Surface Water Resources and Water Supply Figures

The following figures are included in Chapter 5, Surface Water Resources and Water Supply.

- 5.1 California Precipitation Trends
- 5.2 California Major Water Supply Facilities
- 5.3 Northern California Major Water Supply Facilities
- 5.4 San Joaquin Valley and Tulare Lake Major Water Supply Facilities
- 5.5 San Francisco Bay Area Major Water Supply Facilities
- 5.6 Central Coast and Southern California Major Water Supply Facilities
- 5.7 Historical Water Years 2001-2012 Trinity Lake Storage
- 5.8 Historical Water Year 2001 – 2012 Trinity Lake Elevation
- 5.9 Historical Water Year 2001 – 2012 Lewiston Reservoir Storage
- 5.10 Historical Water Year 2001 – 2012 Lewiston Reservoir Elevation
- 5.11 Historical Water Year 2003 – 2012 Trinity River Mean Daily Flows at Douglas City
- 5.12 Historical Water Year 2005 – 2012 Klamath River Mean Daily Flows at Klamath
- 5.13 Historical Water Year 2001 – 2012 Whiskeytown Lake Storage
- 5.14 Historical Water Year 2001 – 2012 Whiskeytown Lake Elevation
- 5.15 Historical Water Year 2001 – 2012 Clear Creek Mean Daily Flows at Igo
- 5.16 Historical Water Year 2001 – 2012 Shasta Lake Storage
- 5.17 Historical Water Year 2001 – 2012 Shasta Lake Elevation
- 5.18 Historical Water Year 2001 – 2012 Keswick Reservoir Storage
- 5.19 Historical Water Year 2001 – 2012 Keswick Reservoir Elevation
- 5.20 Historical Water Year 2001 – 2012 Sacramento River Mean Daily Flows at Bend Bridge
- 5.21 Historical Water Year 2001 – 2012 Sacramento River Mean Daily Flows at Vina Bridge
- 5.22 Historical Water Year 2001 – 2012 Sacramento River Mean Daily Flows at Hamilton City
Chapter 5: Surface Water Resources and Water Supply Figures

1. 5.23 Historical Water Year 2001 – 2012 Sacramento River Mean Daily Flows at Wilkins Slough
2. 5.24 Historical Water Year 2001 – 2012 Sacramento River Mean Daily Flows at Verona
3. 5.25 Historical Water Year 2001 – 2012 Sacramento River Mean Daily Flows at Freeport
4. 5.26 Historical Water Year 2001 – 2012 Flows into Yolo Bypass over Fremont Weir
5. 5.27 Historical Water Year 2001 – 2012 Lake Oroville Storage
6. 5.28 Historical Water Year 2001 – 2012 Lake Oroville Elevation
7. 5.29 Historical Water Year 2001 – 2012 Thermalito Reservoir Storage
8. 5.30 Historical Water Year 2008 – 2012 Thermalito Reservoir Elevation
9. 5.31 Historical Water Year 2001 – 2012 Feather River Mean Daily Flows near Gridley
10. 5.32 Historical Water Year 2001 – 2012 Folsom Lake Storage
11. 5.33 Historical Water Year 2001 – 2012 Folsom Lake Elevation
12. 5.34 Historical Water Year 2001 – 2012 Lake Natoma Storage
13. 5.35 Historical Water Year 2001 – 2012 Lake Natoma Elevation
14. 5.36 Historical Water Year 2001 – 2012 American River Mean Daily Flows at Fair Oaks
15. 5.37 Historical Water Year 2001 – 2012 San Joaquin River Mean Daily Flows at Mendota
16. 5.38 Historical Water Year 2001 – 2012 San Joaquin River Mean Daily Flows at Vernalis
17. 5.39 Historical Water Year 2001 – 2012 New Melones Reservoir Storage
18. 5.40 Historical Water Year 2001 – 2012 New Melones Reservoir Elevation
19. 5.41 Historical Water Year 2001 – 2012 Goodwin Reservoir Storage
20. 5.42 Historical Water Year 2001 – 2012 Goodwin Reservoir Elevation
21. 5.43 Historical Water Year 2001 – 2012 Stanislaus River Mean Daily Flows at Orange Blossom Bridge
22. 5.44 Historical Water Year 2001 – 2012 San Luis Reservoir Storage
23. 5.45 Historical Water Year 2001 – 2012 San Luis Reservoir Elevation
24. 5.46 Historical Water Year 2001 – 2012 Delta Outflow Mean Daily Flows
• 5.47 Historical Water Year 2001 – 2012 Jones Pumping Plant Mean Daily Flows
• 5.48 Historical Water Year 2001 – 2012 Banks Pumping Plant Mean Daily Flows
• 5.49 Historical Water Year 2008 – 2012 Barker Slough Pumping Plant Mean Daily Flows
• 5.50 Historical Water Year 2008 – 2012 Contra Costa Canal Rock Slough Intake Mean Daily Flows
• 5.51 Historical Water Year 2008 – 2012 Contra Costa Water District Old River Intake Mean Daily Flows
• 5.52 Historical Water Year 2010 – 2012 Contra Costa Water District Middle River Intake Mean Daily Flows
• 5.53 Trinity River below Lewiston Reservoir, Long-Term Average Flow
• 5.54 Trinity River below Lewiston Reservoir, Wet Year, Long-Term Average Flow
• 5.55 Trinity River below Lewiston Reservoir, Dry Year Long-Term Average Flow
• 5.56 Sacramento River downstream of Keswick Reservoir, Long-Term Average Flow
• 5.57 Sacramento River downstream of Keswick Reservoir, Wet Year Long-Term Average Flow
• 5.58 Sacramento River downstream of Keswick Reservoir, Dry Year Long-Term Average Flow
• 5.59 Sacramento River at Freeport, Long-Term Average Flow
• 5.60 Sacramento River at Freeport, Wet Year Long-Term Average Flow
• 5.61 Sacramento River at Freeport, Dry Year Long-Term Average Flow
• 5.62 Feather River downstream of Thermalito, Long-Term Average Flow
• 5.63 Feather River downstream of Thermalito, Wet Year Long-Term Average Flow
• 5.64 Feather River downstream of Thermalito, Dry Year Long-Term Average Flow
• 5.65 American River downstream of Nimbus Dam, Long-Term Average Flow
• 5.66 American River downstream of Nimbus Dam, Wet Year Long-Term Average Flow
• 5.67 American River downstream of Nimbus Dam, Dry Year Long-Term Average Flow
Chapter 5: Surface Water Resources and Water Supply Figures

1. 5.68 Stanislaus River below Goodwin, Long-Term Average Flow
2. 5.69 Stanislaus River below Goodwin, Wet Year Long-Term Average Flow
3. 5.70 Stanislaus River below Goodwin, Dry Year Long-Term Average Flow
4. 5.71 San Joaquin River at Vernalis, Long-Term Average Flow
5. 5.72 San Joaquin River at Vernalis, Wet Year Long-Term Average Flow
6. 5.73 San Joaquin River at Vernalis, Dry Year Long-Term Average Flow
7. 5.74 Sacramento/San Joaquin River Delta Outflow, Long-Term Average Flow
8. 5.75 Sacramento/San Joaquin River Delta Outflow, Wet Year Long-Term Average Flow
9. 5.76 Sacramento/San Joaquin River Delta Outflow, Dry Year Long-Term Average Flow
10. 5.77 Old and Middle River, Long-Term Average Flow
11. 5.78 Old and Middle River, Wet Year Long-Term Average Flow
12. 5.79 Old and Middle River, Dry Year Long-Term Average Flow
Figure 5.1 California Precipitation Trends
5.2 California Major Water Supply Facilities
5.3 Northern California Major Water Supply Facilities
5.4 San Joaquin Valley and Tulare Lake Major Water Supply Facilities
5.5 San Francisco Bay Area Major Water Supply Facilities
5.6 Central Coast and Southern California Major Water Supply Facilities
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.7 Historical Water Years 2001-2012 Trinity Lake Storage

Figure 5.8 Historical Water Years 2001-2012 Trinity Lake Elevation

1 The minimum storage line of 240,000 AF was taken from CalSim II. The maximum storage line of 2,448,000 AF was taken from the California Data Exchange Center website http://cdec.water.ca.gov/misc/resinfo.html.

2 The minimum elevation line of 1995 ft was taken from Reclamation’s website http://www.usbr.gov/projects/Facility.jsp?fac_Name=Trinity+Dam&groupName=Dimensions. The maximum elevation line of 2,370 ft was provided by Reclamation.
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.9 Historical Water Years 2001-2012 Lewiston Reservoir Storage

Figure 5.10 Historical Water Years 2001-2012 Lewiston Reservoir Elevation
Figure 5.11 Historical Water Years 2003-2012 Trinity River Mean Daily Flows at Douglas City

Figure 5.12 Historical Water Years 2005-2012 Klamath River Mean Daily Flows at Klamath
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.13 Historical Water Years 2001-2012 Whiskeytown Lake Storage

Figure 5.14 Historical Water Years 2001-2012 Whiskeytown Lake Elevation

---

3 The minimum storage line of 180,000 AF was taken from CalSim II. The maximum storage line of 241,000 AF was taken from the California Data Exchange Center website http://cdec.water.ca.gov/misc/resinfo.html.

4 The minimum elevation line of 1190 ft was taken from CalSim II. The maximum elevation line of 1,210 ft was provided by Reclamation.
Figure 5.15 Historical Water Years 2001-2012 Clear Creek Mean Daily Flows at Igo

Figure 5.16 Historical Water Years 2001-2012 Shasta Lake Storage

The minimum storage line of 550,000 AF was taken from CalSim II. The maximum storage line of 4,552,000 AF was taken from the California Data Exchange Center website http://cdec.water.ca.gov/misc/resinfo.html.
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.17 Historical Water Years 2001-2012 Shasta Lake Elevation

Figure 5.18 Historical Water Year 2001 - 2012 Keswick Reservoir Storage

6 The minimum elevation line of 834 ft was taken from CalSim II. The maximum elevation line of 1,067 ft was provided by Reclamation.
Figure 5.19 Historical Water Year 2001 - 2012 Keswick Reservoir Elevation

Figure 5.20 Historical Water Year 2001 - 2012 Sacramento River Mean Daily Flows at Bend Bridge
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.21 Historical Water Year 2001 - 2012 Sacramento River Mean Daily Flows at Vina Bridge

Figure 5.22 Historical Water Year 2001 - 2012 Sacramento River Mean Daily Flows at Hamilton City
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.23 Historical Water Year 2001 - 2012 Sacramento River Mean Daily Flows at Wilkins Slough

Figure 5.24 Historical Water Year 2001 - 2012 Sacramento River Mean Daily Flows at Verona
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.25 Historical Water Year 2001 - 2012 Sacramento River Mean Daily Flows at Freeport

Figure 5.26 Historical Water Year 2001 - 2012 Flows into Yolo Bypass over Fremont Weir
Figure 5.27 Historical Water Year 2001 - 2012 Lake Oroville Storage

Figure 5.28 Historical Water Year 2001 - 2012 Lake Oroville Elevation

7 The minimum storage line of 30,000 AF was taken from CalSim II. The maximum storage line of 3,537,577 AF was taken from the California Data Exchange Center website http://cdec.water.ca.gov/misc/resinfo.html.

8 The minimum elevation line of 340 ft was taken from CalSim II. The maximum elevation line of 900 ft was provided by Reclamation. Erroneous data on 7/9/2005 was deleted.
Figure 5.29 Historical Water Year 2001 - 2012 Thermalito Reservoir Storage

Figure 5.30 Historical Water Year 2008 - 2012 Thermalito Reservoir Elevation
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.31 Historical Water Year 2001 - 2012 Feather River Mean Daily Flows near Gridley

Figure 5.32 Historical Water Year 2001 - 2012 Folsom Lake Storage

The minimum storage line of 90,000 AF was taken from CalSim II. The maximum storage line of 977,000 AF was taken from the California Data Exchange Center website http://cdec.water.ca.gov/misc/resinfo.html.
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.33 Historical Water Year 2001 - 2012 Folsom Lake Elevation\textsuperscript{10}

Figure 5.34 Historical Water Year 2001 - 2012 Lake Natoma Storage

\textsuperscript{10} The minimum elevation line of 330 ft was taken from CalSim II. The maximum elevation line of 466 ft was provided by Reclamation.
Figure 5.35 Historical Water Year 2001 - 2012 Lake Natoma Elevation

Figure 5.36 Historical Water Year 2001 - 2012 American River Mean Daily Flows at Fair Oaks
Figure 5.37 Historical Water Year 2001 - 2012 San Joaquin River Mean Daily Flows at Mendota

Figure 5.38 Historical Water Year 2001 - 2012 San Joaquin River Mean Daily Flows at Vernalis
Figure 5.39 Historical Water Year 2001 - 2012 New Melones Reservoir Storage

The minimum storage line of 80,000 AF was taken from CalSim II. The maximum storage line of 2,400,000 AF was taken from the California Data Exchange Center website http://cdec.water.ca.gov/misc/resinfo.html.

Figure 5.40 Historical Water Year 2001 - 2012 New Melones Reservoir Elevation

The dead pool elevation of 543 feet and normal pool elevation of 1,088 feet was taken from CalSim II.
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.41 Historical Water Year 2001 - 2012 Goodwin Reservoir Storage

Figure 5.42 Historical Water Year 2001 - 2012 Goodwin Reservoir Elevation

Erroneous data on 10/30/2002 was removed.
Figure 5.43 Historical Water Year 2001 - 2012 Stanislaus River Mean Daily Flows at Orange Blossom Bridge

Figure 5.44 Historical Water Year 2001 - 2012 San Luis Reservoir Storage
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.45 Historical Water Year 2001 - 2012 San Luis Reservoir Elevation

Figure 5.46 Historical Water Year 2001 - 2012 Delta Outflow Mean Daily Flows

14 Erroneous data on 10/13/2003, 9/18/2007, and 7/19/2010 was removed.
Figure 5.47 Historical Water Year 2001 - 2012 Jones Pumping Plant Mean Daily Flows

Figure 5.48 Historical Water Year 2001 - 2012 Banks Pumping Plant Mean Daily Flows
Figure 5.49 Historical Water Year 2008 - 2012 Barker Slough Pumping Plant Mean Daily Flows

Figure 5.50 Water Year 2008 – 2012 Contra Costa Canal Rock Slough Intake Mean Daily Flows
Figure 5.51 Historical Water Year 2008 - 2012 Contra Costa Water District Old River Intake Mean Daily Flows

Figure 5.52 Historical Water Year 2010 - 2012 Contra Costa Water District Middle River Intake Mean Daily Flows
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.53 Trinity River below Lewiston Reservoir, Long-Term Average Flow\textsuperscript{15}

Figure 5.54 Trinity River below Lewiston Reservoir, Wet Year Long-Term Average Flow\textsuperscript{15,16}

\textsuperscript{15} Based on the 82-year simulation period; 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 Alternatives 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.

\textsuperscript{16} Wet-Year and Dry-Year as defined by the Sacramento 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999), projected to year 2030
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.55 Trinity River below Lewiston Reservoir, Dry Year Long-Term Average Flow\textsuperscript{15,16}

Figure 5.56 Sacramento River downstream of Keswick Reservoir, Long-Term Average Flow\textsuperscript{15}
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.57 Sacramento River downstream of Keswick Reservoir, Wet Year Long-Term Average Flow

Figure 5.58 Sacramento River downstream of Keswick Reservoir, Dry Year Long-Term Average Flow
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.59 Sacramento River at Freeport, Long-Term Average Flow\(^{15}\)

Figure 5.60 Sacramento River at Freeport, Wet Year Long-Term Average Flow\(^{15,16}\)
Figure 5.61 Sacramento River at Freeport, Dry Year Long-Term Average Flow\textsuperscript{15,16}

Figure 5.62 Feather River downstream of Thermalito, Long-Term Average Flow\textsuperscript{15}
Figure 5.63 Feather River downstream of Thermalito, Wet Year Long-Term Average Flow\textsuperscript{15,16}

Figure 5.64 Feather River downstream of Thermalito, Dry Year Long-Term Average Flow\textsuperscript{15,16}
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.65 American River downstream of Nimbus Dam, Long-Term Average Flow

Figure 5.66 American River downstream of Nimbus Dam, Wet Year Long-Term Average Flow
Figure 5.67 American River downstream of Nimbus Dam, Dry Year Long-Term Average Flow\textsuperscript{15,16}

Figure 5.68 Stanislaus River below Goodwin, Long-Term Average Flow\textsuperscript{15}
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.69 Stanislaus River below Goodwin, Wet Year Long-Term Average Flow\textsuperscript{15,16}

Figure 5.70 Stanislaus River below Goodwin, Dry Year Long-Term Average Flow\textsuperscript{15,16}
Figure 5.71 San Joaquin River at Vernalis, Long-Term Average Flow\textsuperscript{15}

Figure 5.72 San Joaquin River at Vernalis, Wet Year Long-Term Average Flow\textsuperscript{15,16}
Figure 5.73 San Joaquin River at Vernalis, Dry Year Long-Term Average Flow\textsuperscript{15,16}

Figure 5.74 Sacramento/San Joaquin River Delta Outflow, Long-Term Average Flow\textsuperscript{15}
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.75 Sacramento/San Joaquin River Delta Outflow, Wet Year Long-Term Average Flow

Figure 5.76 Sacramento/San Joaquin River Delta Outflow, Dry Year Long-Term Average Flow
Chapter 5: Surface Water Resources and Water Supply Figures

Figure 5.77 Old and Middle River, Long-Term Average Flow\textsuperscript{15}

Figure 5.78 Old and Middle River, Wet Year Long-Term Average Flow\textsuperscript{15, 16}
Figure 5.79 Old and Middle River, Dry Year Long-Term Average Flow\textsuperscript{15, 16}
This page left blank intentionally.