Normal (13\%) | 62.3 | 55.1 | 49.9 | 49.1 | 52.4 | 57.7 | 60.4 | 60.8 | 67.8 | 74.1 | 73.1 | 69.3 |
| Dry (24\%) | 63.4 | 56.0 | 50.2 | 49.3 | 53.0 | 58.4 | 61.8 | 62.5 | 70.1 | 74.6 | 73.4 | 70.0 |
| Critical (15\%) | 65.8 | 58.2 | 51.0 | 49.9 | 54.2 | 59.7 | 63.5 | 64.3 | 71.1 | 75.9 | 75.2 | 71.9 |

Alternative 5

|  | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 65.4 | 58.6 | 52.2 | 51.4 | 55.1 | 60.5 | 60.1 | 64.4 | 72.3 | 76.3 | 75.4 | 72.0 |
| 20\% | 63.3 | 57.7 | 51.5 | 50.8 | 54.4 | 59.7 | 59.1 | 62.6 | 71.8 | 75.6 | 74.6 | 71.0 |
| 30\% | 62.0 | 57.0 | 51.0 | 50.3 | 53.7 | 59.2 | 58.7 | 61.5 | 70.9 | 75.0 | 73.9 | 70.5 |
| 40\% | 61.1 | 56.7 | 50.5 | 49.7 | 53.2 | 58.7 | 58.3 | 60.8 | 70.1 | 74.3 | 73.5 | 70.0 |
| 50\% | 60.4 | 56.0 | 50.3 | 49.3 | 52.9 | 57.9 | 57.7 | 60.1 | 67.6 | 73.9 | 73.1 | 69.7 |
| 60\% | 59.7 | 55.4 | 50.0 | 49.0 | 52.6 | 57.1 | 57.3 | 59.5 | 65.2 | 73.1 | 72.6 | 69.2 |
| 70\% | 59.2 | 55.1 | 49.7 | 48.9 | 52.0 | 55.9 | 56.3 | 59.0 | 64.0 | 72.9 | 72.4 | 68.7 |
| 80\% | 58.7 | 54.8 | 49.3 | 48.5 | 51.5 | 53.8 | 55.7 | 58.3 | 62.7 | 72.0 | 72.0 | 68.2 |
| 90\% | 58.2 | 54.2 | 48.9 | 47.9 | 50.6 | 52.1 | 55.0 | 57.9 | 61.5 | 69.4 | 71.3 | 66.9 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 61.1 | 56.2 | 50.4 | 49.6 | 52.9 | 57.1 | 57.6 | 60.6 | 67.4 | 73.4 | 72.9 | 69.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 57.5 | 53.4 | 48.6 | 49.4 | 51.8 | 53.8 | 55.6 | 58.4 | 63.1 | 70.8 | 71.0 | 66.8 |
| Above Normal (16\%) | 61.5 | 56.7 | 51.1 | 50.5 | 53.5 | 57.9 | 57.5 | 60.4 | 66.5 | 73.1 | 73.0 | 69.1 |
| Below Normal (13\%) | 60.6 | 55.3 | 49.8 | 49.2 | 52.8 | 58.0 | 58.1 | 60.2 | 68.7 | 74.4 | 73.2 | 69.7 |
| Dry (24\%) | 61.0 | 56.1 | 50.1 | 49.3 | 53.3 | 58.9 | 58.7 | 62.0 | 70.2 | 74.7 | 73.6 | 70.4 |
| Critical (15\%) | 64.1 | 58.1 | 50.7 | 49.8 | 54.3 | 59.7 | 60.0 | 64.0 | 71.6 | 76.4 | 75.6 | 72.2 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Temperature (DEG-F) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -1.1 | 0.3 | 0.2 | 0.1 | 0.6 | 0.2 | -3.5 | 0.3 | 0.3 | 0.1 | 0.3 | 0.6 |
| 20\% | -1.9 | 0.0 | -0.1 | 0.0 | 0.3 | 0.2 | -3.9 | -0.9 | 0.4 | 0.2 | 0.3 | 0.4 |
| 30\% | -2.3 | 0.1 | -0.1 | 0.1 | 0.1 | 0.5 | -3.4 | -1.1 | 0.4 | 0.3 | 0.1 | 0.2 |
| 40\% | -2.8 | 0.4 | -0.4 | 0.0 | 0.2 | 0.5 | -2.5 | -0.7 | 0.5 | 0.1 | 0.1 | 0.3 |
| 50\% | -2.5 | 0.1 | -0.1 | 0.0 | 0.4 | 0.6 | -2.3 | -1.1 | 0.4 | 0.3 | 0.1 | 0.3 |
| 60\% | -2.5 | 0.1 | -0.1 | 0.0 | 0.4 | 0.5 | -0.9 | -1.3 | 0.0 | 0.1 | 0.0 | 0.4 |
| 70\% | -2.6 | 0.0 | 0.0 | 0.1 | 0.1 | -0.4 | -0.5 | -0.8 | 1.7 | 0.2 | 0.0 | 0.3 |
| 80\% | -2.5 | 0.2 | -0.2 | 0.1 | 0.1 | -1.7 | -0.4 | -0.8 | 1.7 | 0.5 | 0.0 | 0.0 |
| 90\% | -2.5 | 0.0 | -0.2 | 0.0 | 0.2 | -2.1 | -0.3 | -0.6 | 2.4 | -1.0 | 0.0 | -0.2 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -2.0 | 0.1 | -0.1 | 0.0 | 0.3 | -0.1 | -1.9 | -0.6 | 1.1 | 0.4 | 0.2 | 0.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -1.8 | 0.2 | 0.0 | 0.1 | 0.2 | -0.9 | -0.3 | -0.8 | 2.5 | 0.7 | 0.3 | 0.4 |
| Above Normal (16\%) | -2.3 | 0.1 | -0.1 | 0.1 | 0.3 | 0.0 | -1.6 | -0.8 | 0.5 | 0.1 | 0.0 | 0.2 |
| Below Normal (13\%) | -1.8 | 0.2 | -0.1 | 0.1 | 0.4 | 0.4 | -2.3 | -0.6 | 0.9 | 0.3 | 0.1 | 0.3 |
| Dry (24\%) | -2.4 | 0.1 | -0.1 | 0.0 | 0.4 | 0.5 | -3.1 | -0.5 | 0.1 | 0.1 | 0.2 | 0.4 |
| Critical (15\%) | -1.6 | 0.0 | -0.3 | -0.1 | 0.0 | 0.0 | -3.5 | -0.3 | 0.4 | 0.5 | 0.4 | 0.2 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on an 81 -year simulation period.
c As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.10 San Joaquin River at Vernalis Flow

Table 5C.3.3.10.1 San Joaquin River at Vernalis, Monthly Flow

No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,498 | 2,953 | 4,804 | 11,135 | 14,596 | 15,471 | 14,974 | 14,174 | 9,351 | 5,890 | 2,796 | 3,060 |
| 20\% | 3,161 | 2,777 | 2,857 | 4,812 | 10,143 | 10,197 | 10,637 | 8,318 | 4,690 | 2,628 | 2,589 | 2,654 |
| 30\% | 2,980 | 2,527 | 2,401 | 3,610 | 6,118 | 8,459 | 8,616 | 5,534 | 3,364 | 1,985 | 1,904 | 2,490 |
| 40\% | 2,796 | 2,395 | 2,215 | 2,629 | 4,232 | 5,570 | 7,564 | 4,609 | 2,947 | 1,735 | 1,666 | 2,125 |
| 50\% | 2,601 | 2,219 | 2,101 | 2,402 | 3,420 | 3,847 | 6,017 | 3,925 | 2,246 | 1,487 | 1,488 | 1,930 |
| 60\% | 2,401 | 2,169 | 2,046 | 2,293 | 2,683 | 3,459 | 4,832 | 3,062 | 1,859 | 1,366 | 1,403 | 1,835 |
| 70\% | 2,247 | 2,059 | 1,979 | 2,114 | 2,305 | 2,906 | 3,776 | 2,699 | 1,448 | 1,154 | 1,307 | 1,739 |
| 80\% | 1,994 | 1,951 | 1,829 | 1,884 | 2,150 | 2,371 | 2,789 | 2,153 | 1,293 | 1,087 | 1,202 | 1,611 |
| 90\% | 1,849 | 1,763 | 1,669 | 1,699 | 1,947 | 2,204 | 1,887 | 1,678 | 1,085 | 885 | 1,067 | 1,476 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,672 | 2,611 | 3,391 | 5,070 | 6,655 | 7,278 | 7,528 | 6,039 | 4,194 | 2,622 | 1,847 | 2,223 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,918 | 3,513 | 6,545 | 11,446 | 15,776 | 16,863 | 15,423 | 14,628 | 11,335 | 6,676 | 3,135 | 3,416 |
| Above Normal (24\%) | 2,700 | 2,416 | 2,663 | 4,883 | 6,881 | 7,536 | 8,542 | 5,264 | 3,280 | 1,989 | 1,975 | 2,345 |
| Below Normal (10\%) | 2,538 | 2,249 | 3,661 | 3,507 | 3,651 | 4,149 | 6,337 | 4,140 | 2,076 | 1,463 | 1,446 | 1,837 |
| Dry (16\%) | 2,767 | 2,569 | 2,232 | 2,402 | 2,549 | 3,241 | 3,996 | 2,805 | 1,680 | 1,254 | 1,347 | 1,776 |
| Critical (27\%) | 2,426 | 2,168 | 1,915 | 1,877 | 2,090 | 2,288 | 2,307 | 1,929 | 1,115 | 926 | 1,060 | 1,487 |

Alternative 1

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,015 | 3,156 | 4,932 | 11,157 | 14,594 | 15,467 | 14,666 | 14,360 | 10,139 | 5,612 | 2,740 | 3,146 |
| 20\% | 2,692 | 2,843 | 2,953 | 4,819 | 10,200 | 9,482 | 10,169 | 8,291 | 5,696 | 2,636 | 2,600 | 2,658 |
| 30\% | 2,520 | 2,663 | 2,541 | 3,655 | 6,300 | 7,933 | 8,421 | 5,676 | 3,488 | 1,990 | 1,897 | 2,503 |
| 40\% | 2,331 | 2,500 | 2,341 | 2,692 | 4,268 | 5,393 | 7,435 | 4,617 | 3,188 | 1,742 | 1,676 | 2,142 |
| 50\% | 2,157 | 2,386 | 2,257 | 2,544 | 3,420 | 3,883 | 6,016 | 4,043 | 2,349 | 1,506 | 1,500 | 1,944 |
| 60\% | 1,952 | 2,244 | 2,165 | 2,343 | 2,774 | 3,511 | 4,349 | 3,276 | 1,895 | 1,379 | 1,415 | 1,842 |
| 70\% | 1,752 | 2,141 | 2,027 | 2,153 | 2,443 | 2,963 | 3,119 | 2,891 | 1,485 | 1,170 | 1,321 | 1,743 |
| 80\% | 1,597 | 1,984 | 1,903 | 1,923 | 2,174 | 2,414 | 2,442 | 2,362 | 1,274 | 1,088 | 1,211 | 1,611 |
| 90\% | 1,411 | 1,793 | 1,699 | 1,733 | 1,945 | 2,230 | 1,779 | 1,890 | 1,085 | 941 | 1,071 | 1,478 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,241 | 2,721 | 3,492 | 5,136 | 6,700 | 7,131 | 7,255 | 6,101 | 4,547 | 2,625 | 1,838 | 2,238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,497 | 3,627 | 6,644 | 11,506 | 15,763 | 16,308 | 15,374 | 14,433 | 12,512 | 6,641 | 3,078 | 3,456 |
| Above Normal (24\%) | 2,288 | 2,532 | 2,757 | 4,947 | 6,946 | 7,415 | 8,260 | 5,348 | 3,525 | 1,999 | 1,977 | 2,352 |
| Below Normal (10\%) | 2,086 | 2,397 | 3,810 | 3,608 | 3,723 | 4,101 | 5,842 | 4,213 | 2,225 | 1,481 | 1,457 | 1,856 |
| Dry (16\%) | 2,339 | 2,684 | 2,347 | 2,487 | 2,628 | 3,304 | 3,551 | 2,976 | 1,714 | 1,267 | 1,362 | 1,789 |
| Critical (27\%) | 1,974 | 2,251 | 1,998 | 1,927 | 2,138 | 2,311 | 2,031 | 2,122 | 1,116 | 943 | 1,059 | 1,485 |

Alternative 1 minus No Action Alternative

|  | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -14\% | 7\% | 3\% | 0\% | 0\% | 0\% | -2\% | 1\% | 8\% | -5\% | -2\% | 3\% |
| 20\% | -15\% | 2\% | 3\% | 0\% | 1\% | -7\% | -4\% | 0\% | 21\% | 0\% | 0\% | 0\% |
| 30\% | -15\% | 5\% | 6\% | 1\% | 3\% | -6\% | -2\% | 3\% | 4\% | 0\% | 0\% | 1\% |
| 40\% | -17\% | 4\% | 6\% | 2\% | 1\% | -3\% | -2\% | 0\% | 8\% | 0\% | 1\% | 1\% |
| 50\% | -17\% | 7\% | 7\% | 6\% | 0\% | 1\% | 0\% | 3\% | 5\% | 1\% | 1\% | 1\% |
| 60\% | -19\% | 3\% | 6\% | 2\% | 3\% | 2\% | -10\% | 7\% | 2\% | 1\% | 1\% | 0\% |
| 70\% | -22\% | 4\% | 2\% | 2\% | 6\% | 2\% | -17\% | 7\% | 3\% | 1\% | 1\% | 0\% |
| 80\% | -20\% | 2\% | 4\% | 2\% | 1\% | 2\% | -12\% | 10\% | -1\% | 0\% | 1\% | 0\% |
| 90\% | -24\% | 2\% | 2\% | 2\% | 0\% | 1\% | -6\% | 13\% | 0\% | 6\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -16\% | 4\% | 3\% | 1\% | 1\% | -2\% | -4\% | 1\% | 8\% | 0\% | -1\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -14\% | 3\% | 2\% | 1\% | 0\% | -3\% | 0\% | -1\% | 10\% | -1\% | -2\% | 1\% |
| Above Normal (24\%) | -15\% | 5\% | 4\% | 1\% | 1\% | -2\% | -3\% | 2\% | 7\% | 0\% | 0\% | 0\% |
| Below Normal (10\%) | -18\% | 7\% | 4\% | 3\% | 2\% | -1\% | -8\% | 2\% | 7\% | 1\% | 1\% | 1\% |
| Dry (16\%) | -15\% | 4\% | 5\% | 4\% | 3\% | 2\% | -11\% | 6\% | 2\% | 1\% | 1\% | 1\% |
| Critical (27\%) | -19\% | 4\% | 4\% | 3\% | 2\% | 1\% | -12\% | 10\% | 0\% | 2\% | 0\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.10.2 San Joaquin River at Vernalis, Monthly Flow
Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,015 | 3,156 | 4,932 | 11,157 | 14,594 | 15,467 | 14,666 | 14,360 | 10,139 | 5,612 | 2,740 | 3,146 |
| 20\% | 2,692 | 2,843 | 2,953 | 4,819 | 10,200 | 9,482 | 10,169 | 8,291 | 5,696 | 2,636 | 2,600 | 2,658 |
| 30\% | 2,520 | 2,663 | 2,541 | 3,655 | 6,300 | 7,933 | 8,421 | 5,676 | 3,488 | 1,990 | 1,897 | 2,503 |
| 40\% | 2,331 | 2,500 | 2,341 | 2,692 | 4,268 | 5,393 | 7,435 | 4,617 | 3,188 | 1,742 | 1,676 | 2,142 |
| 50\% | 2,157 | 2,386 | 2,257 | 2,544 | 3,420 | 3,883 | 6,016 | 4,043 | 2,349 | 1,506 | 1,500 | 1,944 |
| 60\% | 1,952 | 2,244 | 2,165 | 2,343 | 2,774 | 3,511 | 4,349 | 3,276 | 1,895 | 1,379 | 1,415 | 1,842 |
| 70\% | 1,752 | 2,141 | 2,027 | 2,153 | 2,443 | 2,963 | 3,119 | 2,891 | 1,485 | 1,170 | 1,321 | 1,743 |
| 80\% | 1,597 | 1,984 | 1,903 | 1,923 | 2,174 | 2,414 | 2,442 | 2,362 | 1,274 | 1,088 | 1,211 | 1,611 |
| 90\% | 1,411 | 1,793 | 1,699 | 1,733 | 1,945 | 2,230 | 1,779 | 1,890 | 1,085 | 941 | 1,071 | 1,478 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,241 | 2,721 | 3,492 | 5,136 | 6,700 | 7,131 | 7,255 | 6,101 | 4,547 | 2,625 | 1,838 | 2,238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,497 | 3,627 | 6,644 | 11,506 | 15,763 | 16,308 | 15,374 | 14,433 | 12,512 | 6,641 | 3,078 | 3,456 |
| Above Normal (24\%) | 2,288 | 2,532 | 2,757 | 4,947 | 6,946 | 7,415 | 8,260 | 5,348 | 3,525 | 1,999 | 1,977 | 2,352 |
| Below Normal (10\%) | 2,086 | 2,397 | 3,810 | 3,608 | 3,723 | 4,101 | 5,842 | 4,213 | 2,225 | 1,481 | 1,457 | 1,856 |
| Dry (16\%) | 2,339 | 2,684 | 2,347 | 2,487 | 2,628 | 3,304 | 3,551 | 2,976 | 1,714 | 1,267 | 1,362 | 1,789 |
| Critical (27\%) | 1,974 | 2,251 | 1,998 | 1,927 | 2,138 | 2,311 | 2,031 | 2,122 | 1,116 | 943 | 1,059 | 1,485 |

## No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,498 | 2,953 | 4,804 | 11,135 | 14,596 | 15,471 | 14,974 | 14,174 | 9,351 | 5,890 | 2,796 | 3,060 |
| 20\% | 3,161 | 2,777 | 2,857 | 4,812 | 10,143 | 10,197 | 10,637 | 8,318 | 4,690 | 2,628 | 2,589 | 2,654 |
| 30\% | 2,980 | 2,527 | 2,401 | 3,610 | 6,118 | 8,459 | 8,616 | 5,534 | 3,364 | 1,985 | 1,904 | 2,490 |
| 40\% | 2,796 | 2,395 | 2,215 | 2,629 | 4,232 | 5,570 | 7,564 | 4,609 | 2,947 | 1,735 | 1,666 | 2,125 |
| 50\% | 2,601 | 2,219 | 2,101 | 2,402 | 3,420 | 3,847 | 6,017 | 3,925 | 2,246 | 1,487 | 1,488 | 1,930 |
| 60\% | 2,401 | 2,169 | 2,046 | 2,293 | 2,683 | 3,459 | 4,832 | 3,062 | 1,859 | 1,366 | 1,403 | 1,835 |
| 70\% | 2,247 | 2,059 | 1,979 | 2,114 | 2,305 | 2,906 | 3,776 | 2,699 | 1,448 | 1,154 | 1,307 | 1,739 |
| 80\% | 1,994 | 1,951 | 1,829 | 1,884 | 2,150 | 2,371 | 2,789 | 2,153 | 1,293 | 1,087 | 1,202 | 1,611 |
| 90\% | 1,849 | 1,763 | 1,669 | 1,699 | 1,947 | 2,204 | 1,887 | 1,678 | 1,085 | 885 | 1,067 | 1,476 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,672 | 2,611 | 3,391 | 5,070 | 6,655 | 7,278 | 7,528 | 6,039 | 4,194 | 2,622 | 1,847 | 2,223 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,918 | 3,513 | 6,545 | 11,446 | 15,776 | 16,863 | 15,423 | 14,628 | 11,335 | 6,676 | 3,135 | 3,416 |
| Above Normal (24\%) | 2,700 | 2,416 | 2,663 | 4,883 | 6,881 | 7,536 | 8,542 | 5,264 | 3,280 | 1,989 | 1,975 | 2,345 |
| Below Normal (10\%) | 2,538 | 2,249 | 3,661 | 3,507 | 3,651 | 4,149 | 6,337 | 4,140 | 2,076 | 1,463 | 1,446 | 1,837 |
| Dry (16\%) | 2,767 | 2,569 | 2,232 | 2,402 | 2,549 | 3,241 | 3,996 | 2,805 | 1,680 | 1,254 | 1,347 | 1,776 |
| Critical (27\%) | 2,426 | 2,168 | 1,915 | 1,877 | 2,090 | 2,288 | 2,307 | 1,929 | 1,115 | 926 | 1,060 | 1,487 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 16\% | -6\% | -3\% | 0\% | 0\% | 0\% | 2\% | -1\% | -8\% | 5\% | 2\% | -3\% |
| 20\% | 17\% | -2\% | -3\% | 0\% | -1\% | 8\% | 5\% | 0\% | -18\% | 0\% | 0\% | 0\% |
| 30\% | 18\% | -5\% | -6\% | -1\% | -3\% | 7\% | 2\% | -3\% | -4\% | 0\% | 0\% | -1\% |
| 40\% | 20\% | -4\% | -5\% | -2\% | -1\% | 3\% | 2\% | 0\% | -8\% | 0\% | -1\% | -1\% |
| 50\% | 21\% | -7\% | -7\% | -6\% | 0\% | -1\% | 0\% | -3\% | -4\% | -1\% | -1\% | -1\% |
| 60\% | 23\% | -3\% | -6\% | -2\% | -3\% | -1\% | 11\% | -7\% | -2\% | -1\% | -1\% | 0\% |
| 70\% | 28\% | -4\% | -2\% | -2\% | -6\% | -2\% | 21\% | -7\% | -2\% | -1\% | -1\% | 0\% |
| 80\% | 25\% | -2\% | -4\% | -2\% | -1\% | -2\% | 14\% | -9\% | 2\% | 0\% | -1\% | 0\% |
| 90\% | 31\% | -2\% | -2\% | -2\% | 0\% | -1\% | 6\% | -11\% | 0\% | -6\% | 0\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 19\% | -4\% | -3\% | -1\% | -1\% | 2\% | 4\% | -1\% | -8\% | 0\% | 1\% | -1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 17\% | -3\% | -1\% | -1\% | 0\% | 3\% | 0\% | 1\% | -9\% | 1\% | 2\% | -1\% |
| Above Normal (24\%) | 18\% | -5\% | -3\% | -1\% | -1\% | 2\% | 3\% | -2\% | -7\% | 0\% | 0\% | 0\% |
| Below Normal (10\%) | 22\% | -6\% | -4\% | -3\% | -2\% | 1\% | 8\% | -2\% | -7\% | -1\% | -1\% | -1\% |
| Dry (16\%) | 18\% | -4\% | -5\% | -3\% | -3\% | -2\% | 13\% | -6\% | -2\% | -1\% | -1\% | -1\% |
| Critical (27\%) | 23\% | -4\% | -4\% | -3\% | -2\% | -1\% | 14\% | -9\% | 0\% | -2\% | 0\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.10.3 San Joaquin River at Vernalis, Monthly Flow
Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,015 | 3,156 | 4,932 | 11,157 | 14,594 | 15,467 | 14,666 | 14,360 | 10,139 | 5,612 | 2,740 | 3,146 |
| 20\% | 2,692 | 2,843 | 2,953 | 4,819 | 10,200 | 9,482 | 10,169 | 8,291 | 5,696 | 2,636 | 2,600 | 2,658 |
| 30\% | 2,520 | 2,663 | 2,541 | 3,655 | 6,300 | 7,933 | 8,421 | 5,676 | 3,488 | 1,990 | 1,897 | 2,503 |
| 40\% | 2,331 | 2,500 | 2,341 | 2,692 | 4,268 | 5,393 | 7,435 | 4,617 | 3,188 | 1,742 | 1,676 | 2,142 |
| 50\% | 2,157 | 2,386 | 2,257 | 2,544 | 3,420 | 3,883 | 6,016 | 4,043 | 2,349 | 1,506 | 1,500 | 1,944 |
| 60\% | 1,952 | 2,244 | 2,165 | 2,343 | 2,774 | 3,511 | 4,349 | 3,276 | 1,895 | 1,379 | 1,415 | 1,842 |
| 70\% | 1,752 | 2,141 | 2,027 | 2,153 | 2,443 | 2,963 | 3,119 | 2,891 | 1,485 | 1,170 | 1,321 | 1,743 |
| 80\% | 1,597 | 1,984 | 1,903 | 1,923 | 2,174 | 2,414 | 2,442 | 2,362 | 1,274 | 1,088 | 1,211 | 1,611 |
| 90\% | 1,411 | 1,793 | 1,699 | 1,733 | 1,945 | 2,230 | 1,779 | 1,890 | 1,085 | 941 | 1,071 | 1,478 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,241 | 2,721 | 3,492 | 5,136 | 6,700 | 7,131 | 7,255 | 6,101 | 4,547 | 2,625 | 1,838 | 2,238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,497 | 3,627 | 6,644 | 11,506 | 15,763 | 16,308 | 15,374 | 14,433 | 12,512 | 6,641 | 3,078 | 3,456 |
| Above Normal (24\%) | 2,288 | 2,532 | 2,757 | 4,947 | 6,946 | 7,415 | 8,260 | 5,348 | 3,525 | 1,999 | 1,977 | 2,352 |
| Below Normal (10\%) | 2,086 | 2,397 | 3,810 | 3,608 | 3,723 | 4,101 | 5,842 | 4,213 | 2,225 | 1,481 | 1,457 | 1,856 |
| Dry (16\%) | 2,339 | 2,684 | 2,347 | 2,487 | 2,628 | 3,304 | 3,551 | 2,976 | 1,714 | 1,267 | 1,362 | 1,789 |
| Critical (27\%) | 1,974 | 2,251 | 1,998 | 1,927 | 2,138 | 2,311 | 2,031 | 2,122 | 1,116 | 943 | 1,059 | 1,485 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,023 | 3,053 | 4,949 | 12,089 | 17,246 | 15,467 | 14,936 | 14,309 | 10,004 | 6,473 | 3,525 | 3,287 |
| 20\% | 2,667 | 2,830 | 2,938 | 4,833 | 10,213 | 9,874 | 10,251 | 7,931 | 4,627 | 2,495 | 2,587 | 2,623 |
| 30\% | 2,494 | 2,583 | 2,421 | 3,540 | 6,797 | 7,753 | 8,532 | 5,438 | 2,558 | 1,926 | 1,892 | 2,464 |
| 40\% | 2,328 | 2,478 | 2,304 | 2,753 | 4,210 | 5,305 | 7,580 | 4,344 | 2,294 | 1,722 | 1,667 | 2,125 |
| 50\% | 2,137 | 2,313 | 2,191 | 2,439 | 3,215 | 3,847 | 6,112 | 3,821 | 1,955 | 1,506 | 1,495 | 1,932 |
| 60\% | 1,956 | 2,244 | 2,140 | 2,236 | 2,668 | 3,440 | 4,501 | 2,907 | 1,700 | 1,361 | 1,415 | 1,838 |
| 70\% | 1,782 | 2,148 | 2,012 | 2,088 | 2,360 | 2,906 | 3,355 | 2,502 | 1,364 | 1,164 | 1,319 | 1,743 |
| 80\% | 1,609 | 1,974 | 1,886 | 1,824 | 2,090 | 2,371 | 2,581 | 2,158 | 1,241 | 1,026 | 1,211 | 1,612 |
| 90\% | 1,466 | 1,763 | 1,669 | 1,639 | 1,849 | 2,205 | 1,936 | 1,650 | 1,001 | 930 | 1,065 | 1,477 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,252 | 2,683 | 3,501 | 5,108 | 6,872 | 7,145 | 7,431 | 5,830 | 4,009 | 2,655 | 1,882 | 2,271 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,505 | 3,604 | 6,760 | 11,512 | 16,584 | 16,445 | 15,425 | 14,237 | 11,476 | 6,916 | 3,267 | 3,610 |
| Above Normal (24\%) | 2,310 | 2,488 | 2,775 | 4,925 | 6,937 | 7,444 | 8,476 | 5,078 | 2,579 | 1,910 | 1,972 | 2,341 |
| Below Normal (10\%) | 2,067 | 2,299 | 3,711 | 3,708 | 3,857 | 4,057 | 6,015 | 3,856 | 1,865 | 1,472 | 1,454 | 1,834 |
| Dry (16\%) | 2,346 | 2,646 | 2,309 | 2,419 | 2,607 | 3,241 | 3,785 | 2,611 | 1,568 | 1,253 | 1,360 | 1,782 |
| Critical (27\%) | 1,991 | 2,227 | 1,974 | 1,842 | 2,043 | 2,273 | 2,247 | 1,874 | 1,080 | 912 | 1,067 | 1,497 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | -3\% | 0\% | 8\% | 18\% | 0\% | 2\% | 0\% | -1\% | 15\% | 29\% | 4\% |
| 20\% | -1\% | 0\% | -1\% | 0\% | 0\% | 4\% | 1\% | -4\% | -19\% | -5\% | 0\% | -1\% |
| 30\% | -1\% | -3\% | -5\% | -3\% | 8\% | -2\% | 1\% | -4\% | -27\% | -3\% | 0\% | -2\% |
| 40\% | 0\% | -1\% | -2\% | 2\% | -1\% | -2\% | 2\% | -6\% | -28\% | -1\% | -1\% | -1\% |
| 50\% | -1\% | -3\% | -3\% | -4\% | -6\% | -1\% | 2\% | -5\% | -17\% | 0\% | 0\% | -1\% |
| 60\% | 0\% | 0\% | -1\% | -5\% | -4\% | -2\% | 3\% | -11\% | -10\% | -1\% | 0\% | 0\% |
| 70\% | 2\% | 0\% | -1\% | -3\% | -3\% | -2\% | 8\% | -13\% | -8\% | 0\% | 0\% | 0\% |
| 80\% | 1\% | 0\% | -1\% | -5\% | -4\% | -2\% | 6\% | -9\% | -3\% | -6\% | 0\% | 0\% |
| 90\% | 4\% | -2\% | -2\% | -5\% | -5\% | -1\% | 9\% | -13\% | -8\% | -1\% | -1\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | -1\% | 0\% | -1\% | 3\% | 0\% | 2\% | -4\% | -12\% | 1\% | 2\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | -1\% | 2\% | 0\% | 5\% | 1\% | 0\% | -1\% | -8\% | 4\% | 6\% | 4\% |
| Above Normal (24\%) | 1\% | -2\% | 1\% | 0\% | 0\% | 0\% | 3\% | -5\% | -27\% | -4\% | 0\% | 0\% |
| Below Normal (10\%) | -1\% | -4\% | -3\% | 3\% | 4\% | -1\% | 3\% | -8\% | -16\% | -1\% | 0\% | -1\% |
| Dry (16\%) | 0\% | -1\% | -2\% | -3\% | -1\% | -2\% | 7\% | -12\% | -9\% | -1\% | 0\% | 0\% |
| Critical (27\%) | 1\% | -1\% | -1\% | -4\% | -4\% | -2\% | 11\% | -12\% | -3\% | -3\% | 1\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.10.4 San Joaquin River at Vernalis, Monthly Flow
Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,015 | 3,156 | 4,932 | 11,157 | 14,594 | 15,467 | 14,666 | 14,360 | 10,139 | 5,612 | 2,740 | 3,146 |
| 20\% | 2,692 | 2,843 | 2,953 | 4,819 | 10,200 | 9,482 | 10,169 | 8,291 | 5,696 | 2,636 | 2,600 | 2,658 |
| 30\% | 2,520 | 2,663 | 2,541 | 3,655 | 6,300 | 7,933 | 8,421 | 5,676 | 3,488 | 1,990 | 1,897 | 2,503 |
| 40\% | 2,331 | 2,500 | 2,341 | 2,692 | 4,268 | 5,393 | 7,435 | 4,617 | 3,188 | 1,742 | 1,676 | 2,142 |
| 50\% | 2,157 | 2,386 | 2,257 | 2,544 | 3,420 | 3,883 | 6,016 | 4,043 | 2,349 | 1,506 | 1,500 | 1,944 |
| 60\% | 1,952 | 2,244 | 2,165 | 2,343 | 2,774 | 3,511 | 4,349 | 3,276 | 1,895 | 1,379 | 1,415 | 1,842 |
| 70\% | 1,752 | 2,141 | 2,027 | 2,153 | 2,443 | 2,963 | 3,119 | 2,891 | 1,485 | 1,170 | 1,321 | 1,743 |
| 80\% | 1,597 | 1,984 | 1,903 | 1,923 | 2,174 | 2,414 | 2,442 | 2,362 | 1,274 | 1,088 | 1,211 | 1,611 |
| 90\% | 1,411 | 1,793 | 1,699 | 1,733 | 1,945 | 2,230 | 1,779 | 1,890 | 1,085 | 941 | 1,071 | 1,478 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,241 | 2,721 | 3,492 | 5,136 | 6,700 | 7,131 | 7,255 | 6,101 | 4,547 | 2,625 | 1,838 | 2,238 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,497 | 3,627 | 6,644 | 11,506 | 15,763 | 16,308 | 15,374 | 14,433 | 12,512 | 6,641 | 3,078 | 3,456 |
| Above Normal (24\%) | 2,288 | 2,532 | 2,757 | 4,947 | 6,946 | 7,415 | 8,260 | 5,348 | 3,525 | 1,999 | 1,977 | 2,352 |
| Below Normal (10\%) | 2,086 | 2,397 | 3,810 | 3,608 | 3,723 | 4,101 | 5,842 | 4,213 | 2,225 | 1,481 | 1,457 | 1,856 |
| Dry (16\%) | 2,339 | 2,684 | 2,347 | 2,487 | 2,628 | 3,304 | 3,551 | 2,976 | 1,714 | 1,267 | 1,362 | 1,789 |
| Critical (27\%) | 1,974 | 2,251 | 1,998 | 1,927 | 2,138 | 2,311 | 2,031 | 2,122 | 1,116 | 943 | 1,059 | 1,485 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 3,495 | 2,953 | 4,804 | 11,129 | 14,597 | 15,473 | 14,976 | 14,176 | 9,351 | 5,773 | 2,776 | 3,084 |
| 20\% | 3,146 | 2,777 | 2,897 | 4,811 | 10,142 | 9,856 | 10,265 | 8,232 | 4,688 | 2,628 | 2,589 | 2,654 |
| 30\% | 2,938 | 2,527 | 2,401 | 3,610 | 6,118 | 8,461 | 8,576 | 5,670 | 3,364 | 1,985 | 1,904 | 2,488 |
| 40\% | 2,763 | 2,395 | 2,204 | 2,629 | 4,232 | 5,570 | 7,567 | 5,162 | 2,947 | 1,735 | 1,666 | 2,125 |
| 50\% | 2,588 | 2,219 | 2,101 | 2,402 | 3,420 | 3,846 | 6,110 | 4,183 | 2,219 | 1,484 | 1,488 | 1,930 |
| 60\% | 2,385 | 2,169 | 2,046 | 2,289 | 2,683 | 3,459 | 5,047 | 3,554 | 1,860 | 1,365 | 1,402 | 1,835 |
| 70\% | 2,196 | 2,059 | 1,979 | 2,083 | 2,303 | 2,906 | 4,317 | 2,916 | 1,447 | 1,155 | 1,307 | 1,739 |
| 80\% | 1,988 | 1,951 | 1,829 | 1,883 | 2,145 | 2,371 | 3,100 | 2,401 | 1,283 | 1,052 | 1,202 | 1,611 |
| 90\% | 1,849 | 1,763 | 1,669 | 1,699 | 1,947 | 2,204 | 2,461 | 2,245 | 1,000 | 885 | 1,025 | 1,431 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2,660 | 2,609 | 3,371 | 5,071 | 6,639 | 7,235 | 7,686 | 6,290 | 4,174 | 2,597 | 1,818 | 2,213 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 2,903 | 3,513 | 6,448 | 11,445 | 15,743 | 16,679 | 15,389 | 14,666 | 11,287 | 6,580 | 3,020 | 3,379 |
| Above Normal (24\%) | 2,691 | 2,411 | 2,679 | 4,897 | 6,864 | 7,536 | 8,487 | 5,671 | 3,280 | 1,989 | 1,975 | 2,345 |
| Below Normal (10\%) | 2,531 | 2,249 | 3,661 | 3,506 | 3,650 | 4,149 | 6,299 | 4,206 | 2,062 | 1,462 | 1,446 | 1,837 |
| Dry (16\%) | 2,750 | 2,569 | 2,232 | 2,400 | 2,547 | 3,241 | 4,420 | 3,245 | 1,672 | 1,253 | 1,346 | 1,776 |
| Critical (27\%) | 2,418 | 2,163 | 1,910 | 1,871 | 2,078 | 2,288 | 2,741 | 2,177 | 1,090 | 916 | 1,051 | 1,480 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Flow (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 16\% | -6\% | -3\% | 0\% | 0\% | 0\% | 2\% | -1\% | -8\% | 3\% | 1\% | -2\% |
| 20\% | 17\% | -2\% | -2\% | 0\% | -1\% | 4\% | 1\% | -1\% | -18\% | 0\% | 0\% | 0\% |
| 30\% | 17\% | -5\% | -6\% | -1\% | -3\% | 7\% | 2\% | 0\% | -4\% | 0\% | 0\% | -1\% |
| 40\% | 19\% | -4\% | -6\% | -2\% | -1\% | 3\% | 2\% | 12\% | -8\% | 0\% | -1\% | -1\% |
| 50\% | 20\% | -7\% | -7\% | -6\% | 0\% | -1\% | 2\% | 3\% | -6\% | -1\% | -1\% | -1\% |
| 60\% | 22\% | -3\% | -6\% | -2\% | -3\% | -1\% | 16\% | 8\% | -2\% | -1\% | -1\% | 0\% |
| 70\% | 25\% | -4\% | -2\% | -3\% | -6\% | -2\% | 38\% | 1\% | -3\% | -1\% | -1\% | 0\% |
| 80\% | 24\% | -2\% | -4\% | -2\% | -1\% | -2\% | 27\% | 2\% | 1\% | -3\% | -1\% | 0\% |
| 90\% | 31\% | -2\% | -2\% | -2\% | 0\% | -1\% | 38\% | 19\% | -8\% | -6\% | -4\% | -3\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 19\% | -4\% | -3\% | -1\% | -1\% | 1\% | 6\% | 3\% | -8\% | -1\% | -1\% | -1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 16\% | -3\% | -3\% | -1\% | 0\% | 2\% | 0\% | 2\% | -10\% | -1\% | -2\% | -2\% |
| Above Normal (24\%) | 18\% | -5\% | -3\% | -1\% | -1\% | 2\% | 3\% | 6\% | -7\% | -1\% | 0\% | 0\% |
| Below Normal (10\%) | 21\% | -6\% | -4\% | -3\% | -2\% | 1\% | 8\% | 0\% | -7\% | -1\% | -1\% | -1\% |
| Dry (16\%) | 18\% | -4\% | -5\% | -3\% | -3\% | -2\% | 24\% | 9\% | -2\% | -1\% | -1\% | -1\% |
| Critical (27\%) | 22\% | -4\% | -4\% | -3\% | -3\% | -1\% | 35\% | 3\% | -2\% | -3\% | -1\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altematives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.3.11 Old and Middle River Flow

Table 5C.3.3.11.1 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

No Action Alternative

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{a}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 614 | 893 | 4,094 | 6,333 | 7,834 | 5,445 | 4,160 | 2,848 | 1,180 | 763 | 277 | 1,161 |
| 20\% | 586 | 874 | 2,112 | 4,323 | 4,927 | 4,179 | 2,834 | 1,727 | 609 | 688 | 259 | 1,134 |
| 30\% | 576 | 825 | 1,003 | 3,149 | 3,624 | 2,834 | 1,795 | 1,200 | 548 | 573 | 246 | 909 |
| 40\% | 423 | 657 | 761 | 1,793 | 2,868 | 2,092 | 1,504 | 1,004 | 465 | 497 | 246 | 656 |
| 50\% | 270 | 586 | 611 | 1,299 | 2,037 | 1,676 | 1,197 | 843 | 431 | 492 | 246 | 261 |
| 60\% | 246 | 368 | 359 | 1,050 | 1,407 | 1,204 | 946 | 731 | 422 | 400 | 246 | 201 |
| 70\% | 246 | 268 | 315 | 800 | 1,023 | 1,061 | 758 | 592 | 408 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 278 | 586 | 823 | 783 | 598 | 520 | 383 | 307 | 246 | 179 |
| 90\% | 184 | 210 | 277 | 486 | 633 | 662 | 564 | 446 | 334 | 246 | 240 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 401 | 686 | 1,416 | 2,720 | 3,186 | 2,697 | 1,812 | 1,281 | 648 | 495 | 258 | 565 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 520 | 1,020 | 2,913 | 5,509 | 5,771 | 5,000 | 3,288 | 2,394 | 1,120 | 655 | 273 | 1,133 |
| Above Normal (16\%) | 332 | 742 | 1,502 | 3,049 | 3,807 | 3,236 | 1,938 | 1,201 | 485 | 667 | 251 | 662 |
| Below Normal (13\%) | 471 | 650 | 582 | 1,077 | 2,048 | 1,113 | 1,019 | 789 | 445 | 508 | 254 | 211 |
| Dry (24\%) | 341 | 470 | 471 | 981 | 1,443 | 1,396 | 999 | 680 | 431 | 315 | 257 | 191 |
| Critical (15\%) | 253 | 296 | 418 | 723 | 861 | 747 | 559 | 410 | 348 | 249 | 235 | 179 |

Alternative 1

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 357 | 895 | 4,054 | 6,567 | 8,061 | 5,795 | 3,950 | 2,541 | 1,167 | 670 | 268 | 260 |
| 20\% | 283 | 383 | 2,007 | 4,470 | 4,927 | 4,380 | 2,580 | 1,582 | 679 | 593 | 251 | 240 |
| 30\% | 264 | 327 | 950 | 2,828 | 3,382 | 2,653 | 1,494 | 954 | 588 | 515 | 246 | 234 |
| 40\% | 251 | 291 | 635 | 1,564 | 2,894 | 2,062 | 1,215 | 801 | 556 | 492 | 246 | 227 |
| 50\% | 246 | 268 | 477 | 1,080 | 1,904 | 1,621 | 855 | 734 | 507 | 475 | 246 | 219 |
| 60\% | 246 | 268 | 382 | 833 | 1,179 | 1,104 | 724 | 674 | 485 | 400 | 246 | 181 |
| 70\% | 246 | 268 | 314 | 673 | 908 | 901 | 597 | 563 | 433 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 518 | 698 | 752 | 567 | 535 | 422 | 307 | 232 | 179 |
| 90\% | 211 | 208 | 277 | 405 | 562 | 601 | 528 | 437 | 377 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 286 | 506 | 1,408 | 2,595 | 3,126 | 2,682 | 1,611 | 1,161 | 705 | 458 | 252 | 237 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 340 | 791 | 3,011 | 5,453 | 5,779 | 5,081 | 3,010 | 2,178 | 1,209 | 605 | 271 | 319 |
| Above Normal (16\%) | 253 | 566 | 1,391 | 2,845 | 3,822 | 3,311 | 1,615 | 1,026 | 562 | 601 | 249 | 224 |
| Below Normal (13\%) | 291 | 433 | 545 | 879 | 2,062 | 1,078 | 813 | 719 | 533 | 437 | 255 | 206 |
| Dry (24\%) | 260 | 296 | 439 | 815 | 1,269 | 1,236 | 879 | 635 | 454 | 310 | 242 | 191 |
| Critical (15\%) | 240 | 244 | 364 | 670 | 690 | 680 | 525 | 386 | 346 | 248 | 231 | 179 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -42\% | 0\% | -1\% | 4\% | 3\% | 6\% | -5\% | -11\% | -1\% | -12\% | -3\% | -78\% |
| 20\% | -52\% | -56\% | -5\% | 3\% | 0\% | 5\% | -9\% | -8\% | 11\% | -14\% | -3\% | -79\% |
| 30\% | -54\% | -60\% | -5\% | -10\% | -7\% | -6\% | -17\% | -21\% | 7\% | -10\% | 0\% | -74\% |
| 40\% | -41\% | -56\% | -17\% | -13\% | 1\% | -1\% | -19\% | -20\% | 20\% | -1\% | 0\% | -65\% |
| 50\% | -9\% | -54\% | -22\% | -17\% | -7\% | -3\% | -29\% | -13\% | 18\% | -3\% | 0\% | -16\% |
| 60\% | 0\% | -27\% | 6\% | -21\% | -16\% | -8\% | -23\% | -8\% | 15\% | 0\% | 0\% | -10\% |
| 70\% | 0\% | 0\% | 0\% | -16\% | -11\% | -15\% | -21\% | -5\% | 6\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | -11\% | -15\% | -4\% | -5\% | 3\% | 10\% | 0\% | -6\% | 0\% |
| 90\% | 15\% | -1\% | 0\% | -17\% | -11\% | -9\% | -6\% | -2\% | 13\% | 0\% | -10\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -29\% | -26\% | -1\% | -5\% | -2\% | -1\% | -11\% | -9\% | 9\% | -8\% | -2\% | -58\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -35\% | -22\% | 3\% | -1\% | 0\% | 2\% | -8\% | -9\% | 8\% | -8\% | -1\% | -72\% |
| Above Normal (16\%) | -24\% | -24\% | -7\% | -7\% | 0\% | 2\% | -17\% | -15\% | 16\% | -10\% | -1\% | -66\% |
| Below Normal (13\%) | -38\% | -33\% | -6\% | -18\% | 1\% | -3\% | -20\% | -9\% | 20\% | -14\% | 0\% | -3\% |
| Dry (24\%) | -24\% | -37\% | -7\% | -17\% | -12\% | -11\% | -12\% | -7\% | 5\% | -2\% | -6\% | 0\% |
| Critical (15\%) | -5\% | -18\% | -13\% | -7\% | -20\% | -9\% | -6\% | -6\% | -1\% | 0\% | -2\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Altermative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.11.2 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 357 | 895 | 4,054 | 6,567 | 8,061 | 5,795 | 3,950 | 2,541 | 1,167 | 670 | 268 | 260 |
| 20\% | 283 | 383 | 2,007 | 4,470 | 4,927 | 4,380 | 2,580 | 1,582 | 679 | 593 | 251 | 240 |
| 30\% | 264 | 327 | 950 | 2,828 | 3,382 | 2,653 | 1,494 | 954 | 588 | 515 | 246 | 234 |
| 40\% | 251 | 291 | 635 | 1,564 | 2,894 | 2,062 | 1,215 | 801 | 556 | 492 | 246 | 227 |
| 50\% | 246 | 268 | 477 | 1,080 | 1,904 | 1,621 | 855 | 734 | 507 | 475 | 246 | 219 |
| 60\% | 246 | 268 | 382 | 833 | 1,179 | 1,104 | 724 | 674 | 485 | 400 | 246 | 181 |
| 70\% | 246 | 268 | 314 | 673 | 908 | 901 | 597 | 563 | 433 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 518 | 698 | 752 | 567 | 535 | 422 | 307 | 232 | 179 |
| 90\% | 211 | 208 | 277 | 405 | 562 | 601 | 528 | 437 | 377 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 286 | 506 | 1,408 | 2,595 | 3,126 | 2,682 | 1,611 | 1,161 | 705 | 458 | 252 | 237 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 340 | 791 | 3,011 | 5,453 | 5,779 | 5,081 | 3,010 | 2,178 | 1,209 | 605 | 271 | 319 |
| Above Normal (16\%) | 253 | 566 | 1,391 | 2,845 | 3,822 | 3,311 | 1,615 | 1,026 | 562 | 601 | 249 | 224 |
| Below Normal (13\%) | 291 | 433 | 545 | 879 | 2,062 | 1,078 | 813 | 719 | 533 | 437 | 255 | 206 |
| Dry (24\%) | 260 | 296 | 439 | 815 | 1,269 | 1,236 | 879 | 635 | 454 | 310 | 242 | 191 |
| Critical (15\%) | 240 | 244 | 364 | 670 | 690 | 680 | 525 | 386 | 346 | 248 | 231 | 179 |

No Action Alternative

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 614 | 893 | 4,094 | 6,333 | 7,834 | 5,445 | 4,160 | 2,848 | 1,180 | 763 | 277 | 1,161 |
| 20\% | 586 | 874 | 2,112 | 4,323 | 4,927 | 4,179 | 2,834 | 1,727 | 609 | 688 | 259 | 1,134 |
| 30\% | 576 | 825 | 1,003 | 3,149 | 3,624 | 2,834 | 1,795 | 1,200 | 548 | 573 | 246 | 909 |
| 40\% | 423 | 657 | 761 | 1,793 | 2,868 | 2,092 | 1,504 | 1,004 | 465 | 497 | 246 | 656 |
| 50\% | 270 | 586 | 611 | 1,299 | 2,037 | 1,676 | 1,197 | 843 | 431 | 492 | 246 | 261 |
| 60\% | 246 | 368 | 359 | 1,050 | 1,407 | 1,204 | 946 | 731 | 422 | 400 | 246 | 201 |
| 70\% | 246 | 268 | 315 | 800 | 1,023 | 1,061 | 758 | 592 | 408 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 278 | 586 | 823 | 783 | 598 | 520 | 383 | 307 | 246 | 179 |
| 90\% | 184 | 210 | 277 | 486 | 633 | 662 | 564 | 446 | 334 | 246 | 240 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 401 | 686 | 1,416 | 2,720 | 3,186 | 2,697 | 1,812 | 1,281 | 648 | 495 | 258 | 565 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 520 | 1,020 | 2,913 | 5,509 | 5,771 | 5,000 | 3,288 | 2,394 | 1,120 | 655 | 273 | 1,133 |
| Above Normal (16\%) | 332 | 742 | 1,502 | 3,049 | 3,807 | 3,236 | 1,938 | 1,201 | 485 | 667 | 251 | 662 |
| Below Normal (13\%) | 471 | 650 | 582 | 1,077 | 2,048 | 1,113 | 1,019 | 789 | 445 | 508 | 254 | 211 |
| Dry (24\%) | 341 | 470 | 471 | 981 | 1,443 | 1,396 | 999 | 680 | 431 | 315 | 257 | 191 |
| Critical (15\%) | 253 | 296 | 418 | 723 | 861 | 747 | 559 | 410 | 348 | 249 | 235 | 179 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 72\% | 0\% | 1\% | -4\% | -3\% | -6\% | 5\% | 12\% | 1\% | 14\% | 3\% | 346\% |
| 20\% | 107\% | 128\% | 5\% | -3\% | 0\% | -5\% | 10\% | 9\% | -10\% | 16\% | 3\% | 372\% |
| 30\% | 118\% | 152\% | 5\% | 11\% | 7\% | 7\% | 20\% | 26\% | -7\% | 11\% | 0\% | 288\% |
| 40\% | 68\% | 126\% | 20\% | 15\% | -1\% | 1\% | 24\% | 25\% | -16\% | 1\% | 0\% | 189\% |
| 50\% | 10\% | 119\% | 28\% | 20\% | 7\% | 3\% | 40\% | 15\% | -15\% | 4\% | 0\% | 19\% |
| 60\% | 0\% | 37\% | -6\% | 26\% | 19\% | 9\% | 31\% | 8\% | -13\% | 0\% | 0\% | 11\% |
| 70\% | 0\% | 0\% | 0\% | 19\% | 13\% | 18\% | 27\% | 5\% | -6\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 13\% | 18\% | 4\% | 5\% | -3\% | -9\% | 0\% | 6\% | 0\% |
| 90\% | -13\% | 1\% | 0\% | 20\% | 13\% | 10\% | 7\% | 2\% | -12\% | 0\% | 11\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 40\% | 36\% | 1\% | 5\% | 2\% | 1\% | 12\% | 10\% | -8\% | 8\% | 2\% | 139\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 53\% | 29\% | -3\% | 1\% | 0\% | -2\% | 9\% | 10\% | -7\% | 8\% | 1\% | 255\% |
| Above Normal (16\%) | 31\% | 31\% | 8\% | 7\% | 0\% | -2\% | 20\% | 17\% | -14\% | 11\% | 1\% | 195\% |
| Below Normal (13\%) | 62\% | 50\% | 7\% | 23\% | -1\% | 3\% | 25\% | 10\% | -17\% | 16\% | 0\% | 3\% |
| Dry (24\%) | 31\% | 59\% | 7\% | 20\% | 14\% | 13\% | 14\% | 7\% | -5\% | 2\% | 6\% | 0\% |
| Critical (15\%) | 5\% | 21\% | 15\% | 8\% | 25\% | 10\% | 6\% | 6\% | 1\% | 0\% | 2\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.11.3 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 357 | 895 | 4,054 | 6,567 | 8,061 | 5,795 | 3,950 | 2,541 | 1,167 | 670 | 268 | 260 |
| 20\% | 283 | 383 | 2,007 | 4,470 | 4,927 | 4,380 | 2,580 | 1,582 | 679 | 593 | 251 | 240 |
| 30\% | 264 | 327 | 950 | 2,828 | 3,382 | 2,653 | 1,494 | 954 | 588 | 515 | 246 | 234 |
| 40\% | 251 | 291 | 635 | 1,564 | 2,894 | 2,062 | 1,215 | 801 | 556 | 492 | 246 | 227 |
| 50\% | 246 | 268 | 477 | 1,080 | 1,904 | 1,621 | 855 | 734 | 507 | 475 | 246 | 219 |
| 60\% | 246 | 268 | 382 | 833 | 1,179 | 1,104 | 724 | 674 | 485 | 400 | 246 | 181 |
| 70\% | 246 | 268 | 314 | 673 | 908 | 901 | 597 | 563 | 433 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 518 | 698 | 752 | 567 | 535 | 422 | 307 | 232 | 179 |
| 90\% | 211 | 208 | 277 | 405 | 562 | 601 | 528 | 437 | 377 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 286 | 506 | 1,408 | 2,595 | 3,126 | 2,682 | 1,611 | 1,161 | 705 | 458 | 252 | 237 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 340 | 791 | 3,011 | 5,453 | 5,779 | 5,081 | 3,010 | 2,178 | 1,209 | 605 | 271 | 319 |
| Above Normal (16\%) | 253 | 566 | 1,391 | 2,845 | 3,822 | 3,311 | 1,615 | 1,026 | 562 | 601 | 249 | 224 |
| Below Normal (13\%) | 291 | 433 | 545 | 879 | 2,062 | 1,078 | 813 | 719 | 533 | 437 | 255 | 206 |
| Dry (24\%) | 260 | 296 | 439 | 815 | 1,269 | 1,236 | 879 | 635 | 454 | 310 | 242 | 191 |
| Critical (15\%) | 240 | 244 | 364 | 670 | 690 | 680 | 525 | 386 | 346 | 248 | 231 | 179 |

Alternative 3

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 298 | 902 | 4,155 | 6,646 | 7,924 | 5,788 | 3,812 | 2,471 | 1,066 | 729 | 265 | 261 |
| 20\% | 266 | 389 | 2,140 | 4,462 | 4,802 | 4,293 | 2,584 | 1,383 | 630 | 659 | 246 | 245 |
| 30\% | 257 | 319 | 1,154 | 3,104 | 3,795 | 2,714 | 1,525 | 913 | 572 | 575 | 246 | 235 |
| 40\% | 246 | 290 | 722 | 1,875 | 3,031 | 2,137 | 1,238 | 750 | 502 | 492 | 246 | 229 |
| 50\% | 246 | 268 | 480 | 1,398 | 2,079 | 1,678 | 867 | 704 | 477 | 492 | 246 | 222 |
| 60\% | 246 | 268 | 398 | 1,061 | 1,416 | 1,185 | 754 | 630 | 436 | 428 | 246 | 191 |
| 70\% | 246 | 268 | 336 | 768 | 1,078 | 1,032 | 601 | 579 | 422 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 599 | 821 | 789 | 566 | 493 | 409 | 307 | 241 | 179 |
| 90\% | 185 | 208 | 277 | 497 | 634 | 654 | 512 | 437 | 351 | 246 | 222 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 277 | 506 | 1,465 | 2,772 | 3,236 | 2,711 | 1,617 | 1,122 | 656 | 490 | 252 | 240 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 333 | 791 | 3,116 | 5,609 | 5,812 | 5,020 | 2,996 | 2,109 | 1,118 | 649 | 271 | 319 |
| Above Normal (16\%) | 242 | 568 | 1,461 | 3,096 | 3,903 | 3,292 | 1,636 | 960 | 514 | 645 | 246 | 228 |
| Below Normal (13\%) | 281 | 422 | 564 | 1,156 | 2,186 | 1,120 | 856 | 699 | 457 | 507 | 254 | 221 |
| Dry (24\%) | 250 | 297 | 457 | 992 | 1,459 | 1,384 | 882 | 612 | 445 | 321 | 245 | 191 |
| Critical (15\%) | 234 | 243 | 397 | 721 | 859 | 752 | 528 | 397 | 346 | 246 | 230 | 179 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -16\% | 1\% | 2\% | 1\% | -2\% | 0\% | -3\% | -3\% | -9\% | 9\% | -1\% | 0\% |
| 20\% | -6\% | 2\% | 7\% | 0\% | -3\% | -2\% | 0\% | -13\% | -7\% | 11\% | -2\% | 2\% |
| 30\% | -3\% | -3\% | 21\% | 10\% | 12\% | 2\% | 2\% | -4\% | -3\% | 12\% | 0\% | 0\% |
| 40\% | -2\% | 0\% | 14\% | 20\% | 5\% | 4\% | 2\% | -6\% | -10\% | 0\% | 0\% | 1\% |
| 50\% | 0\% | 0\% | 1\% | 29\% | 9\% | 3\% | 1\% | -4\% | -6\% | 4\% | 0\% | 1\% |
| 60\% | 0\% | 0\% | 4\% | 27\% | 20\% | 7\% | 4\% | -7\% | -10\% | 7\% | 0\% | 6\% |
| 70\% | 0\% | 0\% | 7\% | 14\% | 19\% | 14\% | 1\% | 3\% | -2\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 16\% | 18\% | 5\% | 0\% | -8\% | -3\% | 0\% | 4\% | 0\% |
| 90\% | -13\% | 0\% | 0\% | 23\% | 13\% | 9\% | -3\% | 0\% | -7\% | 0\% | 3\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -3\% | 0\% | 4\% | 7\% | 4\% | 1\% | 0\% | -3\% | -7\% | 7\% | 0\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -2\% | 0\% | 4\% | 3\% | 1\% | -1\% | 0\% | -3\% | -8\% | 7\% | 0\% | 0\% |
| Above Normal (16\%) | -4\% | 0\% | 5\% | 9\% | 2\% | -1\% | 1\% | -7\% | -9\% | 7\% | -1\% | 1\% |
| Below Normal (13\%) | -4\% | -3\% | 4\% | 32\% | 6\% | 4\% | 5\% | -3\% | -14\% | 16\% | 0\% | 7\% |
| Dry (24\%) | -4\% | 0\% | 4\% | 22\% | 15\% | 12\% | 0\% | -4\% | -2\% | 4\% | 1\% | 0\% |
| Critical (15\%) | -2\% | 0\% | 9\% | 8\% | 25\% | 11\% | 1\% | 3\% | 0\% | -1\% | 0\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.11.4 Sacramento/San Joaquin River Delta Outflow, Monthly Outflow Volume

Second Basis of Comparison

|  | Monthly Outflow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 357 | 895 | 4,054 | 6,567 | 8,061 | 5,795 | 3,950 | 2,541 | 1,167 | 670 | 268 | 260 |
| 20\% | 283 | 383 | 2,007 | 4,470 | 4,927 | 4,380 | 2,580 | 1,582 | 679 | 593 | 251 | 240 |
| 30\% | 264 | 327 | 950 | 2,828 | 3,382 | 2,653 | 1,494 | 954 | 588 | 515 | 246 | 234 |
| 40\% | 251 | 291 | 635 | 1,564 | 2,894 | 2,062 | 1,215 | 801 | 556 | 492 | 246 | 227 |
| 50\% | 246 | 268 | 477 | 1,080 | 1,904 | 1,621 | 855 | 734 | 507 | 475 | 246 | 219 |
| 60\% | 246 | 268 | 382 | 833 | 1,179 | 1,104 | 724 | 674 | 485 | 400 | 246 | 181 |
| 70\% | 246 | 268 | 314 | 673 | 908 | 901 | 597 | 563 | 433 | 307 | 246 | 179 |
| 80\% | 246 | 268 | 277 | 518 | 698 | 752 | 567 | 535 | 422 | 307 | 232 | 179 |
| 90\% | 211 | 208 | 277 | 405 | 562 | 601 | 528 | 437 | 377 | 246 | 215 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 286 | 506 | 1,408 | 2,595 | 3,126 | 2,682 | 1,611 | 1,161 | 705 | 458 | 252 | 237 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 340 | 791 | 3,011 | 5,453 | 5,779 | 5,081 | 3,010 | 2,178 | 1,209 | 605 | 271 | 319 |
| Above Normal (16\%) | 253 | 566 | 1,391 | 2,845 | 3,822 | 3,311 | 1,615 | 1,026 | 562 | 601 | 249 | 224 |
| Below Normal (13\%) | 291 | 433 | 545 | 879 | 2,062 | 1,078 | 813 | 719 | 533 | 437 | 255 | 206 |
| Dry (24\%) | 260 | 296 | 439 | 815 | 1,269 | 1,236 | 879 | 635 | 454 | 310 | 242 | 191 |
| Critical (15\%) | 240 | 244 | 364 | 670 | 690 | 680 | 525 | 386 | 346 | 248 | 231 | 179 |

Alternative 5

|  | Monthly Outtiow Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 623 | 960 | 4,115 | 6,339 | 7,831 | 5,439 | 4,160 | 2,849 | 1,180 | 767 | 284 | 1,161 |
| 20\% | 594 | 874 | 2,112 | 4,319 | 4,907 | 4,174 | 2,807 | 1,763 | 606 | 688 | 256 | 1,134 |
| 30\% | 576 | 830 | 1,008 | 3,149 | 3,653 | 2,835 | 1,798 | 1,237 | 524 | 593 | 246 | 910 |
| 40\% | 423 | 660 | 762 | 1,785 | 2,869 | 2,092 | 1,542 | 1,002 | 453 | 501 | 246 | 651 |
| 50\% | 257 | 586 | 616 | 1,301 | 2,053 | 1,666 | 1,234 | 873 | 423 | 492 | 246 | 255 |
| 60\% | 246 | 369 | 359 | 1,048 | 1,406 | 1,203 | 1,028 | 776 | 422 | 400 | 246 | 204 |
| 70\% | 246 | 268 | 310 | 800 | 1,025 | 1,057 | 817 | 629 | 401 | 308 | 246 | 179 |
| 80\% | 246 | 268 | 286 | 585 | 823 | 783 | 712 | 561 | 370 | 307 | 246 | 179 |
| 90\% | 184 | 211 | 277 | 486 | 633 | 662 | 623 | 462 | 330 | 246 | 230 | 179 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 401 | 690 | 1,413 | 2,714 | 3,184 | 2,695 | 1,848 | 1,312 | 642 | 500 | 257 | 565 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 517 | 1,020 | 2,905 | 5,499 | 5,773 | 4,996 | 3,288 | 2,411 | 1,117 | 667 | 273 | 1,132 |
| Above Normal (16\%) | 334 | 767 | 1,505 | 3,048 | 3,795 | 3,232 | 1,947 | 1,223 | 482 | 668 | 251 | 661 |
| Below Normal (13\%) | 471 | 650 | 582 | 1,075 | 2,047 | 1,110 | 1,061 | 821 | 434 | 513 | 254 | 214 |
| Dry (24\%) | 342 | 471 | 467 | 980 | 1,444 | 1,396 | 1,081 | 720 | 423 | 316 | 256 | 191 |
| Critical (15\%) | 254 | 296 | 418 | 714 | 856 | 747 | 621 | 462 | 346 | 249 | 233 | 179 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Outflow Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 75\% | 7\% | 2\% | -3\% | -3\% | -6\% | 5\% | 12\% | 1\% | 14\% | 6\% | 346\% |
| 20\% | 110\% | 128\% | 5\% | -3\% | 0\% | -5\% | 9\% | 11\% | -11\% | 16\% | 2\% | 372\% |
| 30\% | 118\% | 154\% | 6\% | 11\% | 8\% | 7\% | 20\% | 30\% | -11\% | 15\% | 0\% | 288\% |
| 40\% | 68\% | 127\% | 20\% | 14\% | -1\% | 1\% | 27\% | 25\% | -19\% | 2\% | 0\% | 186\% |
| 50\% | 5\% | 119\% | 29\% | 20\% | 8\% | 3\% | 44\% | 19\% | -17\% | 4\% | 0\% | 17\% |
| 60\% | 0\% | 38\% | -6\% | 26\% | 19\% | 9\% | 42\% | 15\% | -13\% | 0\% | 0\% | 13\% |
| 70\% | 0\% | 0\% | -1\% | 19\% | 13\% | 17\% | 37\% | 12\% | -7\% | 0\% | 0\% | 0\% |
| 80\% | 0\% | 0\% | 3\% | 13\% | 18\% | 4\% | 25\% | 5\% | -12\% | 0\% | 6\% | 0\% |
| 90\% | -13\% | 1\% | 0\% | 20\% | 13\% | 10\% | 18\% | 6\% | -13\% | 0\% | 7\% | 0\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 40\% | 36\% | 0\% | 5\% | 2\% | 0\% | 15\% | 13\% | -9\% | 9\% | 2\% | 138\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 52\% | 29\% | -3\% | 1\% | 0\% | -2\% | 9\% | 11\% | -8\% | 10\% | 1\% | 255\% |
| Above Normal (16\%) | 32\% | 35\% | 8\% | 7\% | -1\% | -2\% | 21\% | 19\% | -14\% | 11\% | 1\% | 195\% |
| Below Normal (13\%) | 62\% | 50\% | 7\% | 22\% | -1\% | 3\% | 31\% | 14\% | -19\% | 17\% | 0\% | 4\% |
| Dry (24\%) | 31\% | 59\% | 6\% | 20\% | 14\% | 13\% | 23\% | 13\% | -7\% | 2\% | 6\% | 0\% |
| Critical (15\%) | 6\% | 21\% | 15\% | 7\% | 24\% | 10\% | 18\% | 20\% | 0\% | 0\% | 1\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.12 X2 Position

Table 5C.3.3.12.1 X2, End of Month Position

No Action Alternative

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.4 | 93.6 | 90.8 | 84.0 | 77.3 | 75.9 | 78.1 | 81.0 | 83.1 | 86.5 | 89.7 | 91.9 |
| 20\% | 91.8 | 91.4 | 87.6 | 82.3 | 71.7 | 72.8 | 73.6 | 79.3 | 81.8 | 84.9 | 88.1 | 91.1 |
| 30\% | 91.6 | 90.9 | 83.9 | 79.8 | 67.2 | 65.7 | 70.0 | 77.3 | 81.0 | 84.3 | 87.5 | 90.6 |
| 40\% | 91.1 | 88.1 | 82.5 | 73.5 | 64.0 | 64.5 | 66.7 | 72.3 | 80.2 | 82.4 | 86.2 | 90.1 |
| 50\% | 89.7 | 81.1 | 81.1 | 71.2 | 58.5 | 59.9 | 64.7 | 69.9 | 77.8 | 80.6 | 84.8 | 88.5 |
| 60\% | 81.0 | 81.0 | 79.7 | 64.4 | 55.2 | 58.0 | 60.9 | 66.3 | 76.6 | 78.1 | 84.6 | 81.0 |
| 70\% | 74.1 | 75.1 | 72.0 | 55.1 | 51.9 | 53.9 | 58.0 | 63.8 | 73.4 | 77.4 | 84.1 | 74.1 |
| 80\% | 74.0 | 74.0 | 62.2 | 51.3 | 49.4 | 50.6 | 53.8 | 59.1 | 69.8 | 76.8 | 82.7 | 74.0 |
| 90\% | 74.0 | 74.0 | 52.8 | 49.4 | 48.2 | 49.0 | 49.9 | 53.3 | 63.5 | 74.6 | 82.2 | 74.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84.2 | 82.3 | 76.4 | 68.0 | 61.1 | 61.4 | 64.2 | 68.8 | 75.9 | 80.4 | 85.4 | 83.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 73.9 | 72.9 | 71.1 | 54.8 | 51.2 | 53.1 | 55.1 | 58.4 | 67.4 | 74.9 | 82.7 | 73.9 |
| Above Normal (16\%) | 81.0 | 79.3 | 75.9 | 61.0 | 54.9 | 55.3 | 59.1 | 65.2 | 75.3 | 77.9 | 83.1 | 74.7 |
| Below Normal (13\%) | 89.1 | 87.6 | 78.8 | 74.6 | 64.3 | 66.9 | 69.0 | 72.9 | 79.1 | 81.1 | 85.1 | 89.3 |
| Dry (24\%) | 91.5 | 86.9 | 75.4 | 77.7 | 67.7 | 65.4 | 68.8 | 74.5 | 80.1 | 84.5 | 87.6 | 90.5 |
| Critical (15\%) | 93.6 | 93.6 | 87.8 | 82.0 | 75.3 | 74.6 | 77.7 | 82.3 | 85.2 | 87.9 | 90.3 | 92.1 |

Alternative 1

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.6 | 93.1 | 90.9 | 87.3 | 80.8 | 78.5 | 78.7 | 81.5 | 83.5 | 86.7 | 89.9 | 92.0 |
| 20\% | 91.9 | 91.4 | 90.6 | 85.8 | 75.6 | 73.6 | 75.2 | 79.5 | 81.6 | 84.8 | 88.6 | 91.5 |
| 30\% | 91.4 | 91.0 | 89.6 | 83.3 | 72.0 | 68.3 | 73.1 | 78.5 | 80.6 | 84.3 | 88.0 | 91.0 |
| 40\% | 91.0 | 90.8 | 88.6 | 78.8 | 66.2 | 66.5 | 69.7 | 75.3 | 78.7 | 82.0 | 86.6 | 90.1 |
| 50\% | 90.5 | 90.3 | 86.7 | 75.6 | 61.4 | 61.6 | 67.4 | 72.9 | 77.8 | 80.9 | 85.3 | 89.5 |
| 60\% | 90.3 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.1 | 69.2 | 76.2 | 79.1 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.1 | 76.9 | 56.2 | 52.4 | 54.1 | 59.7 | 66.0 | 74.4 | 78.3 | 84.5 | 88.7 |
| 80\% | 89.6 | 88.0 | 65.9 | 52.0 | 49.3 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.0 | 88.4 |
| 90\% | 88.2 | 79.6 | 53.3 | 49.5 | 48.3 | 48.8 | 50.4 | 54.6 | 63.9 | 74.7 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.3 | 62.9 | 62.3 | 65.9 | 70.6 | 75.8 | 80.6 | 85.9 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 87.8 | 84.8 | 75.8 | 55.7 | 51.6 | 53.0 | 56.4 | 60.2 | 67.2 | 75.2 | 83.3 | 86.7 |
| Above Normal (16\%) | 90.3 | 87.9 | 80.5 | 63.6 | 56.0 | 55.2 | 61.2 | 67.9 | 75.1 | 78.2 | 83.8 | 81.9 |
| Below Normal (13\%) | 89.4 | 88.6 | 80.6 | 78.7 | 66.4 | 67.6 | 71.3 | 74.9 | 78.2 | 81.3 | 85.9 | 89.7 |
| Dry (24\%) | 91.2 | 87.2 | 76.9 | 81.1 | 70.8 | 67.5 | 70.7 | 75.9 | 80.2 | 84.4 | 88.1 | 90.9 |
| Critical (15\%) | 93.1 | 93.4 | 89.8 | 83.6 | 78.1 | 76.7 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.3 |

Alternative 1 minus No Action Alternative

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -0.7 | -0.5 | 0.1 | 3.3 | 3.5 | 2.6 | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.1 |
| 20\% | 0.1 | -0.1 | 3.0 | 3.6 | 3.9 | 0.8 | 1.6 | 0.3 | -0.2 | -0.1 | 0.5 | 0.4 |
| 30\% | -0.2 | 0.1 | 5.6 | 3.5 | 4.8 | 2.5 | 3.1 | 1.3 | -0.4 | 0.0 | 0.6 | 0.4 |
| 40\% | -0.1 | 2.7 | 6.1 | 5.3 | 2.2 | 2.0 | 3.0 | 3.0 | -1.5 | -0.4 | 0.3 | 0.0 |
| 50\% | 0.8 | 9.2 | 5.6 | 4.4 | 3.0 | 1.7 | 2.7 | 3.0 | 0.0 | 0.3 | 0.5 | 1.1 |
| 60\% | 9.3 | 8.6 | 2.7 | 3.4 | 0.5 | -0.2 | 3.3 | 2.9 | -0.4 | 1.0 | 0.1 | 8.0 |
| 70\% | 15.9 | 14.0 | 5.0 | 1.1 | 0.5 | 0.2 | 1.7 | 2.2 | 1.0 | 0.9 | 0.4 | 14.6 |
| 80\% | 15.6 | 13.9 | 3.6 | 0.7 | -0.1 | -0.2 | 0.9 | 1.0 | 1.6 | 0.4 | 1.3 | 14.4 |
| 90\% | 14.2 | 5.6 | 0.5 | 0.1 | 0.1 | -0.2 | 0.5 | 1.2 | 0.4 | 0.1 | 0.8 | 13.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 5.8 | 5.3 | 3.1 | 2.4 | 1.8 | 0.9 | 1.7 | 1.8 | -0.1 | 0.2 | 0.5 | 5.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet | 13.9 | 11.9 | 4.7 | 0.9 | 0.4 | 0.0 | 1.3 | 1.9 | -0.1 | 0.4 | 0.5 | 12.7 |
| Above Normal | 9.3 | 8.6 | 4.5 | 2.6 | 1.1 | 0.0 | 2.1 | 2.7 | -0.2 | 0.3 | 0.7 | 7.2 |
| Below Normal | 0.3 | 1.0 | 1.8 | 4.2 | 2.1 | 0.8 | 2.3 | 2.0 | -0.9 | 0.2 | 0.8 | 0.4 |
| Dry | -0.2 | 0.3 | 1.5 | 3.5 | 3.2 | 2.2 | 1.9 | 1.4 | 0.1 | -0.1 | 0.4 | 0.3 |
| Critical | -0.5 | -0.2 | 2.0 | 1.6 | 2.9 | 2.2 | 1.2 | 0.9 | 0.5 | 0.3 | 0.3 | 0.2 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) X 2 is defined as the position of the $2 \%$ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and And Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.12.2 X2, End of Month Position

Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.6 | 93.1 | 90.9 | 87.3 | 80.8 | 78.5 | 78.7 | 81.5 | 83.5 | 86.7 | 89.9 | 92.0 |
| 20\% | 91.9 | 91.4 | 90.6 | 85.8 | 75.6 | 73.6 | 75.2 | 79.5 | 81.6 | 84.8 | 88.6 | 91.5 |
| 30\% | 91.4 | 91.0 | 89.6 | 83.3 | 72.0 | 68.3 | 73.1 | 78.5 | 80.6 | 84.3 | 88.0 | 91.0 |
| 40\% | 91.0 | 90.8 | 88.6 | 78.8 | 66.2 | 66.5 | 69.7 | 75.3 | 78.7 | 82.0 | 86.6 | 90.1 |
| 50\% | 90.5 | 90.3 | 86.7 | 75.6 | 61.4 | 61.6 | 67.4 | 72.9 | 77.8 | 80.9 | 85.3 | 89.5 |
| 60\% | 90.3 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.1 | 69.2 | 76.2 | 79.1 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.1 | 76.9 | 56.2 | 52.4 | 54.1 | 59.7 | 66.0 | 74.4 | 78.3 | 84.5 | 88.7 |
| 80\% | 89.6 | 88.0 | 65.9 | 52.0 | 49.3 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.0 | 88.4 |
| 90\% | 88.2 | 79.6 | 53.3 | 49.5 | 48.3 | 48.8 | 50.4 | 54.6 | 63.9 | 74.7 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.3 | 62.9 | 62.3 | 65.9 | 70.6 | 75.8 | 80.6 | 85.9 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 87.8 | 84.8 | 75.8 | 55.7 | 51.6 | 53.0 | 56.4 | 60.2 | 67.2 | 75.2 | 83.3 | 86.7 |
| Above Normal (16\%) | 90.3 | 87.9 | 80.5 | 63.6 | 56.0 | 55.2 | 61.2 | 67.9 | 75.1 | 78.2 | 83.8 | 81.9 |
| Below Normal (13\%) | 89.4 | 88.6 | 80.6 | 78.7 | 66.4 | 67.6 | 71.3 | 74.9 | 78.2 | 81.3 | 85.9 | 89.7 |
| Dry (24\%) | 91.2 | 87.2 | 76.9 | 81.1 | 70.8 | 67.5 | 70.7 | 75.9 | 80.2 | 84.4 | 88.1 | 90.9 |
| Critical (15\%) | 93.1 | 93.4 | 89.8 | 83.6 | 78.1 | 76.7 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.3 |

## No Action Alternative

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.4 | 93.6 | 90.8 | 84.0 | 77.3 | 75.9 | 78.1 | 81.0 | 83.1 | 86.5 | 89.7 | 91.9 |
| 20\% | 91.8 | 91.4 | 87.6 | 82.3 | 71.7 | 72.8 | 73.6 | 79.3 | 81.8 | 84.9 | 88.1 | 91.1 |
| 30\% | 91.6 | 90.9 | 83.9 | 79.8 | 67.2 | 65.7 | 70.0 | 77.3 | 81.0 | 84.3 | 87.5 | 90.6 |
| 40\% | 91.1 | 88.1 | 82.5 | 73.5 | 64.0 | 64.5 | 66.7 | 72.3 | 80.2 | 82.4 | 86.2 | 90.1 |
| 50\% | 89.7 | 81.1 | 81.1 | 71.2 | 58.5 | 59.9 | 64.7 | 69.9 | 77.8 | 80.6 | 84.8 | 88.5 |
| 60\% | 81.0 | 81.0 | 79.7 | 64.4 | 55.2 | 58.0 | 60.9 | 66.3 | 76.6 | 78.1 | 84.6 | 81.0 |
| 70\% | 74.1 | 75.1 | 72.0 | 55.1 | 51.9 | 53.9 | 58.0 | 63.8 | 73.4 | 77.4 | 84.1 | 74.1 |
| 80\% | 74.0 | 74.0 | 62.2 | 51.3 | 49.4 | 50.6 | 53.8 | 59.1 | 69.8 | 76.8 | 82.7 | 74.0 |
| 90\% | 74.0 | 74.0 | 52.8 | 49.4 | 48.2 | 49.0 | 49.9 | 53.3 | 63.5 | 74.6 | 82.2 | 74.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84.2 | 82.3 | 76.4 | 68.0 | 61.1 | 61.4 | 64.2 | 68.8 | 75.9 | 80.4 | 85.4 | 83.9 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 73.9 | 72.9 | 71.1 | 54.8 | 51.2 | 53.1 | 55.1 | 58.4 | 67.4 | 74.9 | 82.7 | 73.9 |
| Above Normal (16\%) | 81.0 | 79.3 | 75.9 | 61.0 | 54.9 | 55.3 | 59.1 | 65.2 | 75.3 | 77.9 | 83.1 | 74.7 |
| Below Normal (13\%) | 89.1 | 87.6 | 78.8 | 74.6 | 64.3 | 66.9 | 69.0 | 72.9 | 79.1 | 81.1 | 85.1 | 89.3 |
| Dry (24\%) | 91.5 | 86.9 | 75.4 | 77.7 | 67.7 | 65.4 | 68.8 | 74.5 | 80.1 | 84.5 | 87.6 | 90.5 |
| Critical (15\%) | 93.6 | 93.6 | 87.8 | 82.0 | 75.3 | 74.6 | 77.7 | 82.3 | 85.2 | 87.9 | 90.3 | 92.1 |

No Action Alternative minus Second Basis of Comparison

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.7 | 0.5 | -0.1 | -3.3 | -3.5 | -2.6 | -0.5 | -0.5 | -0.3 | -0.2 | -0.2 | -0.1 |
| 20\% | -0.1 | 0.1 | -3.0 | -3.6 | -3.9 | -0.8 | -1.6 | -0.3 | 0.2 | 0.1 | -0.5 | -0.4 |
| 30\% | 0.2 | -0.1 | -5.6 | -3.5 | -4.8 | -2.5 | -3.1 | -1.3 | 0.4 | 0.0 | -0.6 | -0.4 |
| 40\% | 0.1 | -2.7 | -6.1 | -5.3 | -2.2 | -2.0 | -3.0 | -3.0 | 1.5 | 0.4 | -0.3 | 0.0 |
| 50\% | -0.8 | -9.2 | -5.6 | -4.4 | -3.0 | -1.7 | -2.7 | -3.0 | 0.0 | -0.3 | -0.5 | -1.1 |
| 60\% | -9.3 | -8.6 | -2.7 | -3.4 | -0.5 | 0.2 | -3.3 | -2.9 | 0.4 | -1.0 | -0.1 | -8.0 |
| 70\% | -15.9 | -14.0 | -5.0 | -1.1 | -0.5 | -0.2 | -1.7 | -2.2 | -1.0 | -0.9 | -0.4 | -14.6 |
| 80\% | -15.6 | -13.9 | -3.6 | -0.7 | 0.1 | 0.2 | -0.9 | -1.0 | -1.6 | -0.4 | -1.3 | -14.4 |
| 90\% | -14.2 | -5.6 | -0.5 | -0.1 | -0.1 | 0.2 | -0.5 | -1.2 | -0.4 | -0.1 | -0.8 | -13.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5.8 | -5.3 | -3.1 | -2.4 | -1.8 | -0.9 | -1.7 | -1.8 | 0.1 | -0.2 | -0.5 | -5.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet | -13.9 | -11.9 | -4.7 | -0.9 | -0.4 | 0.0 | -1.3 | -1.9 | 0.1 | -0.4 | -0.5 | -12.7 |
| Above Normal | -9.3 | -8.6 | -4.5 | -2.6 | -1.1 | 0.0 | -2.1 | -2.7 | 0.2 | -0.3 | -0.7 | -7.2 |
| Below Normal | -0.3 | -1.0 | -1.8 | -4.2 | -2.1 | -0.8 | -2.3 | -2.0 | 0.9 | -0.2 | -0.8 | -0.4 |
| Dry | 0.2 | -0.3 | -1.5 | -3.5 | -3.2 | -2.2 | -1.9 | -1.4 | -0.1 | 0.1 | -0.4 | -0.3 |
| Critical | 0.5 | 0.2 | -2.0 | -1.6 | -2.9 | -2.2 | -1.2 | -0.9 | -0.5 | -0.3 | -0.3 | -0.2 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) X 2 is defined as the position of the $2 \%$ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.12.3 X2, End of Month Position

Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.6 | 93.1 | 90.9 | 87.3 | 80.8 | 78.5 | 78.7 | 81.5 | 83.5 | 86.7 | 89.9 | 92.0 |
| 20\% | 91.9 | 91.4 | 90.6 | 85.8 | 75.6 | 73.6 | 75.2 | 79.5 | 81.6 | 84.8 | 88.6 | 91.5 |
| 30\% | 91.4 | 91.0 | 89.6 | 83.3 | 72.0 | 68.3 | 73.1 | 78.5 | 80.6 | 84.3 | 88.0 | 91.0 |
| 40\% | 91.0 | 90.8 | 88.6 | 78.8 | 66.2 | 66.5 | 69.7 | 75.3 | 78.7 | 82.0 | 86.6 | 90.1 |
| 50\% | 90.5 | 90.3 | 86.7 | 75.6 | 61.4 | 61.6 | 67.4 | 72.9 | 77.8 | 80.9 | 85.3 | 89.5 |
| 60\% | 90.3 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.1 | 69.2 | 76.2 | 79.1 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.1 | 76.9 | 56.2 | 52.4 | 54.1 | 59.7 | 66.0 | 74.4 | 78.3 | 84.5 | 88.7 |
| 80\% | 89.6 | 88.0 | 65.9 | 52.0 | 49.3 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.0 | 88.4 |
| 90\% | 88.2 | 79.6 | 53.3 | 49.5 | 48.3 | 48.8 | 50.4 | 54.6 | 63.9 | 74.7 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.3 | 62.9 | 62.3 | 65.9 | 70.6 | 75.8 | 80.6 | 85.9 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 87.8 | 84.8 | 75.8 | 55.7 | 51.6 | 53.0 | 56.4 | 60.2 | 67.2 | 75.2 | 83.3 | 86.7 |
| Above Normal (16\%) | 90.3 | 87.9 | 80.5 | 63.6 | 56.0 | 55.2 | 61.2 | 67.9 | 75.1 | 78.2 | 83.8 | 81.9 |
| Below Normal (13\%) | 89.4 | 88.6 | 80.6 | 78.7 | 66.4 | 67.6 | 71.3 | 74.9 | 78.2 | 81.3 | 85.9 | 89.7 |
| Dry (24\%) | 91.2 | 87.2 | 76.9 | 81.1 | 70.8 | 67.5 | 70.7 | 75.9 | 80.2 | 84.4 | 88.1 | 90.9 |
| Critical (15\%) | 93.1 | 93.4 | 89.8 | 83.6 | 78.1 | 76.7 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.3 |

Alternative 3

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.2 | 93.6 | 90.8 | 86.1 | 77.8 | 75.8 | 78.2 | 81.5 | 83.2 | 86.4 | 90.0 | 92.2 |
| 20\% | 91.9 | 91.5 | 90.5 | 83.7 | 71.7 | 72.5 | 74.6 | 79.6 | 82.0 | 84.8 | 88.4 | 91.3 |
| 30\% | 91.6 | 91.1 | 89.4 | 81.5 | 67.6 | 66.1 | 71.3 | 78.4 | 81.0 | 84.3 | 87.7 | 90.8 |
| 40\% | 91.2 | 90.8 | 88.5 | 74.8 | 64.1 | 64.5 | 69.7 | 75.6 | 80.3 | 81.7 | 86.0 | 89.8 |
| 50\% | 90.7 | 90.6 | 86.7 | 71.8 | 58.8 | 60.0 | 67.3 | 73.1 | 78.8 | 80.7 | 84.9 | 89.3 |
| 60\% | 90.2 | 89.8 | 82.6 | 64.6 | 54.4 | 58.0 | 63.6 | 70.4 | 77.1 | 78.4 | 84.6 | 88.7 |
| 70\% | 89.9 | 89.0 | 74.2 | 55.1 | 52.2 | 54.4 | 59.9 | 66.8 | 75.1 | 77.8 | 84.2 | 88.4 |
| 80\% | 89.6 | 87.9 | 65.1 | 51.2 | 49.3 | 50.4 | 54.8 | 61.7 | 71.8 | 77.1 | 83.2 | 88.2 |
| 90\% | 88.2 | 79.6 | 53.0 | 49.5 | 48.1 | 48.8 | 50.4 | 54.8 | 64.9 | 75.0 | 82.4 | 87.6 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.1 | 87.8 | 79.0 | 68.5 | 61.2 | 61.4 | 65.5 | 70.8 | 76.5 | 80.5 | 85.6 | 89.1 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 87.8 | 84.8 | 75.3 | 54.8 | 51.3 | 53.1 | 56.5 | 60.8 | 68.3 | 75.1 | 82.9 | 86.6 |
| Above Normal (16\%) | 90.3 | 88.0 | 80.0 | 61.5 | 54.9 | 55.0 | 60.9 | 68.4 | 76.2 | 78.0 | 83.4 | 81.8 |
| Below Normal (13\%) | 89.2 | 88.8 | 80.2 | 75.4 | 64.0 | 66.6 | 70.5 | 74.9 | 79.6 | 81.0 | 85.1 | 89.2 |
| Dry (24\%) | 91.4 | 87.4 | 76.4 | 78.8 | 67.9 | 65.5 | 69.9 | 76.0 | 80.4 | 84.3 | 87.8 | 90.8 |
| Critical (15\%) | 93.4 | 93.7 | 89.3 | 82.7 | 75.6 | 74.6 | 78.1 | 82.8 | 85.4 | 88.0 | 90.5 | 92.3 |

Alternative 3 minus Second Basis of Comparison

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.5 | 0.5 | -0.1 | -1.2 | -3.0 | -2.7 | -0.5 | -0.1 | -0.3 | -0.3 | 0.1 | 0.2 |
| 20\% | 0.1 | 0.1 | -0.1 | -2.2 | -3.9 | -1.1 | -0.6 | 0.1 | 0.4 | 0.0 | -0.2 | -0.2 |
| 30\% | 0.2 | 0.1 | -0.1 | -1.8 | -4.4 | -2.1 | -1.8 | -0.1 | 0.4 | 0.0 | -0.4 | -0.2 |
| 40\% | 0.2 | 0.0 | -0.2 | -4.0 | -2.0 | -2.1 | 0.0 | 0.3 | 1.6 | -0.3 | -0.5 | -0.3 |
| 50\% | 0.2 | 0.3 | 0.0 | -3.9 | -2.6 | -1.6 | -0.2 | 0.3 | 1.0 | -0.3 | -0.4 | -0.2 |
| 60\% | -0.1 | 0.1 | 0.2 | -3.1 | -1.3 | 0.2 | -0.5 | 1.2 | 0.9 | -0.7 | -0.1 | -0.3 |
| 70\% | -0.1 | -0.1 | -2.7 | -1.1 | -0.2 | 0.2 | 0.2 | 0.8 | 0.7 | -0.5 | -0.2 | -0.2 |
| 80\% | 0.0 | -0.1 | -0.8 | -0.8 | 0.0 | 0.1 | 0.1 | 1.5 | 0.3 | -0.2 | -0.8 | -0.2 |
| 90\% | 0.0 | 0.0 | -0.3 | 0.0 | -0.2 | 0.0 | 0.0 | 0.2 | 1.0 | 0.2 | -0.6 | -0.1 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0.1 | 0.1 | -0.5 | -1.8 | -1.7 | -1.0 | -0.4 | 0.2 | 0.7 | -0.2 | -0.3 | -0.2 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet | 0.0 | 0.0 | -0.4 | -0.9 | -0.3 | 0.1 | 0.1 | 0.5 | 1.1 | -0.1 | -0.4 | -0.1 |
| Above Normal | 0.0 | 0.1 | -0.5 | -2.1 | -1.1 | -0.2 | -0.2 | 0.5 | 1.1 | -0.2 | -0.4 | -0.1 |
| Below Normal | -0.2 | 0.2 | -0.5 | -3.4 | -2.4 | -1.1 | -0.8 | 0.1 | 1.4 | -0.3 | -0.7 | -0.5 |
| Dry | 0.2 | 0.2 | -0.5 | -2.4 | -2.9 | -2.1 | -0.8 | 0.1 | 0.3 | -0.2 | -0.2 | -0.1 |
| Critical | 0.4 | 0.3 | -0.6 | -0.9 | -2.5 | -2.1 | -0.7 | -0.4 | -0.3 | -0.2 | -0.1 | 0.0 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) X 2 is defined as the position of the $2 \%$ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.12.4 X2, End of Month Position

Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 92.6 | 93.1 | 90.9 | 87.3 | 80.8 | 78.5 | 78.7 | 81.5 | 83.5 | 86.7 | 89.9 | 92.0 |
| 20\% | 91.9 | 91.4 | 90.6 | 85.8 | 75.6 | 73.6 | 75.2 | 79.5 | 81.6 | 84.8 | 88.6 | 91.5 |
| 30\% | 91.4 | 91.0 | 89.6 | 83.3 | 72.0 | 68.3 | 73.1 | 78.5 | 80.6 | 84.3 | 88.0 | 91.0 |
| 40\% | 91.0 | 90.8 | 88.6 | 78.8 | 66.2 | 66.5 | 69.7 | 75.3 | 78.7 | 82.0 | 86.6 | 90.1 |
| 50\% | 90.5 | 90.3 | 86.7 | 75.6 | 61.4 | 61.6 | 67.4 | 72.9 | 77.8 | 80.9 | 85.3 | 89.5 |
| 60\% | 90.3 | 89.6 | 82.5 | 67.7 | 55.7 | 57.8 | 64.1 | 69.2 | 76.2 | 79.1 | 84.7 | 89.0 |
| 70\% | 90.0 | 89.1 | 76.9 | 56.2 | 52.4 | 54.1 | 59.7 | 66.0 | 74.4 | 78.3 | 84.5 | 88.7 |
| 80\% | 89.6 | 88.0 | 65.9 | 52.0 | 49.3 | 50.4 | 54.7 | 60.2 | 71.4 | 77.3 | 84.0 | 88.4 |
| 90\% | 88.2 | 79.6 | 53.3 | 49.5 | 48.3 | 48.8 | 50.4 | 54.6 | 63.9 | 74.7 | 83.0 | 87.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90.0 | 87.6 | 79.5 | 70.3 | 62.9 | 62.3 | 65.9 | 70.6 | 75.8 | 80.6 | 85.9 | 89.3 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 87.8 | 84.8 | 75.8 | 55.7 | 51.6 | 53.0 | 56.4 | 60.2 | 67.2 | 75.2 | 83.3 | 86.7 |
| Above Normal (16\%) | 90.3 | 87.9 | 80.5 | 63.6 | 56.0 | 55.2 | 61.2 | 67.9 | 75.1 | 78.2 | 83.8 | 81.9 |
| Below Normal (13\%) | 89.4 | 88.6 | 80.6 | 78.7 | 66.4 | 67.6 | 71.3 | 74.9 | 78.2 | 81.3 | 85.9 | 89.7 |
| Dry (24\%) | 91.2 | 87.2 | 76.9 | 81.1 | 70.8 | 67.5 | 70.7 | 75.9 | 80.2 | 84.4 | 88.1 | 90.9 |
| Critical (15\%) | 93.1 | 93.4 | 89.8 | 83.6 | 78.1 | 76.7 | 78.8 | 83.3 | 85.7 | 88.2 | 90.6 | 92.3 |

Alternative 5

| Statistic | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 93.2 | 93.3 | 90.8 | 84.0 | 77.3 | 75.9 | 77.2 | 79.1 | 83.1 | 86.5 | 89.6 | 91.9 |
| 20\% | 91.9 | 91.5 | 87.6 | 82.3 | 71.7 | 72.8 | 72.5 | 77.9 | 81.4 | 84.9 | 88.1 | 91.1 |
| 30\% | 91.6 | 91.0 | 83.9 | 79.8 | 67.2 | 65.8 | 69.5 | 75.8 | 81.0 | 84.2 | 87.4 | 90.5 |
| 40\% | 91.0 | 88.0 | 82.4 | 73.5 | 63.9 | 64.5 | 66.4 | 71.5 | 79.6 | 82.3 | 86.1 | 90.0 |
| 50\% | 89.5 | 81.1 | 81.2 | 71.2 | 58.5 | 59.9 | 64.2 | 69.3 | 77.8 | 80.7 | 84.8 | 88.5 |
| 60\% | 81.0 | 81.0 | 79.7 | 64.4 | 55.1 | 57.9 | 60.8 | 66.4 | 76.6 | 78.2 | 84.6 | 81.0 |
| 70\% | 74.1 | 75.1 | 71.9 | 55.1 | 51.9 | 53.9 | 58.0 | 63.7 | 73.4 | 77.5 | 84.1 | 74.1 |
| 80\% | 74.0 | 74.1 | 62.2 | 51.3 | 49.4 | 50.6 | 53.5 | 58.9 | 69.8 | 76.8 | 82.6 | 74.0 |
| 90\% | 74.0 | 73.9 | 53.0 | 49.4 | 48.2 | 49.1 | 49.9 | 53.3 | 63.5 | 74.6 | 82.2 | 74.0 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 84.2 | 82.3 | 76.4 | 68.0 | 61.1 | 61.4 | 63.8 | 68.2 | 75.7 | 80.4 | 85.3 | 83.8 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 73.9 | 72.9 | 71.1 | 54.7 | 51.2 | 53.1 | 55.1 | 58.2 | 67.3 | 74.7 | 82.6 | 73.9 |
| Above Normal (16\%) | 81.0 | 79.2 | 75.9 | 60.9 | 54.9 | 55.3 | 59.0 | 65.0 | 75.2 | 77.9 | 83.1 | 74.8 |
| Below Normal (13\%) | 89.1 | 87.2 | 78.6 | 74.6 | 64.3 | 66.9 | 68.4 | 72.1 | 79.0 | 81.1 | 85.0 | 89.3 |
| Dry (24\%) | 91.4 | 87.0 | 75.4 | 77.7 | 67.7 | 65.4 | 67.9 | 73.4 | 79.8 | 84.5 | 87.6 | 90.5 |
| Critical (15\%) | 93.5 | 93.5 | 87.9 | 82.1 | 75.5 | 74.6 | 76.7 | 80.8 | 84.5 | 87.7 | 90.2 | 92.1 |

Alternative 5 minus Second Basis of Comparison

|  | End of Month Position (km) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0.6 | 0.2 | -0.1 | -3.2 | -3.5 | -2.6 | -1.5 | -2.4 | -0.4 | -0.2 | -0.3 | -0.1 |
| 20\% | 0.0 | 0.1 | -3.0 | -3.6 | -3.9 | -0.8 | -2.7 | -1.6 | -0.2 | 0.1 | -0.4 | -0.4 |
| 30\% | 0.2 | 0.0 | -5.6 | -3.5 | -4.8 | -2.5 | -3.6 | -2.7 | 0.4 | -0.1 | -0.6 | -0.5 |
| 40\% | 0.0 | -2.8 | -6.3 | -5.3 | -2.2 | -2.0 | -3.2 | -3.8 | 0.9 | 0.3 | -0.5 | -0.1 |
| 50\% | -1.0 | -9.2 | -5.6 | -4.4 | -3.0 | -1.7 | -3.2 | -3.5 | 0.0 | -0.2 | -0.5 | -1.1 |
| 60\% | -9.3 | -8.7 | -2.7 | -3.3 | -0.6 | 0.1 | -3.4 | -2.8 | 0.3 | -0.9 | -0.1 | -8.0 |
| 70\% | -16.0 | -14.0 | -5.1 | -1.1 | -0.5 | -0.2 | -1.7 | -2.3 | -1.0 | -0.8 | -0.4 | -14.6 |
| 80\% | -15.6 | -13.9 | -3.6 | -0.8 | 0.1 | 0.2 | -1.2 | -1.3 | -1.6 | -0.5 | -1.4 | -14.4 |
| 90\% | -14.2 | -5.6 | -0.3 | -0.1 | -0.1 | 0.3 | -0.5 | -1.2 | -0.4 | -0.1 | -0.8 | -13.8 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5.8 | -5.4 | -3.1 | -2.3 | -1.7 | -0.9 | -2.1 | -2.4 | -0.1 | -0.3 | -0.6 | -5.4 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet | -13.9 | -11.9 | -4.7 | -1.0 | -0.4 | 0.0 | -1.3 | -2.0 | 0.1 | -0.5 | -0.6 | -12.7 |
| Above Normal | -9.3 | -8.6 | -4.5 | -2.6 | -1.1 | 0.0 | -2.1 | -2.9 | 0.1 | -0.3 | -0.7 | -7.1 |
| Below Normal | -0.3 | -1.4 | -2.0 | -4.2 | -2.1 | -0.7 | -2.9 | -2.8 | 0.8 | -0.2 | -0.9 | -0.4 |
| Dry | 0.2 | -0.2 | -1.5 | -3.4 | -3.1 | -2.1 | -2.8 | -2.5 | -0.3 | 0.1 | -0.5 | -0.4 |
| Critical | 0.4 | 0.1 | -2.0 | -1.5 | -2.7 | -2.1 | -2.1 | -2.5 | -1.2 | -0.5 | -0.4 | -0.2 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) X 2 is defined as the position of the $2 \%$ (grams of salt per kilogram of seawater) bottom salinity value along the axis of the estuary; measured in kilometers from the Golden Gate Bridge. 2) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 3) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 4) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text

## 5C.3.3.13 Delta Outflow

Table 5C.3.3.13.1 Old and Middle River, Monthly Flow

No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,764 | -3,724 | -3,812 | -2,823 | -666 | -969 | 3,205 | 2,797 | -1,150 | -4,130 | -2,453 | -3,775 |
| 20\% | -4,076 | -4,560 | -4,673 | -2,823 | -1,771 | -1,394 | 2,207 | 1,304 | -1,570 | -6,849 | -4,032 | -5,147 |
| 30\% | -4,613 | -5,156 | -5,244 | -3,355 | -2,823 | -2,738 | 1,632 | 561 | -3,500 | -7,647 | -5,770 | -6,006 |
| 40\% | -4,820 | -5,627 | -5,871 | -4,392 | -3,314 | -3,500 | 1,268 | 108 | -3,500 | -8,888 | -7,996 | -7,621 |
| 50\% | -5,328 | -6,320 | -5,871 | -4,710 | -3,781 | -3,500 | 612 | -182 | -3,500 | -9,376 | -9,956 | -9,000 |
| 60\% | -5,589 | -6,564 | -5,871 | -5,000 | -4,878 | -4,568 | -102 | -483 | -4,487 | -9,746 | -10,630 | -9,256 |
| 70\% | -6,253 | -7,101 | -7,413 | -5,000 | -5,000 | -5,000 | -448 | -632 | -5,000 | -10,301 | -10,737 | -9,653 |
| 80\% | -6,560 | -8,185 | -9,537 | -5,000 | -5,000 | -5,000 | -995 | -1,129 | -5,000 | -10,602 | -10,853 | -9,884 |
| 90\% | -7,404 | -9,995 | -9,681 | -5,000 | -5,000 | -5,000 | -1,247 | -1,414 | -5,000 | -11,108 | -11,083 | -10,032 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5,476 | -6,380 | -6,228 | $-3,535$ | -2,905 | -2,690 | 919 | 310 | $-3,577$ | -8,496 | -7,975 | -7,706 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -5,847 | -7,229 | -5,526 | -1,900 | -1,991 | -1,552 | 3,110 | 2,011 | -4,274 | -8,957 | -10,532 | -9,358 |
| Above Normal (16\%) | -5,525 | -6,801 | -6,850 | -3,699 | -3,161 | -4,176 | 1,196 | 412 | -4,525 | -9,151 | -10,873 | -9,542 |
| Below Normal (13\%) | -5,488 | -6,749 | -7,669 | -4,380 | -3,477 | -3,919 | 165 | -316 | -3,445 | -10,539 | -9,624 | -8,178 |
| Dry (24\%) | -5,440 | -5,953 | -6,676 | -4,621 | -3,573 | -3,072 | -670 | -906 | -3,350 | -8,900 | -4,745 | -6,453 |
| Critical (15\%) | -4,671 | -4,458 | -5,006 | -4,314 | -2,968 | -1,780 | -786 | -887 | -1,539 | -4,242 | -3,168 | -3,793 |

Alternative 1

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,392 | -4,293 | -4,109 | -2,581 | -1,241 | -119 | -2,051 | -1,611 | -2,184 | -3,454 | -2,880 | -3,666 |
| 20\% | -4,079 | -5,433 | -6,043 | -4,838 | -2,865 | -1,287 | -3,131 | -2,897 | -2,834 | -5,152 | -4,631 | -5,107 |
| 30\% | -4,769 | -6,994 | -6,917 | -6,279 | -4,367 | -3,292 | -3,957 | -4,177 | -3,308 | -6,488 | -5,837 | -6,393 |
| 40\% | -6,409 | -7,620 | -7,554 | -7,434 | -5,806 | -4,012 | -4,821 | -4,673 | -4,258 | -7,155 | -6,876 | -8,264 |
| 50\% | -7,303 | -8,686 | -8,173 | -8,257 | -6,422 | -4,958 | -5,864 | -5,200 | -4,990 | -8,014 | -7,941 | -9,257 |
| 60\% | -8,076 | -9,256 | -8,969 | -8,848 | -7,346 | -5,373 | -6,549 | -5,517 | -5,660 | -8,914 | -9,236 | -9,689 |
| 70\% | -9,075 | -9,598 | -9,326 | -9,269 | -8,323 | -6,205 | -7,131 | -6,008 | -6,016 | -9,492 | -10,081 | -9,977 |
| 80\% | -9,905 | -9,959 | -9,508 | -9,585 | -8,873 | -6,616 | -7,635 | -6,451 | -6,534 | -10,052 | -10,364 | -10,089 |
| 90\% | -10,146 | -10,023 | -9,665 | -9,803 | -9,509 | -7,592 | -7,991 | -7,302 | -6,936 | -10,637 | -10,683 | -10,163 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,980 | -7,844 | -7,429 | -6,650 | -5,206 | -3,727 | -5,381 | -4,842 | -4,611 | -7,538 | -7,489 | -7,917 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -8,038 | -9,112 | -7,723 | -4,985 | $-3,160$ | -1,004 | -6,895 | -6,376 | -4,024 | -8,414 | -9,609 | -9,678 |
| Above Normal (16\%) | -6,419 | -7,887 | -7,960 | -8,266 | -6,089 | -5,331 | -7,034 | -5,761 | -6,024 | -8,921 | -9,947 | -9,886 |
| Below Normal (13\%) | -8,051 | -8,891 | -8,088 | -8,590 | -5,749 | -5,501 | -5,370 | -4,954 | -6,578 | -10,111 | -8,035 | -8,118 |
| Dry (24\%) | -6,466 | -7,140 | -7,171 | -7,358 | -6,832 | -5,646 | -4,159 | -3,813 | -4,591 | -6,827 | -5,191 | -6,639 |
| Critical (15\%) | -5,171 | -5,266 | -6,040 | -5,551 | -5,474 | -3,067 | -2,358 | -2,134 | -2,583 | -2,973 | -3,561 | -3,911 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 373 | -569 | -298 | 241 | -575 | 850 | -5,257 | -4,408 | -1,033 | 675 | -426 | 109 |
| 20\% | -3 | -873 | -1,370 | -2,015 | -1,094 | 107 | -5,338 | -4,202 | -1,264 | 1,697 | -599 | 39 |
| 30\% | -156 | -1,838 | -1,673 | -2,924 | -1,545 | -554 | -5,589 | -4,738 | 192 | 1,159 | -67 | -387 |
| 40\% | -1,588 | -1,993 | -1,683 | -3,042 | -2,492 | -512 | -6,090 | -4,781 | -758 | 1,733 | 1,120 | -644 |
| 50\% | -1,975 | -2,366 | -2,302 | -3,548 | -2,641 | -1,458 | -6,475 | -5,018 | -1,490 | 1,362 | 2,016 | -257 |
| 60\% | -2,487 | -2,692 | -3,098 | -3,848 | -2,467 | -806 | -6,447 | -5,034 | -1,173 | 831 | 1,394 | -433 |
| 70\% | -2,822 | -2,497 | -1,913 | -4,269 | -3,323 | -1,205 | -6,682 | -5,376 | -1,016 | 809 | 656 | -325 |
| 80\% | -3,345 | -1,773 | 29 | -4,585 | -3,873 | -1,616 | -6,640 | -5,322 | -1,534 | 550 | 489 | -205 |
| 90\% | -2,742 | -28 | 16 | -4,803 | -4,509 | -2,592 | -6,744 | -5,887 | -1,936 | 471 | 400 | -132 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1,504 | -1,464 | -1,201 | -3,115 | -2,301 | -1,037 | -6,300 | -5,152 | -1,034 | 958 | 486 | -211 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -2,191 | -1,882 | -2,198 | -3,084 | -1,169 | 549 | -10,005 | -8,387 | 250 | 543 | 923 | -320 |
| Above Normal (16\%) | -895 | -1,086 | -1,110 | -4,566 | -2,928 | -1,155 | -8,229 | -6,173 | -1,499 | 230 | 926 | -344 |
| Below Normal (13\%) | -2,563 | -2,142 | -419 | -4,210 | -2,273 | -1,582 | -5,535 | -4,638 | -3,133 | 429 | 1,589 | 59 |
| Dry (24\%) | -1,026 | -1,187 | -495 | -2,737 | -3,259 | -2,574 | -3,489 | -2,907 | -1,241 | 2,073 | -446 | -186 |
| Critical (15\%) | -500 | -809 | -1,034 | -1,237 | -2,505 | -1,287 | -1,572 | -1,247 | -1,044 | 1,268 | -394 | -118 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.13.2 Old and Middle River, Monthly Flow

Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,392 | -4,293 | -4,109 | -2,581 | -1,241 | -119 | -2,051 | -1,611 | -2,184 | -3,454 | -2,880 | -3,666 |
| 20\% | -4,079 | -5,433 | -6,043 | -4,838 | -2,865 | -1,287 | $-3,131$ | -2,897 | -2,834 | -5,152 | -4,631 | -5,107 |
| 30\% | -4,769 | -6,994 | -6,917 | -6,279 | -4,367 | -3,292 | -3,957 | -4,177 | -3,308 | -6,488 | -5,837 | -6,393 |
| 40\% | -6,409 | -7,620 | -7,554 | -7,434 | -5,806 | -4,012 | -4,821 | -4,673 | -4,258 | -7,155 | -6,876 | -8,264 |
| 50\% | -7,303 | -8,686 | -8,173 | -8,257 | -6,422 | -4,958 | -5,864 | -5,200 | -4,990 | -8,014 | -7,941 | -9,257 |
| 60\% | -8,076 | -9,256 | -8,969 | $-8,848$ | -7,346 | -5,373 | -6,549 | -5,517 | -5,660 | -8,914 | -9,236 | -9,689 |
| 70\% | -9,075 | -9,598 | -9,326 | -9,269 | -8,323 | -6,205 | -7,131 | -6,008 | -6,016 | -9,492 | -10,081 | -9,977 |
| 80\% | -9,905 | -9,959 | -9,508 | -9,585 | -8,873 | -6,616 | -7,635 | -6,451 | -6,534 | -10,052 | -10,364 | -10,089 |
| 90\% | -10,146 | -10,023 | -9,665 | -9,803 | -9,509 | -7,592 | -7,991 | -7,302 | -6,936 | -10,637 | -10,683 | -10,163 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,980 | -7,844 | -7,429 | -6,650 | -5,206 | $-3,727$ | $-5,381$ | -4,842 | -4,611 | -7,538 | -7,489 | -7,917 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -8,038 | -9,112 | -7,723 | -4,985 | -3,160 | -1,004 | -6,895 | -6,376 | -4,024 | -8,414 | -9,609 | -9,678 |
| Above Normal (16\%) | -6,419 | -7,887 | -7,960 | -8,266 | -6,089 | -5,331 | -7,034 | -5,761 | -6,024 | -8,921 | -9,947 | -9,886 |
| Below Normal (13\%) | -8,051 | -8,891 | -8,088 | -8,590 | -5,749 | -5,501 | -5,370 | -4,954 | -6,578 | -10,111 | -8,035 | -8,118 |
| Dry (24\%) | -6,466 | -7,140 | -7,171 | -7,358 | -6,832 | -5,646 | -4,159 | -3,813 | -4,591 | -6,827 | -5,191 | -6,639 |
| Critical (15\%) | -5,171 | -5,266 | -6,040 | -5,551 | -5,474 | -3,067 | -2,358 | -2,134 | -2,583 | -2,973 | -3,561 | -3,911 |

No Action Alternative

|  | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,764 | -3,724 | -3,812 | -2,823 | -666 | -969 | 3,205 | 2,797 | -1,150 | -4,130 | -2,453 | -3,775 |
| 20\% | -4,076 | -4,560 | -4,673 | -2,823 | -1,771 | -1,394 | 2,207 | 1,304 | -1,570 | -6,849 | -4,032 | -5,147 |
| 30\% | -4,613 | -5,156 | -5,244 | -3,355 | -2,823 | -2,738 | 1,632 | 561 | -3,500 | -7,647 | -5,770 | -6,006 |
| 40\% | -4,820 | -5,627 | -5,871 | -4,392 | -3,314 | -3,500 | 1,268 | 108 | -3,500 | -8,888 | -7,996 | -7,621 |
| 50\% | -5,328 | -6,320 | -5,871 | -4,710 | -3,781 | -3,500 | 612 | -182 | -3,500 | -9,376 | -9,956 | -9,000 |
| 60\% | -5,589 | -6,564 | -5,871 | -5,000 | -4,878 | -4,568 | -102 | -483 | -4,487 | -9,746 | -10,630 | -9,256 |
| 70\% | -6,253 | -7,101 | -7,413 | -5,000 | -5,000 | -5,000 | -448 | -632 | -5,000 | -10,301 | -10,737 | -9,653 |
| 80\% | -6,560 | -8,185 | -9,537 | -5,000 | -5,000 | -5,000 | -995 | -1,129 | -5,000 | -10,602 | -10,853 | -9,884 |
| 90\% | -7,404 | -9,995 | -9,681 | -5,000 | -5,000 | -5,000 | -1,247 | -1,414 | -5,000 | -11,108 | -11,083 | -10,032 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | $-5,476$ | $-6,380$ | -6,228 | $-3,535$ | $-2,905$ | -2,690 | 919 | 310 | $-3,577$ | -8,496 | -7,975 | -7,706 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -5,847 | -7,229 | -5,526 | -1,900 | -1,991 | -1,552 | 3,110 | 2,011 | -4,274 | -8,957 | -10,532 | -9,358 |
| Above Normal (16\%) | -5,525 | -6,801 | -6,850 | -3,699 | -3,161 | -4,176 | 1,196 | 412 | -4,525 | -9,151 | -10,873 | -9,542 |
| Below Normal (13\%) | -5,488 | -6,749 | -7,669 | -4,380 | -3,477 | -3,919 | 165 | -316 | -3,445 | -10,539 | -9,624 | -8,178 |
| Dry (24\%) | -5,440 | -5,953 | -6,676 | -4,621 | -3,573 | -3,072 | -670 | -906 | $-3,350$ | -8,900 | -4,745 | -6,453 |
| Critical (15\%) | -4,671 | -4,458 | -5,006 | -4,314 | -2,968 | -1,780 | -786 | -887 | -1,539 | -4,242 | -3,168 | -3,793 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -373 | 569 | 298 | -241 | 575 | -850 | 5,257 | 4,408 | 1,033 | -675 | 426 | -109 |
| 20\% | 3 | 873 | 1,370 | 2,015 | 1,094 | -107 | 5,338 | 4,202 | 1,264 | -1,697 | 599 | -39 |
| 30\% | 156 | 1,838 | 1,673 | 2,924 | 1,545 | 554 | 5,589 | 4,738 | -192 | -1,159 | 67 | 387 |
| 40\% | 1,588 | 1,993 | 1,683 | 3,042 | 2,492 | 512 | 6,090 | 4,781 | 758 | -1,733 | -1,120 | 644 |
| 50\% | 1,975 | 2,366 | 2,302 | 3,548 | 2,641 | 1,458 | 6,475 | 5,018 | 1,490 | -1,362 | -2,016 | 257 |
| 60\% | 2,487 | 2,692 | 3,098 | 3,848 | 2,467 | 806 | 6,447 | 5,034 | 1,173 | -831 | -1,394 | 433 |
| 70\% | 2,822 | 2,497 | 1,913 | 4,269 | 3,323 | 1,205 | 6,682 | 5,376 | 1,016 | -809 | -656 | 325 |
| 80\% | 3,345 | 1,773 | -29 | 4,585 | 3,873 | 1,616 | 6,640 | 5,322 | 1,534 | -550 | -489 | 205 |
| 90\% | 2,742 | 28 | -16 | 4,803 | 4,509 | 2,592 | 6,744 | 5,887 | 1,936 | -471 | -400 | 132 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,504 | 1,464 | 1,201 | 3,115 | 2,301 | 1,037 | 6,300 | 5,152 | 1,034 | -958 | -486 | 211 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 2,191 | 1,882 | 2,198 | 3,084 | 1,169 | -549 | 10,005 | 8,387 | -250 | -543 | -923 | 320 |
| Above Normal (16\%) | 895 | 1,086 | 1,110 | 4,566 | 2,928 | 1,155 | 8,229 | 6,173 | 1,499 | -230 | -926 | 344 |
| Below Normal (13\%) | 2,563 | 2,142 | 419 | 4,210 | 2,273 | 1,582 | 5,535 | 4,638 | 3,133 | -429 | -1,589 | -59 |
| Dry (24\%) | 1,026 | 1,187 | 495 | 2,737 | 3,259 | 2,574 | 3,489 | 2,907 | 1,241 | -2,073 | 446 | 186 |
| Critical (15\%) | 500 | 809 | 1,034 | 1,237 | 2,505 | 1,287 | 1,572 | 1,247 | 1,044 | -1,268 | 394 | 118 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.13.3 Old and Middle River, Monthly Flow

Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,392 | -4,293 | -4,109 | -2,581 | -1,241 | -119 | -2,051 | -1,611 | -2,184 | -3,454 | -2,880 | -3,666 |
| 20\% | -4,079 | -5,433 | -6,043 | -4,838 | -2,865 | -1,287 | -3,131 | -2,897 | -2,834 | -5,152 | -4,631 | -5,107 |
| 30\% | -4,769 | -6,994 | -6,917 | -6,279 | -4,367 | -3,292 | -3,957 | -4,177 | -3,308 | -6,488 | -5,837 | -6,393 |
| 40\% | -6,409 | -7,620 | -7,554 | -7,434 | -5,806 | -4,012 | -4,821 | -4,673 | -4,258 | -7,155 | -6,876 | -8,264 |
| 50\% | -7,303 | -8,686 | -8,173 | -8,257 | -6,422 | -4,958 | -5,864 | -5,200 | -4,990 | -8,014 | -7,941 | -9,257 |
| 60\% | -8,076 | -9,256 | -8,969 | $-8,848$ | -7,346 | -5,373 | -6,549 | -5,517 | -5,660 | -8,914 | -9,236 | -9,689 |
| 70\% | -9,075 | -9,598 | -9,326 | -9,269 | -8,323 | -6,205 | -7,131 | -6,008 | -6,016 | -9,492 | -10,081 | -9,977 |
| 80\% | -9,905 | -9,959 | -9,508 | -9,585 | -8,873 | -6,616 | -7,635 | -6,451 | -6,534 | -10,052 | -10,364 | -10,089 |
| 90\% | -10,146 | -10,023 | -9,665 | -9,803 | -9,509 | -7,592 | -7,991 | -7,302 | -6,936 | -10,637 | -10,683 | -10,163 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,980 | -7,844 | -7,429 | -6,650 | $-5,206$ | $-3,727$ | $-5,381$ | -4,842 | -4,611 | -7,538 | -7,489 | -7,917 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -8,038 | -9,112 | -7,723 | -4,985 | $-3,160$ | -1,004 | -6,895 | -6,376 | -4,024 | -8,414 | -9,609 | -9,678 |
| Above Normal (16\%) | -6,419 | -7,887 | -7,960 | -8,266 | -6,089 | -5,331 | -7,034 | -5,761 | -6,024 | -8,921 | -9,947 | -9,886 |
| Below Normal (13\%) | -8,051 | -8,891 | -8,088 | -8,590 | -5,749 | -5,501 | -5,370 | -4,954 | -6,578 | -10,111 | -8,035 | -8,118 |
| Dry (24\%) | -6,466 | -7,140 | -7,171 | -7,358 | -6,832 | -5,646 | -4,159 | -3,813 | -4,591 | -6,827 | -5,191 | -6,639 |
| Critical (15\%) | -5,171 | -5,266 | -6,040 | -5,551 | -5,474 | -3,067 | -2,358 | -2,134 | -2,583 | -2,973 | -3,561 | -3,911 |

Alternative 3

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,471 | -4,154 | -3,935 | -2,361 | -447 | -819 | 405 | -673 | -2,098 | -3,660 | -3,007 | -3,495 |
| 20\% | -4,101 | -5,233 | -5,184 | -3,500 | -1,896 | -1,347 | -946 | -1,150 | -4,287 | -5,775 | -4,278 | -5,225 |
| 30\% | -4,803 | -6,947 | -6,403 | -3,500 | -2,838 | -2,283 | -1,200 | -1,150 | -4,625 | -7,093 | -6,258 | -6,437 |
| 40\% | -5,638 | -7,541 | -6,403 | -3,500 | -3,500 | -3,500 | -2,086 | -2,560 | -5,017 | -8,012 | -7,669 | -8,402 |
| 50\% | -7,049 | -8,326 | -6,403 | -5,000 | -3,500 | -3,500 | -2,787 | -3,326 | -5,526 | -8,990 | -9,396 | -9,192 |
| 60\% | -8,252 | -9,400 | -6,811 | -5,000 | -4,273 | -3,616 | -3,368 | -3,500 | -5,750 | -9,549 | -9,845 | -9,680 |
| 70\% | -8,982 | -9,810 | -7,677 | -5,000 | -5,000 | -5,061 | -3,526 | -3,500 | -5,750 | -10,046 | -10,212 | -9,842 |
| 80\% | -9,734 | -9,990 | -8,823 | -5,000 | -5,621 | -6,252 | -4,031 | -4,451 | -6,160 | -10,767 | -10,624 | -10,044 |
| 90\% | -10,085 | -10,084 | -9,552 | -6,976 | -7,500 | -7,499 | -4,474 | -5,149 | $-7,011$ | -11,148 | -10,797 | -10,177 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,888 | -7,771 | -6,494 | $-3,764$ | $-3,283$ | $-3,072$ | $-2,176$ | $-2,623$ | -4,997 | -8,112 | -7,831 | -7,917 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -7,965 | -9,052 | -5,964 | -2,522 | -2,581 | -1,646 | -1,367 | -2,399 | -5,476 | -8,581 | -9,731 | -9,555 |
| Above Normal (16\%) | -6,452 | -8,078 | -6,997 | -3,789 | -4,137 | -5,220 | -3,630 | -4,226 | -5,981 | -9,160 | -10,444 | -9,839 |
| Below Normal (13\%) | -7,685 | -8,790 | -7,868 | -4,451 | -3,689 | -4,765 | -2,676 | -2,885 | -5,409 | -10,929 | -10,032 | -8,880 |
| Dry (24\%) | -6,546 | -7,086 | -6,848 | -4,588 | -3,582 | -3,358 | -2,517 | -2,670 | -4,927 | -8,172 | -5,079 | -6,457 |
| Critical (15\%) | -4,869 | -4,871 | -5,252 | -4,429 | -3,011 | -1,804 | -1,328 | -1,054 | -2,628 | -3,280 | -3,450 | -3,839 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -79 | 139 | 175 | 220 | 794 | -701 | 2,456 | 938 | 85 | -205 | -127 | 172 |
| 20\% | -22 | 200 | 858 | 1,338 | 969 | -61 | 2,185 | 1,747 | -1,453 | -623 | 353 | -118 |
| 30\% | -34 | 47 | 514 | 2,779 | 1,529 | 1,009 | 2,757 | 3,027 | -1,317 | -605 | -421 | -43 |
| 40\% | 771 | 79 | 1,151 | 3,934 | 2,306 | 512 | 2,735 | 2,112 | -759 | -857 | -793 | -137 |
| 50\% | 254 | 360 | 1,769 | 3,257 | 2,922 | 1,458 | 3,077 | 1,874 | -536 | -976 | -1,455 | 64 |
| 60\% | -177 | -144 | 2,158 | 3,848 | 3,072 | 1,757 | 3,181 | 2,017 | -90 | -635 | -609 | 10 |
| 70\% | 93 | -213 | 1,648 | 4,269 | 3,323 | 1,144 | 3,605 | 2,508 | 266 | -553 | -131 | 136 |
| 80\% | 171 | -31 | 685 | 4,585 | 3,252 | 365 | 3,604 | 1,999 | 375 | -715 | -259 | 45 |
| 90\% | 61 | -61 | 112 | 2,827 | 2,009 | 93 | 3,517 | 2,153 | -75 | -511 | -114 | -14 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 92 | 73 | 934 | 2,886 | 1,923 | 656 | 3,205 | 2,219 | -386 | -574 | -342 | 0 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 73 | 60 | 1,759 | 2,463 | 579 | -642 | 5,528 | 3,977 | -1,453 | -167 | -123 | 124 |
| Above Normal (16\%) | -32 | -191 | 963 | 4,477 | 1,952 | 111 | 3,403 | 1,535 | 43 | -240 | -497 | 48 |
| Below Normal (13\%) | 366 | 101 | 220 | 4,139 | 2,061 | 736 | 2,695 | 2,069 | 1,169 | -818 | -1,997 | -762 |
| Dry (24\%) | -80 | 54 | 323 | 2,770 | 3,249 | 2,288 | 1,642 | 1,144 | -336 | -1,345 | 112 | 182 |
| Critical (15\%) | 302 | 395 | 789 | 1,123 | 2,462 | 1,263 | 1,030 | 1,081 | -45 | -307 | 112 | 73 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.13.4 Old and Middle River, Monthly Flow

Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,392 | -4,293 | -4,109 | -2,581 | -1,241 | -119 | -2,051 | -1,611 | -2,184 | -3,454 | -2,880 | -3,666 |
| 20\% | -4,079 | -5,433 | -6,043 | -4,838 | -2,865 | -1,287 | -3,131 | -2,897 | -2,834 | -5,152 | -4,631 | -5,107 |
| 30\% | -4,769 | -6,994 | -6,917 | -6,279 | -4,367 | -3,292 | -3,957 | -4,177 | -3,308 | -6,488 | -5,837 | -6,393 |
| 40\% | -6,409 | -7,620 | -7,554 | -7,434 | -5,806 | -4,012 | -4,821 | -4,673 | -4,258 | -7,155 | -6,876 | -8,264 |
| 50\% | -7,303 | -8,686 | -8,173 | -8,257 | -6,422 | -4,958 | -5,864 | -5,200 | -4,990 | -8,014 | -7,941 | -9,257 |
| 60\% | -8,076 | -9,256 | -8,969 | $-8,848$ | -7,346 | -5,373 | -6,549 | -5,517 | -5,660 | -8,914 | -9,236 | -9,689 |
| 70\% | -9,075 | -9,598 | -9,326 | -9,269 | -8,323 | -6,205 | -7,131 | -6,008 | -6,016 | -9,492 | -10,081 | -9,977 |
| 80\% | -9,905 | -9,959 | -9,508 | -9,585 | -8,873 | -6,616 | -7,635 | -6,451 | -6,534 | -10,052 | -10,364 | -10,089 |
| 90\% | -10,146 | -10,023 | -9,665 | -9,803 | -9,509 | -7,592 | -7,991 | -7,302 | -6,936 | -10,637 | -10,683 | -10,163 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6,980 | -7,844 | -7,429 | -6,650 | $-5,206$ | $-3,727$ | $-5,381$ | -4,842 | -4,611 | -7,538 | -7,489 | -7,917 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -8,038 | -9,112 | -7,723 | -4,985 | $-3,160$ | -1,004 | -6,895 | -6,376 | -4,024 | -8,414 | -9,609 | -9,678 |
| Above Normal (16\%) | -6,419 | -7,887 | -7,960 | -8,266 | -6,089 | -5,331 | -7,034 | -5,761 | -6,024 | -8,921 | -9,947 | -9,886 |
| Below Normal (13\%) | -8,051 | -8,891 | -8,088 | -8,590 | -5,749 | -5,501 | -5,370 | -4,954 | -6,578 | -10,111 | -8,035 | -8,118 |
| Dry (24\%) | -6,466 | -7,140 | -7,171 | -7,358 | -6,832 | -5,646 | -4,159 | -3,813 | -4,591 | -6,827 | -5,191 | -6,639 |
| Critical (15\%) | -5,171 | -5,266 | -6,040 | -5,551 | -5,474 | -3,067 | -2,358 | -2,134 | -2,583 | -2,973 | -3,561 | -3,911 |

Alternative 5

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3,722 | -3,722 | -3,826 | -2,823 | -641 | -965 | 3,206 | 2,797 | -1,150 | -4,455 | -3,295 | -3,913 |
| 20\% | -4,102 | -4,558 | -4,737 | -2,823 | -1,771 | -1,394 | 2,134 | 1,335 | -2,319 | -6,620 | -4,451 | -5,247 |
| 30\% | -4,583 | -5,162 | $-5,150$ | -3,355 | -2,820 | -2,738 | 1,566 | 712 | $-3,500$ | -8,001 | -6,361 | -6,304 |
| 40\% | -4,858 | -5,603 | -5,871 | -4,378 | -3,267 | -3,500 | 1,270 | 568 | -3,500 | -9,172 | -8,612 | -7,552 |
| 50\% | -5,145 | -6,098 | $-5,871$ | -4,710 | -3,513 | -3,500 | 623 | 381 | -3,500 | -9,522 | -10,244 | -8,864 |
| 60\% | -5,368 | -6,494 | -5,871 | -5,000 | -4,878 | -4,568 | 381 | 381 | -4,467 | -9,822 | -10,615 | -9,232 |
| 70\% | -6,237 | -7,087 | -7,453 | -5,000 | -5,000 | -5,000 | 381 | 381 | -5,000 | -10,430 | -10,756 | -9,654 |
| 80\% | -6,583 | -8,086 | -9,466 | -5,000 | -5,000 | -5,000 | 381 | 381 | -5,000 | -10,694 | $-10,844$ | -9,915 |
| 90\% | -7,355 | -9,871 | -9,681 | -5,000 | -5,000 | -5,000 | 381 | 381 | -5,000 | -11,168 | -11,076 | -10,031 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | $-5,443$ | $-6,337$ | $-6,246$ | $-3,551$ | $-2,904$ | $-2,710$ | 1,482 | 1,034 | $-3,631$ | -8,687 | -8,239 | -7,714 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -5,812 | -7,354 | -5,572 | -1,900 | -1,926 | -1,598 | 3,122 | 2,182 | -4,275 | -8,965 | -10,573 | -9,193 |
| Above Normal (16\%) | -5,543 | -6,368 | -6,838 | -3,716 | -3,222 | -4,174 | 1,292 | 780 | -4,521 | -9,187 | -10,817 | -9,491 |
| Below Normal (13\%) | -5,418 | -6,748 | -7,637 | -4,380 | -3,554 | -3,971 | 718 | 468 | -3,444 | -10,623 | -9,770 | -8,460 |
| Dry (24\%) | -5,380 | -5,893 | -6,731 | -4,620 | -3,578 | -3,074 | 565 | 453 | -3,523 | -9,446 | -5,313 | -6,571 |
| Critical (15\%) | -4,661 | -4,461 | -4,983 | -4,409 | -2,957 | -1,770 | 363 | 310 | -1,623 | -4,501 | -3,860 | -3,805 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Flow (cfs) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -331 | 571 | 284 | -241 | 600 | -846 | 5,257 | 4,408 | 1,033 | -1,001 | -415 | -247 |
| 20\% | -23 | 875 | 1,306 | 2,015 | 1,094 | -107 | 5,265 | 4,233 | 516 | -1,468 | 180 | -140 |
| 30\% | 186 | 1,832 | 1,767 | 2,924 | 1,548 | 554 | 5,522 | 4,889 | -192 | -1,514 | -524 | 89 |
| 40\% | 1,551 | 2,016 | 1,683 | 3,056 | 2,539 | 512 | 6,091 | 5,240 | 758 | -2,017 | -1,736 | 712 |
| 50\% | 2,158 | 2,588 | 2,302 | 3,548 | 2,909 | 1,458 | 6,487 | 5,582 | 1,490 | -1,507 | -2,303 | 393 |
| 60\% | 2,707 | 2,762 | 3,098 | 3,848 | 2,467 | 806 | 6,930 | 5,899 | 1,193 | -907 | -1,378 | 458 |
| 70\% | 2,838 | 2,511 | 1,873 | 4,269 | 3,323 | 1,205 | 7,512 | 6,390 | 1,016 | -937 | -675 | 323 |
| 80\% | 3,322 | 1,872 | 42 | 4,585 | 3,873 | 1,616 | 8,016 | 6,832 | 1,534 | -642 | -479 | 174 |
| 90\% | 2,791 | 152 | -16 | 4,803 | 4,509 | 2,592 | 8,372 | 7,683 | 1,936 | -531 | -393 | 132 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,537 | 1,508 | 1,182 | 3,099 | 2,302 | 1,017 | 6,863 | 5,876 | 980 | -1,149 | -750 | 203 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 2,226 | 1,758 | 2,151 | 3,084 | 1,234 | -595 | 10,017 | 8,558 | -251 | -552 | -964 | 485 |
| Above Normal (16\%) | 876 | 1,519 | 1,122 | 4,550 | 2,867 | 1,158 | 8,325 | 6,541 | 1,503 | -266 | -871 | 395 |
| Below Normal (13\%) | 2,633 | 2,144 | 450 | 4,210 | 2,196 | 1,530 | 6,088 | 5,422 | 3,134 | -512 | -1,735 | -342 |
| Dry (24\%) | 1,086 | 1,247 | 439 | 2,738 | 3,254 | 2,573 | 4,724 | 4,266 | 1,068 | -2,620 | -122 | 68 |
| Critical (15\%) | 510 | 805 | 1,058 | 1,142 | 2,516 | 1,296 | 2,721 | 2,445 | 961 | -1,528 | -298 | 107 |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.14 Exports through Jones and Banks Pumping Plants

Table 5C.3.3.14.1 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

No Action Alternative

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 517 | 671 | 721 | 604 | 611 | 675 | 242 | 240 | 509 | 714 | 724 | 671 |
| 20\% | 454 | 572 | 717 | 490 | 532 | 617 | 181 | 151 | 359 | 708 | 724 | 664 |
| 30\% | 434 | 479 | 685 | 427 | 448 | 508 | 158 | 127 | 340 | 694 | 715 | 651 |
| 40\% | 400 | 443 | 558 | 419 | 409 | 479 | 138 | 104 | 318 | 667 | 707 | 623 |
| 50\% | 370 | 415 | 494 | 406 | 380 | 424 | 128 | 97 | 253 | 634 | 692 | 604 |
| 60\% | 336 | 381 | 477 | 396 | 363 | 349 | 121 | 92 | 207 | 588 | 519 | 509 |
| 70\% | 310 | 347 | 454 | 377 | 325 | 312 | 113 | 92 | 192 | 501 | 371 | 410 |
| 80\% | 286 | 302 | 379 | 321 | 267 | 283 | 104 | 92 | 150 | 444 | 240 | 335 |
| 90\% | 250 | 251 | 335 | 280 | 165 | 159 | 89 | 92 | 43 | 232 | 141 | 243 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 378 | 430 | 527 | 426 | 395 | 423 | 154 | 140 | 276 | 558 | 521 | 514 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 410 | 497 | 564 | 513 | 537 | 594 | 204 | 207 | 445 | 669 | 717 | 638 |
| Above Normal (16\%) | 376 | 450 | 562 | 406 | 401 | 496 | 130 | 105 | 315 | 587 | 709 | 628 |
| Below Normal (13\%) | 386 | 456 | 590 | 387 | 354 | 394 | 134 | 100 | 209 | 657 | 622 | 542 |
| Dry (24\%) | 374 | 398 | 510 | 392 | 315 | 318 | 153 | 126 | 194 | 541 | 296 | 426 |
| Critical (15\%) | 314 | 293 | 384 | 349 | 250 | 179 | 93 | 90 | 64 | 223 | 176 | 242 |

Alternative 1

| Statistic | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 739 | 803 | 727 | 703 | 526 | 515 | 555 | 694 | 694 | 671 |
| 20\% | 680 | 671 | 724 | 769 | 686 | 608 | 503 | 420 | 455 | 694 | 694 | 671 |
| 30\% | 627 | 652 | 719 | 747 | 668 | 560 | 477 | 387 | 425 | 680 | 694 | 671 |
| 40\% | 553 | 623 | 718 | 741 | 614 | 542 | 427 | 351 | 412 | 624 | 634 | 669 |
| 50\% | 489 | 591 | 683 | 730 | 552 | 509 | 390 | 319 | 389 | 551 | 515 | 635 |
| 60\% | 433 | 513 | 601 | 635 | 519 | 486 | 321 | 281 | 361 | 474 | 446 | 545 |
| 70\% | 318 | 464 | 553 | 565 | 465 | 461 | 258 | 242 | 320 | 404 | 369 | 420 |
| 80\% | 273 | 352 | 500 | 499 | 416 | 374 | 188 | 181 | 176 | 300 | 281 | 340 |
| 90\% | 209 | 288 | 378 | 391 | 335 | 304 | 109 | 80 | 128 | 160 | 161 | 226 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 525 | 612 | 638 | 538 | 489 | 351 | 308 | 352 | 494 | 489 | 528 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 549 | 619 | 716 | 724 | 609 | 543 | 476 | 430 | 456 | 632 | 655 | 660 |
| Above Normal (16\%) | 428 | 521 | 641 | 716 | 584 | 570 | 453 | 363 | 415 | 572 | 647 | 651 |
| Below Normal (13\%) | 548 | 595 | 623 | 674 | 497 | 500 | 337 | 304 | 414 | 629 | 517 | 539 |
| Dry (24\%) | 435 | 475 | 546 | 579 | 518 | 493 | 259 | 228 | 274 | 403 | 325 | 438 |
| Critical (15\%) | 340 | 345 | 455 | 433 | 406 | 266 | 134 | 121 | 132 | 139 | 203 | 249 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 34\% | 0\% | 2\% | 33\% | 19\% | 4\% | 117\% | 115\% | 9\% | -3\% | -4\% | 0\% |
| 20\% | 50\% | 17\% | 1\% | 57\% | 29\% | -2\% | 178\% | 178\% | 27\% | -2\% | -4\% | 1\% |
| 30\% | 44\% | 36\% | 5\% | 75\% | 49\% | 10\% | 202\% | 203\% | 25\% | -2\% | -3\% | 3\% |
| 40\% | 38\% | 41\% | 29\% | 77\% | 50\% | 13\% | 210\% | 238\% | 30\% | -6\% | -10\% | 7\% |
| 50\% | 32\% | 42\% | 38\% | 80\% | 45\% | 20\% | 204\% | 229\% | 54\% | -13\% | -26\% | 5\% |
| 60\% | 29\% | 34\% | 26\% | 60\% | 43\% | 39\% | 166\% | 204\% | 74\% | -19\% | -14\% | 7\% |
| 70\% | 3\% | 34\% | 22\% | 50\% | 43\% | 48\% | 128\% | 162\% | 66\% | -20\% | -1\% | 3\% |
| 80\% | -5\% | 17\% | 32\% | 56\% | 56\% | 32\% | 80\% | 96\% | 17\% | -33\% | 17\% | 1\% |
| 90\% | -16\% | 15\% | 13\% | 40\% | 103\% | 91\% | 22\% | -13\% | 199\% | -31\% | 14\% | -7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 24\% | 22\% | 16\% | 50\% | 36\% | 15\% | 127\% | 120\% | 28\% | -11\% | -6\% | 3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 34\% | 25\% | 27\% | 41\% | 13\% | -9\% | 134\% | 108\% | 2\% | -5\% | -9\% | 3\% |
| Above Normal (16\%) | 14\% | 16\% | 14\% | 77\% | 46\% | 15\% | 247\% | 244\% | 32\% | -3\% | -9\% | 4\% |
| Below Normal (13\%) | 42\% | 31\% | 6\% | 74\% | 40\% | 27\% | 151\% | 204\% | 98\% | -4\% | -17\% | -1\% |
| Dry (24\%) | 16\% | 19\% | 7\% | 48\% | 64\% | 55\% | 69\% | 81\% | 41\% | -25\% | 10\% | 3\% |
| Critical (15\%) | 8\% | 18\% | 19\% | 24\% | 62\% | 49\% | 44\% | 34\% | 104\% | -38\% | 15\% | 3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.14.2 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 739 | 803 | 727 | 703 | 526 | 515 | 555 | 694 | 694 | 671 |
| 20\% | 680 | 671 | 724 | 769 | 686 | 608 | 503 | 420 | 455 | 694 | 694 | 671 |
| 30\% | 627 | 652 | 719 | 747 | 668 | 560 | 477 | 387 | 425 | 680 | 694 | 671 |
| 40\% | 553 | 623 | 718 | 741 | 614 | 542 | 427 | 351 | 412 | 624 | 634 | 669 |
| 50\% | 489 | 591 | 683 | 730 | 552 | 509 | 390 | 319 | 389 | 551 | 515 | 635 |
| 60\% | 433 | 513 | 601 | 635 | 519 | 486 | 321 | 281 | 361 | 474 | 446 | 545 |
| 70\% | 318 | 464 | 553 | 565 | 465 | 461 | 258 | 242 | 320 | 404 | 369 | 420 |
| 80\% | 273 | 352 | 500 | 499 | 416 | 374 | 188 | 181 | 176 | 300 | 281 | 340 |
| 90\% | 209 | 288 | 378 | 391 | 335 | 304 | 109 | 80 | 128 | 160 | 161 | 226 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 525 | 612 | 638 | 538 | 489 | 351 | 308 | 352 | 494 | 489 | 528 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 549 | 619 | 716 | 724 | 609 | 543 | 476 | 430 | 456 | 632 | 655 | 660 |
| Above Normal (16\%) | 428 | 521 | 641 | 716 | 584 | 570 | 453 | 363 | 415 | 572 | 647 | 651 |
| Below Normal (13\%) | 548 | 595 | 623 | 674 | 497 | 500 | 337 | 304 | 414 | 629 | 517 | 539 |
| Dry (24\%) | 435 | 475 | 546 | 579 | 518 | 493 | 259 | 228 | 274 | 403 | 325 | 438 |
| Critical (15\%) | 340 | 345 | 455 | 433 | 406 | 266 | 134 | 121 | 132 | 139 | 203 | 249 |

## No Action Alternative

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 517 | 671 | 721 | 604 | 611 | 675 | 242 | 240 | 509 | 714 | 724 | 671 |
| 20\% | 454 | 572 | 717 | 490 | 532 | 617 | 181 | 151 | 359 | 708 | 724 | 664 |
| 30\% | 434 | 479 | 685 | 427 | 448 | 508 | 158 | 127 | 340 | 694 | 715 | 651 |
| 40\% | 400 | 443 | 558 | 419 | 409 | 479 | 138 | 104 | 318 | 667 | 707 | 623 |
| 50\% | 370 | 415 | 494 | 406 | 380 | 424 | 128 | 97 | 253 | 634 | 692 | 604 |
| 60\% | 336 | 381 | 477 | 396 | 363 | 349 | 121 | 92 | 207 | 588 | 519 | 509 |
| 70\% | 310 | 347 | 454 | 377 | 325 | 312 | 113 | 92 | 192 | 501 | 371 | 410 |
| 80\% | 286 | 302 | 379 | 321 | 267 | 283 | 104 | 92 | 150 | 444 | 240 | 335 |
| 90\% | 250 | 251 | 335 | 280 | 165 | 159 | 89 | 92 | 43 | 232 | 141 | 243 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 378 | 430 | 527 | 426 | 395 | 423 | 154 | 140 | 276 | 558 | 521 | 514 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 410 | 497 | 564 | 513 | 537 | 594 | 204 | 207 | 445 | 669 | 717 | 638 |
| Above Normal (16\%) | 376 | 450 | 562 | 406 | 401 | 496 | 130 | 105 | 315 | 587 | 709 | 628 |
| Below Normal (13\%) | 386 | 456 | 590 | 387 | 354 | 394 | 134 | 100 | 209 | 657 | 622 | 542 |
| Dry (24\%) | 374 | 398 | 510 | 392 | 315 | 318 | 153 | 126 | 194 | 541 | 296 | 426 |
| Critical (15\%) | 314 | 293 | 384 | 349 | 250 | 179 | 93 | 90 | 64 | 223 | 176 | 242 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -25\% | 0\% | -2\% | -25\% | -16\% | -4\% | -54\% | -53\% | -8\% | 3\% | 4\% | 0\% |
| 20\% | -33\% | -15\% | -1\% | -36\% | -22\% | 2\% | -64\% | -64\% | -21\% | 2\% | 4\% | -1\% |
| 30\% | -31\% | -27\% | -5\% | -43\% | -33\% | -9\% | -67\% | -67\% | -20\% | 2\% | 3\% | -3\% |
| 40\% | -28\% | -29\% | -22\% | -43\% | -33\% | -12\% | -68\% | -70\% | -23\% | 7\% | 12\% | -7\% |
| 50\% | -24\% | -30\% | -28\% | -44\% | -31\% | -17\% | -67\% | -70\% | -35\% | 15\% | 34\% | -5\% |
| 60\% | -22\% | -26\% | -21\% | -38\% | -30\% | -28\% | -62\% | -67\% | -43\% | 24\% | 16\% | -7\% |
| 70\% | -3\% | -25\% | -18\% | -33\% | -30\% | -32\% | -56\% | -62\% | -40\% | 24\% | 1\% | -2\% |
| 80\% | 5\% | -14\% | -24\% | -36\% | -36\% | -24\% | -44\% | -49\% | -14\% | 48\% | -15\% | -1\% |
| 90\% | 19\% | -13\% | -11\% | -29\% | -51\% | -48\% | -18\% | 15\% | -67\% | 45\% | -13\% | 7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -20\% | -18\% | -14\% | -33\% | -27\% | -13\% | -56\% | -55\% | -22\% | 13\% | 7\% | -3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -25\% | -20\% | -21\% | -29\% | -12\% | 9\% | -57\% | -52\% | -2\% | 6\% | 10\% | -3\% |
| Above Normal (16\%) | -12\% | -14\% | -12\% | -43\% | -31\% | -13\% | -71\% | -71\% | -24\% | 3\% | 9\% | -3\% |
| Below Normal (13\%) | -30\% | -23\% | -5\% | -43\% | -29\% | -21\% | -60\% | -67\% | -50\% | 4\% | 20\% | 1\% |
| Dry (24\%) | -14\% | -16\% | -7\% | -32\% | -39\% | -36\% | -41\% | -45\% | -29\% | 34\% | -9\% | -3\% |
| Critical (15\%) | -8\% | -15\% | -16\% | -19\% | -38\% | -33\% | -31\% | -25\% | -51\% | 60\% | -13\% | -3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.14.3 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 739 | 803 | 727 | 703 | 526 | 515 | 555 | 694 | 694 | 671 |
| 20\% | 680 | 671 | 724 | 769 | 686 | 608 | 503 | 420 | 455 | 694 | 694 | 671 |
| 30\% | 627 | 652 | 719 | 747 | 668 | 560 | 477 | 387 | 425 | 680 | 694 | 671 |
| 40\% | 553 | 623 | 718 | 741 | 614 | 542 | 427 | 351 | 412 | 624 | 634 | 669 |
| 50\% | 489 | 591 | 683 | 730 | 552 | 509 | 390 | 319 | 389 | 551 | 515 | 635 |
| 60\% | 433 | 513 | 601 | 635 | 519 | 486 | 321 | 281 | 361 | 474 | 446 | 545 |
| 70\% | 318 | 464 | 553 | 565 | 465 | 461 | 258 | 242 | 320 | 404 | 369 | 420 |
| 80\% | 273 | 352 | 500 | 499 | 416 | 374 | 188 | 181 | 176 | 300 | 281 | 340 |
| 90\% | 209 | 288 | 378 | 391 | 335 | 304 | 109 | 80 | 128 | 160 | 161 | 226 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 525 | 612 | 638 | 538 | 489 | 351 | 308 | 352 | 494 | 489 | 528 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 549 | 619 | 716 | 724 | 609 | 543 | 476 | 430 | 456 | 632 | 655 | 660 |
| Above Normal (16\%) | 428 | 521 | 641 | 716 | 584 | 570 | 453 | 363 | 415 | 572 | 647 | 651 |
| Below Normal (13\%) | 548 | 595 | 623 | 674 | 497 | 500 | 337 | 304 | 414 | 629 | 517 | 539 |
| Dry (24\%) | 435 | 475 | 546 | 579 | 518 | 493 | 259 | 228 | 274 | 403 | 325 | 438 |
| Critical (15\%) | 340 | 345 | 455 | 433 | 406 | 266 | 134 | 121 | 132 | 139 | 203 | 249 |

Alternative 3

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 718 | 653 | 725 | 722 | 547 | 563 | 667 | 694 | 694 | 671 |
| 20\% | 673 | 671 | 691 | 565 | 603 | 622 | 510 | 496 | 461 | 694 | 694 | 671 |
| 30\% | 627 | 652 | 628 | 440 | 524 | 577 | 465 | 452 | 399 | 694 | 694 | 671 |
| 40\% | 552 | 627 | 583 | 422 | 449 | 532 | 437 | 386 | 373 | 680 | 694 | 657 |
| 50\% | 476 | 571 | 546 | 411 | 393 | 460 | 369 | 329 | 355 | 628 | 624 | 640 |
| 60\% | 382 | 501 | 523 | 395 | 365 | 351 | 320 | 281 | 338 | 566 | 502 | 572 |
| 70\% | 322 | 467 | 505 | 377 | 320 | 316 | 255 | 230 | 311 | 448 | 396 | 417 |
| 80\% | 265 | 346 | 479 | 328 | 264 | 288 | 187 | 124 | 252 | 382 | 268 | 344 |
| 90\% | 218 | 276 | 378 | 304 | 202 | 159 | 124 | 102 | 138 | 190 | 170 | 228 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 465 | 520 | 549 | 442 | 426 | 445 | 353 | 330 | 362 | 533 | 513 | 529 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 544 | 615 | 601 | 559 | 594 | 589 | 494 | 490 | 519 | 648 | 667 | 654 |
| Above Normal (16\%) | 430 | 533 | 574 | 414 | 469 | 566 | 441 | 413 | 397 | 586 | 680 | 647 |
| Below Normal (13\%) | 524 | 587 | 607 | 394 | 373 | 448 | 312 | 266 | 330 | 683 | 650 | 588 |
| Dry (24\%) | 440 | 471 | 523 | 389 | 314 | 337 | 270 | 242 | 292 | 492 | 318 | 426 |
| Critical (15\%) | 321 | 319 | 401 | 355 | 251 | 180 | 127 | 100 | 131 | 158 | 196 | 245 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | -3\% | -19\% | 0\% | 3\% | 4\% | 9\% | 20\% | 0\% | 0\% | 0\% |
| 20\% | -1\% | 0\% | -5\% | -27\% | -12\% | 2\% | 1\% | 18\% | 1\% | 0\% | 0\% | 0\% |
| 30\% | 0\% | 0\% | -13\% | -41\% | -21\% | 3\% | -3\% | 17\% | -6\% | 2\% | 0\% | 0\% |
| 40\% | 0\% | 1\% | -19\% | -43\% | -27\% | -2\% | 2\% | 10\% | -9\% | 9\% | 9\% | -2\% |
| 50\% | -3\% | -3\% | -20\% | -44\% | -29\% | -10\% | -5\% | 3\% | -9\% | 14\% | 21\% | 1\% |
| 60\% | -12\% | -2\% | -13\% | -38\% | -30\% | -28\% | 0\% | 0\% | -6\% | 19\% | 13\% | 5\% |
| 70\% | 1\% | 0\% | -9\% | -33\% | -31\% | -31\% | -1\% | -5\% | -3\% | 11\% | 7\% | -1\% |
| 80\% | -3\% | -2\% | -4\% | -34\% | -37\% | -23\% | 0\% | -31\% | 43\% | 27\% | -5\% | 1\% |
| 90\% | 4\% | -4\% | 0\% | -22\% | -40\% | -48\% | 14\% | 26\% | 8\% | 19\% | 5\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -1\% | -1\% | -10\% | -31\% | -21\% | -9\% | 1\% | 7\% | 3\% | 8\% | 5\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -1\% | -1\% | -16\% | -23\% | -2\% | 9\% | 4\% | 14\% | 14\% | 3\% | 2\% | -1\% |
| Above Normal (16\%) | 0\% | 2\% | -10\% | -42\% | -20\% | -1\% | -3\% | 14\% | -4\% | 2\% | 5\% | -1\% |
| Below Normal (13\%) | -4\% | -1\% | -3\% | -42\% | -25\% | -10\% | -7\% | -12\% | -20\% | 9\% | 26\% | 9\% |
| Dry (24\%) | 1\% | -1\% | -4\% | -33\% | -39\% | -32\% | 4\% | 6\% | 6\% | 22\% | -2\% | -3\% |
| Critical (15\%) | -6\% | -7\% | -12\% | -18\% | -38\% | -32\% | -5\% | -17\% | 0\% | 14\% | -3\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.14.4 Exports Through Jones and Banks Pumping Plants, Monthly Export Volume

Second Basis of Comparison

|  | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 694 | 671 | 739 | 803 | 727 | 703 | 526 | 515 | 555 | 694 | 694 | 671 |
| 20\% | 680 | 671 | 724 | 769 | 686 | 608 | 503 | 420 | 455 | 694 | 694 | 671 |
| 30\% | 627 | 652 | 719 | 747 | 668 | 560 | 477 | 387 | 425 | 680 | 694 | 671 |
| 40\% | 553 | 623 | 718 | 741 | 614 | 542 | 427 | 351 | 412 | 624 | 634 | 669 |
| 50\% | 489 | 591 | 683 | 730 | 552 | 509 | 390 | 319 | 389 | 551 | 515 | 635 |
| 60\% | 433 | 513 | 601 | 635 | 519 | 486 | 321 | 281 | 361 | 474 | 446 | 545 |
| 70\% | 318 | 464 | 553 | 565 | 465 | 461 | 258 | 242 | 320 | 404 | 369 | 420 |
| 80\% | 273 | 352 | 500 | 499 | 416 | 374 | 188 | 181 | 176 | 300 | 281 | 340 |
| 90\% | 209 | 288 | 378 | 391 | 335 | 304 | 109 | 80 | 128 | 160 | 161 | 226 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 471 | 525 | 612 | 638 | 538 | 489 | 351 | 308 | 352 | 494 | 489 | 528 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 549 | 619 | 716 | 724 | 609 | 543 | 476 | 430 | 456 | 632 | 655 | 660 |
| Above Normal (16\%) | 428 | 521 | 641 | 716 | 584 | 570 | 453 | 363 | 415 | 572 | 647 | 651 |
| Below Normal (13\%) | 548 | 595 | 623 | 674 | 497 | 500 | 337 | 304 | 414 | 629 | 517 | 539 |
| Dry (24\%) | 435 | 475 | 546 | 579 | 518 | 493 | 259 | 228 | 274 | 403 | 325 | 438 |
| Critical (15\%) | 340 | 345 | 455 | 433 | 406 | 266 | 134 | 121 | 132 | 139 | 203 | 249 |

Alternative 5

| Statistic | Monthly Export Volume (TAF) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 514 | 671 | 721 | 604 | 613 | 677 | 223 | 218 | 509 | 714 | 724 | 671 |
| 20\% | 454 | 553 | 717 | 490 | 528 | 612 | 165 | 127 | 359 | 709 | 724 | 662 |
| 30\% | 429 | 479 | 685 | 427 | 448 | 528 | 134 | 91 | 340 | 696 | 715 | 648 |
| 40\% | 378 | 443 | 558 | 419 | 416 | 479 | 122 | 83 | 318 | 678 | 705 | 626 |
| 50\% | 360 | 408 | 496 | 405 | 380 | 424 | 111 | 71 | 251 | 646 | 693 | 598 |
| 60\% | 334 | 375 | 481 | 396 | 363 | 349 | 97 | 50 | 207 | 606 | 571 | 508 |
| 70\% | 311 | 347 | 452 | 377 | 323 | 312 | 80 | 38 | 193 | 568 | 401 | 415 |
| 80\% | 289 | 302 | 387 | 319 | 267 | 283 | 45 | 23 | 178 | 445 | 278 | 347 |
| 90\% | 245 | 250 | 337 | 280 | 165 | 159 | 30 | 7 | 42 | 271 | 192 | 254 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 376 | 427 | 528 | 427 | 394 | 423 | 122 | 99 | 279 | 570 | 538 | 514 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 408 | 505 | 564 | 514 | 532 | 592 | 202 | 202 | 444 | 667 | 718 | 627 |
| Above Normal (16\%) | 376 | 423 | 561 | 407 | 405 | 496 | 127 | 92 | 315 | 590 | 705 | 625 |
| Below Normal (13\%) | 381 | 456 | 588 | 387 | 359 | 397 | 103 | 55 | 208 | 663 | 632 | 561 |
| Dry (24\%) | 370 | 394 | 513 | 392 | 315 | 318 | 80 | 41 | 205 | 577 | 333 | 433 |
| Critical (15\%) | 313 | 293 | 382 | 355 | 249 | 179 | 34 | 20 | 69 | 239 | 222 | 243 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Export Volume (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -26\% | 0\% | -2\% | -25\% | -16\% | -4\% | -58\% | -58\% | -8\% | 3\% | 4\% | 0\% |
| 20\% | -33\% | -18\% | -1\% | -36\% | -23\% | 1\% | -67\% | -70\% | -21\% | 2\% | 4\% | -1\% |
| 30\% | -32\% | -26\% | -5\% | -43\% | -33\% | -6\% | -72\% | -77\% | -20\% | 2\% | 3\% | -4\% |
| 40\% | -32\% | -29\% | -22\% | -43\% | -32\% | -12\% | -71\% | -77\% | -23\% | 9\% | 11\% | -6\% |
| 50\% | -26\% | -31\% | -27\% | -45\% | -31\% | -17\% | -71\% | -78\% | -35\% | 17\% | 35\% | -6\% |
| 60\% | -23\% | -27\% | -20\% | -38\% | -30\% | -28\% | -70\% | -82\% | -43\% | 28\% | 28\% | -7\% |
| 70\% | -2\% | -25\% | -18\% | -33\% | -30\% | -32\% | -69\% | -84\% | -40\% | 41\% | 9\% | -1\% |
| 80\% | 6\% | -14\% | -23\% | -36\% | -36\% | -24\% | -76\% | -87\% | 1\% | 49\% | -1\% | 2\% |
| 90\% | 17\% | -13\% | -11\% | -29\% | -51\% | -48\% | -72\% | -91\% | -67\% | 69\% | 19\% | 12\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -20\% | -19\% | -14\% | -33\% | -27\% | -13\% | -65\% | -68\% | -21\% | 15\% | 10\% | -3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -26\% | -19\% | -21\% | -29\% | -13\% | 9\% | -58\% | -53\% | -3\% | 6\% | 10\% | -5\% |
| Above Normal (16\%) | -12\% | -19\% | -12\% | -43\% | -31\% | -13\% | -72\% | -75\% | -24\% | 3\% | 9\% | -4\% |
| Below Normal (13\%) | -30\% | -23\% | -6\% | -43\% | -28\% | -21\% | -69\% | -82\% | -50\% | 5\% | 22\% | 4\% |
| Dry (24\%) | -15\% | -17\% | -6\% | -32\% | -39\% | -36\% | -69\% | -82\% | -25\% | 43\% | 2\% | -1\% |
| Critical (15\%) | -8\% | -15\% | -16\% | -18\% | -39\% | -33\% | -75\% | -83\% | -48\% | 72\% | 10\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.15 CVP Deliveries

Table 5C.3.3.15.1.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | Alternative 1 | No Action Alternative | Alternative 1 minus No Action Alternative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,858 | 1,859 | -1 |
|  |  |  | Dry | 1,905 | 1,906 | 0 |
|  |  |  | Critical | 1,734 | 1,737 | -3 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 155 | 146 | 8 |
|  |  |  | Dry | 151 | 146 | 6 |
|  |  |  | Critical | 105 | 102 | 3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 214 | 207 | 7 |
|  |  |  | Dry | 192 | 186 | 6 |
|  |  |  | Critical | 152 | 152 | 0 |
| CVP Ag | Contract Delivery (annual average - does not include Settlement contractors) | (TAF/year) | Long Term | 221 | 185 | 36 |
|  |  |  | Dry | 124 | 86 | 39 |
|  |  |  | Critical | 38 | 24 | 14 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 261 | 0 |
|  |  |  | Dry | 268 | 269 | 0 |
|  |  |  | Critical | 224 | 224 | 0 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 350 | 269 | 82 |
|  |  |  | Dry | 206 | 140 | 67 |
|  |  |  | Critical | 65 | 41 | 24 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M $\& 1$ | Contract Delivery (annual average) | (TAF/year) | Long Term | 289 | 275 | 13 |
|  |  |  | Dry | 284 | 274 | 10 |
|  |  |  | Critical | 270 | 264 | 6 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 43 | 33 | 11 |
|  |  |  | Dry | 25 | 17 | 8 |
|  |  |  | Critical | 8 | 5 | 3 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 715 | 545 | 169 |
|  |  |  | Dry | 430 | 288 | 143 |
|  |  |  | Critical | 137 | 85 | 51 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,971 | 4,646 | 325 |
|  |  |  | Dry | 4,475 | 4,198 | 277 |
|  |  |  | Critical | 3,484 | 3,385 | 99 |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030.3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.1.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | Alternative 1 | No Action Alternative | Alternative 1 minus No Action Alternative |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 221 \\ 124 \\ 38 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 185 \\ 86 \\ 24 \\ \hline \end{gathered}$ | $\begin{aligned} & 36 \\ & 39 \\ & 14 \\ & \hline \end{aligned}$ |
| CVP M\& (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 486 \\ & 461 \\ & 410 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 467 \\ & 447 \\ & 405 \\ & \hline \end{aligned}$ | $\begin{gathered} 19 \\ 14 \\ 5 \\ \hline \end{gathered}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} 120 \\ 105 \\ 80 \end{gathered}$ | $\begin{gathered} \hline 113 \\ 97 \\ 75 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 8 \\ & 9 \\ & 6 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 1,858 \\ & 1,905 \\ & 1,734 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 1,859 \\ & 1,906 \\ & 1,737 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-1 \\ 0 \\ -3 \\ \hline \end{gathered}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 146 \\ & 146 \\ & 102 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 8 \\ & 6 \\ & 3 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & \hline 2,720 \\ & 2,642 \\ & 2,287 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2,658 \\ & 2,584 \\ & 2,268 \\ & \hline \end{aligned}$ | $\begin{aligned} & 62 \\ & 58 \\ & 19 \\ & \hline \end{aligned}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 1,108 \\ 662 \\ 210 \\ \hline \end{gathered}$ | $\begin{aligned} & 847 \\ & 445 \\ & 131 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 262 \\ 218 \\ 78 \\ \hline \end{gathered}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & 15 \\ & 14 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 261 \\ & 268 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 261 \\ & 269 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} \hline 1,386 \\ 946 \\ 445 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,123 \\ 727 \\ 366 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 263 \\ 219 \\ 79 \\ \hline \end{gathered}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 510 \\ & 524 \\ & 460 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 508 \\ & 524 \\ & 445 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 2 \\ 0 \\ 16 \\ \hline \end{gathered}$ |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 108 \\ 87 \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 104 \\ 84 \\ 4 \\ \hline \end{gathered}$ | $\begin{aligned} & 5 \\ & 2 \\ & 0 \end{aligned}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 618 \\ & 611 \\ & 465 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 611 \\ & 608 \\ & 449 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 7 \\ 2 \\ 16 \end{gathered}$ |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.2.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | No Action Alternative | Second Basis of Comparison | No Action Alternative minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,859 | 1,858 | 1 |
|  |  |  | Dry | 1,906 | 1,905 | 0 |
|  |  |  | Critical | 1,737 | 1,734 | 3 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 146 | 155 | -8 |
|  |  |  | Dry | 146 | 151 | -6 |
|  |  |  | Critical | 102 | 105 | -3 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 207 | 214 | -7 |
|  |  |  | Dry | 186 | 192 | -6 |
|  |  |  | Critical | 152 | 152 | 0 |
| CVP Ag | Contract Delivery (annual average - does not include Settlement contractors) | (TAF/year) | Long Term | 185 | 221 | -36 |
|  |  |  | Dry | 86 | 124 | -39 |
|  |  |  | Critical | 24 | 38 | -14 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 261 | 0 |
|  |  |  | Dry | 269 | 268 | 0 |
|  |  |  | Critical | 224 | 224 | 0 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 269 | 350 | -82 |
|  |  |  | Dry | 140 | 206 | -67 |
|  |  |  | Critical | 41 | 65 | -24 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 275 | 289 | -13 |
|  |  |  | Dry | 274 | 284 | -10 |
|  |  |  | Critical | 264 | 270 | -6 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 33 | 43 | -11 |
|  |  |  | Dry | 17 | 25 | -8 |
|  |  |  | Critical | 5 | 8 | -3 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 545 | 715 | -169 |
|  |  |  | Dry | 288 | 430 | -143 |
|  |  |  | Critical | 85 | 137 | -51 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,646 | 4,971 | -325 |
|  |  |  | Dry | 4,198 | 4,475 | -277 |
|  |  |  | Critical | 3,385 | 3,484 | -99 |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.2.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | No Action Alternative | Second Basis of Comparison | No Action <br> Alternative minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} \hline 185 \\ 86 \\ 24 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 221 \\ 124 \\ 38 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-36 \\ & -39 \\ & -14 \\ & \hline \end{aligned}$ |
| CVP M\&I (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 467 \\ & 447 \\ & 405 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 486 \\ & 461 \\ & 410 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-19 \\ -14 \\ -5 \\ \hline \end{gathered}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 113 \\ 97 \\ 75 \\ \hline \end{gathered}$ | $\begin{gathered} 120 \\ 105 \\ 80 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-8 \\ & -9 \\ & -6 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 1,859 \\ & 1,906 \\ & 1,737 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 1,858 \\ & 1,905 \\ & 1,734 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1 \\ & 0 \\ & 3 \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 146 \\ & 146 \\ & 102 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-8 \\ & -6 \\ & -3 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta <br> Total CVP Ag, M\&I, Settlement, and Refuge Deliveries |  |  |  |  |  |  |
|  | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 2,658 \\ & 2,584 \\ & 2,268 \end{aligned}$ | $\begin{aligned} & \hline 2,720 \\ & 2,642 \\ & 2,287 \end{aligned}$ | $\begin{aligned} & \hline-62 \\ & -58 \\ & -19 \end{aligned}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 847 \\ & 445 \\ & 131 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 1,108 \\ 662 \\ 210 \\ \hline \end{gathered}$ | $\begin{gathered} -262 \\ -218 \\ -78 \\ \hline \end{gathered}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 15 \\ & 14 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-2 \\ & -1 \\ & -1 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 261 \\ & 269 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 261 \\ & 268 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} 1,123 \\ 727 \\ 366 \\ \hline \end{gathered}$ | $\begin{gathered} 1,386 \\ 946 \\ 445 \\ \hline \end{gathered}$ | $\begin{gathered} -263 \\ -219 \\ -79 \\ \hline \end{gathered}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 508 \\ & 524 \\ & 445 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 510 \\ & 524 \\ & 460 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-2 \\ 0 \\ -16 \\ \hline \end{gathered}$ |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 104 \\ 84 \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 108 \\ 87 \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} \hline-5 \\ -2 \\ 0 \end{gathered}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & 611 \\ & 608 \\ & 449 \end{aligned}$ | 618 <br> 611 <br> 465 | $\begin{gathered} \hline-7 \\ -2 \\ -16 \end{gathered}$ |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.3.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | Alternative 3 | Second Basis of Comparison | Alternative 3 minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term | 1,860 | 1,858 | 2 |
|  |  |  | Dry | 1,906 | 1,905 | 0 |
|  |  |  | Critical | 1,742 | 1,734 | 8 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 153 | 155 | -1 |
|  |  |  | Dry | 149 | 151 | -2 |
|  |  |  | Critical | 103 | 105 | -2 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 214 | 214 | -1 |
|  |  |  | Dry | 192 | 192 | 0 |
|  |  |  | Critical | 152 | 152 | 1 |
| CVP Ag | Contract Delivery (annual average - does not include Settlement contractors) | (TAF/year) | Long Term | 209 | 221 | -12 |
|  |  |  | Dry | 111 | 124 | -13 |
|  |  |  | Critical | 31 | 38 | -7 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 261 | 0 |
|  |  |  | Dry | 269 | 268 | 0 |
|  |  |  | Critical | 224 | 224 | 0 |
| CVP M\& | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 342 | 350 | -9 |
|  |  |  | Dry | 185 | 206 | -21 |
|  |  |  | Critical | 53 | 65 | -12 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 286 | 289 | -3 |
|  |  |  | Dry | 283 | 284 | -1 |
|  |  |  | Critical | 267 | 270 | -4 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 42 | 43 | -1 |
|  |  |  | Dry | 23 | 25 | -2 |
|  |  |  | Critical | 6 | 8 | -2 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) | Long Term | 696 | 715 | -19 |
|  |  |  | Dry | 387 | 430 | -43 |
|  |  |  | Critical | 108 | 137 | -28 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,927 | 4,971 | -44 |
|  |  |  | Dry | 4,392 | 4,475 | -82 |
|  |  |  | Critical | 3,437 | 3,484 | -46 |

Notes: 1) Long-term Average is the average quantity for the 82 -year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.3.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | Alternative 3 | Second Basis of Comparison | Alternative 3 minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} 209 \\ 111 \\ 31 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 221 \\ 124 \\ 38 \\ \hline \end{gathered}$ | $\begin{gathered} \hline-12 \\ -13 \\ -7 \\ \hline \end{gathered}$ |
| CVP M\& (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 483 \\ & 460 \\ & 408 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 486 \\ & 461 \\ & 410 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-3 \\ & -1 \\ & -3 \\ & \hline \end{aligned}$ |
| CVP M\&I American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 118 \\ 104 \\ 78 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 120 \\ 105 \\ 80 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-2 \\ & -2 \\ & -3 \\ & \hline \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 1,860 \\ & 1,906 \\ & 1,742 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,858 \\ & 1,905 \\ & 1,734 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2 \\ & 0 \\ & 8 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 153 \\ & 149 \\ & 103 \\ & \hline \end{aligned}$ | $\begin{aligned} & 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-1 \\ & -2 \\ & -2 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 2,706 \\ & 2,626 \\ & 2,284 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2,720 \\ & 2,642 \\ & 2,287 \end{aligned}$ | $\begin{gathered} \hline-15 \\ -16 \\ -4 \\ \hline \end{gathered}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 1,079 \\ 596 \\ 168 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,108 \\ 662 \\ 210 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-29 \\ & -67 \\ & -42 \\ & \hline \end{aligned}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 17 \\ & 15 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 261 \\ & 269 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & 261 \\ & 268 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 1,357 \\ 879 \\ 403 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,386 \\ 946 \\ 445 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-29 \\ & -66 \\ & -43 \\ & \hline \end{aligned}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 513 \\ & 524 \\ & 478 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 510 \\ & 524 \\ & 460 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 3 \\ 0 \\ 17 \\ \hline \end{gathered}$ |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 123 \\ 109 \\ 36 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 108 \\ 87 \\ 4 \\ \hline \end{gathered}$ | $\begin{aligned} & 15 \\ & 22 \\ & 32 \\ & \hline \end{aligned}$ |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & \hline 636 \\ & 633 \\ & 514 \\ & \hline \end{aligned}$ | $\begin{aligned} & 618 \\ & 611 \\ & 465 \\ & \hline \end{aligned}$ | $\begin{aligned} & 18 \\ & 22 \\ & 50 \\ & \hline \end{aligned}$ |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030.3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.4.1 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | Alternative 5 | Second Basis of Comparison | Alternative 5 minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| Sacramento River Hydrologic Region |  |  |  |  |  |  |
| CVP Settlement |  |  | Long Term | 1,861 | 1,858 | 3 |
|  | Contract Delivery (annual average) | (TAF/year) | Dry | 1,906 | 1,905 | 0 |
|  |  |  | Critical | 1,747 | 1,734 | 13 |
| CVP Refuge Level 2 |  |  | Long Term | 146 | 155 | -9 |
|  | Contract Delivery (annual average) | (TAF/year) | Dry | 145 | 151 | -6 |
|  |  |  | Critical | 103 | 105 | -2 |
| CVP M\&I |  |  | Long Term | 207 | 214 | -7 |
|  | Contract Delivery (annual average) | (TAF/year) | Dry | 186 | 192 | -6 |
|  |  |  | Critical | 152 | 152 | 0 |
| CVP Ag | Contract Delivery (annual average - does not include Settlement contractors) | (TAF/year) | Long Term | 185 | 221 | -36 |
|  |  |  | Dry | 85 | 124 | -39 |
|  |  |  | Critical | 24 | 38 | -14 |
| San Joaquin River Hydrologic Region (not including Friant-Kern and Madera Canal water users and Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Exchange | Contract Delivery (annual average) | (TAF/year) | Long Term | 852 | 852 | 0 |
|  |  |  | Dry | 875 | 875 | 0 |
|  |  |  | Critical | 741 | 741 | 0 |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term | 261 | 261 | 0 |
|  |  |  | Dry | 269 | 268 | 0 |
|  |  |  | Critical | 222 | 224 | -2 |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 0 | 0 | 0 |
|  |  |  | Dry | 0 | 0 | 0 |
|  |  |  | Critical | 0 | 0 | 0 |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term | 264 | 350 | -87 |
|  |  |  | Dry | 135 | 206 | -71 |
|  |  |  | Critical | 40 | 65 | -25 |
| San Francisco Bay Hydrologic Region |  |  |  |  |  |  |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term | 275 | 289 | -13 |
|  |  |  | Dry | 275 | 284 | -9 |
|  |  |  | Critical | 264 | 270 | -6 |
| CVP Ag | Contract Delivery (annual average) | (TAF/year) | Long Term | 32 | 43 | -11 |
|  |  |  | Dry | 17 | 25 | -8 |
|  |  |  | Critical | 5 | 8 | -3 |
| Central Coast Hydrologic Region |  |  |  |  |  |  |
| Tulare Lake Hydrologic Region (not including Friant-Kern Canal water users) |  |  |  |  |  |  |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) |  | 12 | 12 | 0 |
|  |  |  | Dry | 12 | 12 | 0 |
|  |  |  | Critical | 10 | 10 | 0 |
| CVP Ag | Contract Delivery (annual average includes Cross Valley Canal) | (TAF/year) |  |  | 715 | -176 |
|  |  |  | Dry | 281 | 430 | -149 |
|  |  |  | Critical | 85 | 137 | -52 |
| Total For All Regions |  |  |  |  |  |  |
| Total Supplies | Contract Delivery (annual average) | (TAF/year) | Long Term | 4,634 | 4,971 | -337 |
|  |  |  | Dry | 4,186 | 4,475 | -288 |
|  |  |  | Critical | 3,393 | 3,484 | -91 |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030. 3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in the text.

Table 5C.3.3.15.4.2 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Averages, CVP

|  |  |  |  | Alternative 5 | Second Basis of Comparison | Alternative 5 minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water Supply Reliability |  |  |  |  |  |  |
| North of Delta |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry <br> Critical | $\begin{gathered} 185 \\ 85 \\ 24 \\ \hline \end{gathered}$ | $\begin{gathered} 221 \\ 124 \\ 38 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-36 \\ & -39 \\ & -14 \\ & \hline \end{aligned}$ |
| CVP M\& (Including American River) | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 467 \\ & 447 \\ & 405 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 486 \\ & 461 \\ & 410 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline-18 \\ -13 \\ -5 \\ \hline \end{gathered}$ |
| CVP M\& American River | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 112 \\ 96 \\ 74 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 120 \\ 105 \\ 80 \\ \hline \end{gathered}$ | $\begin{aligned} & \hline-8 \\ & -9 \\ & -7 \end{aligned}$ |
| CVP Settlement | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 1,861 \\ & 1,906 \\ & 1,747 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,858 \\ & 1,905 \\ & 1,734 \\ & \hline \end{aligned}$ | $\begin{gathered} 3 \\ 0 \\ 13 \\ \hline \end{gathered}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 146 \\ & 145 \\ & 103 \\ & \hline \end{aligned}$ | $\begin{aligned} & 155 \\ & 151 \\ & 105 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-9 \\ & -6 \\ & -2 \\ & \hline \end{aligned}$ |
| Total CVP North of Delta |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (CVP) (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 2,660 \\ & 2,584 \\ & 2,279 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2,720 \\ & 2,642 \\ & 2,287 \end{aligned}$ | $\begin{gathered} -60 \\ -58 \\ -8 \end{gathered}$ |
| South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| CVP Ag | Contract Delivery (annual average; does not include Exchange contractors) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 834 \\ & 433 \\ & 130 \\ & \hline \end{aligned}$ | $\begin{gathered} \hline 1,108 \\ 662 \\ 210 \\ \hline \end{gathered}$ | $\begin{gathered} \hline-274 \\ -229 \\ -80 \\ \hline \end{gathered}$ |
| CVP M\&I | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 15 \\ & 14 \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \\ & 12 \\ & \hline \end{aligned}$ | $\begin{aligned} & -2 \\ & -1 \\ & -1 \end{aligned}$ |
| CVP Refuge Level 2 | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & 261 \\ & 269 \\ & 222 \\ & \hline \end{aligned}$ | $\begin{aligned} & 261 \\ & 268 \\ & 224 \\ & \hline \end{aligned}$ | $\begin{gathered} 0 \\ 0 \\ 0 \\ -2 \end{gathered}$ |
| Total CVP South of Delta (Does not include Eastside Contractors deliveries) |  |  |  |  |  |  |
| Total CVP Ag, M\&I, Settlement, and Refuge Deliveries | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 1,110 \\ 715 \\ 363 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 1,386 \\ 946 \\ 445 \\ \hline \end{gathered}$ | $\begin{gathered} \hline-276 \\ -230 \\ -83 \\ \hline \end{gathered}$ |
| Eastside Contractors deliveries |  |  |  |  |  |  |
| Water Rights | Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{aligned} & \hline 502 \\ & 524 \\ & 406 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 510 \\ & 524 \\ & 460 \\ & \hline \end{aligned}$ | -8 0 -55 |
| CVP Service Contracts | Contract Delivery (annual average) | (TAF/year) | Long Term Dry Critical | $\begin{gathered} \hline 100 \\ 69 \\ 8 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 108 \\ 87 \\ 4 \\ \hline \end{gathered}$ | -8 -18 4 |
| Total Eastside Contractors Deliveries |  |  |  |  |  |  |
| Total Water Rights and CVP Service Contracts Deliveries | Delivery (annual average) | (TAF/year) | Long Term Dry <br> Critical | $\begin{aligned} & \hline 602 \\ & 593 \\ & 414 \\ & \hline \end{aligned}$ | $\begin{aligned} & 618 \\ & 611 \\ & 465 \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-16 \\ & -18 \\ & -50 \\ & \hline \end{aligned}$ |

Notes: 1) Long-term Average is the average quantity for the 82-year simulation period. 2) Dry and Critical Year designations are defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D1641, 1999); projected to Year 2030.3) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 4) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text. 6) Contra Costa Water District accounted for as part of North of Delta deliveries.

Table 5C.3.3.15.5 CALSIM II Summary Reporting Metrics, Long-Term Average and Dry and Critical Year Aver:

|  | Stanislaus Deliveries |  | Difference from No Action Alternative |  | Difference from Second Basis of Comparison |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CVP | Water Rights | CVP | Water Rights | CVP | Water Rights |
|  | (TAF) | (TAF) | (TAF) | (TAF) | (TAF) | (TAF) |
| No Action Alternative | 103.5 | 507.8 |  |  |  |  |
| Second Basis of Comparison | 108.1 | 510.1 | 4.5 | 2.3 |  |  |
| Alternative 2 | 103.5 | 507.8 |  |  | -4.5 | -2.3 |
| Alternative 3 | 123.2 | 512.7 | 19.6 | 4.9 | 15.1 | 2.6 |
| Alternative 5 | 99.7 | 502.1 | -3.8 | -5.7 | -8.4 | -8.1 |

Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.3.16 CVP Total Generating Capacity

Table 5C.3.3.16.1 CVP Total Capacity, Monthly Capacity

No Action Alternative

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,688 | 1,743 | 1,810 | 1,854 | 1,883 | 1,895 | 1,877 | 1,848 | 1,785 | 1,749 | 1,670 | 1,647 |
| 20\% | 1,638 | 1,724 | 1,772 | 1,829 | 1,858 | 1,872 | 1,842 | 1,806 | 1,719 | 1,695 | 1,623 | 1,615 |
| 30\% | 1,600 | 1,694 | 1,744 | 1,802 | 1,837 | 1,842 | 1,825 | 1,782 | 1,671 | 1,623 | 1,585 | 1,599 |
| 40\% | 1,579 | 1,635 | 1,710 | 1,776 | 1,811 | 1,812 | 1,793 | 1,736 | 1,634 | 1,583 | 1,545 | 1,553 |
| 50\% | 1,550 | 1,611 | 1,681 | 1,732 | 1,778 | 1,782 | 1,757 | 1,711 | 1,607 | 1,543 | 1,510 | 1,516 |
| 60\% | 1,529 | 1,556 | 1,622 | 1,700 | 1,749 | 1,752 | 1,725 | 1,652 | 1,564 | 1,504 | 1,481 | 1,473 |
| 70\% | 1,465 | 1,519 | 1,588 | 1,661 | 1,712 | 1,714 | 1,685 | 1,618 | 1,524 | 1,457 | 1,433 | 1,432 |
| 80\% | 1,354 | 1,428 | 1,521 | 1,584 | 1,666 | 1,675 | 1,637 | 1,578 | 1,440 | 1,353 | 1,332 | 1,342 |
| 90\% | 1,137 | 1,293 | 1,403 | 1,455 | 1,476 | 1,502 | 1,454 | 1,384 | 1,203 | 1,120 | 1,085 | 1,103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,476 | 1,542 | 1,612 | 1,685 | 1,727 | 1,734 | 1,705 | 1,648 | 1,542 | 1,468 | 1,429 | 1,430 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,621 | 1,696 | 1,761 | 1,824 | 1,860 | 1,877 | 1,859 | 1,831 | 1,753 | 1,717 | 1,645 | 1,628 |
| Above Normal (16\%) | 1,465 | 1,580 | 1,676 | 1,762 | 1,814 | 1,814 | 1,793 | 1,741 | 1,633 | 1,590 | 1,545 | 1,541 |
| Below Normal (13\%) | 1,530 | 1,580 | 1,669 | 1,719 | 1,764 | 1,757 | 1,728 | 1,665 | 1,559 | 1,491 | 1,478 | 1,483 |
| Dry (24\%) | 1,441 | 1,491 | 1,556 | 1,637 | 1,690 | 1,709 | 1,680 | 1,607 | 1,508 | 1,434 | 1,418 | 1,433 |
| Critical (15\%) | 1,180 | 1,221 | 1,264 | 1,348 | 1,374 | 1,355 | 1,299 | 1,205 | 1,025 | 832 | 808 | 825 |

Alternative 1

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,767 | 1,807 | 1,854 | 1,883 | 1,910 | 1,941 | 1,942 | 1,899 | 1,825 | 1,767 | 1,751 | 1,733 |
| 20\% | 1,731 | 1,790 | 1,829 | 1,862 | 1,891 | 1,923 | 1,907 | 1,856 | 1,739 | 1,676 | 1,669 | 1,677 |
| 30\% | 1,687 | 1,768 | 1,809 | 1,849 | 1,876 | 1,899 | 1,890 | 1,808 | 1,695 | 1,620 | 1,608 | 1,647 |
| 40\% | 1,645 | 1,727 | 1,787 | 1,832 | 1,865 | 1,879 | 1,857 | 1,770 | 1,654 | 1,590 | 1,571 | 1,574 |
| 50\% | 1,583 | 1,686 | 1,750 | 1,811 | 1,846 | 1,855 | 1,832 | 1,745 | 1,612 | 1,550 | 1,541 | 1,544 |
| 60\% | 1,561 | 1,629 | 1,710 | 1,768 | 1,811 | 1,831 | 1,788 | 1,701 | 1,584 | 1,509 | 1,487 | 1,488 |
| 70\% | 1,482 | 1,568 | 1,650 | 1,714 | 1,771 | 1,786 | 1,760 | 1,669 | 1,550 | 1,471 | 1,439 | 1,448 |
| 80\% | 1,379 | 1,450 | 1,576 | 1,644 | 1,719 | 1,747 | 1,713 | 1,616 | 1,490 | 1,391 | 1,387 | 1,375 |
| 90\% | 1,197 | 1,360 | 1,427 | 1,535 | 1,569 | 1,552 | 1,523 | 1,429 | 1,335 | 1,222 | 1,183 | 1,134 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,532 | 1,606 | 1,675 | 1,735 | 1,780 | 1,795 | 1,772 | 1,693 | 1,574 | 1,492 | 1,469 | 1,474 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,679 | 1,756 | 1,811 | 1,857 | 1,892 | 1,926 | 1,920 | 1,871 | 1,773 | 1,717 | 1,694 | 1,701 |
| Above Normal (16\%) | 1,522 | 1,652 | 1,747 | 1,810 | 1,856 | 1,877 | 1,860 | 1,778 | 1,653 | 1,584 | 1,567 | 1,564 |
| Below Normal (13\%) | 1,606 | 1,671 | 1,754 | 1,792 | 1,830 | 1,838 | 1,807 | 1,718 | 1,593 | 1,496 | 1,481 | 1,487 |
| Dry (24\%) | 1,476 | 1,536 | 1,607 | 1,689 | 1,746 | 1,771 | 1,746 | 1,652 | 1,533 | 1,463 | 1,445 | 1,456 |
| Critical (15\%) | 1,250 | 1,290 | 1,342 | 1,416 | 1,466 | 1,419 | 1,366 | 1,262 | 1,106 | 948 | 902 | 904 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 5\% | 4\% | 2\% | 2\% | 1\% | 2\% | 3\% | 3\% | 2\% | 1\% | 5\% | 5\% |
| 20\% | 6\% | 4\% | 3\% | 2\% | 2\% | 3\% | 3\% | 3\% | 1\% | -1\% | 3\% | 4\% |
| 30\% | 5\% | 4\% | 4\% | 3\% | 2\% | 3\% | 4\% | 1\% | 1\% | 0\% | 1\% | 3\% |
| 40\% | 4\% | 6\% | 4\% | 3\% | 3\% | 4\% | 4\% | 2\% | 1\% | 0\% | 2\% | 1\% |
| 50\% | 2\% | 5\% | 4\% | 5\% | 4\% | 4\% | 4\% | 2\% | 0\% | 0\% | 2\% | 2\% |
| 60\% | 2\% | 5\% | 5\% | 4\% | 4\% | 5\% | 4\% | 3\% | 1\% | 0\% | 0\% | 1\% |
| 70\% | 1\% | 3\% | 4\% | 3\% | 3\% | 4\% | 4\% | 3\% | 2\% | 1\% | 0\% | 1\% |
| 80\% | 2\% | 2\% | 4\% | 4\% | 3\% | 4\% | 5\% | 2\% | 4\% | 3\% | 4\% | 2\% |
| 90\% | 5\% | 5\% | 2\% | 6\% | 6\% | 3\% | 5\% | 3\% | 11\% | 9\% | 9\% | 3\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 4\% | 4\% | 4\% | 3\% | 3\% | 4\% | 4\% | 3\% | 2\% | 2\% | 3\% | 3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 4\% | 4\% | 3\% | 2\% | 2\% | 3\% | 3\% | 2\% | 1\% | 0\% | 3\% | 4\% |
| Above Normal (16\%) | 4\% | 5\% | 4\% | 3\% | 2\% | 3\% | 4\% | 2\% | 1\% | 0\% | 1\% | 2\% |
| Below Normal (13\%) | 5\% | 6\% | 5\% | 4\% | 4\% | 5\% | 5\% | 3\% | 2\% | 0\% | 0\% | 0\% |
| Dry (24\%) | 2\% | 3\% | 3\% | 3\% | 3\% | 4\% | 4\% | 3\% | 2\% | 2\% | 2\% | 2\% |
| Critical (15\%) | 6\% | 6\% | 6\% | 5\% | 7\% | 5\% | 5\% | 5\% | 8\% | 14\% | 12\% | 10\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.16.2 CVP Total Capacity, Monthly Capacity

Second Basis of Comparison

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,767 | 1,807 | 1,854 | 1,883 | 1,910 | 1,941 | 1,942 | 1,899 | 1,825 | 1,767 | 1,751 | 1,733 |
| 20\% | 1,731 | 1,790 | 1,829 | 1,862 | 1,891 | 1,923 | 1,907 | 1,856 | 1,739 | 1,676 | 1,669 | 1,677 |
| 30\% | 1,687 | 1,768 | 1,809 | 1,849 | 1,876 | 1,899 | 1,890 | 1,808 | 1,695 | 1,620 | 1,608 | 1,647 |
| 40\% | 1,645 | 1,727 | 1,787 | 1,832 | 1,865 | 1,879 | 1,857 | 1,770 | 1,654 | 1,590 | 1,571 | 1,574 |
| 50\% | 1,583 | 1,686 | 1,750 | 1,811 | 1,846 | 1,855 | 1,832 | 1,745 | 1,612 | 1,550 | 1,541 | 1,544 |
| 60\% | 1,561 | 1,629 | 1,710 | 1,768 | 1,811 | 1,831 | 1,788 | 1,701 | 1,584 | 1,509 | 1,487 | 1,488 |
| 70\% | 1,482 | 1,568 | 1,650 | 1,714 | 1,771 | 1,786 | 1,760 | 1,669 | 1,550 | 1,471 | 1,439 | 1,448 |
| 80\% | 1,379 | 1,450 | 1,576 | 1,644 | 1,719 | 1,747 | 1,713 | 1,616 | 1,490 | 1,391 | 1,387 | 1,375 |
| 90\% | 1,197 | 1,360 | 1,427 | 1,535 | 1,569 | 1,552 | 1,523 | 1,429 | 1,335 | 1,222 | 1,183 | 1,134 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,532 | 1,606 | 1,675 | 1,735 | 1,780 | 1,795 | 1,772 | 1,693 | 1,574 | 1,492 | 1,469 | 1,474 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,679 | 1,756 | 1,811 | 1,857 | 1,892 | 1,926 | 1,920 | 1,871 | 1,773 | 1,717 | 1,694 | 1,701 |
| Above Normal (16\%) | 1,522 | 1,652 | 1,747 | 1,810 | 1,856 | 1,877 | 1,860 | 1,778 | 1,653 | 1,584 | 1,567 | 1,564 |
| Below Normal (13\%) | 1,606 | 1,671 | 1,754 | 1,792 | 1,830 | 1,838 | 1,807 | 1,718 | 1,593 | 1,496 | 1,481 | 1,487 |
| Dry (24\%) | 1,476 | 1,536 | 1,607 | 1,689 | 1,746 | 1,771 | 1,746 | 1,652 | 1,533 | 1,463 | 1,445 | 1,456 |
| Critical (15\%) | 1,250 | 1,290 | 1,342 | 1,416 | 1,466 | 1,419 | 1,366 | 1,262 | 1,106 | 948 | 902 | 904 |

## No Action Alternative

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,688 | 1,743 | 1,810 | 1,854 | 1,883 | 1,895 | 1,877 | 1,848 | 1,785 | 1,749 | 1,670 | 1,647 |
| 20\% | 1,638 | 1,724 | 1,772 | 1,829 | 1,858 | 1,872 | 1,842 | 1,806 | 1,719 | 1,695 | 1,623 | 1,615 |
| 30\% | 1,600 | 1,694 | 1,744 | 1,802 | 1,837 | 1,842 | 1,825 | 1,782 | 1,671 | 1,623 | 1,585 | 1,599 |
| 40\% | 1,579 | 1,635 | 1,710 | 1,776 | 1,811 | 1,812 | 1,793 | 1,736 | 1,634 | 1,583 | 1,545 | 1,553 |
| 50\% | 1,550 | 1,611 | 1,681 | 1,732 | 1,778 | 1,782 | 1,757 | 1,711 | 1,607 | 1,543 | 1,510 | 1,516 |
| 60\% | 1,529 | 1,556 | 1,622 | 1,700 | 1,749 | 1,752 | 1,725 | 1,652 | 1,564 | 1,504 | 1,481 | 1,473 |
| 70\% | 1,465 | 1,519 | 1,588 | 1,661 | 1,712 | 1,714 | 1,685 | 1,618 | 1,524 | 1,457 | 1,433 | 1,432 |
| 80\% | 1,354 | 1,428 | 1,521 | 1,584 | 1,666 | 1,675 | 1,637 | 1,578 | 1,440 | 1,353 | 1,332 | 1,342 |
| 90\% | 1,137 | 1,293 | 1,403 | 1,455 | 1,476 | 1,502 | 1,454 | 1,384 | 1,203 | 1,120 | 1,085 | 1,103 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,476 | 1,542 | 1,612 | 1,685 | 1,727 | 1,734 | 1,705 | 1,648 | 1,542 | 1,468 | 1,429 | 1,430 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,621 | 1,696 | 1,761 | 1,824 | 1,860 | 1,877 | 1,859 | 1,831 | 1,753 | 1,717 | 1,645 | 1,628 |
| Above Normal (16\%) | 1,465 | 1,580 | 1,676 | 1,762 | 1,814 | 1,814 | 1,793 | 1,741 | 1,633 | 1,590 | 1,545 | 1,541 |
| Below Normal (13\%) | 1,530 | 1,580 | 1,669 | 1,719 | 1,764 | 1,757 | 1,728 | 1,665 | 1,559 | 1,491 | 1,478 | 1,483 |
| Dry (24\%) | 1,441 | 1,491 | 1,556 | 1,637 | 1,690 | 1,709 | 1,680 | 1,607 | 1,508 | 1,434 | 1,418 | 1,433 |
| Critical (15\%) | 1,180 | 1,221 | 1,264 | 1,348 | 1,374 | 1,355 | 1,299 | 1,205 | 1,025 | 832 | 808 | 825 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -4\% | -4\% | -2\% | -2\% | -1\% | -2\% | -3\% | -3\% | -2\% | -1\% | -5\% | -5\% |
| 20\% | -5\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% | -3\% | -1\% | 1\% | -3\% | -4\% |
| 30\% | -5\% | -4\% | -4\% | -3\% | -2\% | -3\% | -3\% | -1\% | -1\% | 0\% | -1\% | -3\% |
| 40\% | -4\% | -5\% | -4\% | -3\% | -3\% | -4\% | -3\% | -2\% | -1\% | 0\% | -2\% | -1\% |
| 50\% | -2\% | -4\% | -4\% | -4\% | -4\% | -4\% | -4\% | -2\% | 0\% | 0\% | -2\% | -2\% |
| 60\% | -2\% | -5\% | -5\% | -4\% | -3\% | -4\% | -3\% | -3\% | -1\% | 0\% | 0\% | -1\% |
| 70\% | -1\% | -3\% | -4\% | -3\% | -3\% | -4\% | -4\% | -3\% | -2\% | -1\% | 0\% | -1\% |
| 80\% | -2\% | -2\% | -4\% | -4\% | -3\% | -4\% | -4\% | -2\% | -3\% | -3\% | -4\% | -2\% |
| 90\% | -5\% | -5\% | -2\% | -5\% | -6\% | -3\% | -4\% | -3\% | -10\% | -8\% | -8\% | -3\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -4\% | -4\% | -4\% | -3\% | -3\% | -3\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -3\% | -3\% | -3\% | -2\% | -2\% | -3\% | -3\% | -2\% | -1\% | 0\% | -3\% | -4\% |
| Above Normal (16\%) | -4\% | -4\% | -4\% | -3\% | -2\% | -3\% | -4\% | -2\% | -1\% | 0\% | -1\% | -2\% |
| Below Normal (13\%) | -5\% | -5\% | -5\% | -4\% | -4\% | -4\% | -4\% | -3\% | -2\% | 0\% | 0\% | 0\% |
| Dry (24\%) | -2\% | -3\% | -3\% | -3\% | -3\% | -4\% | -4\% | -3\% | -2\% | -2\% | -2\% | -2\% |
| Critical (15\%) | -6\% | -5\% | -6\% | -5\% | -6\% | -5\% | -5\% | -5\% | -7\% | -12\% | -10\% | -9\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.16.3 CVP Total Capacity, Monthly Capacity

Second Basis of Comparison

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,767 | 1,807 | 1,854 | 1,883 | 1,910 | 1,941 | 1,942 | 1,899 | 1,825 | 1,767 | 1,751 | 1,733 |
| 20\% | 1,731 | 1,790 | 1,829 | 1,862 | 1,891 | 1,923 | 1,907 | 1,856 | 1,739 | 1,676 | 1,669 | 1,677 |
| 30\% | 1,687 | 1,768 | 1,809 | 1,849 | 1,876 | 1,899 | 1,890 | 1,808 | 1,695 | 1,620 | 1,608 | 1,647 |
| 40\% | 1,645 | 1,727 | 1,787 | 1,832 | 1,865 | 1,879 | 1,857 | 1,770 | 1,654 | 1,590 | 1,571 | 1,574 |
| 50\% | 1,583 | 1,686 | 1,750 | 1,811 | 1,846 | 1,855 | 1,832 | 1,745 | 1,612 | 1,550 | 1,541 | 1,544 |
| 60\% | 1,561 | 1,629 | 1,710 | 1,768 | 1,811 | 1,831 | 1,788 | 1,701 | 1,584 | 1,509 | 1,487 | 1,488 |
| 70\% | 1,482 | 1,568 | 1,650 | 1,714 | 1,771 | 1,786 | 1,760 | 1,669 | 1,550 | 1,471 | 1,439 | 1,448 |
| 80\% | 1,379 | 1,450 | 1,576 | 1,644 | 1,719 | 1,747 | 1,713 | 1,616 | 1,490 | 1,391 | 1,387 | 1,375 |
| 90\% | 1,197 | 1,360 | 1,427 | 1,535 | 1,569 | 1,552 | 1,523 | 1,429 | 1,335 | 1,222 | 1,183 | 1,134 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,532 | 1,606 | 1,675 | 1,735 | 1,780 | 1,795 | 1,772 | 1,693 | 1,574 | 1,492 | 1,469 | 1,474 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,679 | 1,756 | 1,811 | 1,857 | 1,892 | 1,926 | 1,920 | 1,871 | 1,773 | 1,717 | 1,694 | 1,701 |
| Above Normal (16\%) | 1,522 | 1,652 | 1,747 | 1,810 | 1,856 | 1,877 | 1,860 | 1,778 | 1,653 | 1,584 | 1,567 | 1,564 |
| Below Normal (13\%) | 1,606 | 1,671 | 1,754 | 1,792 | 1,830 | 1,838 | 1,807 | 1,718 | 1,593 | 1,496 | 1,481 | 1,487 |
| Dry (24\%) | 1,476 | 1,536 | 1,607 | 1,689 | 1,746 | 1,771 | 1,746 | 1,652 | 1,533 | 1,463 | 1,445 | 1,456 |
| Critical (15\%) | 1,250 | 1,290 | 1,342 | 1,416 | 1,466 | 1,419 | 1,366 | 1,262 | 1,106 | 948 | 902 | 904 |

Alternative 3

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,778 | 1,818 | 1,852 | 1,884 | 1,910 | 1,945 | 1,947 | 1,910 | 1,837 | 1,777 | 1,759 | 1,753 |
| 20\% | 1,749 | 1,789 | 1,828 | 1,860 | 1,894 | 1,930 | 1,930 | 1,883 | 1,766 | 1,692 | 1,687 | 1,696 |
| 30\% | 1,708 | 1,772 | 1,814 | 1,851 | 1,884 | 1,900 | 1,895 | 1,828 | 1,717 | 1,654 | 1,633 | 1,659 |
| 40\% | 1,663 | 1,741 | 1,781 | 1,838 | 1,866 | 1,882 | 1,849 | 1,777 | 1,670 | 1,601 | 1,604 | 1,600 |
| 50\% | 1,609 | 1,689 | 1,744 | 1,800 | 1,840 | 1,851 | 1,821 | 1,760 | 1,644 | 1,572 | 1,554 | 1,569 |
| 60\% | 1,579 | 1,639 | 1,695 | 1,748 | 1,797 | 1,814 | 1,781 | 1,711 | 1,603 | 1,542 | 1,511 | 1,510 |
| 70\% | 1,499 | 1,557 | 1,632 | 1,703 | 1,768 | 1,784 | 1,755 | 1,665 | 1,567 | 1,487 | 1,453 | 1,465 |
| 80\% | 1,394 | 1,457 | 1,570 | 1,624 | 1,708 | 1,738 | 1,707 | 1,620 | 1,506 | 1,408 | 1,378 | 1,372 |
| 90\% | 1,231 | 1,365 | 1,434 | 1,496 | 1,518 | 1,545 | 1,519 | 1,453 | 1,343 | 1,229 | 1,190 | 1,181 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,551 | 1,613 | 1,676 | 1,732 | 1,777 | 1,794 | 1,775 | 1,705 | 1,592 | 1,512 | 1,486 | 1,493 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,690 | 1,756 | 1,806 | 1,856 | 1,894 | 1,929 | 1,928 | 1,885 | 1,791 | 1,730 | 1,713 | 1,716 |
| Above Normal (16\%) | 1,527 | 1,640 | 1,746 | 1,802 | 1,852 | 1,875 | 1,862 | 1,786 | 1,679 | 1,615 | 1,591 | 1,589 |
| Below Normal (13\%) | 1,629 | 1,676 | 1,751 | 1,790 | 1,829 | 1,832 | 1,788 | 1,718 | 1,607 | 1,529 | 1,504 | 1,501 |
| Dry (24\%) | 1,504 | 1,551 | 1,612 | 1,686 | 1,748 | 1,768 | 1,745 | 1,660 | 1,555 | 1,479 | 1,459 | 1,475 |
| Critical (15\%) | 1,283 | 1,319 | 1,355 | 1,411 | 1,444 | 1,422 | 1,386 | 1,288 | 1,113 | 967 | 909 | 930 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 0\% | 1\% |
| 20\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 2\% | 1\% | 1\% | 1\% |
| 30\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 2\% | 2\% | 1\% |
| 40\% | 1\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 2\% | 2\% |
| 50\% | 2\% | 0\% | 0\% | -1\% | 0\% | 0\% | -1\% | 1\% | 2\% | 1\% | 1\% | 2\% |
| 60\% | 1\% | 1\% | -1\% | -1\% | -1\% | -1\% | 0\% | 1\% | 1\% | 2\% | 2\% | 1\% |
| 70\% | 1\% | -1\% | -1\% | -1\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% |
| 80\% | 1\% | 0\% | 0\% | -1\% | -1\% | -1\% | 0\% | 0\% | 1\% | 1\% | -1\% | 0\% |
| 90\% | 3\% | 0\% | 0\% | -3\% | -3\% | -1\% | 0\% | 2\% | 1\% | 1\% | 1\% | 4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Above Normal (16\%) | 0\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 2\% | 1\% | 2\% |
| Below Normal (13\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 0\% | 1\% | 2\% | 2\% | 1\% |
| Dry (24\%) | 2\% | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 1\% | 1\% | 1\% | 1\% |
| Critical (15\%) | 3\% | 2\% | 1\% | 0\% | -1\% | 0\% | 1\% | 2\% | 1\% | 2\% | 1\% | 3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.16.4 CVP Total Capacity, Monthly Capacity

Second Basis of Comparison

|  | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,767 | 1,807 | 1,854 | 1,883 | 1,910 | 1,941 | 1,942 | 1,899 | 1,825 | 1,767 | 1,751 | 1,733 |
| 20\% | 1,731 | 1,790 | 1,829 | 1,862 | 1,891 | 1,923 | 1,907 | 1,856 | 1,739 | 1,676 | 1,669 | 1,677 |
| 30\% | 1,687 | 1,768 | 1,809 | 1,849 | 1,876 | 1,899 | 1,890 | 1,808 | 1,695 | 1,620 | 1,608 | 1,647 |
| 40\% | 1,645 | 1,727 | 1,787 | 1,832 | 1,865 | 1,879 | 1,857 | 1,770 | 1,654 | 1,590 | 1,571 | 1,574 |
| 50\% | 1,583 | 1,686 | 1,750 | 1,811 | 1,846 | 1,855 | 1,832 | 1,745 | 1,612 | 1,550 | 1,541 | 1,544 |
| 60\% | 1,561 | 1,629 | 1,710 | 1,768 | 1,811 | 1,831 | 1,788 | 1,701 | 1,584 | 1,509 | 1,487 | 1,488 |
| 70\% | 1,482 | 1,568 | 1,650 | 1,714 | 1,771 | 1,786 | 1,760 | 1,669 | 1,550 | 1,471 | 1,439 | 1,448 |
| 80\% | 1,379 | 1,450 | 1,576 | 1,644 | 1,719 | 1,747 | 1,713 | 1,616 | 1,490 | 1,391 | 1,387 | 1,375 |
| 90\% | 1,197 | 1,360 | 1,427 | 1,535 | 1,569 | 1,552 | 1,523 | 1,429 | 1,335 | 1,222 | 1,183 | 1,134 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,532 | 1,606 | 1,675 | 1,735 | 1,780 | 1,795 | 1,772 | 1,693 | 1,574 | 1,492 | 1,469 | 1,474 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,679 | 1,756 | 1,811 | 1,857 | 1,892 | 1,926 | 1,920 | 1,871 | 1,773 | 1,717 | 1,694 | 1,701 |
| Above Normal (16\%) | 1,522 | 1,652 | 1,747 | 1,810 | 1,856 | 1,877 | 1,860 | 1,778 | 1,653 | 1,584 | 1,567 | 1,564 |
| Below Normal (13\%) | 1,606 | 1,671 | 1,754 | 1,792 | 1,830 | 1,838 | 1,807 | 1,718 | 1,593 | 1,496 | 1,481 | 1,487 |
| Dry (24\%) | 1,476 | 1,536 | 1,607 | 1,689 | 1,746 | 1,771 | 1,746 | 1,652 | 1,533 | 1,463 | 1,445 | 1,456 |
| Critical (15\%) | 1,250 | 1,290 | 1,342 | 1,416 | 1,466 | 1,419 | 1,366 | 1,262 | 1,106 | 948 | 902 | 904 |

Alternative 5

| Statistic | Monthly Capacity (MW) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 1,693 | 1,746 | 1,805 | 1,849 | 1,882 | 1,891 | 1,879 | 1,849 | 1,777 | 1,748 | 1,671 | 1,650 |
| 20\% | 1,635 | 1,721 | 1,772 | 1,829 | 1,859 | 1,867 | 1,843 | 1,806 | 1,725 | 1,690 | 1,624 | 1,612 |
| 30\% | 1,599 | 1,680 | 1,744 | 1,797 | 1,836 | 1,839 | 1,816 | 1,766 | 1,655 | 1,616 | 1,576 | 1,579 |
| 40\% | 1,566 | 1,638 | 1,710 | 1,767 | 1,801 | 1,801 | 1,785 | 1,732 | 1,619 | 1,571 | 1,538 | 1,547 |
| 50\% | 1,538 | 1,596 | 1,668 | 1,726 | 1,775 | 1,774 | 1,737 | 1,700 | 1,598 | 1,555 | 1,504 | 1,510 |
| 60\% | 1,516 | 1,552 | 1,617 | 1,687 | 1,737 | 1,733 | 1,701 | 1,643 | 1,537 | 1,484 | 1,460 | 1,457 |
| 70\% | 1,458 | 1,512 | 1,571 | 1,650 | 1,694 | 1,699 | 1,673 | 1,596 | 1,506 | 1,415 | 1,413 | 1,413 |
| 80\% | 1,327 | 1,399 | 1,504 | 1,574 | 1,644 | 1,639 | 1,616 | 1,532 | 1,439 | 1,324 | 1,302 | 1,310 |
| 90\% | 1,044 | 1,242 | 1,372 | 1,427 | 1,440 | 1,483 | 1,450 | 1,351 | 1,173 | 1,061 | 1,046 | 1,029 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1,460 | 1,532 | 1,603 | 1,672 | 1,716 | 1,717 | 1,692 | 1,633 | 1,525 | 1,450 | 1,410 | 1,410 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1,609 | 1,690 | 1,755 | 1,819 | 1,856 | 1,873 | 1,858 | 1,830 | 1,748 | 1,715 | 1,641 | 1,625 |
| Above Normal (16\%) | 1,458 | 1,576 | 1,671 | 1,757 | 1,808 | 1,806 | 1,785 | 1,735 | 1,624 | 1,577 | 1,536 | 1,532 |
| Below Normal (13\%) | 1,504 | 1,559 | 1,648 | 1,712 | 1,755 | 1,743 | 1,710 | 1,653 | 1,546 | 1,474 | 1,465 | 1,468 |
| Dry (24\%) | 1,428 | 1,478 | 1,545 | 1,622 | 1,676 | 1,686 | 1,657 | 1,585 | 1,485 | 1,403 | 1,383 | 1,391 |
| Critical (15\%) | 1,152 | 1,205 | 1,253 | 1,308 | 1,344 | 1,310 | 1,274 | 1,159 | 985 | 793 | 768 | 794 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Capacity (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -4\% | -3\% | -3\% | -2\% | -1\% | -3\% | -3\% | -3\% | -3\% | -1\% | -5\% | -5\% |
| 20\% | -6\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% | -3\% | -1\% | 1\% | -3\% | -4\% |
| 30\% | -5\% | -5\% | -4\% | -3\% | -2\% | -3\% | -4\% | -2\% | -2\% | 0\% | -2\% | -4\% |
| 40\% | -5\% | -5\% | -4\% | -4\% | -3\% | -4\% | -4\% | -2\% | -2\% | -1\% | -2\% | -2\% |
| 50\% | -3\% | -5\% | -5\% | -5\% | -4\% | -4\% | -5\% | -3\% | -1\% | 0\% | -2\% | -2\% |
| 60\% | -3\% | -5\% | -5\% | -5\% | -4\% | -5\% | -5\% | -3\% | -3\% | -2\% | -2\% | -2\% |
| 70\% | -2\% | -4\% | -5\% | -4\% | -4\% | -5\% | -5\% | -4\% | -3\% | -4\% | -2\% | -2\% |
| 80\% | -4\% | -4\% | -5\% | -4\% | -4\% | -6\% | -6\% | -5\% | -3\% | -5\% | -6\% | -5\% |
| 90\% | -13\% | -9\% | -4\% | -7\% | -8\% | -4\% | -5\% | -6\% | -12\% | -13\% | -12\% | -9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -5\% | -5\% | -4\% | -4\% | -4\% | -4\% | -4\% | -4\% | -3\% | -3\% | -4\% | -4\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -4\% | -4\% | -3\% | -2\% | -2\% | -3\% | -3\% | -2\% | -1\% | 0\% | -3\% | -4\% |
| Above Normal (16\%) | -4\% | -5\% | -4\% | -3\% | -3\% | -4\% | -4\% | -2\% | -2\% | 0\% | -2\% | -2\% |
| Below Normal (13\%) | -6\% | -7\% | -6\% | -4\% | -4\% | -5\% | -5\% | -4\% | -3\% | -1\% | -1\% | -1\% |
| Dry (24\%) | -3\% | -4\% | -4\% | -4\% | -4\% | -5\% | -5\% | -4\% | -3\% | -4\% | -4\% | -5\% |
| Critical (15\%) | -8\% | -7\% | -7\% | -8\% | -8\% | -8\% | -7\% | -8\% | -11\% | -16\% | -15\% | -12\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.17 CVP Total Generation

Table 5C.3.3.17.1 CVP Total Generation, Monthly Generation

No Action Alternative

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 409 | 413 | 641 | 689 | 671 | 696 | 492 | 616 | 619 | 756 | 585 | 630 |
| 20\% | 372 | 380 | 338 | 490 | 622 | 569 | 397 | 549 | 577 | 729 | 549 | 597 |
| 30\% | 329 | 310 | 240 | 381 | 471 | 363 | 358 | 514 | 561 | 705 | 536 | 469 |
| 40\% | 292 | 274 | 190 | 235 | 245 | 267 | 334 | 478 | 544 | 662 | 511 | 414 |
| 50\% | 270 | 231 | 175 | 201 | 205 | 229 | 318 | 464 | 527 | 644 | 496 | 342 |
| 60\% | 239 | 183 | 167 | 179 | 173 | 194 | 302 | 442 | 495 | 630 | 476 | 285 |
| 70\% | 210 | 162 | 146 | 152 | 141 | 171 | 282 | 415 | 479 | 598 | 451 | 250 |
| 80\% | 186 | 140 | 131 | 137 | 130 | 151 | 249 | 350 | 435 | 551 | 421 | 215 |
| 90\% | 159 | 118 | 105 | 120 | 110 | 141 | 217 | 291 | 350 | 474 | 359 | 184 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 273 | 255 | 260 | 317 | 322 | 329 | 343 | 461 | 514 | 631 | 487 | 376 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 317 | 318 | 441 | 558 | 513 | 557 | 447 | 580 | 568 | 683 | 542 | 598 |
| Above Normal (16\%) | 268 | 263 | 259 | 320 | 454 | 367 | 370 | 484 | 544 | 708 | 527 | 421 |
| Below Normal (13\%) | 310 | 258 | 175 | 186 | 266 | 220 | 318 | 455 | 540 | 679 | 529 | 289 |
| Dry (24\%) | 254 | 232 | 154 | 183 | 145 | 183 | 263 | 406 | 511 | 607 | 457 | 246 |
| Critical (15\%) | 184 | 149 | 123 | 134 | 111 | 135 | 242 | 271 | 345 | 431 | 333 | 145 |

Alternative 1

| Statistic | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 415 | 295 | 659 | 692 | 684 | 702 | 486 | 626 | 696 | 779 | 637 | 441 |
| 20\% | 339 | 256 | 436 | 584 | 637 | 584 | 393 | 572 | 655 | 757 | 588 | 370 |
| 30\% | 303 | 233 | 242 | 439 | 446 | 357 | 350 | 535 | 623 | 732 | 569 | 334 |
| 40\% | 268 | 220 | 194 | 266 | 287 | 256 | 325 | 507 | 602 | 711 | 549 | 315 |
| 50\% | 236 | 204 | 182 | 211 | 220 | 232 | 313 | 493 | 577 | 683 | 525 | 297 |
| 60\% | 212 | 180 | 169 | 177 | 175 | 194 | 289 | 470 | 553 | 654 | 501 | 278 |
| 70\% | 201 | 168 | 148 | 156 | 141 | 177 | 276 | 445 | 530 | 627 | 477 | 258 |
| 80\% | 172 | 138 | 134 | 143 | 133 | 154 | 248 | 372 | 481 | 571 | 436 | 225 |
| 90\% | 152 | 125 | 112 | 121 | 115 | 141 | 217 | 318 | 390 | 470 | 389 | 186 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 256 | 215 | 278 | 336 | 331 | 334 | 334 | 481 | 569 | 655 | 514 | 305 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 297 | 269 | 491 | 582 | 521 | 549 | 428 | 586 | 636 | 697 | 573 | 399 |
| Above Normal (16\%) | 245 | 215 | 245 | 362 | 479 | 396 | 341 | 513 | 618 | 740 | 571 | 341 |
| Below Normal (13\%) | 282 | 221 | 188 | 231 | 280 | 246 | 323 | 496 | 612 | 724 | 575 | 306 |
| Dry (24\%) | 243 | 183 | 158 | 179 | 150 | 181 | 262 | 433 | 542 | 637 | 463 | 251 |
| Critical (15\%) | 180 | 145 | 134 | 134 | 107 | 140 | 253 | 286 | 376 | 442 | 357 | 154 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2\% | -29\% | 3\% | 0\% | 2\% | 1\% | -1\% | 2\% | 12\% | 3\% | 9\% | -30\% |
| 20\% | -9\% | -33\% | 29\% | 19\% | 2\% | 3\% | -1\% | 4\% | 14\% | 4\% | 7\% | -38\% |
| 30\% | -8\% | -25\% | 1\% | 15\% | -5\% | -2\% | -2\% | 4\% | 11\% | 4\% | 6\% | -29\% |
| 40\% | -8\% | -20\% | 2\% | 13\% | 17\% | -4\% | -3\% | 6\% | 11\% | 7\% | 7\% | -24\% |
| 50\% | -12\% | -12\% | 4\% | 5\% | 7\% | 1\% | -2\% | 6\% | 9\% | 6\% | 6\% | -13\% |
| 60\% | -12\% | -2\% | 1\% | -1\% | 1\% | 0\% | -4\% | 6\% | 12\% | 4\% | 5\% | -2\% |
| 70\% | -4\% | 3\% | 1\% | 3\% | 0\% | 4\% | -2\% | 7\% | 11\% | 5\% | 6\% | 3\% |
| 80\% | -8\% | -2\% | 3\% | 4\% | 2\% | 2\% | 0\% | 6\% | 11\% | 4\% | 4\% | 4\% |
| 90\% | -4\% | 6\% | 7\% | 1\% | 5\% | 0\% | 0\% | 9\% | 11\% | -1\% | 8\% | 1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6\% | -16\% | 7\% | 6\% | 3\% | 2\% | -3\% | 5\% | 11\% | 4\% | 6\% | -19\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -6\% | -15\% | 11\% | 4\% | 1\% | -1\% | -4\% | 1\% | 12\% | 2\% | 6\% | -33\% |
| Above Normal (16\%) | -8\% | -18\% | -6\% | 13\% | 6\% | 8\% | -8\% | 6\% | 14\% | 5\% | 8\% | -19\% |
| Below Normal (13\%) | -9\% | -14\% | 7\% | 24\% | 5\% | 12\% | 1\% | 9\% | 13\% | 7\% | 9\% | 6\% |
| Dry (24\%) | -4\% | -21\% | 2\% | -2\% | 4\% | -1\% | 0\% | 7\% | 6\% | 5\% | 1\% | 2\% |
| Critical (15\%) | -2\% | -3\% | 9\% | 0\% | -4\% | 4\% | 5\% | 6\% | 9\% | 3\% | 7\% | 6\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same,
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.17.2 CVP Total Generation, Monthly Generation

Second Basis of Comparison

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 415 | 295 | 659 | 692 | 684 | 702 | 486 | 626 | 696 | 779 | 637 | 441 |
| 20\% | 339 | 256 | 436 | 584 | 637 | 584 | 393 | 572 | 655 | 757 | 588 | 370 |
| 30\% | 303 | 233 | 242 | 439 | 446 | 357 | 350 | 535 | 623 | 732 | 569 | 334 |
| 40\% | 268 | 220 | 194 | 266 | 287 | 256 | 325 | 507 | 602 | 711 | 549 | 315 |
| 50\% | 236 | 204 | 182 | 211 | 220 | 232 | 313 | 493 | 577 | 683 | 525 | 297 |
| 60\% | 212 | 180 | 169 | 177 | 175 | 194 | 289 | 470 | 553 | 654 | 501 | 278 |
| 70\% | 201 | 168 | 148 | 156 | 141 | 177 | 276 | 445 | 530 | 627 | 477 | 258 |
| 80\% | 172 | 138 | 134 | 143 | 133 | 154 | 248 | 372 | 481 | 571 | 436 | 225 |
| 90\% | 152 | 125 | 112 | 121 | 115 | 141 | 217 | 318 | 390 | 470 | 389 | 186 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 256 | 215 | 278 | 336 | 331 | 334 | 334 | 481 | 569 | 655 | 514 | 305 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 297 | 269 | 491 | 582 | 521 | 549 | 428 | 586 | 636 | 697 | 573 | 399 |
| Above Normal (16\%) | 245 | 215 | 245 | 362 | 479 | 396 | 341 | 513 | 618 | 740 | 571 | 341 |
| Below Normal (13\%) | 282 | 221 | 188 | 231 | 280 | 246 | 323 | 496 | 612 | 724 | 575 | 306 |
| Dry (24\%) | 243 | 183 | 158 | 179 | 150 | 181 | 262 | 433 | 542 | 637 | 463 | 251 |
| Critical (15\%) | 180 | 145 | 134 | 134 | 107 | 140 | 253 | 286 | 376 | 442 | 357 | 154 |

No Action Alternative

| Statistic | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 409 | 413 | 641 | 689 | 671 | 696 | 492 | 616 | 619 | 756 | 585 | 630 |
| 20\% | 372 | 380 | 338 | 490 | 622 | 569 | 397 | 549 | 577 | 729 | 549 | 597 |
| 30\% | 329 | 310 | 240 | 381 | 471 | 363 | 358 | 514 | 561 | 705 | 536 | 469 |
| 40\% | 292 | 274 | 190 | 235 | 245 | 267 | 334 | 478 | 544 | 662 | 511 | 414 |
| 50\% | 270 | 231 | 175 | 201 | 205 | 229 | 318 | 464 | 527 | 644 | 496 | 342 |
| 60\% | 239 | 183 | 167 | 179 | 173 | 194 | 302 | 442 | 495 | 630 | 476 | 285 |
| 70\% | 210 | 162 | 146 | 152 | 141 | 171 | 282 | 415 | 479 | 598 | 451 | 250 |
| 80\% | 186 | 140 | 131 | 137 | 130 | 151 | 249 | 350 | 435 | 551 | 421 | 215 |
| 90\% | 159 | 118 | 105 | 120 | 110 | 141 | 217 | 291 | 350 | 474 | 359 | 184 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 273 | 255 | 260 | 317 | 322 | 329 | 343 | 461 | 514 | 631 | 487 | 376 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 317 | 318 | 441 | 558 | 513 | 557 | 447 | 580 | 568 | 683 | 542 | 598 |
| Above Normal (16\%) | 268 | 263 | 259 | 320 | 454 | 367 | 370 | 484 | 544 | 708 | 527 | 421 |
| Below Normal (13\%) | 310 | 258 | 175 | 186 | 266 | 220 | 318 | 455 | 540 | 679 | 529 | 289 |
| Dry (24\%) | 254 | 232 | 154 | 183 | 145 | 183 | 263 | 406 | 511 | 607 | 457 | 246 |
| Critical (15\%) | 184 | 149 | 123 | 134 | 111 | 135 | 242 | 271 | 345 | 431 | 333 | 145 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -2\% | 40\% | -3\% | 0\% | -2\% | -1\% | 1\% | -1\% | -11\% | -3\% | -8\% | 43\% |
| 20\% | 10\% | 49\% | -22\% | -16\% | -2\% | -2\% | 1\% | -4\% | -12\% | -4\% | -6\% | 61\% |
| 30\% | 8\% | 33\% | -1\% | -13\% | 6\% | 2\% | 2\% | -4\% | -10\% | -4\% | -6\% | 40\% |
| 40\% | 9\% | 25\% | -2\% | -11\% | -14\% | 4\% | 3\% | -6\% | -10\% | -7\% | -7\% | 31\% |
| 50\% | 14\% | 13\% | -4\% | -5\% | -7\% | -1\% | 2\% | -6\% | -9\% | -6\% | -6\% | 15\% |
| 60\% | 13\% | 2\% | -1\% | 1\% | -1\% | 0\% | 4\% | -6\% | -10\% | -4\% | -5\% | 3\% |
| 70\% | 5\% | -3\% | -1\% | -3\% | 0\% | -4\% | 2\% | -7\% | -10\% | -5\% | -5\% | -3\% |
| 80\% | 8\% | 2\% | -2\% | -4\% | -2\% | -2\% | 0\% | -6\% | -10\% | -4\% | -3\% | -4\% |
| 90\% | 5\% | -5\% | -7\% | -1\% | -5\% | 0\% | 0\% | -9\% | -10\% | 1\% | -8\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 7\% | 19\% | -6\% | -6\% | -3\% | -2\% | 3\% | -4\% | -10\% | -4\% | -5\% | 23\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 7\% | 18\% | -10\% | -4\% | -1\% | 1\% | 5\% | -1\% | -11\% | -2\% | -5\% | 50\% |
| Above Normal (16\%) | 9\% | 22\% | 6\% | -12\% | -5\% | -7\% | 8\% | -6\% | -12\% | -4\% | -8\% | 23\% |
| Below Normal (13\%) | 10\% | 17\% | -7\% | -19\% | -5\% | -11\% | -1\% | -8\% | -12\% | -6\% | -8\% | -5\% |
| Dry (24\%) | 5\% | 27\% | -2\% | 2\% | -4\% | 1\% | 0\% | -6\% | -6\% | -5\% | -1\% | -2\% |
| Critical (15\%) | 2\% | 3\% | -8\% | 0\% | 4\% | -4\% | -4\% | -5\% | -8\% | -2\% | -7\% | -6\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.17.3 CVP Total Generation, Monthly Generation

Second Basis of Comparison

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 415 | 295 | 659 | 692 | 684 | 702 | 486 | 626 | 696 | 779 | 637 | 441 |
| 20\% | 339 | 256 | 436 | 584 | 637 | 584 | 393 | 572 | 655 | 757 | 588 | 370 |
| 30\% | 303 | 233 | 242 | 439 | 446 | 357 | 350 | 535 | 623 | 732 | 569 | 334 |
| 40\% | 268 | 220 | 194 | 266 | 287 | 256 | 325 | 507 | 602 | 711 | 549 | 315 |
| 50\% | 236 | 204 | 182 | 211 | 220 | 232 | 313 | 493 | 577 | 683 | 525 | 297 |
| 60\% | 212 | 180 | 169 | 177 | 175 | 194 | 289 | 470 | 553 | 654 | 501 | 278 |
| 70\% | 201 | 168 | 148 | 156 | 141 | 177 | 276 | 445 | 530 | 627 | 477 | 258 |
| 80\% | 172 | 138 | 134 | 143 | 133 | 154 | 248 | 372 | 481 | 571 | 436 | 225 |
| 90\% | 152 | 125 | 112 | 121 | 115 | 141 | 217 | 318 | 390 | 470 | 389 | 186 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 256 | 215 | 278 | 336 | 331 | 334 | 334 | 481 | 569 | 655 | 514 | 305 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 297 | 269 | 491 | 582 | 521 | 549 | 428 | 586 | 636 | 697 | 573 | 399 |
| Above Normal (16\%) | 245 | 215 | 245 | 362 | 479 | 396 | 341 | 513 | 618 | 740 | 571 | 341 |
| Below Normal (13\%) | 282 | 221 | 188 | 231 | 280 | 246 | 323 | 496 | 612 | 724 | 575 | 306 |
| Dry (24\%) | 243 | 183 | 158 | 179 | 150 | 181 | 262 | 433 | 542 | 637 | 463 | 251 |
| Critical (15\%) | 180 | 145 | 134 | 134 | 107 | 140 | 253 | 286 | 376 | 442 | 357 | 154 |

Alternative 3

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 415 | 306 | 662 | 691 | 701 | 710 | 489 | 598 | 648 | 775 | 610 | 459 |
| 20\% | 342 | 256 | 426 | 590 | 650 | 583 | 393 | 551 | 635 | 759 | 578 | 387 |
| 30\% | 314 | 227 | 242 | 427 | 458 | 367 | 360 | 507 | 590 | 741 | 557 | 358 |
| 40\% | 275 | 216 | 199 | 254 | 283 | 258 | 330 | 493 | 564 | 720 | 538 | 328 |
| 50\% | 245 | 204 | 181 | 203 | 220 | 223 | 314 | 469 | 548 | 678 | 525 | 302 |
| 60\% | 222 | 180 | 170 | 173 | 179 | 192 | 291 | 442 | 518 | 657 | 513 | 279 |
| 70\% | 202 | 164 | 149 | 156 | 142 | 171 | 271 | 421 | 511 | 624 | 482 | 257 |
| 80\% | 176 | 145 | 133 | 134 | 128 | 153 | 250 | 363 | 453 | 561 | 445 | 227 |
| 90\% | 158 | 124 | 113 | 122 | 109 | 136 | 222 | 300 | 381 | 474 | 387 | 191 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 262 | 215 | 279 | 333 | 336 | 335 | 338 | 462 | 542 | 658 | 512 | 314 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 298 | 268 | 493 | 584 | 537 | 551 | 430 | 562 | 593 | 712 | 576 | 407 |
| Above Normal (16\%) | 249 | 222 | 245 | 350 | 477 | 401 | 346 | 482 | 580 | 736 | 550 | 341 |
| Below Normal (13\%) | 284 | 211 | 187 | 228 | 283 | 245 | 332 | 476 | 580 | 711 | 557 | 347 |
| Dry (24\%) | 256 | 184 | 162 | 175 | 146 | 180 | 265 | 416 | 532 | 635 | 471 | 251 |
| Critical (15\%) | 189 | 150 | 132 | 130 | 113 | 139 | 253 | 285 | 373 | 445 | 360 | 160 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 4\% | 1\% | 0\% | 2\% | 1\% | 1\% | -4\% | -7\% | 0\% | -4\% | 4\% |
| 20\% | 1\% | 0\% | -2\% | 1\% | 2\% | 0\% | 0\% | -4\% | -3\% | 0\% | -2\% | 5\% |
| 30\% | 4\% | -3\% | 0\% | -3\% | 3\% | 3\% | 3\% | -5\% | -5\% | 1\% | -2\% | 7\% |
| 40\% | 2\% | -2\% | 3\% | -4\% | -1\% | 1\% | 2\% | -3\% | -6\% | 1\% | -2\% | 4\% |
| 50\% | 4\% | 0\% | -1\% | -4\% | 0\% | -4\% | 0\% | -5\% | -5\% | -1\% | 0\% | 2\% |
| 60\% | 5\% | 0\% | 1\% | -2\% | 2\% | -1\% | 1\% | -6\% | -6\% | 1\% | 2\% | 0\% |
| 70\% | 1\% | -2\% | 1\% | 0\% | 1\% | -3\% | -2\% | -5\% | -4\% | -1\% | 1\% | 0\% |
| 80\% | 2\% | 5\% | -1\% | -6\% | -4\% | -1\% | 1\% | -3\% | -6\% | -2\% | 2\% | 1\% |
| 90\% | 4\% | -1\% | 1\% | 0\% | -6\% | -4\% | 2\% | -6\% | -2\% | 1\% | -1\% | 3\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 2\% | 0\% | 1\% | -1\% | 2\% | 0\% | 1\% | -4\% | -5\% | 0\% | 0\% | 3\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0\% | -1\% | 1\% | 0\% | 3\% | 0\% | 1\% | -4\% | -7\% | 2\% | 1\% | 2\% |
| Above Normal (16\%) | 2\% | 3\% | 0\% | -3\% | 0\% | 1\% | 1\% | -6\% | -6\% | -1\% | -4\% | 0\% |
| Below Normal (13\%) | 1\% | -5\% | 0\% | -1\% | 1\% | -1\% | 3\% | -4\% | -5\% | -2\% | -3\% | 14\% |
| Dry (24\%) | 5\% | 1\% | 3\% | -2\% | -3\% | 0\% | 1\% | -4\% | -2\% | 0\% | 2\% | 0\% |
| Critical (15\%) | 5\% | 4\% | -2\% | -3\% | 6\% | -1\% | 0\% | 0\% | -1\% | 1\% | 1\% | 4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.17.4 CVP Total Generation, Monthly Generation

Second Basis of Comparison

|  | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 415 | 295 | 659 | 692 | 684 | 702 | 486 | 626 | 696 | 779 | 637 | 441 |
| 20\% | 339 | 256 | 436 | 584 | 637 | 584 | 393 | 572 | 655 | 757 | 588 | 370 |
| 30\% | 303 | 233 | 242 | 439 | 446 | 357 | 350 | 535 | 623 | 732 | 569 | 334 |
| 40\% | 268 | 220 | 194 | 266 | 287 | 256 | 325 | 507 | 602 | 711 | 549 | 315 |
| 50\% | 236 | 204 | 182 | 211 | 220 | 232 | 313 | 493 | 577 | 683 | 525 | 297 |
| 60\% | 212 | 180 | 169 | 177 | 175 | 194 | 289 | 470 | 553 | 654 | 501 | 278 |
| 70\% | 201 | 168 | 148 | 156 | 141 | 177 | 276 | 445 | 530 | 627 | 477 | 258 |
| 80\% | 172 | 138 | 134 | 143 | 133 | 154 | 248 | 372 | 481 | 571 | 436 | 225 |
| 90\% | 152 | 125 | 112 | 121 | 115 | 141 | 217 | 318 | 390 | 470 | 389 | 186 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 256 | 215 | 278 | 336 | 331 | 334 | 334 | 481 | 569 | 655 | 514 | 305 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 297 | 269 | 491 | 582 | 521 | 549 | 428 | 586 | 636 | 697 | 573 | 399 |
| Above Normal (16\%) | 245 | 215 | 245 | 362 | 479 | 396 | 341 | 513 | 618 | 740 | 571 | 341 |
| Below Normal (13\%) | 282 | 221 | 188 | 231 | 280 | 246 | 323 | 496 | 612 | 724 | 575 | 306 |
| Dry (24\%) | 243 | 183 | 158 | 179 | 150 | 181 | 262 | 433 | 542 | 637 | 463 | 251 |
| Critical (15\%) | 180 | 145 | 134 | 134 | 107 | 140 | 253 | 286 | 376 | 442 | 357 | 154 |

Alternative 5

| Statistic | Monthly Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 404 | 410 | 647 | 689 | 671 | 694 | 491 | 627 | 618 | 752 | 574 | 628 |
| 20\% | 365 | 380 | 341 | 486 | 622 | 563 | 404 | 562 | 578 | 722 | 553 | 598 |
| 30\% | 328 | 316 | 236 | 381 | 459 | 362 | 368 | 513 | 557 | 705 | 534 | 468 |
| 40\% | 284 | 281 | 188 | 233 | 245 | 266 | 334 | 482 | 541 | 660 | 514 | 418 |
| 50\% | 269 | 226 | 173 | 201 | 205 | 229 | 327 | 460 | 525 | 648 | 498 | 351 |
| 60\% | 244 | 182 | 163 | 178 | 173 | 199 | 304 | 439 | 493 | 634 | 471 | 277 |
| 70\% | 220 | 161 | 145 | 153 | 139 | 170 | 281 | 412 | 472 | 601 | 451 | 248 |
| 80\% | 183 | 140 | 131 | 137 | 127 | 151 | 258 | 343 | 432 | 548 | 416 | 217 |
| 90\% | 155 | 113 | 102 | 120 | 108 | 136 | 233 | 308 | 350 | 463 | 365 | 184 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 273 | 254 | 258 | 317 | 321 | 328 | 348 | 463 | 509 | 628 | 485 | 378 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 313 | 320 | 438 | 558 | 512 | 554 | 446 | 585 | 567 | 685 | 538 | 598 |
| Above Normal (16\%) | 266 | 254 | 259 | 321 | 454 | 368 | 370 | 489 | 542 | 708 | 523 | 419 |
| Below Normal (13\%) | 307 | 257 | 173 | 186 | 265 | 221 | 334 | 458 | 533 | 675 | 520 | 294 |
| Dry (24\%) | 254 | 231 | 153 | 183 | 145 | 183 | 273 | 404 | 505 | 604 | 459 | 247 |
| Critical (15\%) | 192 | 149 | 120 | 135 | 110 | 132 | 250 | 270 | 336 | 414 | 337 | 153 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -3\% | 39\% | -2\% | 0\% | -2\% | -1\% | 1\% | 0\% | -11\% | -3\% | -10\% | 42\% |
| 20\% | 8\% | 48\% | -22\% | -17\% | -2\% | -4\% | 3\% | -2\% | -12\% | -5\% | -6\% | 62\% |
| 30\% | 8\% | 36\% | -2\% | -13\% | 3\% | 1\% | 5\% | -4\% | -11\% | -4\% | -6\% | 40\% |
| 40\% | 6\% | 28\% | -3\% | -12\% | -14\% | 4\% | 3\% | -5\% | -10\% | -7\% | -6\% | 33\% |
| 50\% | 14\% | 11\% | -5\% | -5\% | -7\% | -1\% | 4\% | -7\% | -9\% | -5\% | -5\% | 18\% |
| 60\% | 15\% | 1\% | -4\% | 1\% | -1\% | 3\% | 5\% | -7\% | -11\% | -3\% | -6\% | 0\% |
| 70\% | 10\% | -4\% | -2\% | -2\% | -2\% | -4\% | 2\% | -7\% | -11\% | -4\% | -5\% | -4\% |
| 80\% | 6\% | 1\% | -2\% | -4\% | -4\% | -2\% | 4\% | -8\% | -10\% | -4\% | -5\% | -4\% |
| 90\% | 2\% | -9\% | -9\% | -1\% | -6\% | -3\% | 7\% | -3\% | -10\% | -2\% | -6\% | -1\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 6\% | 18\% | -7\% | -6\% | -3\% | -2\% | 4\% | -4\% | -10\% | -4\% | -6\% | 24\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 6\% | 19\% | -11\% | -4\% | -2\% | 1\% | 4\% | 0\% | -11\% | -2\% | -6\% | 50\% |
| Above Normal (16\%) | 8\% | 18\% | 6\% | -11\% | -5\% | -7\% | 8\% | -5\% | -12\% | -4\% | -8\% | 23\% |
| Below Normal (13\%) | 9\% | 16\% | -7\% | -20\% | -5\% | -10\% | 3\% | -8\% | -13\% | -7\% | -10\% | -4\% |
| Dry (24\%) | 4\% | 26\% | -3\% | 3\% | -4\% | 1\% | 4\% | -7\% | -7\% | -5\% | -1\% | -2\% |
| Critical (15\%) | 7\% | 3\% | -10\% | 0\% | 3\% | -6\% | -1\% | -6\% | -11\% | -6\% | -5\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.18 CVP Total Energy Use

Table 5C.3.3.18.1 CVP Total Energy Use, Monthly Energy Use

No Action Alternative

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 111 | 171 | 154 | 153 | 146 | 149 | 60 | 69 | 128 | 153 | 133 | 106 |
| 20\% | 95 | 150 | 149 | 131 | 133 | 138 | 43 | 46 | 103 | 139 | 122 | 105 |
| 30\% | 85 | 139 | 142 | 118 | 115 | 109 | 37 | 41 | 88 | 122 | 114 | 103 |
| 40\% | 76 | 129 | 134 | 113 | 99 | 98 | 35 | 39 | 78 | 114 | 109 | 96 |
| 50\% | 72 | 105 | 129 | 110 | 94 | 75 | 32 | 36 | 65 | 104 | 102 | 87 |
| 60\% | 67 | 93 | 123 | 105 | 85 | 65 | 31 | 33 | 58 | 93 | 94 | 76 |
| 70\% | 62 | 81 | 115 | 95 | 72 | 61 | 29 | 30 | 44 | 84 | 79 | 68 |
| 80\% | 57 | 65 | 96 | 83 | 47 | 46 | 25 | 26 | 34 | 69 | 59 | 58 |
| 90\% | 54 | 58 | 74 | 71 | 31 | 22 | 21 | 21 | 21 | 42 | 36 | 45 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 76 | 111 | 121 | 108 | 92 | 86 | 36 | 40 | 71 | 101 | 93 | 82 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 81 | 125 | 130 | 124 | 125 | 122 | 50 | 58 | 113 | 132 | 119 | 94 |
| Above Normal (16\%) | 74 | 120 | 123 | 97 | 91 | 104 | 36 | 40 | 85 | 99 | 108 | 87 |
| Below Normal (13\%) | 79 | 122 | 132 | 107 | 84 | 76 | 30 | 33 | 61 | 106 | 106 | 92 |
| Dry (24\%) | 76 | 103 | 120 | 108 | 77 | 64 | 30 | 30 | 42 | 90 | 65 | 72 |
| Critical (15\%) | 65 | 73 | 89 | 85 | 52 | 31 | 21 | 22 | 22 | 51 | 56 | 57 |

## Alternative 1

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 151 | 163 | 173 | 183 | 144 | 83 | 90 | 114 | 161 | 182 | 109 |
| 20\% | 121 | 141 | 160 | 167 | 149 | 127 | 81 | 65 | 105 | 156 | 154 | 108 |
| 30\% | 117 | 139 | 157 | 164 | 143 | 101 | 80 | 59 | 96 | 145 | 132 | 107 |
| 40\% | 96 | 134 | 156 | 162 | 139 | 80 | 75 | 54 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 124 | 152 | 160 | 135 | 69 | 69 | 47 | 88 | 131 | 124 | 104 |
| 60\% | 67 | 109 | 144 | 158 | 116 | 67 | 59 | 45 | 78 | 119 | 109 | 90 |
| 70\% | 57 | 96 | 127 | 151 | 84 | 62 | 49 | 38 | 65 | 98 | 86 | 81 |
| 80\% | 46 | 80 | 111 | 124 | 55 | 52 | 36 | 29 | 43 | 85 | 63 | 68 |
| 90\% | 34 | 66 | 87 | 81 | 27 | 30 | 22 | 23 | 26 | 43 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 85 | 115 | 136 | 149 | 115 | 84 | 60 | 51 | 78 | 119 | 113 | 93 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 100 | 132 | 154 | 168 | 139 | 94 | 77 | 69 | 102 | 145 | 150 | 110 |
| Above Normal (16\%) | 76 | 116 | 136 | 151 | 128 | 94 | 78 | 58 | 100 | 129 | 135 | 117 |
| Below Normal (13\%) | 92 | 134 | 148 | 158 | 104 | 85 | 61 | 52 | 85 | 146 | 137 | 94 |
| Dry (24\%) | 86 | 103 | 124 | 143 | 104 | 83 | 44 | 36 | 55 | 107 | 68 | 75 |
| Critical (15\%) | 53 | 78 | 106 | 105 | 79 | 50 | 30 | 26 | 30 | 46 | 63 | 56 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 23\% | -12\% | 6\% | 13\% | 26\% | -3\% | 39\% | 31\% | -11\% | 6\% | 37\% | 3\% |
| 20\% | 27\% | -6\% | 7\% | 27\% | 12\% | -8\% | 89\% | 41\% | 2\% | 12\% | 27\% | 3\% |
| 30\% | 38\% | -1\% | 11\% | 40\% | 24\% | -7\% | 113\% | 44\% | 10\% | 19\% | 16\% | 3\% |
| 40\% | 26\% | 4\% | 16\% | 43\% | 41\% | -19\% | 116\% | 38\% | 17\% | 23\% | 18\% | 10\% |
| 50\% | 4\% | 18\% | 18\% | 45\% | 44\% | -8\% | 112\% | 33\% | 34\% | 26\% | 22\% | 20\% |
| 60\% | 0\% | 17\% | 17\% | 50\% | 36\% | 3\% | 92\% | 36\% | 34\% | 28\% | 16\% | 17\% |
| 70\% | -8\% | 18\% | 10\% | 58\% | 17\% | 2\% | 69\% | 25\% | 46\% | 17\% | 9\% | 19\% |
| 80\% | -20\% | 24\% | 15\% | 51\% | 17\% | 13\% | 44\% | 11\% | 28\% | 23\% | 6\% | 18\% |
| 90\% | -38\% | 14\% | 17\% | 15\% | -13\% | 34\% | 4\% | 8\% | 23\% | 2\% | 7\% | 10\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 11\% | 4\% | 13\% | 37\% | 26\% | -2\% | 67\% | 26\% | 9\% | 17\% | 21\% | 13\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 22\% | 5\% | 19\% | 35\% | 12\% | -23\% | 54\% | 18\% | -10\% | 9\% | 26\% | 17\% |
| Above Normal (16\%) | 2\% | -3\% | 11\% | 56\% | 41\% | -10\% | 118\% | 42\% | 18\% | 30\% | 25\% | 34\% |
| Below Normal (13\%) | 17\% | 10\% | 12\% | 48\% | 24\% | 11\% | 104\% | 56\% | 38\% | 38\% | 30\% | 2\% |
| Dry (24\%) | 12\% | 0\% | 3\% | 32\% | 35\% | 30\% | 44\% | 20\% | 32\% | 19\% | 4\% | 4\% |
| Critical (15\%) | -18\% | 6\% | 19\% | 22\% | 51\% | 64\% | 46\% | 15\% | 34\% | -9\% | 12\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.18.2 CVP Total Energy Use, Monthly Energy Use

Second Basis of Comparison

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 151 | 163 | 173 | 183 | 144 | 83 | 90 | 114 | 161 | 182 | 109 |
| 20\% | 121 | 141 | 160 | 167 | 149 | 127 | 81 | 65 | 105 | 156 | 154 | 108 |
| 30\% | 117 | 139 | 157 | 164 | 143 | 101 | 80 | 59 | 96 | 145 | 132 | 107 |
| 40\% | 96 | 134 | 156 | 162 | 139 | 80 | 75 | 54 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 124 | 152 | 160 | 135 | 69 | 69 | 47 | 88 | 131 | 124 | 104 |
| 60\% | 67 | 109 | 144 | 158 | 116 | 67 | 59 | 45 | 78 | 119 | 109 | 90 |
| 70\% | 57 | 96 | 127 | 151 | 84 | 62 | 49 | 38 | 65 | 98 | 86 | 81 |
| 80\% | 46 | 80 | 111 | 124 | 55 | 52 | 36 | 29 | 43 | 85 | 63 | 68 |
| 90\% | 34 | 66 | 87 | 81 | 27 | 30 | 22 | 23 | 26 | 43 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 85 | 115 | 136 | 149 | 115 | 84 | 60 | 51 | 78 | 119 | 113 | 93 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 100 | 132 | 154 | 168 | 139 | 94 | 77 | 69 | 102 | 145 | 150 | 110 |
| Above Normal (16\%) | 76 | 116 | 136 | 151 | 128 | 94 | 78 | 58 | 100 | 129 | 135 | 117 |
| Below Normal (13\%) | 92 | 134 | 148 | 158 | 104 | 85 | 61 | 52 | 85 | 146 | 137 | 94 |
| Dry (24\%) | 86 | 103 | 124 | 143 | 104 | 83 | 44 | 36 | 55 | 107 | 68 | 75 |
| Critical (15\%) | 53 | 78 | 106 | 105 | 79 | 50 | 30 | 26 | 30 | 46 | 63 | 56 |

## No Action Alternative

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 111 | 171 | 154 | 153 | 146 | 149 | 60 | 69 | 128 | 153 | 133 | 106 |
| 20\% | 95 | 150 | 149 | 131 | 133 | 138 | 43 | 46 | 103 | 139 | 122 | 105 |
| 30\% | 85 | 139 | 142 | 118 | 115 | 109 | 37 | 41 | 88 | 122 | 114 | 103 |
| 40\% | 76 | 129 | 134 | 113 | 99 | 98 | 35 | 39 | 78 | 114 | 109 | 96 |
| 50\% | 72 | 105 | 129 | 110 | 94 | 75 | 32 | 36 | 65 | 104 | 102 | 87 |
| 60\% | 67 | 93 | 123 | 105 | 85 | 65 | 31 | 33 | 58 | 93 | 94 | 76 |
| 70\% | 62 | 81 | 115 | 95 | 72 | 61 | 29 | 30 | 44 | 84 | 79 | 68 |
| 80\% | 57 | 65 | 96 | 83 | 47 | 46 | 25 | 26 | 34 | 69 | 59 | 58 |
| 90\% | 54 | 58 | 74 | 71 | 31 | 22 | 21 | 21 | 21 | 42 | 36 | 45 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 76 | 111 | 121 | 108 | 92 | 86 | 36 | 40 | 71 | 101 | 93 | 82 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 81 | 125 | 130 | 124 | 125 | 122 | 50 | 58 | 113 | 132 | 119 | 94 |
| Above Normal (16\%) | 74 | 120 | 123 | 97 | 91 | 104 | 36 | 40 | 85 | 99 | 108 | 87 |
| Below Normal (13\%) | 79 | 122 | 132 | 107 | 84 | 76 | 30 | 33 | 61 | 106 | 106 | 92 |
| Dry (24\%) | 76 | 103 | 120 | 108 | 77 | 64 | 30 | 30 | 42 | 90 | 65 | 72 |
| Critical (15\%) | 65 | 73 | 89 | 85 | 52 | 31 | 21 | 22 | 22 | 51 | 56 | 57 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -19\% | 14\% | -5\% | -12\% | -20\% | 3\% | -28\% | -24\% | 12\% | -5\% | -27\% | -3\% |
| 20\% | -21\% | 7\% | -7\% | -22\% | -10\% | 9\% | -47\% | -29\% | -2\% | -11\% | -21\% | -2\% |
| 30\% | -28\% | 1\% | -10\% | -28\% | -20\% | 7\% | -53\% | -31\% | -9\% | -16\% | -14\% | -3\% |
| 40\% | -21\% | -4\% | -14\% | -30\% | -29\% | 23\% | -54\% | -28\% | -15\% | -19\% | -15\% | -9\% |
| 50\% | -4\% | -15\% | -15\% | -31\% | -30\% | 8\% | -53\% | -25\% | -26\% | -21\% | -18\% | -17\% |
| 60\% | 0\% | -15\% | -15\% | -33\% | -26\% | -3\% | -48\% | -27\% | -25\% | -22\% | -14\% | -15\% |
| 70\% | 9\% | -16\% | -9\% | -37\% | -15\% | -2\% | -41\% | -20\% | -31\% | -14\% | -8\% | -16\% |
| 80\% | 25\% | -19\% | -13\% | -34\% | -15\% | -12\% | -30\% | -10\% | -22\% | -19\% | -6\% | -15\% |
| 90\% | 62\% | -12\% | -15\% | -13\% | 15\% | -26\% | -4\% | -7\% | -19\% | -2\% | -6\% | -9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -10\% | -3\% | -11\% | -27\% | -21\% | 2\% | -40\% | -21\% | -8\% | -15\% | -18\% | -12\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -18\% | -5\% | -16\% | -26\% | -10\% | 30\% | -35\% | -15\% | 11\% | -9\% | -20\% | -15\% |
| Above Normal (16\%) | -2\% | 3\% | -10\% | -36\% | -29\% | 11\% | -54\% | -30\% | -15\% | -23\% | -20\% | -26\% |
| Below Normal (13\%) | -14\% | -9\% | -11\% | -32\% | -19\% | -10\% | -51\% | -36\% | -28\% | -28\% | -23\% | -2\% |
| Dry (24\%) | -11\% | 0\% | -3\% | -24\% | -26\% | -23\% | -30\% | -17\% | -24\% | -16\% | -4\% | -4\% |
| Critical (15\%) | 22\% | -6\% | -16\% | -18\% | -34\% | -39\% | -31\% | -13\% | -25\% | 10\% | -11\% | 1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.18.3 CVP Total Energy Use, Monthly Energy Use

Second Basis of Comparison

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 151 | 163 | 173 | 183 | 144 | 83 | 90 | 114 | 161 | 182 | 109 |
| 20\% | 121 | 141 | 160 | 167 | 149 | 127 | 81 | 65 | 105 | 156 | 154 | 108 |
| 30\% | 117 | 139 | 157 | 164 | 143 | 101 | 80 | 59 | 96 | 145 | 132 | 107 |
| 40\% | 96 | 134 | 156 | 162 | 139 | 80 | 75 | 54 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 124 | 152 | 160 | 135 | 69 | 69 | 47 | 88 | 131 | 124 | 104 |
| 60\% | 67 | 109 | 144 | 158 | 116 | 67 | 59 | 45 | 78 | 119 | 109 | 90 |
| 70\% | 57 | 96 | 127 | 151 | 84 | 62 | 49 | 38 | 65 | 98 | 86 | 81 |
| 80\% | 46 | 80 | 111 | 124 | 55 | 52 | 36 | 29 | 43 | 85 | 63 | 68 |
| 90\% | 34 | 66 | 87 | 81 | 27 | 30 | 22 | 23 | 26 | 43 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 85 | 115 | 136 | 149 | 115 | 84 | 60 | 51 | 78 | 119 | 113 | 93 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 100 | 132 | 154 | 168 | 139 | 94 | 77 | 69 | 102 | 145 | 150 | 110 |
| Above Normal (16\%) | 76 | 116 | 136 | 151 | 128 | 94 | 78 | 58 | 100 | 129 | 135 | 117 |
| Below Normal (13\%) | 92 | 134 | 148 | 158 | 104 | 85 | 61 | 52 | 85 | 146 | 137 | 94 |
| Dry (24\%) | 86 | 103 | 124 | 143 | 104 | 83 | 44 | 36 | 55 | 107 | 68 | 75 |
| Critical (15\%) | 53 | 78 | 106 | 105 | 79 | 50 | 30 | 26 | 30 | 46 | 63 | 56 |

Alternative 3


Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 4\% | -1\% | -1\% | -5\% | -18\% | 2\% | 5\% | 11\% | 24\% | -5\% | -14\% | 27\% |
| 20\% | 2\% | -1\% | -1\% | -21\% | -5\% | 9\% | 1\% | 38\% | 17\% | -7\% | -13\% | 4\% |
| 30\% | 2\% | 0\% | -2\% | -27\% | -12\% | -1\% | 2\% | 34\% | 11\% | -4\% | 0\% | 1\% |
| 40\% | 13\% | -5\% | -8\% | -28\% | -25\% | -2\% | 6\% | 34\% | 10\% | -9\% | 0\% | 0\% |
| 50\% | 15\% | -4\% | -8\% | -31\% | -32\% | 4\% | 4\% | 40\% | 3\% | -10\% | -8\% | 0\% |
| 60\% | 5\% | -2\% | -9\% | -34\% | -35\% | -4\% | 9\% | 19\% | 3\% | -14\% | -9\% | 7\% |
| 70\% | 10\% | -1\% | -3\% | -39\% | -23\% | 0\% | -6\% | 5\% | -9\% | -12\% | -4\% | 5\% |
| 80\% | 14\% | 3\% | -8\% | -32\% | -2\% | -2\% | -2\% | 5\% | -4\% | -16\% | -1\% | -8\% |
| 90\% | 36\% | 0\% | -16\% | -7\% | 12\% | -21\% | 6\% | 0\% | -7\% | 8\% | 7\% | -7\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 7\% | -1\% | -5\% | -27\% | -17\% | 2\% | 4\% | 22\% | 10\% | -8\% | -6\% | 5\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 1\% | -1\% | -7\% | -24\% | -3\% | 15\% | 8\% | 26\% | 23\% | -4\% | -6\% | 2\% |
| Above Normal (16\%) | 10\% | -3\% | -10\% | -38\% | -25\% | 33\% | -2\% | 29\% | 5\% | -11\% | -10\% | -5\% |
| Below Normal (13\%) | 2\% | -3\% | -2\% | -30\% | -18\% | -8\% | -9\% | 13\% | 2\% | -16\% | -15\% | 34\% |
| Dry (24\%) | 13\% | 1\% | 2\% | -24\% | -28\% | -21\% | 12\% | 20\% | -2\% | -8\% | 11\% | -1\% |
| Critical (15\%) | 20\% | 0\% | -8\% | -18\% | -33\% | -39\% | 0\% | -2\% | -11\% | -7\% | -12\% | 4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.18.4 CVP Total Energy Use, Monthly Energy Use

Second Basis of Comparison

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 137 | 151 | 163 | 173 | 183 | 144 | 83 | 90 | 114 | 161 | 182 | 109 |
| 20\% | 121 | 141 | 160 | 167 | 149 | 127 | 81 | 65 | 105 | 156 | 154 | 108 |
| 30\% | 117 | 139 | 157 | 164 | 143 | 101 | 80 | 59 | 96 | 145 | 132 | 107 |
| 40\% | 96 | 134 | 156 | 162 | 139 | 80 | 75 | 54 | 91 | 140 | 128 | 106 |
| 50\% | 74 | 124 | 152 | 160 | 135 | 69 | 69 | 47 | 88 | 131 | 124 | 104 |
| 60\% | 67 | 109 | 144 | 158 | 116 | 67 | 59 | 45 | 78 | 119 | 109 | 90 |
| 70\% | 57 | 96 | 127 | 151 | 84 | 62 | 49 | 38 | 65 | 98 | 86 | 81 |
| 80\% | 46 | 80 | 111 | 124 | 55 | 52 | 36 | 29 | 43 | 85 | 63 | 68 |
| 90\% | 34 | 66 | 87 | 81 | 27 | 30 | 22 | 23 | 26 | 43 | 39 | 49 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 85 | 115 | 136 | 149 | 115 | 84 | 60 | 51 | 78 | 119 | 113 | 93 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 100 | 132 | 154 | 168 | 139 | 94 | 77 | 69 | 102 | 145 | 150 | 110 |
| Above Normal (16\%) | 76 | 116 | 136 | 151 | 128 | 94 | 78 | 58 | 100 | 129 | 135 | 117 |
| Below Normal (13\%) | 92 | 134 | 148 | 158 | 104 | 85 | 61 | 52 | 85 | 146 | 137 | 94 |
| Dry (24\%) | 86 | 103 | 124 | 143 | 104 | 83 | 44 | 36 | 55 | 107 | 68 | 75 |
| Critical (15\%) | 53 | 78 | 106 | 105 | 79 | 50 | 30 | 26 | 30 | 46 | 63 | 56 |

Alternative 5

|  | Monthly Energy Use (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 106 | 174 | 154 | 153 | 146 | 153 | 59 | 68 | 128 | 155 | 132 | 106 |
| 20\% | 94 | 153 | 151 | 134 | 134 | 138 | 41 | 44 | 103 | 140 | 121 | 105 |
| 30\% | 85 | 140 | 142 | 120 | 116 | 109 | 35 | 40 | 86 | 122 | 113 | 102 |
| 40\% | 75 | 126 | 135 | 114 | 104 | 99 | 32 | 37 | 77 | 115 | 110 | 95 |
| 50\% | 72 | 106 | 128 | 110 | 94 | 75 | 30 | 33 | 65 | 105 | 102 | 90 |
| 60\% | 69 | 92 | 123 | 104 | 86 | 65 | 29 | 30 | 57 | 94 | 94 | 76 |
| 70\% | 63 | 74 | 115 | 95 | 71 | 61 | 24 | 22 | 46 | 88 | 80 | 70 |
| 80\% | 59 | 65 | 92 | 83 | 46 | 48 | 18 | 16 | 32 | 74 | 63 | 58 |
| 90\% | 54 | 56 | 68 | 71 | 32 | 22 | 13 | 12 | 24 | 50 | 49 | 47 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 76 | 110 | 121 | 109 | 92 | 86 | 33 | 36 | 71 | 103 | 95 | 82 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 81 | 129 | 131 | 125 | 124 | 123 | 50 | 58 | 113 | 132 | 119 | 93 |
| Above Normal (16\%) | 75 | 112 | 122 | 100 | 90 | 104 | 35 | 40 | 84 | 100 | 107 | 86 |
| Below Normal (13\%) | 76 | 122 | 132 | 107 | 90 | 77 | 28 | 30 | 62 | 106 | 100 | 96 |
| Dry (24\%) | 74 | 101 | 121 | 108 | 77 | 64 | 23 | 21 | 43 | 96 | 71 | 74 |
| Critical (15\%) | 69 | 73 | 86 | 88 | 54 | 30 | 13 | 13 | 22 | 56 | 64 | 56 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Energy Use (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -23\% | 16\% | -5\% | -12\% | -20\% | 6\% | -29\% | -25\% | 12\% | -4\% | -27\% | -3\% |
| 20\% | -22\% | 9\% | -5\% | -20\% | -10\% | 8\% | -49\% | -32\% | -1\% | -10\% | -22\% | -2\% |
| 30\% | -27\% | 1\% | -10\% | -27\% | -19\% | 8\% | -56\% | -32\% | -10\% | -16\% | -15\% | -4\% |
| 40\% | -21\% | -6\% | -13\% | -30\% | -25\% | 23\% | -57\% | -32\% | -16\% | -18\% | -14\% | -10\% |
| 50\% | -3\% | -15\% | -16\% | -31\% | -30\% | 9\% | -56\% | -31\% | -26\% | -20\% | -17\% | -14\% |
| 60\% | 4\% | -16\% | -15\% | -34\% | -26\% | -3\% | -51\% | -33\% | -26\% | -21\% | -14\% | -15\% |
| 70\% | 11\% | -23\% | -9\% | -37\% | -15\% | -3\% | -52\% | -41\% | -29\% | -10\% | -7\% | -14\% |
| 80\% | 28\% | -19\% | -17\% | -33\% | -16\% | -8\% | -49\% | -44\% | -26\% | -13\% | 0\% | -16\% |
| 90\% | 60\% | -16\% | -21\% | -13\% | 17\% | -26\% | -41\% | -49\% | -8\% | 17\% | 27\% | -4\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -10\% | -4\% | -11\% | -27\% | -20\% | 2\% | -46\% | -29\% | -8\% | -13\% | -16\% | -11\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -19\% | -2\% | -16\% | -26\% | -11\% | 30\% | -36\% | -15\% | 10\% | -9\% | -20\% | -16\% |
| Above Normal (16\%) | 0\% | -4\% | -10\% | -34\% | -30\% | 11\% | -55\% | -31\% | -16\% | -23\% | -21\% | -26\% |
| Below Normal (13\%) | -17\% | -9\% | -11\% | -32\% | -14\% | -9\% | -54\% | -43\% | -27\% | -28\% | -27\% | 3\% |
| Dry (24\%) | -13\% | -2\% | -2\% | -25\% | -26\% | -23\% | -48\% | -42\% | -21\% | -10\% | 5\% | -2\% |
| Critical (15\%) | 29\% | -6\% | -18\% | -16\% | -31\% | -40\% | -56\% | -48\% | -26\% | 21\% | 1\% | 0\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.19 CVP Net Energy Use

Table 5C.3.3.19.1 CVP Net Generation, Monthly Net Generation

No Action Alternative

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 324 | 257 | 523 | 556 | 567 | 564 | 449 | 560 | 543 | 664 | 474 | 528 |
| 20\% | 283 | 220 | 218 | 372 | 491 | 444 | 355 | 513 | 500 | 624 | 446 | 491 |
| 30\% | 249 | 195 | 116 | 257 | 358 | 262 | 325 | 468 | 476 | 596 | 427 | 366 |
| 40\% | 216 | 162 | 72 | 147 | 163 | 169 | 304 | 441 | 452 | 558 | 418 | 344 |
| 50\% | 200 | 112 | 49 | 104 | 110 | 150 | 285 | 424 | 438 | 537 | 405 | 246 |
| 60\% | 154 | 96 | 42 | 71 | 94 | 133 | 270 | 404 | 426 | 508 | 381 | 198 |
| 70\% | 134 | 71 | 30 | 50 | 71 | 109 | 248 | 383 | 410 | 480 | 366 | 183 |
| 80\% | 119 | 56 | 18 | 37 | 54 | 95 | 225 | 327 | 377 | 450 | 347 | 150 |
| 90\% | 86 | 40 | -1 | 24 | 36 | 72 | 198 | 262 | 332 | 400 | 302 | 104 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 197 | 145 | 139 | 209 | 230 | 243 | 307 | 420 | 443 | 530 | 393 | 295 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 236 | 193 | 311 | 433 | 389 | 435 | 397 | 522 | 455 | 551 | 423 | 504 |
| Above Normal (16\%) | 193 | 143 | 136 | 223 | 363 | 263 | 334 | 443 | 459 | 608 | 419 | 334 |
| Below Normal (13\%) | 231 | 137 | 43 | 79 | 181 | 144 | 288 | 422 | 478 | 573 | 423 | 198 |
| Dry (24\%) | 178 | 128 | 34 | 74 | 67 | 119 | 233 | 376 | 469 | 518 | 391 | 174 |
| Critical (15\%) | 118 | 76 | 34 | 48 | 59 | 104 | 221 | 249 | 323 | 380 | 276 | 89 |

Alternative 1


Alternative 1 minus No Action Alternative

| Statistic | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | -12\% | -37\% | 0\% | 0\% | 0\% | 0\% | -10\% | 0\% | 11\% | -4\% | 1\% | -45\% |
| 20\% | -16\% | -40\% | 25\% | 11\% | -1\% | 9\% | -9\% | 1\% | 15\% | 0\% | 4\% | -48\% |
| 30\% | -22\% | -47\% | -1\% | 12\% | -17\% | 10\% | -9\% | 3\% | 11\% | 1\% | 3\% | -38\% |
| 40\% | -20\% | -46\% | 0\% | -8\% | 28\% | 11\% | -10\% | 4\% | 14\% | 4\% | 1\% | -37\% |
| 50\% | -19\% | -28\% | -12\% | -25\% | 4\% | 3\% | -10\% | 5\% | 11\% | 2\% | 0\% | -17\% |
| 60\% | -2\% | -22\% | -22\% | -57\% | -22\% | -1\% | -12\% | 2\% | 10\% | 2\% | 3\% | -5\% |
| 70\% | 3\% | -17\% | -19\% | -64\% | -26\% | -1\% | -14\% | 0\% | 11\% | 3\% | 1\% | -2\% |
| 80\% | -11\% | -10\% | -32\% | -84\% | -63\% | -10\% | -14\% | 5\% | 8\% | 3\% | 2\% | 3\% |
| 90\% | 7\% | -19\% | 1388\% | -134\% | -120\% | -10\% | -18\% | 11\% | 9\% | 0\% | 6\% | -5\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -13\% | -31\% | 2\% | -10\% | -6\% | 3\% | -11\% | 2\% | 11\% | 1\% | 2\% | -28\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | -16\% | -29\% | 8\% | -5\% | -2\% | 5\% | -12\% | -1\% | 17\% | 0\% | 0\% | -43\% |
| Above Normal (16\%) | -12\% | -31\% | -20\% | -5\% | -3\% | 15\% | -21\% | 3\% | 13\% | 0\% | 4\% | -33\% |
| Below Normal (13\%) | -18\% | -36\% | -7\% | -8\% | -3\% | 12\% | -9\% | 5\% | 10\% | 1\% | 4\% | 7\% |
| Dry (24\%) | -11\% | -38\% | 0\% | -52\% | -32\% | -18\% | -6\% | 6\% | 4\% | 2\% | 1\% | 1\% |
| Critical (15\%) | 7\% | -12\% | -18\% | -38\% | -53\% | -14\% | 1\% | 5\% | 7\% | 4\% | 6\% | 11\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same
therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.19.2 CVP Net Generation, Monthly Net Generation

Second Basis of Comparison

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 285 | 162 | 524 | 558 | 567 | 562 | 404 | 561 | 600 | 638 | 480 | 291 |
| 20\% | 239 | 132 | 272 | 412 | 486 | 482 | 324 | 519 | 577 | 622 | 463 | 256 |
| 30\% | 195 | 103 | 114 | 288 | 296 | 288 | 297 | 481 | 531 | 602 | 438 | 227 |
| 40\% | 173 | 87 | 72 | 135 | 208 | 188 | 273 | 461 | 517 | 579 | 422 | 217 |
| 50\% | 162 | 81 | 43 | 78 | 114 | 155 | 255 | 444 | 488 | 547 | 405 | 205 |
| 60\% | 152 | 75 | 33 | 30 | 74 | 132 | 238 | 413 | 469 | 518 | 393 | 189 |
| 70\% | 138 | 58 | 24 | 18 | 53 | 108 | 214 | 384 | 454 | 493 | 369 | 179 |
| 80\% | 106 | 50 | 12 | 6 | 20 | 86 | 194 | 343 | 407 | 463 | 356 | 155 |
| 90\% | 92 | 32 | -10 | -8 | -7 | 65 | 162 | 292 | 363 | 398 | 321 | 98 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 172 | 100 | 142 | 187 | 215 | 251 | 274 | 431 | 491 | 537 | 401 | 213 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 197 | 138 | 336 | 414 | 382 | 455 | 351 | 517 | 533 | 552 | 423 | 289 |
| Above Normal (16\%) | 169 | 99 | 109 | 211 | 351 | 302 | 263 | 456 | 517 | 611 | 436 | 224 |
| Below Normal (13\%) | 189 | 87 | 40 | 73 | 176 | 161 | 262 | 444 | 527 | 577 | 438 | 212 |
| Dry (24\%) | 158 | 80 | 34 | 35 | 46 | 98 | 219 | 397 | 487 | 530 | 395 | 176 |
| Critical (15\%) | 126 | 67 | 28 | 30 | 28 | 90 | 223 | 261 | 346 | 395 | 294 | 98 |

## No Action Alternative

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 324 | 257 | 523 | 556 | 567 | 564 | 449 | 560 | 543 | 664 | 474 | 528 |
| 20\% | 283 | 220 | 218 | 372 | 491 | 444 | 355 | 513 | 500 | 624 | 446 | 491 |
| 30\% | 249 | 195 | 116 | 257 | 358 | 262 | 325 | 468 | 476 | 596 | 427 | 366 |
| 40\% | 216 | 162 | 72 | 147 | 163 | 169 | 304 | 441 | 452 | 558 | 418 | 344 |
| 50\% | 200 | 112 | 49 | 104 | 110 | 150 | 285 | 424 | 438 | 537 | 405 | 246 |
| 60\% | 154 | 96 | 42 | 71 | 94 | 133 | 270 | 404 | 426 | 508 | 381 | 198 |
| 70\% | 134 | 71 | 30 | 50 | 71 | 109 | 248 | 383 | 410 | 480 | 366 | 183 |
| 80\% | 119 | 56 | 18 | 37 | 54 | 95 | 225 | 327 | 377 | 450 | 347 | 150 |
| 90\% | 86 | 40 | -1 | 24 | 36 | 72 | 198 | 262 | 332 | 400 | 302 | 104 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 197 | 145 | 139 | 209 | 230 | 243 | 307 | 420 | 443 | 530 | 393 | 295 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 236 | 193 | 311 | 433 | 389 | 435 | 397 | 522 | 455 | 551 | 423 | 504 |
| Above Normal (16\%) | 193 | 143 | 136 | 223 | 363 | 263 | 334 | 443 | 459 | 608 | 419 | 334 |
| Below Normal ( $13 \%$ ) | 231 | 137 | 43 | 79 | 181 | 144 | 288 | 422 | 478 | 573 | 423 | 198 |
| Dry (24\%) | 178 | 128 | 34 | 74 | 67 | 119 | 233 | 376 | 469 | 518 | 391 | 174 |
| Critical (15\%) | 118 | 76 | 34 | 48 | 59 | 104 | 221 | 249 | 323 | 380 | 276 | 89 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 14\% | 59\% | 0\% | 0\% | 0\% | 0\% | 11\% | 0\% | -10\% | 4\% | -1\% | 81\% |
| 20\% | 18\% | 66\% | -20\% | -10\% | 1\% | -8\% | 10\% | -1\% | -13\% | 0\% | -4\% | 92\% |
| 30\% | 27\% | 90\% | 1\% | -11\% | 21\% | -9\% | 10\% | -3\% | -10\% | -1\% | -2\% | 61\% |
| 40\% | 25\% | 86\% | 0\% | 8\% | -22\% | -10\% | 12\% | -4\% | -13\% | -4\% | -1\% | 58\% |
| 50\% | 24\% | 39\% | 14\% | 34\% | -3\% | -3\% | 12\% | -4\% | -10\% | -2\% | 0\% | 20\% |
| 60\% | 2\% | 29\% | 29\% | 134\% | 27\% | 1\% | 13\% | -2\% | -9\% | -2\% | -3\% | 5\% |
| 70\% | -3\% | 21\% | 24\% | 176\% | 34\% | 1\% | 16\% | 0\% | -10\% | -3\% | -1\% | 2\% |
| 80\% | 12\% | 12\% | 47\% | 513\% | 167\% | 11\% | 16\% | -4\% | -7\% | -3\% | -2\% | -3\% |
| 90\% | -7\% | 24\% | -93\% | -394\% | -606\% | 11\% | 22\% | -10\% | -9\% | 0\% | -6\% | 6\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 15\% | 44\% | -2\% | 11\% | 7\% | -3\% | 12\% | -2\% | -10\% | -1\% | -2\% | 38\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 19\% | 40\% | -8\% | 5\% | 2\% | -4\% | 13\% | 1\% | -15\% | 0\% | 0\% | 74\% |
| Above Normal (16\%) | 14\% | 44\% | 25\% | 5\% | 3\% | -13\% | 27\% | -3\% | -11\% | 0\% | -4\% | 49\% |
| Below Normal (13\%) | 22\% | 57\% | 8\% | 9\% | 3\% | -11\% | 10\% | -5\% | -9\% | -1\% | -3\% | -7\% |
| Dry (24\%) | 13\% | 61\% | 0\% | 110\% | 47\% | 22\% | 7\% | -5\% | -4\% | -2\% | -1\% | -1\% |
| Critical (15\%) | -6\% | 14\% | 22\% | 62\% | 111\% | 16\% | -1\% | -5\% | -7\% | -4\% | -6\% | -10\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.19.3 CVP Net Generation, Monthly Net Generation

Second Basis of Comparison

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 285 | 162 | 524 | 558 | 567 | 562 | 404 | 561 | 600 | 638 | 480 | 291 |
| 20\% | 239 | 132 | 272 | 412 | 486 | 482 | 324 | 519 | 577 | 622 | 463 | 256 |
| 30\% | 195 | 103 | 114 | 288 | 296 | 288 | 297 | 481 | 531 | 602 | 438 | 227 |
| 40\% | 173 | 87 | 72 | 135 | 208 | 188 | 273 | 461 | 517 | 579 | 422 | 217 |
| 50\% | 162 | 81 | 43 | 78 | 114 | 155 | 255 | 444 | 488 | 547 | 405 | 205 |
| 60\% | 152 | 75 | 33 | 30 | 74 | 132 | 238 | 413 | 469 | 518 | 393 | 189 |
| 70\% | 138 | 58 | 24 | 18 | 53 | 108 | 214 | 384 | 454 | 493 | 369 | 179 |
| 80\% | 106 | 50 | 12 | 6 | 20 | 86 | 194 | 343 | 407 | 463 | 356 | 155 |
| 90\% | 92 | 32 | -10 | -8 | -7 | 65 | 162 | 292 | 363 | 398 | 321 | 98 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 172 | 100 | 142 | 187 | 215 | 251 | 274 | 431 | 491 | 537 | 401 | 213 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 197 | 138 | 336 | 414 | 382 | 455 | 351 | 517 | 533 | 552 | 423 | 289 |
| Above Normal (16\%) | 169 | 99 | 109 | 211 | 351 | 302 | 263 | 456 | 517 | 611 | 436 | 224 |
| Below Normal (13\%) | 189 | 87 | 40 | 73 | 176 | 161 | 262 | 444 | 527 | 577 | 438 | 212 |
| Dry (24\%) | 158 | 80 | 34 | 35 | 46 | 98 | 219 | 397 | 487 | 530 | 395 | 176 |
| Critical (15\%) | 126 | 67 | 28 | 30 | 28 | 90 | 223 | 261 | 346 | 395 | 294 | 98 |

Alternative 3

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 291 | 182 | 530 | 558 | 606 | 583 | 437 | 534 | 563 | 674 | 481 | 336 |
| 20\% | 235 | 125 | 266 | 480 | 511 | 511 | 316 | 479 | 531 | 638 | 465 | 266 |
| 30\% | 193 | 104 | 114 | 332 | 334 | 287 | 298 | 459 | 508 | 622 | 441 | 246 |
| 40\% | 173 | 91 | 74 | 160 | 183 | 189 | 268 | 439 | 473 | 596 | 424 | 216 |
| 50\% | 158 | 77 | 52 | 112 | 122 | 150 | 251 | 392 | 448 | 544 | 409 | 205 |
| 60\% | 147 | 66 | 39 | 72 | 84 | 122 | 229 | 374 | 433 | 528 | 387 | 195 |
| 70\% | 133 | 60 | 25 | 51 | 71 | 106 | 216 | 348 | 411 | 506 | 374 | 181 |
| 80\% | 113 | 52 | 12 | 36 | 56 | 92 | 200 | 316 | 387 | 469 | 362 | 155 |
| 90\% | 88 | 31 | -6 | 18 | 41 | 71 | 174 | 260 | 340 | 397 | 326 | 104 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 172 | 102 | 150 | 224 | 241 | 250 | 275 | 400 | 457 | 549 | 406 | 217 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 197 | 137 | 349 | 456 | 402 | 443 | 347 | 475 | 467 | 572 | 436 | 294 |
| Above Normal (16\%) | 166 | 109 | 123 | 257 | 381 | 276 | 269 | 408 | 475 | 621 | 429 | 230 |
| Below Normal (13\%) | 190 | 81 | 42 | 117 | 198 | 167 | 276 | 418 | 493 | 588 | 440 | 221 |
| Dry (24\%) | 160 | 81 | 36 | 67 | 71 | 115 | 217 | 372 | 478 | 537 | 396 | 177 |
| Critical (15\%) | 125 | 73 | 35 | 45 | 60 | 108 | 223 | 260 | 346 | 402 | 305 | 101 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 2\% | 13\% | 1\% | 0\% | 7\% | 4\% | 8\% | -5\% | -6\% | 6\% | 0\% | 15\% |
| 20\% | -2\% | -5\% | -2\% | 16\% | 5\% | 6\% | -2\% | -8\% | -8\% | 3\% | 0\% | 4\% |
| 30\% | -1\% | 2\% | 0\% | 16\% | 13\% | -1\% | 1\% | -5\% | -4\% | 3\% | 1\% | 8\% |
| 40\% | 0\% | 5\% | 2\% | 18\% | -12\% | 1\% | -2\% | -5\% | -8\% | 3\% | 1\% | -1\% |
| 50\% | -3\% | -4\% | 19\% | 44\% | 7\% | -3\% | -2\% | -12\% | -8\% | -1\% | 1\% | 0\% |
| 60\% | -3\% | -12\% | 18\% | 138\% | 13\% | -7\% | -4\% | -9\% | -8\% | 2\% | -2\% | 3\% |
| 70\% | -4\% | 2\% | 3\% | 181\% | 36\% | -3\% | 1\% | -9\% | -10\% | 3\% | 1\% | 1\% |
| 80\% | 6\% | 4\% | -5\% | 490\% | 174\% | 7\% | 3\% | -8\% | -5\% | 1\% | 2\% | 0\% |
| 90\% | -4\% | -3\% | -44\% | -317\% | -682\% | 10\% | 7\% | -11\% | -6\% | 0\% | 2\% | 6\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | 2\% | 6\% | 20\% | 12\% | 0\% | 0\% | -7\% | -7\% | 2\% | 1\% | 2\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 0\% | 0\% | 4\% | 10\% | 5\% | -3\% | -1\% | -8\% | -12\% | 4\% | 3\% | 2\% |
| Above Normal (16\%) | -2\% | 10\% | 13\% | 22\% | 9\% | -9\% | 2\% | -10\% | -8\% | 2\% | -2\% | 3\% |
| Below Normal (13\%) | 1\% | -7\% | 7\% | 61\% | 13\% | 3\% | 6\% | -6\% | -6\% | 2\% | 0\% | 4\% |
| Dry (24\%) | 1\% | 1\% | 6\% | 89\% | 54\% | 18\% | -1\% | -6\% | -2\% | 1\% | 0\% | 1\% |
| Critical (15\%) | -1\% | 9\% | 24\% | 51\% | 113\% | 21\% | 0\% | 0\% | 0\% | 2\% | 4\% | 3\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

Table 5C.3.3.19.4 CVP Net Generation, Monthly Net Generation

Second Basis of Comparison

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 285 | 162 | 524 | 558 | 567 | 562 | 404 | 561 | 600 | 638 | 480 | 291 |
| 20\% | 239 | 132 | 272 | 412 | 486 | 482 | 324 | 519 | 577 | 622 | 463 | 256 |
| 30\% | 195 | 103 | 114 | 288 | 296 | 288 | 297 | 481 | 531 | 602 | 438 | 227 |
| 40\% | 173 | 87 | 72 | 135 | 208 | 188 | 273 | 461 | 517 | 579 | 422 | 217 |
| 50\% | 162 | 81 | 43 | 78 | 114 | 155 | 255 | 444 | 488 | 547 | 405 | 205 |
| 60\% | 152 | 75 | 33 | 30 | 74 | 132 | 238 | 413 | 469 | 518 | 393 | 189 |
| 70\% | 138 | 58 | 24 | 18 | 53 | 108 | 214 | 384 | 454 | 493 | 369 | 179 |
| 80\% | 106 | 50 | 12 | 6 | 20 | 86 | 194 | 343 | 407 | 463 | 356 | 155 |
| 90\% | 92 | 32 | -10 | -8 | -7 | 65 | 162 | 292 | 363 | 398 | 321 | 98 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 172 | 100 | 142 | 187 | 215 | 251 | 274 | 431 | 491 | 537 | 401 | 213 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 197 | 138 | 336 | 414 | 382 | 455 | 351 | 517 | 533 | 552 | 423 | 289 |
| Above Normal (16\%) | 169 | 99 | 109 | 211 | 351 | 302 | 263 | 456 | 517 | 611 | 436 | 224 |
| Below Normal (13\%) | 189 | 87 | 40 | 73 | 176 | 161 | 262 | 444 | 527 | 577 | 438 | 212 |
| Dry (24\%) | 158 | 80 | 34 | 35 | 46 | 98 | 219 | 397 | 487 | 530 | 395 | 176 |
| Critical (15\%) | 126 | 67 | 28 | 30 | 28 | 90 | 223 | 261 | 346 | 395 | 294 | 98 |

Alternative 5

|  | Monthly Net Generation (GWh) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 323 | 255 | 511 | 557 | 567 | 559 | 451 | 559 | 528 | 654 | 468 | 527 |
| 20\% | 285 | 219 | 219 | 356 | 495 | 444 | 360 | 514 | 496 | 620 | 442 | 495 |
| 30\% | 233 | 186 | 113 | 253 | 363 | 270 | 330 | 469 | 475 | 589 | 426 | 365 |
| 40\% | 217 | 160 | 72 | 146 | 159 | 168 | 310 | 447 | 450 | 551 | 415 | 343 |
| 50\% | 194 | 116 | 48 | 104 | 107 | 148 | 294 | 426 | 437 | 531 | 402 | 243 |
| 60\% | 158 | 99 | 39 | 72 | 92 | 131 | 274 | 409 | 424 | 509 | 377 | 199 |
| 70\% | 134 | 71 | 28 | 52 | 67 | 105 | 254 | 389 | 404 | 485 | 366 | 177 |
| 80\% | 110 | 57 | 18 | 38 | 52 | 84 | 237 | 323 | 368 | 425 | 346 | 146 |
| 90\% | 84 | 31 | -2 | 25 | 35 | 72 | 210 | 288 | 322 | 396 | 304 | 107 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 197 | 144 | 137 | 208 | 229 | 242 | 315 | 427 | 438 | 524 | 390 | 296 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 233 | 191 | 307 | 433 | 388 | 431 | 397 | 527 | 454 | 553 | 419 | 506 |
| Above Normal (16\%) | 190 | 142 | 136 | 221 | 364 | 264 | 335 | 449 | 458 | 608 | 416 | 333 |
| Below Normal (13\%) | 230 | 135 | 42 | 79 | 175 | 144 | 305 | 428 | 471 | 569 | 420 | 198 |
| Dry (24\%) | 179 | 130 | 32 | 75 | 67 | 119 | 250 | 383 | 461 | 508 | 388 | 173 |
| Critical (15\%) | 123 | 76 | 34 | 47 | 56 | 102 | 237 | 257 | 314 | 358 | 273 | 97 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Net Generation (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 13\% | 58\% | -3\% | 0\% | 0\% | 0\% | 12\% | 0\% | -12\% | 3\% | -2\% | 81\% |
| 20\% | 19\% | 65\% | -20\% | -14\% | 2\% | -8\% | 11\% | -1\% | -14\% | 0\% | -4\% | 94\% |
| 30\% | 19\% | 81\% | -1\% | -12\% | 23\% | -6\% | 11\% | -3\% | -10\% | -2\% | -3\% | 60\% |
| 40\% | 25\% | 83\% | -1\% | 8\% | -23\% | -11\% | 14\% | -3\% | -13\% | -5\% | -2\% | 58\% |
| 50\% | 20\% | 44\% | 10\% | 33\% | -6\% | -5\% | 15\% | -4\% | -10\% | -3\% | -1\% | 19\% |
| 60\% | 4\% | 32\% | 19\% | 138\% | 24\% | 0\% | 15\% | -1\% | -9\% | -2\% | -4\% | 5\% |
| 70\% | -3\% | 21\% | 14\% | 182\% | 27\% | -3\% | 19\% | 1\% | -11\% | -2\% | -1\% | -1\% |
| 80\% | 3\% | 14\% | 46\% | 522\% | 159\% | -2\% | 23\% | -6\% | -10\% | -8\% | -3\% | -6\% |
| 90\% | -8\% | -4\% | -82\% | -404\% | -603\% | 10\% | 29\% | -1\% | -11\% | 0\% | -5\% | 9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 14\% | 44\% | -3\% | 11\% | 6\% | -4\% | 15\% | -1\% | -11\% | -2\% | -3\% | 39\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (32\%) | 18\% | 39\% | -9\% | 5\% | 2\% | -5\% | 13\% | 2\% | -15\% | 0\% | -1\% | 75\% |
| Above Normal (16\%) | 12\% | 44\% | 25\% | 4\% | 4\% | -13\% | 27\% | -1\% | -11\% | -1\% | -5\% | 48\% |
| Below Normal (13\%) | 22\% | 55\% | 5\% | 8\% | 0\% | -11\% | 17\% | -4\% | -11\% | -1\% | -4\% | -7\% |
| Dry (24\%) | 14\% | 63\% | -6\% | 113\% | 47\% | 22\% | 14\% | -4\% | -5\% | -4\% | -2\% | -1\% |
| Critical (15\%) | -3\% | 14\% | 21\% | 57\% | 99\% | 14\% | 6\% | -1\% | -9\% | -9\% | -7\% | -1\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in the text. 3) Model results for Alternative 2 and № Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in the text.

## 5C.3.3.20 Stanislaus River Percent Mortality - Fall-run Chinook Salmon

Table 5C.3.3.20 Stanislaus River Percent Mortality - Fall-Run Chinook Salmon

|  | Percent <br> Mortality | Difference from No Action Alternative | Difference from Second Basis of Comparison |
| :---: | :---: | :---: | :---: |
|  | \% | \% | \% |
| No Action Alternative |  |  |  |
| Long-term Average | 7.0 | --- | -0.4 |
| Wet | 1.6 | --- | 0.1 |
| Above Normal | 5.3 | --- | -0.1 |
| Below Normal | 4.4 | --- | 0.3 |
| Dry | 4.9 | --- | -0.3 |
| Critical | 14.4 | --- | -1.5 |
| Second Basis of Comparison |  |  |  |
| Long-term Average | 7.4 | 0.4 |  |
| Wet | 1.5 | -0.1 | --- |
| Above Normal | 5.4 | 0.1 | --- |
| Below Normal | 4.1 | -0.3 | --- |
| Dry | 5.1 | 0.3 | --- |
| Critical | 15.9 | 1.5 | --- |
| Alternative 3 |  |  |  |
| Long-term Average | 6.2 | -0.8 | -1.2 |
| Wet | 1.6 | 0.0 | 0.1 |
| Above Normal | 4.0 | -1.3 | -1.4 |
| Below Normal | 3.8 | -0.6 | -0.3 |
| Dry | 4.2 | -0.7 | -0.9 |
| Critical | 13.4 | -1.0 | -2.5 |
| Alternative 5 |  |  |  |
| Long-term Average | 8.5 | 1.5 | 1.0 |
| Wet | 1.8 | 0.2 | 0.3 |
| Above Normal | 6.4 | 1.1 | 1.0 |
| Below Normal | 6.1 | 1.6 | 2.0 |
| Dry | 7.0 | 2.2 | 1.9 |
| Critical | 16.9 | 2.5 | 1.0 |

Notes: All results are based on the 82-year simulation period. The water year types are defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.

5C.3.3.21 New Melones Large Mouth Bass Nest Survival Percentage

Table 5C.3.3.21.1 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 66 | 38 | 80 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 49 | 30 | 64 |
| 30\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 25 | 59 |
| 40\% | 74 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 25 | 23 | 57 |
| 50\% | 67 | 100 | 100 | 100 | 100 | 100 | 80 | 100 | 98 | 22 | 20 | 55 |
| 60\% | 59 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 63 | 18 | 19 | 50 |
| 70\% | 50 | 100 | 100 | 100 | 100 | 100 | 49 | 40 | 42 | 13 | 16 | 43 |
| 80\% | 43 | 100 | 100 | 100 | 100 | 100 | 27 | 29 | 27 | 10 | 12 | 38 |
| 90\% | 29 | 100 | 100 | 100 | 100 | 100 | 13 | 14 | 15 | 1 | 4 | 34 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 66 | 99 | 100 | 100 | 97 | 95 | 68 | 72 | 69 | 29 | 23 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 67 | 100 | 100 | 100 | 96 | 94 | 83 | 98 | 95 | 47 | 24 | 51 |
| Above Normal (24\%) | 74 | 100 | 100 | 100 | 100 | 100 | 88 | 100 | 72 | 26 | 20 | 60 |
| Below Normal (10\%) | 60 | 100 | 100 | 100 | 98 | 95 | 58 | 65 | 61 | 22 | 19 | 58 |
| Dry (16\%) | 63 | 99 | 100 | 100 | 97 | 98 | 66 | 51 | 54 | 14 | 16 | 49 |
| Critical (27\%) | 65 | 97 | 100 | 100 | 93 | 87 | 29 | 25 | 43 | 28 | 37 | 58 |

## Alternative 1

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 61 | 34 | 81 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 30 | 64 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 26 | 60 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 24 | 56 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 24 | 21 | 55 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 51 | 21 | 18 | 49 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 33 | 32 | 17 | 14 | 45 |
| 80\% | 91 | 100 | 100 | 100 | 100 | 100 | 52 | 21 | 25 | 12 | 10 | 39 |
| 90\% | 80 | 98 | 100 | 100 | 100 | 100 | 40 | 9 | 16 | 5 | 5 | 31 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 95 | 98 | 100 | 100 | 96 | 97 | 82 | 69 | 64 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 98 | 100 | 100 | 100 | 96 | 97 | 92 | 98 | 82 | 45 | 24 | 51 |
| Above Normal (24\%) | 95 | 98 | 100 | 100 | 100 | 100 | 95 | 100 | 69 | 25 | 20 | 59 |
| Below Normal (10\%) | 93 | 100 | 100 | 100 | 98 | 100 | 79 | 63 | 55 | 25 | 19 | 56 |
| Dry (16\%) | 91 | 98 | 100 | 100 | 95 | 98 | 84 | 46 | 54 | 15 | 16 | 51 |
| Critical (27\%) | 93 | 96 | 100 | 100 | 94 | 87 | 44 | 19 | 43 | 24 | 30 | 61 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -8\% | -9\% | 1\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -14\% | 1\% | 0\% |
| 30\% | 19\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | 3\% | 1\% |
| 40\% | 35\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 6\% | 5\% | 0\% |
| 50\% | 48\% | 0\% | 0\% | 0\% | 0\% | 0\% | 26\% | 0\% | -30\% | 5\% | 3\% | 0\% |
| 60\% | 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 37\% | 0\% | -20\% | 15\% | -4\% | 0\% |
| 70\% | 99\% | 0\% | 0\% | 0\% | 0\% | 0\% | 64\% | -18\% | -22\% | 34\% | -16\% | 4\% |
| 80\% | 113\% | 0\% | 0\% | 0\% | 0\% | 0\% | 95\% | -27\% | -9\% | 16\% | -17\% | 2\% |
| 90\% | 180\% | -2\% | 0\% | 0\% | 0\% | 0\% | 219\% | -36\% | 8\% | 302\% | 48\% | -9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 44\% | -1\% | 0\% | 0\% | 0\% | 2\% | 20\% | -3\% | -8\% | -1\% | -5\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 48\% | 0\% | 0\% | 0\% | 0\% | 4\% | 11\% | 0\% | -13\% | -4\% | -1\% | -2\% |
| Above Normal (24\%) | 29\% | -1\% | 0\% | 0\% | 0\% | 0\% | 9\% | 0\% | -5\% | -4\% | -2\% | -2\% |
| Below Normal (10\%) | 55\% | 0\% | 0\% | 0\% | 0\% | 5\% | 36\% | -4\% | -9\% | 15\% | -4\% | -2\% |
| Dry (16\%) | 44\% | -1\% | 0\% | 0\% | -2\% | 0\% | 28\% | -9\% | 0\% | 12\% | 2\% | 3\% |
| Critical (27\%) | 44\% | -2\% | 0\% | 0\% | 0\% | 0\% | 53\% | -23\% | 0\% | -12\% | -18\% | 7\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.21.2 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 61 | 34 | 81 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 30 | 64 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 26 | 60 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 24 | 56 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 24 | 21 | 55 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 51 | 21 | 18 | 49 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 33 | 32 | 17 | 14 | 45 |
| 80\% | 91 | 100 | 100 | 100 | 100 | 100 | 52 | 21 | 25 | 12 | 10 | 39 |
| 90\% | 80 | 98 | 100 | 100 | 100 | 100 | 40 | 9 | 16 | 5 | 5 | 31 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 95 | 98 | 100 | 100 | 96 | 97 | 82 | 69 | 64 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 98 | 100 | 100 | 100 | 96 | 97 | 92 | 98 | 82 | 45 | 24 | 51 |
| Above Normal (24\%) | 95 | 98 | 100 | 100 | 100 | 100 | 95 | 100 | 69 | 25 | 20 | 59 |
| Below Normal (10\%) | 93 | 100 | 100 | 100 | 98 | 100 | 79 | 63 | 55 | 25 | 19 | 56 |
| Dry (16\%) | 91 | 98 | 100 | 100 | 95 | 98 | 84 | 46 | 54 | 15 | 16 | 51 |
| Critical (27\%) | 93 | 96 | 100 | 100 | 94 | 87 | 44 | 19 | 43 | 24 | 30 | 61 |

## No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 66 | 38 | 80 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 49 | 30 | 64 |
| 30\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 25 | 59 |
| 40\% | 74 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 25 | 23 | 57 |
| 50\% | 67 | 100 | 100 | 100 | 100 | 100 | 80 | 100 | 98 | 22 | 20 | 55 |
| 60\% | 59 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 63 | 18 | 19 | 50 |
| 70\% | 50 | 100 | 100 | 100 | 100 | 100 | 49 | 40 | 42 | 13 | 16 | 43 |
| 80\% | 43 | 100 | 100 | 100 | 100 | 100 | 27 | 29 | 27 | 10 | 12 | 38 |
| 90\% | 29 | 100 | 100 | 100 | 100 | 100 | 13 | 14 | 15 | 1 | 4 | 34 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 66 | 99 | 100 | 100 | 97 | 95 | 68 | 72 | 69 | 29 | 23 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 67 | 100 | 100 | 100 | 96 | 94 | 83 | 98 | 95 | 47 | 24 | 51 |
| Above Normal (24\%) | 74 | 100 | 100 | 100 | 100 | 100 | 88 | 100 | 72 | 26 | 20 | 60 |
| Below Normal (10\%) | 60 | 100 | 100 | 100 | 98 | 95 | 58 | 65 | 61 | 22 | 19 | 58 |
| Dry (16\%) | 63 | 99 | 100 | 100 | 97 | 98 | 66 | 51 | 54 | 14 | 16 | 49 |
| Critical (27\%) | 65 | 97 | 100 | 100 | 93 | 87 | 29 | 25 | 43 | 28 | 37 | 58 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 10\% | -1\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 16\% | -1\% | 0\% |
| 30\% | -16\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | -3\% | -1\% |
| 40\% | -26\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -5\% | -5\% | 0\% |
| 50\% | -33\% | 0\% | 0\% | 0\% | 0\% | 0\% | -20\% | 0\% | 44\% | -5\% | -3\% | 0\% |
| 60\% | -41\% | 0\% | 0\% | 0\% | 0\% | 0\% | -27\% | 0\% | 25\% | -13\% | 4\% | 0\% |
| 70\% | -50\% | 0\% | 0\% | 0\% | 0\% | 0\% | -39\% | 22\% | 29\% | -25\% | 19\% | -4\% |
| 80\% | -53\% | 0\% | 0\% | 0\% | 0\% | 0\% | -49\% | 37\% | 10\% | -14\% | 21\% | -1\% |
| 90\% | -64\% | 2\% | 0\% | 0\% | 0\% | 0\% | -69\% | 56\% | -7\% | -75\% | -32\% | 10\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -31\% | 1\% | 0\% | 0\% | 0\% | -2\% | -17\% | 3\% | 8\% | 1\% | 5\% | -1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -32\% | 0\% | 0\% | 0\% | 0\% | -3\% | -10\% | 0\% | 16\% | 4\% | 1\% | 2\% |
| Above Normal (24\%) | -22\% | 1\% | 0\% | 0\% | 0\% | 0\% | -8\% | 0\% | 5\% | 4\% | 2\% | 2\% |
| Below Normal (10\%) | -35\% | 0\% | 0\% | 0\% | 0\% | -5\% | -26\% | 4\% | 10\% | -13\% | 4\% | 2\% |
| Dry (16\%) | -31\% | 1\% | 0\% | 0\% | 2\% | 0\% | -22\% | 10\% | 0\% | -11\% | -2\% | -3\% |
| Critical (27\%) | -31\% | 2\% | 0\% | 0\% | 0\% | 0\% | -35\% | 30\% | 0\% | 13\% | 21\% | -6\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.21.3 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 61 | 34 | 81 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 30 | 64 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 26 | 60 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 24 | 56 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 24 | 21 | 55 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 51 | 21 | 18 | 49 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 33 | 32 | 17 | 14 | 45 |
| 80\% | 91 | 100 | 100 | 100 | 100 | 100 | 52 | 21 | 25 | 12 | 10 | 39 |
| 90\% | 80 | 98 | 100 | 100 | 100 | 100 | 40 | 9 | 16 | 5 | 5 | 31 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 95 | 98 | 100 | 100 | 96 | 97 | 82 | 69 | 64 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 98 | 100 | 100 | 100 | 96 | 97 | 92 | 98 | 82 | 45 | 24 | 51 |
| Above Normal (24\%) | 95 | 98 | 100 | 100 | 100 | 100 | 95 | 100 | 69 | 25 | 20 | 59 |
| Below Normal (10\%) | 93 | 100 | 100 | 100 | 98 | 100 | 79 | 63 | 55 | 25 | 19 | 56 |
| Dry (16\%) | 91 | 98 | 100 | 100 | 95 | 98 | 84 | 46 | 54 | 15 | 16 | 51 |
| Critical (27\%) | 93 | 96 | 100 | 100 | 94 | 87 | 44 | 19 | 43 | 24 | 30 | 61 |

Alternative 3

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 78 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 37 | 69 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 29 | 61 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 27 | 56 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 24 | 23 | 55 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 92 | 55 | 21 | 20 | 48 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 44 | 35 | 18 | 18 | 42 |
| 80\% | 94 | 100 | 100 | 100 | 100 | 100 | 43 | 21 | 28 | 11 | 11 | 31 |
| 90\% | 84 | 100 | 100 | 100 | 100 | 100 | 23 | 0 | 14 | 0 | 0 | 23 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 95 | 99 | 99 | 100 | 99 | 96 | 73 | 70 | 67 | 35 | 24 | 51 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 96 | 98 | 92 | 91 | 77 | 66 | 30 | 53 |
| Above Normal (24\%) | 98 | 99 | 100 | 100 | 100 | 100 | 94 | 100 | 90 | 34 | 22 | 58 |
| Below Normal (10\%) | 96 | 100 | 91 | 100 | 100 | 100 | 62 | 73 | 64 | 23 | 18 | 56 |
| Dry (16\%) | 89 | 100 | 100 | 100 | 100 | 98 | 68 | 46 | 59 | 16 | 20 | 42 |
| Critical (27\%) | 94 | 97 | 100 | 100 | 100 | 83 | 30 | 30 | 40 | 15 | 25 | 50 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 64\% | 27\% | -3\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 34\% | 22\% | 8\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 39\% | 14\% | 3\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 18\% | 13\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -3\% | 0\% | 47\% | 1\% | 9\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -23\% | -8\% | 8\% | -2\% | 11\% | -3\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -29\% | 34\% | 8\% | 4\% | 32\% | -6\% |
| 80\% | 3\% | 0\% | 0\% | 0\% | 0\% | 0\% | -18\% | -4\% | 11\% | -2\% | 9\% | -19\% |
| 90\% | 5\% | 2\% | 0\% | 0\% | 0\% | 0\% | -43\% | -96\% | -14\% | -100\% | -99\% | -24\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | 1\% | -1\% | 0\% | 3\% | 0\% | -10\% | 1\% | 6\% | 22\% | 11\% | -6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -7\% | -6\% | 45\% | 25\% | 5\% |
| Above Normal (24\%) | 3\% | 1\% | 0\% | 0\% | 0\% | 0\% | -1\% | 0\% | 31\% | 38\% | 10\% | -1\% |
| Below Normal (10\%) | 3\% | 0\% | -9\% | 0\% | 2\% | 0\% | -21\% | 15\% | 15\% | -10\% | -2\% | 0\% |
| Dry (16\%) | -3\% | 2\% | 0\% | 0\% | 5\% | 0\% | -20\% | 1\% | 8\% | 2\% | 21\% | -17\% |
| Critical (27\%) | 1\% | 1\% | 0\% | 0\% | 7\% | -4\% | -31\% | 56\% | -5\% | -37\% | -16\% | -18\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.21.4 New Melones Large Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 61 | 34 | 81 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 43 | 30 | 64 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 31 | 26 | 60 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 24 | 56 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 24 | 21 | 55 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 51 | 21 | 18 | 49 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 33 | 32 | 17 | 14 | 45 |
| 80\% | 91 | 100 | 100 | 100 | 100 | 100 | 52 | 21 | 25 | 12 | 10 | 39 |
| 90\% | 80 | 98 | 100 | 100 | 100 | 100 | 40 | 9 | 16 | 5 | 5 | 31 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 95 | 98 | 100 | 100 | 96 | 97 | 82 | 69 | 64 | 29 | 22 | 54 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 98 | 100 | 100 | 100 | 96 | 97 | 92 | 98 | 82 | 45 | 24 | 51 |
| Above Normal (24\%) | 95 | 98 | 100 | 100 | 100 | 100 | 95 | 100 | 69 | 25 | 20 | 59 |
| Below Normal (10\%) | 93 | 100 | 100 | 100 | 98 | 100 | 79 | 63 | 55 | 25 | 19 | 56 |
| Dry (16\%) | 91 | 98 | 100 | 100 | 95 | 98 | 84 | 46 | 54 | 15 | 16 | 51 |
| Critical (27\%) | 93 | 96 | 100 | 100 | 94 | 87 | 44 | 19 | 43 | 24 | 30 | 61 |

Alternative 5

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 36 | 98 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 42 | 24 | 62 |
| 30\% | 88 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 30 | 22 | 57 |
| 40\% | 75 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 20 | 55 |
| 50\% | 69 | 100 | 100 | 100 | 100 | 100 | 72 | 100 | 100 | 20 | 19 | 50 |
| 60\% | 57 | 100 | 100 | 100 | 100 | 100 | 43 | 60 | 79 | 16 | 16 | 44 |
| 70\% | 51 | 100 | 100 | 100 | 100 | 100 | 24 | 29 | 43 | 12 | 11 | 39 |
| 80\% | 46 | 100 | 100 | 100 | 100 | 100 | 10 | 1 | 25 | 5 | 5 | 35 |
| 90\% | 35 | 100 | 100 | 100 | 100 | 95 | 0 | 0 | 7 | 0 | 0 | 13 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 67 | 100 | 100 | 100 | 98 | 95 | 60 | 64 | 70 | 28 | 21 | 50 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 71 | 100 | 100 | 100 | 96 | 95 | 87 | 93 | 97 | 41 | 19 | 47 |
| Above Normal (24\%) | 73 | 99 | 100 | 100 | 100 | 100 | 79 | 94 | 61 | 21 | 17 | 53 |
| Below Normal (10\%) | 58 | 100 | 100 | 100 | 98 | 95 | 50 | 58 | 59 | 18 | 14 | 44 |
| Dry (16\%) | 58 | 99 | 100 | 100 | 100 | 98 | 45 | 37 | 52 | 10 | 13 | 45 |
| Critical (27\%) | 73 | 100 | 100 | 100 | 99 | 85 | 14 | 19 | 60 | 44 | 50 | 67 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 22\% | 5\% | 21\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -20\% | -3\% |
| 30\% | -12\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | -15\% | -4\% |
| 40\% | -25\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | -17\% | -2\% |
| 50\% | -31\% | 0\% | 0\% | 0\% | 0\% | 0\% | -28\% | 0\% | 47\% | -17\% | -12\% | -9\% |
| 60\% | -43\% | 0\% | 0\% | 0\% | 0\% | 0\% | -56\% | -40\% | 56\% | -24\% | -8\% | -11\% |
| 70\% | -49\% | 0\% | 0\% | 0\% | 0\% | 0\% | -70\% | -11\% | 33\% | -30\% | -18\% | -13\% |
| 80\% | -50\% | 0\% | 0\% | 0\% | 0\% | 0\% | -81\% | -94\% | 0\% | -61\% | -46\% | -9\% |
| 90\% | -57\% | 2\% | 0\% | 0\% | 0\% | -5\% | -100\% | -100\% | -56\% | -98\% | -99\% | -58\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -29\% | 1\% | 0\% | 0\% | 2\% | -2\% | -27\% | -8\% | 9\% | -5\% | -2\% | -8\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -28\% | 0\% | 0\% | 0\% | 0\% | -3\% | -5\% | -5\% | 19\% | -9\% | -19\% | -8\% |
| Above Normal (24\%) | -23\% | 1\% | 0\% | 0\% | 0\% | 0\% | -17\% | -6\% | -12\% | -16\% | -14\% | -10\% |
| Below Normal (10\%) | -38\% | 0\% | 0\% | 0\% | 0\% | -5\% | -37\% | -8\% | 6\% | -29\% | -26\% | -22\% |
| Dry (16\%) | -36\% | 1\% | 0\% | 0\% | 5\% | 0\% | -47\% | -19\% | -3\% | -35\% | -23\% | -11\% |
| Critical (27\%) | -21\% | 5\% | 0\% | 0\% | 5\% | -1\% | -69\% | -1\% | 40\% | 82\% | 66\% | 9\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

## 5C.3.3.22 New Melones Small Mouth Bass Nest Survival Percentage

Table 5C.3.3.22.1 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 56 | 32 | 67 |
| 20\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 42 | 26 | 54 |
| 30\% | 71 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 22 | 50 |
| 40\% | 62 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 22 | 20 | 48 |
| 50\% | 57 | 100 | 100 | 100 | 100 | 100 | 67 | 100 | 86 | 20 | 18 | 46 |
| 60\% | 50 | 100 | 100 | 100 | 100 | 100 | 60 | 91 | 53 | 16 | 17 | 42 |
| 70\% | 43 | 100 | 100 | 100 | 100 | 100 | 42 | 34 | 35 | 12 | 15 | 37 |
| 80\% | 37 | 100 | 100 | 100 | 100 | 100 | 23 | 25 | 24 | 9 | 11 | 33 |
| 90\% | 25 | 100 | 100 | 100 | 100 | 85 | 12 | 13 | 14 | 2 | 4 | 29 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58 | 98 | 100 | 100 | 96 | 94 | 65 | 70 | 66 | 26 | 21 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59 | 100 | 100 | 100 | 96 | 93 | 81 | 97 | 93 | 42 | 21 | 43 |
| Above Normal (24\%) | 64 | 98 | 100 | 100 | 100 | 100 | 86 | 99 | 68 | 22 | 18 | 52 |
| Below Normal (10\%) | 54 | 100 | 100 | 100 | 97 | 94 | 55 | 63 | 59 | 19 | 17 | 50 |
| Dry (16\%) | 55 | 97 | 100 | 100 | 97 | 98 | 59 | 48 | 50 | 12 | 15 | 43 |
| Critical (27\%) | 58 | 95 | 100 | 99 | 92 | 82 | 26 | 23 | 40 | 25 | 36 | 53 |

Alternative 1

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 51 | 30 | 68 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 26 | 54 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 26 | 22 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 21 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 21 | 19 | 46 |
| 60\% | 92 | 100 | 100 | 100 | 100 | 100 | 82 | 96 | 43 | 18 | 16 | 42 |
| 70\% | 87 | 100 | 100 | 100 | 100 | 100 | 68 | 28 | 28 | 15 | 12 | 38 |
| 80\% | 76 | 91 | 100 | 100 | 100 | 100 | 44 | 19 | 22 | 11 | 9 | 33 |
| 90\% | 67 | 82 | 100 | 100 | 100 | 100 | 35 | 8 | 14 | 5 | 6 | 26 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 89 | 95 | 100 | 100 | 96 | 96 | 77 | 68 | 61 | 26 | 19 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 93 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 79 | 41 | 21 | 43 |
| Above Normal (24\%) | 91 | 95 | 100 | 100 | 100 | 100 | 94 | 100 | 65 | 22 | 18 | 51 |
| Below Normal (10\%) | 84 | 98 | 100 | 100 | 97 | 100 | 73 | 61 | 53 | 22 | 17 | 49 |
| Dry (16\%) | 84 | 92 | 100 | 100 | 95 | 97 | 78 | 44 | 50 | 14 | 15 | 44 |
| Critical (27\%) | 92 | 90 | 100 | 99 | 92 | 82 | 39 | 18 | 40 | 22 | 29 | 56 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -8\% | -9\% | 1\% |
| 20\% | 19\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | 1\% | 0\% |
| 30\% | 42\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | 3\% | 1\% |
| 40\% | 61\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 5\% | 5\% | 0\% |
| 50\% | 76\% | 0\% | 0\% | 0\% | 0\% | 0\% | 50\% | 0\% | -34\% | 5\% | 3\% | 0\% |
| 60\% | 84\% | 0\% | 0\% | 0\% | 0\% | 0\% | 37\% | 6\% | -20\% | 14\% | -4\% | 0\% |
| 70\% | 104\% | 0\% | 0\% | 0\% | 0\% | 0\% | 63\% | -18\% | -22\% | 30\% | -15\% | 4\% |
| 80\% | 109\% | -9\% | 0\% | 0\% | 0\% | 0\% | 90\% | -26\% | -9\% | 14\% | -15\% | 1\% |
| 90\% | 171\% | -18\% | 0\% | 0\% | 0\% | 18\% | 196\% | -33\% | 7\% | 136\% | 34\% | -9\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 54\% | -3\% | 0\% | 0\% | 0\% | 2\% | 20\% | -3\% | -8\% | -1\% | -5\% | 1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59\% | 0\% | 0\% | 0\% | 0\% | 4\% | 9\% | 0\% | -15\% | -3\% | 0\% | -1\% |
| Above Normal (24\%) | 41\% | -2\% | 0\% | 0\% | 0\% | 0\% | 10\% | 0\% | -4\% | -4\% | -2\% | -2\% |
| Below Normal (10\%) | 57\% | -2\% | 0\% | 0\% | 0\% | 6\% | 34\% | -3\% | -10\% | 14\% | -3\% | -2\% |
| Dry (16\%) | 52\% | -5\% | 0\% | 0\% | -2\% | -1\% | 32\% | -8\% | 0\% | 11\% | 2\% | 3\% |
| Critical (27\%) | 58\% | -5\% | 0\% | 0\% | 0\% | 0\% | 51\% | -22\% | 1\% | -11\% | -19\% | 6\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1, 4, and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.22.2 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 51 | 30 | 68 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 26 | 54 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 26 | 22 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 21 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 21 | 19 | 46 |
| 60\% | 92 | 100 | 100 | 100 | 100 | 100 | 82 | 96 | 43 | 18 | 16 | 42 |
| 70\% | 87 | 100 | 100 | 100 | 100 | 100 | 68 | 28 | 28 | 15 | 12 | 38 |
| 80\% | 76 | 91 | 100 | 100 | 100 | 100 | 44 | 19 | 22 | 11 | 9 | 33 |
| 90\% | 67 | 82 | 100 | 100 | 100 | 100 | 35 | 8 | 14 | 5 | 6 | 26 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 89 | 95 | 100 | 100 | 96 | 96 | 77 | 68 | 61 | 26 | 19 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 93 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 79 | 41 | 21 | 43 |
| Above Normal (24\%) | 91 | 95 | 100 | 100 | 100 | 100 | 94 | 100 | 65 | 22 | 18 | 51 |
| Below Normal (10\%) | 84 | 98 | 100 | 100 | 97 | 100 | 73 | 61 | 53 | 22 | 17 | 49 |
| Dry (16\%) | 84 | 92 | 100 | 100 | 95 | 97 | 78 | 44 | 50 | 14 | 15 | 44 |
| Critical (27\%) | 92 | 90 | 100 | 99 | 92 | 82 | 39 | 18 | 40 | 22 | 29 | 56 |

## No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 56 | 32 | 67 |
| 20\% | 84 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 42 | 26 | 54 |
| 30\% | 71 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 22 | 50 |
| 40\% | 62 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 22 | 20 | 48 |
| 50\% | 57 | 100 | 100 | 100 | 100 | 100 | 67 | 100 | 86 | 20 | 18 | 46 |
| 60\% | 50 | 100 | 100 | 100 | 100 | 100 | 60 | 91 | 53 | 16 | 17 | 42 |
| 70\% | 43 | 100 | 100 | 100 | 100 | 100 | 42 | 34 | 35 | 12 | 15 | 37 |
| 80\% | 37 | 100 | 100 | 100 | 100 | 100 | 23 | 25 | 24 | 9 | 11 | 33 |
| 90\% | 25 | 100 | 100 | 100 | 100 | 85 | 12 | 13 | 14 | 2 | 4 | 29 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 58 | 98 | 100 | 100 | 96 | 94 | 65 | 70 | 66 | 26 | 21 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 59 | 100 | 100 | 100 | 96 | 93 | 81 | 97 | 93 | 42 | 21 | 43 |
| Above Normal (24\%) | 64 | 98 | 100 | 100 | 100 | 100 | 86 | 99 | 68 | 22 | 18 | 52 |
| Below Normal (10\%) | 54 | 100 | 100 | 100 | 97 | 94 | 55 | 63 | 59 | 19 | 17 | 50 |
| Dry (16\%) | 55 | 97 | 100 | 100 | 97 | 98 | 59 | 48 | 50 | 12 | 15 | 43 |
| Critical (27\%) | 58 | 95 | 100 | 99 | 92 | 82 | 26 | 23 | 40 | 25 | 36 | 53 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 10\% | -1\% |
| 20\% | -16\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 16\% | -1\% | 0\% |
| 30\% | -29\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | -3\% | -1\% |
| 40\% | -38\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -5\% | -5\% | 0\% |
| 50\% | -43\% | 0\% | 0\% | 0\% | 0\% | 0\% | -33\% | 0\% | 51\% | -5\% | -3\% | 0\% |
| 60\% | -46\% | 0\% | 0\% | 0\% | 0\% | 0\% | -27\% | -5\% | 25\% | -12\% | 4\% | 0\% |
| 70\% | -51\% | 0\% | 0\% | 0\% | 0\% | 0\% | -38\% | 21\% | 27\% | -23\% | 17\% | -3\% |
| 80\% | -52\% | 10\% | 0\% | 0\% | 0\% | 0\% | -47\% | 34\% | 10\% | -12\% | 18\% | -1\% |
| 90\% | -63\% | 22\% | 0\% | 0\% | 0\% | -15\% | -66\% | 48\% | -7\% | -58\% | -25\% | 10\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -35\% | 3\% | 0\% | 0\% | 0\% | -2\% | -17\% | 3\% | 9\% | 1\% | 6\% | -1\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -37\% | 0\% | 0\% | 0\% | 0\% | -4\% | -9\% | 0\% | 17\% | 3\% | 0\% | 1\% |
| Above Normal (24\%) | -29\% | 2\% | 0\% | 0\% | 0\% | 0\% | -9\% | 0\% | 4\% | 4\% | 2\% | 2\% |
| Below Normal (10\%) | -37\% | 2\% | 0\% | 0\% | 0\% | -6\% | -25\% | 3\% | 11\% | -12\% | 3\% | 2\% |
| Dry (16\%) | -34\% | 5\% | 0\% | 0\% | 2\% | 1\% | -24\% | 8\% | 0\% | -10\% | -2\% | -3\% |
| Critical (27\%) | -37\% | 5\% | 0\% | 0\% | 0\% | 0\% | -34\% | 28\% | -1\% | 13\% | 24\% | -6\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.22.3 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 51 | 30 | 68 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 26 | 54 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 26 | 22 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 21 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 21 | 19 | 46 |
| 60\% | 92 | 100 | 100 | 100 | 100 | 100 | 82 | 96 | 43 | 18 | 16 | 42 |
| 70\% | 87 | 100 | 100 | 100 | 100 | 100 | 68 | 28 | 28 | 15 | 12 | 38 |
| 80\% | 76 | 91 | 100 | 100 | 100 | 100 | 44 | 19 | 22 | 11 | 9 | 33 |
| 90\% | 67 | 82 | 100 | 100 | 100 | 100 | 35 | 8 | 14 | 5 | 6 | 26 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 89 | 95 | 100 | 100 | 96 | 96 | 77 | 68 | 61 | 26 | 19 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 93 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 79 | 41 | 21 | 43 |
| Above Normal (24\%) | 91 | 95 | 100 | 100 | 100 | 100 | 94 | 100 | 65 | 22 | 18 | 51 |
| Below Normal (10\%) | 84 | 98 | 100 | 100 | 97 | 100 | 73 | 61 | 53 | 22 | 17 | 49 |
| Dry (16\%) | 84 | 92 | 100 | 100 | 95 | 97 | 78 | 44 | 50 | 14 | 15 | 44 |
| Critical (27\%) | 92 | 90 | 100 | 99 | 92 | 82 | 39 | 18 | 40 | 22 | 29 | 56 |

Alternative 3

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 37 | 66 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 48 | 31 | 58 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 25 | 52 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 27 | 23 | 48 |
| 50\% | 99 | 100 | 100 | 100 | 100 | 100 | 81 | 100 | 100 | 21 | 20 | 46 |
| 60\% | 97 | 100 | 100 | 100 | 100 | 100 | 63 | 81 | 46 | 18 | 18 | 41 |
| 70\% | 84 | 100 | 100 | 100 | 100 | 100 | 48 | 38 | 30 | 16 | 16 | 36 |
| 80\% | 79 | 100 | 100 | 100 | 100 | 100 | 36 | 18 | 24 | 11 | 10 | 27 |
| 90\% | 70 | 88 | 100 | 100 | 100 | 100 | 20 | 0 | 13 | 0 | 0 | 20 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 90 | 98 | 99 | 100 | 99 | 96 | 70 | 69 | 65 | 32 | 21 | 44 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 94 | 100 | 100 | 100 | 96 | 98 | 89 | 90 | 77 | 62 | 26 | 45 |
| Above Normal (24\%) | 93 | 98 | 100 | 100 | 100 | 100 | 93 | 100 | 88 | 30 | 19 | 50 |
| Below Normal (10\%) | 90 | 100 | 91 | 100 | 100 | 100 | 57 | 69 | 61 | 20 | 16 | 49 |
| Dry (16\%) | 81 | 96 | 100 | 100 | 100 | 97 | 62 | 44 | 54 | 14 | 18 | 37 |
| Critical (27\%) | 90 | 92 | 100 | 100 | 99 | 79 | 27 | 27 | 37 | 13 | 23 | 44 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 94\% | 26\% | -3\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 33\% | 21\% | 7\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 37\% | 13\% | 2\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 17\% | 12\% | 0\% |
| 50\% | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -19\% | 0\% | 74\% | 1\% | 9\% | 0\% |
| 60\% | 6\% | 0\% | 0\% | 0\% | 0\% | 0\% | -23\% | -16\% | 8\% | -2\% | 11\% | -3\% |
| 70\% | -4\% | 0\% | 0\% | 0\% | 0\% | 0\% | -29\% | 32\% | 8\% | 3\% | 29\% | -6\% |
| 80\% | 3\% | 10\% | 0\% | 0\% | 0\% | 0\% | -18\% | -4\% | 11\% | -2\% | 8\% | -18\% |
| 90\% | 5\% | 8\% | 0\% | 0\% | 0\% | 0\% | -42\% | -95\% | -12\% | -91\% | -97\% | -23\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 1\% | 2\% | -1\% | 0\% | 3\% | 0\% | -10\% | 1\% | 7\% | 25\% | 8\% | -6\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | -7\% | -3\% | 53\% | 24\% | 4\% |
| Above Normal (24\%) | 3\% | 3\% | 0\% | 0\% | 0\% | 0\% | -2\% | 0\% | 35\% | 37\% | 8\% | -1\% |
| Below Normal (10\%) | 7\% | 2\% | -9\% | 0\% | 3\% | 0\% | -23\% | 15\% | 16\% | -10\% | -3\% | 0\% |
| Dry (16\%) | -4\% | 4\% | 0\% | 0\% | 5\% | 0\% | -20\% | 0\% | 7\% | 1\% | 19\% | -16\% |
| Critical (27\%) | -2\% | 3\% | 0\% | 1\% | 8\% | -4\% | -30\% | 51\% | -8\% | -40\% | -19\% | -22\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.22.4 New Melones Small Mouth Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 51 | 30 | 68 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 26 | 54 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 26 | 22 | 50 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 23 | 21 | 48 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 57 | 21 | 19 | 46 |
| 60\% | 92 | 100 | 100 | 100 | 100 | 100 | 82 | 96 | 43 | 18 | 16 | 42 |
| 70\% | 87 | 100 | 100 | 100 | 100 | 100 | 68 | 28 | 28 | 15 | 12 | 38 |
| 80\% | 76 | 91 | 100 | 100 | 100 | 100 | 44 | 19 | 22 | 11 | 9 | 33 |
| 90\% | 67 | 82 | 100 | 100 | 100 | 100 | 35 | 8 | 14 | 5 | 6 | 26 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 89 | 95 | 100 | 100 | 96 | 96 | 77 | 68 | 61 | 26 | 19 | 47 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 93 | 100 | 100 | 100 | 96 | 97 | 88 | 98 | 79 | 41 | 21 | 43 |
| Above Normal (24\%) | 91 | 95 | 100 | 100 | 100 | 100 | 94 | 100 | 65 | 22 | 18 | 51 |
| Below Normal (10\%) | 84 | 98 | 100 | 100 | 97 | 100 | 73 | 61 | 53 | 22 | 17 | 49 |
| Dry (16\%) | 84 | 92 | 100 | 100 | 95 | 97 | 78 | 44 | 50 | 14 | 15 | 44 |
| Critical (27\%) | 92 | 90 | 100 | 99 | 92 | 82 | 39 | 18 | 40 | 22 | 29 | 56 |

Alternative 5

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 63 | 31 | 88 |
| 20\% | 87 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 36 | 21 | 53 |
| 30\% | 74 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 26 | 19 | 48 |
| 40\% | 63 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 20 | 17 | 47 |
| 50\% | 58 | 100 | 100 | 100 | 100 | 100 | 60 | 100 | 100 | 18 | 17 | 42 |
| 60\% | 48 | 100 | 100 | 100 | 100 | 100 | 37 | 51 | 66 | 14 | 15 | 37 |
| 70\% | 43 | 100 | 100 | 100 | 100 | 100 | 21 | 25 | 37 | 11 | 10 | 34 |
| 80\% | 39 | 100 | 100 | 100 | 100 | 100 | 9 | 2 | 22 | 5 | 6 | 30 |
| 90\% | 30 | 100 | 100 | 100 | 100 | 80 | 0 | 0 | 7 | 0 | 1 | 12 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 59 | 99 | 100 | 100 | 98 | 94 | 57 | 62 | 67 | 25 | 20 | 44 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 61 | 100 | 100 | 100 | 96 | 95 | 84 | 90 | 94 | 36 | 17 | 40 |
| Above Normal (24\%) | 65 | 98 | 100 | 100 | 100 | 100 | 76 | 93 | 58 | 18 | 15 | 46 |
| Below Normal (10\%) | 51 | 100 | 100 | 100 | 97 | 94 | 47 | 56 | 57 | 16 | 12 | 39 |
| Dry (16\%) | 52 | 97 | 100 | 100 | 100 | 97 | 43 | 36 | 49 | 9 | 12 | 39 |
| Critical (27\%) | 68 | 98 | 100 | 100 | 98 | 81 | 13 | 19 | 58 | 43 | 50 | 63 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 22\% | 5\% | 29\% |
| 20\% | -13\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -20\% | -3\% |
| 30\% | -26\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | -15\% | -4\% |
| 40\% | -37\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -12\% | -16\% | -2\% |
| 50\% | -42\% | 0\% | 0\% | 0\% | 0\% | 0\% | -40\% | 0\% | 74\% | -16\% | -11\% | -8\% |
| 60\% | -47\% | 0\% | 0\% | 0\% | 0\% | 0\% | -56\% | -48\% | 54\% | -22\% | -7\% | -11\% |
| 70\% | -51\% | 0\% | 0\% | 0\% | 0\% | 0\% | -69\% | -11\% | 32\% | -28\% | -17\% | -12\% |
| 80\% | -49\% | 10\% | 0\% | 0\% | 0\% | 0\% | -79\% | -88\% | 0\% | -54\% | -40\% | -9\% |
| 90\% | -56\% | 22\% | 0\% | 0\% | 0\% | -20\% | -100\% | -100\% | -51\% | -96\% | -78\% | -55\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -34\% | 3\% | 0\% | 0\% | 2\% | -2\% | -26\% | -9\% | 11\% | -3\% | 0\% | -7\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -34\% | 0\% | 0\% | 0\% | 0\% | -3\% | -5\% | -7\% | 19\% | -10\% | -19\% | -7\% |
| Above Normal (24\%) | -28\% | 2\% | 0\% | 0\% | 0\% | 0\% | -19\% | -7\% | -11\% | -16\% | -13\% | -9\% |
| Below Normal (10\%) | -39\% | 2\% | 0\% | 0\% | 0\% | -6\% | -37\% | -7\% | 8\% | -28\% | -25\% | -21\% |
| Dry (16\%) | -39\% | 5\% | 0\% | 0\% | 5\% | 0\% | -45\% | -19\% | -3\% | -34\% | -22\% | -11\% |
| Critical (27\%) | -26\% | 10\% | 0\% | 1\% | 6\% | -1\% | -67\% | 5\% | 45\% | 92\% | 72\% | 12\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82-year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

5C.3.3.23 New Melones Spotted Bass Nest Survival Percentage

Table 5C.3.3.23.1 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

No Action Alternative

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 91 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 85 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 85 | 81 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 78 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 76 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 91 | 88 | 64 | 66 | 100 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 68 | 69 | 71 | 51 | 55 | 97 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 94 | 100 | 100 | 100 | 99 | 99 | 90 | 91 | 91 | 77 | 76 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88 | 100 | 100 | 100 | 98 | 96 | 88 | 100 | 96 | 84 | 79 | 96 |
| Above Normal (24\%) | 99 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 99 | 77 | 78 | 100 |
| Below Normal (10\%) | 91 | 100 | 100 | 100 | 100 | 100 | 90 | 90 | 94 | 80 | 77 | 99 |
| Dry (16\%) | 97 | 100 | 100 | 100 | 100 | 100 | 97 | 92 | 89 | 69 | 72 | 99 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 100 | 100 | 73 | 62 | 72 | 75 | 75 | 94 |

## Alternative 1

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 86 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 83 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 79 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 75 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 95 | 74 | 69 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 85 | 66 | 63 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 62 | 72 | 57 | 57 | 93 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 98 | 100 | 98 | 89 | 92 | 80 | 77 | 98 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 99 | 93 | 83 | 96 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 78 | 77 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 90 | 92 | 84 | 76 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 87 | 90 | 71 | 73 | 99 |
| Critical (27\%) | 98 | 100 | 100 | 100 | 100 | 100 | 87 | 56 | 78 | 62 | 71 | 96 |

Alternative 1 minus No Action Alternative

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 1\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 2\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 1\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 5\% | -1\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -4\% | -5\% | 9\% | -5\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 15\% | -12\% | -4\% | 4\% | -4\% | 0\% |
| 90\% | 11\% | 0\% | 0\% | 0\% | 0\% | 0\% | 48\% | -10\% | 2\% | 10\% | 4\% | -5\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 6\% | 0\% | 0\% | 0\% | -1\% | 1\% | 9\% | -2\% | 1\% | 3\% | 1\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 13\% | 0\% | 0\% | 0\% | -1\% | 4\% | 13\% | 0\% | 3\% | 11\% | 6\% | 0\% |
| Above Normal (24\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 0\% | -3\% | 1\% | -1\% | 0\% |
| Below Normal (10\%) | 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 11\% | -1\% | -2\% | 5\% | -1\% | 0\% |
| Dry (16\%) | 3\% | 0\% | 0\% | 0\% | -3\% | 0\% | 3\% | -5\% | 1\% | 3\% | 1\% | 0\% |
| Critical (27\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | 20\% | -10\% | 9\% | -17\% | -4\% | 2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.23.2 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 86 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 83 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 79 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 75 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 95 | 74 | 69 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 85 | 66 | 63 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 62 | 72 | 57 | 57 | 93 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 98 | 100 | 98 | 89 | 92 | 80 | 77 | 98 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 99 | 93 | 83 | 96 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 78 | 77 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 90 | 92 | 84 | 76 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 87 | 90 | 71 | 73 | 99 |
| Critical (27\%) | 98 | 100 | 100 | 100 | 100 | 100 | 87 | 56 | 78 | 62 | 71 | 96 |

## No Action Alternative

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 91 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 85 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 85 | 81 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 81 | 78 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | 76 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 68 | 73 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 91 | 88 | 64 | 66 | 100 |
| 90\% | 90 | 100 | 100 | 100 | 100 | 100 | 68 | 69 | 71 | 51 | 55 | 97 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 94 | 100 | 100 | 100 | 99 | 99 | 90 | 91 | 91 | 77 | 76 | 97 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 88 | 100 | 100 | 100 | 98 | 96 | 88 | 100 | 96 | 84 | 79 | 96 |
| Above Normal (24\%) | 99 | 100 | 100 | 100 | 100 | 100 | 98 | 100 | 99 | 77 | 78 | 100 |
| Below Normal (10\%) | 91 | 100 | 100 | 100 | 100 | 100 | 90 | 90 | 94 | 80 | 77 | 99 |
| Dry (16\%) | 97 | 100 | 100 | 100 | 100 | 100 | 97 | 92 | 89 | 69 | 72 | 99 |
| Critical (27\%) | 99 | 100 | 100 | 100 | 100 | 100 | 73 | 62 | 72 | 75 | 75 | 94 |

No Action Alternative minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 1\% | -1\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -2\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | -1\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -5\% | 2\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 4\% | 5\% | -8\% | 5\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -13\% | 14\% | 4\% | -3\% | 5\% | 0\% |
| 90\% | -10\% | 0\% | 0\% | 0\% | 0\% | 0\% | -32\% | 11\% | -2\% | -9\% | -4\% | 5\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -6\% | 0\% | 0\% | 0\% | 1\% | -1\% | -8\% | 2\% | -1\% | -3\% | -1\% | 0\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -12\% | 0\% | 0\% | 0\% | 1\% | -4\% | -12\% | 0\% | -3\% | -10\% | -5\% | 0\% |
| Above Normal (24\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -2\% | 0\% | 3\% | -1\% | 1\% | 0\% |
| Below Normal (10\%) | -9\% | 0\% | 0\% | 0\% | 0\% | 0\% | -10\% | 1\% | 2\% | -5\% | 1\% | 0\% |
| Dry (16\%) | -3\% | 0\% | 0\% | 0\% | 3\% | 0\% | -3\% | 5\% | -1\% | -3\% | -1\% | 0\% |
| Critical (27\%) | 1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -17\% | 11\% | -8\% | 21\% | 5\% | -2\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.23.3 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 86 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 83 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 79 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 75 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 95 | 74 | 69 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 85 | 66 | 63 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 62 | 72 | 57 | 57 | 93 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 98 | 100 | 98 | 89 | 92 | 80 | 77 | 98 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 99 | 93 | 83 | 96 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 78 | 77 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 90 | 92 | 84 | 76 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 87 | 90 | 71 | 73 | 99 |
| Critical (27\%) | 98 | 100 | 100 | 100 | 100 | 100 | 87 | 56 | 78 | 62 | 71 | 96 |

Alternative 3

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 91 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 94 | 87 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 82 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 78 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 75 | 75 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 88 | 66 | 65 | 94 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 82 | 38 | 69 | 48 | 38 | 82 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 99 | 100 | 99 | 99 | 94 | 86 | 88 | 78 | 75 | 91 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 98 | 100 | 100 | 92 | 77 | 98 | 87 | 98 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 80 | 68 | 92 |
| Below Normal (10\%) | 100 | 100 | 91 | 100 | 100 | 100 | 90 | 95 | 97 | 69 | 66 | 98 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 73 | 93 | 67 | 74 | 79 |
| Critical (27\%) | 100 | 100 | 100 | 100 | 100 | 92 | 79 | 71 | 83 | 63 | 70 | 89 |

Alternative 3 minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 9\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 6\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 8\% | 5\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 3\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 4\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 4\% | 3\% | 1\% | 9\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | 5\% | 0\% | 2\% | -6\% |
| 90\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -18\% | -39\% | -4\% | -14\% | -34\% | -11\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 0\% | 0\% | -1\% | 0\% | 1\% | -1\% | -4\% | -3\% | -5\% | -2\% | -2\% | -7\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 0\% | 0\% | 0\% | 0\% | 1\% | 0\% | 0\% | -8\% | -22\% | 5\% | 5\% | 3\% |
| Above Normal (24\%) | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 3\% | 3\% | -13\% | -8\% |
| Below Normal (10\%) | 0\% | 0\% | -9\% | 0\% | 0\% | 0\% | -10\% | 6\% | 5\% | -18\% | -12\% | -1\% |
| Dry (16\%) | 0\% | 0\% | 0\% | 0\% | 3\% | 0\% | -7\% | -15\% | 4\% | -6\% | 2\% | -21\% |
| Critical (27\%) | 2\% | 0\% | 0\% | 0\% | 0\% | -8\% | -10\% | 26\% | 5\% | 1\% | -3\% | -7\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.23.4 New Melones Spotted Bass Nest Survival Percentage, Monthly Percentage

Second Basis of Comparison

|  | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Statistic | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 98 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 93 | 86 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 87 | 83 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 79 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 79 | 75 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 95 | 74 | 69 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 80 | 85 | 66 | 63 | 100 |
| 90\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 62 | 72 | 57 | 57 | 93 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 100 | 100 | 100 | 100 | 98 | 100 | 98 | 89 | 92 | 80 | 77 | 98 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 100 | 99 | 93 | 83 | 96 |
| Above Normal (24\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 96 | 78 | 77 | 100 |
| Below Normal (10\%) | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 90 | 92 | 84 | 76 | 99 |
| Dry (16\%) | 100 | 100 | 100 | 100 | 97 | 100 | 100 | 87 | 90 | 71 | 73 | 99 |
| Critical (27\%) | 98 | 100 | 100 | 100 | 100 | 100 | 87 | 56 | 78 | 62 | 71 | 96 |

Alternative 5

| Statistic | Monthly Percentage (Percent Survival) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 99 | 100 |
| 20\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 83 | 100 |
| 30\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 92 | 80 | 100 |
| 40\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 82 | 77 | 100 |
| 50\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 78 | 76 | 100 |
| 60\% | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 72 | 73 | 100 |
| 70\% | 100 | 100 | 100 | 100 | 100 | 100 | 84 | 91 | 100 | 67 | 65 | 100 |
| 80\% | 100 | 100 | 100 | 100 | 100 | 100 | 63 | 52 | 84 | 56 | 57 | 99 |
| 90\% | 98 | 100 | 100 | 100 | 100 | 100 | 27 | 9 | 60 | 33 | 50 | 68 |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | 96 | 100 | 100 | 100 | 99 | 100 | 81 | 80 | 88 | 72 | 71 | 91 |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | 99 | 100 | 100 | 100 | 97 | 99 | 99 | 100 | 100 | 90 | 76 | 94 |
| Above Normal (24\%) | 99 | 100 | 100 | 100 | 100 | 100 | 90 | 100 | 76 | 66 | 74 | 92 |
| Below Normal (10\%) | 87 | 100 | 100 | 100 | 100 | 100 | 78 | 74 | 92 | 65 | 65 | 79 |
| Dry (16\%) | 93 | 100 | 100 | 100 | 100 | 100 | 78 | 71 | 85 | 56 | 59 | 93 |
| Critical (27\%) | 97 | 100 | 100 | 100 | 100 | 100 | 38 | 38 | 80 | 73 | 80 | 92 |

Alternative 5 minus Second Basis of Comparison

| Statistic | Monthly Percentage (Percent Change) |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
| Probability of Exceedance ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 2\% | 0\% |
| 20\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -9\% | 0\% |
| 30\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -1\% | -7\% | 0\% |
| 40\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -6\% | -7\% | 0\% |
| 50\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -7\% | -4\% | 0\% |
| 60\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -9\% | -3\% | 0\% |
| 70\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -16\% | -5\% | 5\% | -10\% | -5\% | 0\% |
| 80\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | -37\% | -35\% | 0\% | -15\% | -10\% | -1\% |
| 90\% | -2\% | 0\% | 0\% | 0\% | 0\% | 0\% | -73\% | -85\% | -17\% | -41\% | -13\% | -27\% |
| Long Term |  |  |  |  |  |  |  |  |  |  |  |  |
| Full Simulation Period ${ }^{\text {b }}$ | -4\% | 0\% | 0\% | 0\% | 1\% | 0\% | -18\% | -10\% | -4\% | -9\% | -8\% | -7\% |
| Water Year Types ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Wet (23\%) | -1\% | 0\% | 0\% | 0\% | -1\% | -1\% | -1\% | 0\% | 1\% | -3\% | -8\% | -1\% |
| Above Normal (24\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -10\% | 0\% | -21\% | -16\% | -5\% | -8\% |
| Below Normal (10\%) | -13\% | 0\% | 0\% | 0\% | 0\% | 0\% | -22\% | -18\% | -1\% | -22\% | -15\% | -20\% |
| Dry (16\%) | -7\% | 0\% | 0\% | 0\% | 3\% | 0\% | -22\% | -18\% | -6\% | -21\% | -18\% | -6\% |
| Critical (27\%) | -1\% | 0\% | 0\% | 0\% | 0\% | 0\% | -57\% | -31\% | 2\% | 18\% | 13\% | -4\% |

a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
b Based on the 82 -year simulation period.
c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

Table 5C.3.3.24 Temperature Threshold Exceedances

| Species | Lifestage | River | Reach | Water Year Type | Month | Temperature Objective (Degree F) | Temperature Objective Reference ${ }^{1}$ | No Action <br> Alternative | Second Basis of Comparison (Alternative 1) | Alternative 3 | Alternative 5 | Alternative 1 minus No Action Alternative | No Action Alternative minus Second Basis of Comparison | Alternative 3 minus Second Basis of Comparison | Alternative 5 minus Second Basis of Comparison |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Steelhead | Adult Migration | Stanislaus | Orange Blossom Bridge | All | October | 56 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 57\% | 85\% | 87\% | 58\% | 28\% | -28\% | 2\% | -27\% |
| Steelhead | Adult Migration | Stanislaus | Orange Blossom Bridge | All | November | 56 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 33\% | 28\% | 24\% | 36\% | -5\% | 5\% | -4\% | 8\% |
| Steelhead | Adult Migration | Stanislaus | Orange Blossom Bridge | All | December | 56 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 3\% | 0\% | 0\% | 0\% | 3\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | January | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 2\% | 2\% | 2\% | 2\% | -2\% | 0\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | February | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 2\% | 2\% | 0\% | 2\% | -2\% | 0\% | -2\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | March | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 8\% | 9\% | 12\% | 8\% | 1\% | -1\% | 3\% | -1\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | April | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 33\% | 31\% | 30\% | 37\% | -2\% | 2\% | -1\% | 6\% |
| Steelhead | Smoltification | Stanislaus | Knights Ferry (*Used Below Goodwin Dam) | All | May | 52 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 63\% | 66\% | 63\% | 68\% | 3\% | -3\% | -3\% | 2\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | January | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | February | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | March | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | April | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 2\% | 8\% | 3\% | 0\% | 6\% | -6\% | -4\% | -8\% |
| Steelhead | Smoltification | Stanislaus | Orange Blossom Bridge | All | May | 57 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 18\% | 10\% | 17\% | 8\% | -8\% | 8\% | 7\% | -3\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | January | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | February | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 1\% | 0\% | 0\% | 0\% | 1\% | 0\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | March | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 21\% | 16\% | 25\% | 21\% | -5\% | 5\% | 8\% | 4\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | April | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 16\% | 34\% | 17\% | 7\% | 17\% | -17\% | -16\% | -26\% |
| Steelhead | Spawning | Stanislaus | Orange Blossom Bridge | All | May | 55 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 49\% | 43\% | 53\% | 40\% | -5\% | 5\% | 10\% | -3\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | June | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 6\% | 2\% | 4\% | 6\% | -3\% | 3\% | 2\% | 3\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | July | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 16\% | 16\% | 19\% | 21\% | -1\% | 1\% | 4\% | 6\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | August | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 15\% | 13\% | 9\% | 21\% | -2\% | 2\% | -4\% | 8\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | September | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 11\% | 10\% | 7\% | 18\% | 0\% | 0\% | -3\% | 8\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | October | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 7\% | 8\% | 4\% | 11\% | 1\% | -1\% | -4\% | 3\% |
| Steelhead | Rearing | Stanislaus | Orange Blossom Bridge | All | November | 65 | $\begin{gathered} \text { NMFS BiOp } \\ 2009 \end{gathered}$ | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% | 0\% |
| ${ }^{1}$ See Append | dix 9N, Section C for | the full refe | nce |  |  |  |  |  |  |  |  |  |  |  |  |

Table 5C.3.3.25 CVP Annual Power Generation Summary

|  |  |  |  | No Action Alternative | Second Basis of Comparison (Alternative 1) | Alternative 3 | Alternative 5 | Alternative 1 vs. No Action <br> Altenative <br> (Percent <br> Difference) | No Action Alternative vs. Second Basis of Comparison (Percent Difference) | Alternative 3 <br> vs. Second <br> Basis of Comparison <br> (Percent <br> Difference) | Alternative 5 vs. Second Basis of Comparison (Percent Difference) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| CVP Generation Facilities |  |  |  |  |  |  |  |  |  |  |  |
| Capacity | At load center | (MW) | Long Term Dry and Critical | $\begin{aligned} & 1,583 \\ & 1,203 \end{aligned}$ | $\begin{aligned} & 1,633 \\ & 1,277 \end{aligned}$ | $\begin{aligned} & 1,642 \\ & 1,291 \end{aligned}$ | $\begin{aligned} & 1,568 \\ & 1,173 \end{aligned}$ | $\begin{aligned} & 3 \% \\ & 6 \% \end{aligned}$ | -3\% | 1\% | $-4 \%$ <br> $-8 \%$ |
| Energy Generation | Total of all Facilities at load center | (GWh) | Long Term <br> Dry and Critical | $\begin{aligned} & 4,558 \\ & 2,696 \end{aligned}$ | $\begin{aligned} & \hline \text { 4,604 } \\ & 2,773 \end{aligned}$ | $\begin{aligned} & 4,582 \\ & 2,798 \end{aligned}$ | $\begin{aligned} & 4,552 \\ & 2,684 \end{aligned}$ | $\begin{aligned} & 1 \% \\ & 3 \% \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline-1 \% \\ & -3 \% \\ & \hline \end{aligned}$ | $0 \%$ $1 \%$ | $-1 \%$ $-3 \%$ |
| CVP Pumping Facilities |  |  |  |  |  |  |  |  |  |  |  |
| Energy Use | Total of all Facilities at load center | (GWh) | Long Term <br> Dry and Critical | $\begin{gathered} 1,113 \\ 699 \end{gathered}$ | $\begin{gathered} 1,289 \\ 773 \end{gathered}$ | $\begin{gathered} 1,238 \\ 715 \end{gathered}$ | $\begin{gathered} 1,110 \\ 699 \end{gathered}$ | $\begin{aligned} & 16 \% \\ & 11 \% \end{aligned}$ | $\begin{aligned} & -14 \% \\ & -10 \% \end{aligned}$ | $-4 \%$ $-8 \%$ | $-14 \%$ $-10 \%$ |
| All CVP Facilities |  |  |  |  |  |  |  |  |  |  |  |
| Net Generation | Total of all Facilities | (GWh) | Long Term <br> Dry and Critical | $\begin{aligned} & 3,445 \\ & 1,997 \end{aligned}$ | $\begin{aligned} & 3,315 \\ & 2,000 \end{aligned}$ | $\begin{aligned} & 3,344 \\ & 2,084 \end{aligned}$ | $\begin{aligned} & 3,442 \\ & 1,986 \end{aligned}$ | -4\% | 4\% | 1\% | $\begin{array}{r}4 \% \\ -1 \% \\ \hline\end{array}$ |


 Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences are discussed in text. 5) Model results for Alternative 2 and No Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences are discussed in text.

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[^0]:    a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
    b Based on the 82-year simulation period.
    c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
    Notes: 1) All altermatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same,
    therefore Second Basis of Comparison and Alternative 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and No Action Alternative are the same, therefore Altemative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

[^1]:    a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
    b Based on the 82-year simulation period.
    c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
    Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

[^2]:    a Exceedance probability is defined as the probability a given value will be exceeded in any one year.

[^3]:    a Exceedance probability is defined as the probability a given value will be exceeded in any one year.
    b Based on the 82-year simulation period.
    c As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999); projected to Year 2030.
    Notes: 1) All alternatives are simulated with projected hydrology and sea level at Year 2030 conditions. 2) Model results for Alternatives 1,4 , and Second Basis of Comparison are the same, therefore Alternative 1 and 4 results are not presented. Qualitative differences, if applicable, are discussed in text. 3) Model results for Alternative 2 and $N o$ Action Alternative are the same, therefore Alternative 2 results are not presented. Qualitative differences, if applicable, are discussed in text.

