

## **Appendix 11M2 Yolo Bypass Weir Spill Frequencies**

**Table 1. Count of Years that Exceed Fremont Weir Flow Magnitude Thresholds Between 1922 and 2003 for Each Alternative**

Number of years that contain events with consecutive days of spills (max 7 day gap to count as new event)	Count of Years That Exceed Fremont Weir Flow Magnitude Thresholds Between 1922 and 2003, Alternative 1A														
	> 0 days			> 10 days			> 20 days			> 30 days			> 45 days		
	No Action	Alternative 1A	Difference	No Action	Alternative 1A	Difference	No Action	Alternative 1A	Difference	No Action	Alternative 1A	Difference	No Action	Alternative 1A	Difference
> 0 cfs	81	82	1 1.2%	77	77	0 0.0%	74	74	0 0.0%	70	70	0 0.0%	55	53	-2 -3.6%
> 1,000 cfs	71	71	0 0.0%	55	51	-4 -7.3%	45	45	0 0.0%	39	39	0 0.0%	33	33	0 0.0%
> 2,000 cfs	70	68	-2 -2.9%	49	48	-1 -2.0%	41	41	0 0.0%	34	34	0 0.0%	26	26	0 0.0%
> 3,000 cfs	64	63	-1 -1.6%	47	46	-1 -2.1%	36	34	-2 -5.6%	30	29	-1 -3.3%	22	21	-1 -4.5%
> 4,000 cfs	62	59	-3 -4.8%	43	43	0 0.0%	32	32	0 0.0%	26	25	-1 -3.8%	18	18	0 0.0%
> 6,000 cfs	49	48	-1 -2.0%	34	31	-3 -8.8%	26	24	-2 -7.7%	18	18	0 0.0%	10	10	0 0.0%
> 8,000 cfs	47	44	-3 -6.4%	29	26	-3 -10.3%	22	22	0 0.0%	16	15	-1 -6.3%	5	5	0 0.0%
> 10,000 cfs	45	44	-1 -2.2%	28	26	-2 -7.1%	22	22	0 0.0%	11	11	0 0.0%	4	3	-1 -25.0%

Number of years that contain events with consecutive days of spills (max 7 day gap to count as new event)	Count of Years That Exceed Fremont Weir Flow Magnitude Thresholds Between 1922 and 2003, Alternative 1B														
	> 0 days			> 10 days			> 20 days			> 30 days			> 45 days		
	No Action	Alternative 1B	Difference	No Action	Alternative 1B	Difference	No Action	Alternative 1B	Difference	No Action	Alternative 1B	Difference	No Action	Alternative 1B	Difference
> 0 cfs	81	81	0 0.0%	77	77	0 0.0%	74	74	0 0.0%	70	70	0 0.0%	55	55	0 0.0%
> 1,000 cfs	71	71	0 0.0%	55	51	-4 -7.3%	45	45	0 0.0%	39	39	0 0.0%	33	34	1 3.0%
> 2,000 cfs	70	68	-2 -2.9%	49	48	-1 -2.0%	41	41	0 0.0%	34	34	0 0.0%	26	26	0 0.0%
> 3,000 cfs	64	63	-1 -1.6%	47	46	-1 -2.1%	36	34	-2 -5.6%	30	29	-1 -3.3%	22	21	-1 -4.5%
> 4,000 cfs	62	58	-4 -6.5%	43	43	0 0.0%	32	32	0 0.0%	26	25	-1 -3.8%	18	18	0 0.0%
> 6,000 cfs	49	48	-1 -2.0%	34	31	-3 -8.8%	26	24	-2 -7.7%	18	18	0 0.0%	10	10	0 0.0%
> 8,000 cfs	47	44	-3 -6.4%	29	26	-3 -10.3%	22	22	0 0.0%	16	15	-1 -6.3%	5	5	0 0.0%
> 10,000 cfs	45	44	-1 -2.2%	28	26	-2 -7.1%	22	22	0 0.0%	11	11	0 0.0%	4	3	-1 -25.0%

Number of years that contain events with consecutive days of spills (max 7 day gap to count as new event)	Count of Years That Exceed Fremont Weir Flow Magnitude Thresholds Between 1922 and 2003, Alternative 2														
	> 0 days			> 10 days			> 20 days			> 30 days			> 45 days		
	No Action	Alternative 2	Difference	No Action	Alternative 2	Difference	No Action	Alternative 2	Difference	No Action	Alternative 2	Difference	No Action	Alternative 2	Difference
> 0 cfs	81	81	0 0.0%	77	77	0 0.0%	74	74	0 0.0%	70	70	0 0.0%	55	54	-1 -1.8%
> 1,000 cfs	71	71	0 0.0%	55	51	-4 -7.3%	45	45	0 0.0%	39	39	0 0.0%	33	33	0 0.0%
> 2,000 cfs	70	68	-2 -2.9%	49	48	-1 -2.0%	41	41	0 0.0%	34	34	0 0.0%	26	26	0 0.0%
> 3,000 cfs	64	63	-1 -1.6%	47	46	-1 -2.1%	36	34	-2 -5.6%	30	29	-1 -3.3%	22	21	-1 -4.5%
> 4,000 cfs	62	59	-3 -4.8%	43	43	0 0.0%	32	32	0 0.0%	26	25	-1 -3.8%	18	18	0 0.0%
> 6,000 cfs	49	48	-1 -2.0%	34	31	-3 -8.8%	26	24	-2 -7.7%	18	18	0 0.0%	10	10	0 0.0%
> 8,000 cfs	47	44	-3 -6.4%	29	26	-3 -10.3%	22	22	0 0.0%	16	15	-1 -6.3%	5	5	0 0.0%
> 10,000 cfs	45	44	-1 -2.2%	28	26	-2 -7.1%	22	22	0 0.0%	11	11	0 0.0%	4	3	-1 -25.0%

Number of years that contain events with consecutive days of spills (max 7 day gap to count as new event)	Count of Years That Exceed Fremont Weir Flow Magnitude Thresholds Between 1922 and 2003, Alternative 3														
	> 0 days			> 10 days			> 20 days			> 30 days			> 45 days		
	No Action	Alternative 3	Difference	No Action	Alternative 3	Difference	No Action	Alternative 3	Difference	No Action	Alternative 3	Difference	No Action	Alternative 3	Difference
> 0 cfs	81	81	0 0.0%	77	77	0 0.0%	74	74	0 0.0%	70	70	0 0.0%	55	55	0 0.0%
> 1,000 cfs	71	71	0 0.0%	55	51	-4 -7.3%	45	45	0 0.0%	39	39	0 0.0%	33	34	1 3.0%
> 2,000 cfs	70	68	-2 -2.9%	49	48	-1 -2.0%	41	41	0 0.0%	34	35	1 2.9%	26	27	1 3.8%
> 3,000 cfs	64	63	-1 -1.6%	47	46	-1 -2.1%	36	34	-2 -5.6%	30	29	-1 -3.3%	22	21	-1 -4.5%
> 4,000 cfs	62	58	-4 -6.5%	43	44	1 2.3%	32	32	0 0.0%	26	25	-1 -3.8%	18	18	0 0.0%
> 6,000 cfs	49	48	-1 -2.0%	34	31	-3 -8.8%	26	23	-3 -11.5%	18	18	0 0.0%	10	9	-1 -10.0%
> 8,000 cfs	47	44	-3 -6.4%	29	27	-2 -6.9%	22	22	0 0.0%	16	15	-1 -6.3%	5	5	0 0.0%
> 10,000 cfs	45	44	-1 -2.2%	28	26	-2 -7.1%	22	22	0 0.0%	11	11	0 0.0%	4	3	-1 -25.0%