Appendix 5C Upper Sacramento River Daily River Flow and Operations Model

1 Introduction

This document provides the summary of modeling performed to simulate daily flow and operations in the reservoirs, rivers and other conveyance features that are part of the Central Valley Project (CVP) and the Sites Project for the Sites Reservoir Project Revised Draft Environmental Impact Report/Supplemental Draft Environmental Impact Statement (RDEIR/SDEIS). It includes a description of the Upper Sacramento River Daily Operations Model (USRDOM) and results used in the detailed evaluation of alternatives. USRDOM results are used or referenced in:

- Chapter 5 Surface Water Resources
- Chapter 7 Fluvial Geomorphology

USRDOM simulates daily flow and storage conditions in the upper Sacramento River including Trinity basin, Sacramento River from Shasta Lake to Knights Landing and Colusa Basin including the Sites Project conveyance and storage features. The analytical framework used to evaluate the alternatives is summarized in Appendix 1A Introduction to Appendices and Modeling Information. Assumptions used in modeling the alternatives are summarized in Appendix 5A Surface Water Resources Modeling of Alternatives. USRDOM utilizes results from CalSim II to evaluate the impacts of changing diversion, in-basin use and Delta operations under projected conditions within current regulatory and operational regimes. It couples the downstream monthly operational decisions in CalSim II to a simulation of the associated sub-monthly operational response at Shasta Lake depending on the inflows. It is particularly useful in verifying the CalSim II simulated river conditions and the availability of excess flows to fill Sites Reservoir under the capacity and operational constraints of the intakes at Red Bluff and Hamilton City.

Development of USRDOM, calibration and verification, its use in planning simulations and application comparative analysis is documented in detail in the final USRDOM Development, Calibration, and Application report prepared by CH2M HILL for Reclamation (CH2M HILL, 2011).

1.1 Objective

USRDOM is used in several ways as part of modeling of the operations of the RDEIR/SDEIS Alternatives. It was used to test and finalize the CalSim II operations for the Alternatives. One main objective of using USRDOM in the RDEIR/SDEIS was to simulate daily flows to inform CalSim II (monthly) about the potential restrictions on the diversions subject to operational constraints. It was also used to evaluate flow conditions on a daily-weekly time scale along the Sacramento River from Keswick Dam to Knights Landing and in the Colusa Basin. The results from USRDOM are used for input into biological and flow regime models to evaluate the alternatives.

2 Methods

2.1.1 Project Intake Operations Assumptions

The detailed modeling assumptions used for the alternatives modeled for the RDEIR/SDEIS are described in Appendix 5A Surface Water Resources Modeling of Alternatives. This section briefly describes the key operational assumptions used in the USRDOM model for evaluating the alternatives.

The operational assumptions governing the diversions at the two Project intakes, namely existing Tehama Colusa Canal (TC Canal) Intake and Glenn-Colusa Irrigation District Main Canal (GCID Main Canal) Intake include:

- Restrictions based on the available channel conveyance capacities at various locations along the TC Canal and GCID Main Canal. Further, restrictions based on the dedicated annual maintenance periods for TC Canal and GCID Main Canal conveyance systems.

- Restrictions based on meeting the specified bypass flow requirements downstream of each intake. In addition, diversions are restricted based on the seasonal bypass flow requirements specified for the Sacramento River.

- Restrictions based on the occurrence of pulse flows in the Sacramento River, which provide key biological cues for the outmigrating juvenile winter-, spring-, fall, and late fall-run Chinook salmon, as well as a potion of the steelhead juvenile fish. Therefore, diversions are restricted when pulse events are recognized in October through May. Sacramento River flow at Bend Bridge and tributary flow upstream of Bend Bridge (Cow Creek, Cottonwood Creek, and Battle Creek) were used to identify pulse signals as part of the modeling.

2.1.2 Overview of the Planning Analysis

For RDEIR/SDEIS, CalSim II is the model of choice for the lead agencies to simulate reservoir operations and river flow conditions. CalSim II simulates CVP and State Water Project (SWP) operations on a monthly timestep from WY 1922 through WY 2003. Therefore, for the

USRDOM projected conditions simulation, the inputs are taken from CalSim II for a consistent analysis. Appendix 5B Water Resources System Modeling includes detailed description of the CalSim II model. Because USRDOM requires inputs on a daily timestep, the monthly inputs and outputs of the CalSim II model are downscaled to a daily timestep using the CAL2DOM utility. CAL2DOM utility translates monthly CalSim II operations data to a daily time step. It uses the inputs and outputs from CalSim II, USRDOM hydrology inputs, and other datasets to compute inflows, diversions, and evaporation rates for using as inputs in the USRDOM.

2.1.3 Operations Modeling with USRDOM

CalSim II was the core model used to simulate Sites Project operations. However, the assumptions related to the intake operations require daily flow data in determining the diversions allowed at the intakes, in turn affecting the system-wide operations. Since CalSim II is a monthly timestep model, USRDOM results were used to enforce the intake operations on a sub-monthly scale for pulse protection, which was developed to protect fish migration during naturally occurring, storm-induced, pulse flow events in the Sacramento River.

Due to the complexity in the intake operational rules, a spreadsheet tool was developed to implement the operational constraints using the daily results from the USRDOM simulation of No Action Alternative. Further, CalSim II and USRDOM were run iteratively to ensure periods of pulse protection were simulated accurately. Figure 5C-1 shows the schematic of the modeling process used to determine periods of pulse protection.

First, a draft CalSim II simulation was run with all the physical, regulatory, and operational assumptions for No Action Alternative. The results from this draft CalSim II simulation were used to run a draft USRDOM simulation for No Action Alternative. The USRDOM setup included assumptions consistent with the draft CalSim II model. Daily flows estimated by USRDOM were then used in a post-processing spreadsheet to determine the days requiring pulse protection. The post-processing spreadsheet generates a timeseries of the number of days that Sites diversions are restricted due to pulse protection in each month of the 82-year period. Next, the draft CalSim II simulation of No Action Alternative is re-run with the new pulse protection timeseries input. Then, CalSim II simulations of Alternatives 1A, 1B, 2, and 3 were run using the same pulse protection inputs. Finally, USRDOM simulations of No Action Alternative and each alternative are run using the corresponding CalSim II outputs. The USRDOM setup between each Alternative and No Action Alternative were consistent. Although pulse protection is not

employed in No Action Alternative, the pulse protection input timeseries was included in the CalSim II simulation of No Action Alternative for consistency among all models.

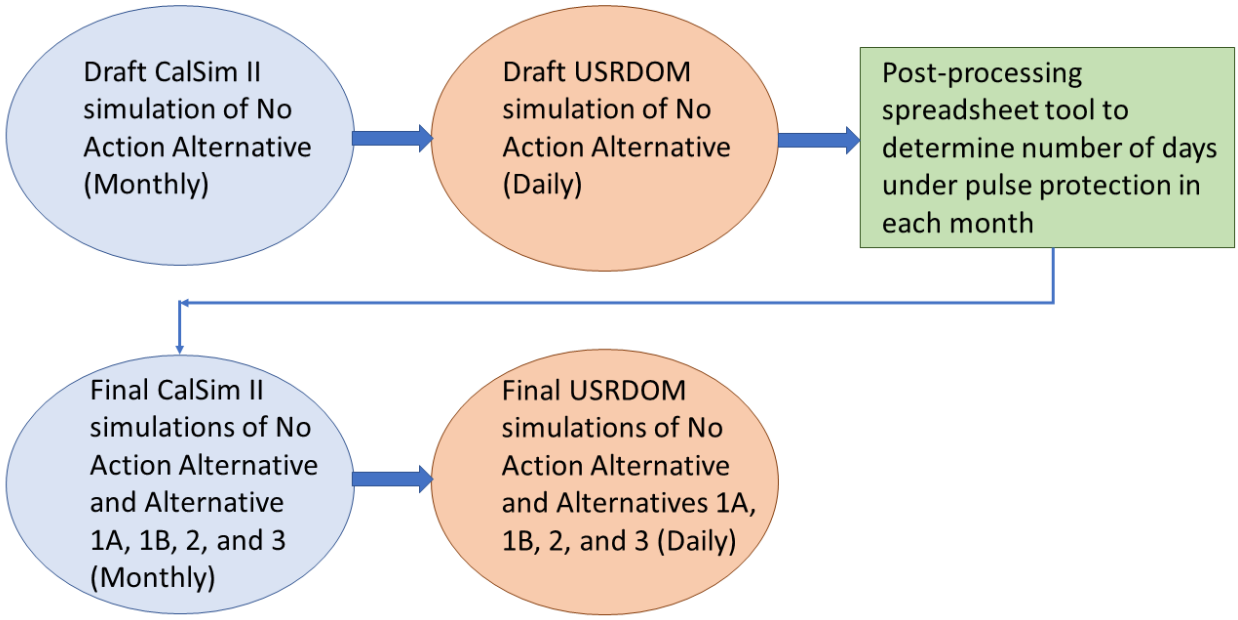


Figure 5C-1. Operations Modeling Process used for Sites Alternatives Evaluation.

2.1.4 Analysis of Alternatives

For the RDEIR/SDEIS, the results from the final USRDOM simulations were used to evaluate the effects of the Alternatives 1A, 1B, 2, and 3 on daily Sacramento River flows at Bend Bridge, below Red Bluff Diversion Dam, and near Wilkins Slough and diversions at Red Bluff and Hamilton City. USRDOM results of weir spills into the Sutter Bypass from Ord Ferry, Moulton Weir, Colusa Weir, and Tisdale Weir are also included in this appendix to asses the effects Sites operations.

2.1.5 Limitations

The following limitation should be considered in using USRDOM results:

In the downscaling of CalSim II boundary condition flows for use in the USRDOM simulations, diversions at Red Bluff and Hamilton City are smoothed from monthly to daily timesteps. In this smoothing operation, in order to conserve volume and have a gradual change in diversion flows (as opposed to sharp changes at monthly or other time scale boundaries), there are some days in which diversions are represented in the model at flow rates that may exceed the sustainable rate of the physical capacity of these facilities. It is recommended that any assessment of flows or

other parameters linked to the peak flow rate of these diversions use monthly average values rather than daily or other sub-monthly average values.

The CalSim II model is used to establish system operational conditions and USRDOM is used to interpret these on a daily time-step; all residuals and inconsistencies between the CalSim II and USRDOM models accumulate in storage facilities modeled, including Sites Reservoir; the Sites Reservoir storage in the USRDOM sometimes exceeds physical capacity slightly due to this inconsistency between the models.

3 Results

The tables and figures in this section show monthly average USRDOM results for river flows, diversions, and weir spills at key locations for the following alternatives:

- No Action Alternative 011221
- Alternative 1A 011221
- Alternative 1B 011221
- Alternative 2 011221
- Alternative 3 020121

The locations and parameters for the results included in this appendix are shown in Table 5C-1.

Table 5C-1. USRDOM Monthly Reports.

Section	Output Parameter	Table Numbers	Figure Numbers
Sacramento	Sacramento River Flow at Bend Bridge	5C-1-1 to 5C-1-4	5C-1-1 to 5C-1-18
Sacramento	Sacramento River Flow below Red Bluff Diversion Dam	5C-2-1 to 5C-2-4	5C-2-1 to 5C-2-18
Sacramento	Red Bluff Diversion - Tehama Colusa Canal	5C-3-1 to 5C-3-4	5C-3-1 to 5C-3-18
Sacramento	Hamilton City Diversion - Glenn Colusa Canal	5C-4-1 to 5C-4-4	5C-4-1 to 5C-4-18
Sutter Bypass	Ord Ferry Spill	5C-5-1 to 5C-5-4	5C-5-1 to 5C-5-18
Sutter Bypass	Moulton Weir Spill	5C-6-1 to 5C-6-4	5C-6-1 to 5C-6-18
Sutter Bypass	Colusa Weir Spill	5C-7-1 to 5C-7-4	5C-7-1 to 5C-7-18
Sutter Bypass	Tisdale Weir Spill	5C-8-1 to 5C-8-4	5C-8-1 to 5C-8-18
Sacramento	Sacramento River Flow at Wilkins Slough	5C-9-1 to 5C-9-4	5C-9-1 to 5C-9-18

Report formats

- Exceedance tables comparing an alternative against the No Action alternative (exceedance values, long-term average, and average by water year type
- Monthly pattern charts (long-term average and average by water year type) including all alternatives
- Monthly exceedance charts (all months) including all alternatives

4 References Cited

CH2M HILL. 2011. *USRDOM Development, Calibration, and Application.* Final. Sacramento, CA. Prepared for Bureau of Reclamation, Mid Pacific Region, CA.

Table 5C-1-1a. Sacramento River Flow at Bend Bridge, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,659	9,845	24,714	35,761	40,312	31,303	19,334	14,016	13,526	16,093	12,600	11,595
20%	8,716	8,572	16,798	21,808	28,360	21,185	13,696	11,434	12,684	15,447	12,042	10,834
30%	7,592	8,141	11,513	15,104	21,564	18,047	9,672	10,101	11,912	13,924	11,274	9,413
40%	6,924	7,579	8,903	12,371	15,766	13,192	7,620	9,562	11,425	13,310	10,758	8,351
50%	6,576	7,040	7,635	8,798	10,861	9,499	6,525	8,878	11,089	13,038	10,440	6,766
60%	6,354	6,842	6,919	7,215	9,034	8,219	5,845	8,547	10,527	12,338	10,102	6,106
70%	6,008	6,482	6,377	6,725	7,653	7,553	5,692	8,117	10,069	11,792	9,672	5,781
80%	5,825	6,255	5,773	5,868	6,492	6,400	5,326	7,606	9,630	11,358	9,274	5,376
90%	4,972	5,776	5,324	5,193	5,494	5,532	5,009	6,985	9,315	9,930	8,493	5,109
Long Term												
Full Simulation Period[a]	7,107	7,945	11,798	15,206	18,426	15,545	10,071	9,821	11,346	12,970	10,563	7,819
Water Year Types[b,c]												
Wet (32%)	8,632	8,481	12,612	27,319	31,939	25,498	16,429	11,769	11,585	13,431	11,872	10,817
Above Normal (15%)	7,017	9,879	11,545	16,335	21,814	20,952	10,583	9,874	11,402	14,701	11,400	8,768
Below Normal (17%)	7,018	7,803	13,188	9,889	12,549	9,201	7,132	8,834	11,506	13,602	10,268	6,361
Dry (22%)	5,941	7,109	13,195	6,940	9,105	8,410	5,919	8,709	11,705	12,559	9,613	5,631
Critical (15%)	5,748	6,272	6,570	6,436	6,595	6,675	5,438	8,370	10,045	10,118	8,660	5,356

Table 5C-1-1b. Sacramento River Flow at Bend Bridge, Alternative 1A 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,657	9,849	24,662	35,788	40,330	31,891	19,397	14,019	13,531	16,086	12,600	11,612
20%	8,723	8,578	17,005	21,618	28,424	21,162	13,696	11,435	12,507	15,437	12,019	10,814
30%	7,691	8,138	11,522	15,077	21,563	18,134	9,585	10,019	11,767	13,964	11,418	9,304
40%	7,091	7,516	8,768	12,424	16,064	13,190	7,450	9,247	11,317	13,405	10,822	8,482
50%	6,795	6,975	7,509	8,800	10,861	9,506	6,579	8,763	10,863	13,102	10,503	6,943
60%	6,453	6,573	6,755	7,211	9,034	8,530	5,876	8,427	10,494	12,540	10,204	6,137
70%	6,203	6,418	6,341	6,731	7,653	7,553	5,692	8,052	10,062	11,919	9,784	5,848
80%	5,931	6,200	5,783	5,856	6,493	6,384	5,321	7,391	9,497	11,411	9,253	5,501
90%	5,482	5,752	5,413	5,098	5,400	5,532	4,958	6,632	9,289	9,923	8,212	5,125
Long Term												
Full Simulation Period[a]	7,194	7,892	11,770	15,240	18,483	15,564	10,077	9,669	11,242	13,036	10,575	7,880
Water Year Types[b,c]												
Wet (32%)	8,637	8,557	12,499	27,384	31,974	25,549	16,431	11,766	11,560	13,471	11,845	10,814
Above Normal (15%)	7,068	9,744	11,418	16,352	21,920	20,849	10,698	9,881	11,379	14,668	11,362	8,792
Below Normal (17%)	6,986	7,742	13,282	9,885	12,779	9,214	7,134	8,863	11,414	13,694	10,240	6,376
Dry (22%)	5,973	6,991	13,308	6,933	9,077	8,441	5,878	8,464	11,388	12,716	9,831	5,786
Critical (15%)	6,267	6,124	6,474	6,527	6,576	6,739	5,420	7,659	9,994	10,176	8,546	5,507

Table 5C-1-1c. Sacramento River Flow at Bend Bridge, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-2	4	-52	27	18	588	64	3	6	-7	0	17
20%	7	6	207	-190	64	-23	0	1	-177	-10	-23	-20
30%	98	-3	8	-27	0	87	-87	-82	-144	40	144	-109
40%	167	-63	-135	53	298	-2	-170	-315	-108	95	65	131
50%	219	-64	-127	2	0	7	54	-115	-225	64	63	177
60%	99	-269	-163	-4	0	311	31	-119	-33	202	102	32
70%	195	-64	-36	5	0	-1	0	-65	-8	126	112	68
80%	106	-55	9	-11	0	-16	-5	-215	-133	54	-21	125
90%	509	-24	89	-95	-94	0	-51	-353	-26	-7	-281	17
Long Term												
Full Simulation Period[a]	86	-54	-28	34	57	19	6	-153	-104	66	13	61
Water Year Types[b,c]												
Wet (32%)	5	76	-113	65	35	50	3	-3	-25	40	-26	-3
Above Normal (15%)	51	-135	-128	17	106	-103	115	8	-23	-33	-38	24
Below Normal (17%)	-32	-62	94	-3	230	12	2	29	-91	92	-28	15
Dry (22%)	31	-118	113	-8	-28	31	-41	-245	-317	157	218	154
Critical (15%)	519	-148	-96	91	-18	64	-17	-712	-51	58	-113	151

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-1-2a. Sacramento River Flow at Bend Bridge, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,659	9,845	24,714	35,761	40,312	31,303	19,334	14,016	13,526	16,093	12,600	11,595
20%	8,716	8,572	16,798	21,808	28,360	21,185	13,696	11,434	12,684	15,447	12,042	10,834
30%	7,592	8,141	11,513	15,104	21,564	18,047	9,672	10,101	11,912	13,924	11,274	9,413
40%	6,924	7,579	8,903	12,371	15,766	13,192	7,620	9,562	11,425	13,310	10,758	8,351
50%	6,576	7,040	7,635	8,798	10,861	9,499	6,525	8,878	11,089	13,038	10,440	6,766
60%	6,354	6,842	6,919	7,215	9,034	8,219	5,845	8,547	10,527	12,338	10,102	6,106
70%	6,008	6,482	6,377	6,725	7,653	7,553	5,692	8,117	10,069	11,792	9,672	5,781
80%	5,825	6,255	5,773	5,868	6,492	6,400	5,326	7,606	9,630	11,358	9,274	5,376
90%	4,972	5,776	5,324	5,193	5,494	5,532	5,009	6,985	9,315	9,930	8,493	5,109
Long Term												
Full Simulation Period[a]	7,107	7,945	11,798	15,206	18,426	15,545	10,071	9,821	11,346	12,970	10,563	7,819
Water Year Types[b,c]												
Wet (32%)	8,632	8,481	12,612	27,319	31,939	25,498	16,429	11,769	11,585	13,431	11,872	10,817
Above Normal (15%)	7,017	9,879	11,545	16,335	21,814	20,952	10,583	9,874	11,402	14,701	11,400	8,768
Below Normal (17%)	7,018	7,803	13,188	9,889	12,549	9,201	7,132	8,834	11,506	13,602	10,268	6,361
Dry (22%)	5,941	7,109	13,195	6,940	9,105	8,410	5,919	8,709	11,705	12,559	9,613	5,631
Critical (15%)	5,748	6,272	6,570	6,436	6,595	6,675	5,438	8,370	10,045	10,118	8,660	5,356

Table 5C-1-2b. Sacramento River Flow at Bend Bridge, Alternative 1B 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,727	9,849	24,662	36,317	40,271	31,892	19,398	14,019	13,384	16,082	12,601	11,613
20%	8,830	8,577	17,063	21,637	28,497	21,312	13,695	11,435	12,596	15,483	12,246	10,982
30%	7,501	8,022	12,040	15,125	21,562	18,109	9,670	9,883	11,420	13,964	11,317	9,435
40%	7,090	7,409	8,776	12,437	16,397	12,633	7,454	9,255	11,113	13,399	10,695	8,672
50%	6,778	7,000	7,460	8,799	10,907	9,476	6,628	8,616	10,709	13,091	10,483	6,859
60%	6,409	6,744	6,829	7,211	9,034	8,290	5,878	8,260	10,366	12,444	10,172	6,194
70%	6,167	6,488	6,372	6,730	7,653	7,550	5,693	7,733	9,767	11,947	9,762	5,930
80%	5,862	6,312	5,738	5,875	6,493	6,384	5,312	7,283	9,395	11,059	9,320	5,532
90%	5,548	5,866	5,410	5,105	5,391	5,607	4,935	6,631	9,230	9,825	8,514	5,149
Long Term												
Full Simulation Period[a]	7,186	7,987	11,828	15,246	18,514	15,556	10,072	9,594	11,121	12,982	10,592	7,934
Water Year Types[b,c]												
Wet (32%)	8,629	8,488	12,507	27,439	32,061	25,511	16,431	11,767	11,560	13,471	11,846	10,823
Above Normal (15%)	7,143	9,724	11,558	16,371	21,827	20,878	10,745	9,857	10,754	14,307	11,382	9,127
Below Normal (17%)	7,053	7,894	13,396	9,873	12,893	9,212	7,118	8,625	11,212	13,597	10,233	6,430
Dry (22%)	5,880	7,283	13,326	6,941	9,061	8,475	5,825	8,358	11,486	12,800	9,797	5,739
Critical (15%)	6,213	6,325	6,554	6,429	6,589	6,690	5,435	7,608	9,887	10,157	8,698	5,528

Table 5C-1-2c. Sacramento River Flow at Bend Bridge, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	69	4	-52	556	-41	589	65	3	-142	-11	1	18
20%	113	5	265	-171	137	127	-1	1	-88	37	205	148
30%	-91	-119	527	22	-2	62	-2	-218	-492	40	43	22
40%	166	-170	-127	66	630	-559	-166	-307	-312	88	-62	320
50%	202	-40	-175	1	47	-24	103	-263	-380	53	42	92
60%	55	-97	-90	-4	0	70	33	-287	-161	106	69	88
70%	159	6	-6	5	0	-4	1	-384	-302	154	90	149
80%	37	57	-35	7	1	-16	-14	-323	-235	-299	46	156
90%	575	90	87	-88	-103	75	-75	-354	-85	-106	21	40
Long Term												
Full Simulation Period[a]	78	41	31	40	89	12	1	-228	-224	13	29	115
Water Year Types[b,c]												
Wet (32%)	-3	7	-105	120	122	13	3	-2	-25	40	-26	6
Above Normal (15%)	126	-155	13	36	13	-74	161	-16	-648	-394	-18	359
Below Normal (17%)	35	91	208	-16	344	11	-14	-209	-294	-5	-35	69
Dry (22%)	-61	175	132	1	-44	65	-94	-352	-220	240	185	108
Critical (15%)	465	53	-16	-6	-6	15	-2	-763	-159	39	38	172

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-1-3a. Sacramento River Flow at Bend Bridge, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,659	9,845	24,714	35,761	40,312	31,303	19,334	14,016	13,526	16,093	12,600	11,595
20%	8,716	8,572	16,798	21,808	28,360	21,185	13,696	11,434	12,684	15,447	12,042	10,834
30%	7,592	8,141	11,513	15,104	21,564	18,047	9,672	10,101	11,912	13,924	11,274	9,413
40%	6,924	7,579	8,903	12,371	15,766	13,192	7,620	9,562	11,425	13,310	10,758	8,351
50%	6,576	7,040	7,635	8,798	10,861	9,499	6,525	8,878	11,089	13,038	10,440	6,766
60%	6,354	6,842	6,919	7,215	9,034	8,219	5,845	8,547	10,527	12,338	10,102	6,106
70%	6,008	6,482	6,377	6,725	7,653	7,553	5,692	8,117	10,069	11,792	9,672	5,781
80%	5,825	6,255	5,773	5,868	6,492	6,400	5,326	7,606	9,630	11,358	9,274	5,376
90%	4,972	5,776	5,324	5,193	5,494	5,532	5,009	6,985	9,315	9,930	8,493	5,109
Long Term												
Full Simulation Period[a]	7,107	7,945	11,798	15,206	18,426	15,545	10,071	9,821	11,346	12,970	10,563	7,819
Water Year Types[b,c]												
Wet (32%)	8,632	8,481	12,612	27,319	31,939	25,498	16,429	11,769	11,585	13,431	11,872	10,817
Above Normal (15%)	7,017	9,879	11,545	16,335	21,814	20,952	10,583	9,874	11,402	14,701	11,400	8,768
Below Normal (17%)	7,018	7,803	13,188	9,889	12,549	9,201	7,132	8,834	11,506	13,602	10,268	6,361
Dry (22%)	5,941	7,109	13,195	6,940	9,105	8,410	5,919	8,709	11,705	12,559	9,613	5,631
Critical (15%)	5,748	6,272	6,570	6,436	6,595	6,675	5,438	8,370	10,045	10,118	8,660	5,356

Table 5C-1-3b. Sacramento River Flow at Bend Bridge, Alternative 2 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,727	9,849	24,662	35,768	40,315	31,303	19,397	14,019	13,532	16,086	12,600	11,612
20%	8,723	8,582	17,042	21,618	28,167	21,162	13,696	11,435	12,507	15,434	12,018	10,830
30%	7,679	8,136	11,522	15,077	21,564	18,103	9,586	10,019	11,770	13,964	11,418	9,310
40%	7,046	7,541	8,766	12,424	15,940	13,191	7,453	9,247	11,317	13,405	10,840	8,482
50%	6,781	6,985	7,440	8,800	10,861	9,506	6,579	8,763	10,863	13,102	10,525	6,955
60%	6,443	6,630	6,857	7,211	9,034	8,528	5,876	8,424	10,492	12,541	10,204	6,155
70%	6,180	6,418	6,372	6,731	7,653	7,553	5,692	8,051	10,063	11,923	9,784	5,849
80%	5,960	6,215	5,775	5,856	6,493	6,384	5,321	7,392	9,500	11,403	9,337	5,501
90%	5,473	5,808	5,418	5,098	5,400	5,532	4,958	6,632	9,278	9,872	8,298	5,091
Long Term												
Full Simulation Period[a]	7,187	7,917	11,776	15,227	18,453	15,550	10,077	9,668	11,241	13,033	10,599	7,878
Water Year Types[b,c]												
Wet (32%)	8,637	8,556	12,474	27,380	31,974	25,500	16,430	11,766	11,560	13,472	11,845	10,814
Above Normal (15%)	7,068	9,742	11,418	16,350	21,862	20,837	10,698	9,881	11,378	14,663	11,362	8,798
Below Normal (17%)	7,024	7,734	13,288	9,884	12,650	9,214	7,135	8,864	11,415	13,689	10,249	6,368
Dry (22%)	5,980	7,009	13,320	6,932	9,077	8,457	5,879	8,466	11,398	12,719	9,832	5,782
Critical (15%)	6,167	6,282	6,540	6,447	6,580	6,738	5,420	7,650	9,976	10,155	8,695	5,505

Table 5C-1-3c. Sacramento River Flow at Bend Bridge, Alternative 2 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	69	4	-52	7	3	0	64	3	6	-7	0	17
20%	7	10	244	-190	-193	-23	0	1	-177	-13	-23	-4
30%	86	-4	9	-27	0	56	-87	-82	-142	40	144	-103
40%	121	-37	-137	53	173	-1	-167	-315	-108	95	83	131
50%	204	-55	-196	2	0	7	54	-115	-225	64	84	189
60%	89	-212	-61	-4	0	308	31	-122	-35	203	101	50
70%	171	-64	-5	5	0	-1	0	-66	-7	131	112	68
80%	135	-40	1	-11	0	-16	-5	-214	-130	46	64	125
90%	501	32	95	-95	-94	0	-51	-353	-37	-58	-195	-18
Long Term												
Full Simulation Period[a]	80	-29	-22	21	27	6	6	-153	-105	63	36	60
Water Year Types[b,c]												
Wet (32%)	5	75	-137	61	35	2	1	-3	-25	41	-26	-3
Above Normal (15%)	51	-137	-128	15	48	-115	115	7	-24	-38	-38	30
Below Normal (17%)	6	-70	100	-5	100	12	3	30	-91	87	-20	7
Dry (22%)	39	-100	125	-8	-28	48	-40	-243	-308	160	219	150
Critical (15%)	419	10	-30	11	-14	63	-17	-720	-69	37	35	149

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-1-4a. Sacramento River Flow at Bend Bridge, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,659	9,845	24,714	35,761	40,312	31,303	19,334	14,016	13,526	16,093	12,600	11,595
20%	8,716	8,572	16,798	21,808	28,360	21,185	13,696	11,434	12,684	15,447	12,042	10,834
30%	7,592	8,141	11,513	15,104	21,564	18,047	9,672	10,101	11,912	13,924	11,274	9,413
40%	6,924	7,579	8,903	12,371	15,766	13,192	7,620	9,562	11,425	13,310	10,758	8,351
50%	6,576	7,040	7,635	8,798	10,861	9,499	6,525	8,878	11,089	13,038	10,440	6,766
60%	6,354	6,842	6,919	7,215	9,034	8,219	5,845	8,547	10,527	12,338	10,102	6,106
70%	6,008	6,482	6,377	6,725	7,653	7,553	5,692	8,117	10,069	11,792	9,672	5,781
80%	5,825	6,255	5,773	5,868	6,492	6,400	5,326	7,606	9,630	11,358	9,274	5,376
90%	4,972	5,776	5,324	5,193	5,494	5,532	5,009	6,985	9,315	9,930	8,493	5,109
Long Term												
Full Simulation Period[a]	7,107	7,945	11,798	15,206	18,426	15,545	10,071	9,821	11,346	12,970	10,563	7,819
Water Year Types[b,c]												
Wet (32%)	8,632	8,481	12,612	27,319	31,939	25,498	16,429	11,769	11,585	13,431	11,872	10,817
Above Normal (15%)	7,017	9,879	11,545	16,335	21,814	20,952	10,583	9,874	11,402	14,701	11,400	8,768
Below Normal (17%)	7,018	7,803	13,188	9,889	12,549	9,201	7,132	8,834	11,506	13,602	10,268	6,361
Dry (22%)	5,941	7,109	13,195	6,940	9,105	8,410	5,919	8,709	11,705	12,559	9,613	5,631
Critical (15%)	5,748	6,272	6,570	6,436	6,595	6,675	5,438	8,370	10,045	10,118	8,660	5,356

Table 5C-1-4b. Sacramento River Flow at Bend Bridge, Alternative 3 020121, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,735	10,030	24,662	37,067	40,270	31,893	19,398	14,019	13,028	15,984	12,522	11,613
20%	8,830	8,533	17,514	21,661	28,498	21,341	13,695	11,425	12,116	15,175	11,689	10,982
30%	7,839	8,255	12,587	15,211	22,390	18,162	9,670	9,900	11,420	13,891	11,061	9,607
40%	7,264	7,570	8,813	12,432	16,584	13,153	7,462	9,156	10,955	13,279	10,475	8,868
50%	6,811	7,086	7,318	8,799	10,860	9,433	6,731	8,538	10,651	12,898	10,293	6,952
60%	6,508	6,817	6,760	7,158	9,034	8,463	5,879	8,326	10,118	12,378	9,966	6,315
70%	6,250	6,424	6,348	6,710	7,654	7,550	5,691	7,718	9,669	11,789	9,480	5,949
80%	5,951	6,197	5,732	5,896	6,422	6,384	5,300	7,151	9,400	10,709	9,027	5,408
90%	5,530	5,757	5,381	5,107	5,400	5,533	4,916	6,614	8,843	9,686	8,347	5,166
Long Term												
Full Simulation Period[a]	7,301	8,059	11,943	15,275	18,655	15,594	10,068	9,564	10,927	12,833	10,388	7,988
Water Year Types[b,c]												
Wet (32%)	8,636	8,496	12,484	27,535	32,145	25,565	16,432	11,765	11,560	13,471	11,845	10,816
Above Normal (15%)	7,480	9,791	11,726	16,381	22,484	20,888	10,736	9,851	10,503	13,920	10,494	9,503
Below Normal (17%)	7,283	7,996	13,626	9,875	13,015	9,214	7,120	8,621	10,579	13,452	10,146	6,526
Dry (22%)	6,015	7,501	13,591	6,957	9,065	8,605	5,809	8,257	11,238	12,506	9,553	5,674
Critical (15%)	6,180	6,288	6,553	6,381	6,561	6,626	5,440	7,570	9,922	10,136	8,661	5,526

Table 5C-1-4c. Sacramento River Flow at Bend Bridge, Alternative 3 020121 minus No Action Alternative 011221, Monthly Flow (cfs)

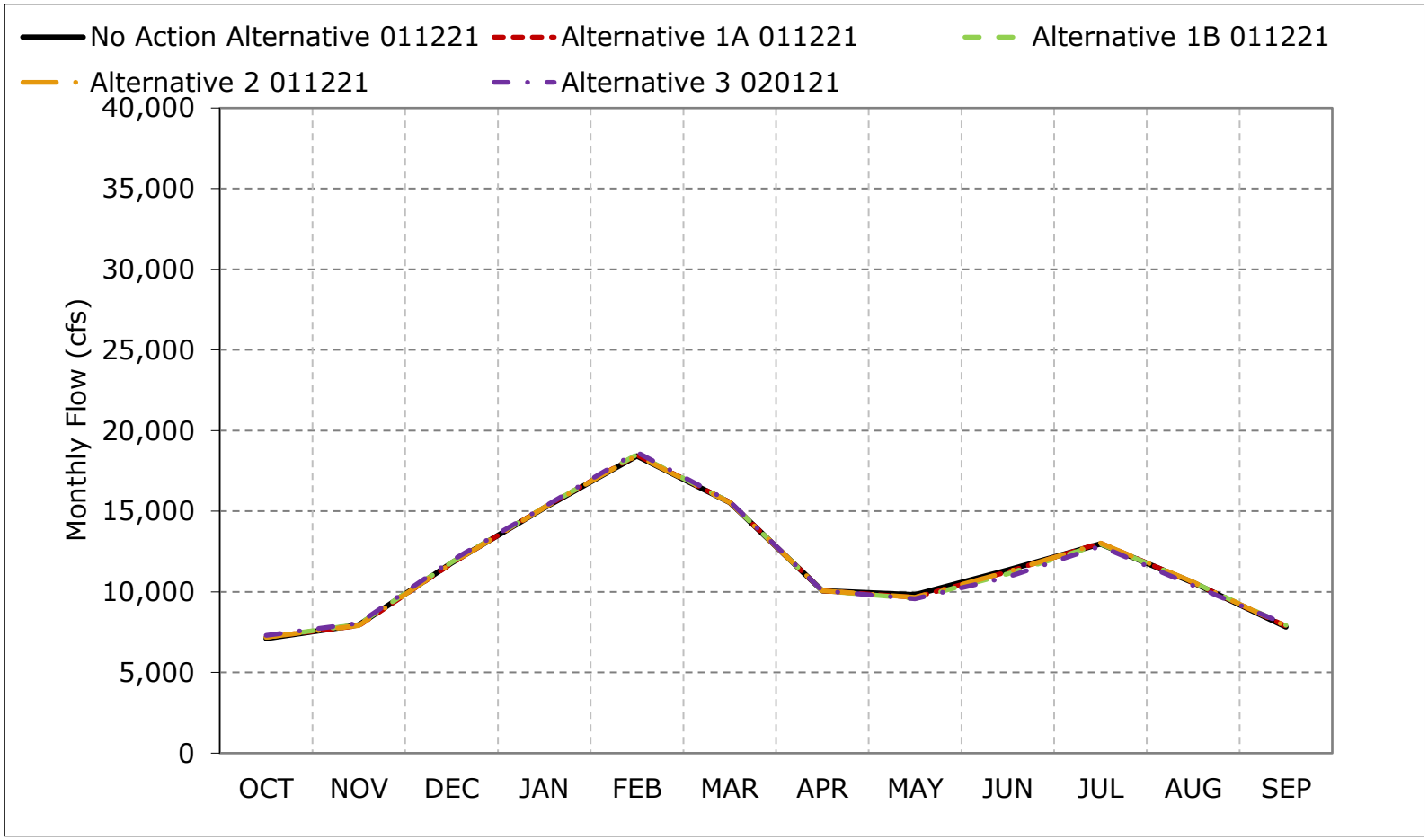
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	77	185	-52	1,306	-42	590	64	3	-497	-109	-78	18
20%	114	-39	716	-147	138	156	-1	-8	-567	-272	-353	148
30%	247	114	1,074	107	827	115	-2	-201	-492	-33	-213	194
40%	340	-8	-90	61	818	-39	-158	-406	-470	-31	-282	517
50%	235	46	-318	1	0	-66	206	-340	-438	-140	-147	186
60%	154	-25	-158	-57	0	244	33	-220	-409	40	-137	210
70%	242	-58	-29	-15	0	-3	-1	-400	-400	-4	-192	168
80%	126	-57	-41	29	-70	-16	-26	-455	-229	-649	-246	32
90%	558	-19	57	-86	-95	1	-94	-371	-473	-244	-146	57
Long Term												
Full Simulation Period[a]	194	113	145	68	229	50	-2	-257	-418	-136	-175	170
Water Year Types[b,c]												
Wet (32%)	4	15	-127	215	206	67	3	-4	-25	40	-27	0
Above Normal (15%)	463	-89	181	46	670	-65	153	-23	-898	-780	-906	735
Below Normal (17%)	265	193	438	-13	466	13	-12	-213	-927	-151	-122	164
Dry (22%)	74	392	396	17	-41	195	-110	-453	-468	-53	-60	42
Critical (15%)	431	16	-17	-54	-34	-49	2	-800	-123	18	2	169

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

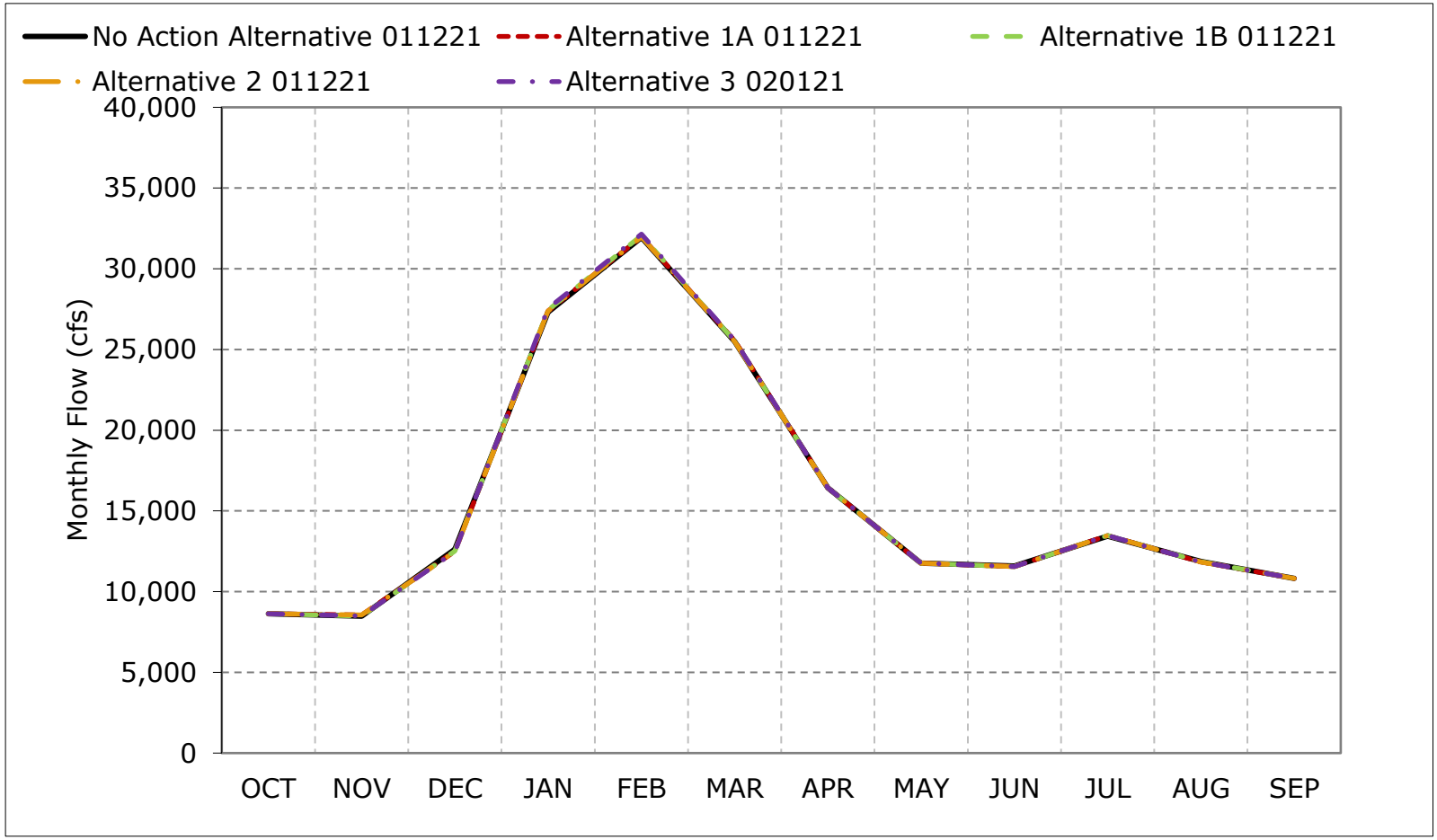
c These results are displayed with calendar year - year type sorting.

Figure 5C-1-1. Sacramento River Flow at Bend Bridge, Long-Term Average Flow



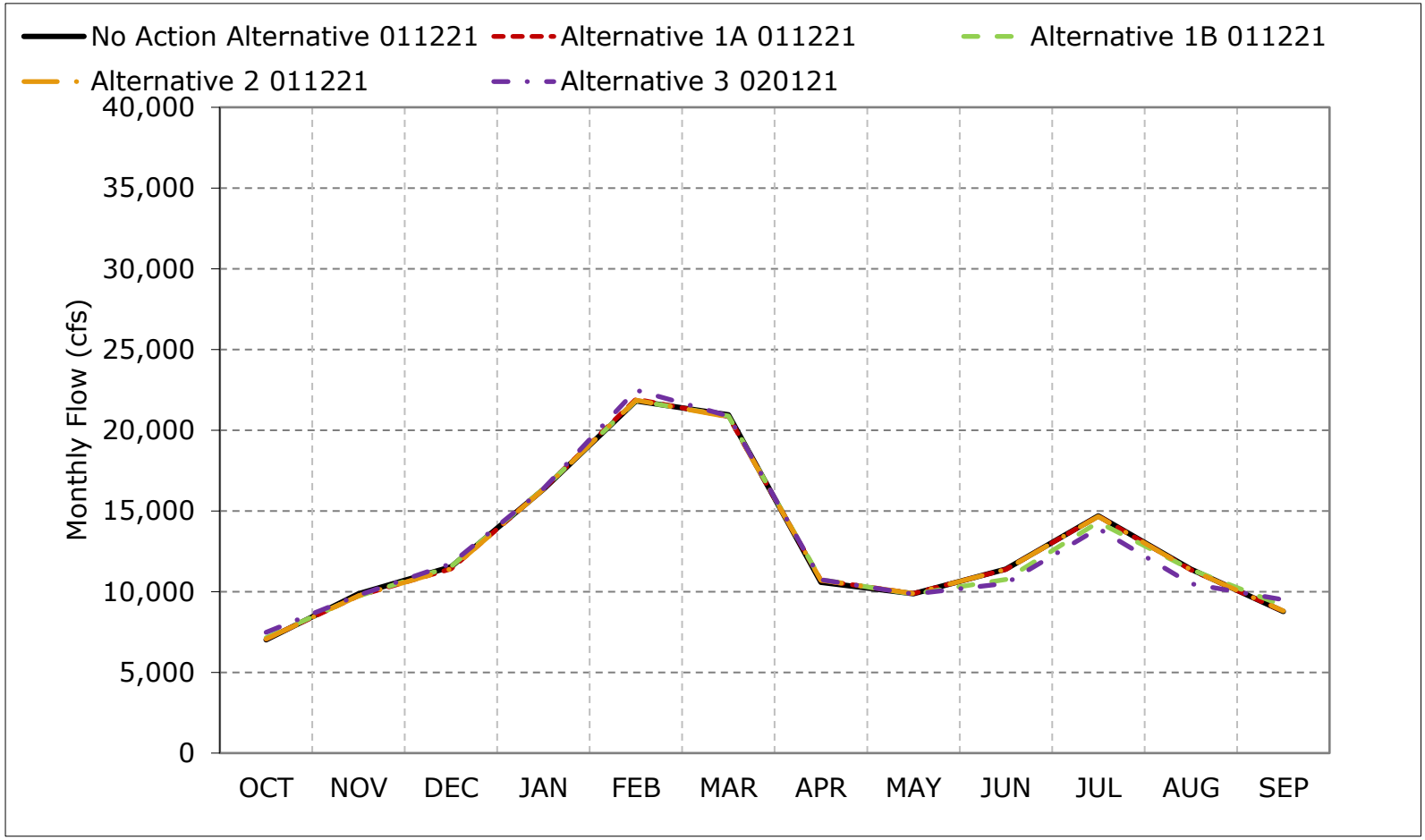
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-1-2. Sacramento River Flow at Bend Bridge, Wet Year Average Flow



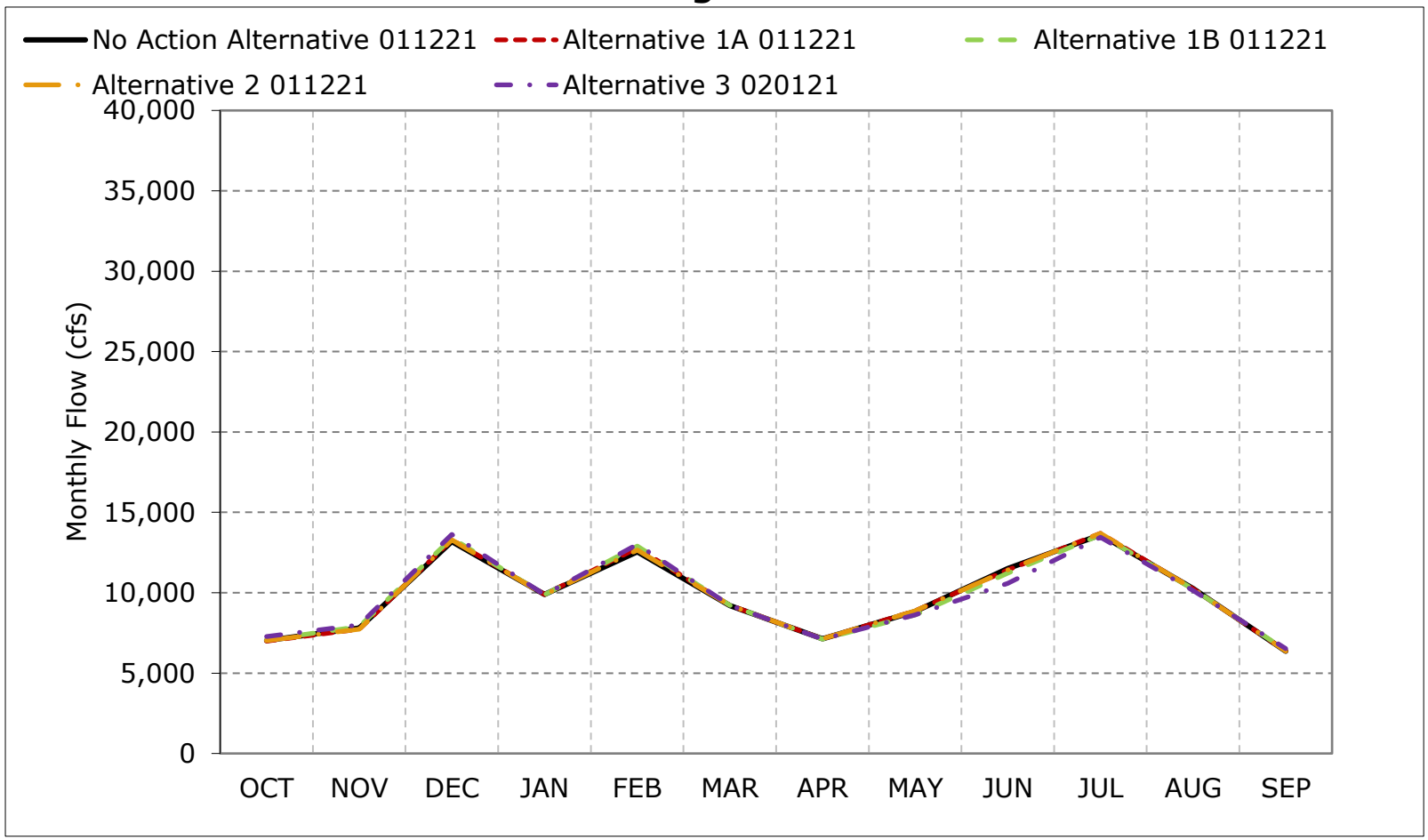
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-1-3. Sacramento River Flow at Bend Bridge, Above Normal Year Average Flow



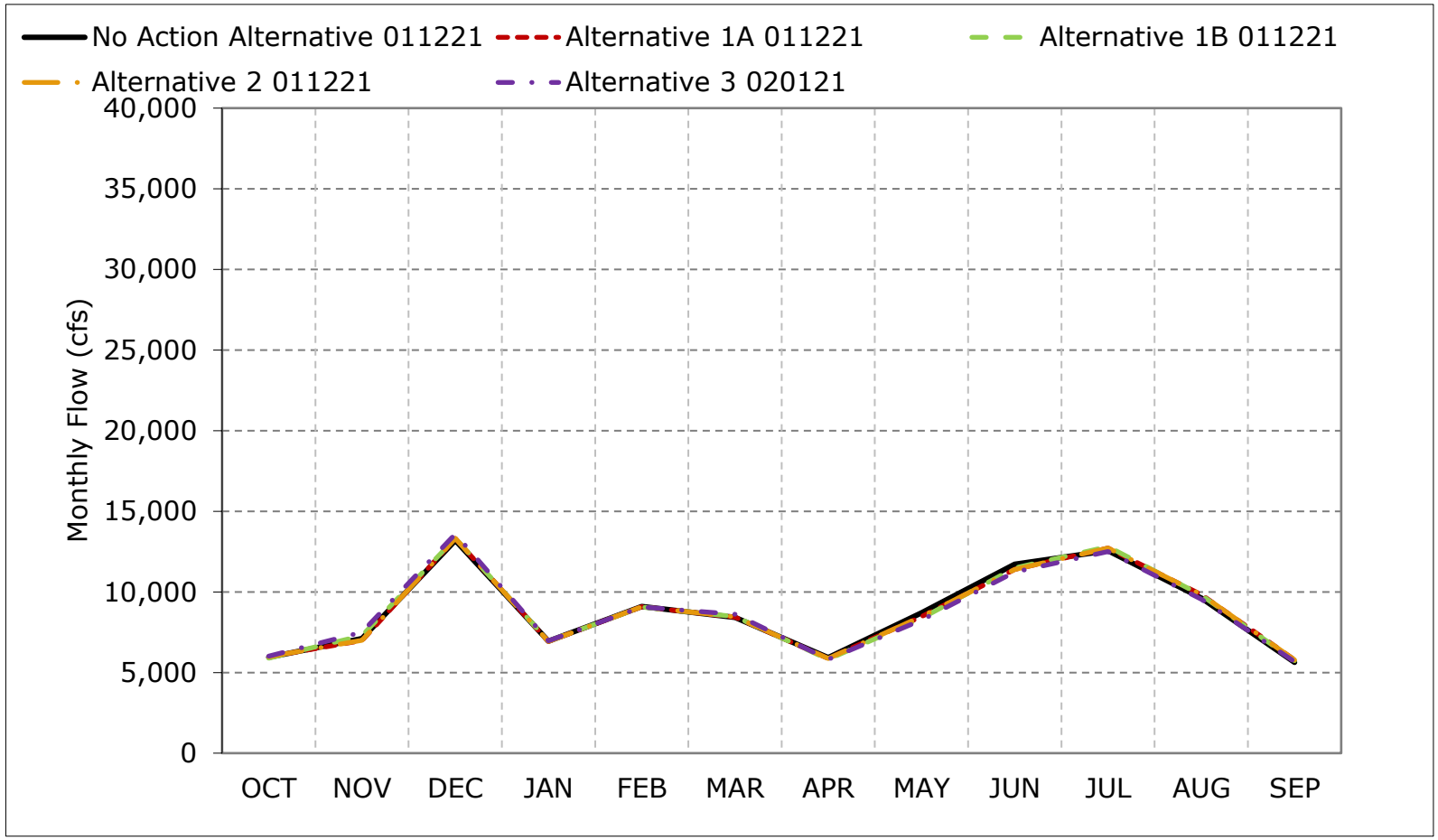
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-1-4. Sacramento River Flow at Bend Bridge, Below Normal Year Average Flow



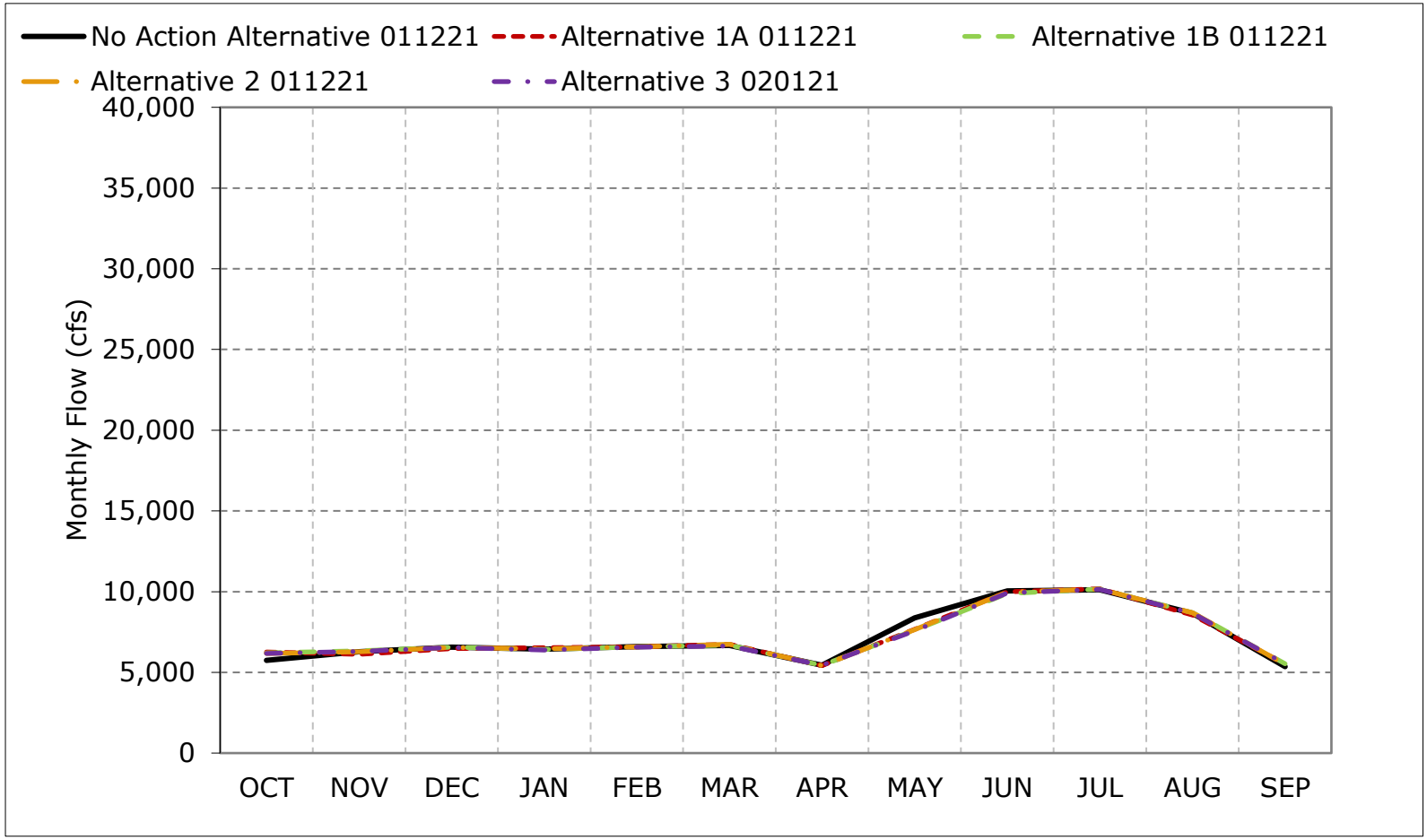
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-1-5. Sacramento River Flow at Bend Bridge, Dry Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-1-6. Sacramento River Flow at Bend Bridge, Critical Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-1-7. Sacramento River Flow at Bend Bridge, October

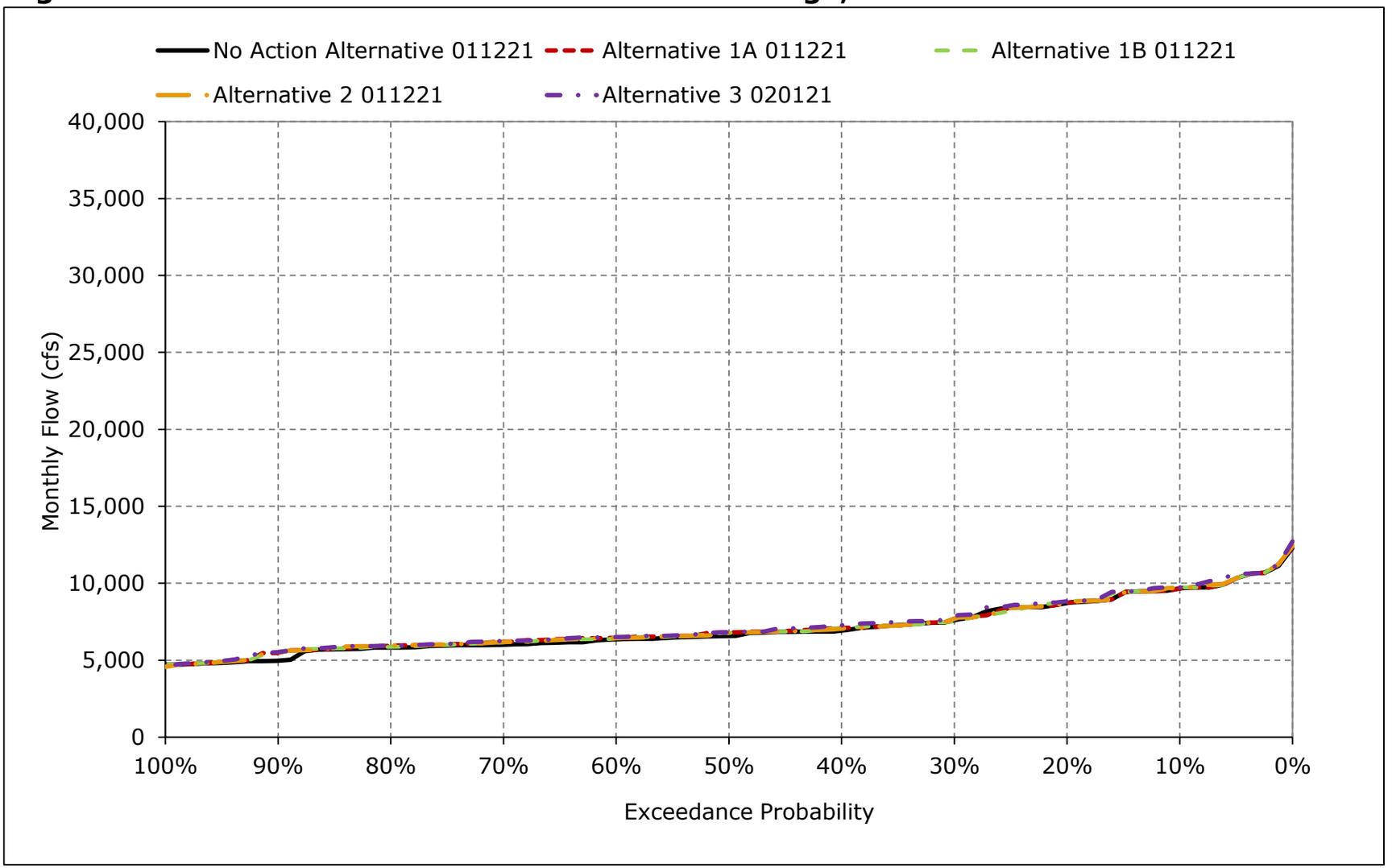


Figure 5C-1-8. Sacramento River Flow at Bend Bridge, November

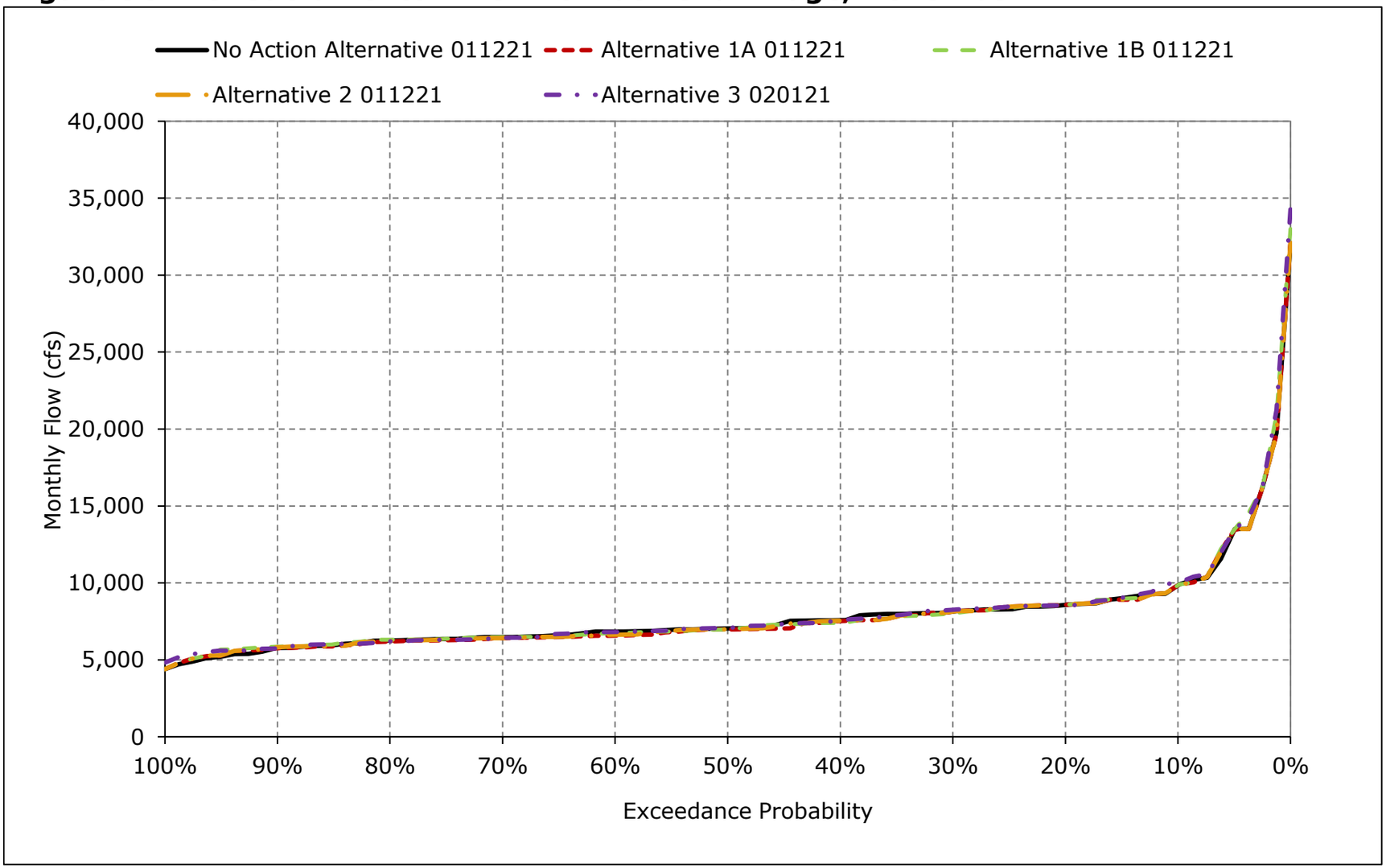


Figure 5C-1-9. Sacramento River Flow at Bend Bridge, December

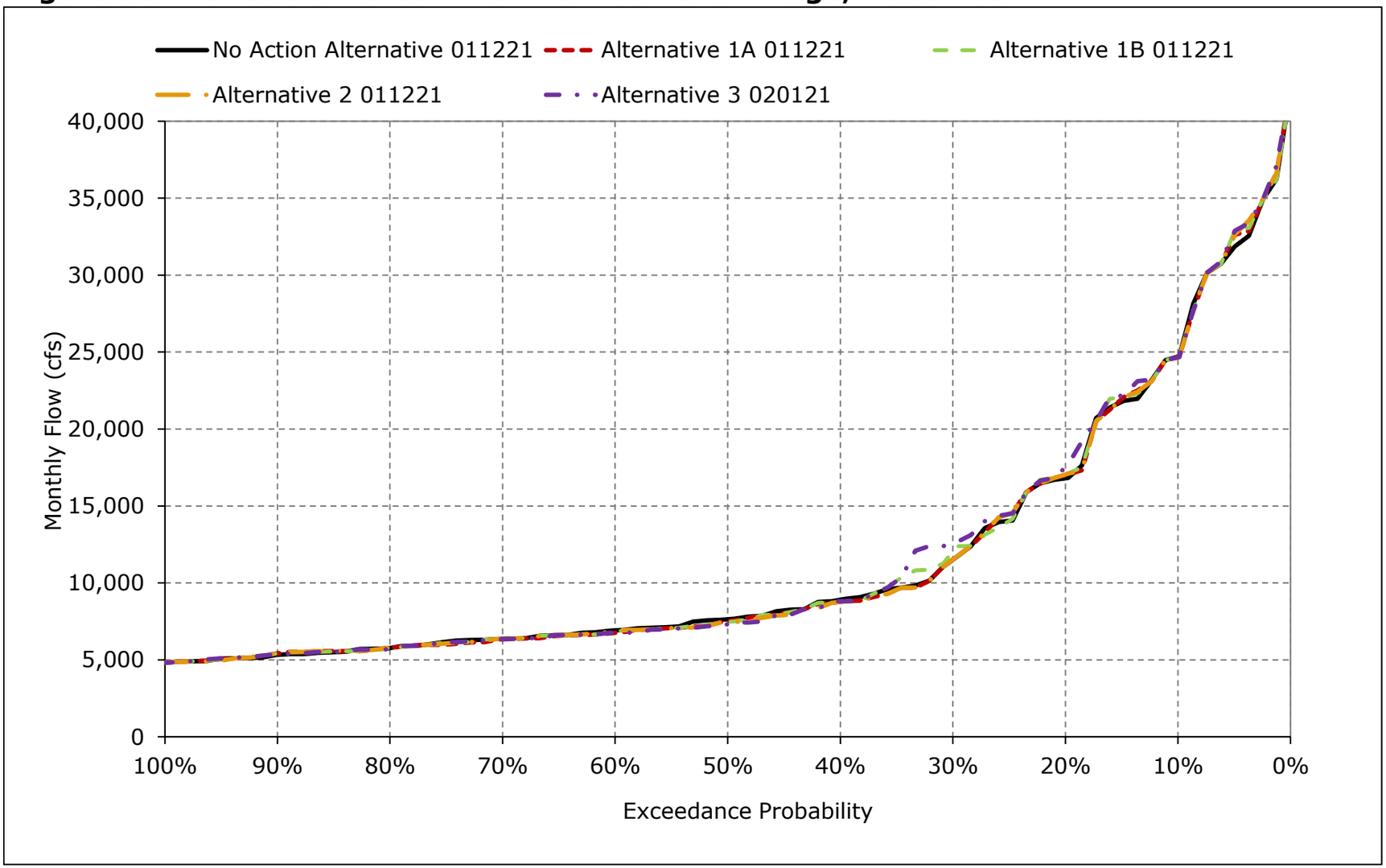


Figure 5C-1-10. Sacramento River Flow at Bend Bridge, January

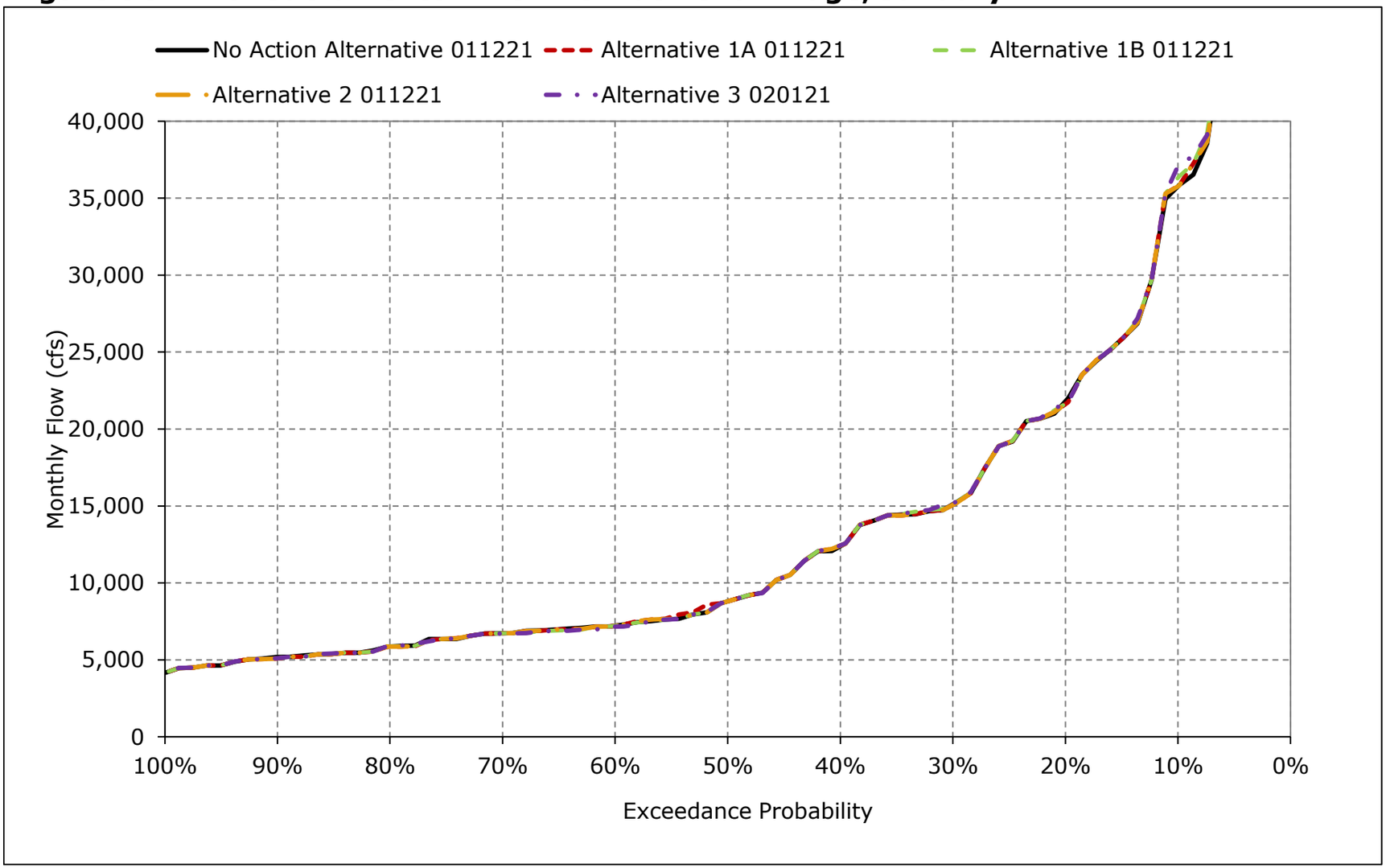


Figure 5C-1-11. Sacramento River Flow at Bend Bridge, February

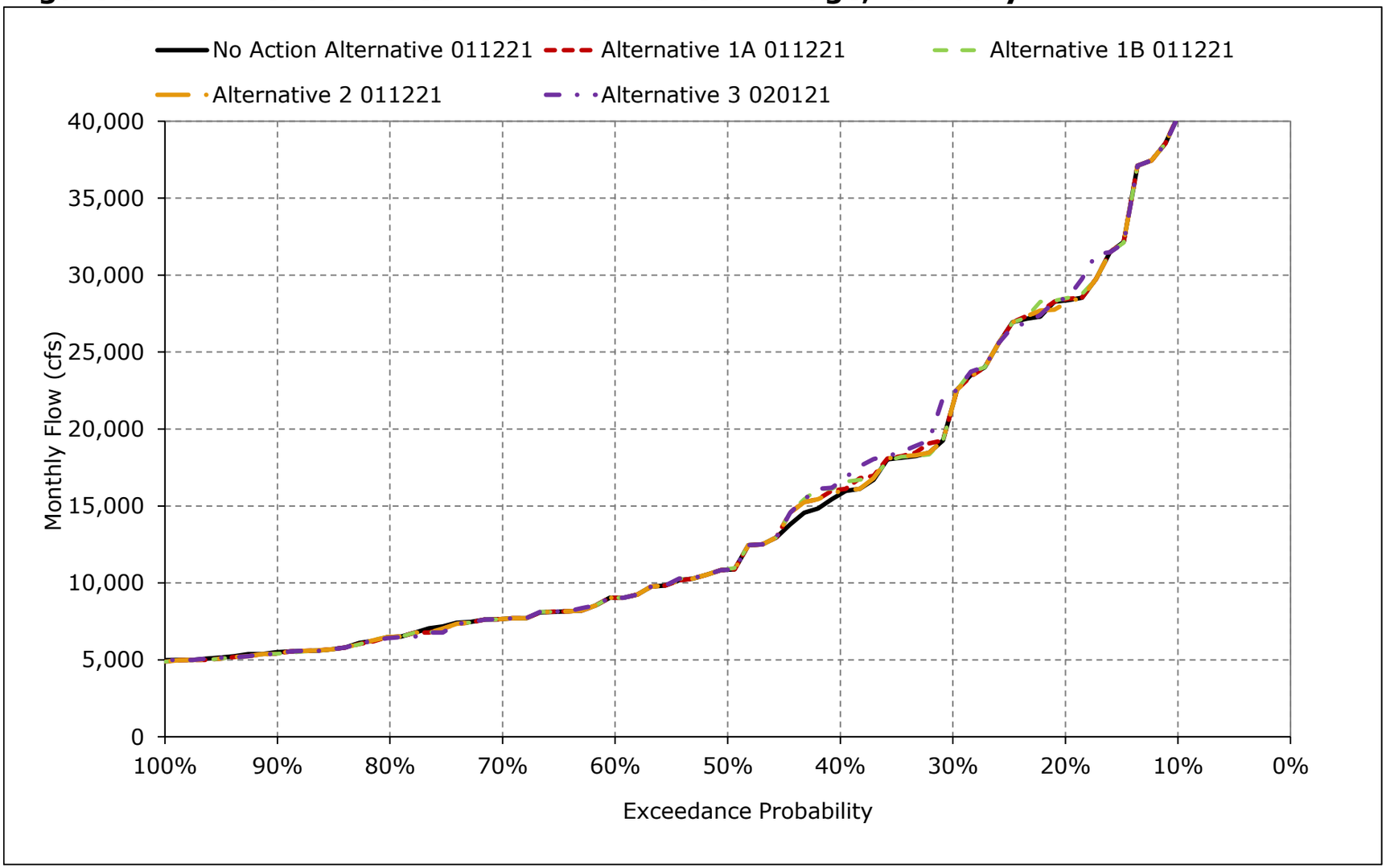


Figure 5C-1-12. Sacramento River Flow at Bend Bridge, March

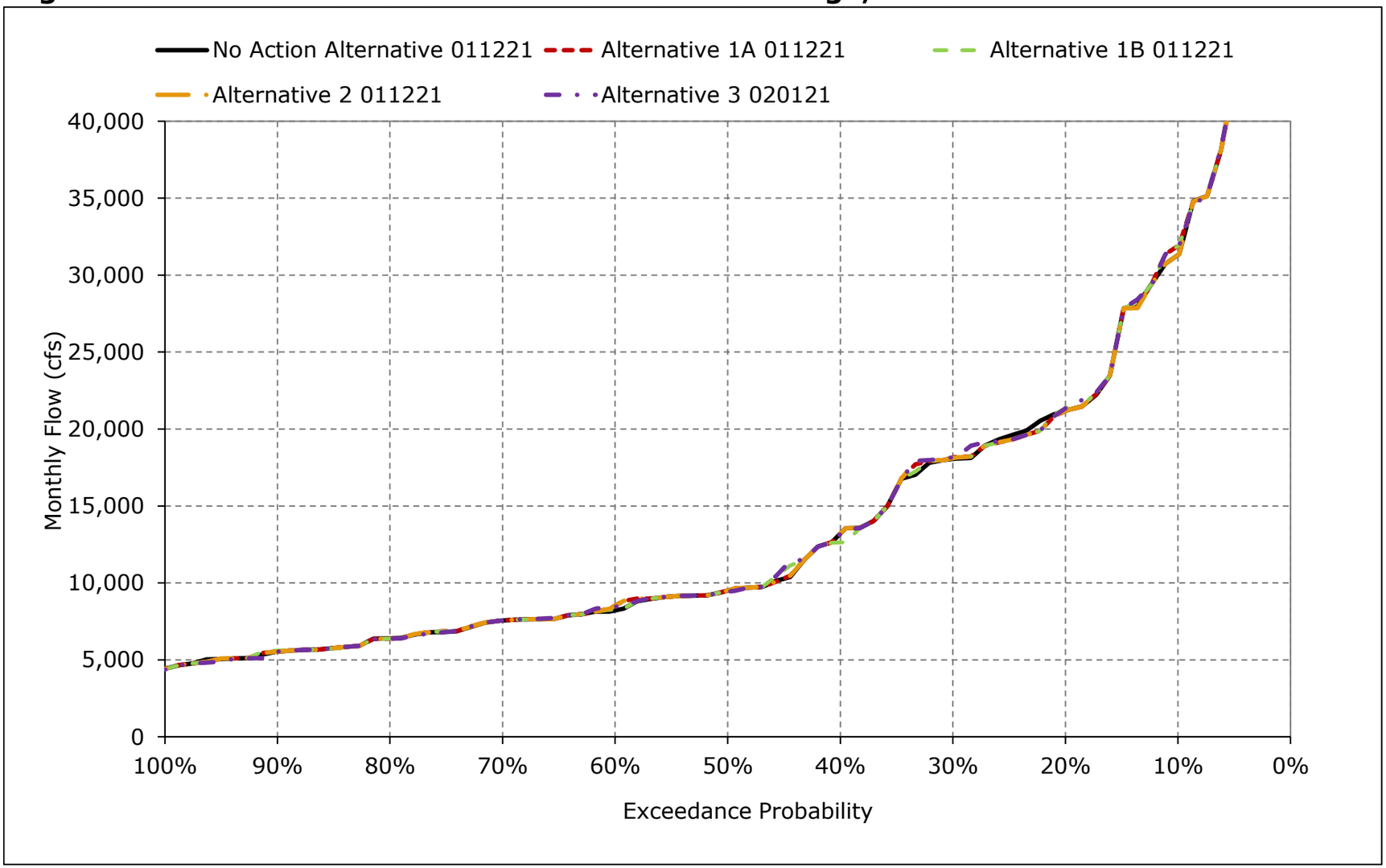


Figure 5C-1-13. Sacramento River Flow at Bend Bridge, April

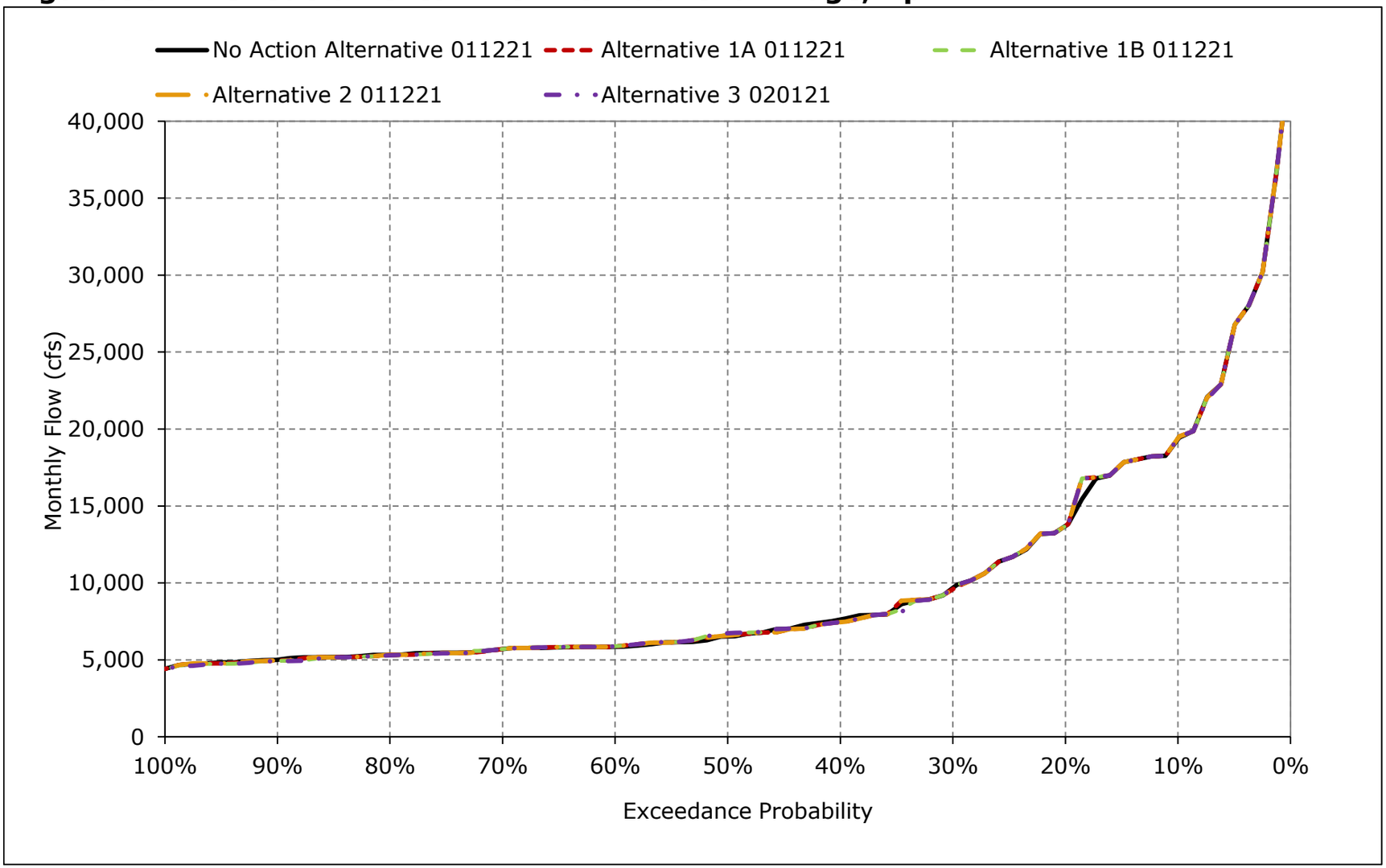


Figure 5C-1-14. Sacramento River Flow at Bend Bridge, May

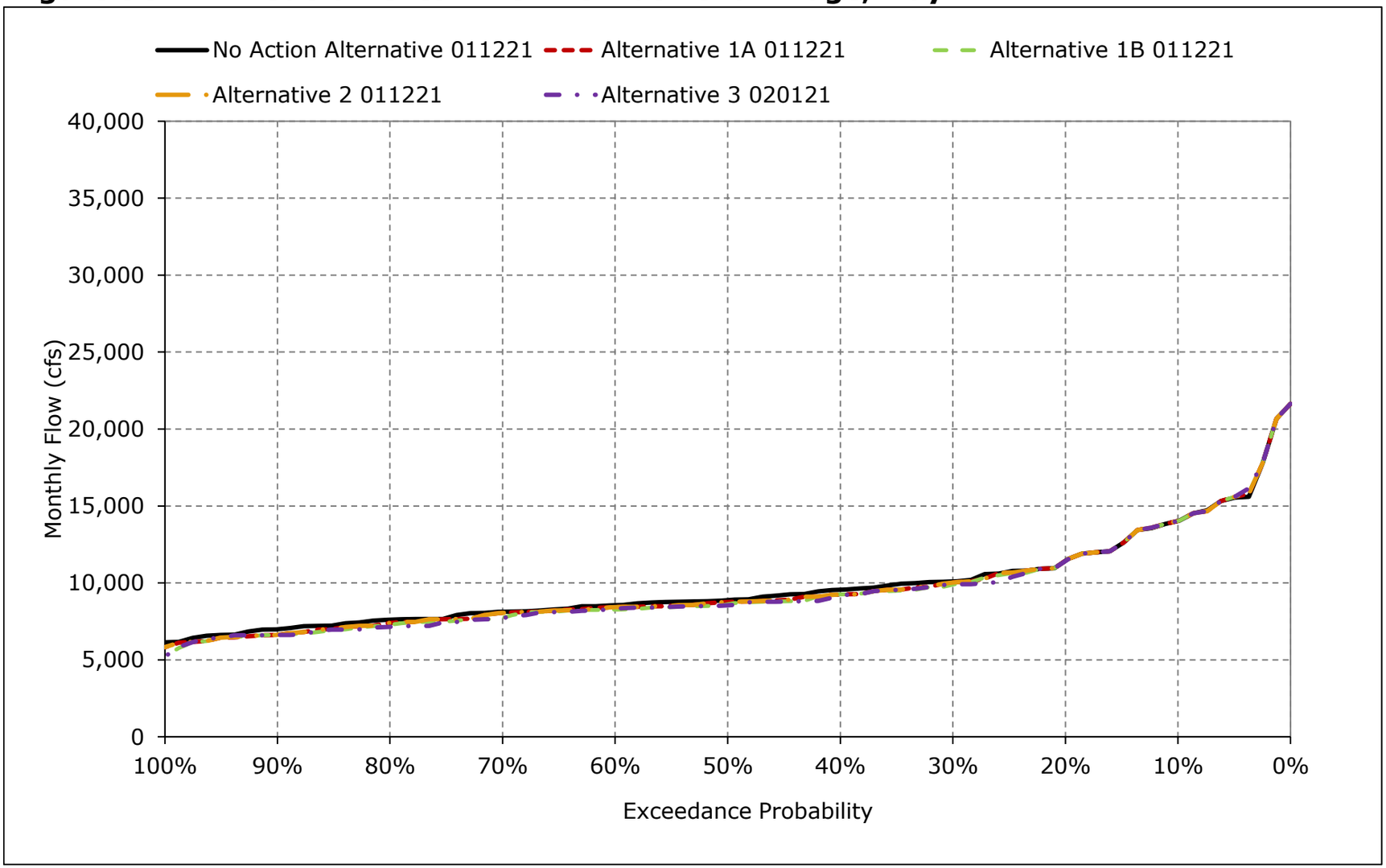


Figure 5C-1-15. Sacramento River Flow at Bend Bridge, June

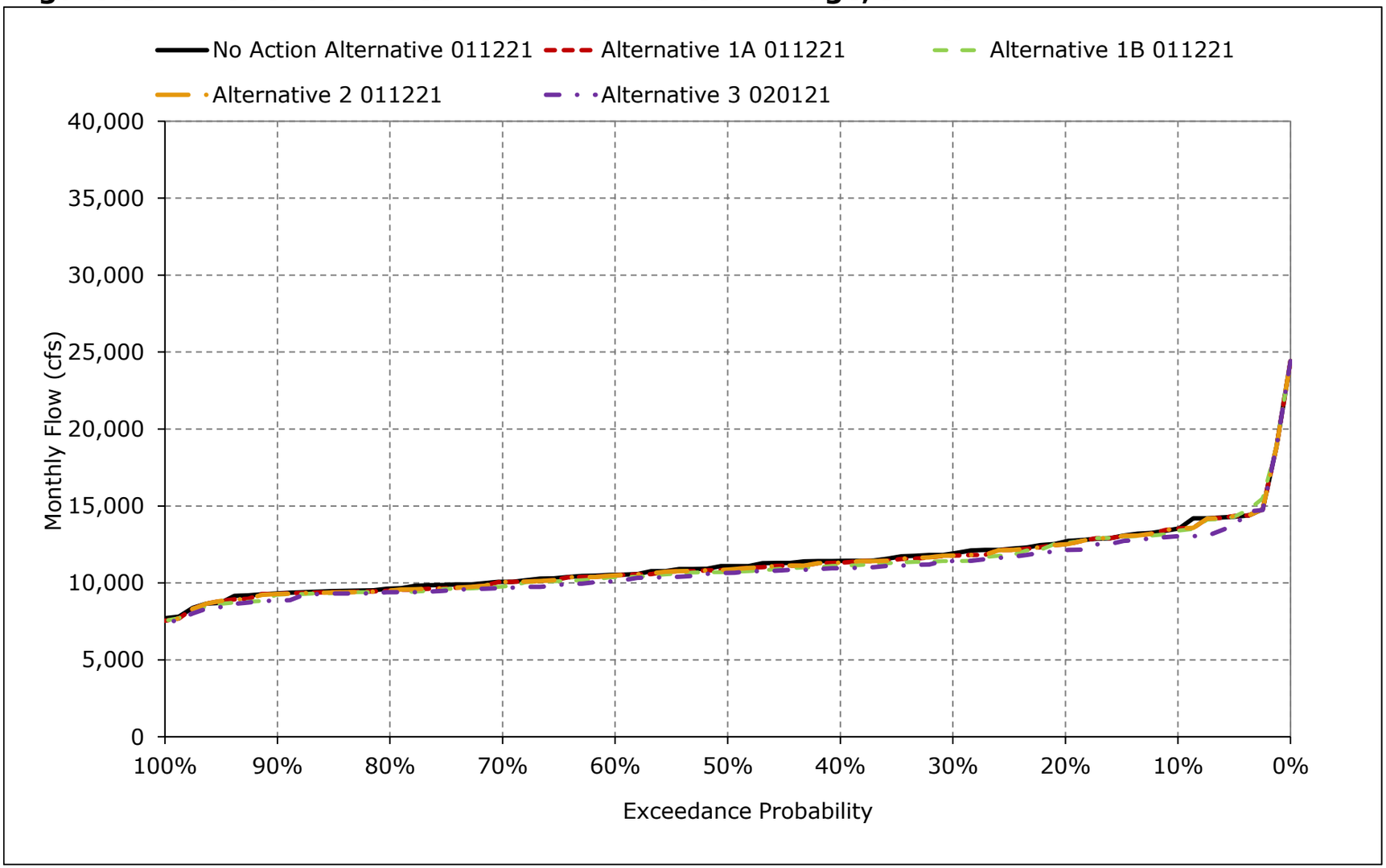


Figure 5C-1-16. Sacramento River Flow at Bend Bridge, July

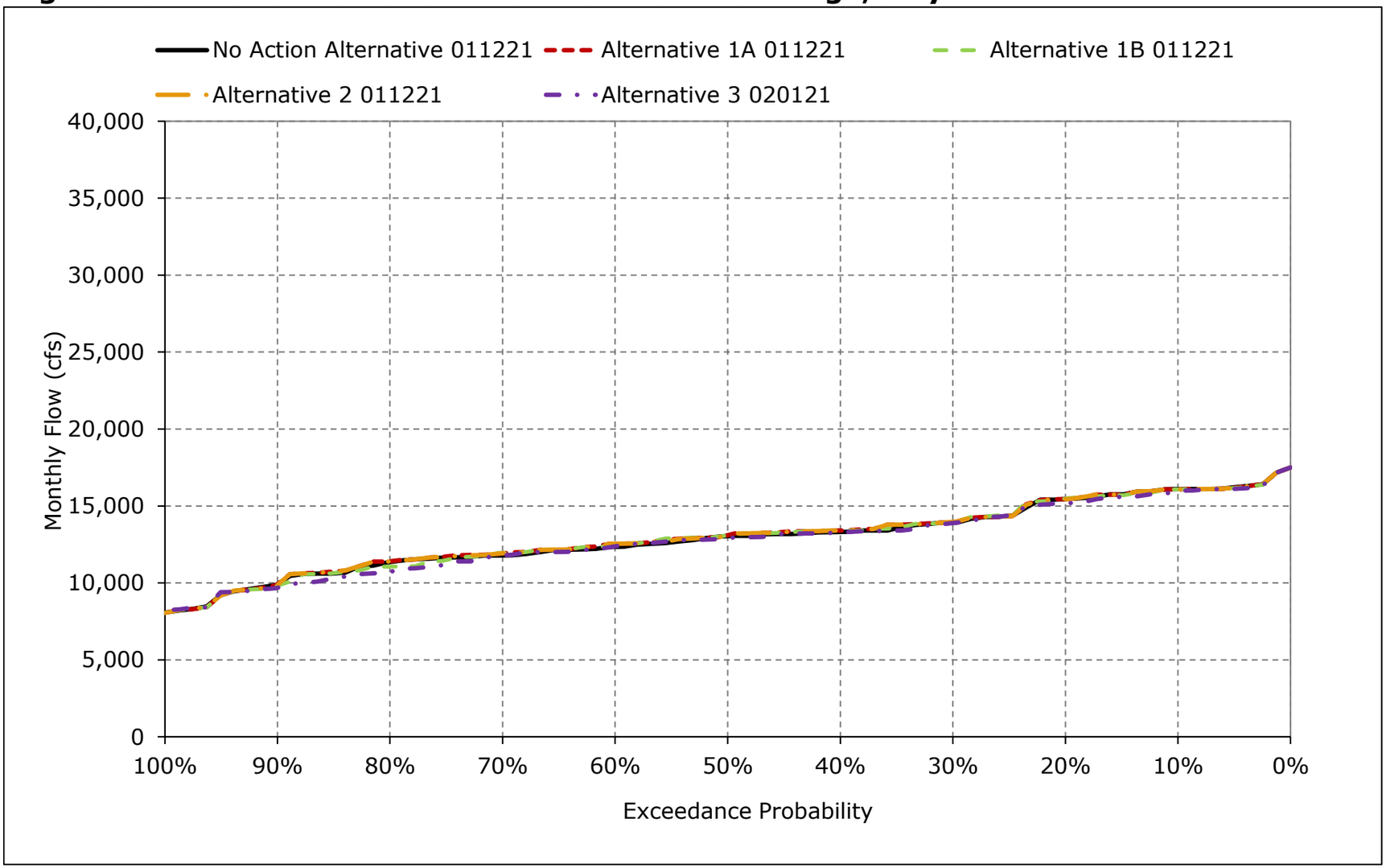


Figure 5C-1-17. Sacramento River Flow at Bend Bridge, August

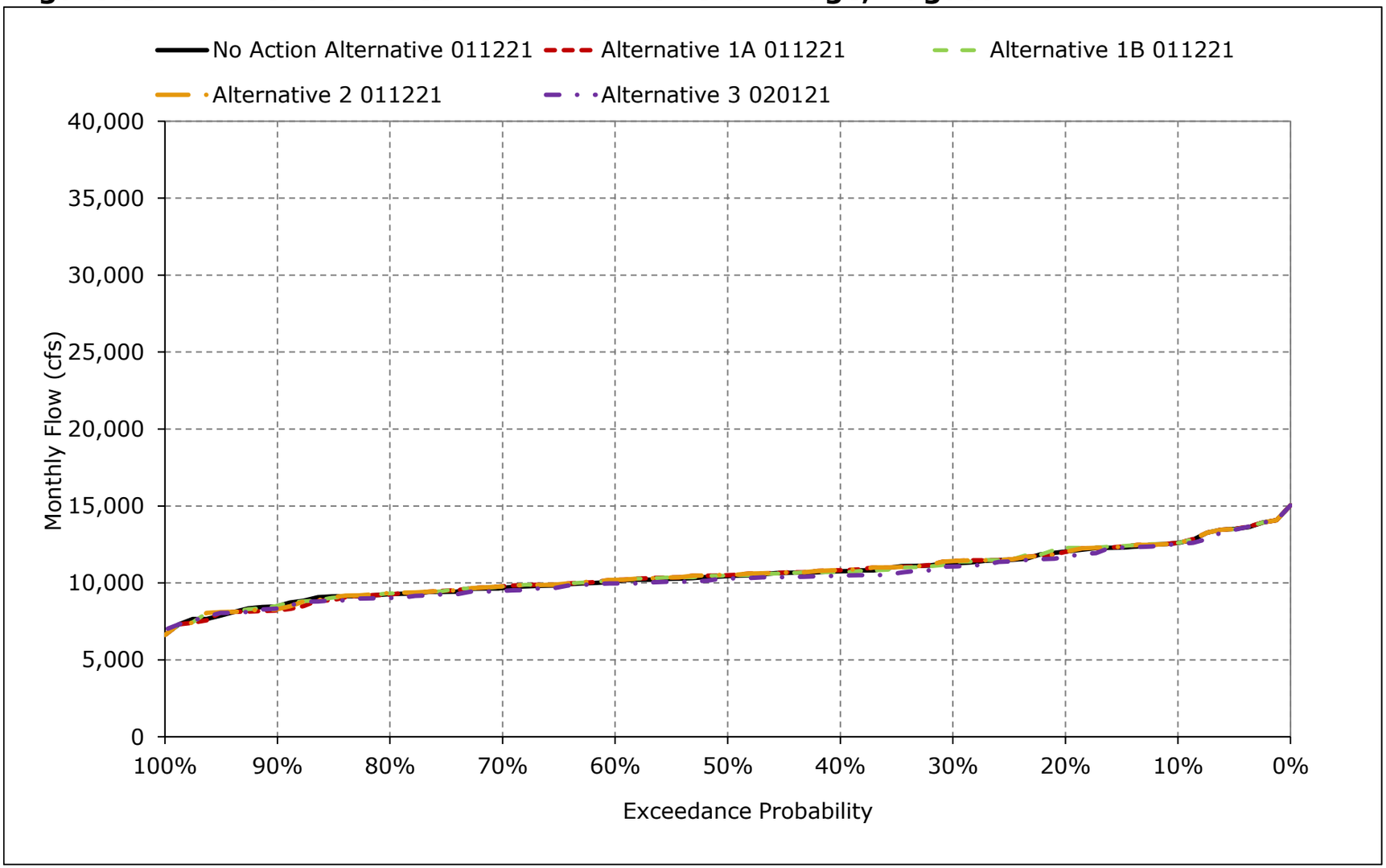


Figure 5C-1-18. Sacramento River Flow at Bend Bridge, September

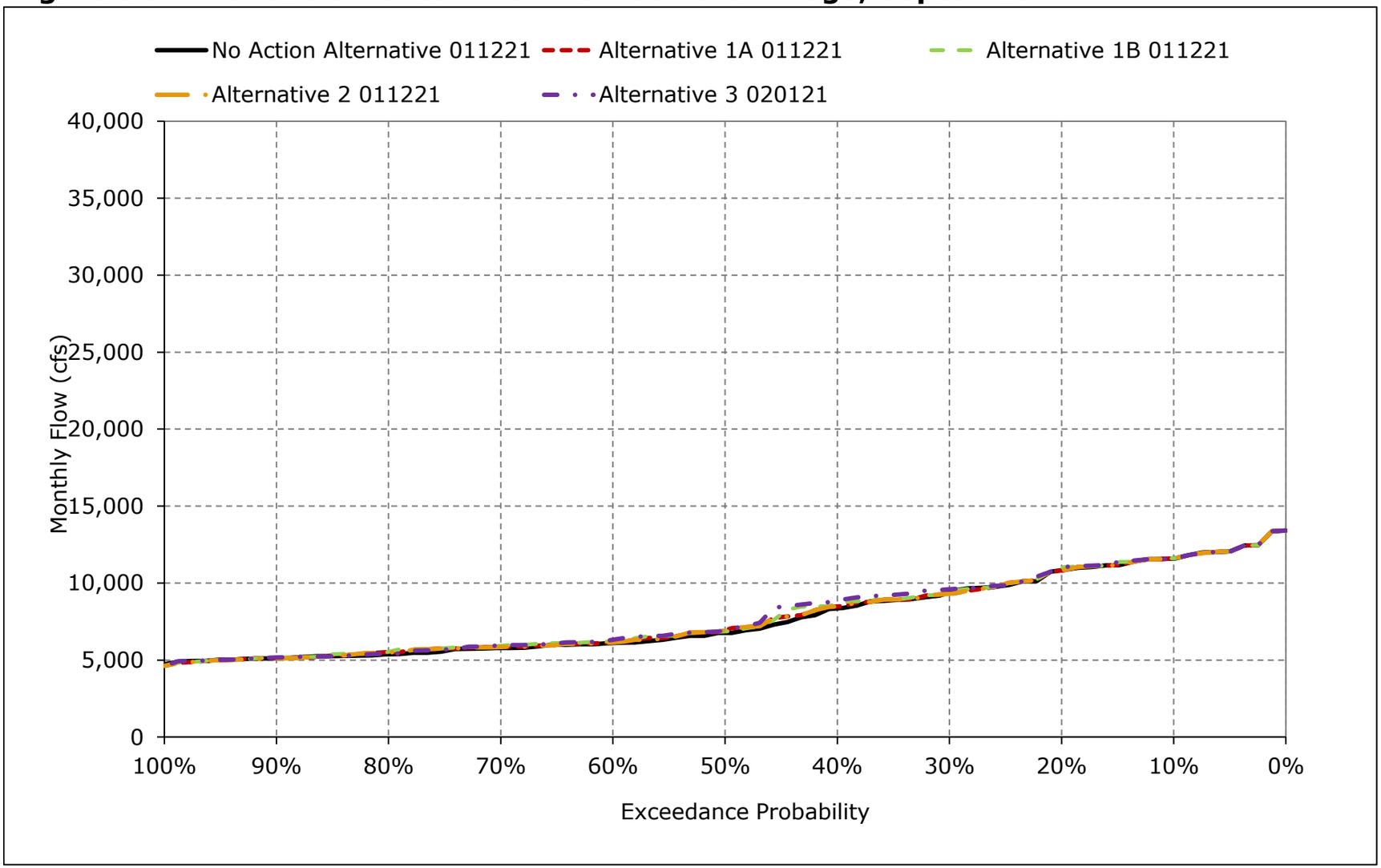


Table 5C-2-1a. Sacramento River Flow below Red Bluff Diversion Dam , No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,438	9,775	25,405	37,124	40,997	32,263	19,336	13,283	12,660	14,850	11,524	11,420
20%	8,539	8,616	17,331	22,722	29,393	21,738	13,706	11,163	11,757	14,089	11,094	10,488
30%	7,444	8,172	11,822	16,292	22,546	18,699	9,495	9,765	11,076	12,791	10,339	9,078
40%	6,789	7,655	9,262	12,796	16,419	13,377	7,465	8,918	10,304	12,305	9,889	8,142
50%	6,425	6,980	7,668	9,020	11,351	9,932	6,290	8,312	9,949	11,880	9,572	6,689
60%	6,208	6,880	6,985	7,444	9,404	8,342	5,765	7,851	9,655	11,365	9,254	5,889
70%	5,866	6,452	6,502	6,937	7,944	7,693	5,465	7,423	9,171	10,725	9,104	5,645
80%	5,677	6,254	5,805	5,894	6,728	6,432	5,208	7,094	8,778	10,291	8,665	5,230
90%	4,935	5,761	5,389	5,286	5,568	5,587	4,842	6,611	8,588	9,294	8,186	5,038
Long Term												
Full Simulation Period[a]	6,972	7,963	12,047	15,713	19,055	15,901	10,076	9,297	10,471	11,960	9,783	7,595
Water Year Types[b,c]												
Wet (32%)	8,473	8,492	12,891	28,179	33,074	26,085	16,694	11,166	10,477	12,112	10,835	10,513
Above Normal (15%)	6,884	9,908	11,831	17,145	22,455	21,497	10,560	9,197	10,224	13,351	10,367	8,481
Below Normal (17%)	6,886	7,842	13,478	10,209	13,012	9,368	6,954	8,187	10,518	12,469	9,398	6,147
Dry (22%)	5,811	7,122	13,428	7,123	9,444	8,616	5,767	8,253	11,016	11,800	9,031	5,464
Critical (15%)	5,651	6,272	6,697	6,577	6,745	6,791	5,362	8,207	9,835	9,886	8,498	5,274

Table 5C-2-1b. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 1A 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,437	9,310	25,167	35,844	38,996	31,883	18,210	13,071	12,535	14,877	11,511	11,420
20%	8,549	8,612	17,305	21,333	27,475	20,466	13,387	10,461	11,518	14,208	11,057	10,483
30%	7,587	7,999	11,736	14,774	20,670	16,757	9,351	9,118	10,898	12,859	10,495	8,974
40%	6,966	7,406	8,780	11,942	15,735	12,252	7,192	8,636	10,187	12,492	10,007	8,187
50%	6,673	6,922	7,431	8,664	10,344	8,585	6,367	8,247	9,921	11,926	9,611	6,849
60%	6,368	6,497	6,733	7,031	8,715	7,524	5,771	7,800	9,606	11,455	9,479	6,068
70%	6,038	6,294	6,127	6,580	7,541	6,379	5,418	7,313	9,126	10,877	9,087	5,735
80%	5,834	6,031	5,735	5,539	6,224	5,975	5,111	6,974	8,661	10,398	8,566	5,378
90%	5,412	5,680	5,328	5,109	5,516	5,211	4,791	6,347	8,377	9,270	8,038	5,030
Long Term												
Full Simulation Period[a]	7,070	7,770	11,770	15,034	18,278	15,015	9,907	9,096	10,324	12,049	9,806	7,683
Water Year Types[b,c]												
Wet (32%)	8,463	8,257	12,708	27,220	32,061	25,338	16,307	11,025	10,405	12,130	10,767	10,510
Above Normal (15%)	6,927	9,577	11,548	15,934	21,337	19,939	10,493	9,208	10,118	13,408	10,339	8,508
Below Normal (17%)	6,894	7,767	13,212	9,623	12,220	8,207	6,848	8,203	10,350	12,605	9,430	6,219
Dry (22%)	5,879	6,973	13,189	6,794	8,855	7,769	5,697	7,994	10,682	11,989	9,289	5,680
Critical (15%)	6,183	6,107	6,149	6,402	6,559	6,534	5,336	7,499	9,787	9,958	8,407	5,448

Table 5C-2-1c. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 1A 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-1	-465	-238	-1,280	-2,001	-380	-1,127	-212	-125	27	-14	0
20%	10	-3	-26	-1,389	-1,917	-1,272	-320	-703	-239	119	-36	-4
30%	143	-174	-87	-1,518	-1,876	-1,942	-144	-647	-178	67	155	-105
40%	177	-249	-482	-854	-684	-1,124	-273	-281	-117	187	119	46
50%	248	-58	-237	-357	-1,007	-1,347	77	-65	-28	46	39	160
60%	160	-383	-252	-414	-689	-818	6	-51	-49	91	225	179
70%	172	-158	-375	-357	-403	-1,314	-48	-111	-45	151	-17	90
80%	157	-223	-70	-355	-504	-457	-98	-120	-117	108	-99	147
90%	477	-81	-61	-177	-53	-377	-51	-265	-210	-24	-148	-8
Long Term												
Full Simulation Period[a]	97	-193	-277	-679	-777	-887	-170	-201	-147	89	23	88
Water Year Types[b,c]												
Wet (32%)	-10	-235	-183	-959	-1,013	-747	-387	-141	-72	18	-68	-3
Above Normal (15%)	43	-331	-283	-1,211	-1,118	-1,559	-67	11	-106	57	-28	27
Below Normal (17%)	8	-76	-266	-586	-791	-1,162	-106	16	-168	136	32	72
Dry (22%)	68	-148	-238	-329	-590	-847	-70	-259	-334	189	258	216
Critical (15%)	532	-166	-547	-176	-186	-257	-27	-708	-47	72	-92	174

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-2-2a. Sacramento River Flow below Red Bluff Diversion Dam , No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,438	9,775	25,405	37,124	40,997	32,263	19,336	13,283	12,660	14,850	11,524	11,420
20%	8,539	8,616	17,331	22,722	29,393	21,738	13,706	11,163	11,757	14,089	11,094	10,488
30%	7,444	8,172	11,822	16,292	22,546	18,699	9,495	9,765	11,076	12,791	10,339	9,078
40%	6,789	7,655	9,262	12,796	16,419	13,377	7,465	8,918	10,304	12,305	9,889	8,142
50%	6,425	6,980	7,668	9,020	11,351	9,932	6,290	8,312	9,949	11,880	9,572	6,689
60%	6,208	6,880	6,985	7,444	9,404	8,342	5,765	7,851	9,655	11,365	9,254	5,889
70%	5,866	6,452	6,502	6,937	7,944	7,693	5,465	7,423	9,171	10,725	9,104	5,645
80%	5,677	6,254	5,805	5,894	6,728	6,432	5,208	7,094	8,778	10,291	8,665	5,230
90%	4,935	5,761	5,389	5,286	5,568	5,587	4,842	6,611	8,588	9,294	8,186	5,038
Long Term												
Full Simulation Period[a]	6,972	7,963	12,047	15,713	19,055	15,901	10,076	9,297	10,471	11,960	9,783	7,595
Water Year Types[b,c]												
Wet (32%)	8,473	8,492	12,891	28,179	33,074	26,085	16,694	11,166	10,477	12,112	10,835	10,513
Above Normal (15%)	6,884	9,908	11,831	17,145	22,455	21,497	10,560	9,197	10,224	13,351	10,367	8,481
Below Normal (17%)	6,886	7,842	13,478	10,209	13,012	9,368	6,954	8,187	10,518	12,469	9,398	6,147
Dry (22%)	5,811	7,122	13,428	7,123	9,444	8,616	5,767	8,253	11,016	11,800	9,031	5,464
Critical (15%)	5,651	6,272	6,697	6,577	6,745	6,791	5,362	8,207	9,835	9,886	8,498	5,274

Table 5C-2-2b. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 1B 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,543	9,313	25,167	35,877	38,916	31,839	18,211	13,071	12,356	14,900	11,573	11,421
20%	8,616	8,642	17,381	21,250	27,717	20,559	13,386	10,443	11,484	14,202	11,137	10,627
30%	7,385	7,846	12,145	14,521	20,576	16,745	9,441	9,229	10,658	12,880	10,366	9,093
40%	6,959	7,353	8,773	11,957	15,675	12,202	7,192	8,632	10,130	12,422	10,017	8,465
50%	6,546	6,923	7,427	8,531	10,391	8,558	6,546	8,244	9,885	11,941	9,608	6,802
60%	6,317	6,619	6,742	7,031	8,701	7,494	5,770	7,684	9,604	11,477	9,477	6,141
70%	6,058	6,411	6,197	6,541	7,541	6,392	5,422	7,291	9,079	11,033	9,186	5,760
80%	5,731	6,149	5,705	5,549	6,294	5,910	5,109	6,926	8,652	10,310	8,584	5,412
90%	5,472	5,833	5,320	5,116	5,514	5,211	4,808	6,345	8,326	9,269	8,131	5,027
Long Term												
Full Simulation Period[a]	7,060	7,868	11,821	14,999	18,239	14,988	9,902	9,056	10,299	12,029	9,823	7,736
Water Year Types[b,c]												
Wet (32%)	8,456	8,203	12,712	27,156	32,016	25,276	16,275	10,969	10,404	12,130	10,767	10,519
Above Normal (15%)	7,007	9,548	11,622	15,947	21,119	19,963	10,539	9,207	9,844	13,258	10,384	8,838
Below Normal (17%)	6,959	7,918	13,329	9,608	12,284	8,204	6,853	8,100	10,297	12,562	9,418	6,269
Dry (22%)	5,777	7,267	13,221	6,798	8,830	7,755	5,676	7,983	10,861	12,033	9,243	5,632
Critical (15%)	6,133	6,308	6,230	6,305	6,572	6,484	5,353	7,483	9,687	9,954	8,561	5,469

Table 5C-2-2c. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 1B 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	105	-463	-238	-1,247	-2,082	-424	-1,126	-211	-304	50	49	1
20%	77	27	50	-1,472	-1,676	-1,178	-321	-720	-273	113	44	139
30%	-59	-326	323	-1,771	-1,970	-1,954	-55	-536	-418	89	27	15
40%	170	-303	-488	-840	-744	-1,174	-273	-285	-174	117	129	324
50%	121	-57	-240	-490	-960	-1,374	256	-68	-65	61	36	113
60%	108	-262	-243	-413	-703	-848	5	-167	-51	112	223	252
70%	192	-42	-304	-396	-403	-1,301	-44	-133	-92	307	82	115
80%	55	-105	-100	-346	-434	-522	-100	-168	-126	20	-82	182
90%	537	72	-69	-170	-54	-376	-34	-266	-262	-25	-55	-11
Long Term												
Full Simulation Period[a]	88	-94	-226	-714	-816	-914	-175	-241	-172	69	40	140
Water Year Types[b,c]												
Wet (32%)	-17	-289	-179	-1,023	-1,058	-809	-419	-197	-74	18	-68	6
Above Normal (15%)	122	-359	-209	-1,198	-1,336	-1,534	-21	9	-380	-93	18	357
Below Normal (17%)	73	76	-149	-601	-727	-1,165	-101	-87	-221	93	21	122
Dry (22%)	-34	145	-207	-326	-615	-862	-91	-270	-155	233	212	168
Critical (15%)	482	36	-466	-273	-174	-307	-9	-723	-147	68	63	195

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-2-3a. Sacramento River Flow below Red Bluff Diversion Dam , No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,438	9,775	25,405	37,124	40,997	32,263	19,336	13,283	12,660	14,850	11,524	11,420
20%	8,539	8,616	17,331	22,722	29,393	21,738	13,706	11,163	11,757	14,089	11,094	10,488
30%	7,444	8,172	11,822	16,292	22,546	18,699	9,495	9,765	11,076	12,791	10,339	9,078
40%	6,789	7,655	9,262	12,796	16,419	13,377	7,465	8,918	10,304	12,305	9,889	8,142
50%	6,425	6,980	7,668	9,020	11,351	9,932	6,290	8,312	9,949	11,880	9,572	6,689
60%	6,208	6,880	6,985	7,444	9,404	8,342	5,765	7,851	9,655	11,365	9,254	5,889
70%	5,866	6,452	6,502	6,937	7,944	7,693	5,465	7,423	9,171	10,725	9,104	5,645
80%	5,677	6,254	5,805	5,894	6,728	6,432	5,208	7,094	8,778	10,291	8,665	5,230
90%	4,935	5,761	5,389	5,286	5,568	5,587	4,842	6,611	8,588	9,294	8,186	5,038
Long Term												
Full Simulation Period[a]	6,972	7,963	12,047	15,713	19,055	15,901	10,076	9,297	10,471	11,960	9,783	7,595
Water Year Types[b,c]												
Wet (32%)	8,473	8,492	12,891	28,179	33,074	26,085	16,694	11,166	10,477	12,112	10,835	10,513
Above Normal (15%)	6,884	9,908	11,831	17,145	22,455	21,497	10,560	9,197	10,224	13,351	10,367	8,481
Below Normal (17%)	6,886	7,842	13,478	10,209	13,012	9,368	6,954	8,187	10,518	12,469	9,398	6,147
Dry (22%)	5,811	7,122	13,428	7,123	9,444	8,616	5,767	8,253	11,016	11,800	9,031	5,464
Critical (15%)	5,651	6,272	6,697	6,577	6,745	6,791	5,362	8,207	9,835	9,886	8,498	5,274

Table 5C-2-3b. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 2 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,543	9,314	25,169	35,818	40,782	32,162	18,261	13,071	12,542	14,876	11,695	11,422
20%	8,549	8,612	17,299	21,348	27,330	20,466	13,387	10,461	11,521	14,209	11,132	10,483
30%	7,587	7,994	11,736	14,872	20,678	16,805	9,351	9,118	10,898	12,842	10,497	8,980
40%	6,941	7,429	8,780	12,139	15,671	12,253	7,192	8,636	10,187	12,492	10,008	8,187
50%	6,615	6,963	7,381	8,525	10,344	8,878	6,368	8,224	9,919	11,940	9,610	6,874
60%	6,353	6,507	6,815	7,030	8,738	7,523	5,767	7,800	9,614	11,433	9,519	6,068
70%	6,015	6,318	6,187	6,580	7,541	6,379	5,418	7,313	9,126	10,881	9,141	5,726
80%	5,860	6,063	5,740	5,539	6,267	5,976	5,110	6,975	8,662	10,403	8,646	5,375
90%	5,395	5,817	5,333	5,109	5,515	5,211	4,791	6,347	8,397	9,270	8,066	5,001
Long Term												
Full Simulation Period[a]	7,064	7,786	11,776	15,033	18,274	15,052	9,928	9,096	10,324	12,050	9,842	7,684
Water Year Types[b,c]												
Wet (32%)	8,464	8,259	12,685	27,255	32,140	25,415	16,372	11,027	10,405	12,132	10,800	10,512
Above Normal (15%)	6,928	9,580	11,548	15,933	21,282	19,927	10,493	9,208	10,118	13,413	10,339	8,513
Below Normal (17%)	6,932	7,697	13,214	9,622	12,093	8,206	6,848	8,204	10,351	12,610	9,440	6,214
Dry (22%)	5,890	6,992	13,202	6,793	8,857	7,836	5,700	7,995	10,692	11,995	9,291	5,678
Critical (15%)	6,086	6,264	6,216	6,323	6,563	6,533	5,336	7,490	9,770	9,937	8,561	5,450

Table 5C-2-3c. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 2 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	105	-461	-236	-1,306	-215	-101	-1,075	-212	-118	26	170	2
20%	11	-3	-32	-1,374	-2,062	-1,272	-320	-702	-237	120	39	-5
30%	142	-179	-86	-1,420	-1,868	-1,894	-144	-647	-178	51	158	-99
40%	152	-226	-481	-658	-748	-1,124	-273	-281	-117	188	119	46
50%	190	-18	-286	-495	-1,007	-1,054	79	-89	-30	61	39	185
60%	144	-373	-170	-414	-666	-819	1	-51	-41	68	265	179
70%	149	-135	-315	-356	-403	-1,314	-48	-111	-45	156	37	81
80%	183	-191	-64	-355	-461	-456	-98	-119	-116	112	-19	145
90%	460	56	-56	-177	-54	-377	-51	-265	-191	-24	-120	-37
Long Term												
Full Simulation Period[a]	92	-177	-272	-680	-781	-850	-149	-201	-148	90	58	88
Water Year Types[b,c]												
Wet (32%)	-9	-233	-206	-924	-935	-670	-322	-139	-72	20	-35	-2
Above Normal (15%)	44	-328	-283	-1,212	-1,173	-1,570	-67	11	-106	62	-27	32
Below Normal (17%)	46	-146	-263	-587	-919	-1,162	-106	17	-168	140	42	66
Dry (22%)	78	-130	-225	-330	-588	-780	-67	-257	-324	195	260	214
Critical (15%)	435	-9	-481	-255	-182	-258	-27	-716	-65	51	63	176

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-2-4a. Sacramento River Flow below Red Bluff Diversion Dam , No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,438	9,775	25,405	37,124	40,997	32,263	19,336	13,283	12,660	14,850	11,524	11,420
20%	8,539	8,616	17,331	22,722	29,393	21,738	13,706	11,163	11,757	14,089	11,094	10,488
30%	7,444	8,172	11,822	16,292	22,546	18,699	9,495	9,765	11,076	12,791	10,339	9,078
40%	6,789	7,655	9,262	12,796	16,419	13,377	7,465	8,918	10,304	12,305	9,889	8,142
50%	6,425	6,980	7,668	9,020	11,351	9,932	6,290	8,312	9,949	11,880	9,572	6,689
60%	6,208	6,880	6,985	7,444	9,404	8,342	5,765	7,851	9,655	11,365	9,254	5,889
70%	5,866	6,452	6,502	6,937	7,944	7,693	5,465	7,423	9,171	10,725	9,104	5,645
80%	5,677	6,254	5,805	5,894	6,728	6,432	5,208	7,094	8,778	10,291	8,665	5,230
90%	4,935	5,761	5,389	5,286	5,568	5,587	4,842	6,611	8,588	9,294	8,186	5,038
Long Term												
Full Simulation Period[a]	6,972	7,963	12,047	15,713	19,055	15,901	10,076	9,297	10,471	11,960	9,783	7,595
Water Year Types[b,c]												
Wet (32%)	8,473	8,492	12,891	28,179	33,074	26,085	16,694	11,166	10,477	12,112	10,835	10,513
Above Normal (15%)	6,884	9,908	11,831	17,145	22,455	21,497	10,560	9,197	10,224	13,351	10,367	8,481
Below Normal (17%)	6,886	7,842	13,478	10,209	13,012	9,368	6,954	8,187	10,518	12,469	9,398	6,147
Dry (22%)	5,811	7,122	13,428	7,123	9,444	8,616	5,767	8,253	11,016	11,800	9,031	5,464
Critical (15%)	5,651	6,272	6,697	6,577	6,745	6,791	5,362	8,207	9,835	9,886	8,498	5,274

Table 5C-2-4b. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 3 020121, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,603	9,745	25,166	35,891	38,915	31,875	18,138	13,075	12,263	15,105	11,487	11,420
20%	8,638	8,533	17,834	21,320	28,880	20,221	13,386	10,386	11,273	14,389	10,981	10,627
30%	7,737	8,081	12,733	14,551	21,319	17,311	9,438	9,211	10,496	12,722	10,098	9,292
40%	7,135	7,388	8,772	11,951	16,480	11,560	7,193	8,588	10,130	12,333	9,635	8,682
50%	6,683	7,023	7,297	8,528	10,353	8,639	6,570	8,177	9,800	11,970	9,537	6,847
60%	6,361	6,755	6,673	6,985	8,701	7,516	5,763	7,688	9,405	11,288	9,259	6,207
70%	6,162	6,298	6,181	6,560	7,615	6,618	5,415	7,161	9,053	10,760	8,973	5,747
80%	5,822	6,048	5,715	5,550	6,263	5,997	5,106	6,725	8,603	10,166	8,472	5,313
90%	5,416	5,703	5,323	5,118	5,475	5,137	4,784	6,371	8,192	9,284	8,017	5,025
Long Term												
Full Simulation Period[a]	7,173	7,916	11,912	15,022	18,358	14,944	9,858	9,015	10,157	12,001	9,680	7,791
Water Year Types[b,c]												
Wet (32%)	8,462	8,211	12,692	27,237	32,098	25,118	16,157	10,915	10,364	12,129	10,766	10,512
Above Normal (15%)	7,353	9,527	11,681	15,952	21,730	19,858	10,527	9,199	9,610	13,285	9,872	9,269
Below Normal (17%)	7,188	7,955	13,524	9,607	12,324	8,182	6,851	8,101	9,899	12,670	9,381	6,360
Dry (22%)	5,907	7,483	13,478	6,812	8,833	7,884	5,655	7,926	10,744	11,860	9,022	5,555
Critical (15%)	6,083	6,270	6,223	6,258	6,546	6,462	5,352	7,413	9,677	9,870	8,474	5,438

Table 5C-2-4c. Sacramento River Flow below Red Bluff Diversion Dam , Alternative 3 020121 minus No Action Alternative 011221, Monthly Flow (cfs)

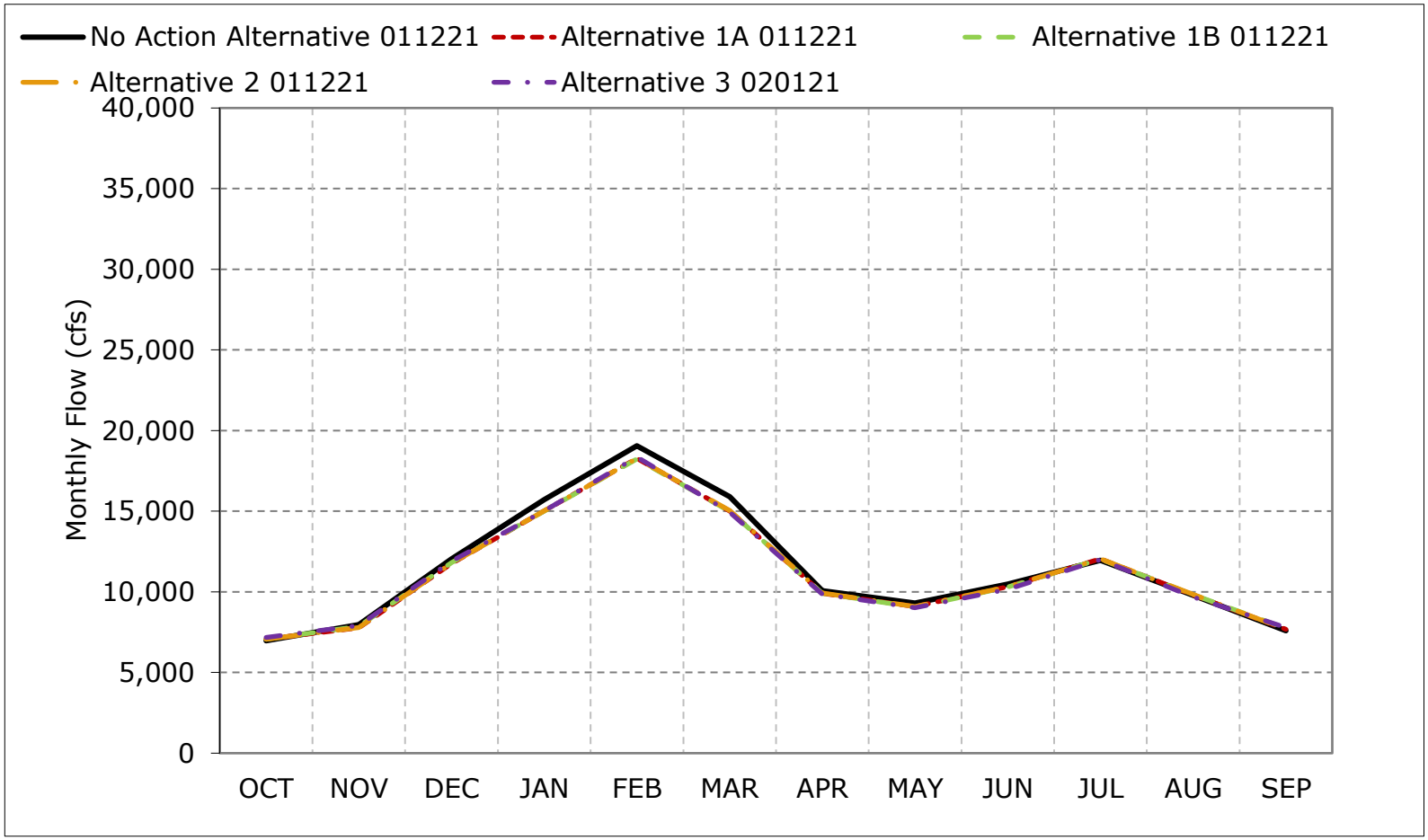
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	165	-30	-239	-1,233	-2,083	-389	-1,198	-208	-397	255	-37	0
20%	99	-82	502	-1,402	-513	-1,517	-321	-777	-484	300	-113	140
30%	293	-91	911	-1,742	-1,227	-1,388	-58	-553	-580	-69	-241	214
40%	346	-268	-489	-845	61	-1,817	-272	-329	-174	28	-253	541
50%	258	42	-371	-492	-998	-1,293	281	-135	-149	91	-34	158
60%	153	-125	-312	-459	-703	-826	-2	-163	-250	-77	5	318
70%	296	-154	-321	-376	-329	-1,075	-50	-263	-118	34	-132	101
80%	145	-206	-90	-344	-465	-435	-103	-369	-174	-125	-193	83
90%	481	-58	-66	-168	-94	-451	-58	-241	-396	-10	-169	-13
Long Term												
Full Simulation Period[a]	201	-47	-136	-691	-696	-958	-219	-282	-314	41	-103	196
Water Year Types[b,c]												
Wet (32%)	-10	-282	-199	-942	-977	-967	-537	-252	-113	17	-69	-1
Above Normal (15%)	469	-381	-150	-1,192	-725	-1,640	-33	2	-614	-66	-495	788
Below Normal (17%)	301	113	46	-602	-688	-1,186	-103	-86	-619	200	-17	213
Dry (22%)	96	362	51	-311	-612	-732	-112	-327	-272	59	-9	91
Critical (15%)	432	-2	-474	-319	-199	-329	-10	-794	-157	-16	-25	164

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

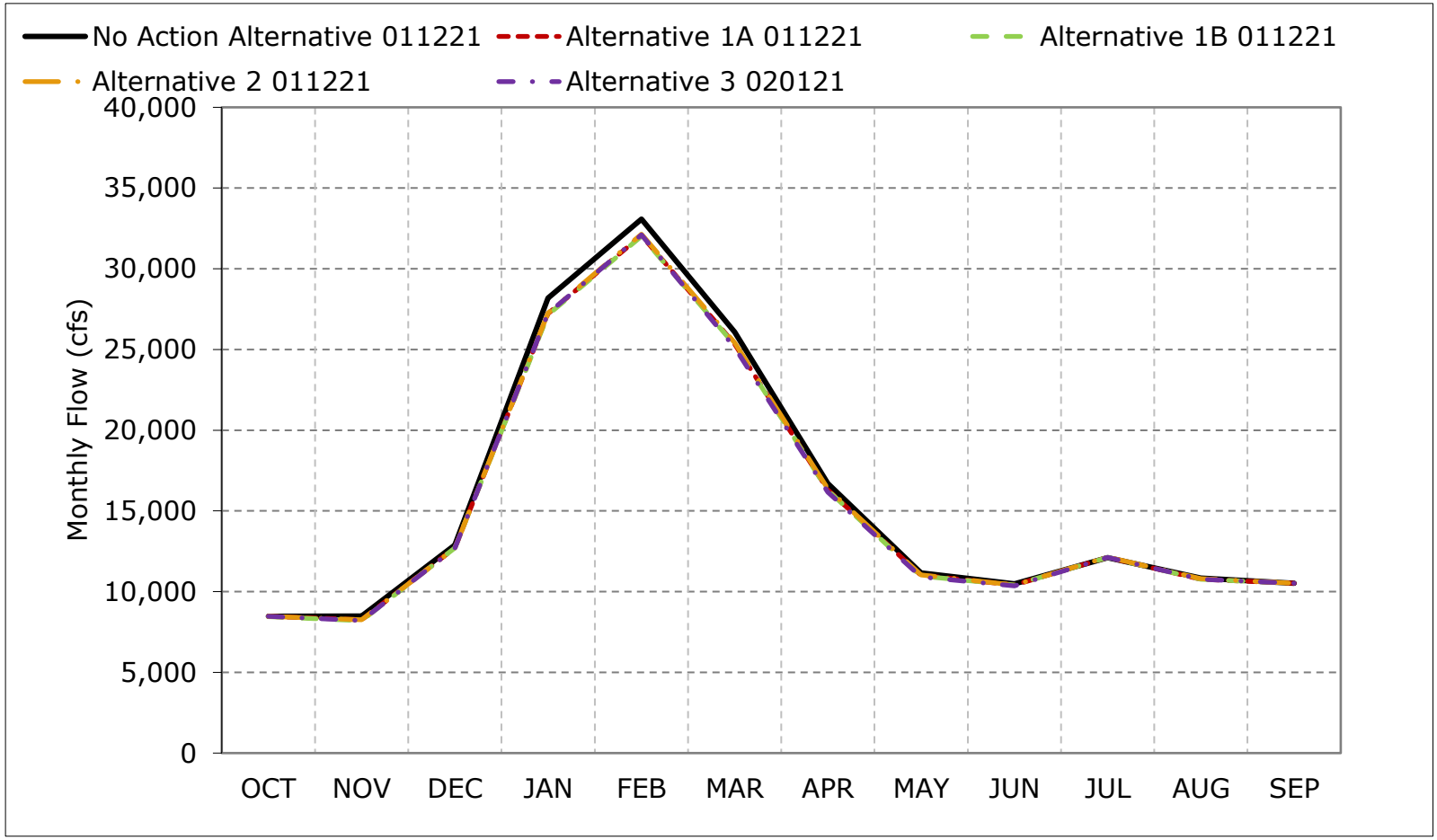
c These results are displayed with calendar year - year type sorting.

Figure 5C-2-1. Sacramento River Flow below Red Bluff Diversion Dam , Long-Term Average Flow



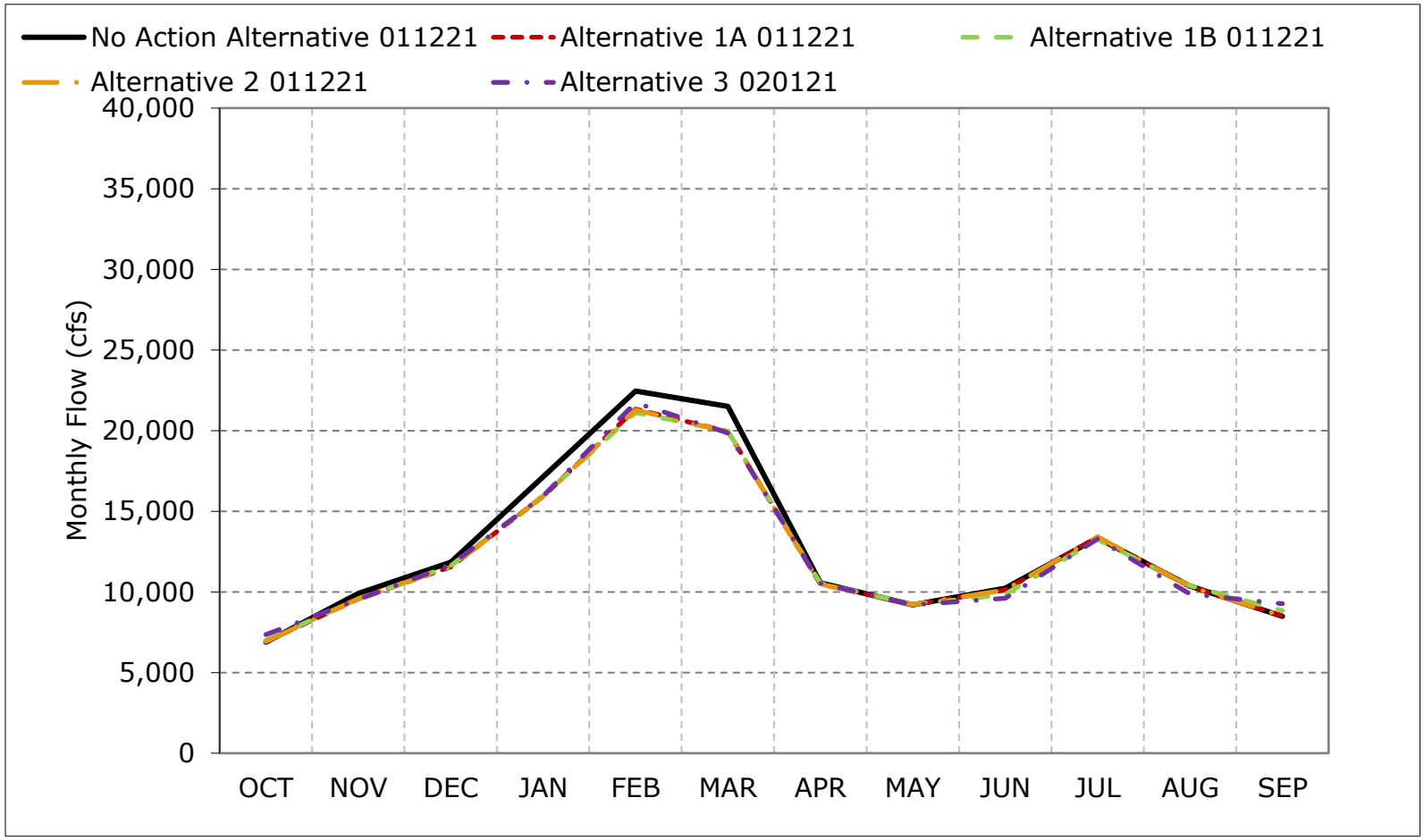
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-2-2. Sacramento River Flow below Red Bluff Diversion Dam , Wet Year Average Flow



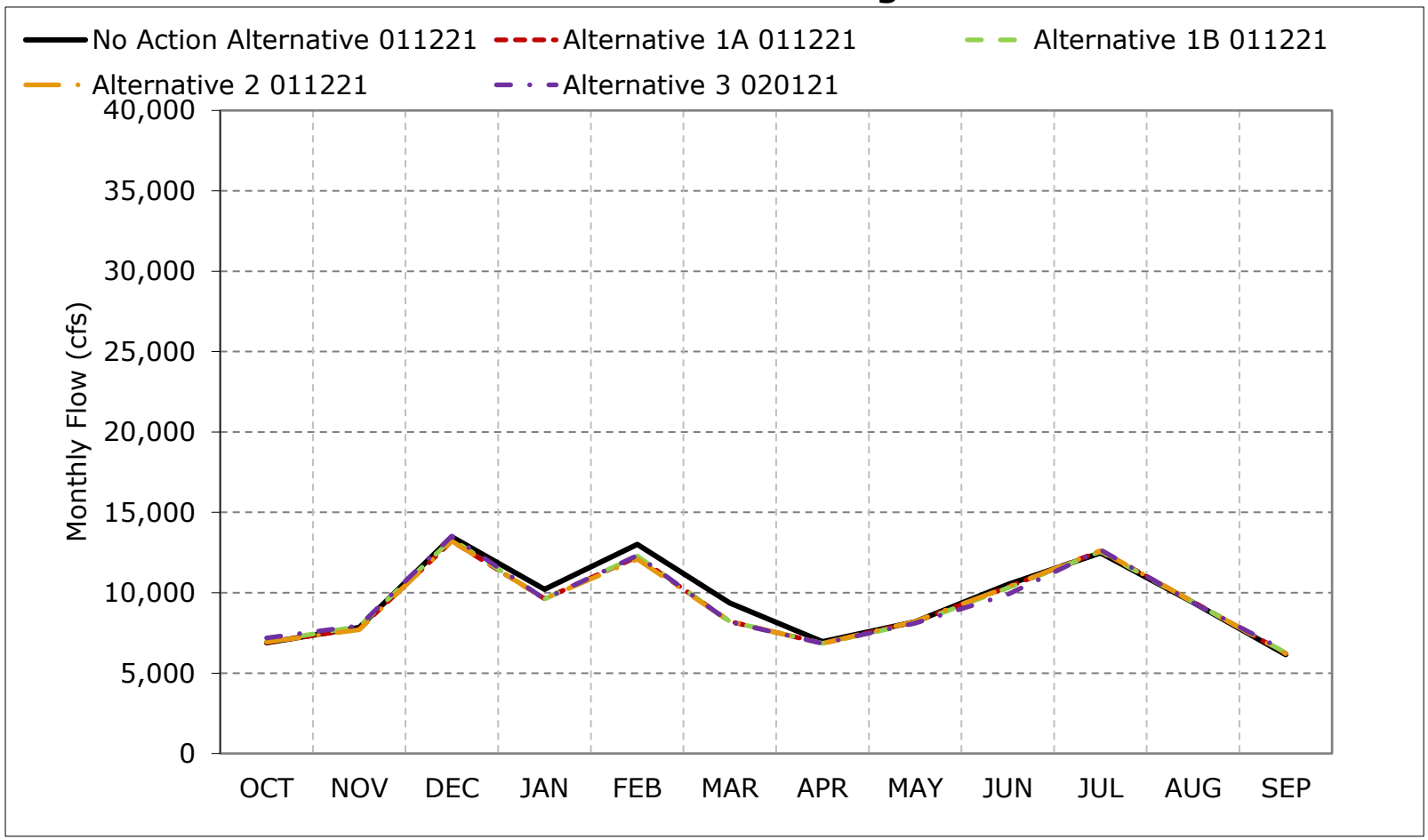
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-2-3. Sacramento River Flow below Red Bluff Diversion Dam , Above Normal Year Average Flow



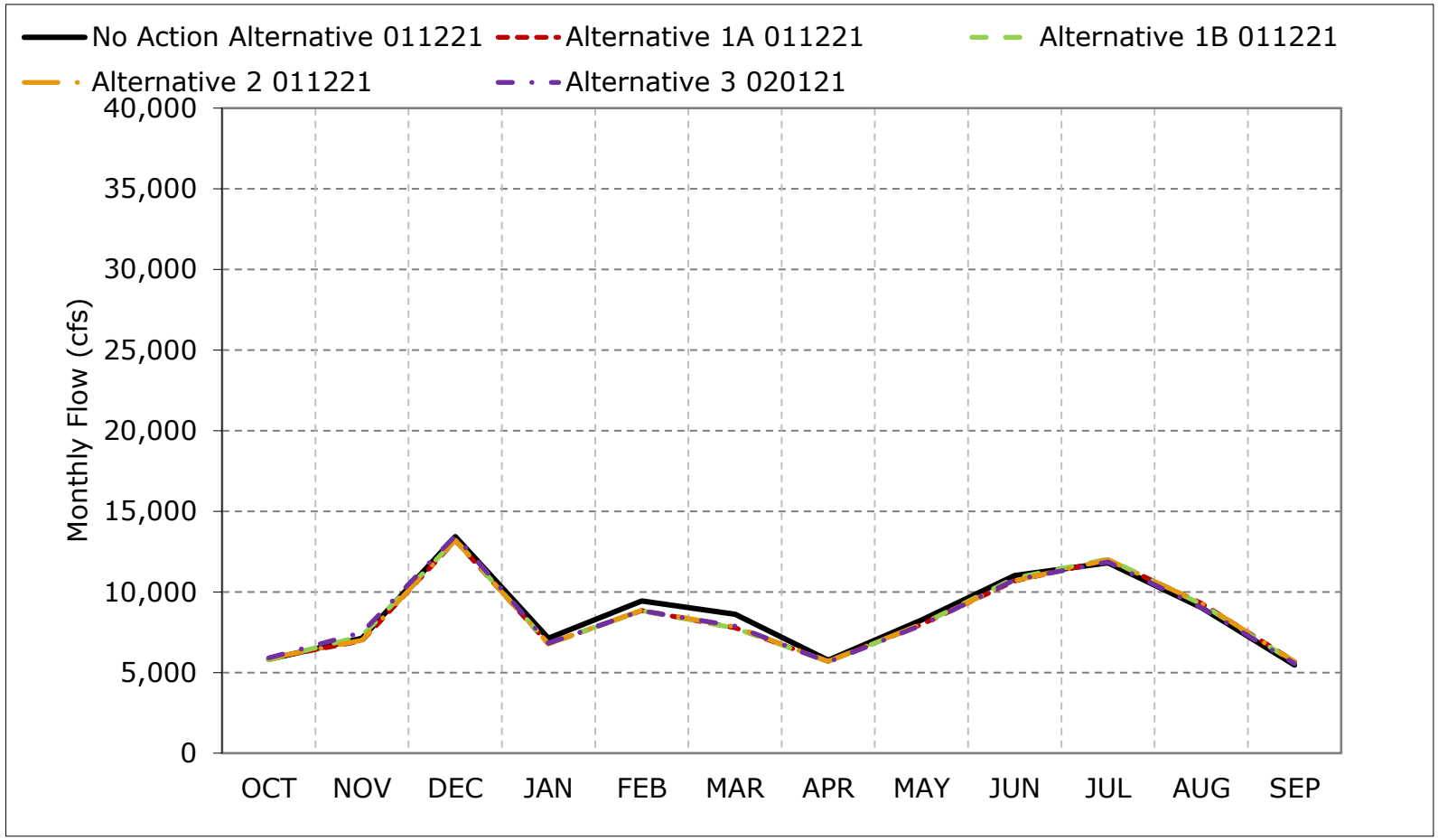
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-2-4. Sacramento River Flow below Red Bluff Diversion Dam , Below Normal Year Average Flow



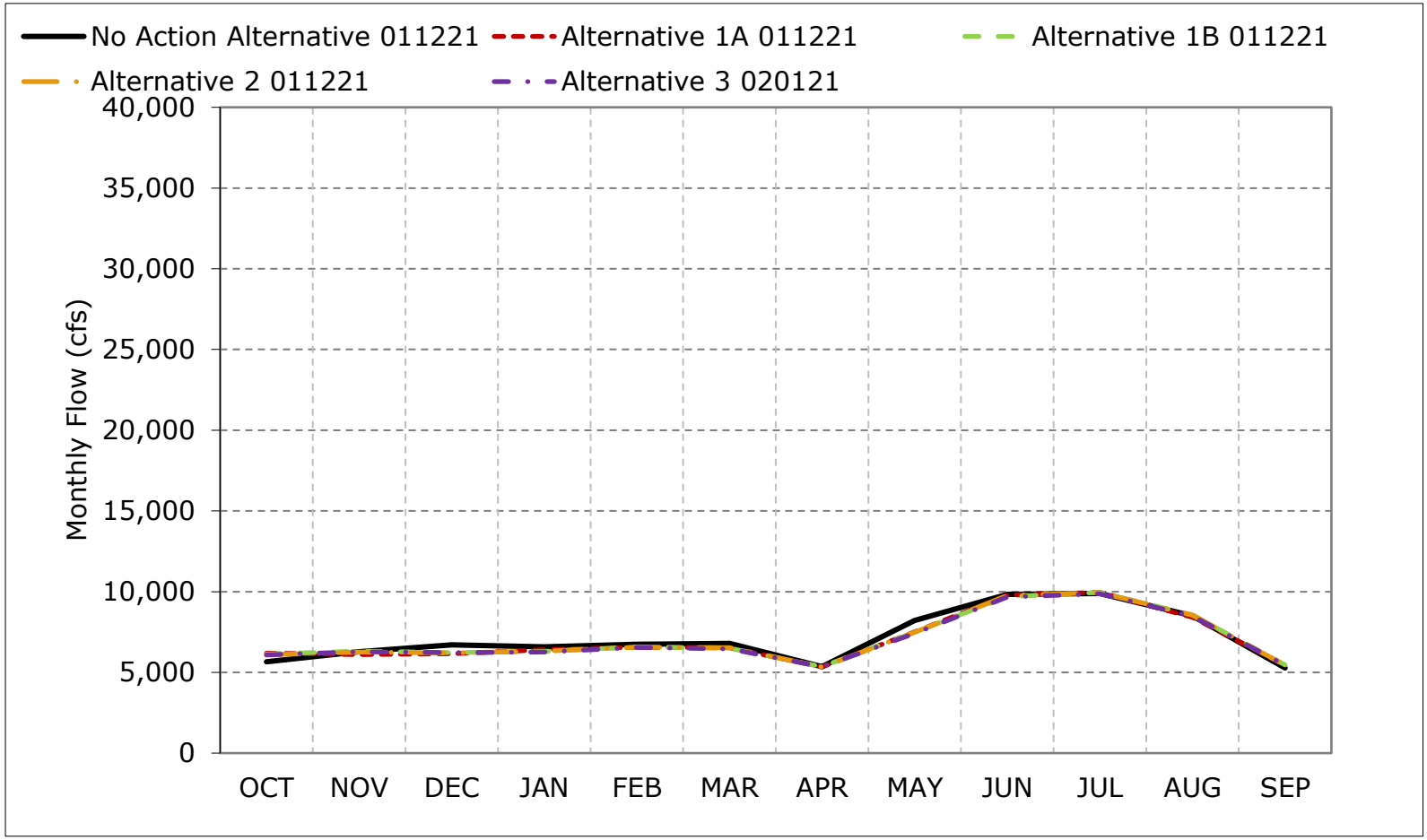
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-2-5. Sacramento River Flow below Red Bluff Diversion Dam , Dry Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-2-6. Sacramento River Flow below Red Bluff Diversion Dam , Critical Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-2-7. Sacramento River Flow below Red Bluff Diversion Dam , October

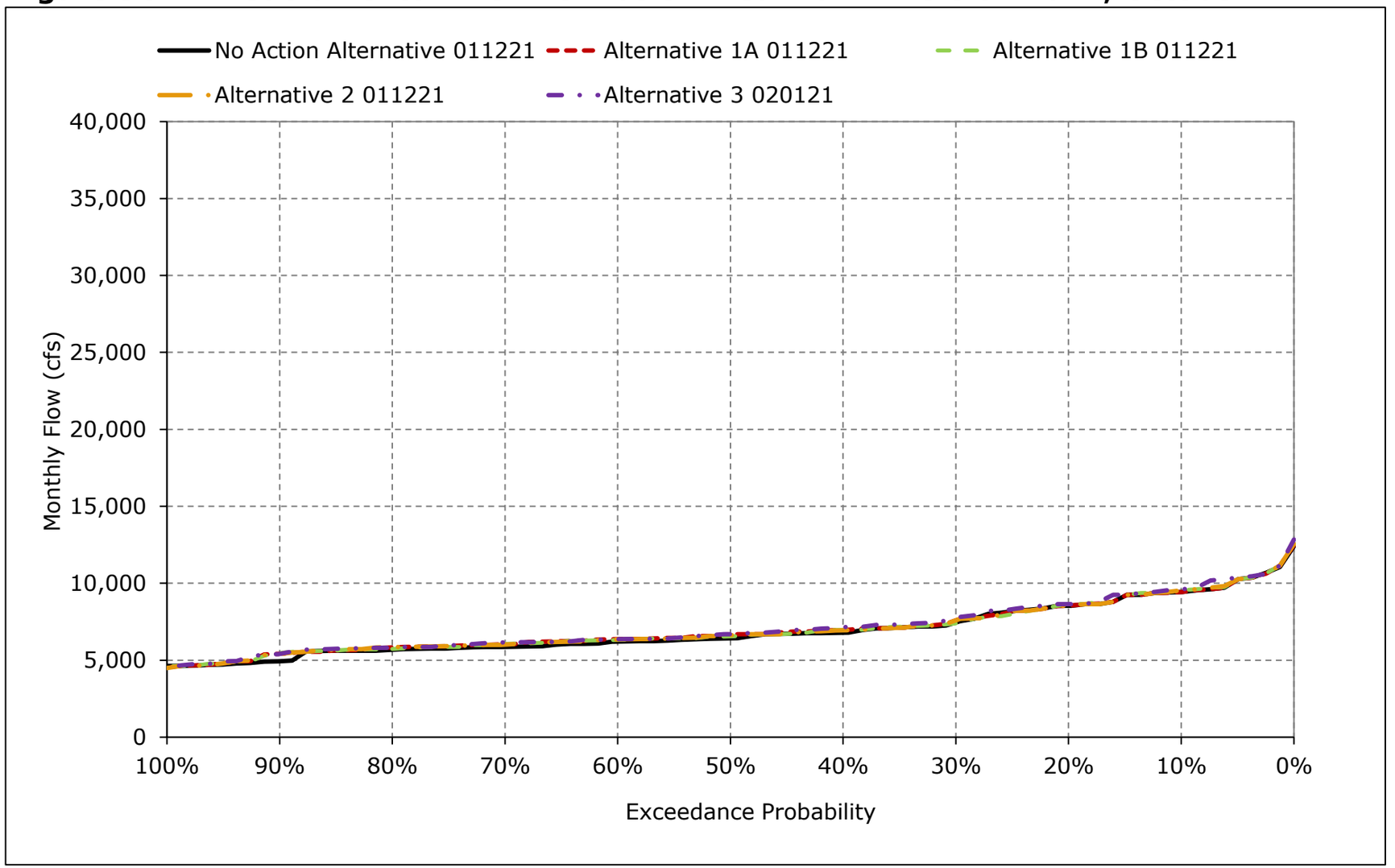


Figure 5C-2-8. Sacramento River Flow below Red Bluff Diversion Dam , November

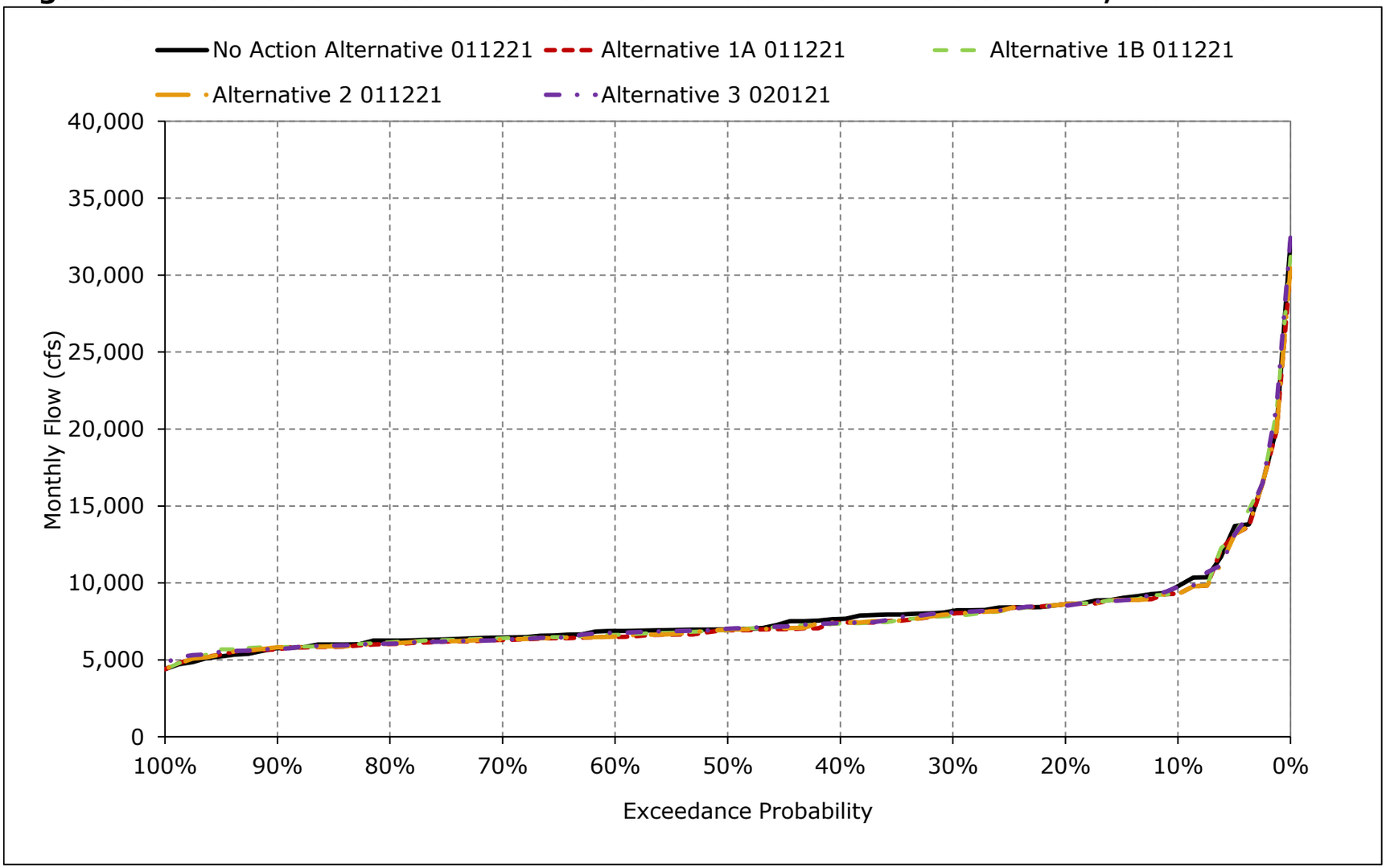


Figure 5C-2-9. Sacramento River Flow below Red Bluff Diversion Dam , December

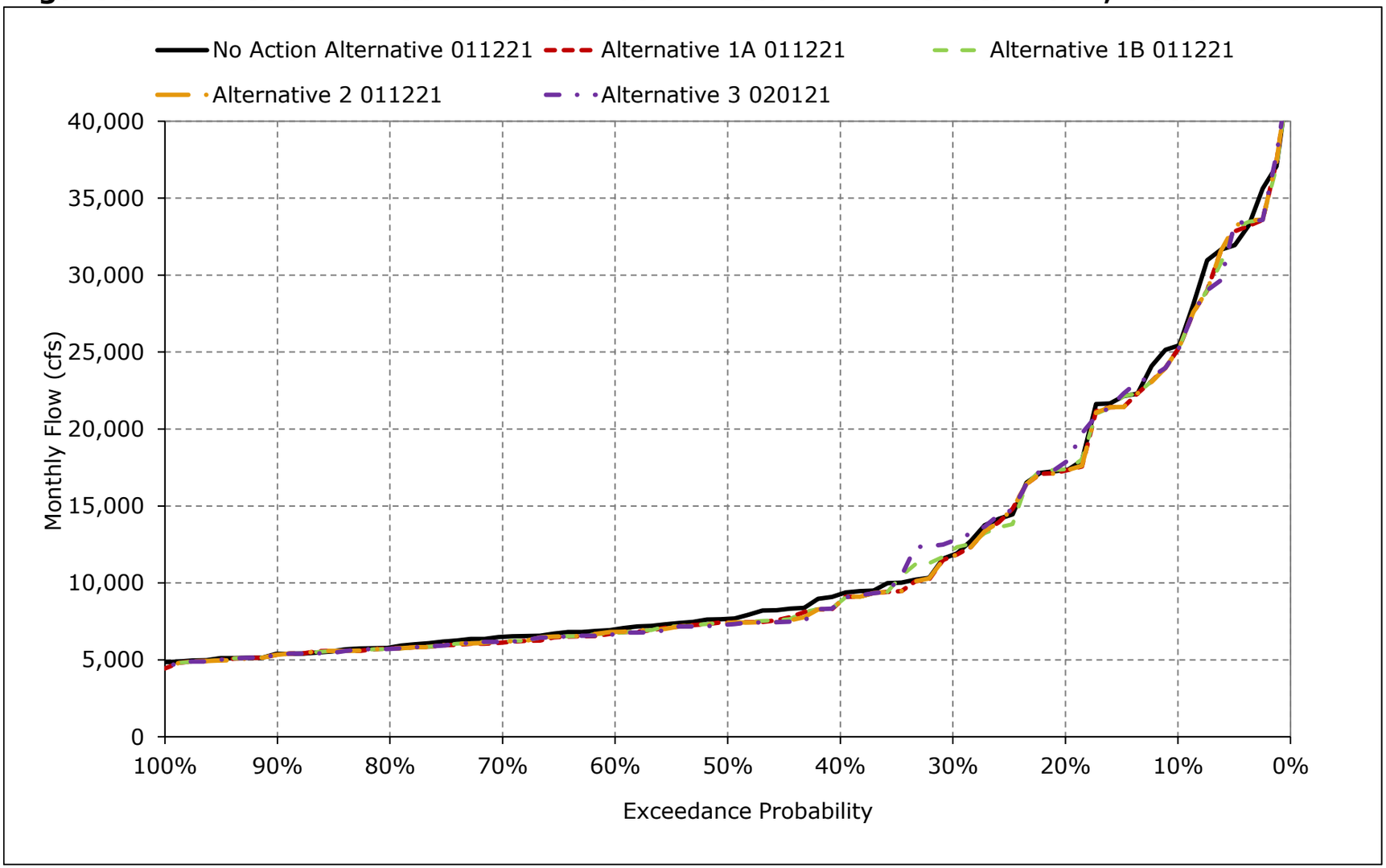


Figure 5C-2-10. Sacramento River Flow below Red Bluff Diversion Dam , January

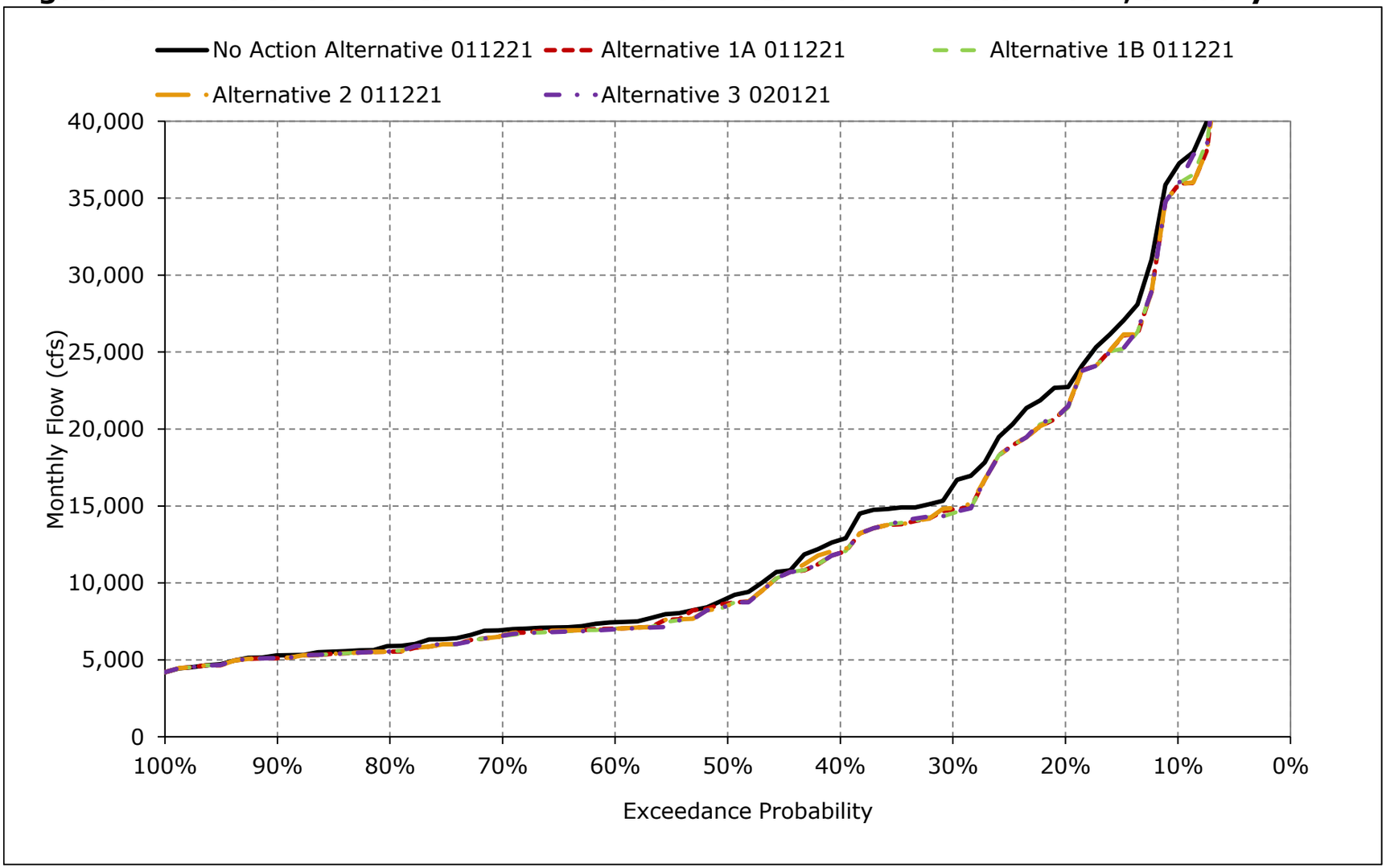


Figure 5C-2-11. Sacramento River Flow below Red Bluff Diversion Dam , February

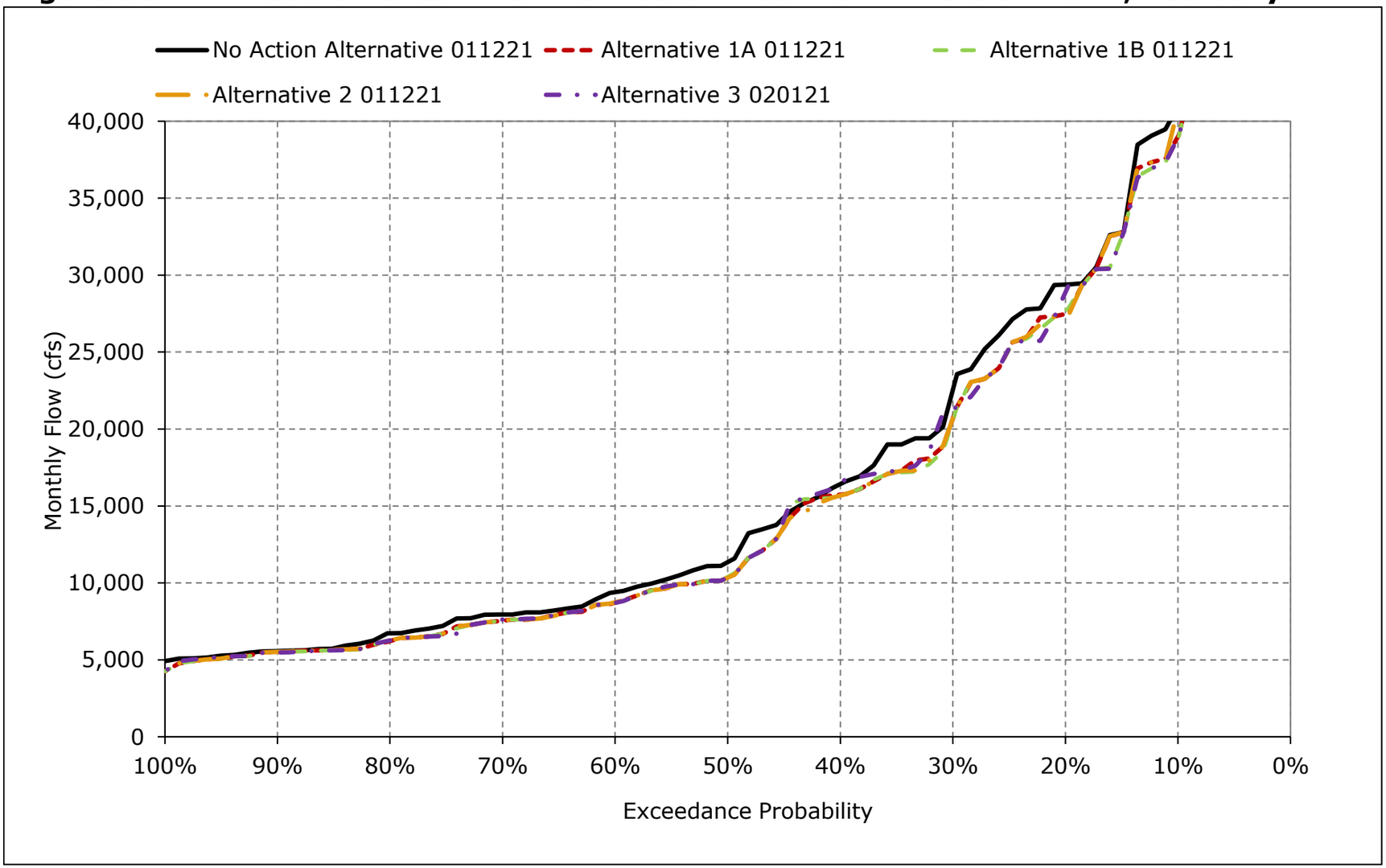


Figure 5C-2-12. Sacramento River Flow below Red Bluff Diversion Dam , March

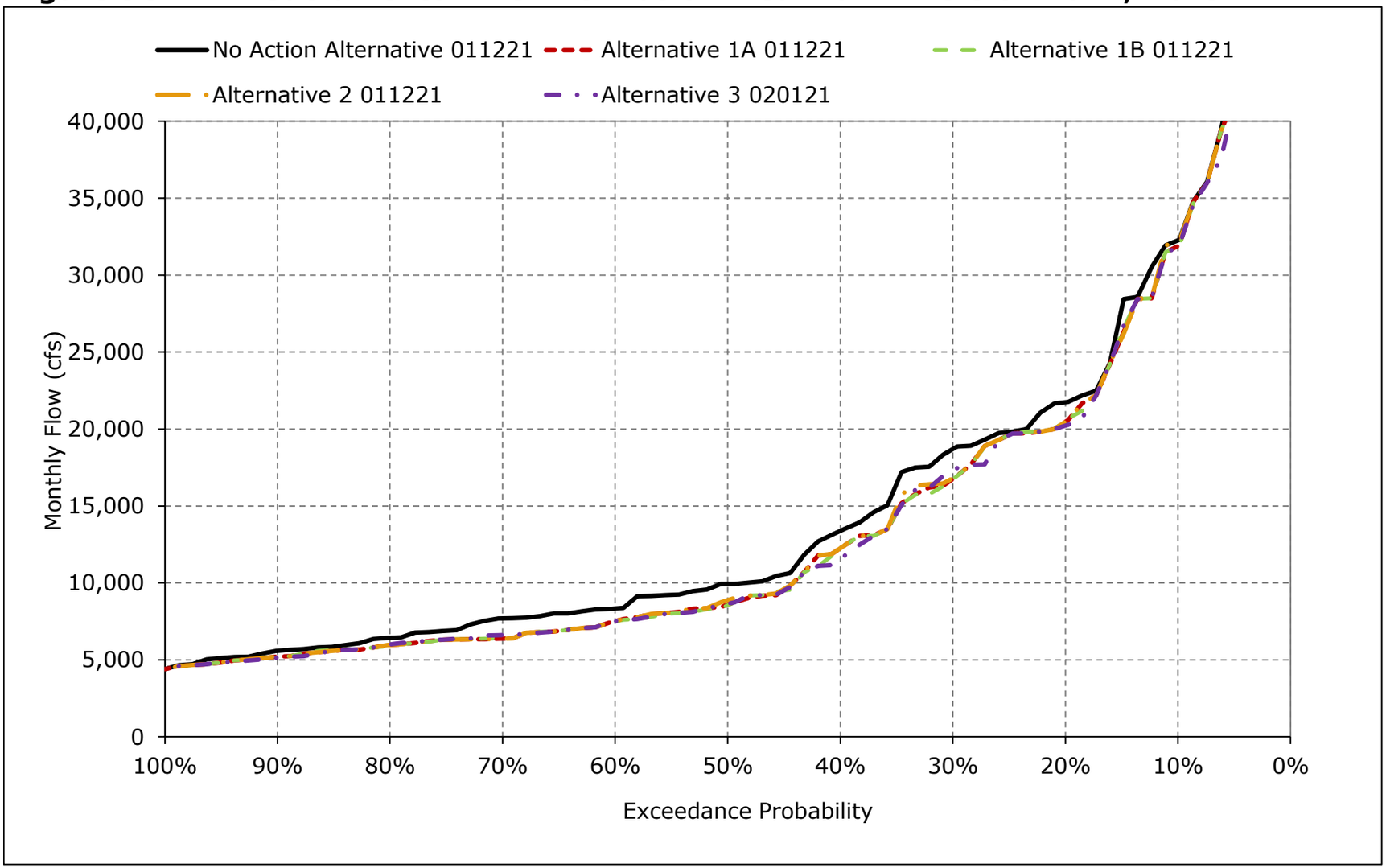


Figure 5C-2-13. Sacramento River Flow below Red Bluff Diversion Dam , April

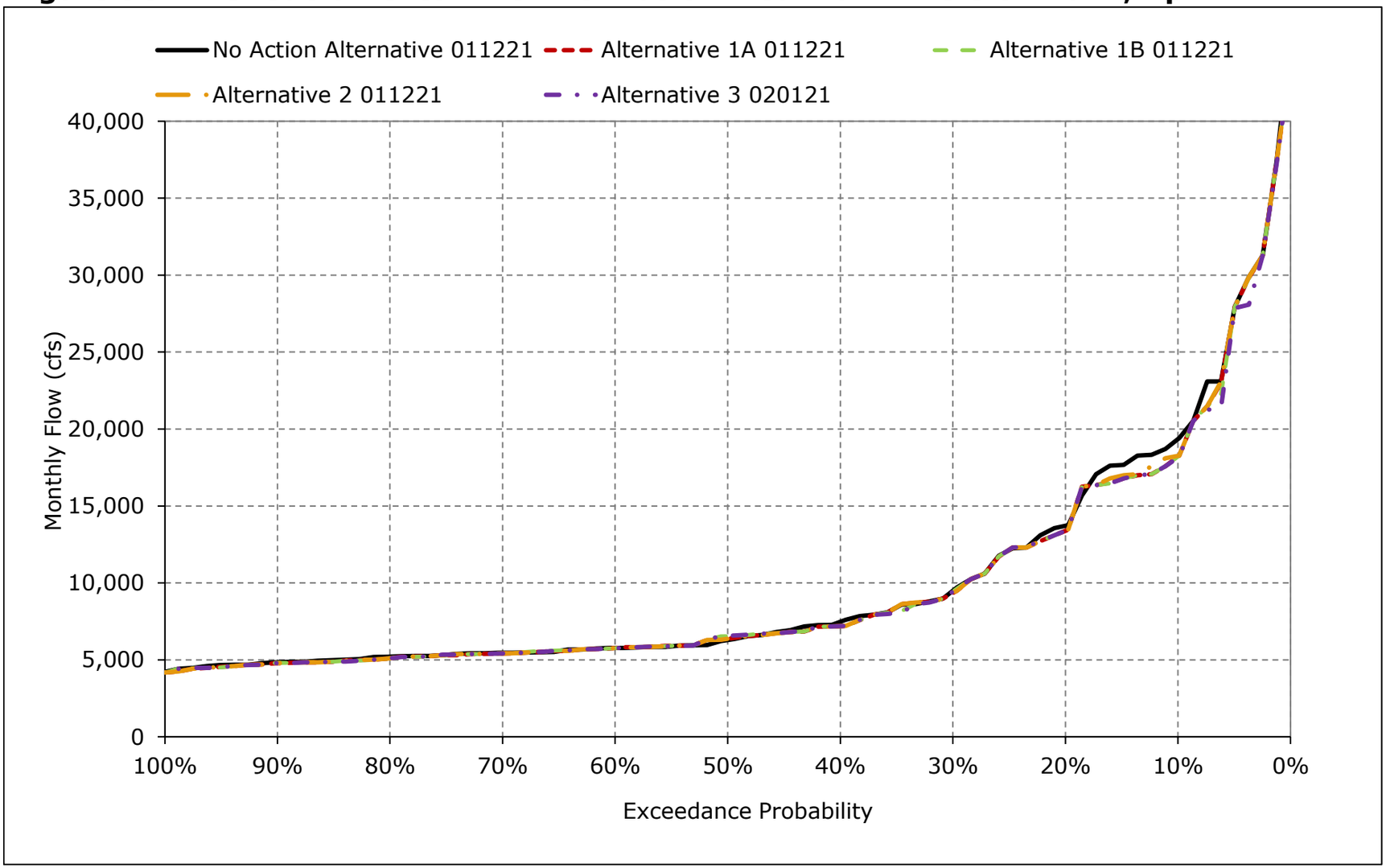


Figure 5C-2-14. Sacramento River Flow below Red Bluff Diversion Dam , May

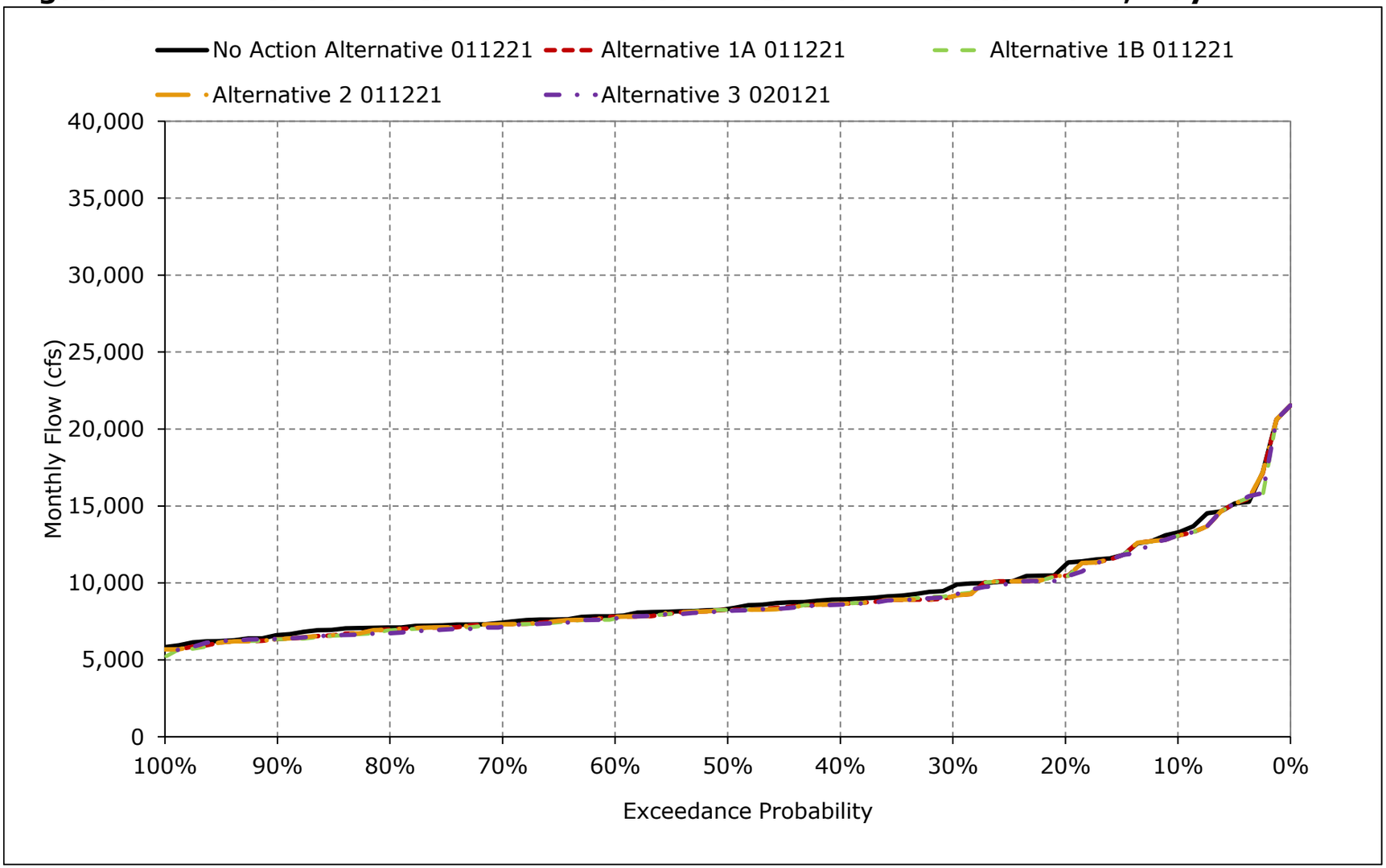


Figure 5C-2-15. Sacramento River Flow below Red Bluff Diversion Dam , June

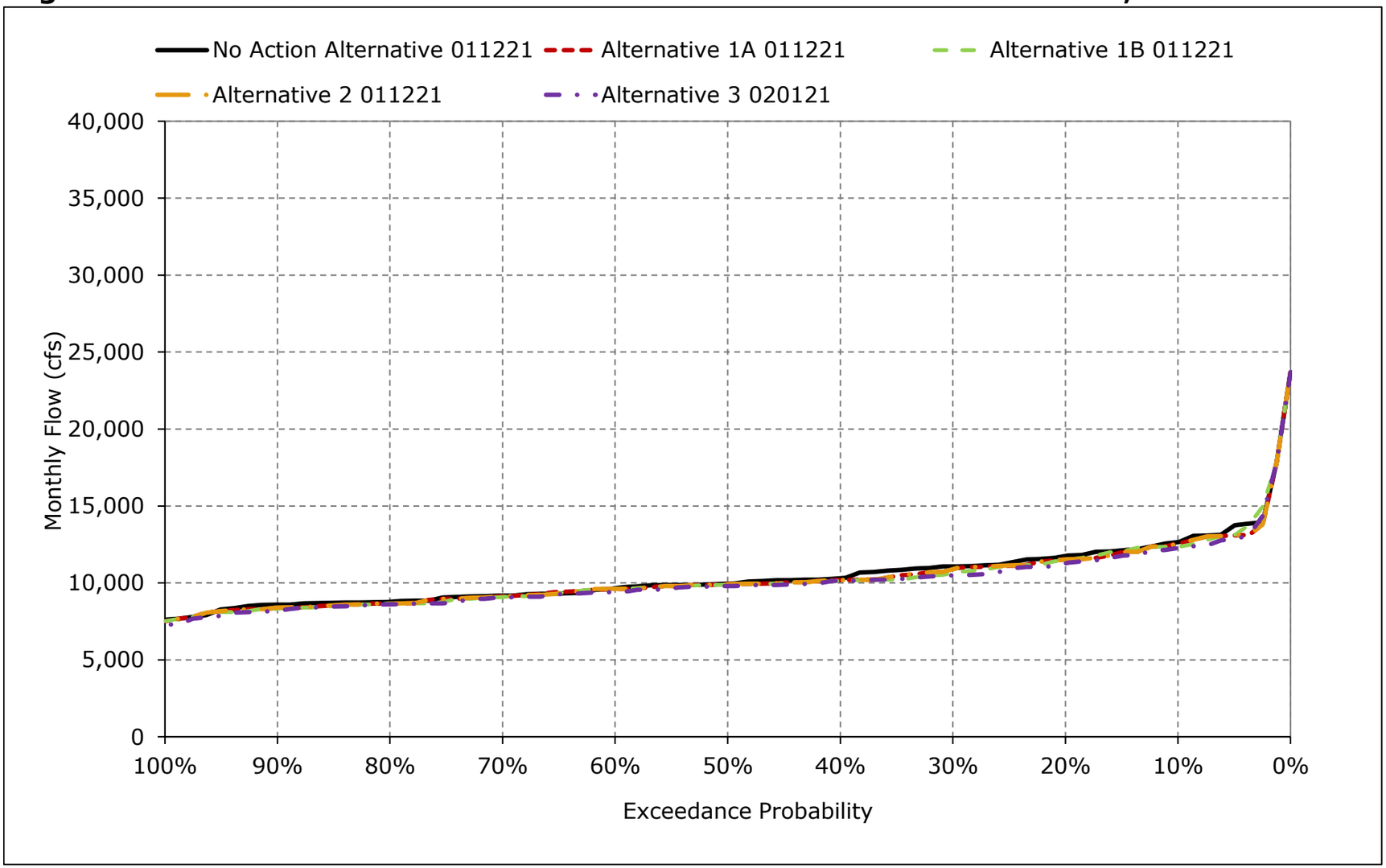


Figure 5C-2-16. Sacramento River Flow below Red Bluff Diversion Dam , July

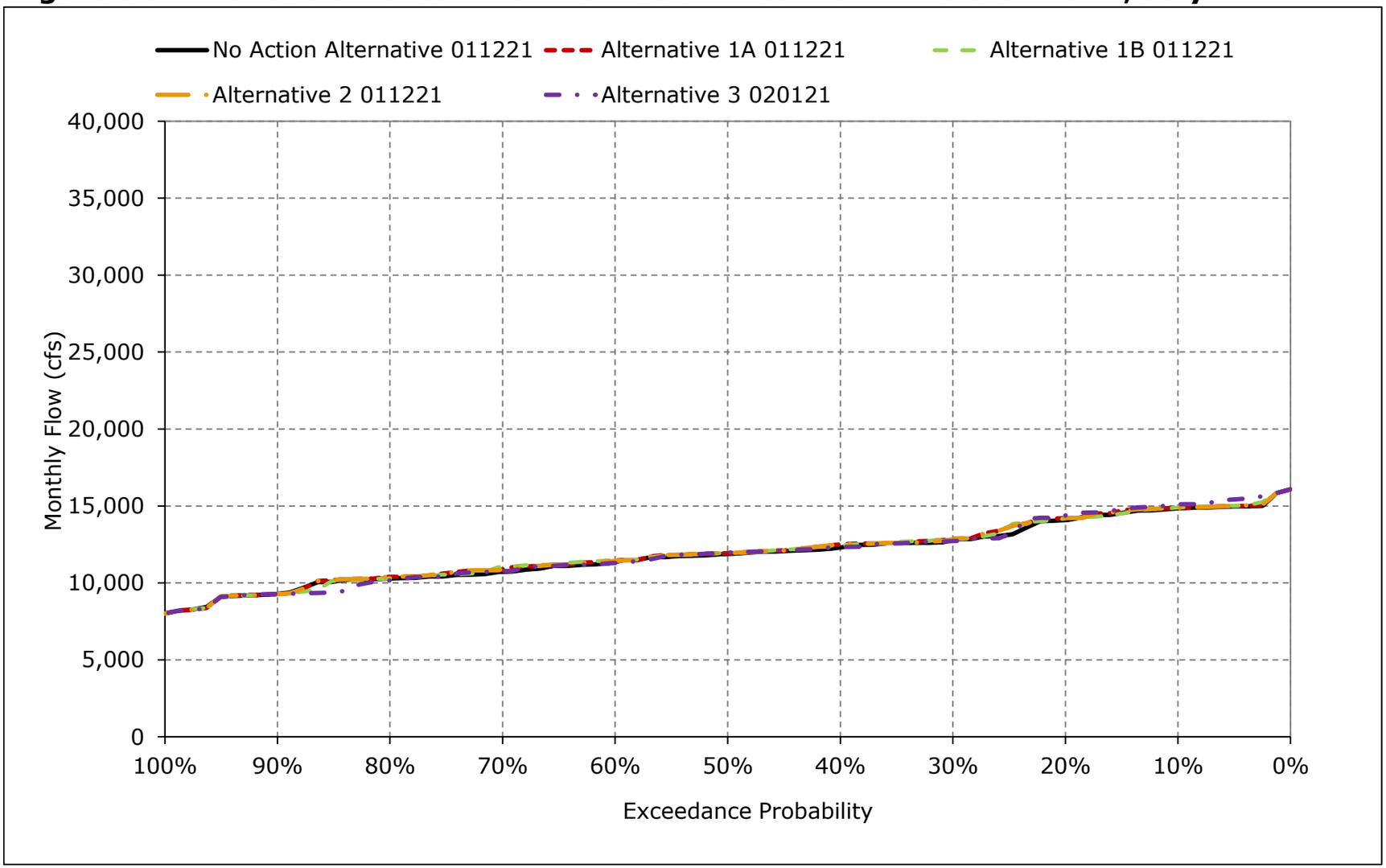


Figure 5C-2-17. Sacramento River Flow below Red Bluff Diversion Dam , August

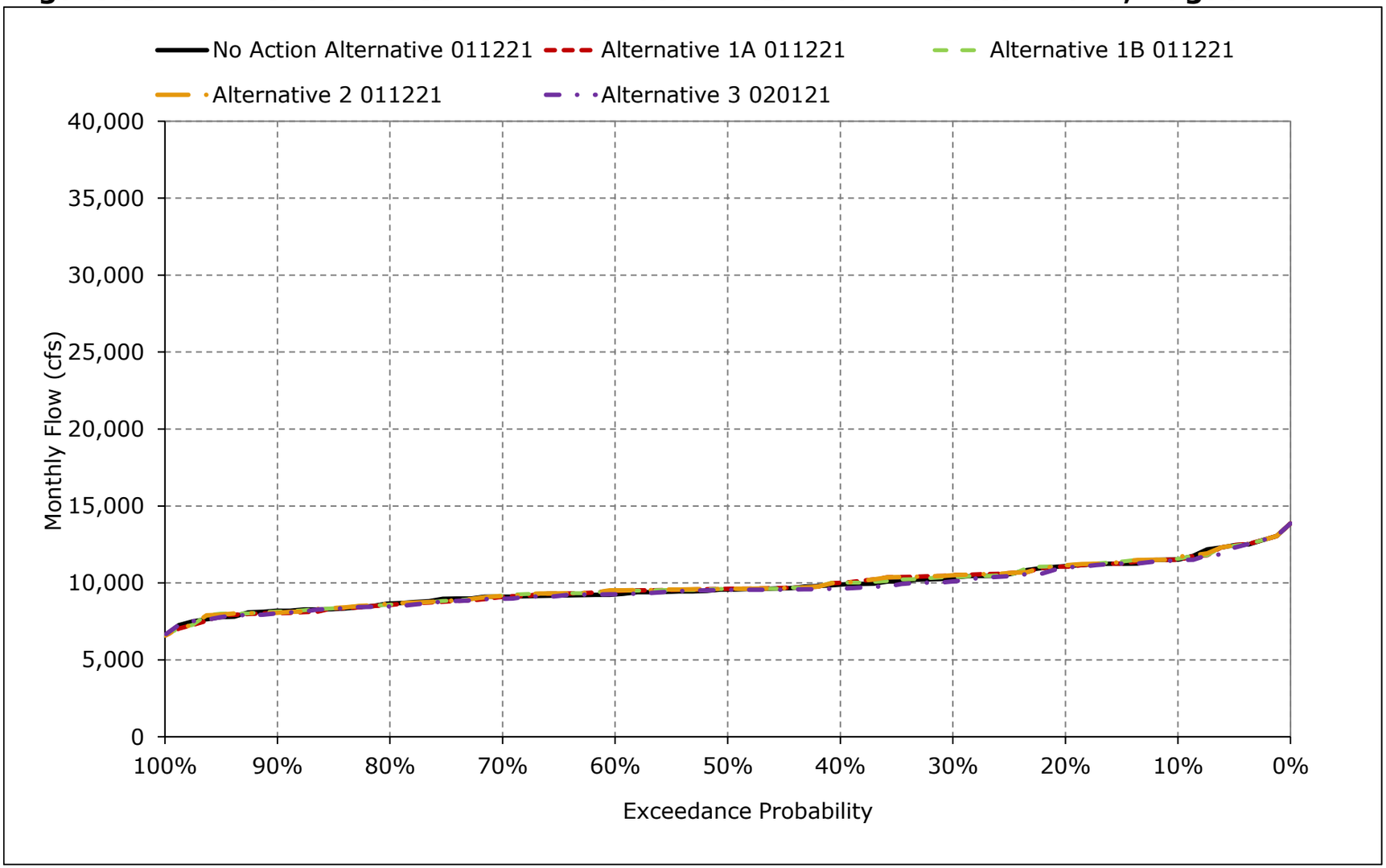


Figure 5C-2-18. Sacramento River Flow below Red Bluff Diversion Dam , September

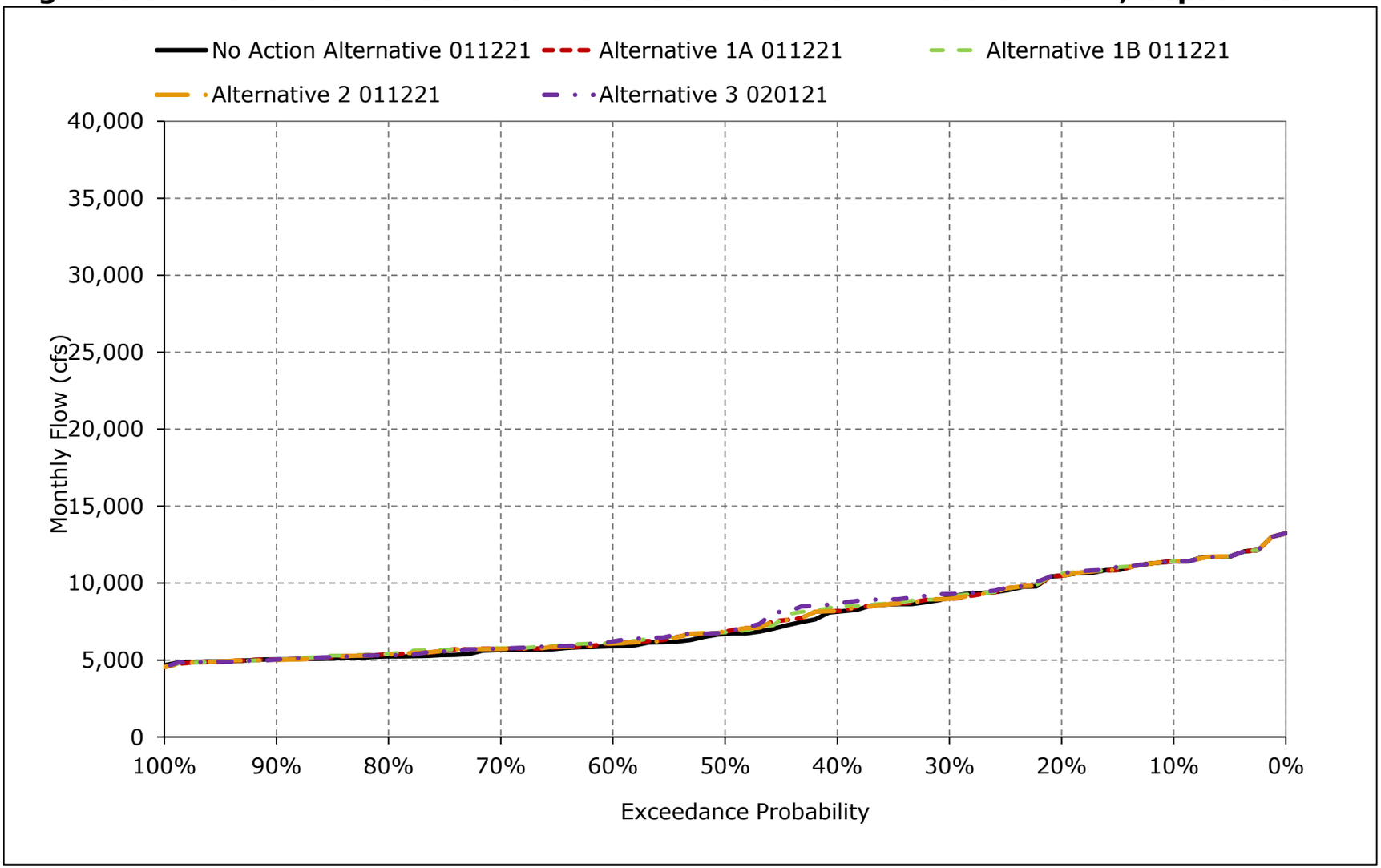


Table 5C-3-1a. Red Bluff Diversion - Tehama Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	24	1	0	3	66	448	857	1,193	1,372	1,076	323
20%	193	21	0	0	1	46	376	773	1,159	1,350	1,059	303
30%	168	19	0	0	1	24	327	732	1,109	1,275	1,008	292
40%	130	18	0	0	0	20	241	673	1,085	1,263	988	270
50%	96	17	0	0	0	16	165	558	1,060	1,210	916	243
60%	86	14	0	0	0	13	131	490	980	1,134	851	217
70%	73	12	0	0	0	10	61	413	628	729	568	114
80%	62	11	0	0	0	8	41	257	481	541	420	74
90%	54	10	0	0	0	8	21	67	209	229	182	36
Long Term												
Full Simulation Period[a]	120	17	0	0	3	30	209	531	845	969	756	204
Water Year Types[b,c]												
Wet (32%)	150	19	0	0	1	24	191	665	1,116	1,282	1,003	282
Above Normal (15%)	125	17	0	0	0	25	291	701	1,151	1,307	1,013	269
Below Normal (17%)	122	17	0	0	3	47	280	629	935	1,090	849	196
Dry (22%)	109	15	0	0	5	29	200	414	630	714	560	153
Critical (15%)	66	18	0	0	8	27	94	128	169	193	151	59

Table 5C-3-1b. Red Bluff Diversion - Tehama Colusa Canal, Alternative 1A 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	440	1,065	2,021	2,101	2,086	675	886	1,214	1,333	1,071	318
20%	183	98	95	1,601	2,013	2,032	454	811	1,172	1,274	1,023	299
30%	149	52	82	973	1,244	1,993	400	740	1,128	1,251	999	286
40%	116	28	64	621	909	1,590	329	687	1,090	1,202	954	250
50%	82	22	43	434	576	123	236	605	1,063	1,163	899	172
60%	70	18	22	166	273	93	169	508	973	1,075	815	107
70%	58	17	8	48	90	60	128	413	626	716	538	77
80%	52	13	1	12	50	42	68	280	479	472	361	45
90%	49	10	0	1	14	11	41	70	205	229	156	25
Long Term												
Full Simulation Period[a]	110	158	248	714	837	937	385	579	887	946	745	177
Water Year Types[b,c]												
Wet (32%)	164	333	68	1,024	1,050	822	582	803	1,162	1,304	1,045	283
Above Normal (15%)	133	216	152	1,229	1,226	1,484	470	697	1,234	1,217	1,003	265
Below Normal (17%)	83	29	360	583	1,023	1,224	388	642	1,012	1,045	788	138
Dry (22%)	73	45	351	324	568	908	230	429	645	680	518	91
Critical (15%)	54	37	452	267	176	348	104	128	162	180	128	35

Table 5C-3-1c. Red Bluff Diversion - Tehama Colusa Canal, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	415	1,064	2,021	2,099	2,020	228	29	21	-38	-5	-5
20%	-10	77	95	1,601	2,012	1,986	78	38	13	-76	-37	-5
30%	-19	33	81	973	1,243	1,968	73	8	19	-24	-9	-6
40%	-14	10	64	621	908	1,569	88	13	5	-61	-33	-20
50%	-14	4	43	434	575	106	71	47	3	-47	-17	-72
60%	-17	4	22	166	273	80	38	18	-7	-60	-36	-110
70%	-15	4	7	48	89	50	67	0	-2	-12	-30	-37
80%	-10	1	0	12	50	34	27	23	-2	-69	-59	-29
90%	-5	0	0	1	14	4	20	3	-5	0	-25	-12
Long Term												
Full Simulation Period[a]	-10	141	248	714	835	907	177	49	42	-23	-11	-27
Water Year Types[b,c]												
Wet (32%)	14	314	68	1,024	1,050	798	390	138	46	22	42	0
Above Normal (15%)	9	200	151	1,229	1,225	1,459	179	-4	83	-90	-11	-3
Below Normal (17%)	-38	12	359	583	1,020	1,177	109	13	77	-45	-61	-58
Dry (22%)	-35	31	350	324	563	879	30	15	14	-34	-41	-62
Critical (15%)	-12	19	451	266	168	321	10	-1	-7	-13	-23	-25

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-3-2a. Red Bluff Diversion - Tehama Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	24	1	0	3	66	448	857	1,193	1,372	1,076	323
20%	193	21	0	0	1	46	376	773	1,159	1,350	1,059	303
30%	168	19	0	0	1	24	327	732	1,109	1,275	1,008	292
40%	130	18	0	0	0	20	241	673	1,085	1,263	988	270
50%	96	17	0	0	0	16	165	558	1,060	1,210	916	243
60%	86	14	0	0	0	13	131	490	980	1,134	851	217
70%	73	12	0	0	0	10	61	413	628	729	568	114
80%	62	11	0	0	0	8	41	257	481	541	420	74
90%	54	10	0	0	0	8	21	67	209	229	182	36
Long Term												
Full Simulation Period[a]	120	17	0	0	3	30	209	531	845	969	756	204
Water Year Types[b,c]												
Wet (32%)	150	19	0	0	1	24	191	665	1,116	1,282	1,003	282
Above Normal (15%)	125	17	0	0	0	25	291	701	1,151	1,307	1,013	269
Below Normal (17%)	122	17	0	0	3	47	280	629	935	1,090	849	196
Dry (22%)	109	15	0	0	5	29	200	414	630	714	560	153
Critical (15%)	66	18	0	0	8	27	94	128	169	193	151	59

Table 5C-3-2b. Red Bluff Diversion - Tehama Colusa Canal, Alternative 1B 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	402	1,066	2,032	2,101	2,086	936	876	1,192	1,333	1,070	319
20%	185	98	100	1,665	2,030	2,043	462	808	1,139	1,276	1,023	300
30%	153	59	84	1,097	1,631	1,990	386	719	1,079	1,261	993	287
40%	117	25	73	709	1,017	1,697	311	614	1,037	1,208	930	259
50%	84	21	47	504	645	237	219	520	907	1,131	891	161
60%	69	18	24	307	327	96	158	429	598	850	811	108
70%	59	16	11	64	95	72	129	333	547	607	547	79
80%	53	12	1	15	71	53	77	183	398	494	362	46
90%	50	10	0	1	23	20	41	68	199	187	159	33
Long Term												
Full Simulation Period[a]	111	154	256	755	906	958	385	545	792	912	744	179
Water Year Types[b,c]												
Wet (32%)	163	319	73	1,144	1,175	851	614	860	1,164	1,304	1,045	283
Above Normal (15%)	130	226	218	1,235	1,350	1,490	471	676	885	1,003	975	269
Below Normal (17%)	86	28	359	586	1,073	1,225	367	508	862	991	793	142
Dry (22%)	82	44	337	329	576	956	200	334	563	720	532	93
Critical (15%)	49	38	451	267	176	349	101	93	154	164	124	35

Table 5C-3-2c. Red Bluff Diversion - Tehama Colusa Canal, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	378	1,066	2,032	2,099	2,020	488	20	-1	-38	-5	-4
20%	-8	77	100	1,665	2,029	1,998	86	35	-20	-74	-36	-3
30%	-16	40	83	1,097	1,631	1,966	59	-13	-30	-14	-15	-5
40%	-13	8	73	709	1,016	1,677	69	-60	-48	-55	-58	-11
50%	-12	4	47	504	645	220	54	-38	-152	-79	-25	-82
60%	-18	4	24	307	327	83	27	-62	-382	-284	-40	-110
70%	-14	4	11	64	94	63	68	-79	-82	-122	-21	-36
80%	-9	0	0	15	71	45	35	-73	-83	-46	-57	-28
90%	-4	0	0	1	23	12	20	0	-11	-42	-23	-3
Long Term												
Full Simulation Period[a]	-10	137	256	754	903	928	176	15	-53	-57	-12	-26
Water Year Types[b,c]												
Wet (32%)	13	300	72	1,144	1,175	827	422	195	48	22	42	0
Above Normal (15%)	5	209	218	1,235	1,349	1,465	180	-26	-266	-304	-38	1
Below Normal (17%)	-36	11	358	586	1,070	1,178	88	-121	-73	-99	-56	-54
Dry (22%)	-26	29	337	328	571	927	0	-81	-68	6	-28	-60
Critical (15%)	-18	20	451	267	168	322	7	-36	-15	-29	-26	-25

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-3-3a. Red Bluff Diversion - Tehama Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	24	1	0	3	66	448	857	1,193	1,372	1,076	323
20%	193	21	0	0	1	46	376	773	1,159	1,350	1,059	303
30%	168	19	0	0	1	24	327	732	1,109	1,275	1,008	292
40%	130	18	0	0	0	20	241	673	1,085	1,263	988	270
50%	96	17	0	0	0	16	165	558	1,060	1,210	916	243
60%	86	14	0	0	0	13	131	490	980	1,134	851	217
70%	73	12	0	0	0	10	61	413	628	729	568	114
80%	62	11	0	0	0	8	41	257	481	541	420	74
90%	54	10	0	0	0	8	21	67	209	229	182	36
Long Term												
Full Simulation Period[a]	120	17	0	0	3	30	209	531	845	969	756	204
Water Year Types[b,c]												
Wet (32%)	150	19	0	0	1	24	191	665	1,116	1,282	1,003	282
Above Normal (15%)	125	17	0	0	0	25	291	701	1,151	1,307	1,013	269
Below Normal (17%)	122	17	0	0	3	47	280	629	935	1,090	849	196
Dry (22%)	109	15	0	0	5	29	200	414	630	714	560	153
Critical (15%)	66	18	0	0	8	27	94	128	169	193	151	59

Table 5C-3-3b. Red Bluff Diversion - Tehama Colusa Canal, Alternative 2 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	510	1,066	2,019	2,095	2,083	635	886	1,214	1,333	1,071	318
20%	182	109	95	1,528	1,965	2,019	451	811	1,172	1,272	1,025	299
30%	138	59	81	976	1,149	1,966	389	741	1,127	1,245	999	287
40%	115	28	64	621	838	1,276	318	687	1,090	1,194	948	250
50%	82	21	43	434	564	119	236	605	1,061	1,152	899	163
60%	70	18	22	166	246	89	164	508	973	1,074	829	101
70%	59	16	8	42	84	57	128	413	619	720	532	74
80%	51	12	1	12	49	36	64	273	479	472	361	43
90%	46	10	0	1	13	11	39	71	206	228	119	25
Long Term												
Full Simulation Period[a]	108	167	249	702	811	886	364	579	887	942	733	175
Water Year Types[b,c]												
Wet (32%)	164	330	68	985	971	696	515	801	1,162	1,303	1,011	281
Above Normal (15%)	133	212	152	1,227	1,223	1,484	470	697	1,233	1,207	1,002	267
Below Normal (17%)	83	91	364	583	1,021	1,224	388	642	1,012	1,036	787	136
Dry (22%)	70	45	349	324	566	858	227	430	645	678	518	89
Critical (15%)	51	38	452	267	176	349	104	128	162	179	122	31

Table 5C-3-3c. Red Bluff Diversion - Tehama Colusa Canal, Alternative 2 011221 minus No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	485	1,065	2,019	2,092	2,017	187	29	21	-38	-5	-5
20%	-11	88	95	1,528	1,964	1,974	75	38	13	-78	-34	-4
30%	-30	40	81	976	1,149	1,942	62	8	18	-30	-9	-5
40%	-15	10	64	621	838	1,256	77	14	5	-69	-40	-20
50%	-14	4	43	434	563	102	71	47	2	-58	-17	-81
60%	-16	4	22	166	245	76	34	18	-7	-60	-22	-116
70%	-14	4	7	42	84	47	67	0	-9	-9	-36	-40
80%	-11	1	0	12	49	28	23	16	-2	-69	-59	-31
90%	-8	0	0	1	13	4	18	3	-4	-1	-62	-12
Long Term												
Full Simulation Period[a]	-12	150	248	702	808	857	155	48	42	-27	-23	-29
Water Year Types[b,c]												
Wet (32%)	14	311	67	985	970	673	324	136	47	21	9	-1
Above Normal (15%)	8	195	151	1,227	1,222	1,459	179	-4	82	-100	-11	-2
Below Normal (17%)	-38	75	363	583	1,018	1,177	109	13	76	-54	-62	-60
Dry (22%)	-39	31	349	324	561	829	28	15	15	-37	-42	-64
Critical (15%)	-16	20	452	266	168	322	10	-1	-7	-14	-29	-28

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-3-4a. Red Bluff Diversion - Tehama Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	204	24	1	0	3	66	448	857	1,193	1,372	1,076	323
20%	193	21	0	0	1	46	376	773	1,159	1,350	1,059	303
30%	168	19	0	0	1	24	327	732	1,109	1,275	1,008	292
40%	130	18	0	0	0	20	241	673	1,085	1,263	988	270
50%	96	17	0	0	0	16	165	558	1,060	1,210	916	243
60%	86	14	0	0	0	13	131	490	980	1,134	851	217
70%	73	12	0	0	0	10	61	413	628	729	568	114
80%	62	11	0	0	0	8	41	257	481	541	420	74
90%	54	10	0	0	0	8	21	67	209	229	182	36
Long Term												
Full Simulation Period[a]	120	17	0	0	3	30	209	531	845	969	756	204
Water Year Types[b,c]												
Wet (32%)	150	19	0	0	1	24	191	665	1,116	1,282	1,003	282
Above Normal (15%)	125	17	0	0	0	25	291	701	1,151	1,307	1,013	269
Below Normal (17%)	122	17	0	0	3	47	280	629	935	1,090	849	196
Dry (22%)	109	15	0	0	5	29	200	414	630	714	560	153
Critical (15%)	66	18	0	0	8	27	94	128	169	193	151	59

Table 5C-3-4b. Red Bluff Diversion - Tehama Colusa Canal, Alternative 3 020121, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	206	533	1,106	2,024	2,133	2,093	1,279	888	1,210	1,325	1,065	319
20%	185	118	333	1,629	2,061	2,046	486	833	1,149	1,268	1,013	297
30%	150	67	87	1,085	1,941	1,997	408	728	1,075	1,201	963	279
40%	122	29	74	715	1,013	1,913	318	616	905	1,035	871	238
50%	90	22	49	525	645	1,273	234	531	574	641	778	154
60%	81	20	28	321	323	102	176	430	530	600	518	112
70%	64	16	15	72	90	76	134	258	479	542	425	87
80%	54	13	1	15	68	51	83	175	279	318	372	61
90%	50	10	0	1	26	18	45	105	212	235	179	37
Long Term												
Full Simulation Period[a]	113	178	280	761	929	1,039	426	556	740	791	683	177
Water Year Types[b,c]												
Wet (32%)	164	319	71	1,160	1,184	1,058	732	913	1,203	1,305	1,044	283
Above Normal (15%)	122	313	328	1,239	1,396	1,604	475	676	870	592	598	211
Below Normal (17%)	87	92	395	589	1,155	1,249	371	504	628	736	742	146
Dry (22%)	86	45	342	330	577	957	205	290	433	600	508	104
Critical (15%)	65	38	458	266	174	307	107	126	200	227	176	63

Table 5C-3-4c. Red Bluff Diversion - Tehama Colusa Canal, Alternative 3 020121 minus No Action Alternative 011221, Monthly Diversion (cfs)

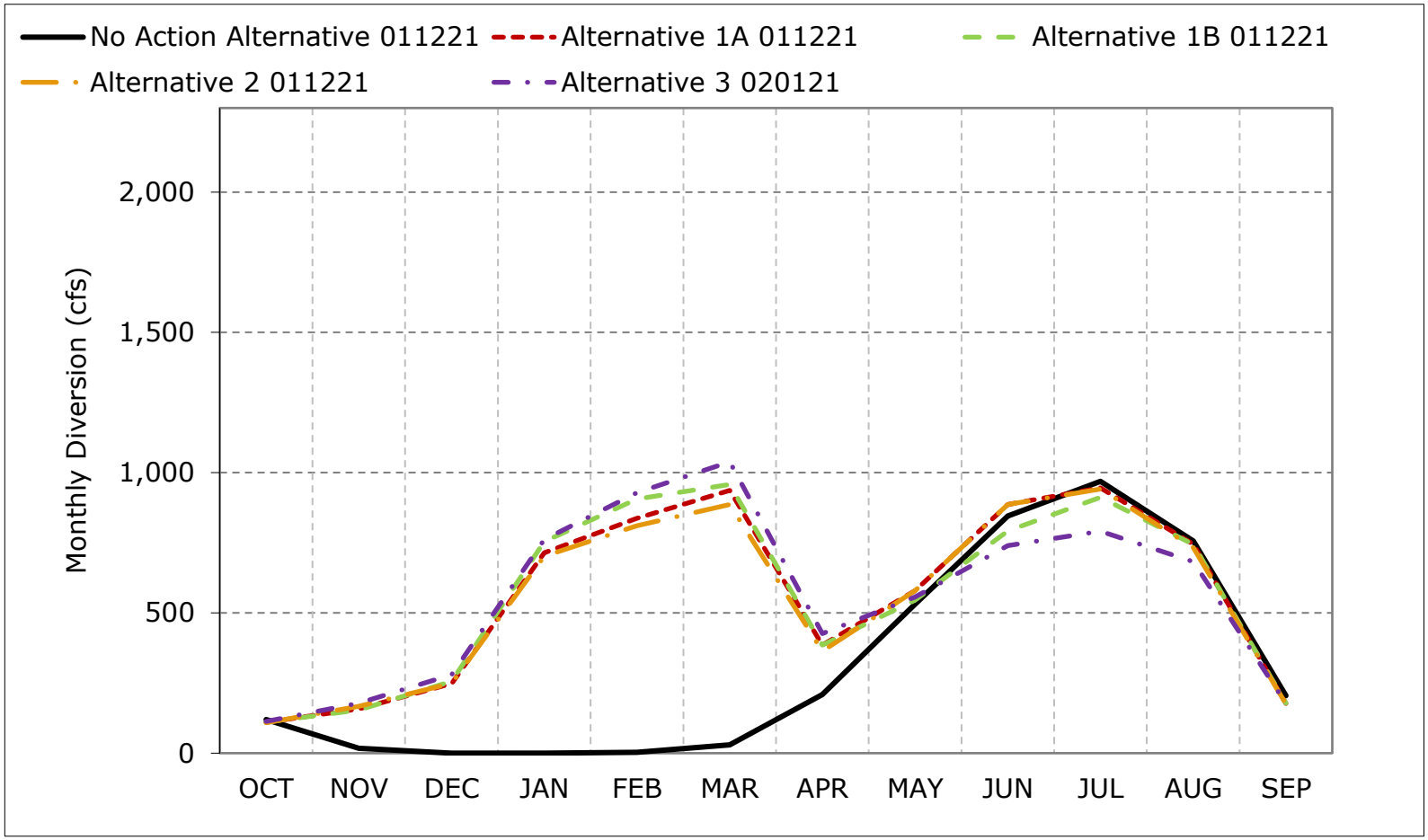
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	2	508	1,105	2,024	2,130	2,027	832	31	17	-46	-11	-4
20%	-8	96	332	1,629	2,060	2,001	111	59	-10	-82	-47	-6
30%	-19	48	87	1,085	1,940	1,973	81	-5	-34	-74	-44	-13
40%	-8	11	73	715	1,013	1,892	76	-58	-180	-228	-117	-31
50%	-7	4	49	525	644	1,256	69	-27	-486	-569	-138	-89
60%	-5	5	28	321	323	88	45	-61	-450	-534	-333	-106
70%	-10	4	15	72	90	66	73	-154	-149	-186	-143	-27
80%	-8	1	0	15	68	43	42	-82	-202	-223	-48	-13
90%	-4	0	0	1	26	10	24	38	3	7	-3	1
Long Term												
Full Simulation Period[a]	-7	161	280	761	926	1,009	217	26	-105	-178	-73	-27
Water Year Types[b,c]												
Wet (32%)	14	300	70	1,160	1,183	1,034	541	248	87	23	42	0
Above Normal (15%)	-3	297	327	1,239	1,395	1,579	184	-25	-281	-715	-415	-58
Below Normal (17%)	-35	75	395	589	1,152	1,202	92	-125	-307	-354	-107	-50
Dry (22%)	-23	31	342	330	572	928	5	-125	-197	-115	-52	-49
Critical (15%)	-1	21	457	266	166	280	13	-3	31	34	25	4

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

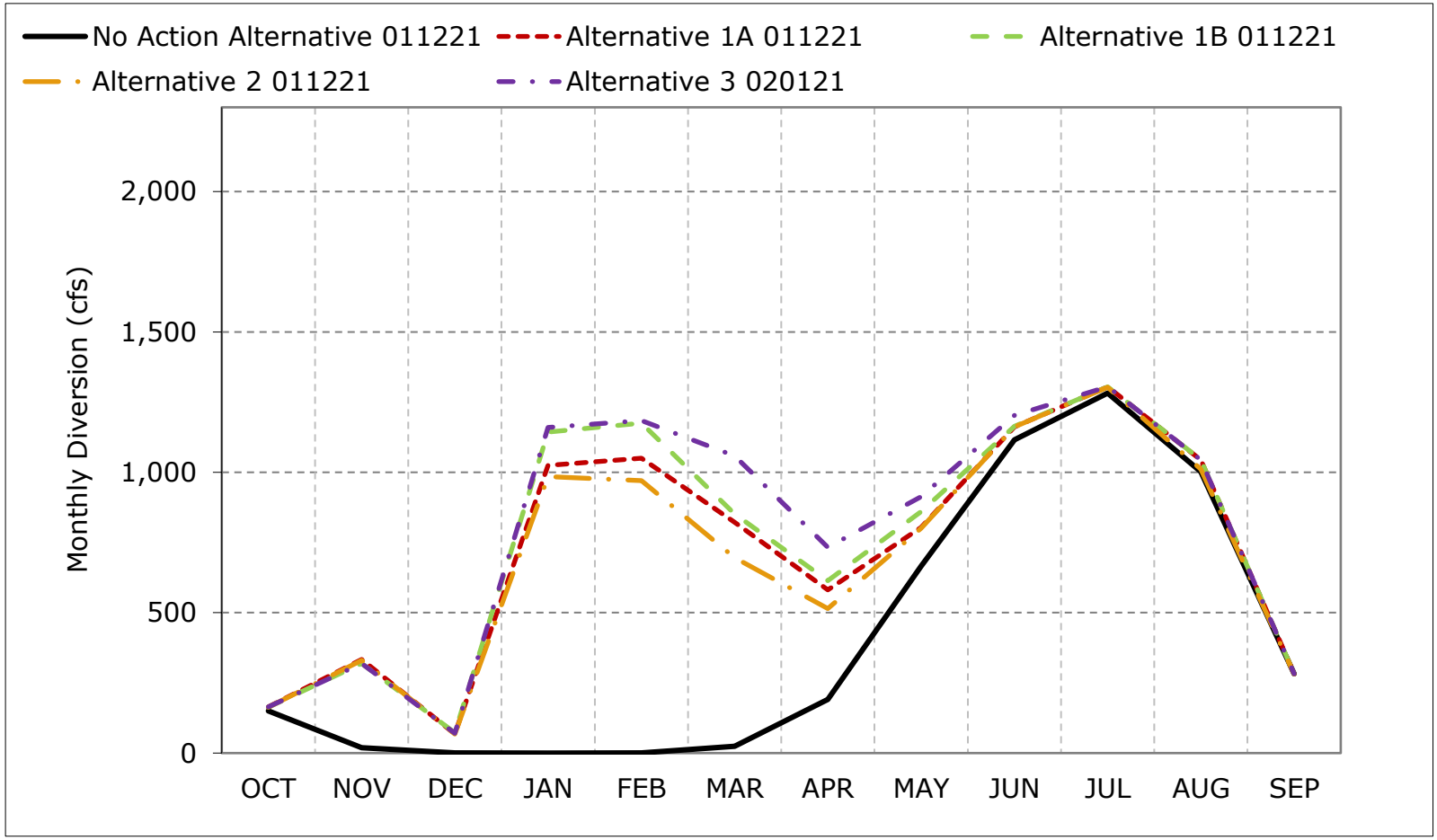
c These results are displayed with calendar year - year type sorting.

Figure 5C-3-1. Red Bluff Diversion - Tehama Colusa Canal, Long-Term Average Diversion



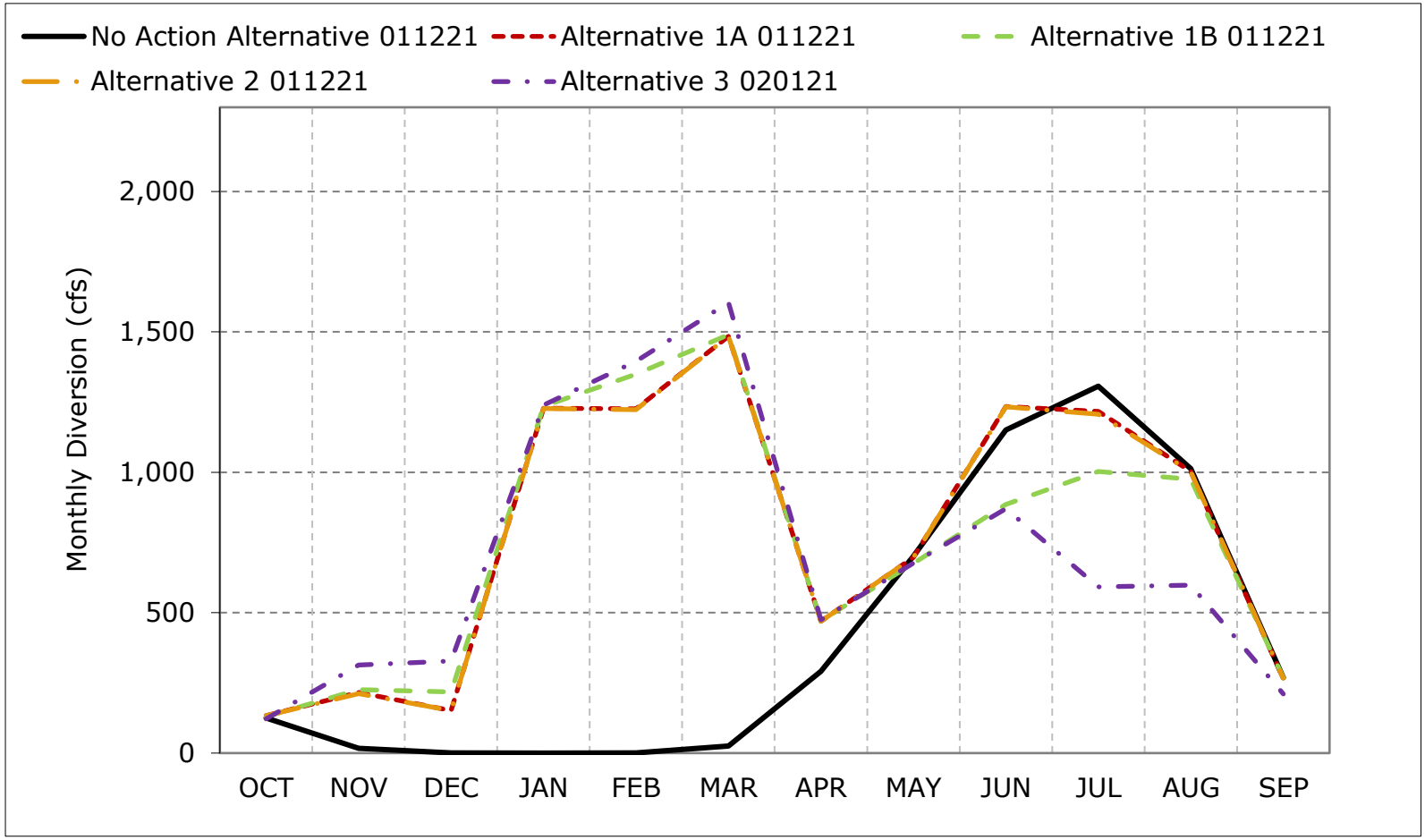
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-3-2. Red Bluff Diversion - Tehama Colusa Canal, Wet Year Average Diversion



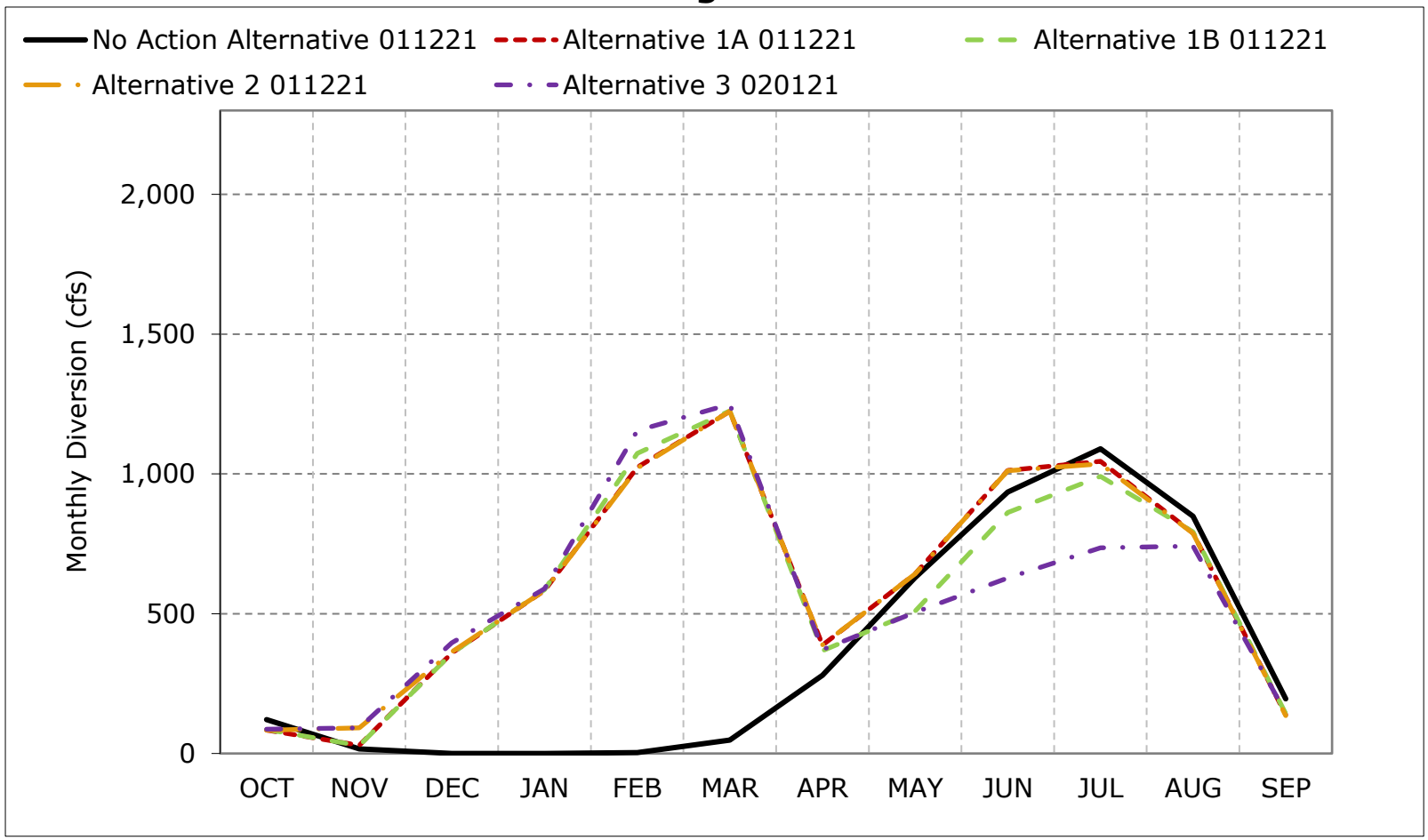
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-3-3. Red Bluff Diversion - Tehama Colusa Canal, Above Normal Year Average Diversion



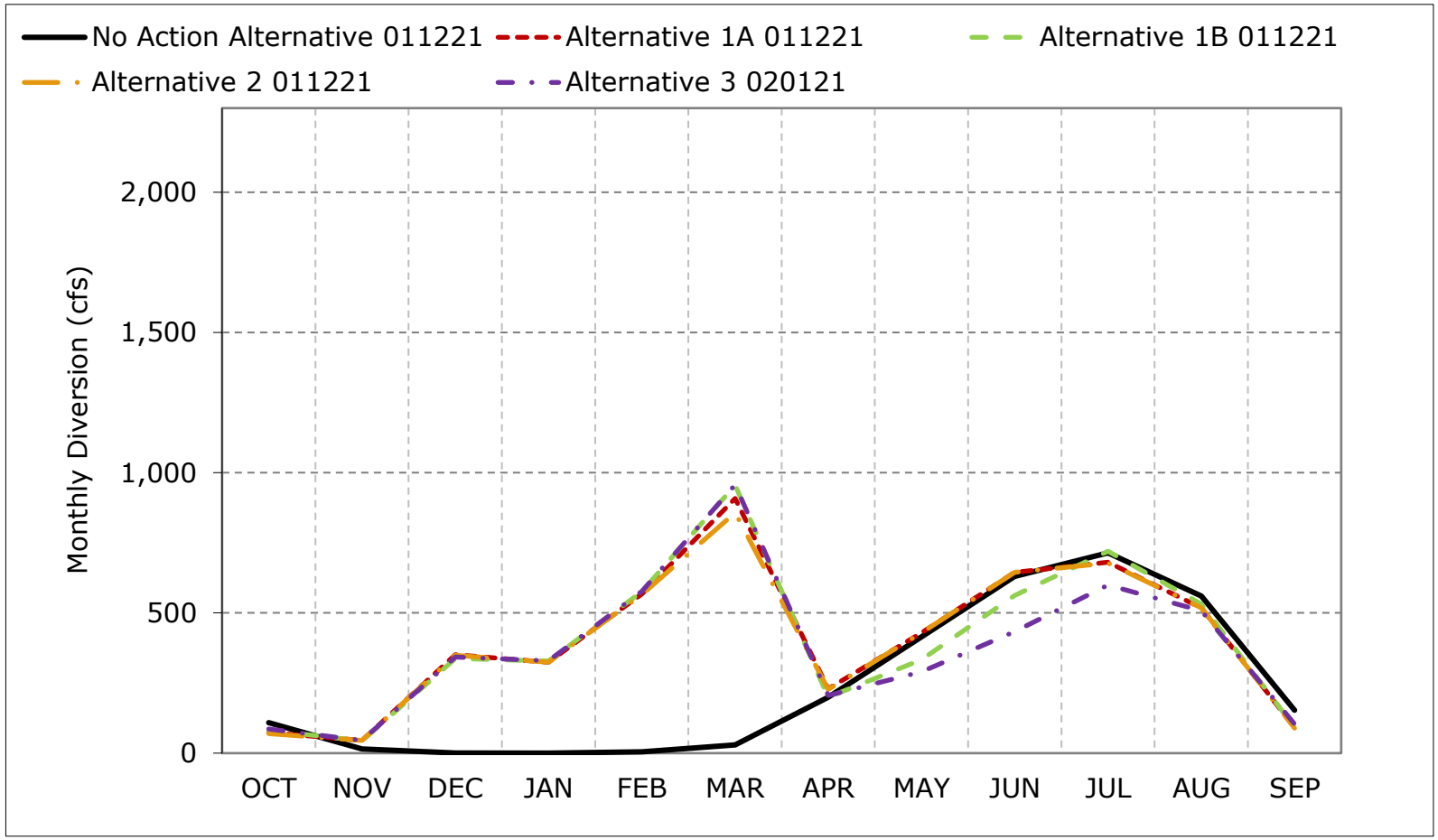
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-3-4. Red Bluff Diversion - Tehama Colusa Canal, Below Normal Year Average Diversion



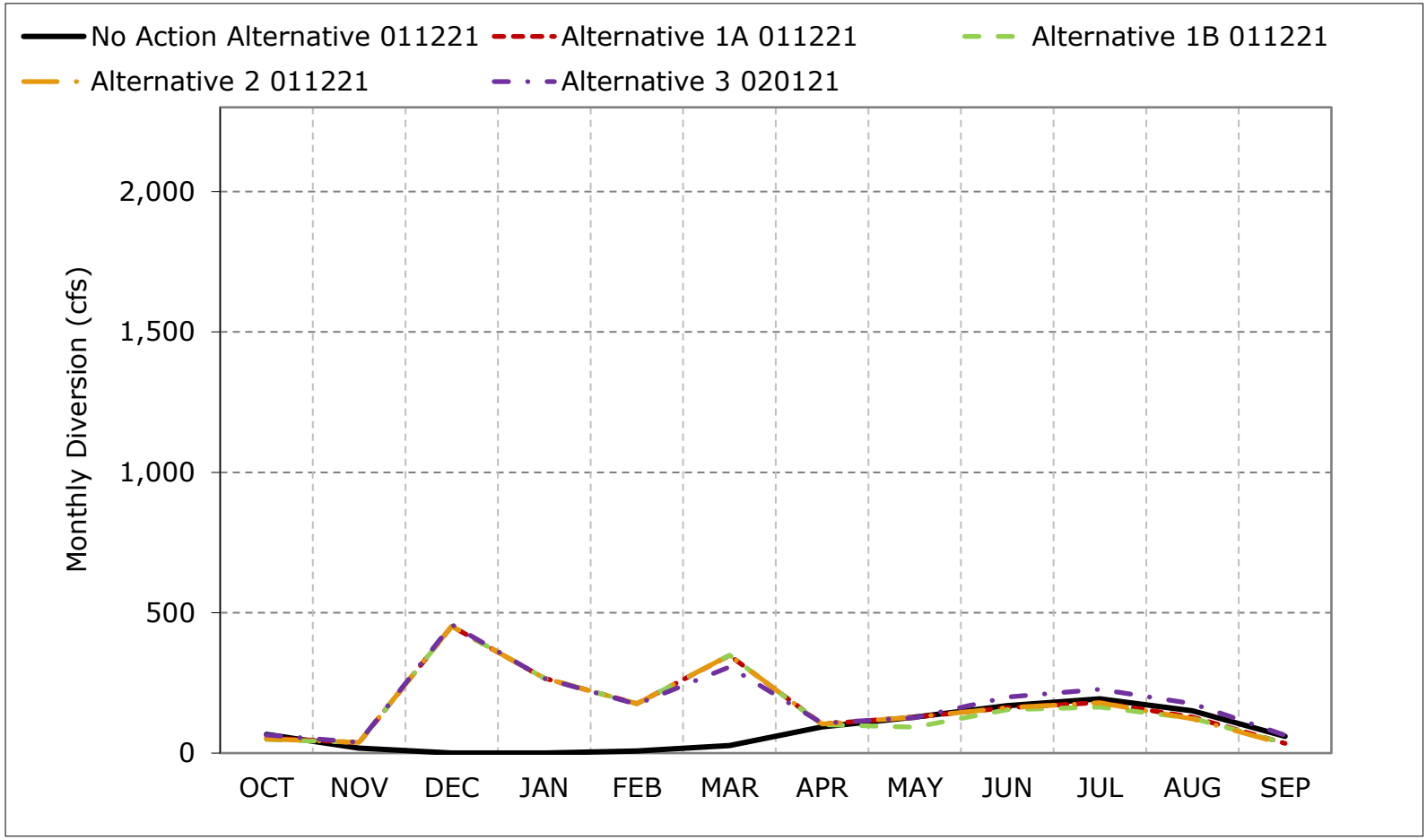
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-3-5. Red Bluff Diversion - Tehama Colusa Canal, Dry Year Average Diversion



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-3-6. Red Bluff Diversion - Tehama Colusa Canal, Critical Year Average Diversion



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-3-7. Red Bluff Diversion - Tehama Colusa Canal, October

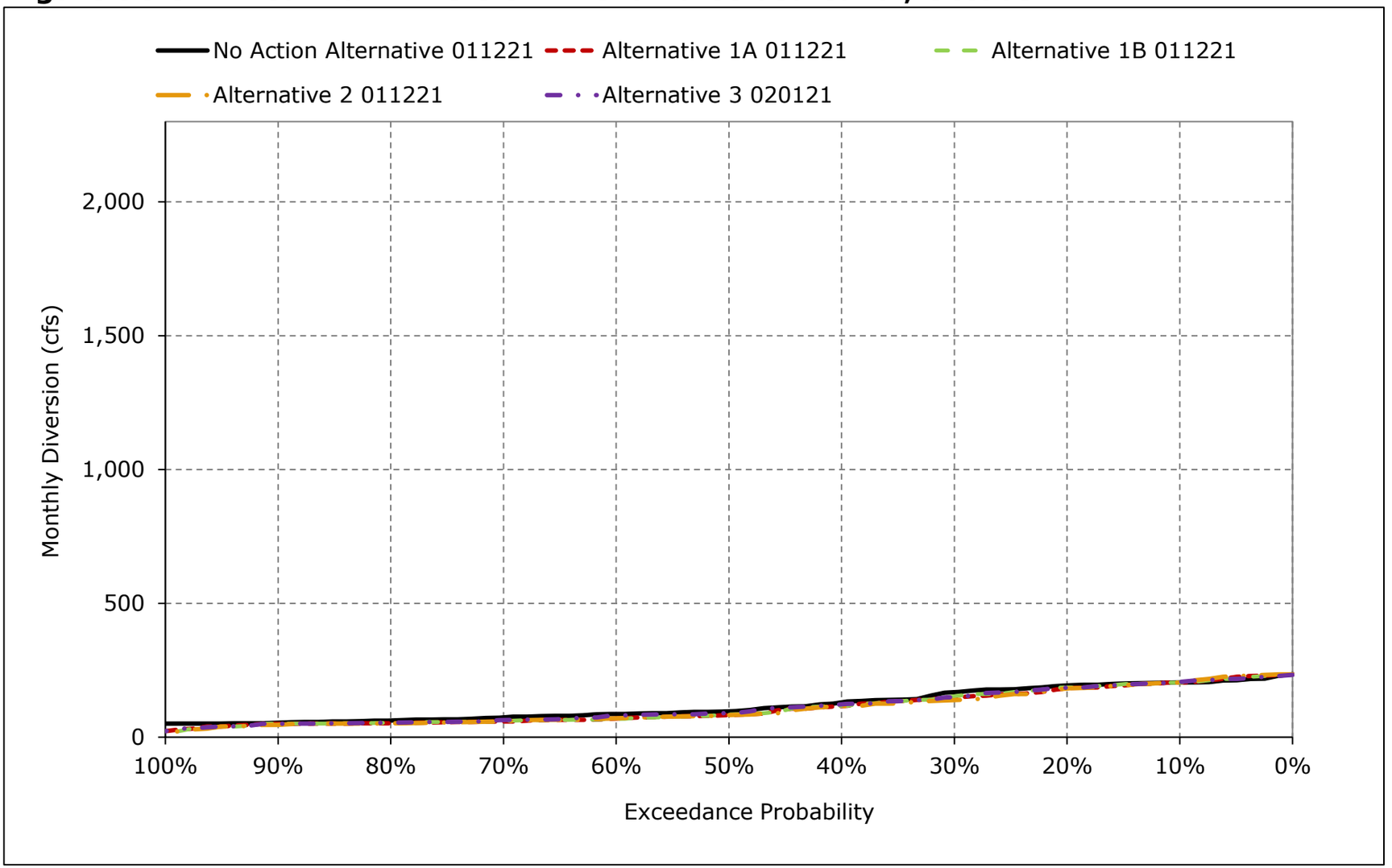


Figure 5C-3-8. Red Bluff Diversion - Tehama Colusa Canal, November

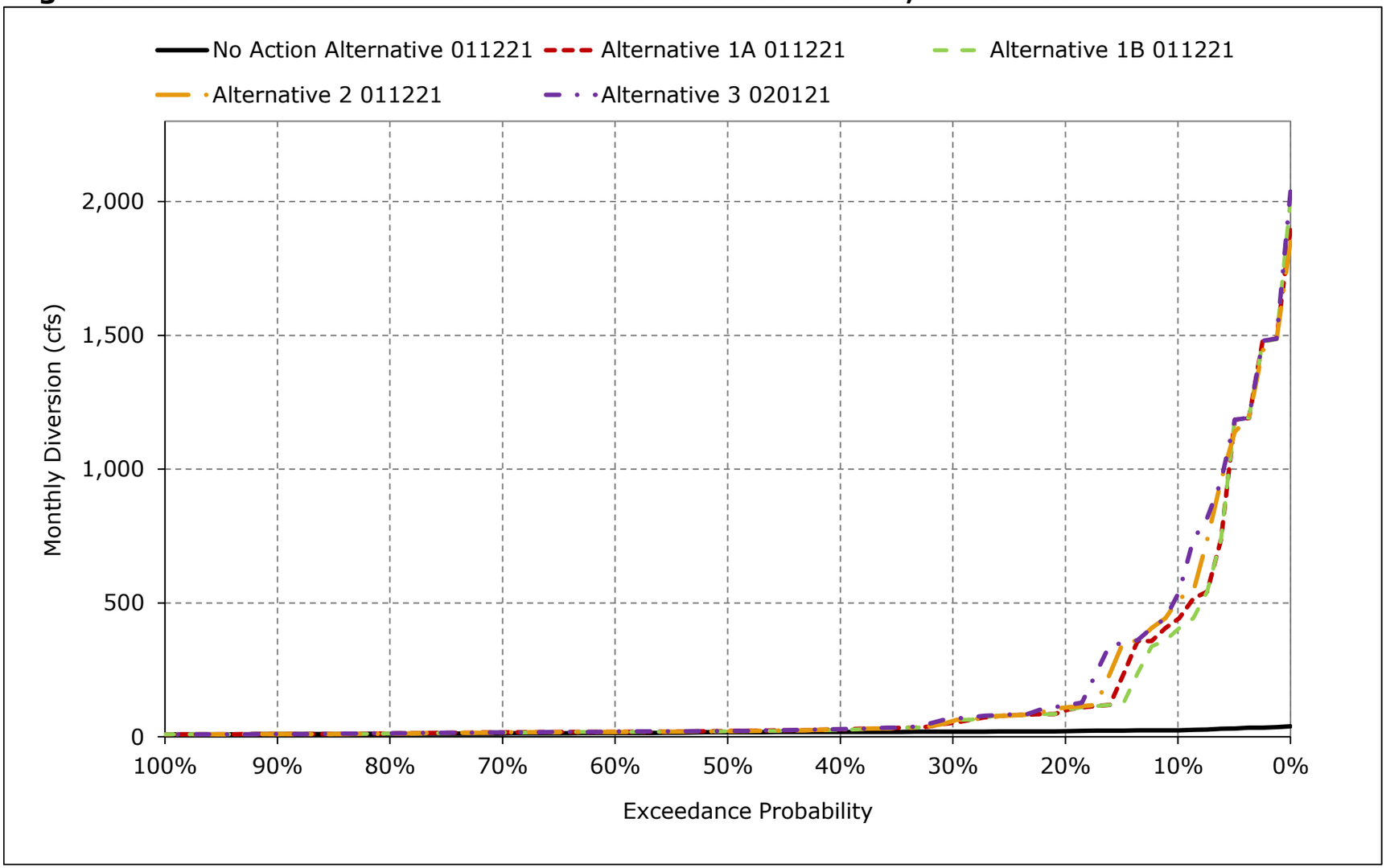


Figure 5C-3-9. Red Bluff Diversion - Tehama Colusa Canal, December

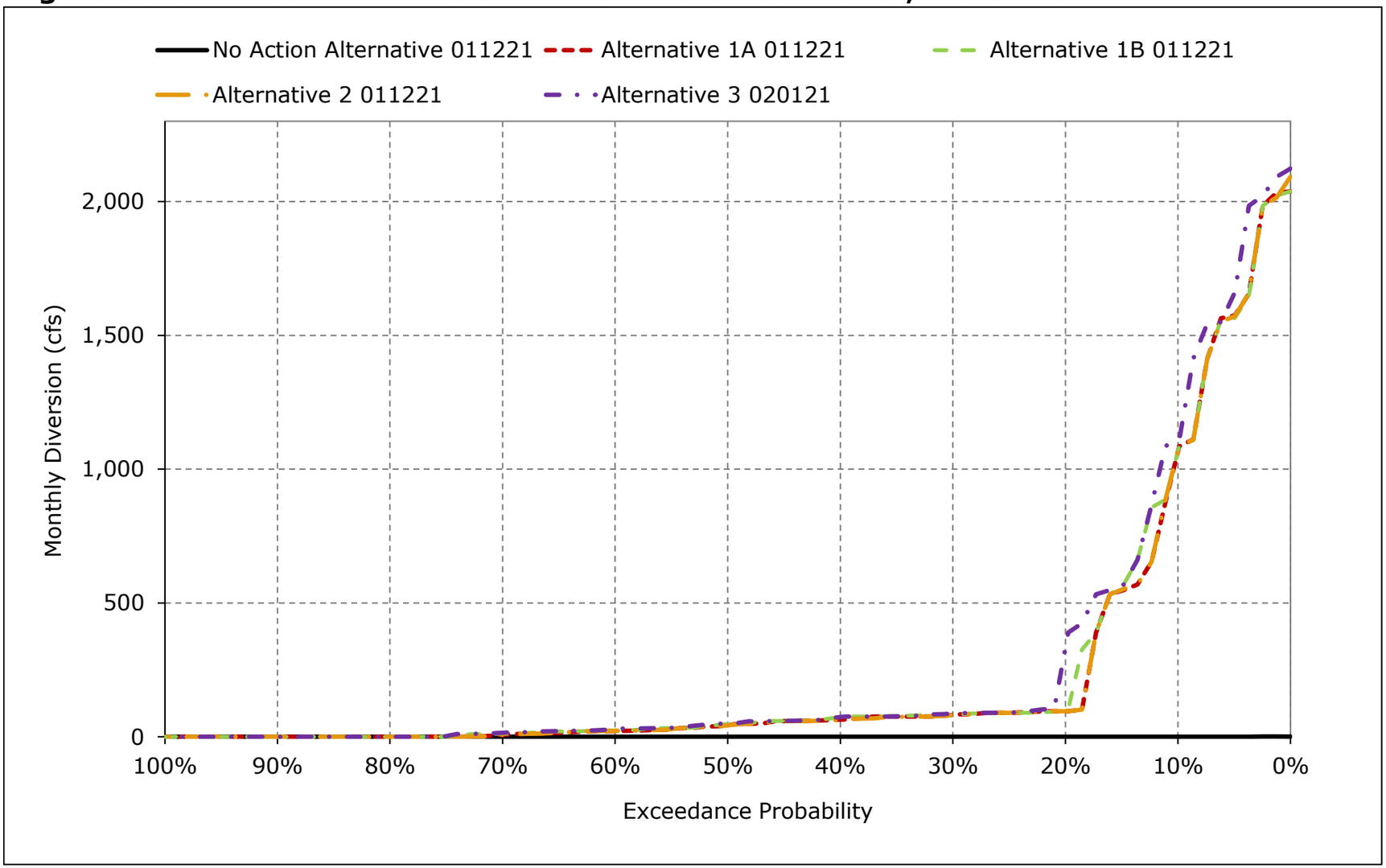


Figure 5C-3-10. Red Bluff Diversion - Tehama Colusa Canal, January

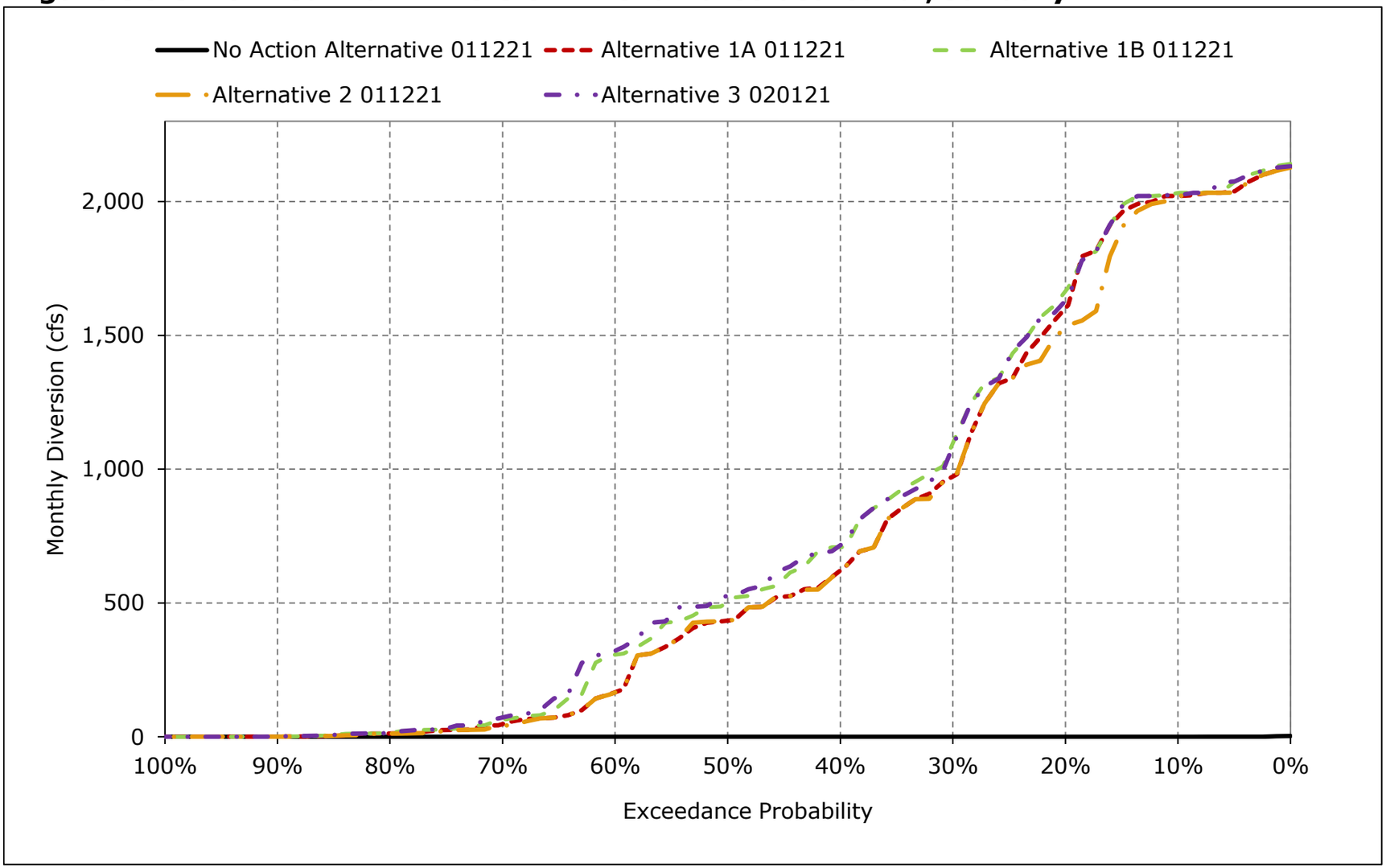


Figure 5C-3-11. Red Bluff Diversion - Tehama Colusa Canal, February

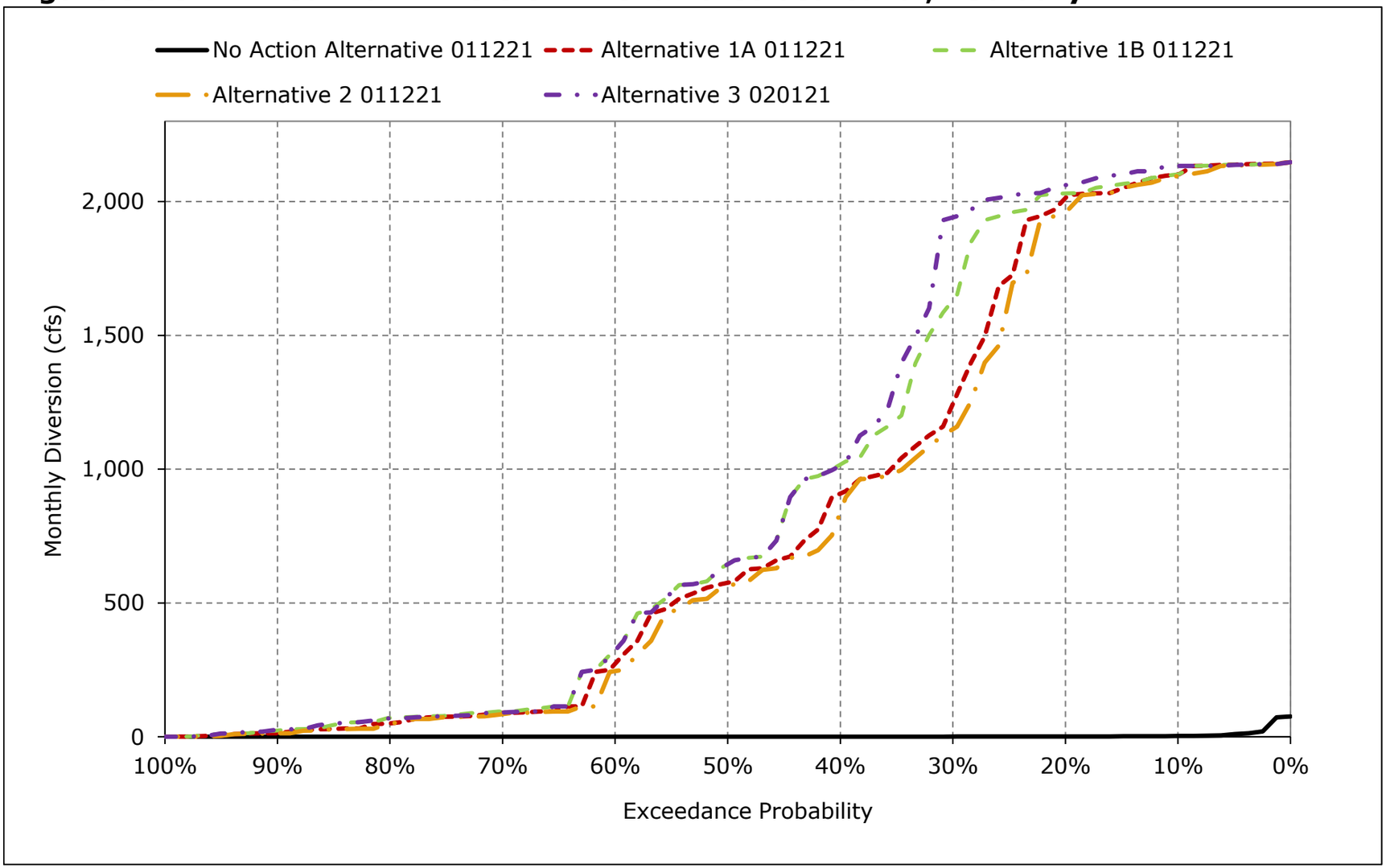


Figure 5C-3-12. Red Bluff Diversion - Tehama Colusa Canal, March

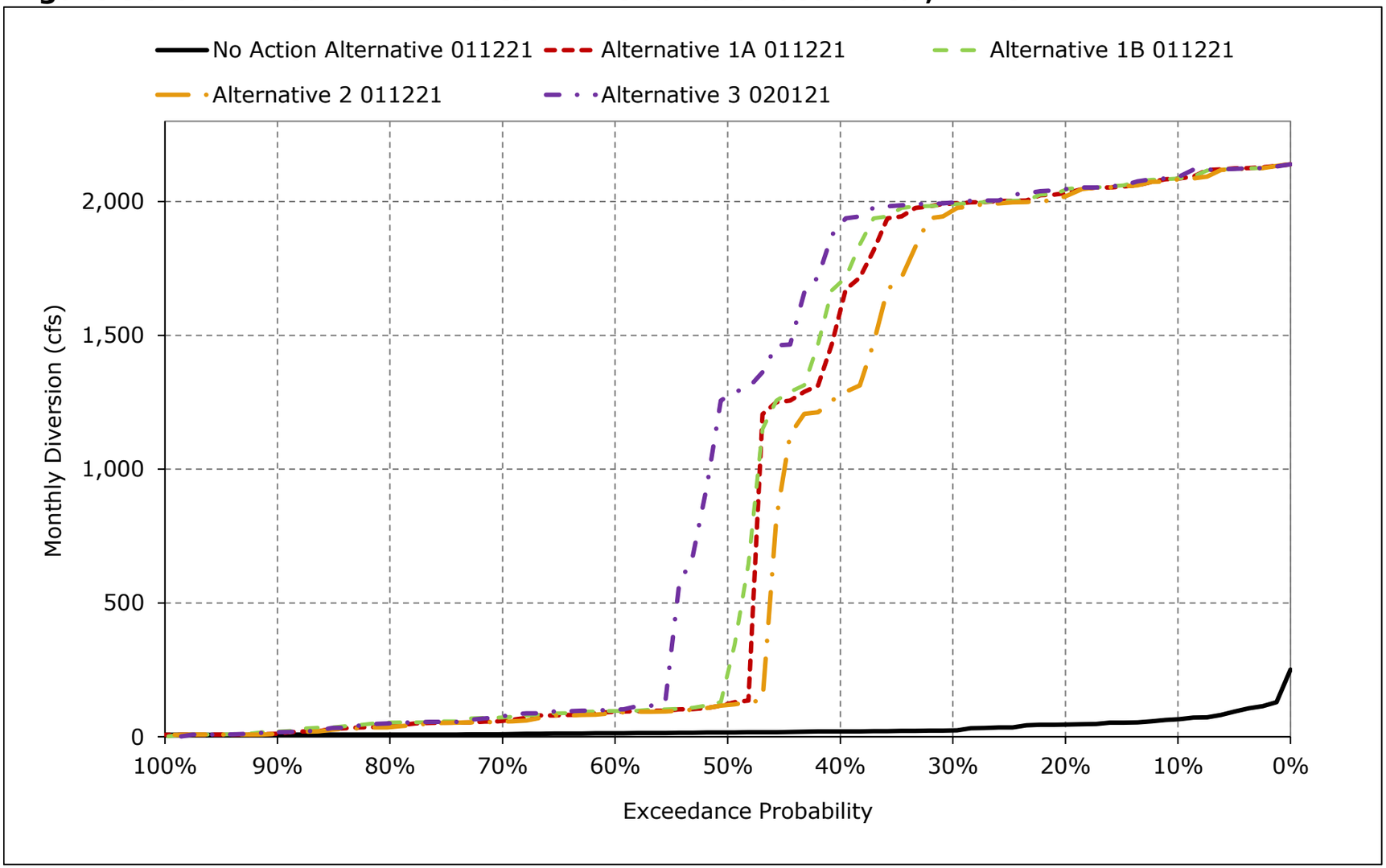


Figure 5C-3-13. Red Bluff Diversion - Tehama Colusa Canal, April

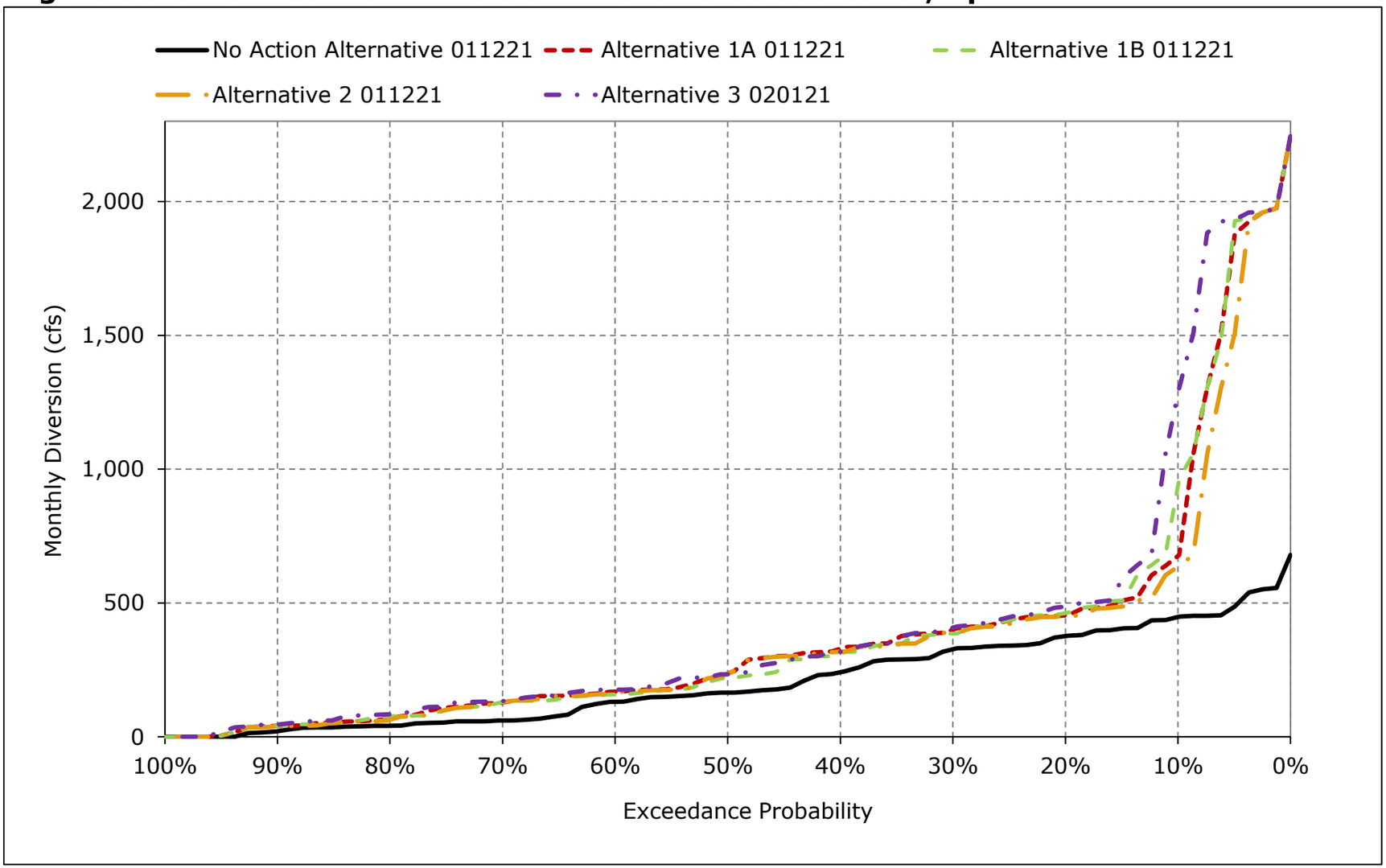


Figure 5C-3-14. Red Bluff Diversion - Tehama Colusa Canal, May

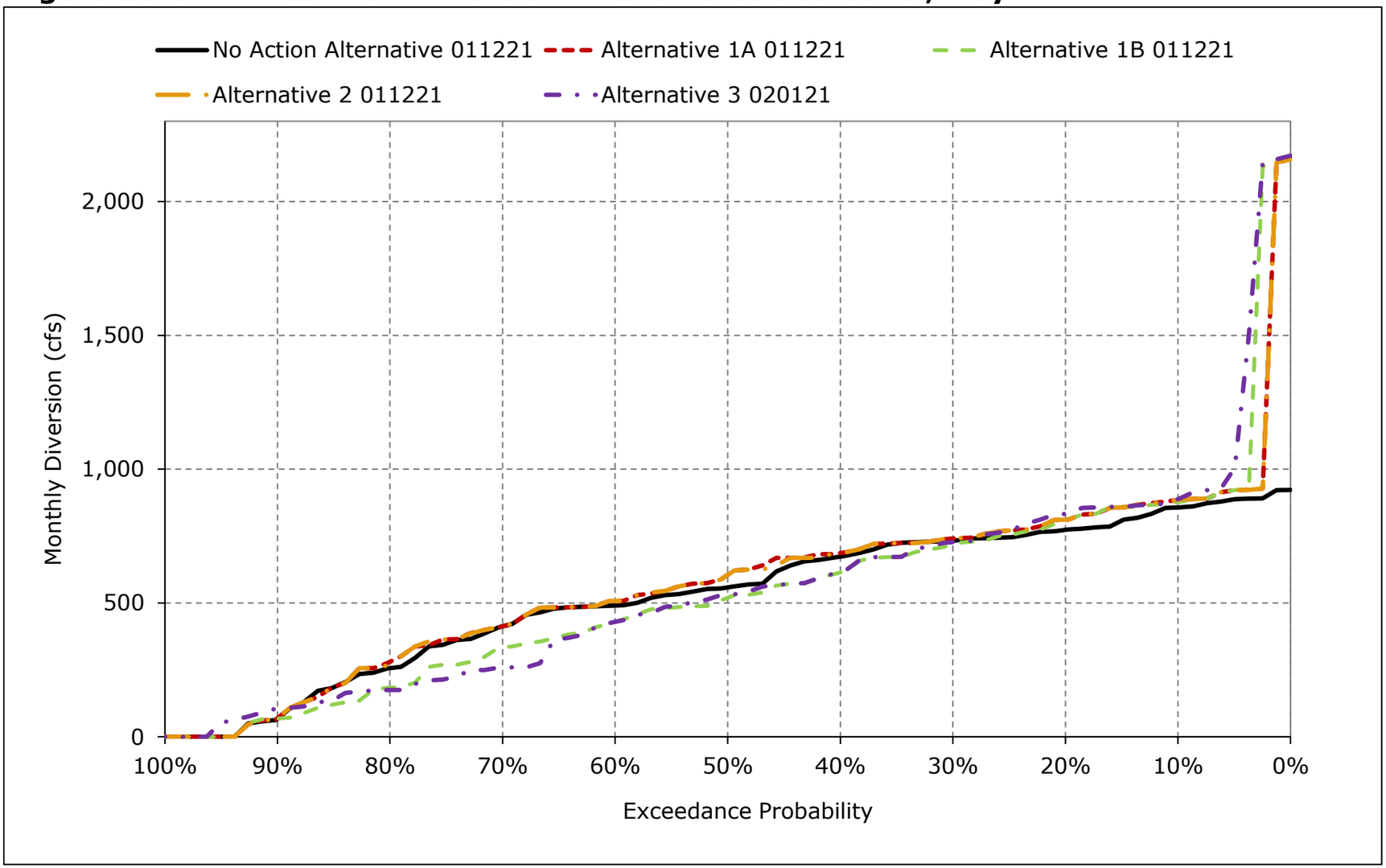


Figure 5C-3-15. Red Bluff Diversion - Tehama Colusa Canal, June

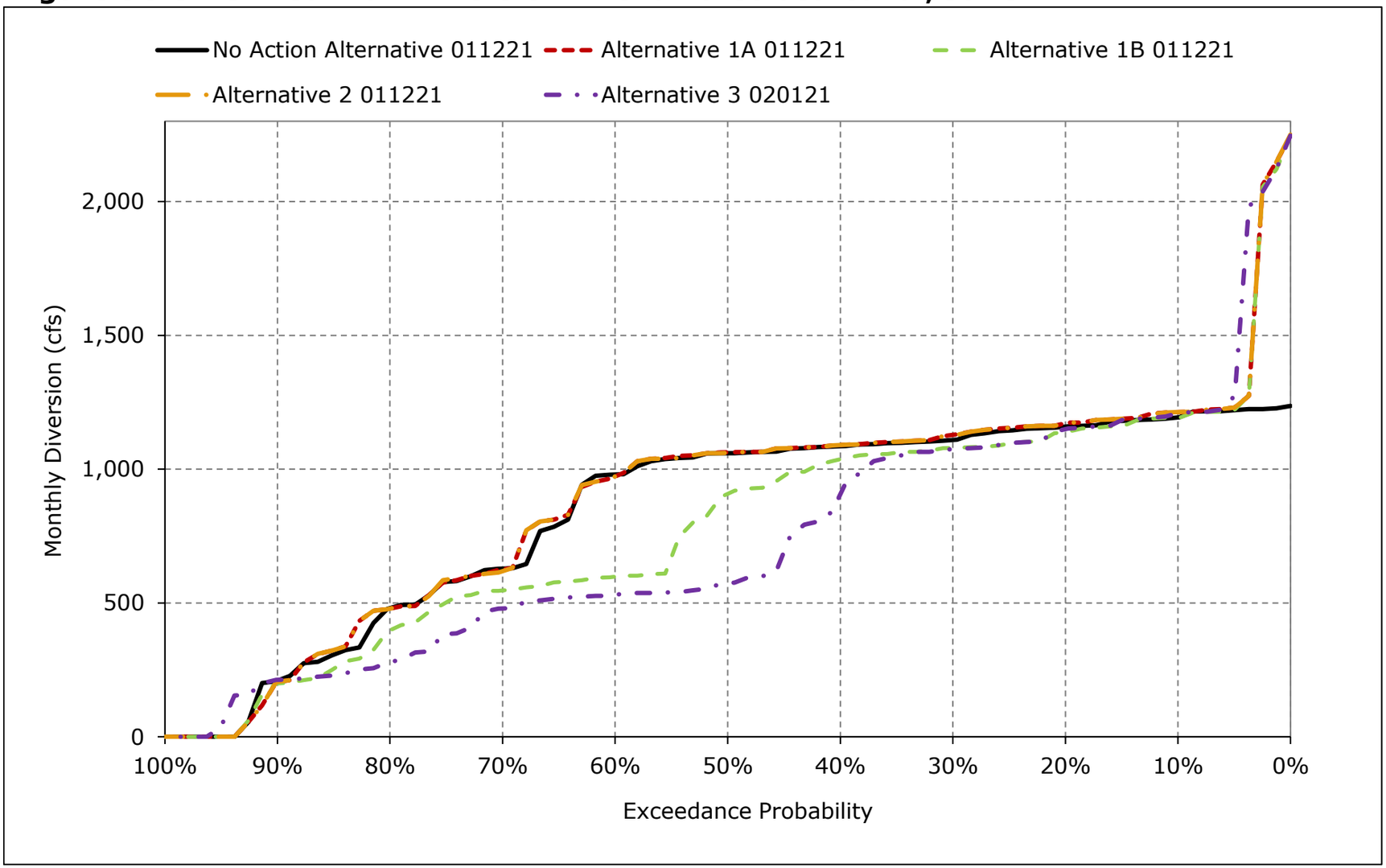


Figure 5C-3-16. Red Bluff Diversion - Tehama Colusa Canal, July

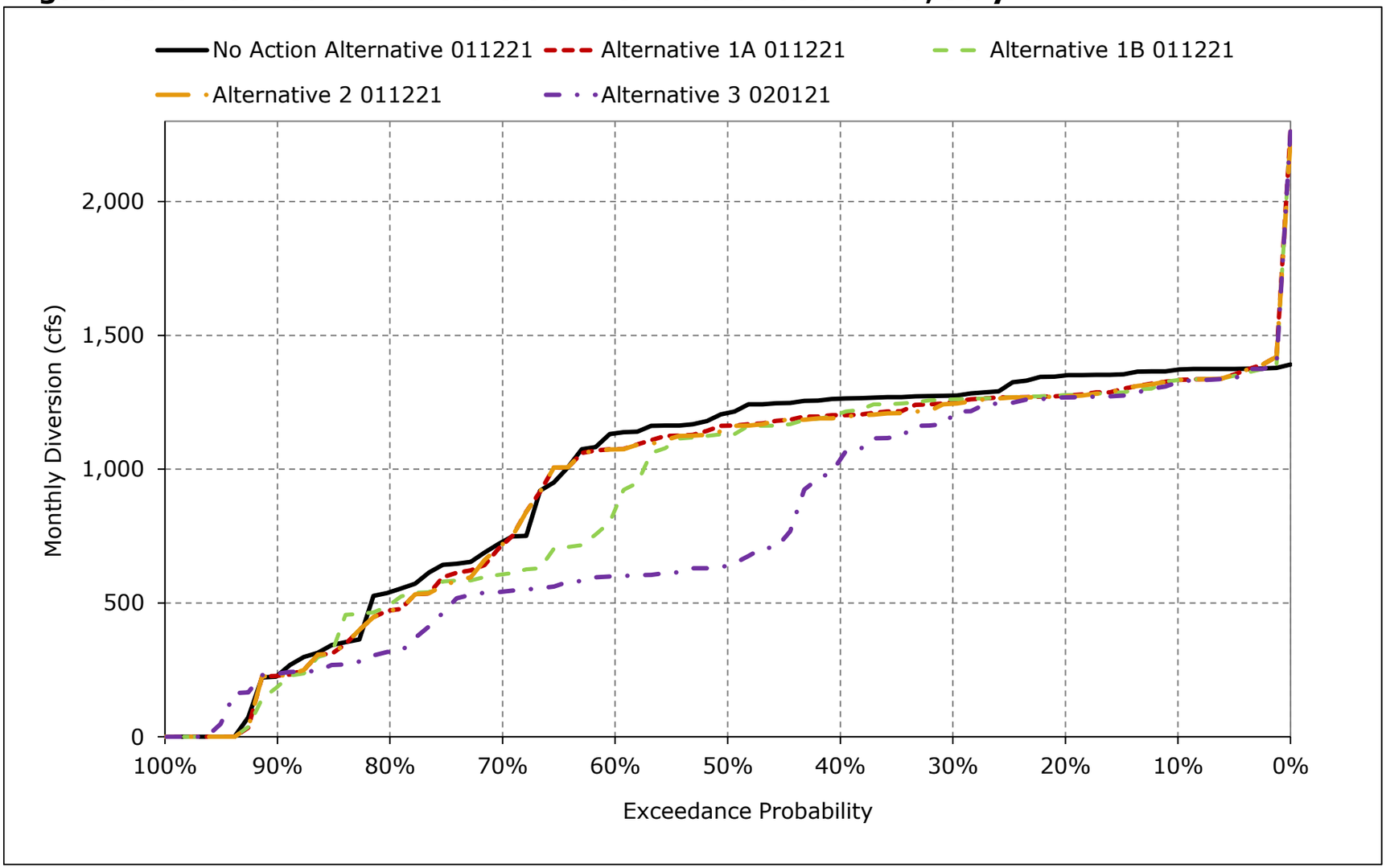


Figure 5C-3-17. Red Bluff Diversion - Tehama Colusa Canal, August

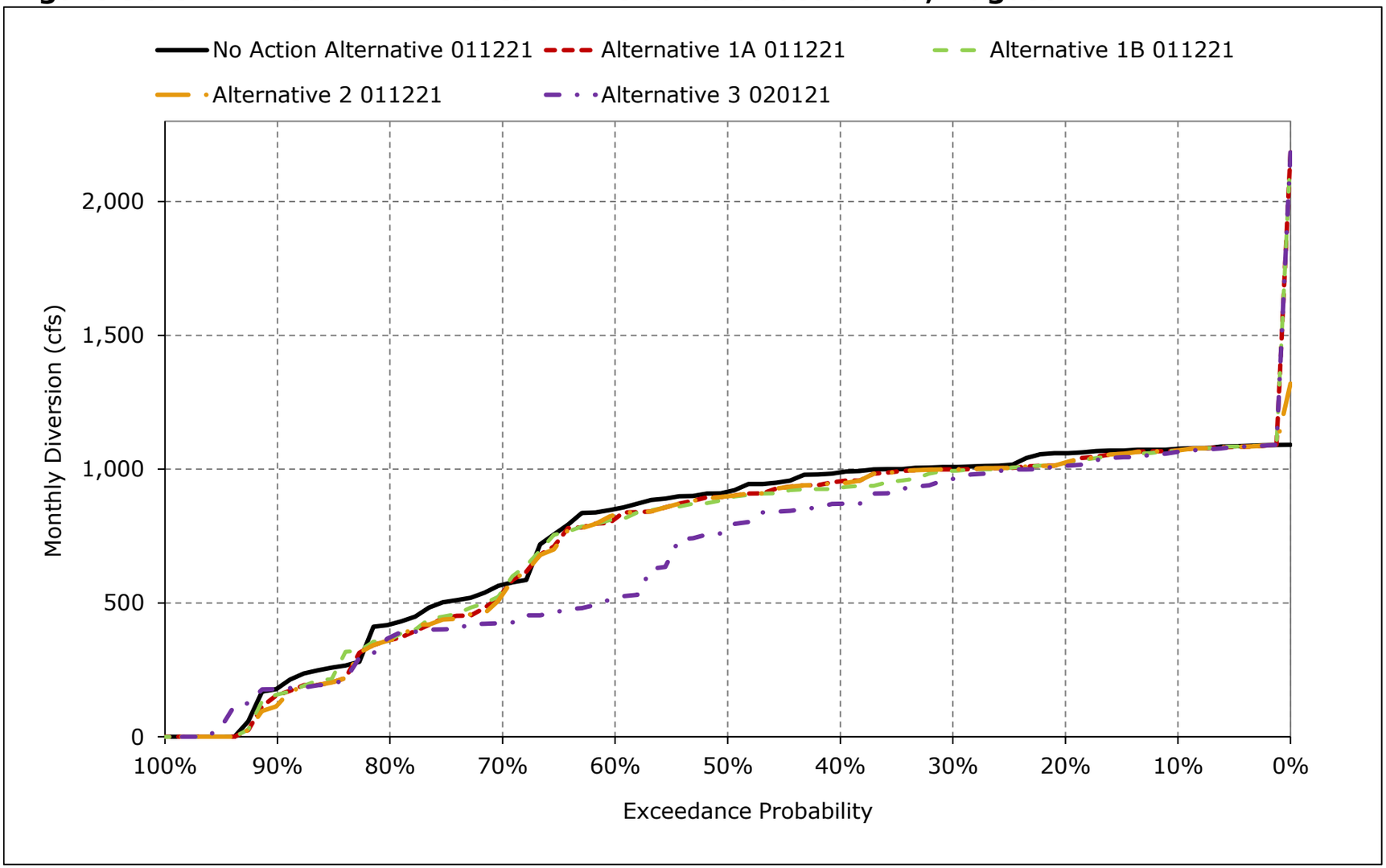


Figure 5C-3-18. Red Bluff Diversion - Tehama Colusa Canal, September

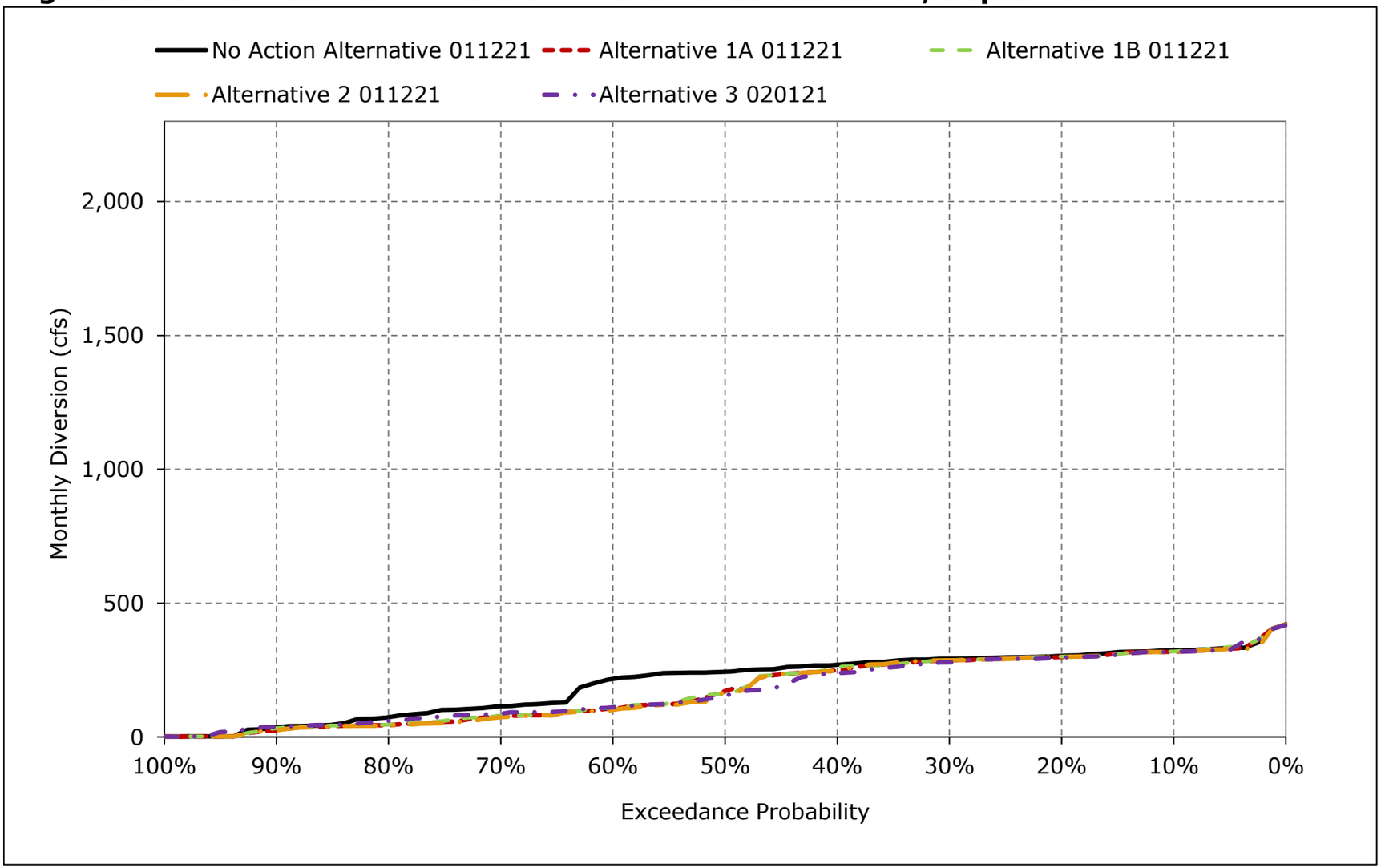


Table 5C-4-1a. Hamilton City Diversion - Glenn Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	612	776	296	125	68	74	584	2,281	2,696	2,616	2,193	680
20%	606	750	281	88	67	61	564	2,239	2,623	2,599	2,172	675
30%	600	730	256	81	66	48	533	2,204	2,547	2,551	2,058	669
40%	589	681	230	79	66	33	506	2,189	2,481	2,518	2,036	664
50%	577	662	208	78	66	25	490	2,165	2,414	2,512	1,978	656
60%	560	630	190	77	65	24	461	2,115	2,354	2,478	1,901	641
70%	544	587	176	76	65	23	442	2,033	2,303	2,444	1,821	631
80%	523	558	171	76	64	21	422	1,976	2,278	2,437	1,785	574
90%	457	533	166	64	52	19	342	1,824	2,227	2,273	1,761	534
Long Term												
Full Simulation Period[a]	559	655	219	84	65	41	474	2,094	2,432	2,482	1,963	630
Water Year Types[b,c]												
Wet (32%)	578	675	240	80	65	31	419	2,061	2,255	2,528	2,148	669
Above Normal (15%)	564	659	217	75	62	28	465	2,035	2,358	2,506	1,983	651
Below Normal (17%)	564	676	212	92	66	44	490	2,140	2,559	2,607	1,999	618
Dry (22%)	573	644	223	87	66	43	497	2,146	2,653	2,463	1,818	625
Critical (15%)	488	597	182	91	63	72	546	2,091	2,409	2,241	1,719	551

Table 5C-4-1b. Hamilton City Diversion - Glenn Colusa Canal, Alternative 1A 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	612	759	297	638	791	1,056	1,738	2,329	2,682	2,618	2,195	682
20%	603	730	278	140	290	311	588	2,261	2,576	2,594	2,186	675
30%	582	694	250	125	111	245	565	2,228	2,521	2,550	2,057	668
40%	556	667	225	104	81	120	540	2,191	2,445	2,530	2,039	659
50%	532	611	210	82	69	73	511	2,172	2,413	2,513	1,970	642
60%	494	573	196	79	67	54	476	2,078	2,360	2,463	1,890	571
70%	426	543	181	78	66	38	457	2,007	2,303	2,334	1,771	522
80%	391	512	171	76	65	26	438	1,951	2,282	2,193	1,641	474
90%	336	435	153	75	64	23	360	1,757	2,188	1,448	1,016	382
Long Term												
Full Simulation Period[a]	543	609	248	212	234	277	664	2,096	2,408	2,309	1,836	587
Water Year Types[b,c]												
Wet (32%)	732	680	236	317	448	364	900	2,195	2,378	2,572	2,194	708
Above Normal (15%)	563	612	205	430	244	573	637	2,126	2,424	2,504	1,983	650
Below Normal (17%)	427	602	299	94	137	152	615	2,150	2,549	2,597	1,962	566
Dry (22%)	440	549	306	89	105	177	479	2,041	2,357	1,931	1,419	468
Critical (15%)	401	546	166	88	64	91	516	1,874	2,367	1,772	1,394	465

Table 5C-4-1c. Hamilton City Diversion - Glenn Colusa Canal, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-17	1	513	723	982	1,154	48	-14	3	2	2
20%	-3	-20	-3	52	223	250	24	22	-46	-5	14	0
30%	-18	-36	-6	44	45	197	32	24	-26	0	-1	-1
40%	-33	-14	-5	24	15	87	34	2	-36	12	2	-5
50%	-46	-51	2	4	4	47	21	6	-1	1	-8	-14
60%	-66	-57	5	2	2	30	15	-36	5	-15	-12	-70
70%	-118	-44	6	1	1	15	14	-26	0	-110	-50	-110
80%	-131	-45	-1	0	2	4	16	-25	4	-245	-143	-100
90%	-121	-98	-13	12	12	4	18	-67	-39	-825	-745	-152
Long Term												
Full Simulation Period[a]	-17	-46	28	127	169	236	190	3	-24	-173	-127	-43
Water Year Types[b,c]												
Wet (32%)	154	5	-3	237	383	333	480	133	124	45	45	40
Above Normal (15%)	-2	-47	-11	354	182	545	172	90	66	-2	0	0
Below Normal (17%)	-138	-74	88	2	71	108	125	9	-11	-10	-37	-52
Dry (22%)	-133	-95	83	2	39	134	-18	-104	-296	-531	-400	-156
Critical (15%)	-86	-51	-16	-4	1	19	-29	-217	-41	-469	-325	-87

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-4-2a. Hamilton City Diversion - Glenn Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	612	776	296	125	68	74	584	2,281	2,696	2,616	2,193	680
20%	606	750	281	88	67	61	564	2,239	2,623	2,599	2,172	675
30%	600	730	256	81	66	48	533	2,204	2,547	2,551	2,058	669
40%	589	681	230	79	66	33	506	2,189	2,481	2,518	2,036	664
50%	577	662	208	78	66	25	490	2,165	2,414	2,512	1,978	656
60%	560	630	190	77	65	24	461	2,115	2,354	2,478	1,901	641
70%	544	587	176	76	65	23	442	2,033	2,303	2,444	1,821	631
80%	523	558	171	76	64	21	422	1,976	2,278	2,437	1,785	574
90%	457	533	166	64	52	19	342	1,824	2,227	2,273	1,761	534
Long Term												
Full Simulation Period[a]	559	655	219	84	65	41	474	2,094	2,432	2,482	1,963	630
Water Year Types[b,c]												
Wet (32%)	578	675	240	80	65	31	419	2,061	2,255	2,528	2,148	669
Above Normal (15%)	564	659	217	75	62	28	465	2,035	2,358	2,506	1,983	651
Below Normal (17%)	564	676	212	92	66	44	490	2,140	2,559	2,607	1,999	618
Dry (22%)	573	644	223	87	66	43	497	2,146	2,653	2,463	1,818	625
Critical (15%)	488	597	182	91	63	72	546	2,091	2,409	2,241	1,719	551

Table 5C-4-2b. Hamilton City Diversion - Glenn Colusa Canal, Alternative 1B 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	617	757	297	640	813	1,289	2,097	2,310	2,677	2,621	2,195	682
20%	603	731	278	140	438	312	586	2,256	2,594	2,592	2,186	675
30%	583	695	251	123	119	243	564	2,219	2,531	2,542	2,058	666
40%	556	667	226	104	81	127	541	2,188	2,460	2,521	2,037	658
50%	531	609	212	81	73	76	507	2,146	2,417	2,508	1,970	644
60%	498	576	196	79	67	60	474	2,067	2,370	2,458	1,881	600
70%	428	541	178	77	66	43	468	1,992	2,300	2,331	1,772	528
80%	385	488	169	76	65	27	438	1,862	2,282	2,180	1,485	482
90%	352	446	151	74	63	24	365	1,675	2,215	1,454	1,019	382
Long Term												
Full Simulation Period[a]	552	612	248	225	255	285	689	2,076	2,414	2,297	1,825	582
Water Year Types[b,c]												
Wet (32%)	730	680	236	363	509	386	985	2,220	2,407	2,572	2,192	677
Above Normal (15%)	615	624	205	430	263	575	637	2,122	2,327	2,418	1,979	652
Below Normal (17%)	430	601	299	90	134	143	608	2,011	2,566	2,568	1,926	567
Dry (22%)	440	545	307	89	104	189	481	2,035	2,444	1,956	1,403	479
Critical (15%)	416	564	167	84	64	90	508	1,856	2,293	1,772	1,393	478

Table 5C-4-2c. Hamilton City Diversion - Glenn Colusa Canal, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	5	-18	1	515	745	1,216	1,513	29	-19	5	2	2
20%	-3	-20	-3	52	371	252	21	17	-28	-7	14	-1
30%	-17	-36	-5	42	52	195	31	15	-16	-9	0	-2
40%	-32	-14	-4	25	15	94	35	-1	-21	3	1	-5
50%	-46	-53	4	3	7	51	17	-19	3	-4	-8	-12
60%	-62	-54	5	2	2	37	13	-47	16	-19	-20	-41
70%	-116	-47	3	1	1	19	26	-41	-3	-113	-50	-103
80%	-137	-69	-2	0	2	6	17	-114	4	-257	-300	-92
90%	-106	-87	-15	11	11	5	24	-149	-12	-819	-743	-152
Long Term												
Full Simulation Period[a]	-7	-43	28	141	190	244	216	-18	-18	-185	-138	-49
Water Year Types[b,c]												
Wet (32%)	153	5	-3	283	444	355	565	158	153	44	44	8
Above Normal (15%)	51	-35	-11	355	200	547	172	87	-31	-88	-3	1
Below Normal (17%)	-135	-75	87	-2	68	99	118	-130	7	-38	-73	-50
Dry (22%)	-133	-99	83	2	37	146	-16	-111	-209	-506	-416	-145
Critical (15%)	-72	-33	-15	-7	1	18	-38	-235	-116	-469	-326	-73

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-4-3a. Hamilton City Diversion - Glenn Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	612	776	296	125	68	74	584	2,281	2,696	2,616	2,193	680
20%	606	750	281	88	67	61	564	2,239	2,623	2,599	2,172	675
30%	600	730	256	81	66	48	533	2,204	2,547	2,551	2,058	669
40%	589	681	230	79	66	33	506	2,189	2,481	2,518	2,036	664
50%	577	662	208	78	66	25	490	2,165	2,414	2,512	1,978	656
60%	560	630	190	77	65	24	461	2,115	2,354	2,478	1,901	641
70%	544	587	176	76	65	23	442	2,033	2,303	2,444	1,821	631
80%	523	558	171	76	64	21	422	1,976	2,278	2,437	1,785	574
90%	457	533	166	64	52	19	342	1,824	2,227	2,273	1,761	534
Long Term												
Full Simulation Period[a]	559	655	219	84	65	41	474	2,094	2,432	2,482	1,963	630
Water Year Types[b,c]												
Wet (32%)	578	675	240	80	65	31	419	2,061	2,255	2,528	2,148	669
Above Normal (15%)	564	659	217	75	62	28	465	2,035	2,358	2,506	1,983	651
Below Normal (17%)	564	676	212	92	66	44	490	2,140	2,559	2,607	1,999	618
Dry (22%)	573	644	223	87	66	43	497	2,146	2,653	2,463	1,818	625
Critical (15%)	488	597	182	91	63	72	546	2,091	2,409	2,241	1,719	551

Table 5C-4-3b. Hamilton City Diversion - Glenn Colusa Canal, Alternative 2 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	612	757	297	638	794	750	625	2,329	2,669	2,618	2,195	682
20%	603	729	278	139	260	311	585	2,261	2,579	2,594	2,186	675
30%	582	690	248	125	99	190	564	2,228	2,529	2,550	2,056	668
40%	551	660	228	103	80	98	540	2,191	2,462	2,530	2,039	659
50%	526	622	210	81	68	69	511	2,168	2,418	2,512	1,969	648
60%	481	580	196	79	67	51	476	2,080	2,382	2,458	1,890	575
70%	429	553	178	77	66	37	457	2,003	2,313	2,340	1,786	522
80%	392	527	170	76	65	25	438	1,946	2,282	2,200	1,683	444
90%	342	459	148	75	64	23	361	1,752	2,188	1,463	1,049	389
Long Term												
Full Simulation Period[a]	539	613	248	211	228	244	647	2,096	2,416	2,316	1,856	579
Water Year Types[b,c]												
Wet (32%)	728	680	236	316	431	275	845	2,190	2,375	2,571	2,191	676
Above Normal (15%)	562	608	205	430	245	550	636	2,126	2,424	2,504	1,983	650
Below Normal (17%)	424	594	299	94	137	147	615	2,150	2,549	2,597	1,962	559
Dry (22%)	440	574	305	89	105	171	479	2,042	2,393	1,939	1,463	467
Critical (15%)	389	556	169	88	64	91	517	1,882	2,381	1,813	1,468	486

Table 5C-4-3c. Hamilton City Diversion - Glenn Colusa Canal, Alternative 2 011221 minus No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-18	1	513	726	676	41	48	-27	3	2	2
20%	-3	-21	-3	51	193	250	21	22	-44	-5	14	0
30%	-18	-40	-8	44	33	142	31	23	-18	0	-1	-1
40%	-38	-21	-2	23	14	64	34	2	-19	12	2	-5
50%	-52	-40	1	3	2	44	21	3	4	-1	-9	-8
60%	-78	-49	5	2	2	28	15	-34	28	-19	-12	-66
70%	-115	-34	2	1	1	14	14	-30	10	-104	-35	-109
80%	-131	-31	-1	0	2	4	16	-31	5	-238	-102	-130
90%	-116	-74	-18	11	12	4	19	-73	-39	-810	-712	-145
Long Term												
Full Simulation Period[a]	-20	-41	28	127	163	202	173	2	-15	-166	-108	-52
Water Year Types[b,c]												
Wet (32%)	150	5	-3	236	366	243	426	129	120	43	43	8
Above Normal (15%)	-2	-51	-12	354	183	522	171	90	66	-2	0	-1
Below Normal (17%)	-141	-82	87	2	71	103	125	9	-10	-10	-38	-59
Dry (22%)	-133	-70	81	2	38	128	-19	-103	-260	-524	-356	-158
Critical (15%)	-99	-41	-13	-4	1	19	-29	-209	-28	-428	-251	-65

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-4-4a. Hamilton City Diversion - Glenn Colusa Canal, No Action Alternative 011221, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	612	776	296	125	68	74	584	2,281	2,696	2,616	2,193	680
20%	606	750	281	88	67	61	564	2,239	2,623	2,599	2,172	675
30%	600	730	256	81	66	48	533	2,204	2,547	2,551	2,058	669
40%	589	681	230	79	66	33	506	2,189	2,481	2,518	2,036	664
50%	577	662	208	78	66	25	490	2,165	2,414	2,512	1,978	656
60%	560	630	190	77	65	24	461	2,115	2,354	2,478	1,901	641
70%	544	587	176	76	65	23	442	2,033	2,303	2,444	1,821	631
80%	523	558	171	76	64	21	422	1,976	2,278	2,437	1,785	574
90%	457	533	166	64	52	19	342	1,824	2,227	2,273	1,761	534
Long Term												
Full Simulation Period[a]	559	655	219	84	65	41	474	2,094	2,432	2,482	1,963	630
Water Year Types[b,c]												
Wet (32%)	578	675	240	80	65	31	419	2,061	2,255	2,528	2,148	669
Above Normal (15%)	564	659	217	75	62	28	465	2,035	2,358	2,506	1,983	651
Below Normal (17%)	564	676	212	92	66	44	490	2,140	2,559	2,607	1,999	618
Dry (22%)	573	644	223	87	66	43	497	2,146	2,653	2,463	1,818	625
Critical (15%)	488	597	182	91	63	72	546	2,091	2,409	2,241	1,719	551

Table 5C-4-4b. Hamilton City Diversion - Glenn Colusa Canal, Alternative 3 020121, Monthly Diversion (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	618	759	307	682	904	1,389	2,167	2,322	2,662	2,603	2,195	682
20%	604	731	278	141	553	399	599	2,246	2,565	2,534	2,186	676
30%	589	694	254	127	130	294	566	2,201	2,436	2,513	2,054	667
40%	558	668	236	109	84	154	546	2,175	2,367	2,465	2,001	659
50%	521	622	215	87	75	83	520	2,096	2,301	2,315	1,957	643
60%	489	578	198	80	67	68	480	2,009	2,277	2,183	1,799	615
70%	423	546	182	78	66	49	467	1,928	2,216	1,612	1,748	539
80%	382	524	170	76	65	32	439	1,757	1,946	1,482	1,601	495
90%	339	459	152	75	63	24	381	1,323	1,668	1,447	1,023	390
Long Term												
Full Simulation Period[a]	563	619	262	228	290	333	729	2,027	2,261	2,109	1,813	595
Water Year Types[b,c]												
Wet (32%)	733	680	236	365	550	531	1,115	2,279	2,407	2,571	2,194	709
Above Normal (15%)	619	619	293	437	364	579	637	2,116	2,076	1,589	1,705	643
Below Normal (17%)	432	594	298	96	180	146	605	1,905	2,136	2,257	1,891	576
Dry (22%)	453	584	315	89	106	192	475	1,866	2,236	1,859	1,480	491
Critical (15%)	457	568	163	87	60	84	514	1,776	2,312	1,828	1,501	481

Table 5C-4-4c. Hamilton City Diversion - Glenn Colusa Canal, Alternative 3 020121 minus No Action Alternative 011221, Monthly Diversion (cfs)

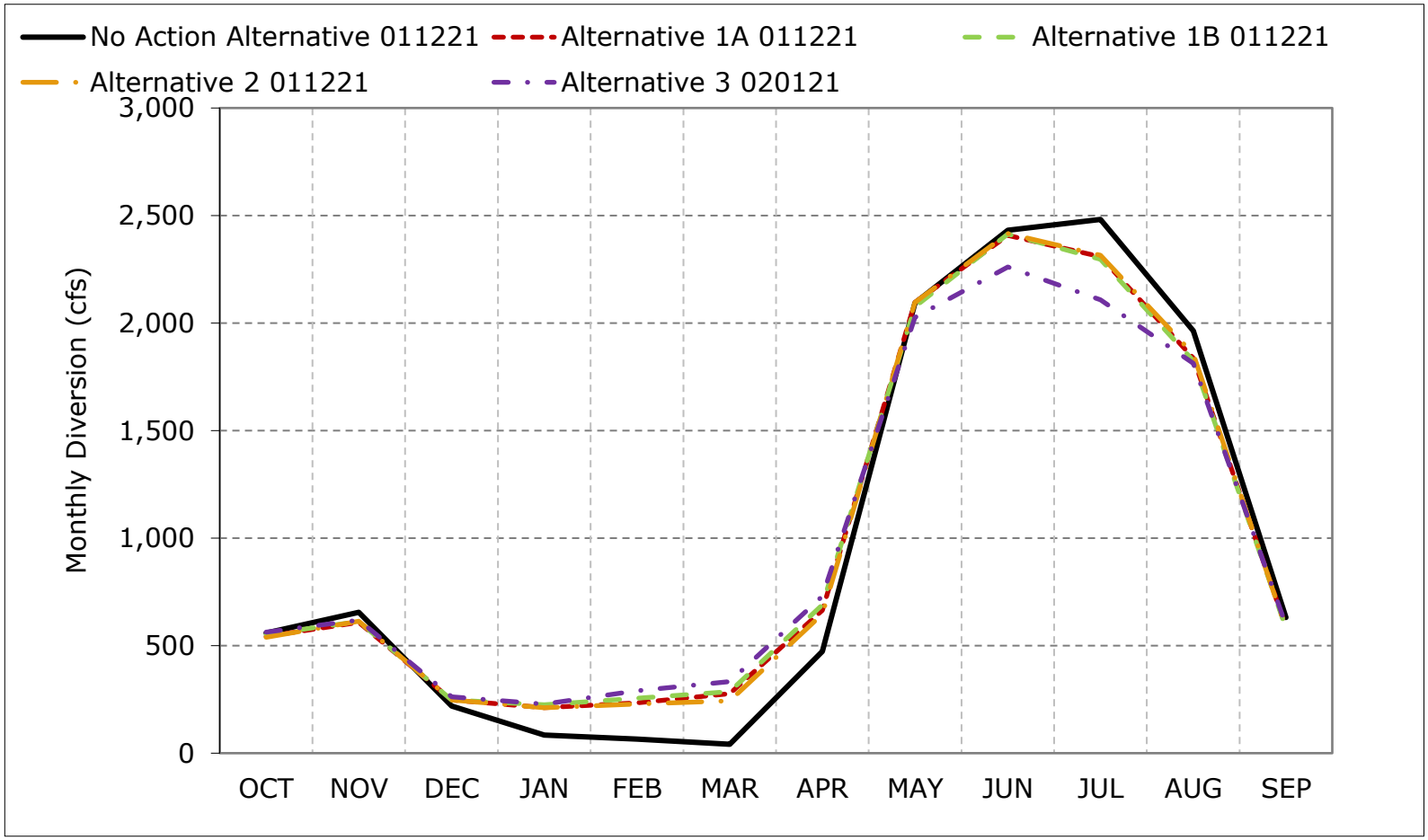
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	6	-17	11	557	836	1,315	1,582	41	-34	-13	2	2
20%	-2	-19	-2	52	486	338	35	8	-58	-66	14	1
30%	-11	-36	-2	47	63	246	34	-3	-111	-37	-4	-2
40%	-31	-13	6	30	18	120	39	-14	-114	-54	-36	-5
50%	-57	-40	7	8	9	58	31	-69	-113	-198	-21	-13
60%	-71	-52	7	3	2	44	19	-105	-77	-295	-103	-26
70%	-121	-41	6	2	1	25	24	-105	-88	-832	-73	-92
80%	-140	-34	-1	0	2	11	18	-219	-332	-956	-184	-79
90%	-118	-74	-14	11	11	5	39	-502	-559	-827	-738	-144
Long Term												
Full Simulation Period[a]	4	-36	42	144	225	291	256	-67	-171	-373	-151	-35
Water Year Types[b,c]												
Wet (32%)	156	5	-3	285	485	499	695	217	152	43	45	40
Above Normal (15%)	54	-40	76	362	301	552	172	81	-282	-917	-278	-8
Below Normal (17%)	-133	-83	86	5	114	102	115	-235	-423	-350	-109	-42
Dry (22%)	-120	-60	92	2	40	150	-23	-280	-418	-603	-338	-134
Critical (15%)	-31	-29	-18	-5	-3	12	-32	-314	-97	-413	-218	-70

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

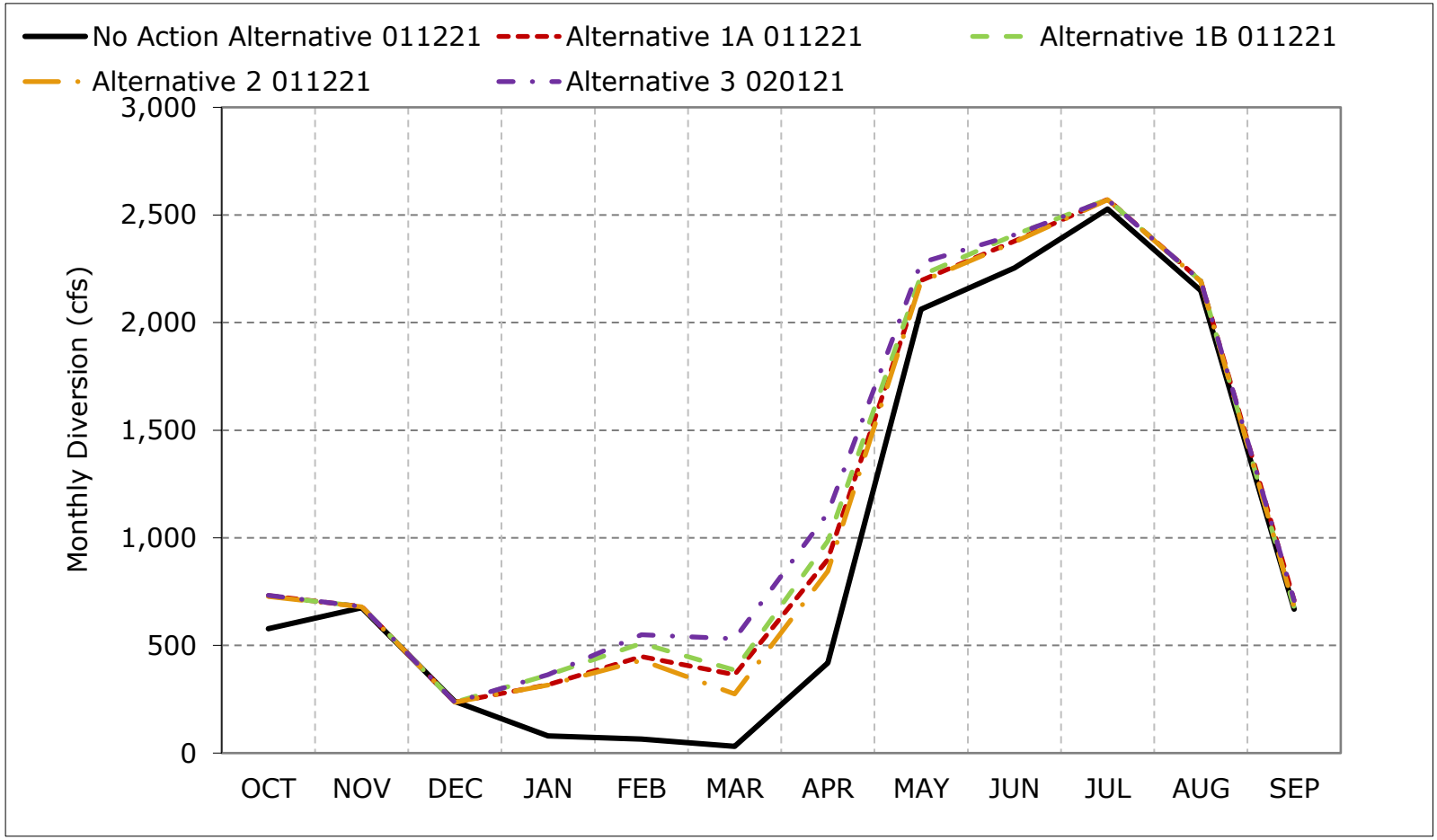
c These results are displayed with calendar year - year type sorting.

Figure 5C-4-1. Hamilton City Diversion - Glenn Colusa Canal, Long-Term Average Diversion



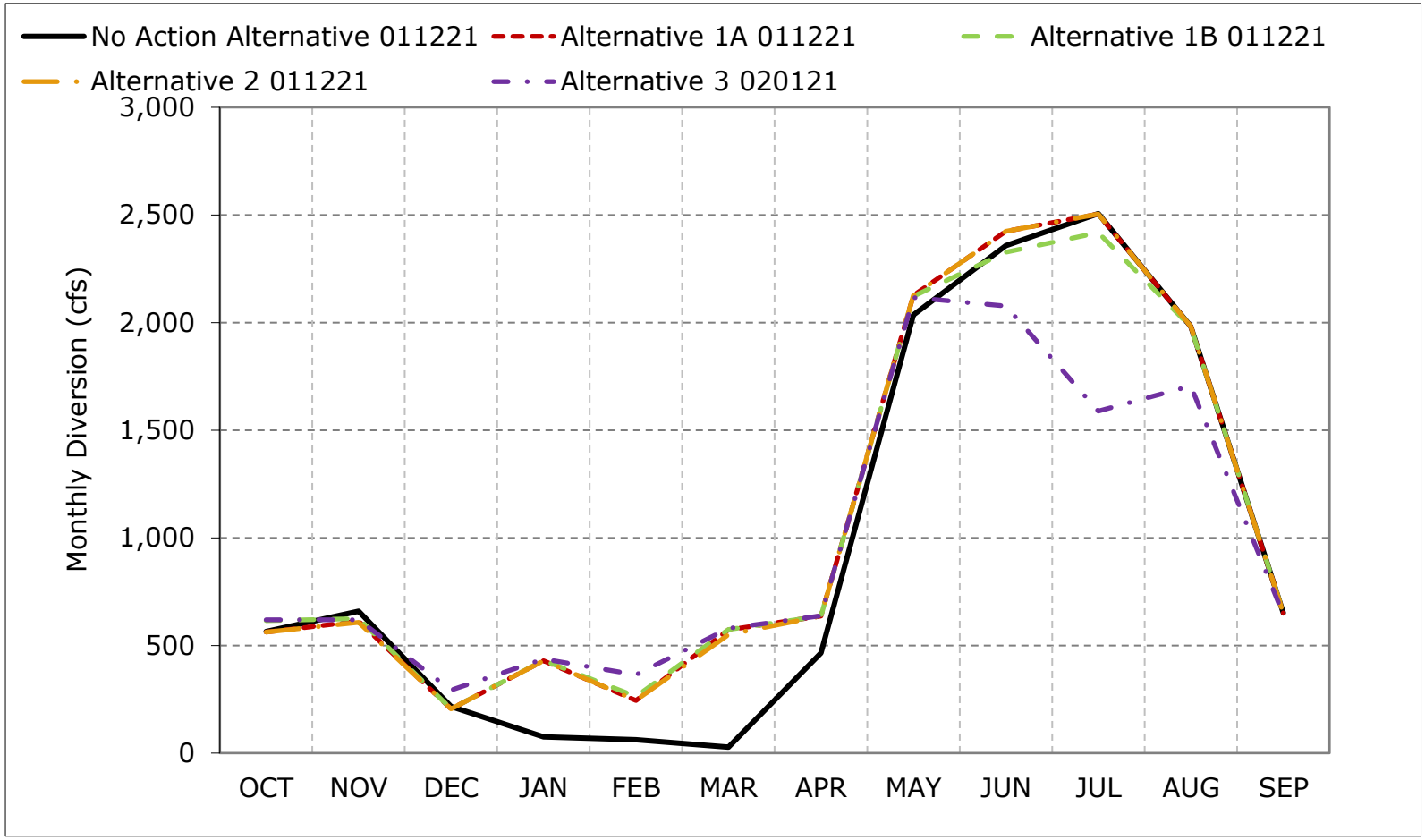
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-4-2. Hamilton City Diversion - Glenn Colusa Canal, Wet Year Average Diversion



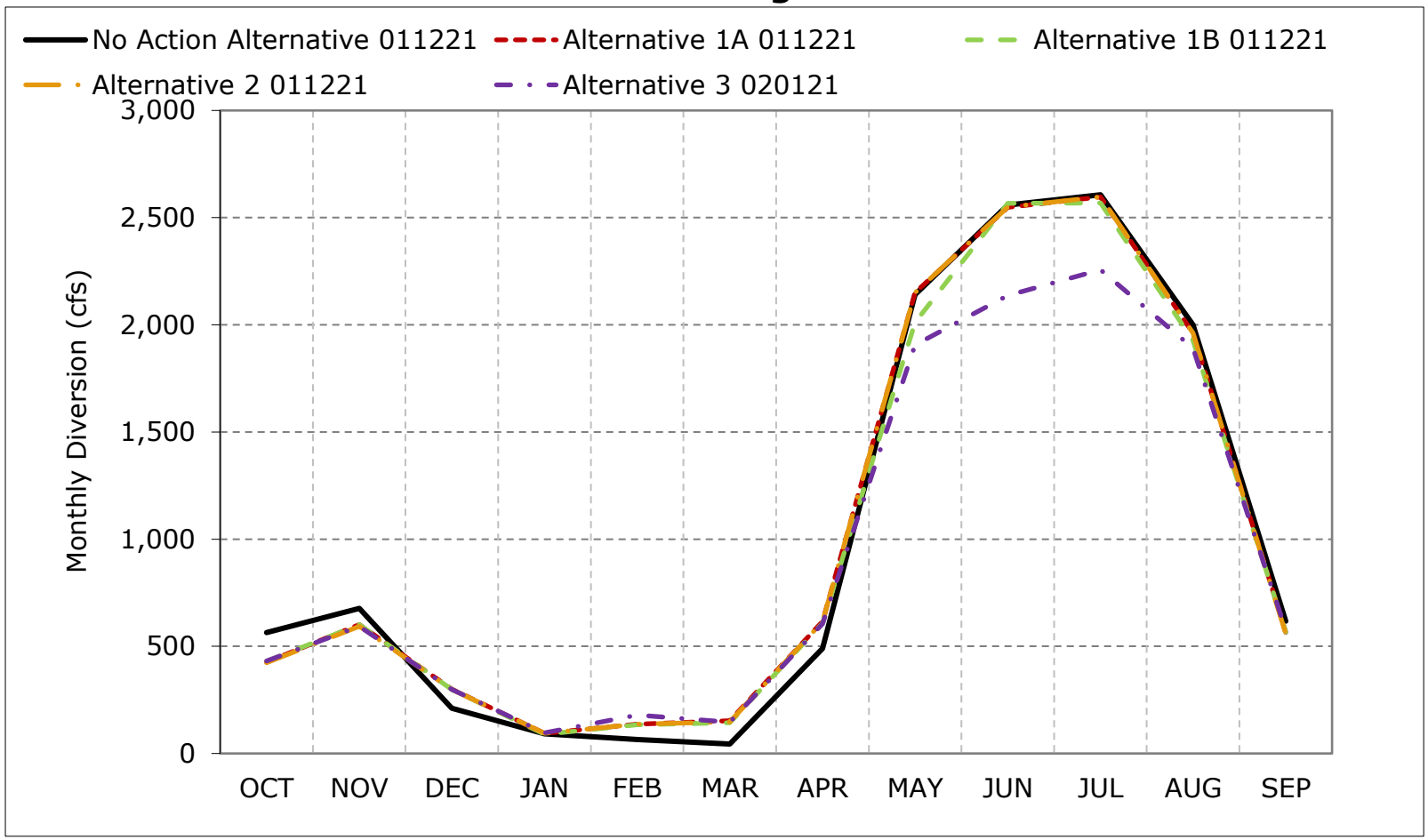
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-4-3. Hamilton City Diversion - Glenn Colusa Canal, Above Normal Year Average Diversion



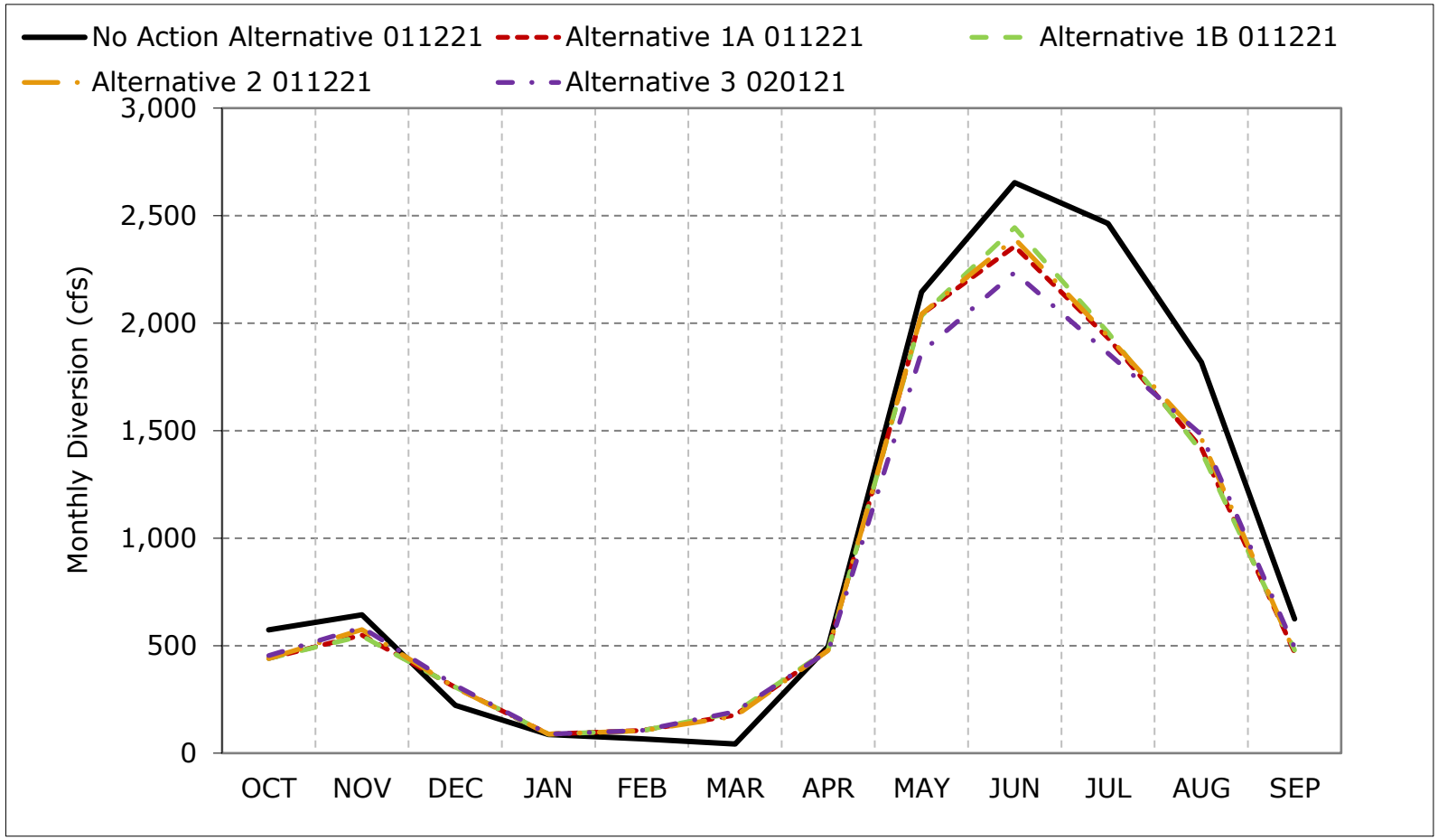
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-4-4. Hamilton City Diversion - Glenn Colusa Canal, Below Normal Year Average Diversion



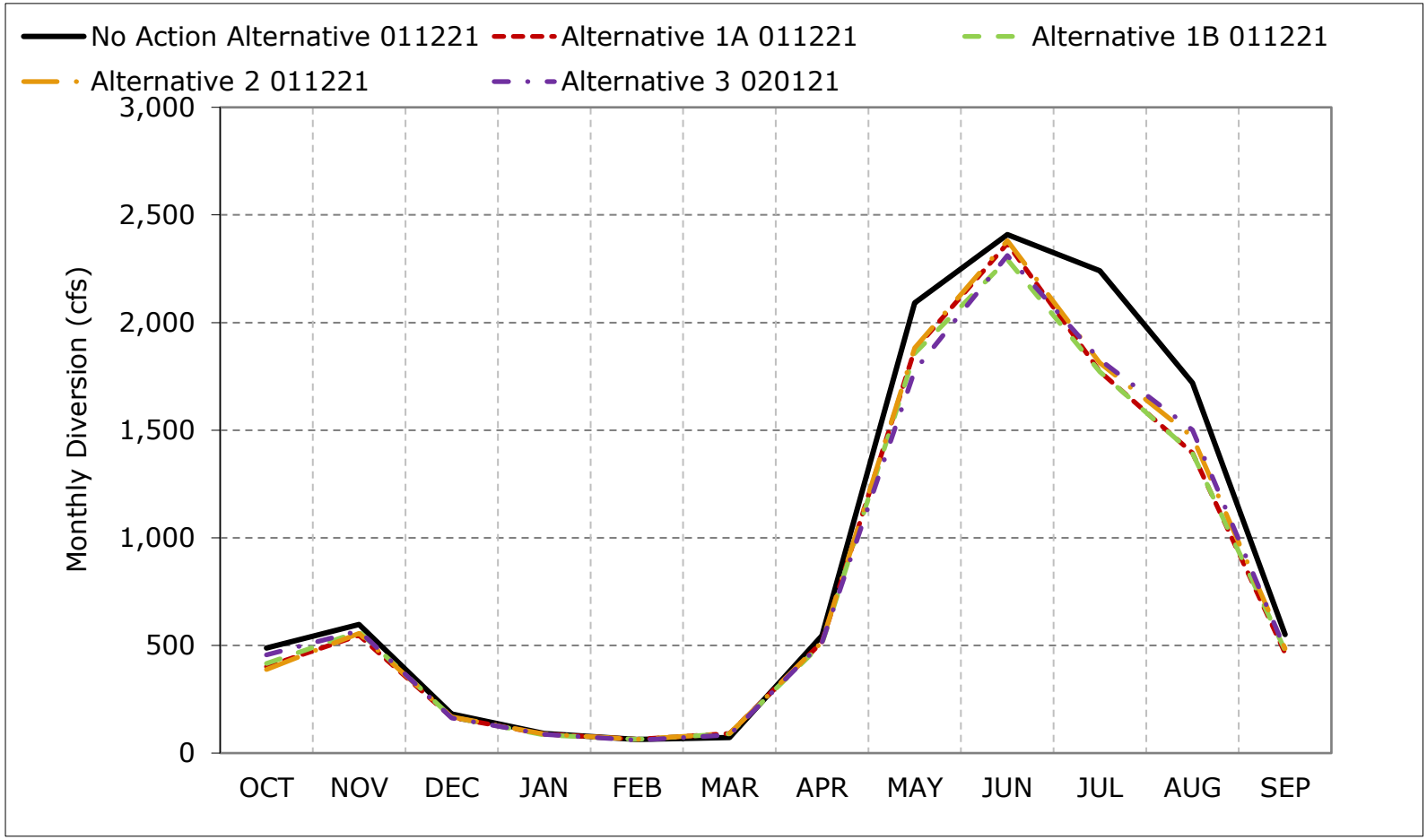
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-4-5. Hamilton City Diversion - Glenn Colusa Canal, Dry Year Average Diversion



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-4-6. Hamilton City Diversion - Glenn Colusa Canal, Critical Year Average Diversion



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-4-7. Hamilton City Diversion - Glenn Colusa Canal, October

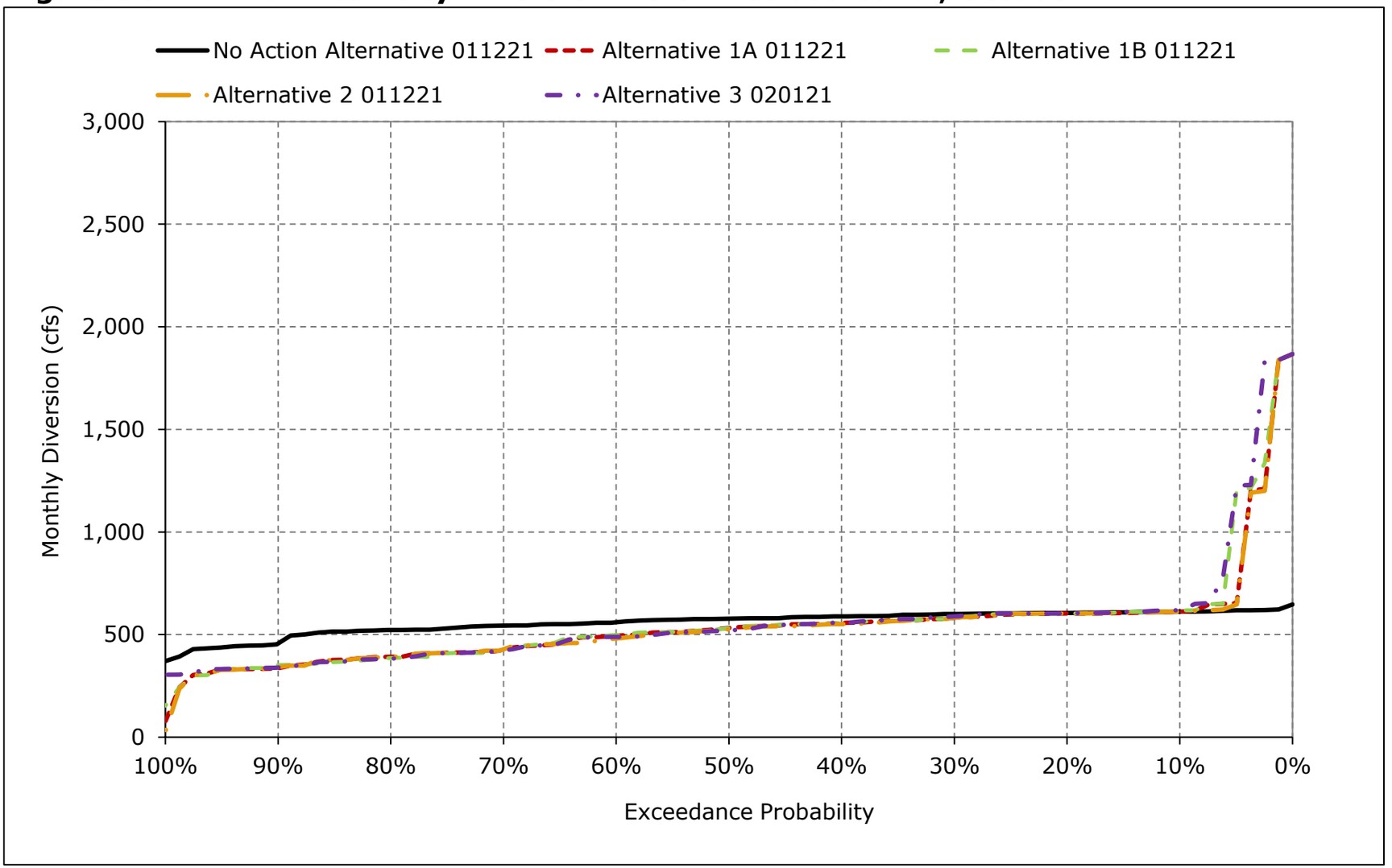


Figure 5C-4-8. Hamilton City Diversion - Glenn Colusa Canal, November

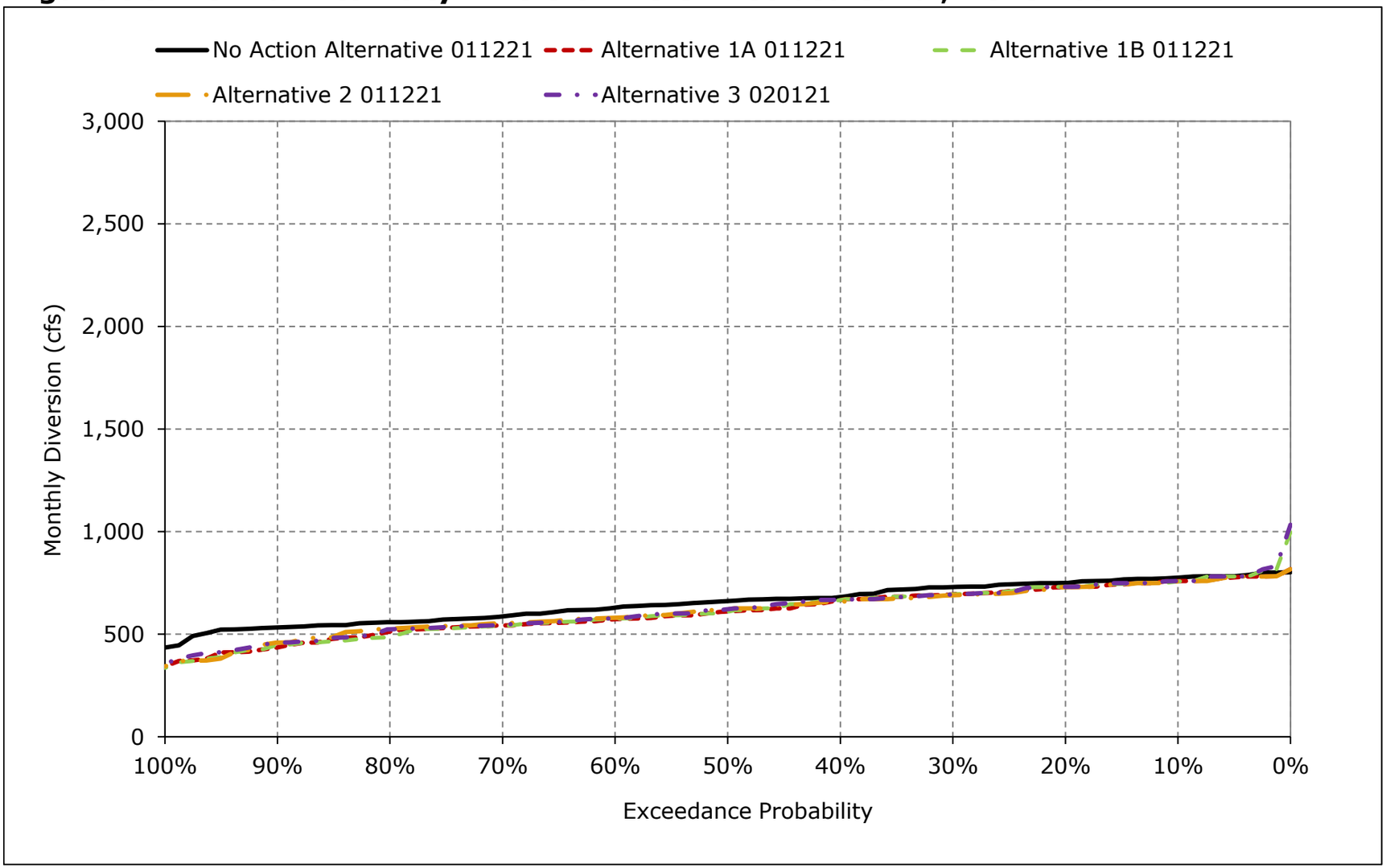


Figure 5C-4-9. Hamilton City Diversion - Glenn Colusa Canal, December

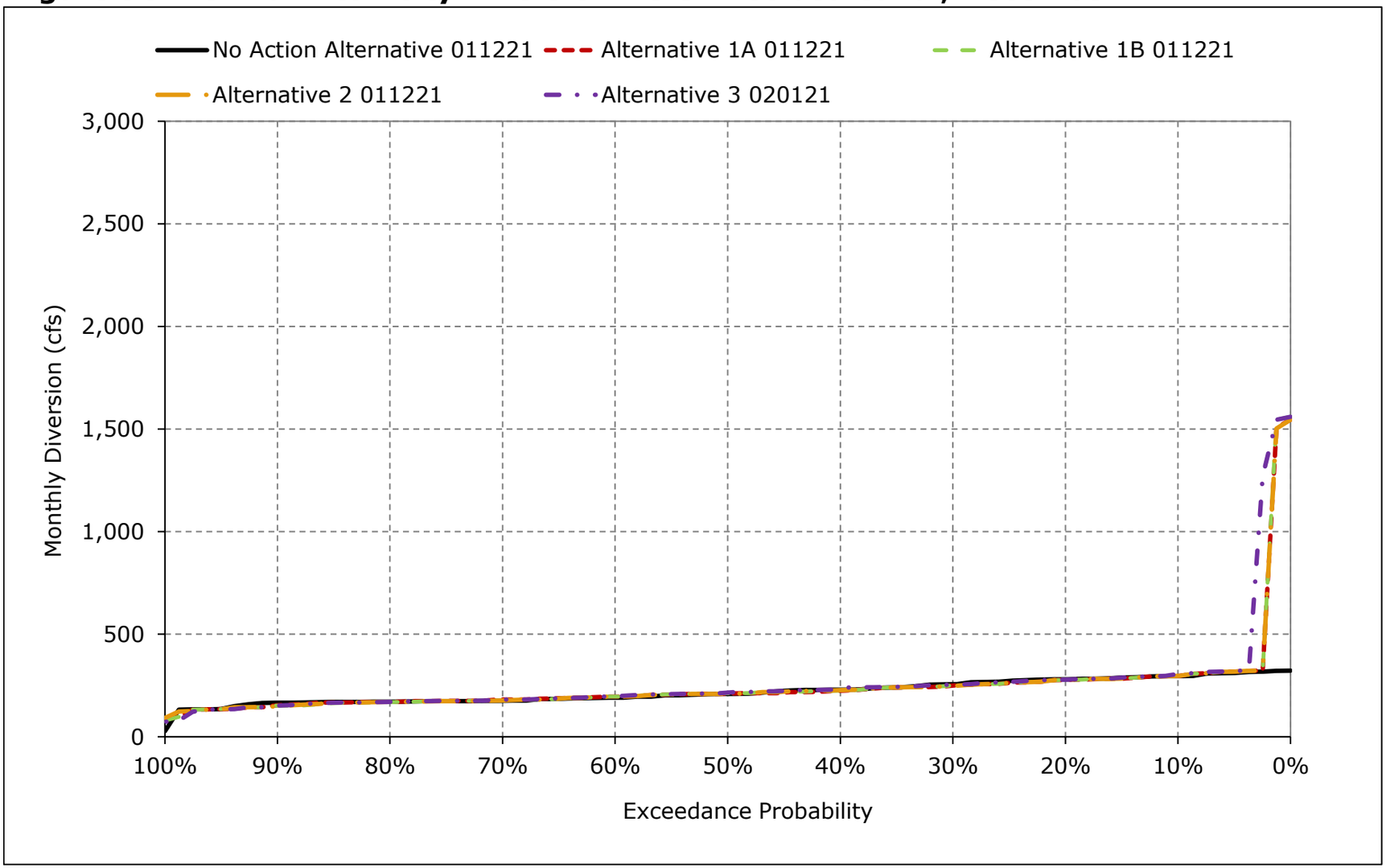


Figure 5C-4-10. Hamilton City Diversion - Glenn Colusa Canal, January

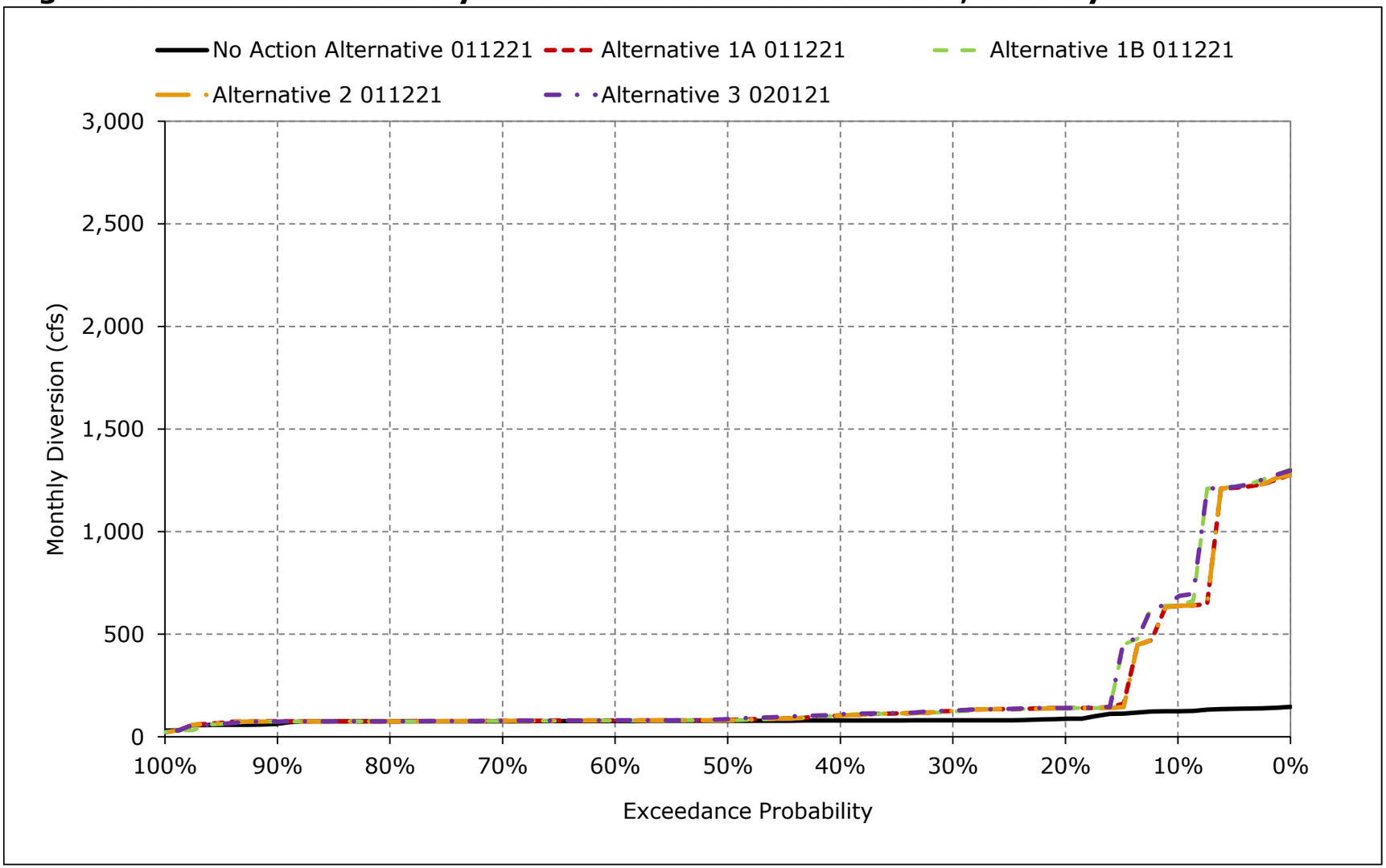


Figure 5C-4-11. Hamilton City Diversion - Glenn Colusa Canal, February

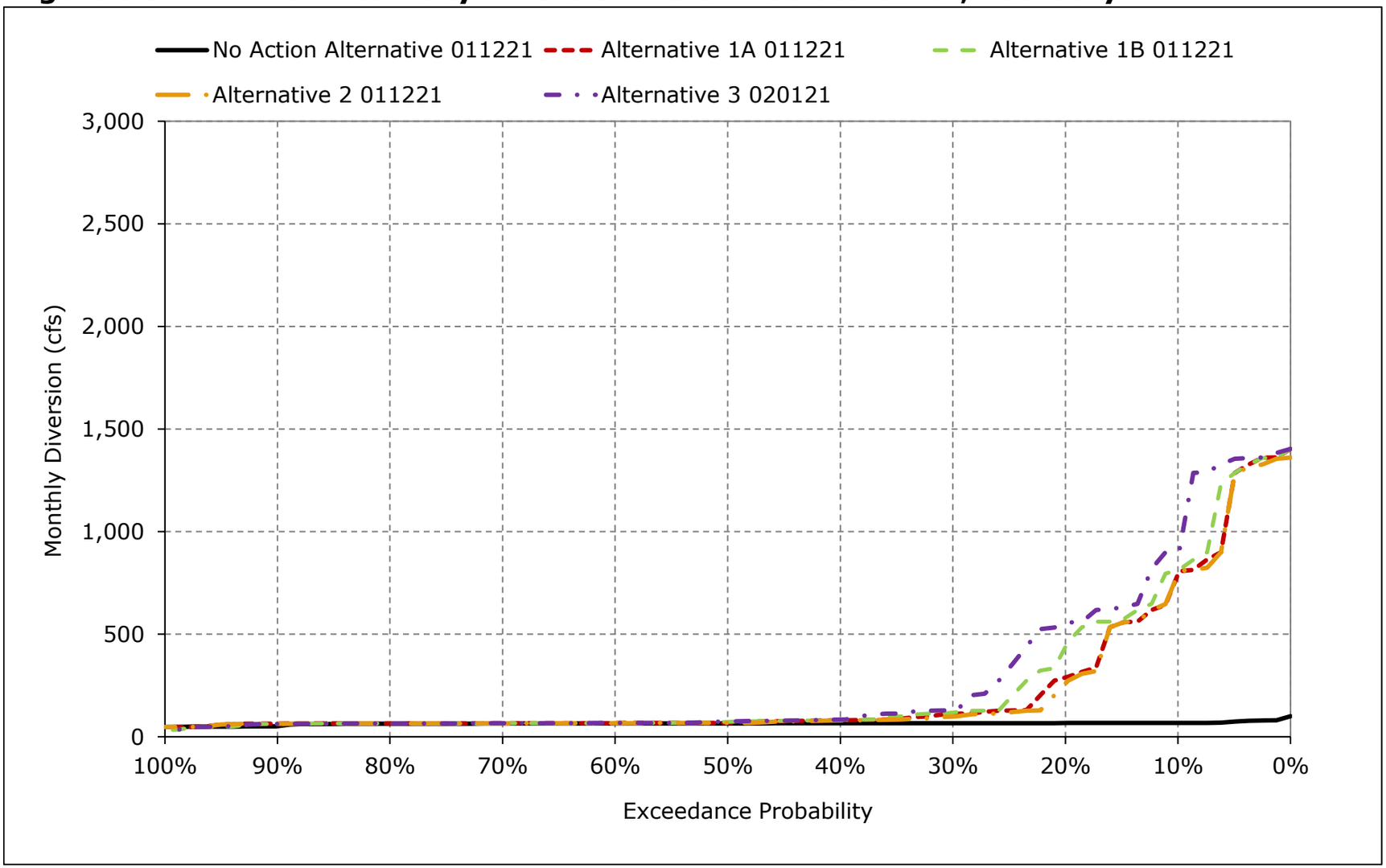


Figure 5C-4-12. Hamilton City Diversion - Glenn Colusa Canal, March

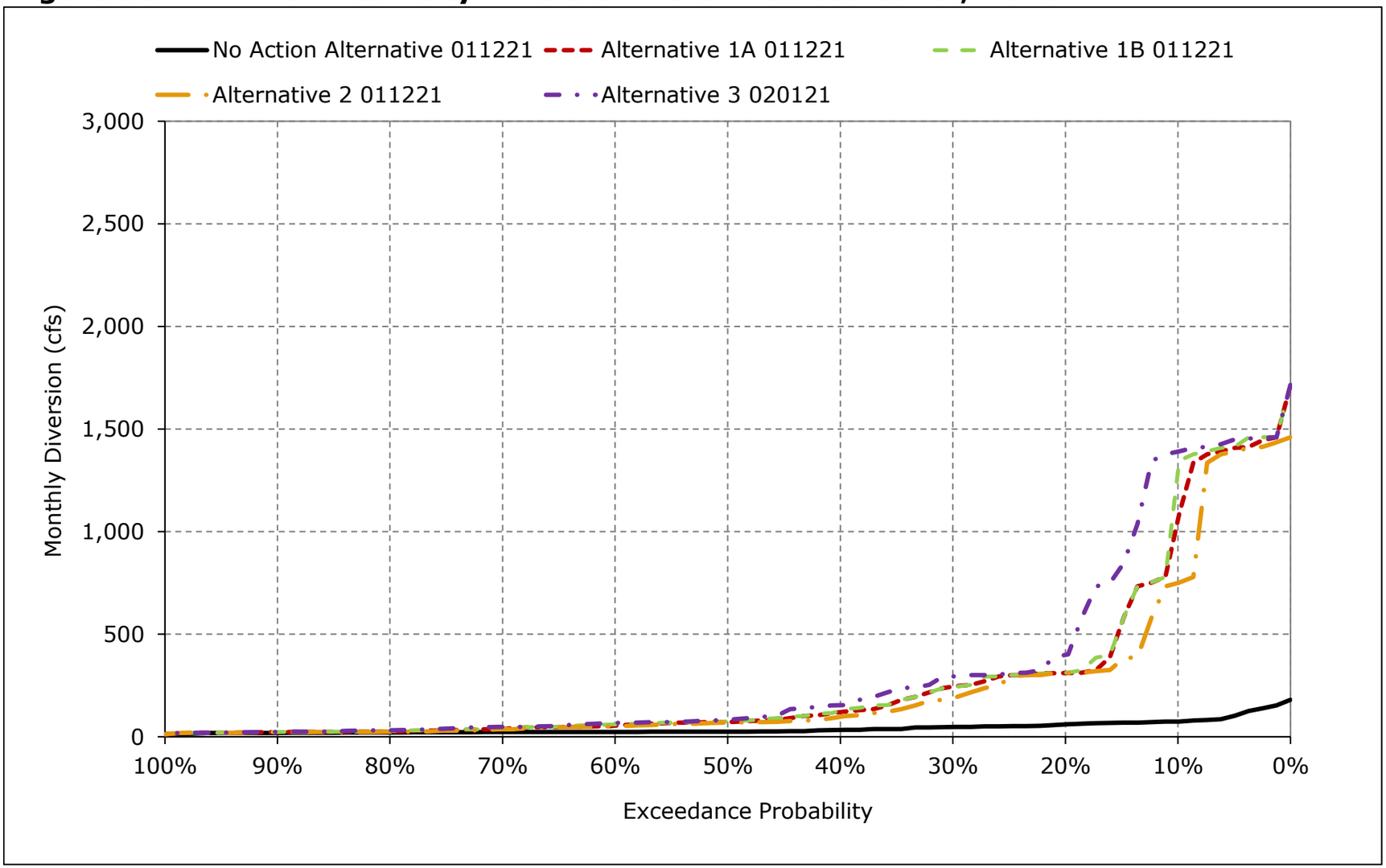


Figure 5C-4-13. Hamilton City Diversion - Glenn Colusa Canal, April

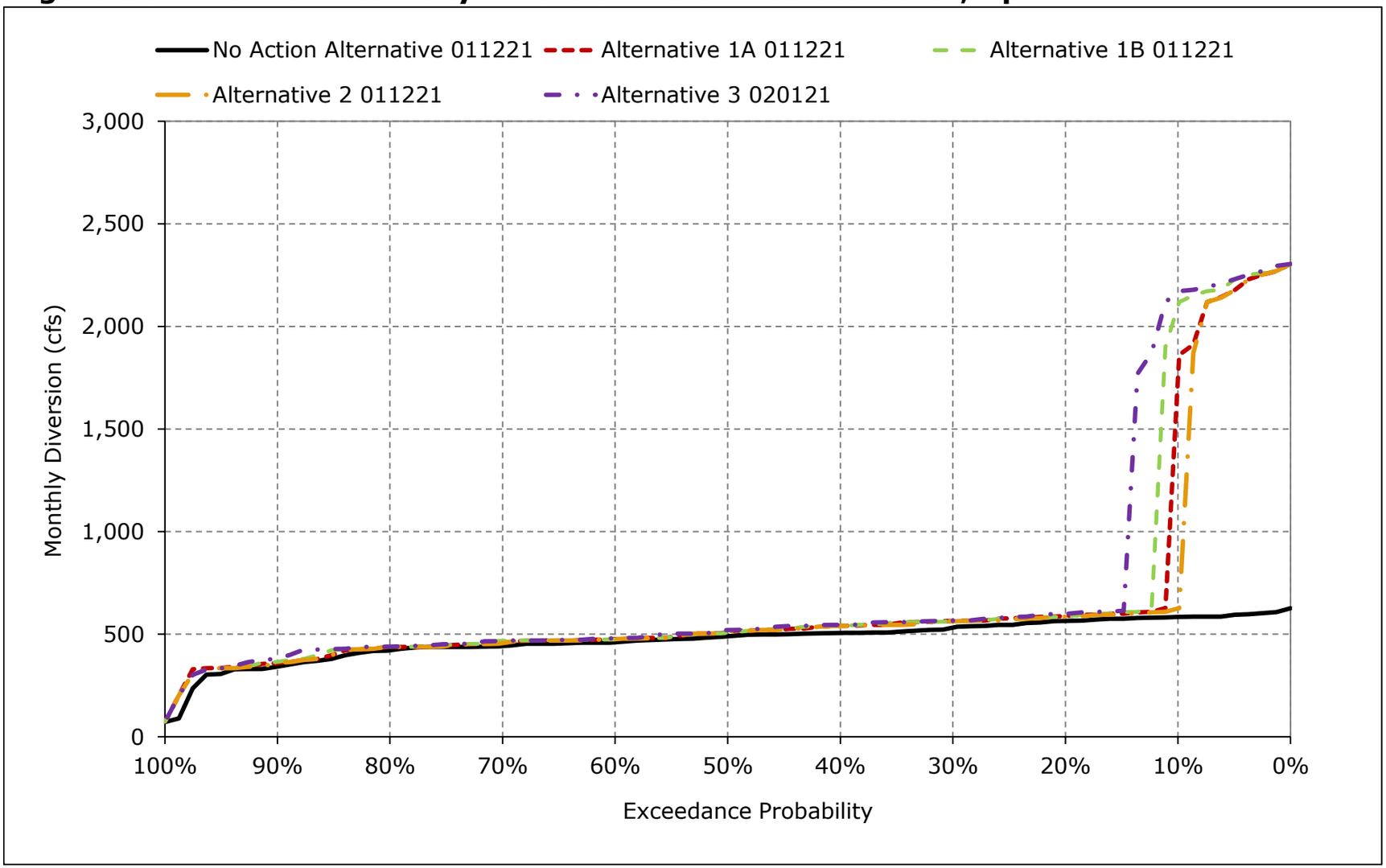


Figure 5C-4-14. Hamilton City Diversion - Glenn Colusa Canal, May

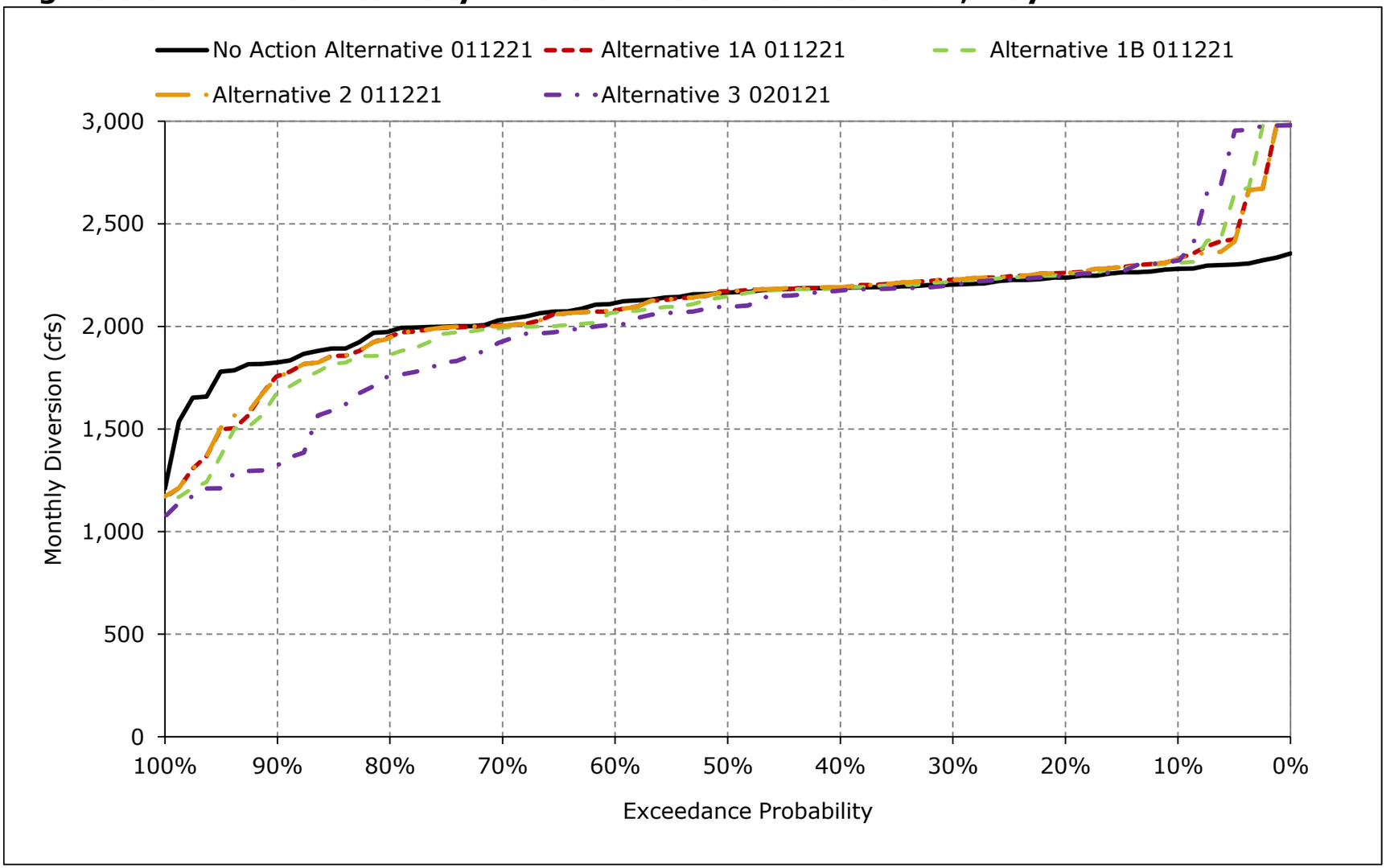


Figure 5C-4-15. Hamilton City Diversion - Glenn Colusa Canal, June

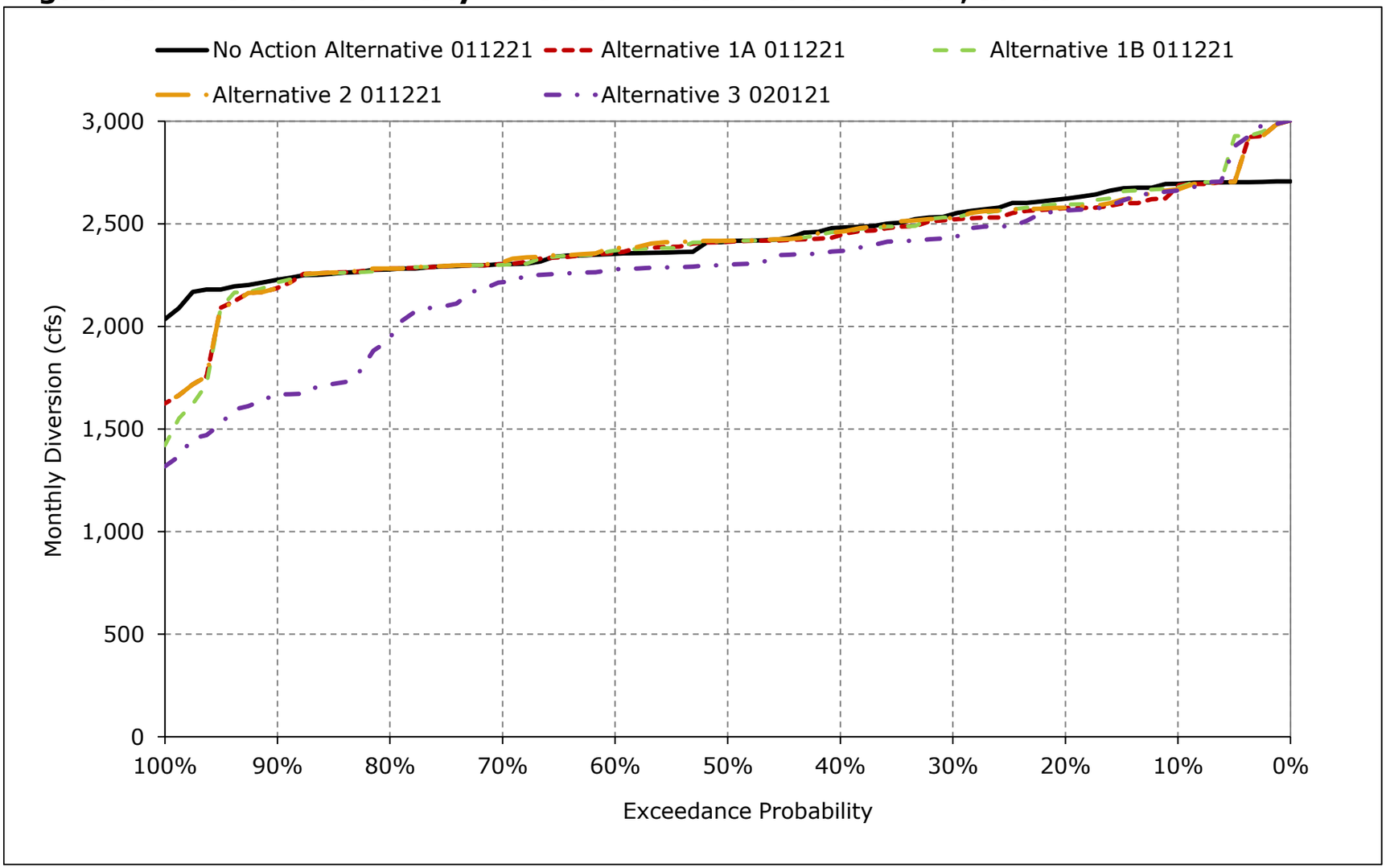


Figure 5C-4-16. Hamilton City Diversion - Glenn Colusa Canal, July

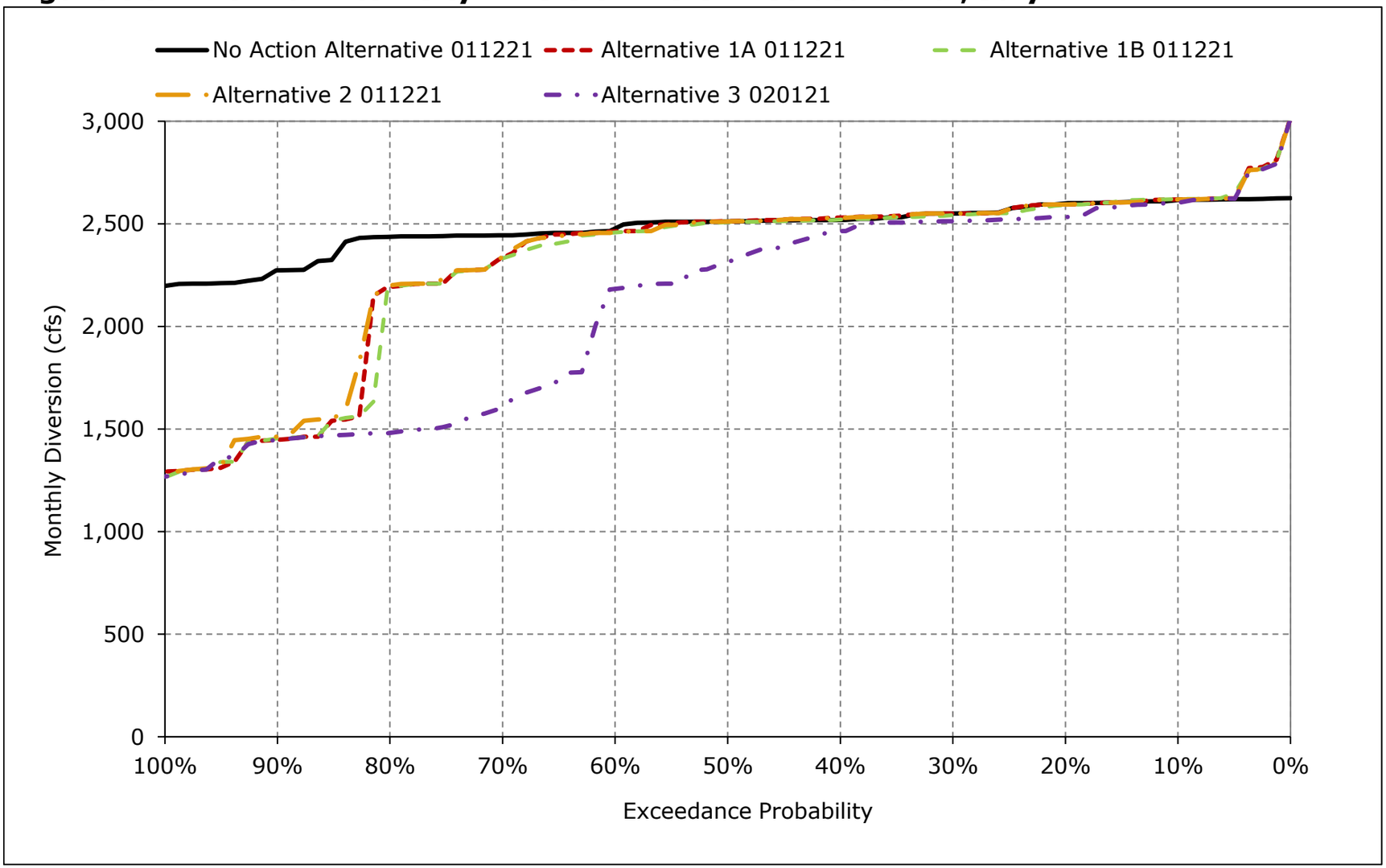


Figure 5C-4-17. Hamilton City Diversion - Glenn Colusa Canal, August

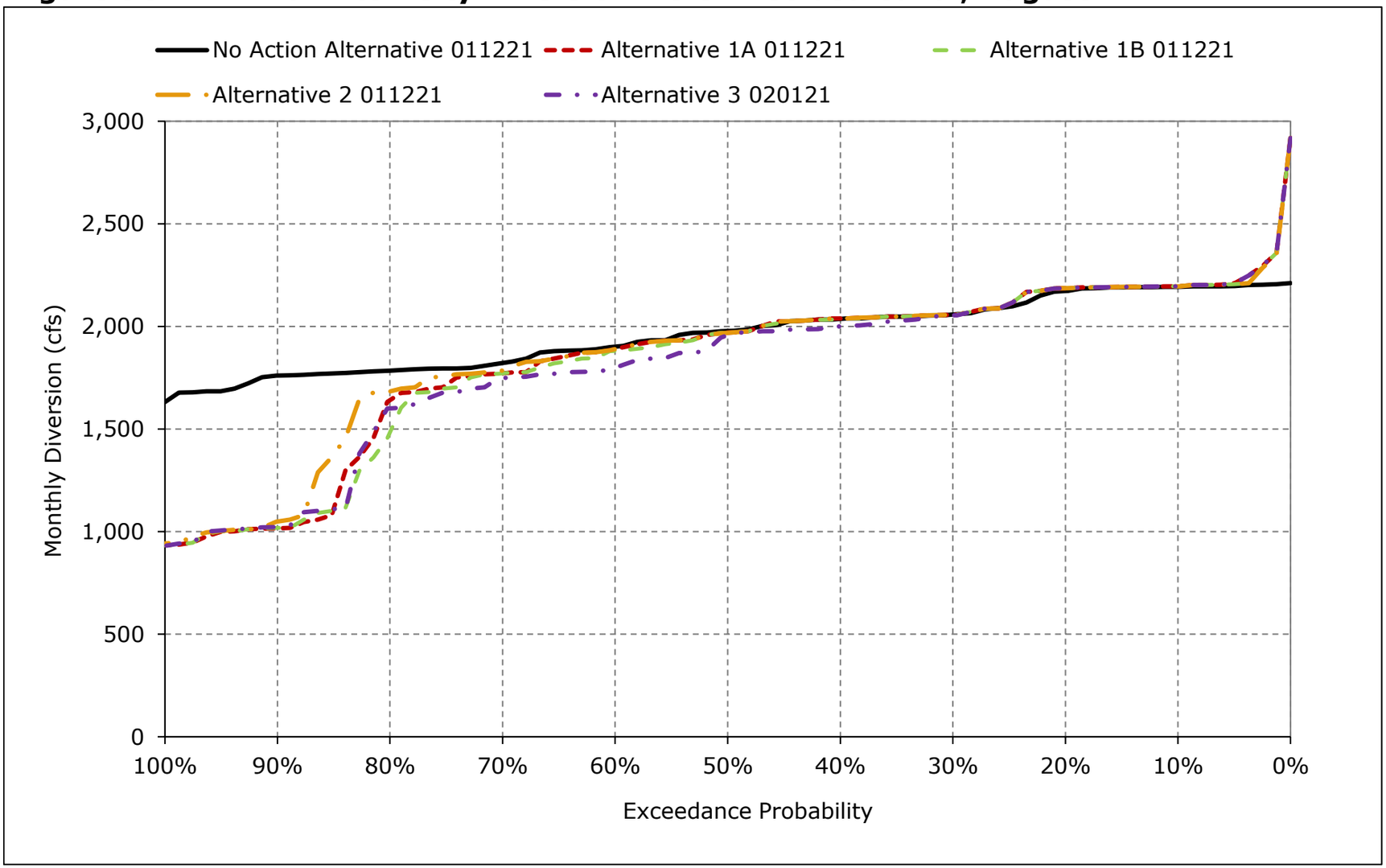


Figure 5C-4-18. Hamilton City Diversion - Glenn Colusa Canal, September

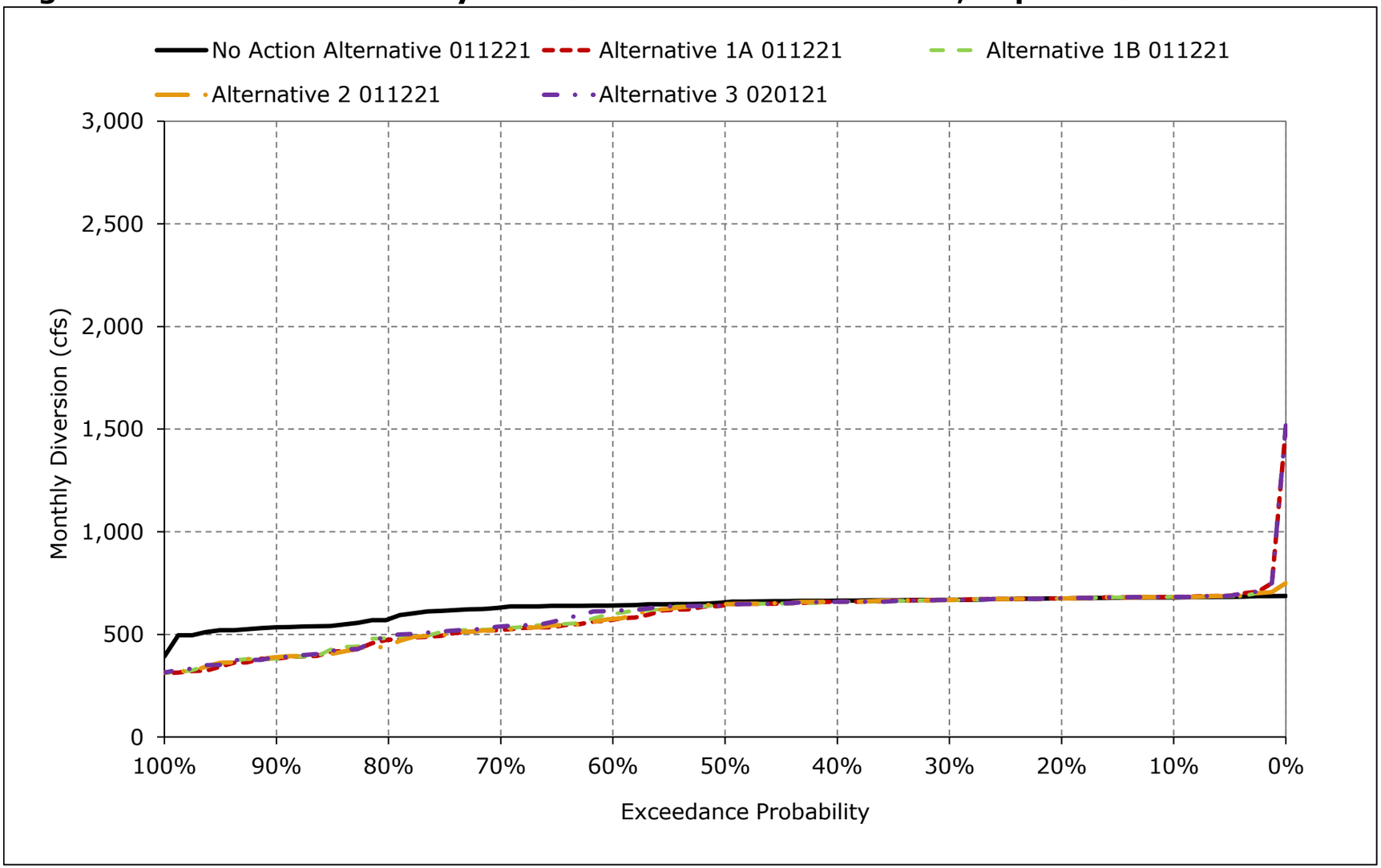


Table 5C-5-1a. Ord Ferry Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	10	272	850	301	0	0	0	0	0	0
20%	0	0	0	3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	110	268	469	202	17	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	816	1,329	580	44	0	0	0	0	0
Above Normal (15%)	0	0	13	66	323	125	20	0	0	0	0	0
Below Normal (17%)	0	0	189	0	4	0	0	0	0	0	0	0
Dry (22%)	0	0	292	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-1b. Ord Ferry Spill, Alternative 1A 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	314	614	117	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	104	253	430	183	16	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	778	1,221	535	43	0	0	0	0	0
Above Normal (15%)	0	0	13	45	292	89	15	0	0	0	0	0
Below Normal (17%)	0	0	179	0	2	0	0	0	0	0	0	0
Dry (22%)	0	0	272	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-1c. Ord Ferry Spill, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-10	42	-236	-184	0	0	0	0	0	0
20%	0	0	0	-3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-6	-15	-39	-19	-1	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-38	-107	-45	0	0	0	0	0	0
Above Normal (15%)	0	0	-1	-21	-31	-36	-5	0	0	0	0	0
Below Normal (17%)	0	0	-10	0	-2	0	0	0	0	0	0	0
Dry (22%)	0	0	-21	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-5-2a. Ord Ferry Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	10	272	850	301	0	0	0	0	0	0
20%	0	0	0	3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	110	268	469	202	17	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	816	1,329	580	44	0	0	0	0	0
Above Normal (15%)	0	0	13	66	323	125	20	0	0	0	0	0
Below Normal (17%)	0	0	189	0	4	0	0	0	0	0	0	0
Dry (22%)	0	0	292	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-2b. Ord Ferry Spill, Alternative 1B 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	314	615	117	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	104	253	429	183	15	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	776	1,215	535	40	0	0	0	0	0
Above Normal (15%)	0	0	13	47	291	89	15	0	0	0	0	0
Below Normal (17%)	0	0	179	0	3	0	0	0	0	0	0	0
Dry (22%)	0	0	271	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-2c. Ord Ferry Spill, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-10	43	-235	-184	0	0	0	0	0	0
20%	0	0	0	-3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-7	-15	-41	-19	-2	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-40	-113	-45	-3	0	0	0	0	0
Above Normal (15%)	0	0	-1	-19	-32	-36	-5	0	0	0	0	0
Below Normal (17%)	0	0	-10	0	-1	0	0	0	0	0	0	0
Dry (22%)	0	0	-21	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-5-3a. Ord Ferry Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	10	272	850	301	0	0	0	0	0	0
20%	0	0	0	3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	110	268	469	202	17	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	816	1,329	580	44	0	0	0	0	0
Above Normal (15%)	0	0	13	66	323	125	20	0	0	0	0	0
Below Normal (17%)	0	0	189	0	4	0	0	0	0	0	0	0
Dry (22%)	0	0	292	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-3b. Ord Ferry Spill, Alternative 2 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	312	601	117	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	106	253	430	185	16	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	778	1,221	542	44	0	0	0	0	0
Above Normal (15%)	0	0	13	44	292	89	15	0	0	0	0	0
Below Normal (17%)	0	0	179	0	0	0	0	0	0	0	0	0
Dry (22%)	0	0	282	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-3c. Ord Ferry Spill, Alternative 2 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-10	40	-249	-184	0	0	0	0	0	0
20%	0	0	0	-3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-4	-15	-39	-17	-1	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-38	-107	-37	0	0	0	0	0	0
Above Normal (15%)	0	0	-1	-22	-31	-36	-5	0	0	0	0	0
Below Normal (17%)	0	0	-10	0	-4	0	0	0	0	0	0	0
Dry (22%)	0	0	-11	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-5-4a. Ord Ferry Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	10	272	850	301	0	0	0	0	0	0
20%	0	0	0	3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	110	268	469	202	17	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	816	1,329	580	44	0	0	0	0	0
Above Normal (15%)	0	0	13	66	323	125	20	0	0	0	0	0
Below Normal (17%)	0	0	189	0	4	0	0	0	0	0	0	0
Dry (22%)	0	0	292	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-4b. Ord Ferry Spill, Alternative 3 020121, Monthly Spill (cfs)

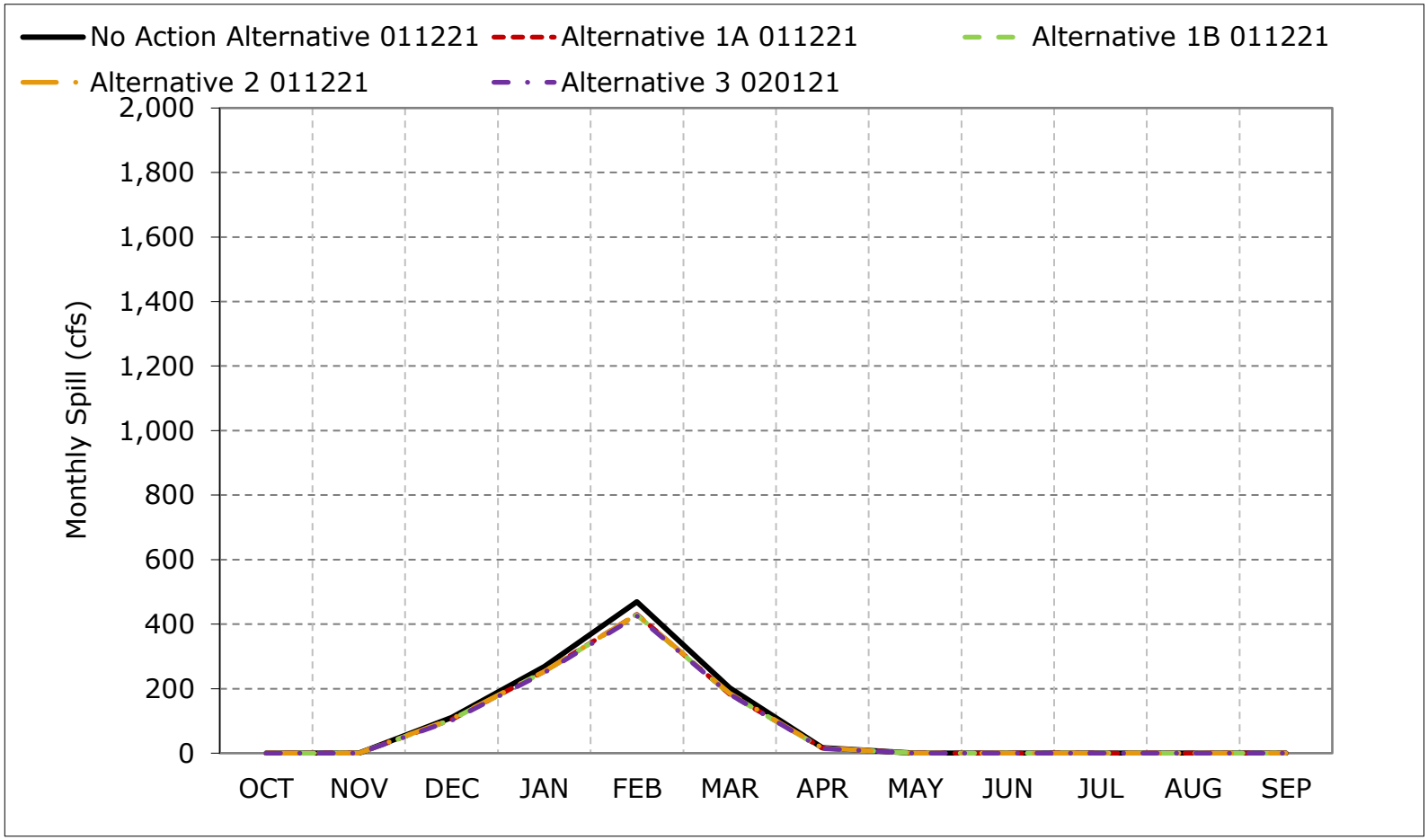
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	0	315	615	117	0	0	0	0	0	0
20%	0	0	0	0	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	102	250	425	182	14	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	38	765	1,207	535	38	0	0	0	0	0
Above Normal (15%)	0	0	13	47	290	88	15	0	0	0	0	0
Below Normal (17%)	0	0	179	0	0	0	0	0	0	0	0	0
Dry (22%)	0	0	260	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-5-4c. Ord Ferry Spill, Alternative 3 020121 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-10	44	-235	-184	0	0	0	0	0	0
20%	0	0	0	-3	0	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-9	-19	-44	-20	-3	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-51	-121	-45	-6	0	0	0	0	0
Above Normal (15%)	0	0	-1	-19	-33	-36	-5	0	0	0	0	0
Below Normal (17%)	0	0	-10	0	-4	0	0	0	0	0	0	0
Dry (22%)	0	0	-32	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

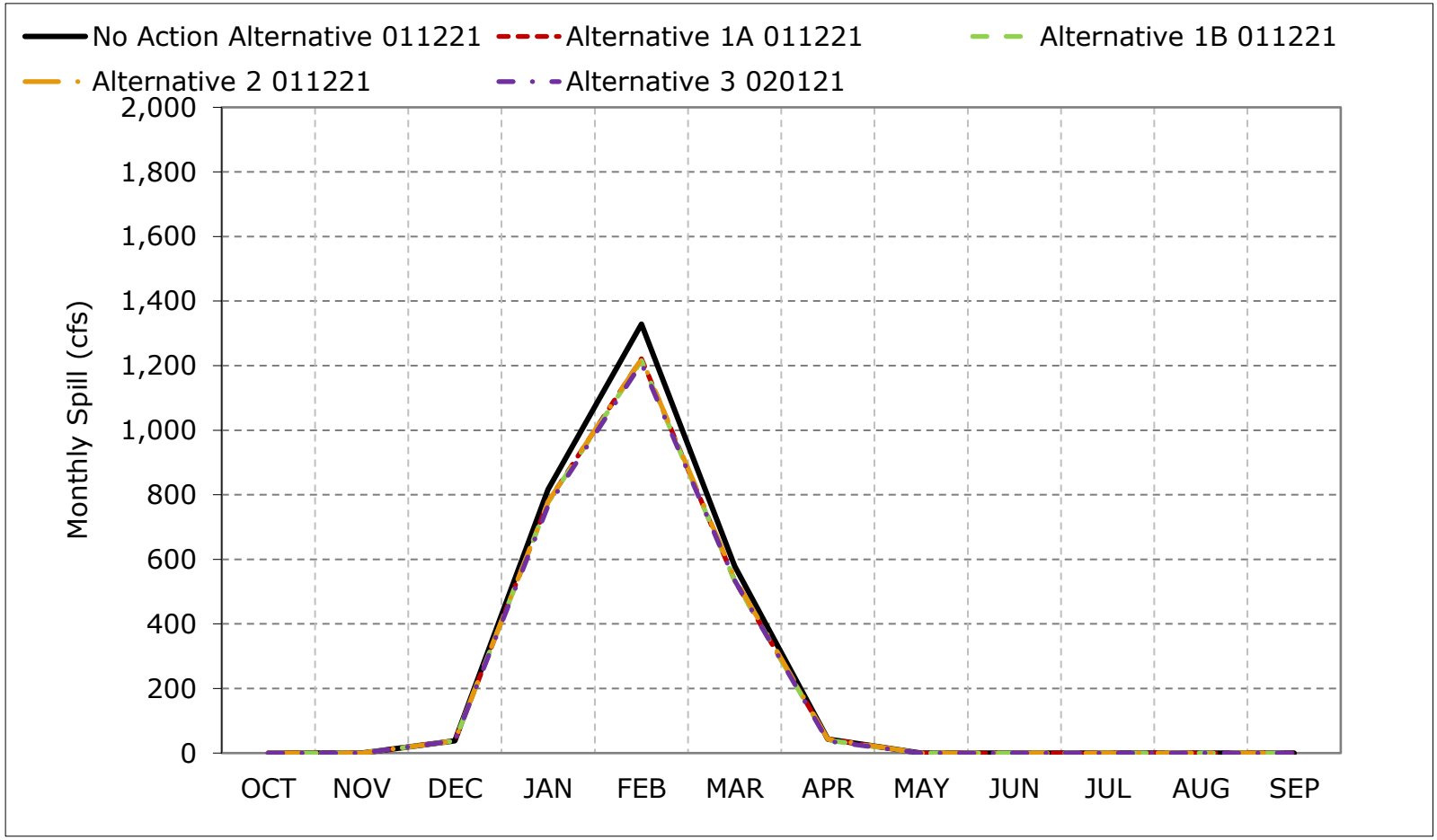
a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.

Figure 5C-5-1. Ord Ferry Spill, Long-Term Average Spill



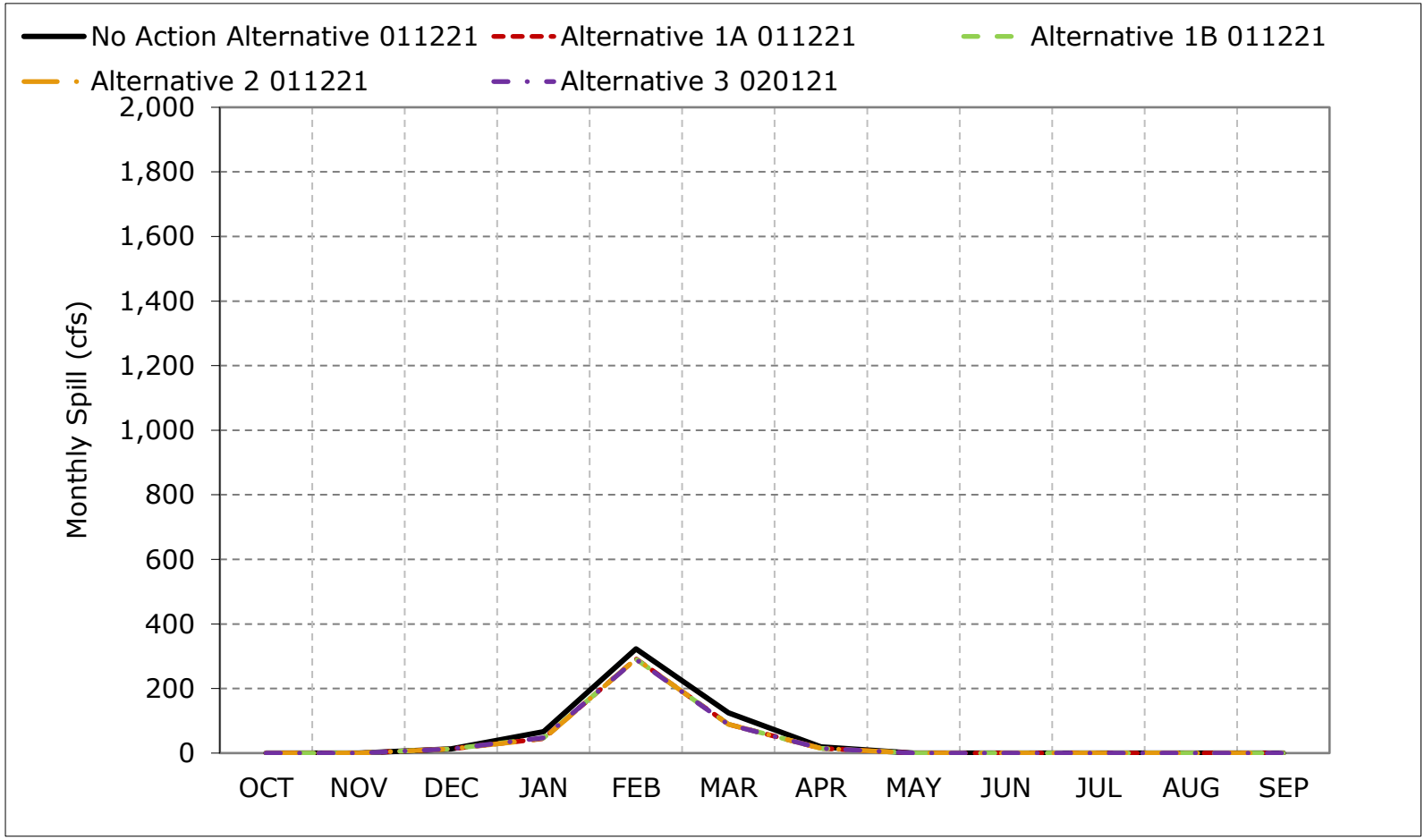
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-5-2. Ord Ferry Spill, Wet Year Average Spill



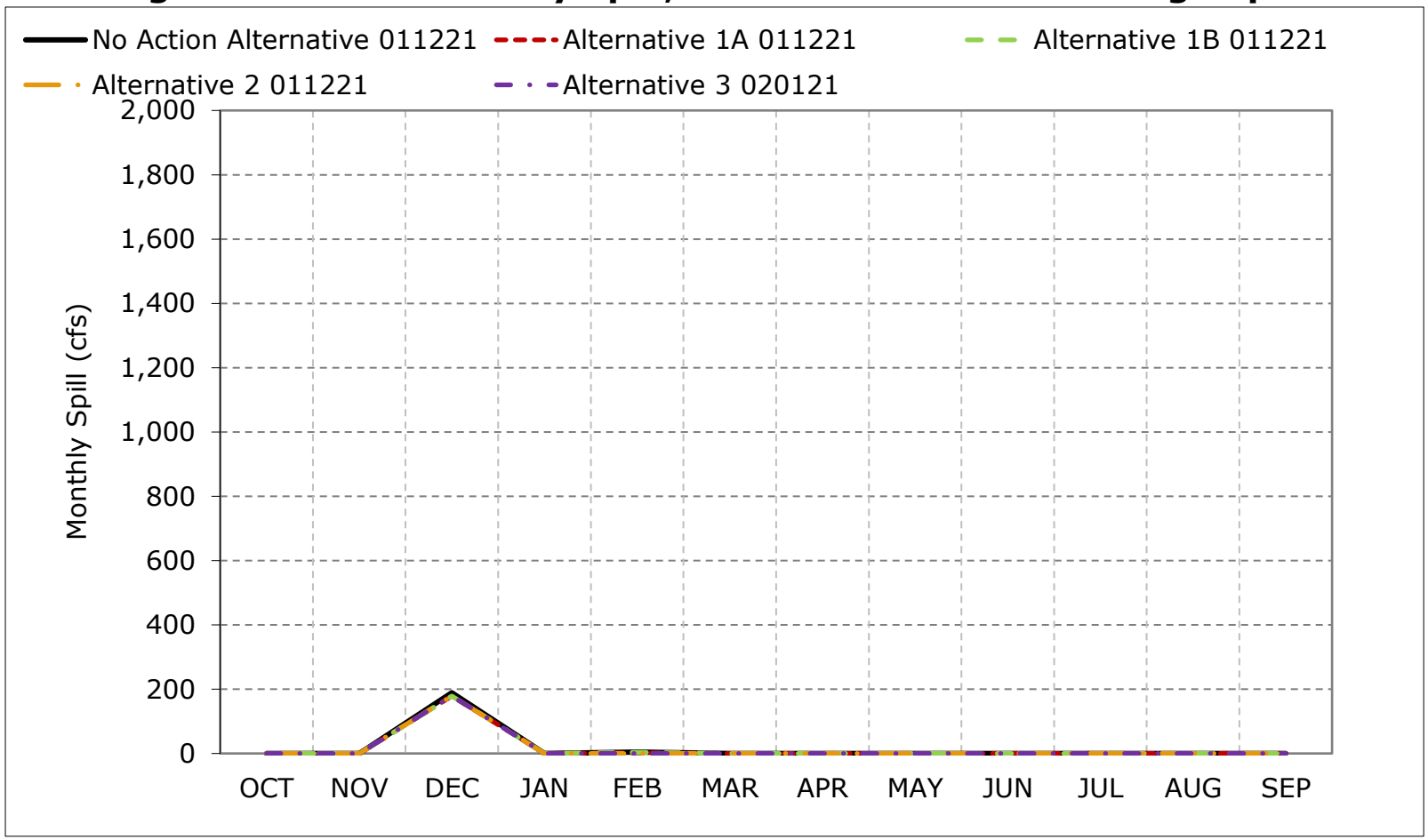
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-5-3. Ord Ferry Spill, Above Normal Year Average Spill



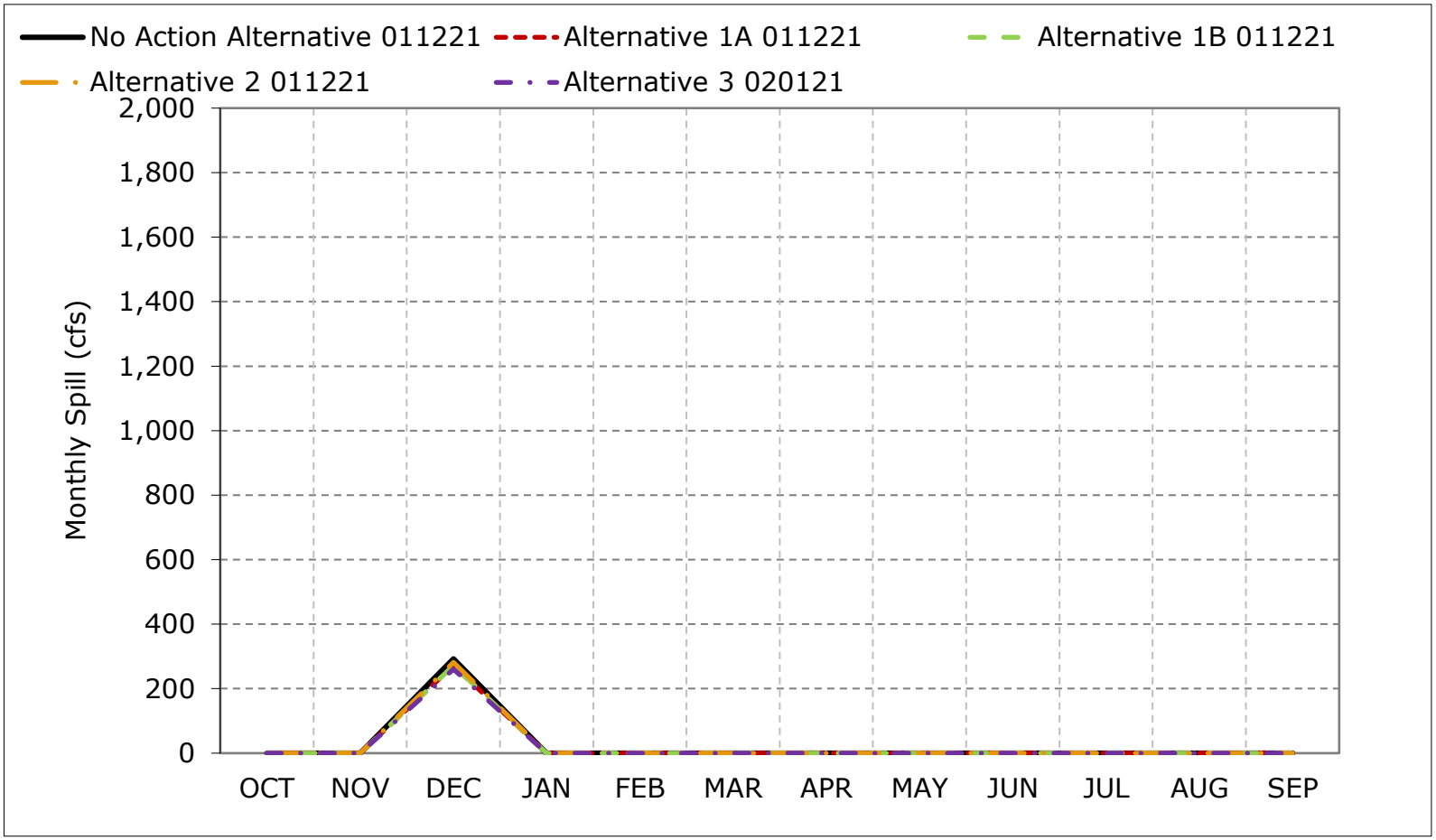
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-5-4. Ord Ferry Spill, Below Normal Year Average Spill



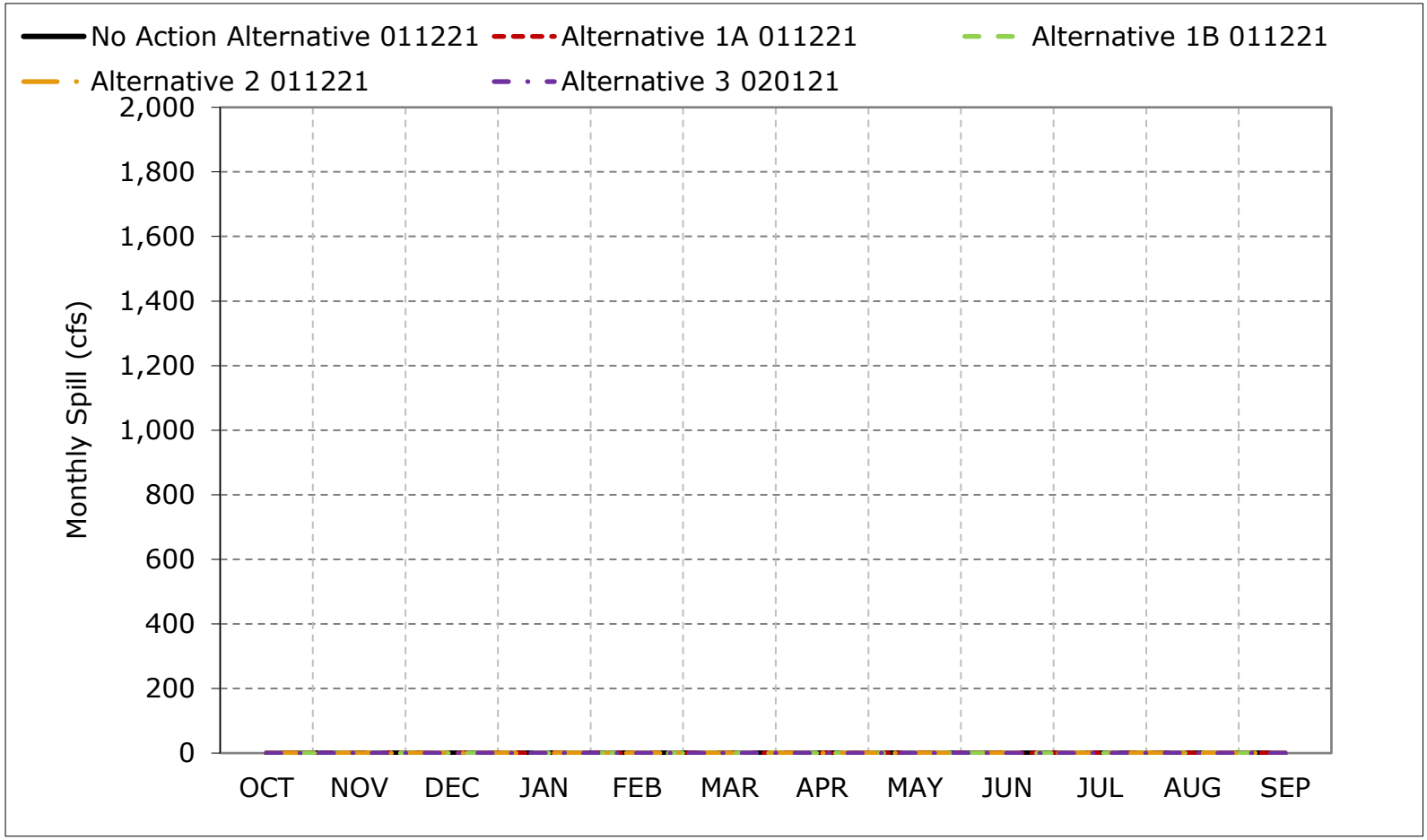
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-5-5. Ord Ferry Spill, Dry Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-5-6. Ord Ferry Spill, Critical Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-5-7. Ord Ferry Spill, October

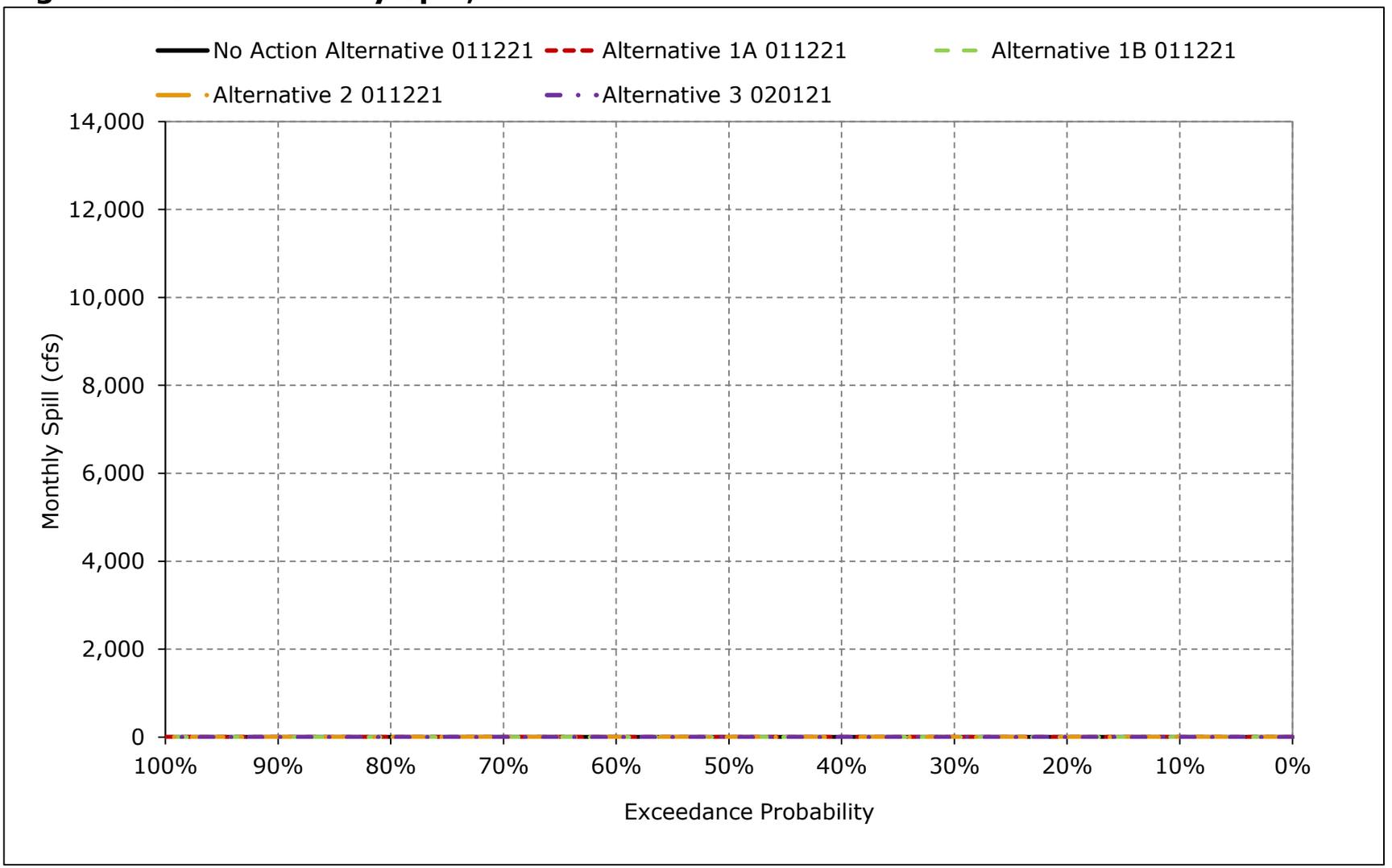


Figure 5C-5-8. Ord Ferry Spill, November

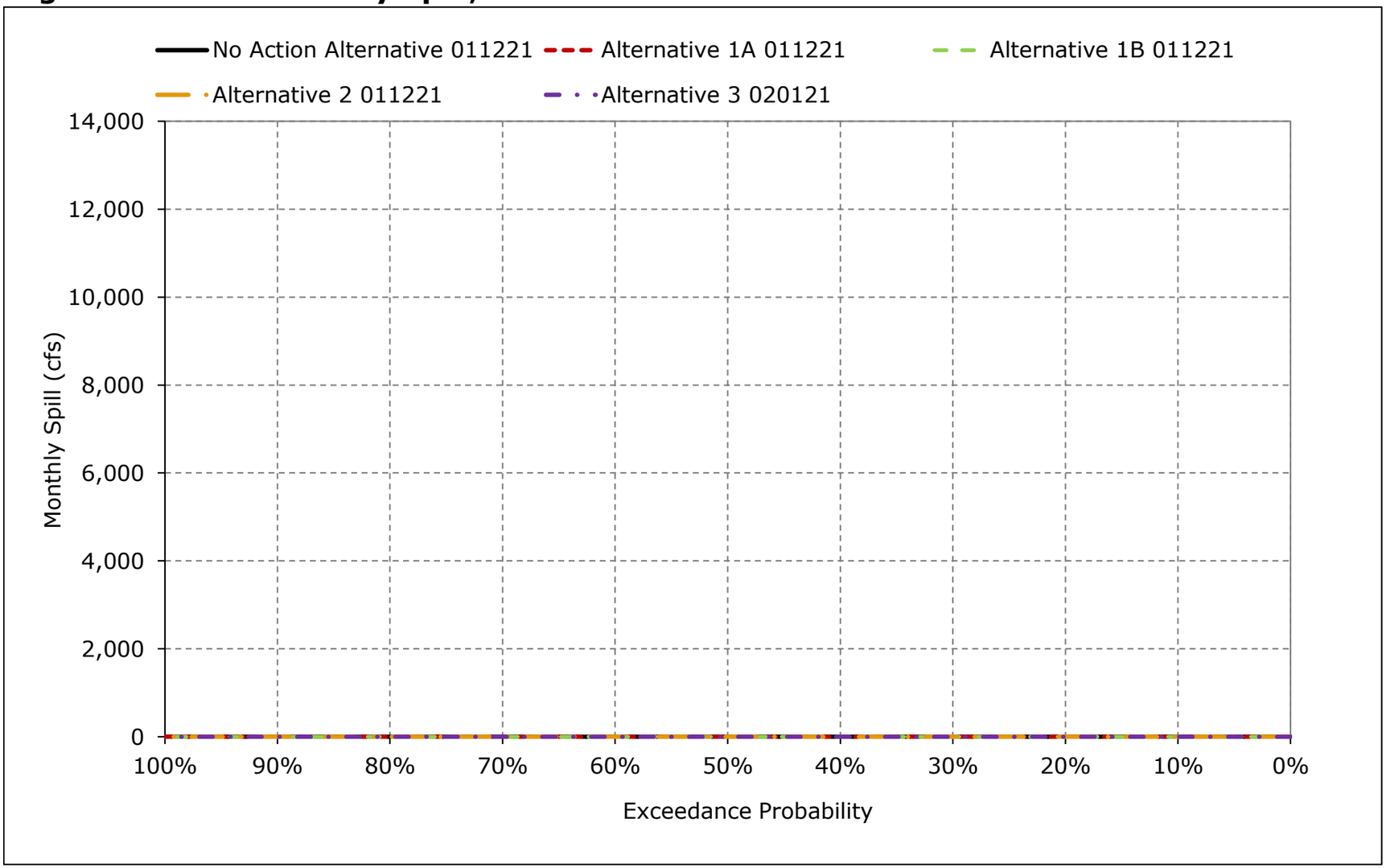


Figure 5C-5-9. Ord Ferry Spill, December

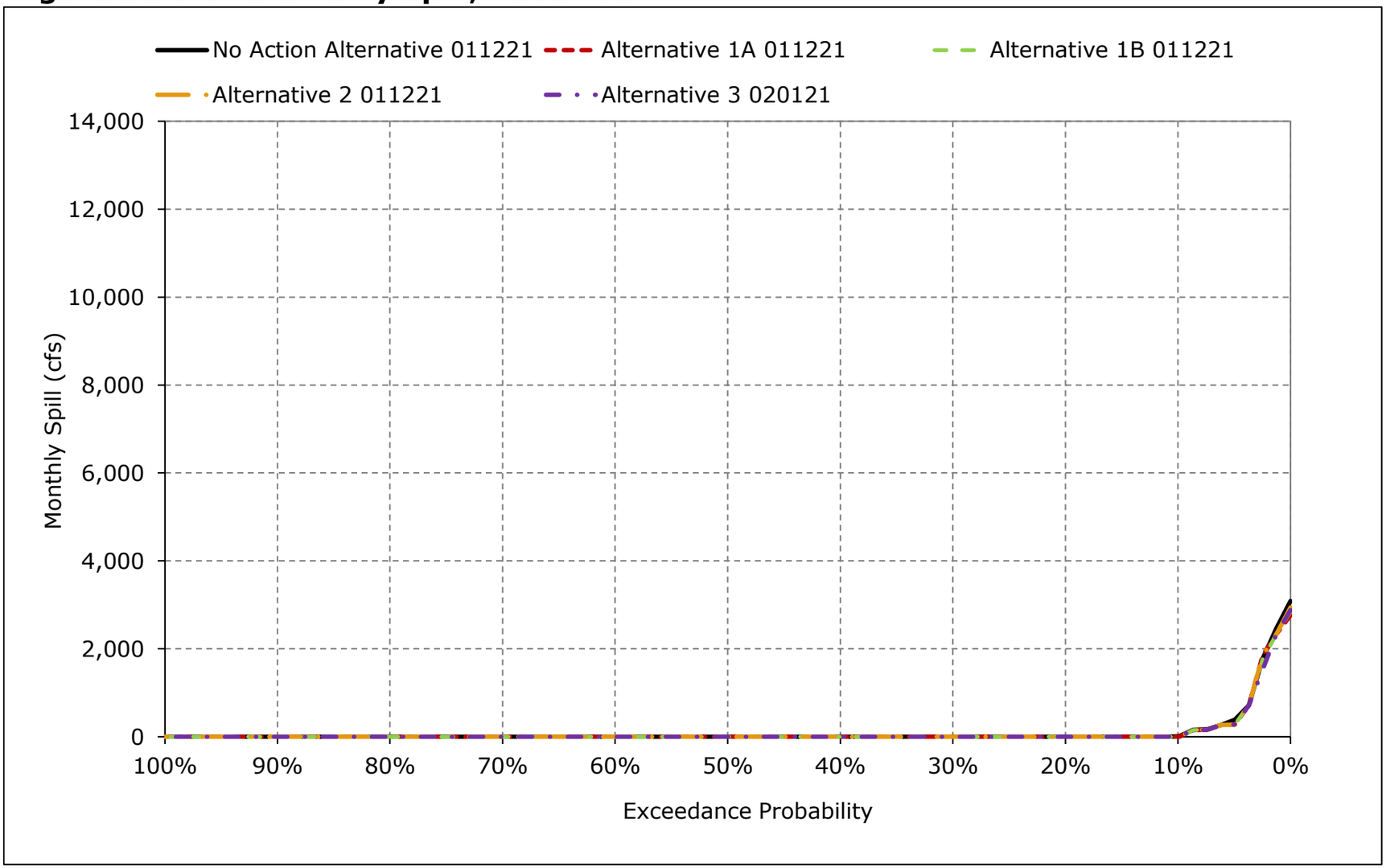


Figure 5C-5-10. Ord Ferry Spill, January

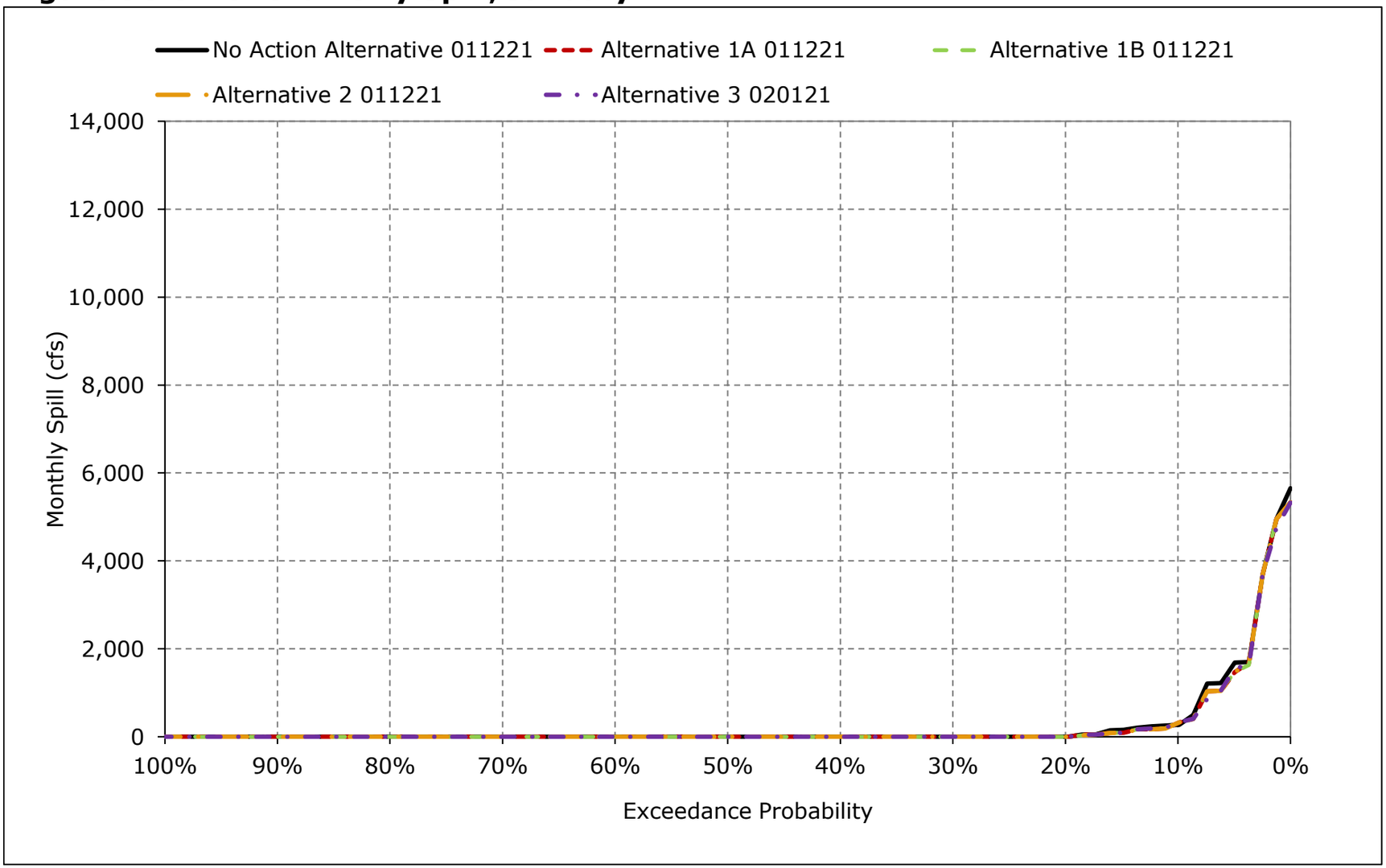


Figure 5C-5-11. Ord Ferry Spill, February

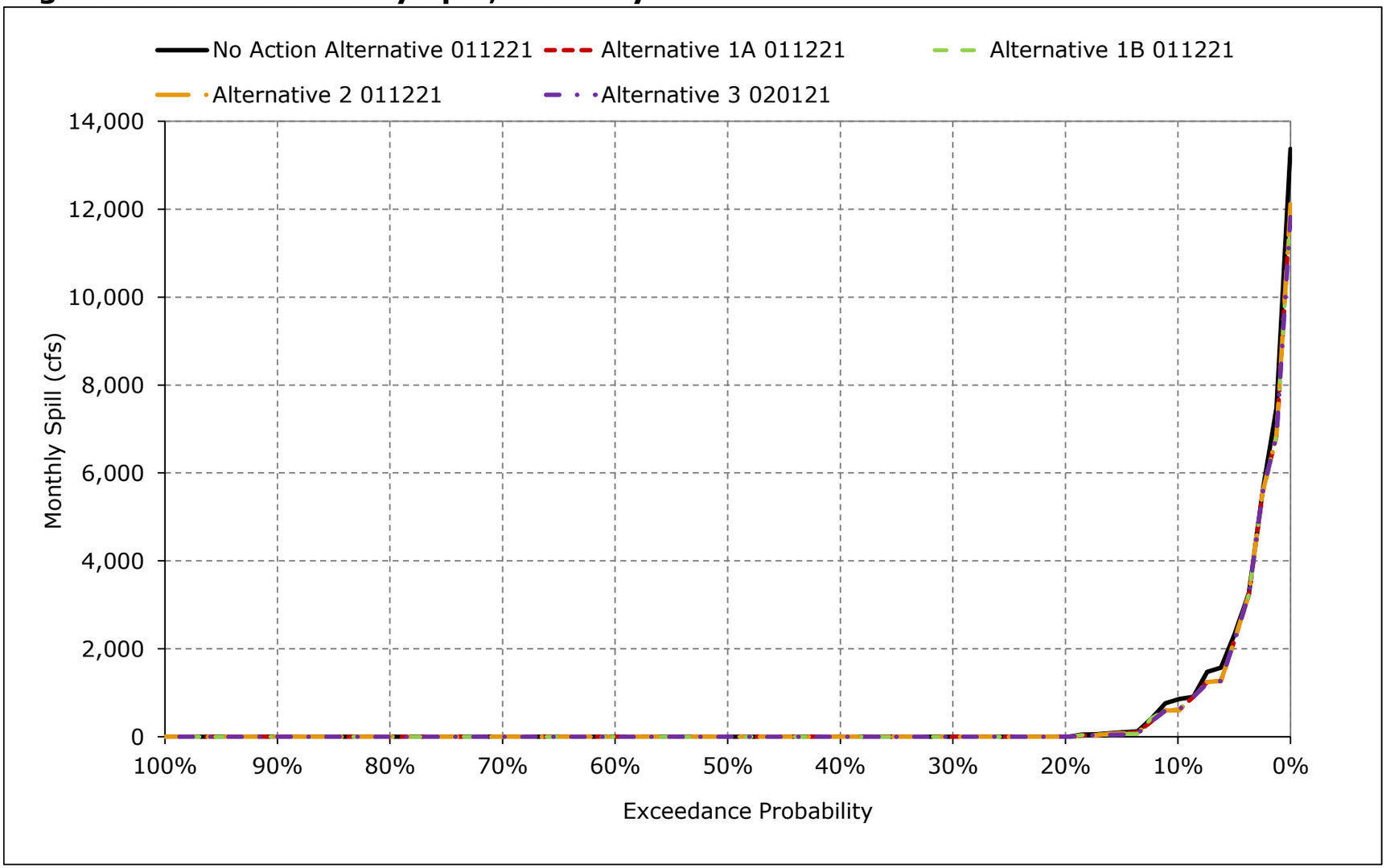


Figure 5C-5-12. Ord Ferry Spill, March

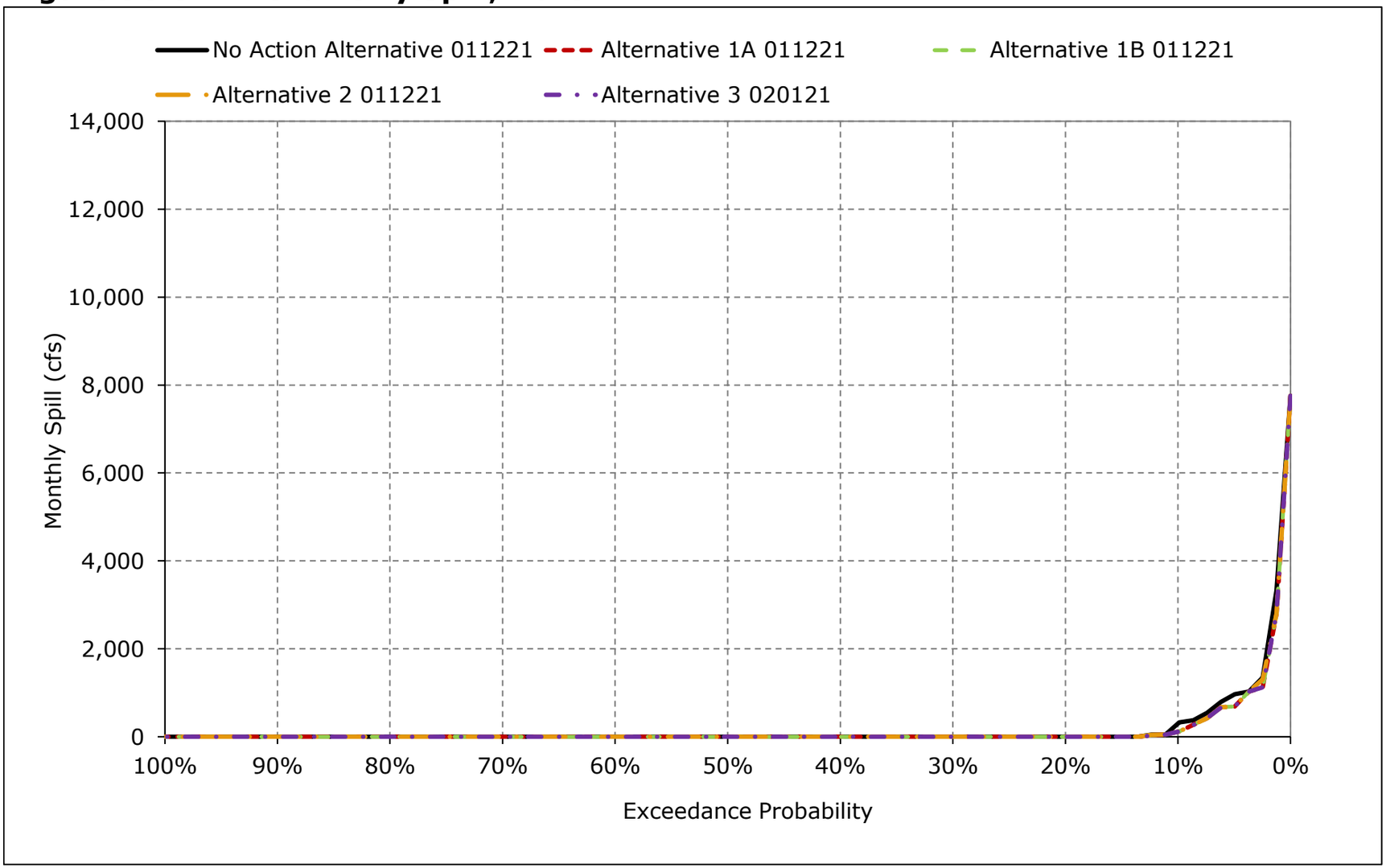


Figure 5C-5-13. Ord Ferry Spill, April

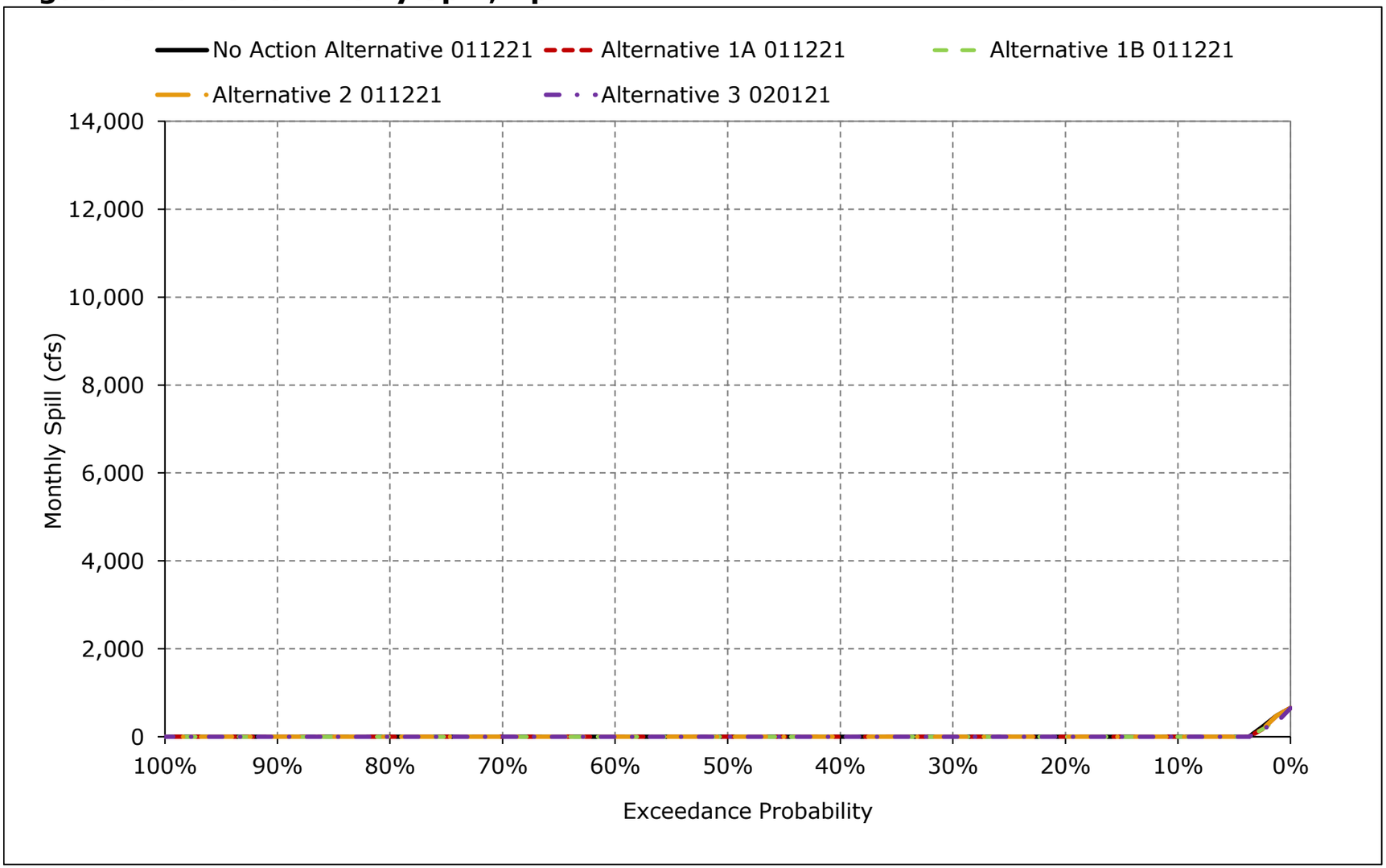


Figure 5C-5-14. Ord Ferry Spill, May

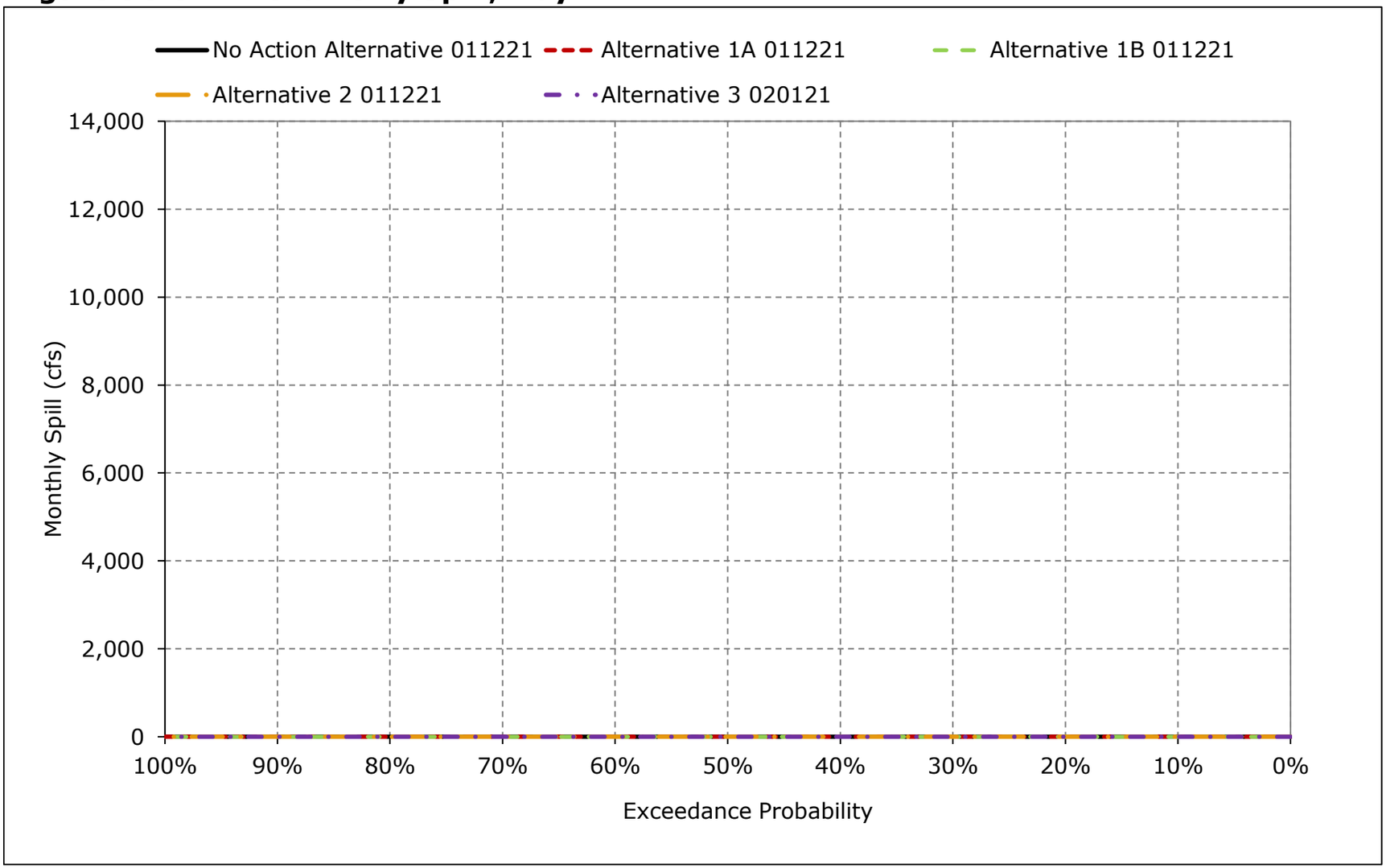


Figure 5C-5-15. Ord Ferry Spill, June

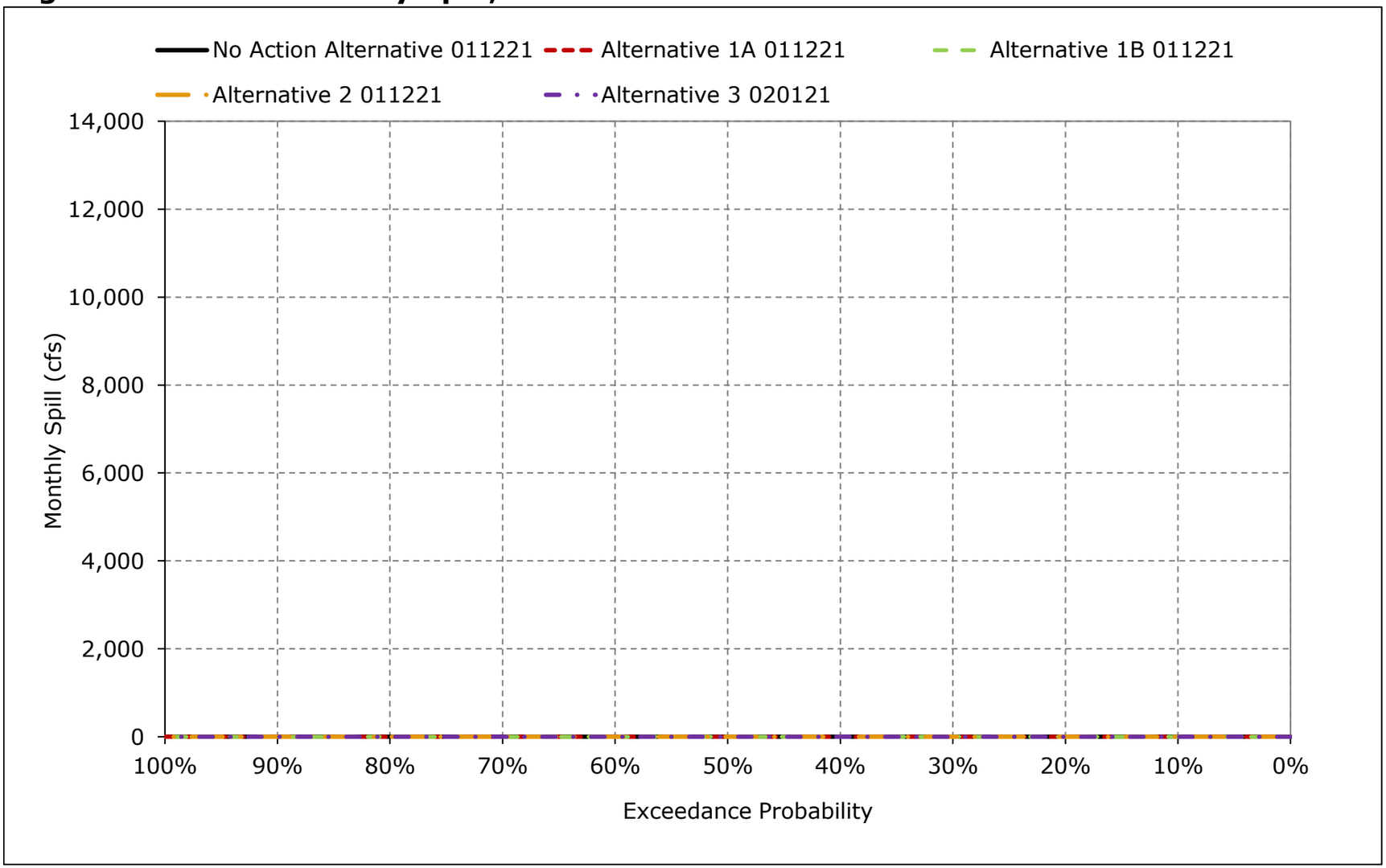


Figure 5C-5-16. Ord Ferry Spill, July

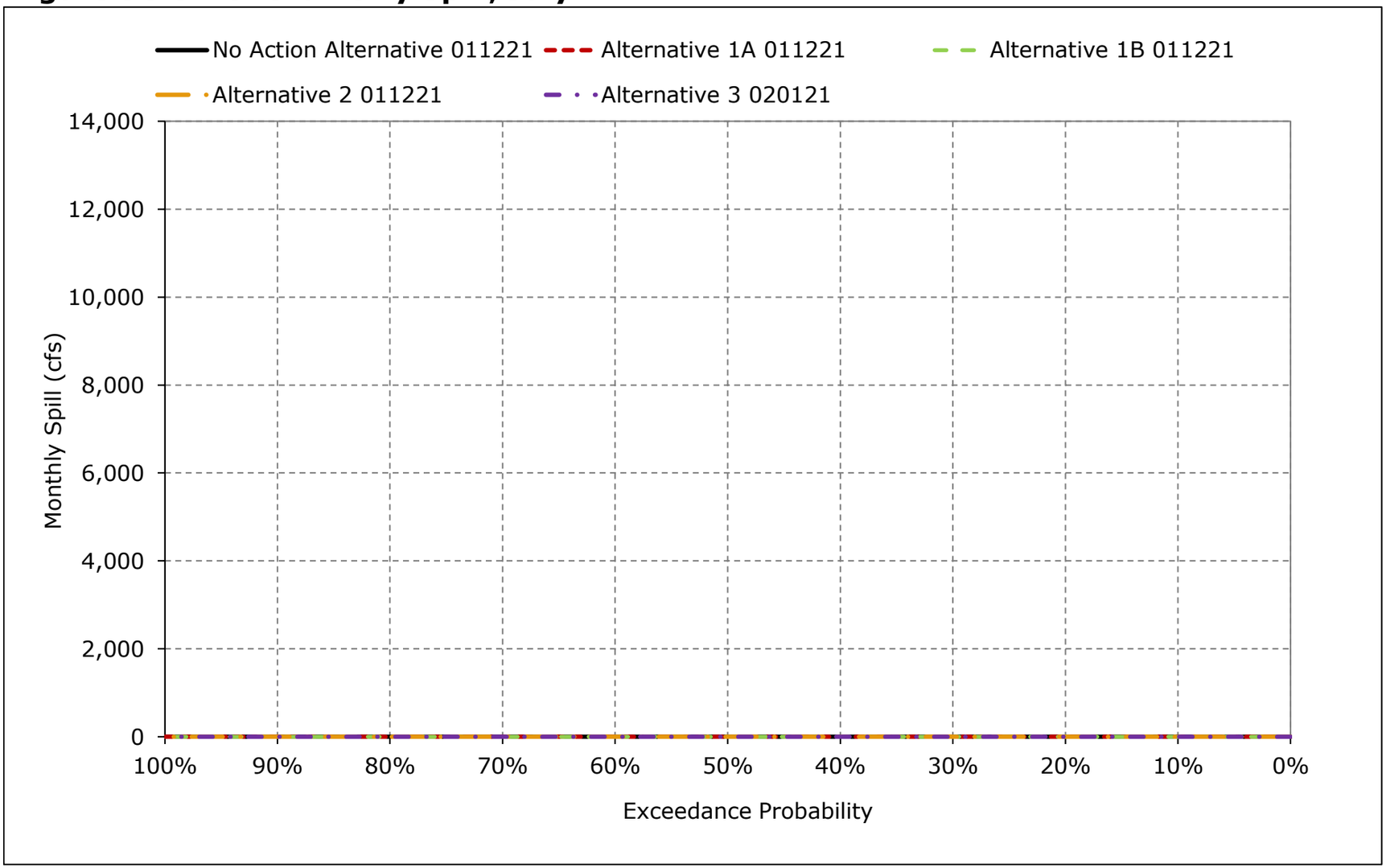


Figure 5C-5-17. Ord Ferry Spill, August

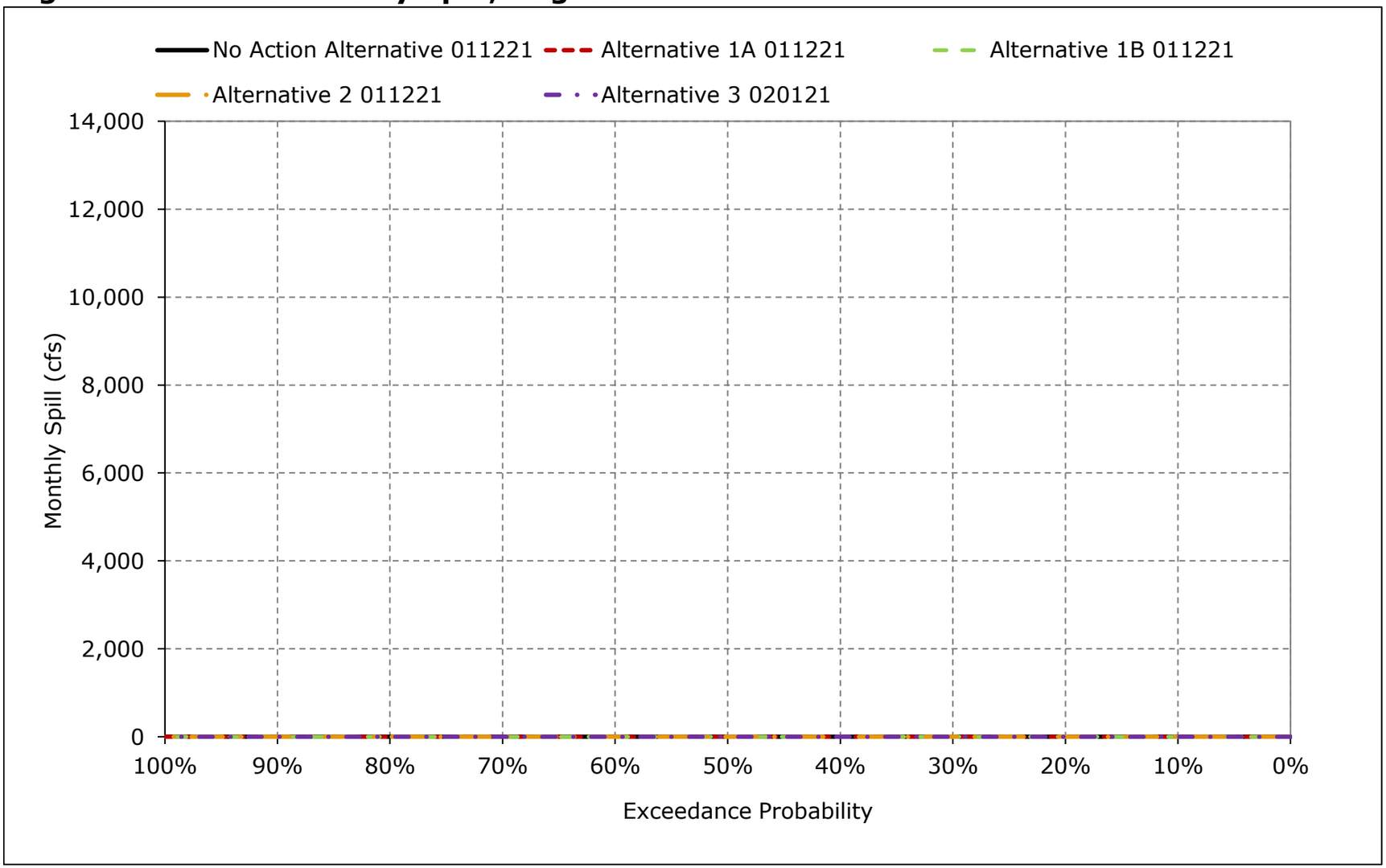


Figure 5C-5-18. Ord Ferry Spill, September

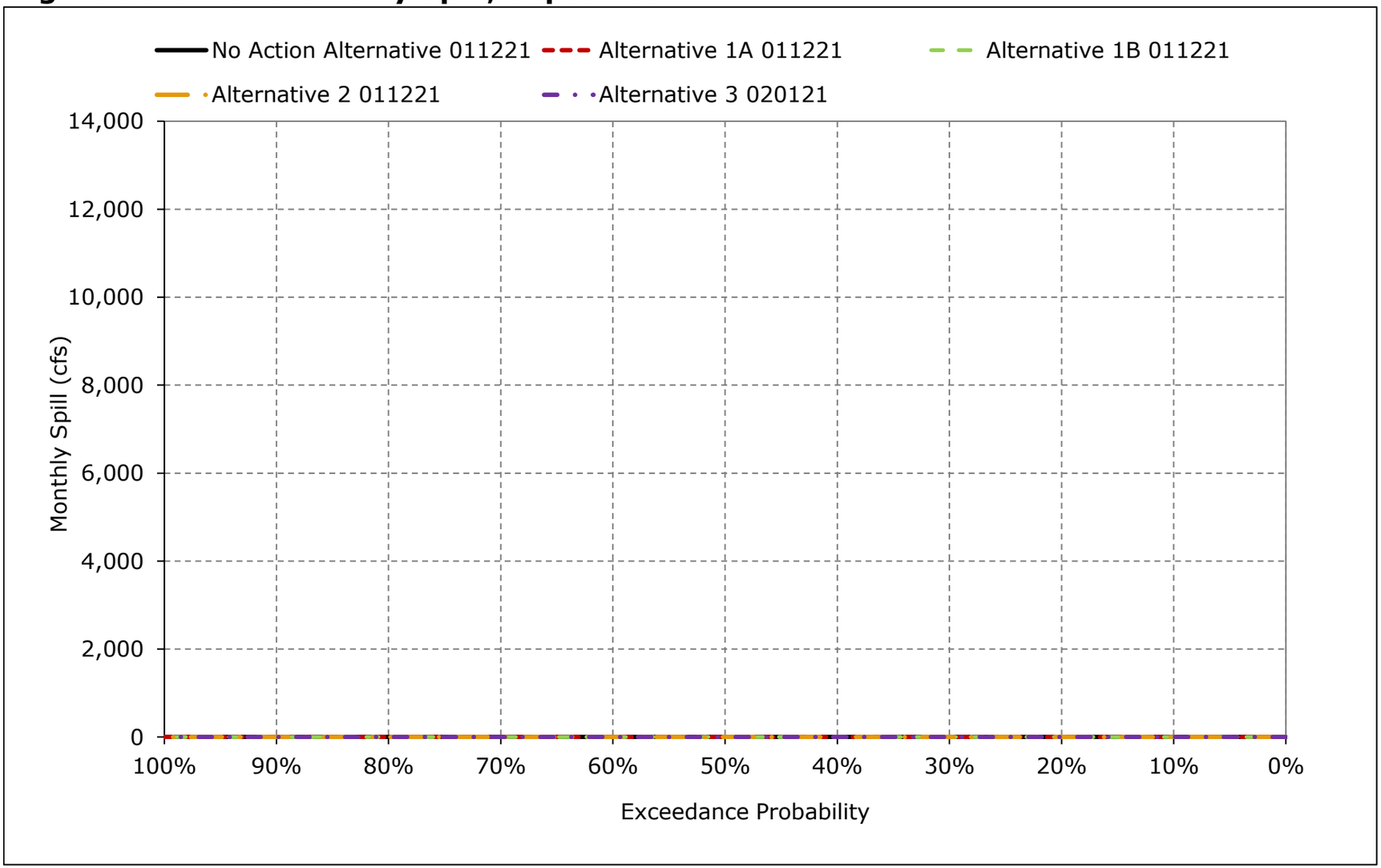


Table 5C-6-1a. Moulton Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	106	699	959	478	0	0	0	0	0	0
20%	0	0	0	135	226	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	97	322	498	254	34	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	54	938	1,454	712	89	0	0	0	0	0
Above Normal (15%)	0	2	21	152	233	196	42	0	0	0	0	0
Below Normal (17%)	0	0	134	5	17	0	0	0	0	0	0	0
Dry (22%)	0	0	246	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-1b. Moulton Weir Spill, Alternative 1A 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	83	772	820	372	0	0	0	0	0	0
20%	0	0	0	110	191	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	94	301	467	228	31	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	55	884	1,371	650	82	0	0	0	0	0
Above Normal (15%)	0	1	20	127	208	148	33	0	0	0	0	0
Below Normal (17%)	0	0	124	4	14	0	0	0	0	0	0	0
Dry (22%)	0	0	242	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-1c. Moulton Weir Spill, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-23	74	-139	-105	0	0	0	0	0	0
20%	0	0	0	-25	-35	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-3	-21	-31	-27	-3	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-54	-83	-62	-7	0	0	0	0	0
Above Normal (15%)	0	-1	-1	-25	-25	-47	-9	0	0	0	0	0
Below Normal (17%)	0	0	-10	-1	-3	0	0	0	0	0	0	0
Dry (22%)	0	0	-4	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.

Table 5C-6-2a. Moulton Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	106	699	959	478	0	0	0	0	0	0
20%	0	0	0	135	226	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	97	322	498	254	34	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	54	938	1,454	712	89	0	0	0	0	0
Above Normal (15%)	0	2	21	152	233	196	42	0	0	0	0	0
Below Normal (17%)	0	0	134	5	17	0	0	0	0	0	0	0
Dry (22%)	0	0	246	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-2b. Moulton Weir Spill, Alternative 1B 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	83	762	813	371	0	0	0	0	0	0
20%	0	0	0	108	196	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	94	300	466	228	30	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	54	881	1,365	650	78	0	0	0	0	0
Above Normal (15%)	0	3	19	128	207	148	33	0	0	0	0	0
Below Normal (17%)	0	0	123	4	16	0	0	0	0	0	0	0
Dry (22%)	0	0	242	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-2c. Moulton Weir Spill, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-23	64	-146	-107	0	0	0	0	0	0
20%	0	0	0	-26	-30	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-3	-22	-32	-27	-5	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-57	-88	-63	-10	0	0	0	0	0
Above Normal (15%)	0	0	-1	-24	-25	-47	-9	0	0	0	0	0
Below Normal (17%)	0	0	-11	-1	-1	0	0	0	0	0	0	0
Dry (22%)	0	0	-5	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.

Table 5C-6-3a. Moulton Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	106	699	959	478	0	0	0	0	0	0
20%	0	0	0	135	226	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	97	322	498	254	34	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	54	938	1,454	712	89	0	0	0	0	0
Above Normal (15%)	0	2	21	152	233	196	42	0	0	0	0	0
Below Normal (17%)	0	0	134	5	17	0	0	0	0	0	0	0
Dry (22%)	0	0	246	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-3b. Moulton Weir Spill, Alternative 2 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	83	773	808	372	0	0	0	0	0	0
20%	0	0	0	110	176	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	96	300	468	230	31	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	55	881	1,373	656	82	0	0	0	0	0
Above Normal (15%)	0	1	20	126	208	148	33	0	0	0	0	0
Below Normal (17%)	0	0	124	4	10	0	0	0	0	0	0	0
Dry (22%)	0	0	248	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-3c. Moulton Weir Spill, Alternative 2 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-23	75	-151	-105	0	0	0	0	0	0
20%	0	0	0	-25	-50	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-1	-22	-30	-25	-3	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-57	-81	-57	-6	0	0	0	0	0
Above Normal (15%)	0	-1	-1	-26	-25	-47	-9	0	0	0	0	0
Below Normal (17%)	0	0	-10	-1	-7	0	0	0	0	0	0	0
Dry (22%)	0	0	2	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.
b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
c These results are displayed with calendar year - year type sorting.

Table 5C-6-4a. Moulton Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	106	699	959	478	0	0	0	0	0	0
20%	0	0	0	135	226	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	97	322	498	254	34	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	54	938	1,454	712	89	0	0	0	0	0
Above Normal (15%)	0	2	21	152	233	196	42	0	0	0	0	0
Below Normal (17%)	0	0	134	5	17	0	0	0	0	0	0	0
Dry (22%)	0	0	246	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-4b. Moulton Weir Spill, Alternative 3 020121, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	83	773	809	372	0	0	0	0	0	0
20%	0	0	0	109	181	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	95	298	464	227	28	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	55	876	1,357	647	73	0	0	0	0	0
Above Normal (15%)	0	3	19	128	220	147	33	0	0	0	0	0
Below Normal (17%)	0	0	123	4	9	0	0	0	0	0	0	0
Dry (22%)	0	0	246	6	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

Table 5C-6-4c. Moulton Weir Spill, Alternative 3 020121 minus No Action Alternative 011221, Monthly Spill (cfs)

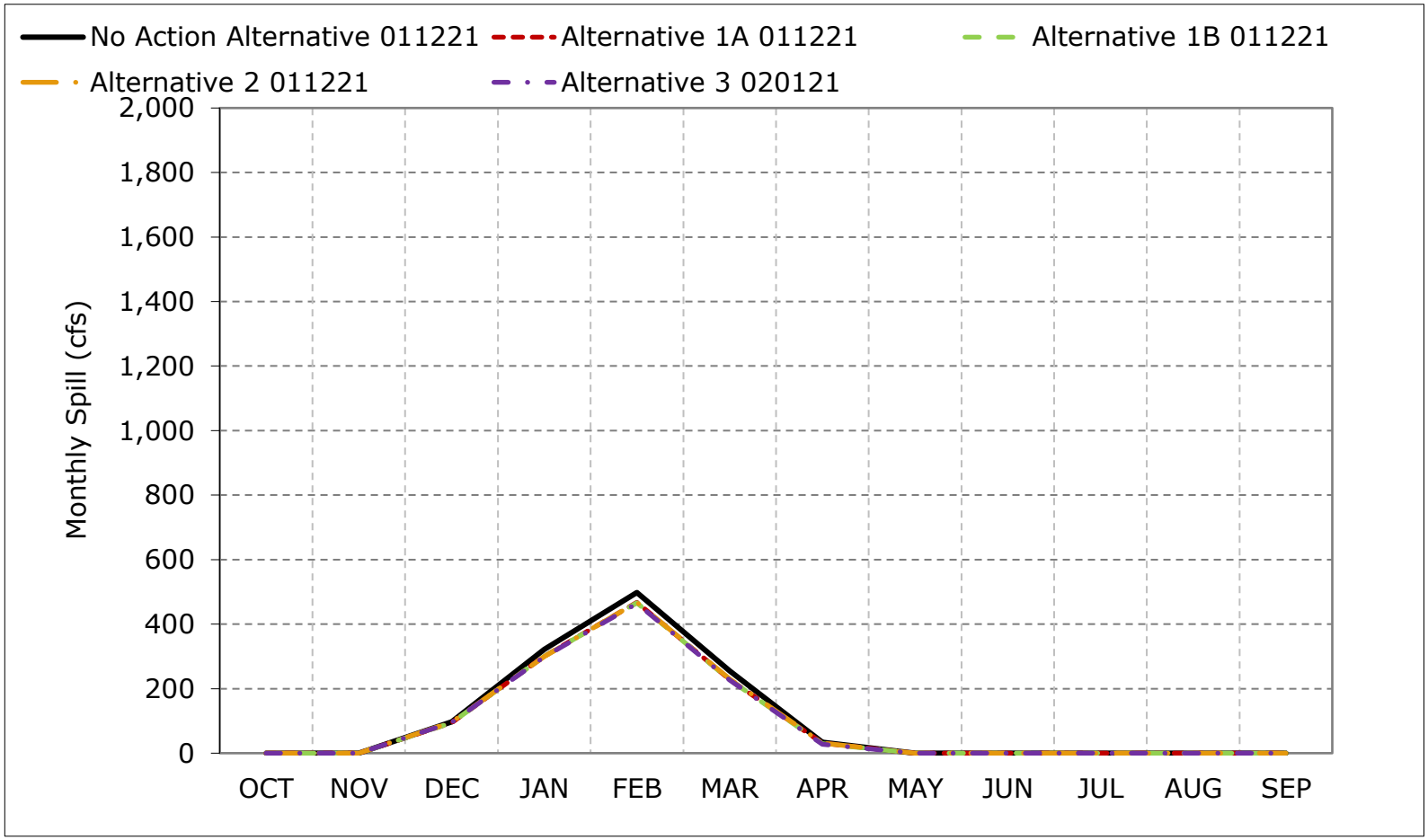
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-23	74	-150	-105	0	0	0	0	0	0
20%	0	0	0	-25	-45	0	0	0	0	0	0	0
30%	0	0	0	0	0	0	0	0	0	0	0	0
40%	0	0	0	0	0	0	0	0	0	0	0	0
50%	0	0	0	0	0	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	0	0	-2	-23	-34	-28	-6	0	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	0	0	-62	-97	-66	-16	0	0	0	0	0
Above Normal (15%)	0	0	-2	-24	-13	-48	-9	0	0	0	0	0
Below Normal (17%)	0	0	-11	-1	-8	0	0	0	0	0	0	0
Dry (22%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical (15%)	0	0	0	0	0	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

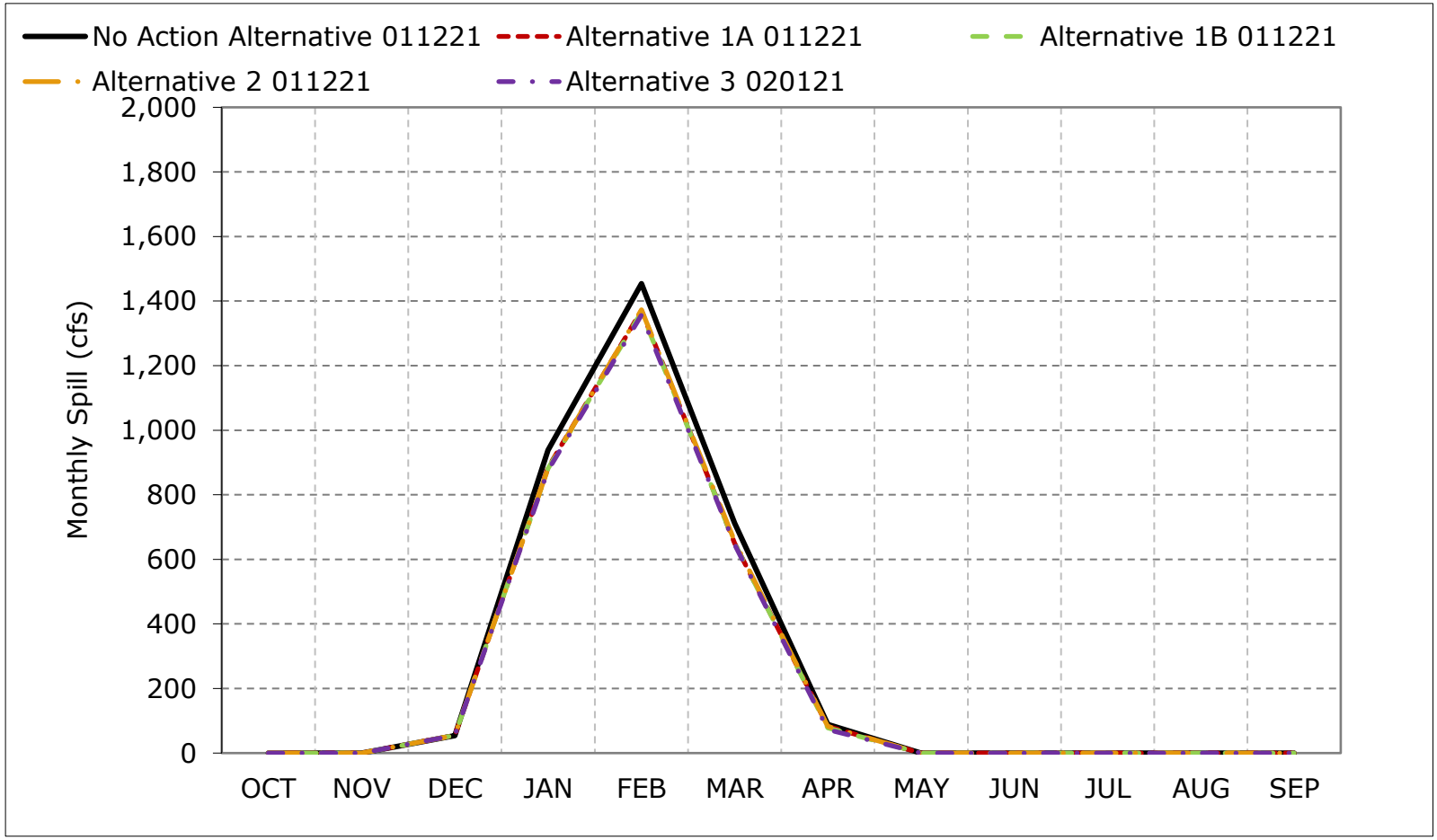
c These results are displayed with calendar year - year type sorting.

Figure 5C-6-1. Moulton Weir Spill, Long-Term Average Spill



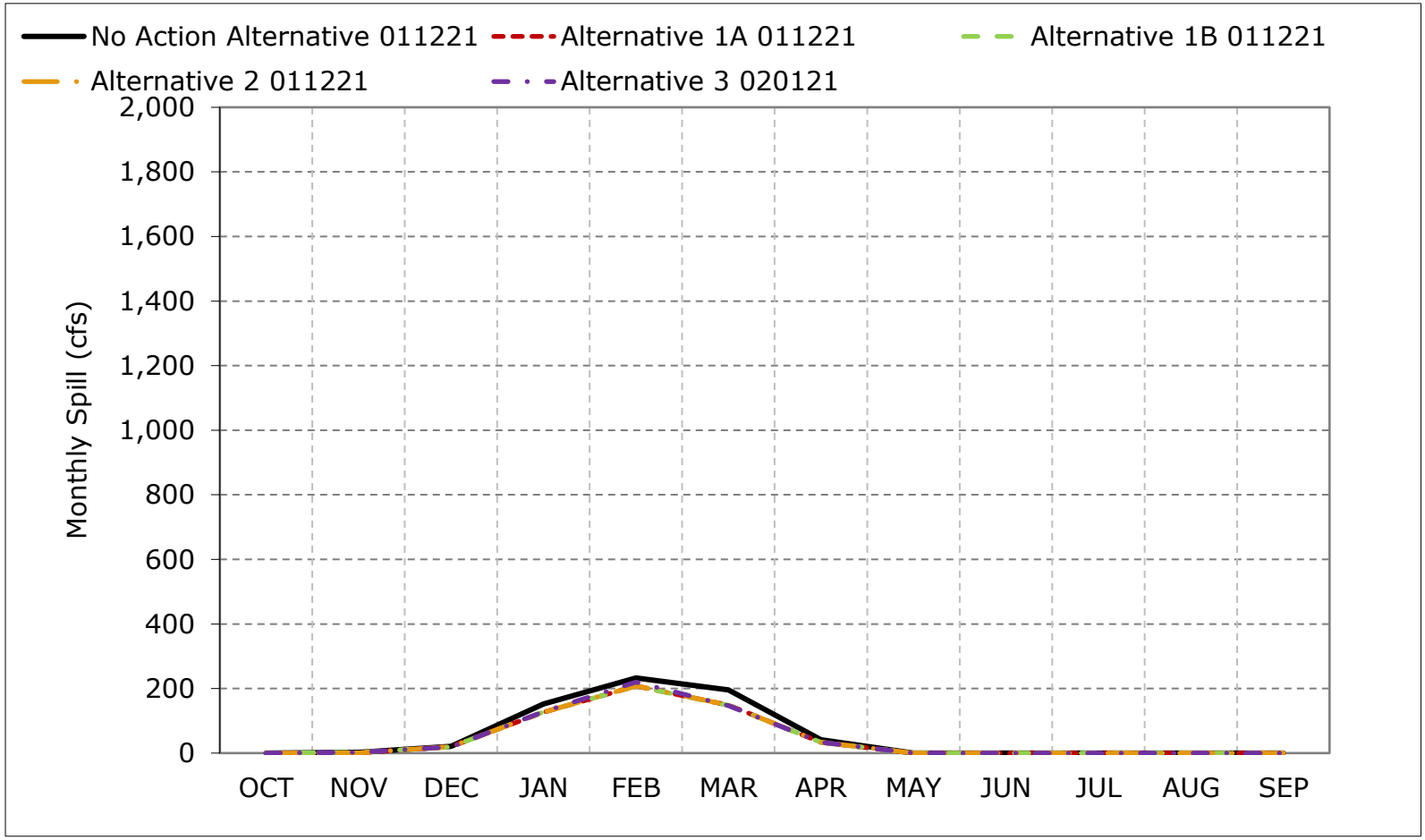
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-6-2. Moulton Weir Spill, Wet Year Average Spill



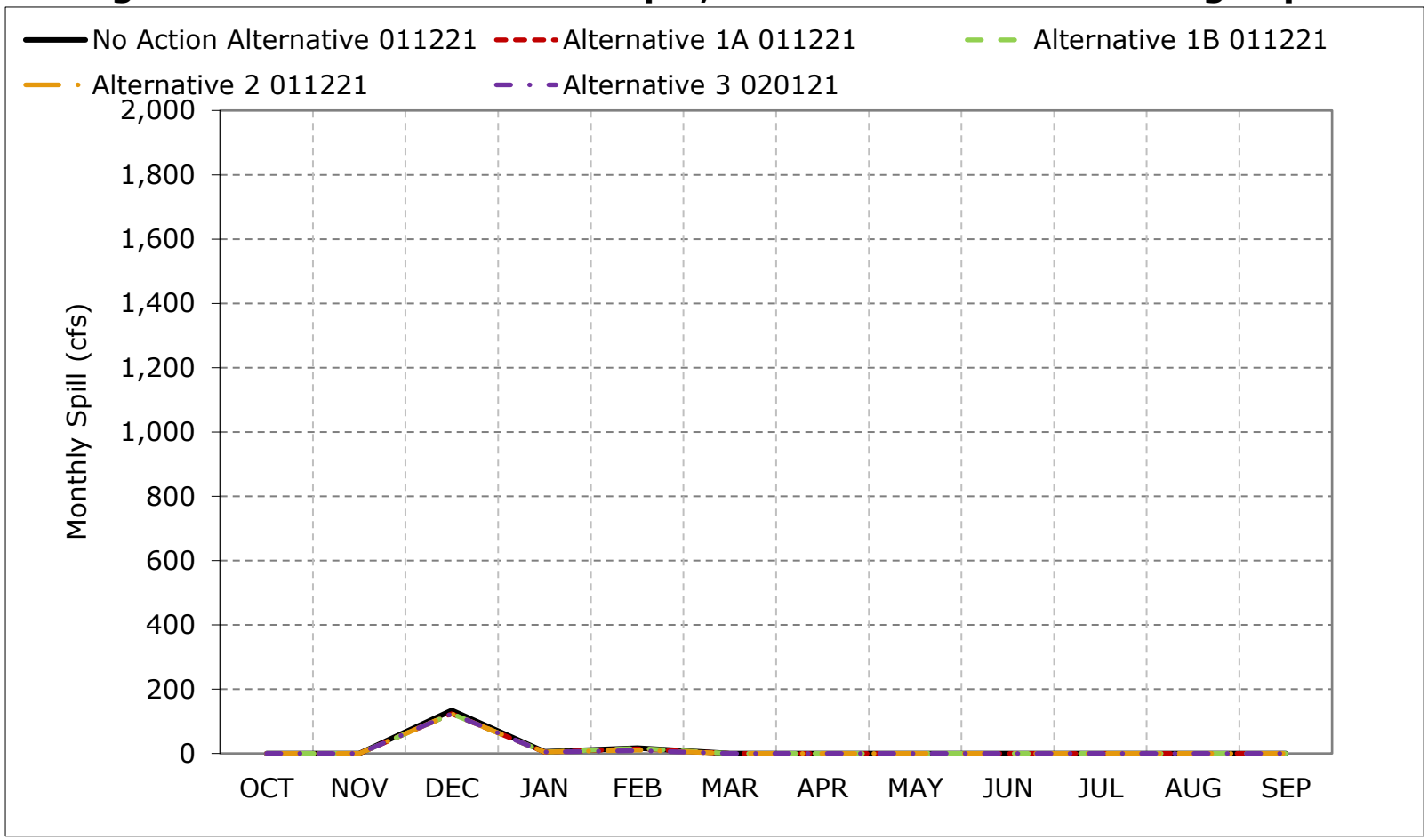
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-6-3. Moulton Weir Spill, Above Normal Year Average Spill



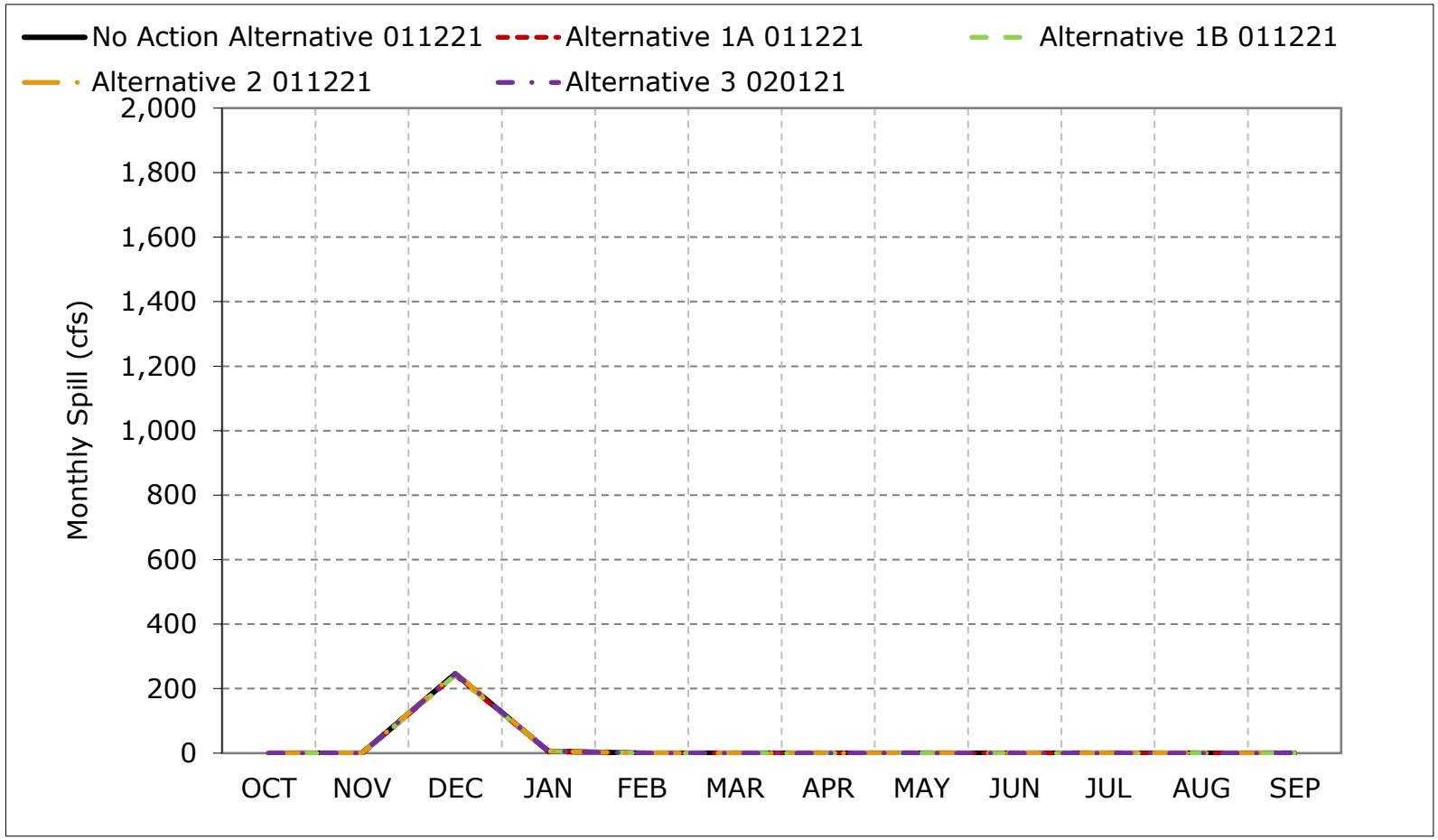
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-6-4. Moulton Weir Spill, Below Normal Year Average Spill



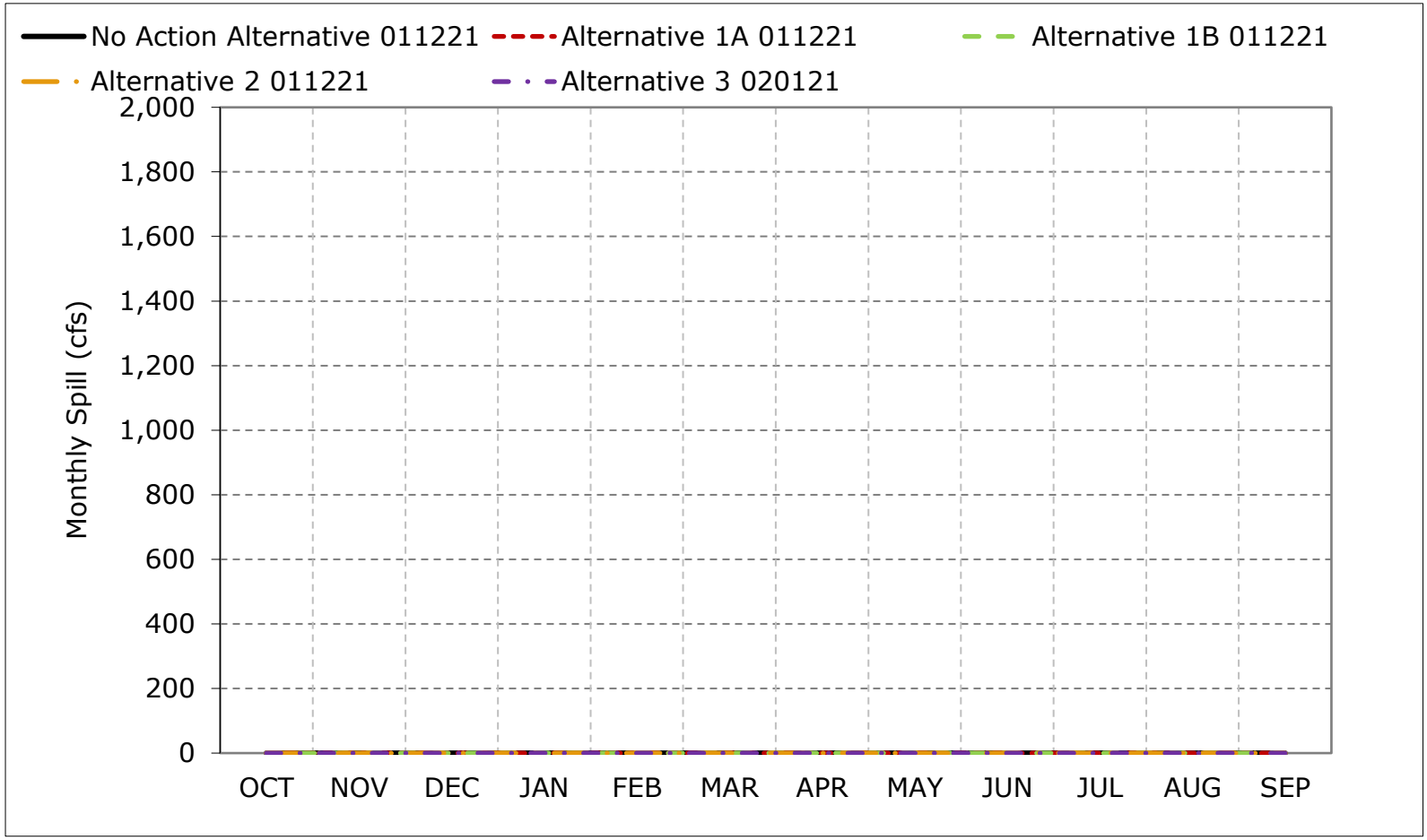
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-6-5. Moulton Weir Spill, Dry Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-6-6. Moulton Weir Spill, Critical Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-6-7. Moulton Weir Spill, October

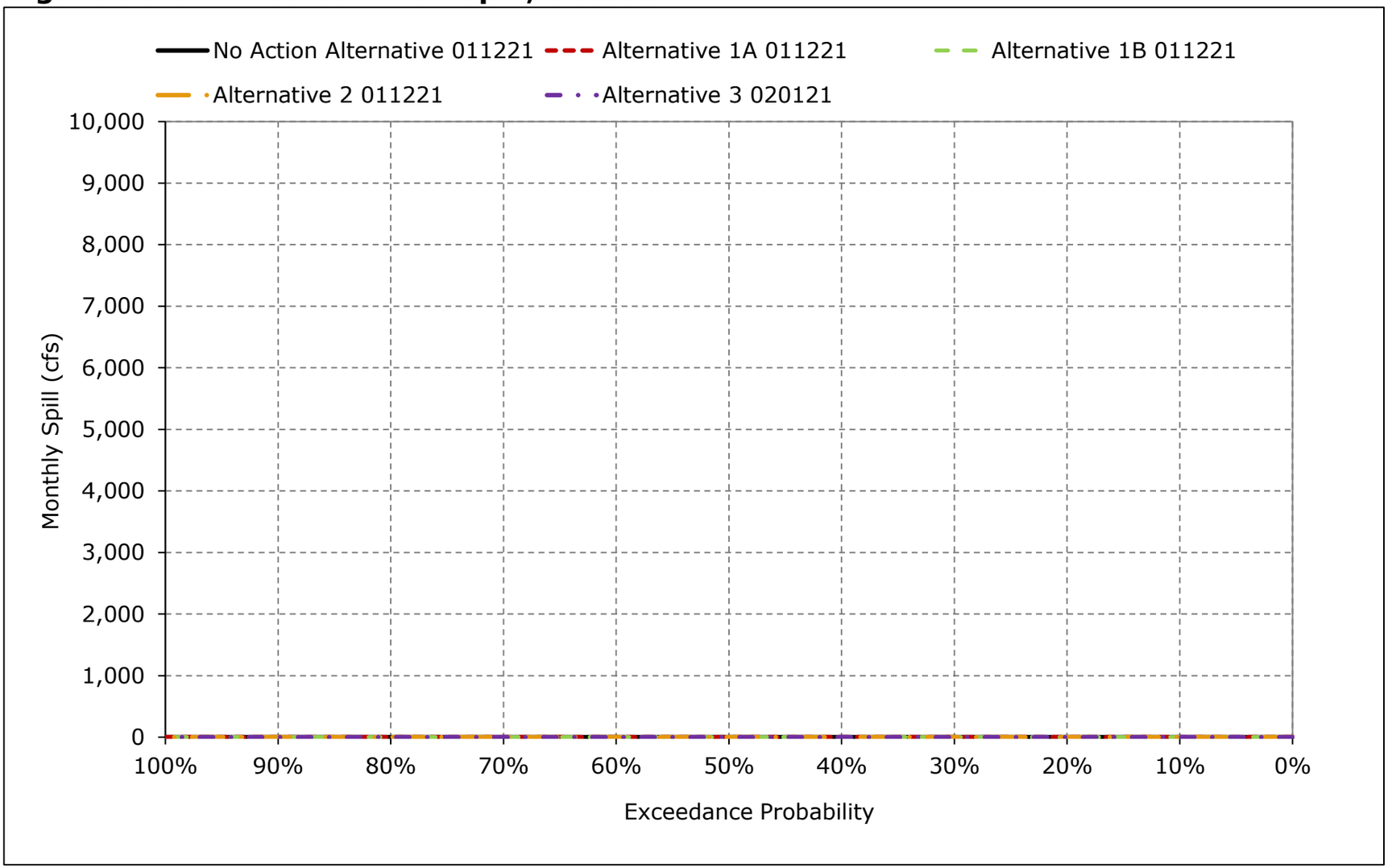


Figure 5C-6-8. Moulton Weir Spill, November

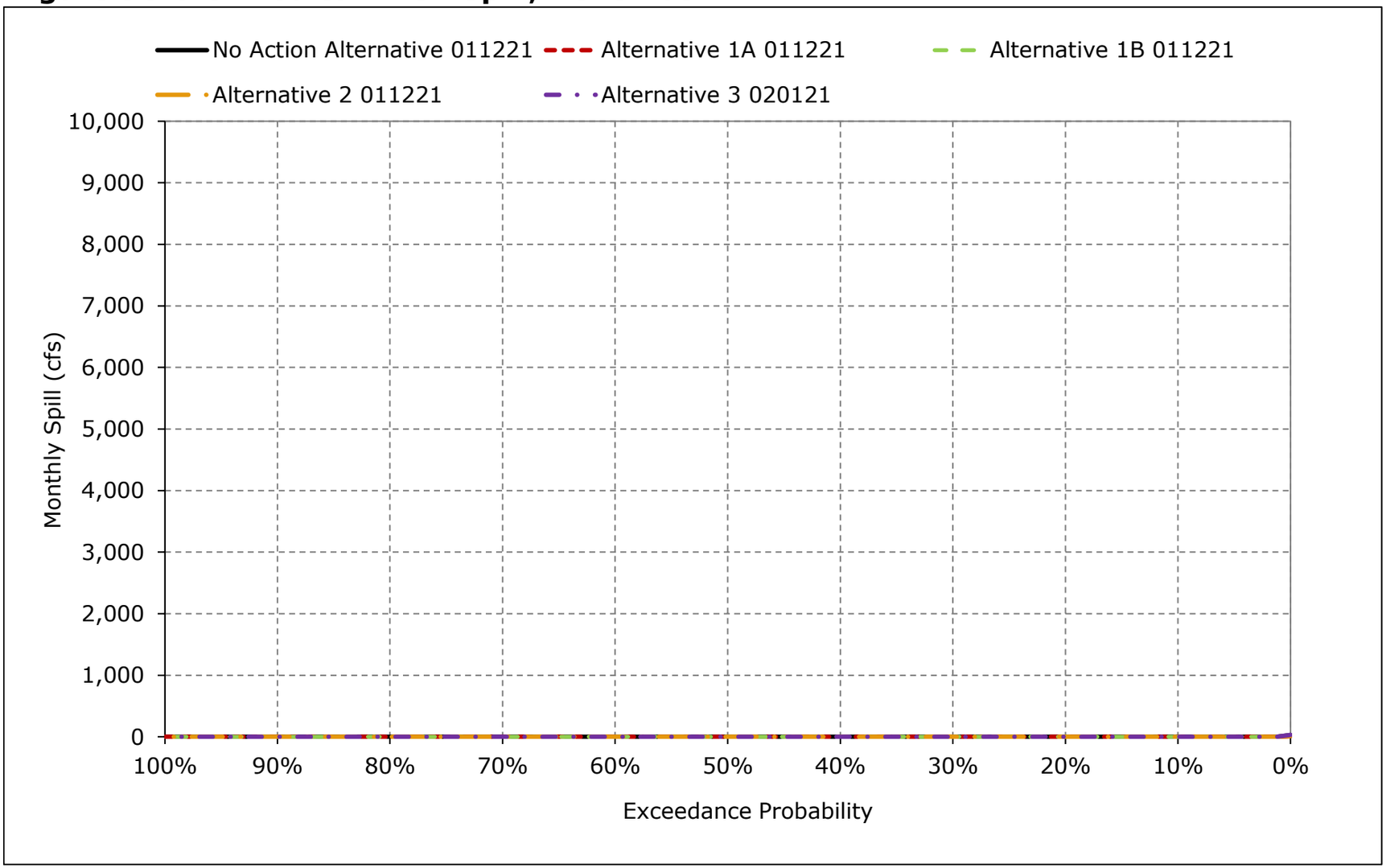


Figure 5C-6-9. Moulton Weir Spill, December

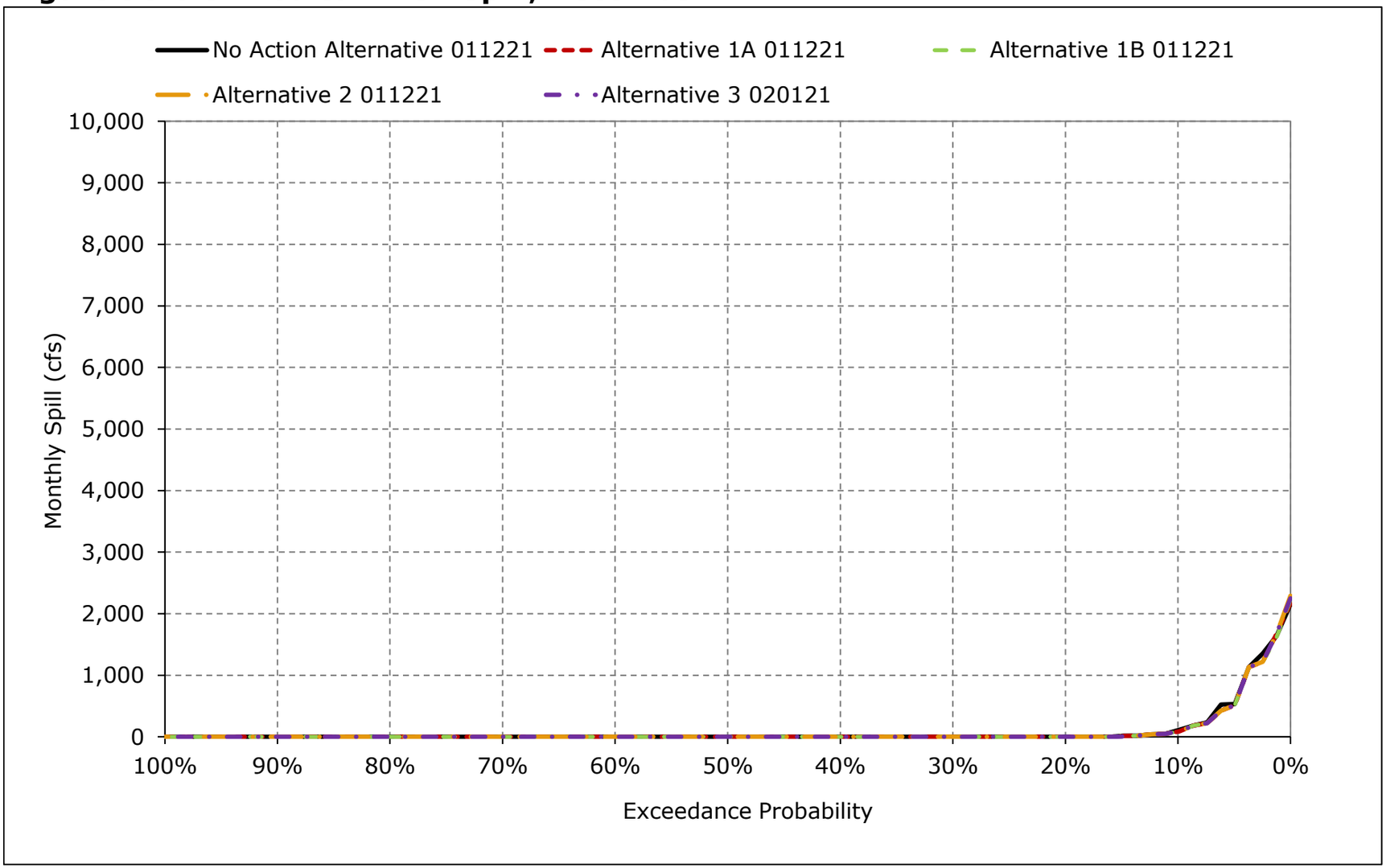


Figure 5C-6-10. Moulton Weir Spill, January

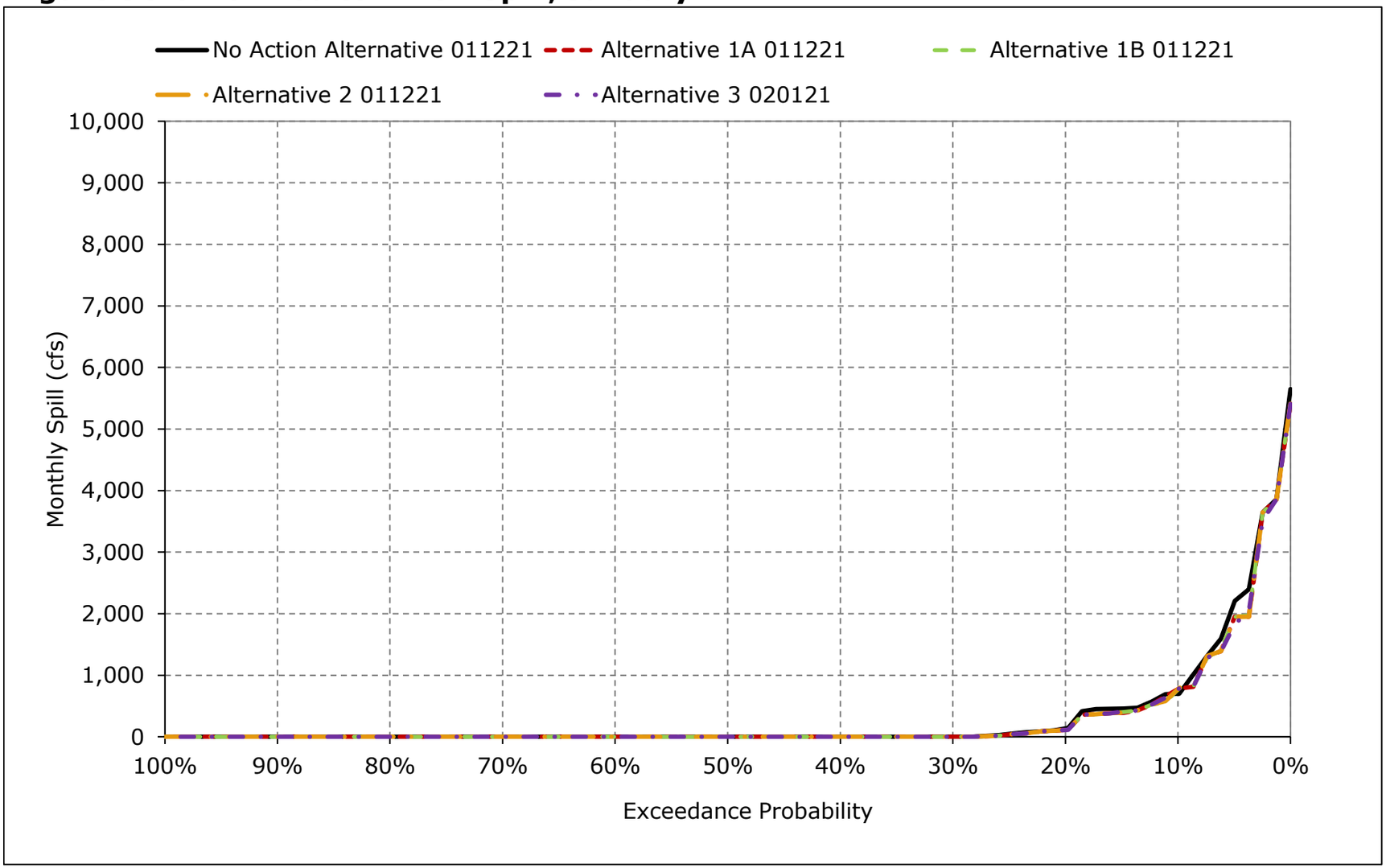


Figure 5C-6-11. Moulton Weir Spill, February

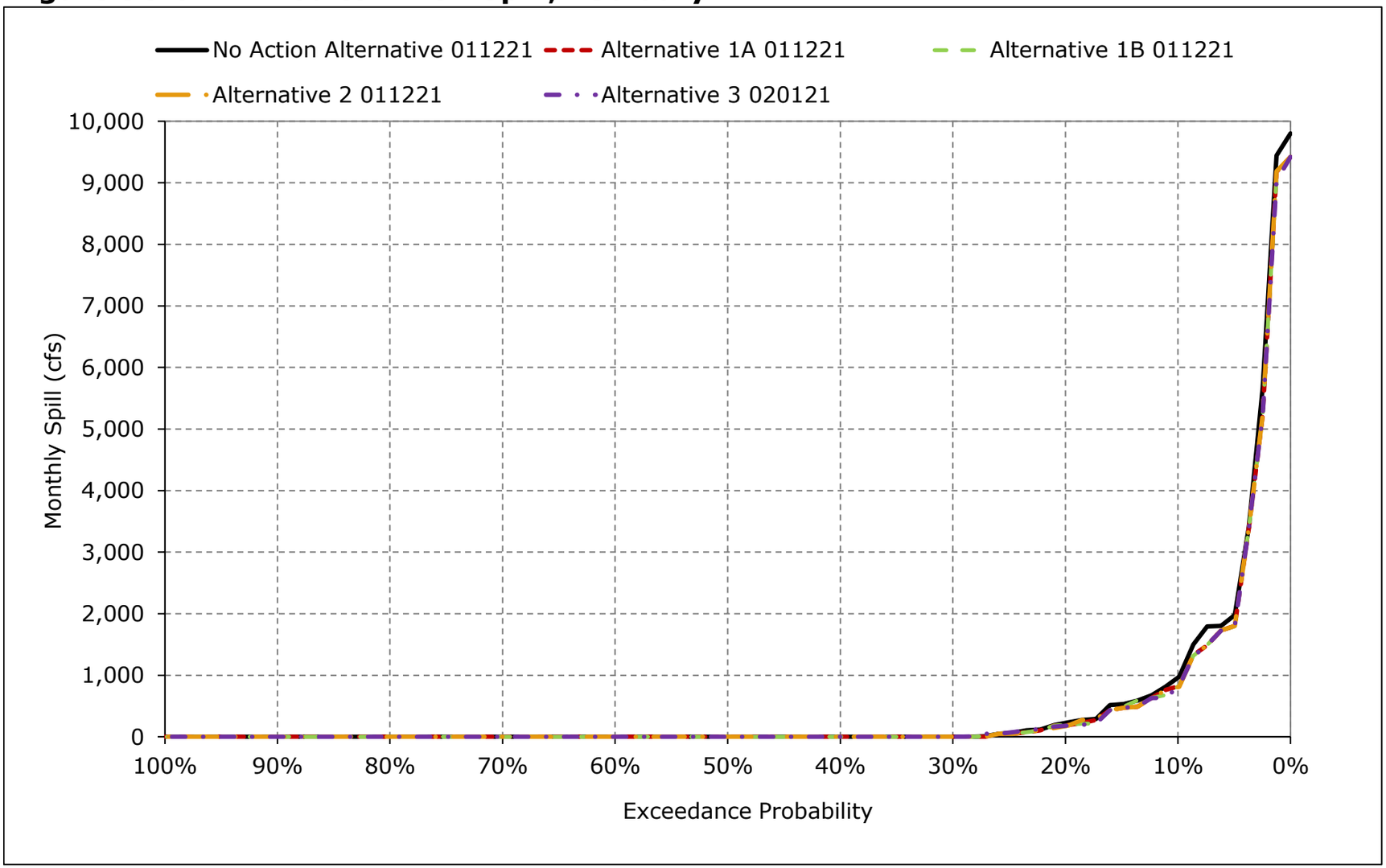


Figure 5C-6-12. Moulton Weir Spill, March

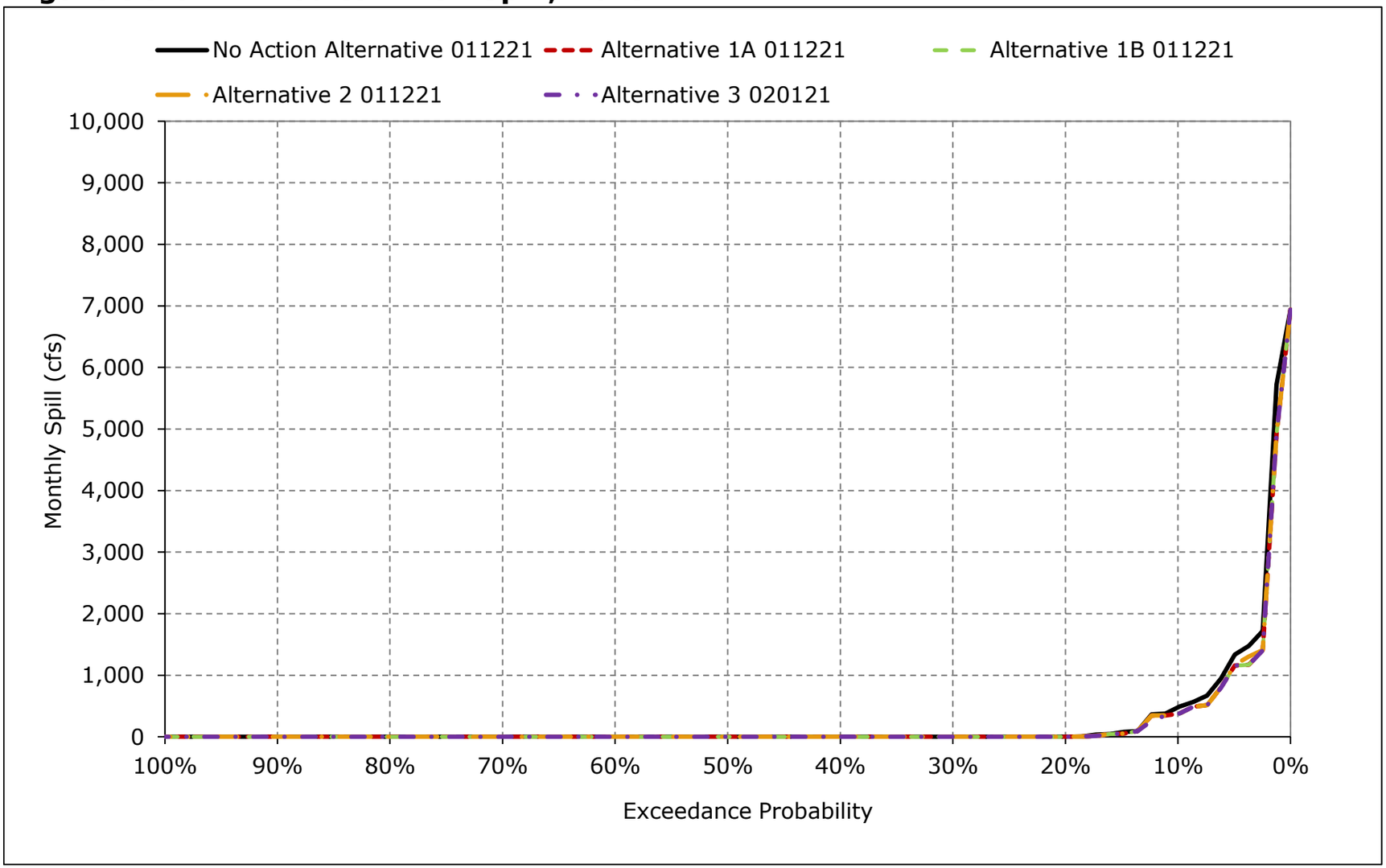


Figure 5C-6-13. Moulton Weir Spill, April

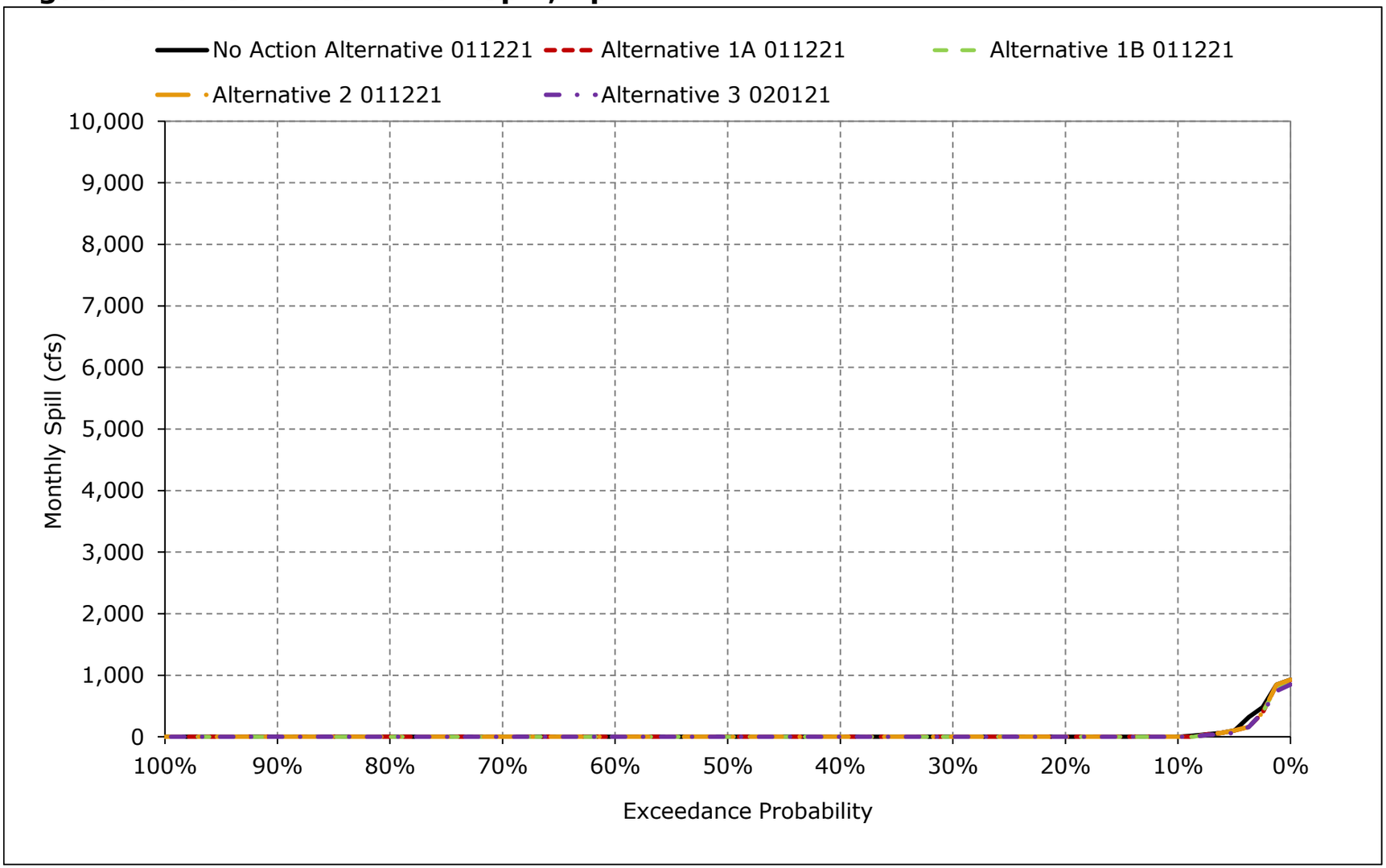


Figure 5C-6-14. Moulton Weir Spill, May

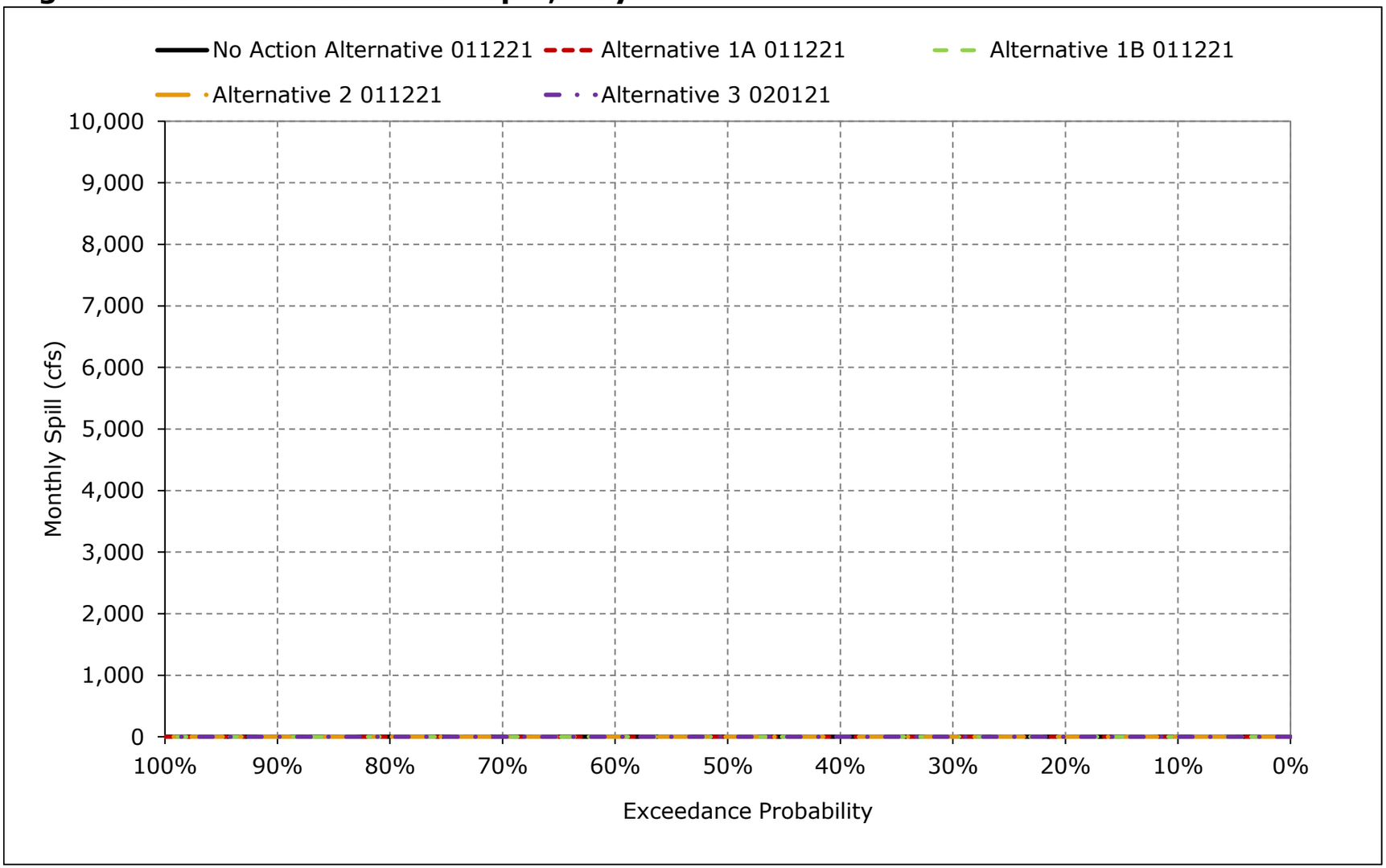


Figure 5C-6-15. Moulton Weir Spill, June

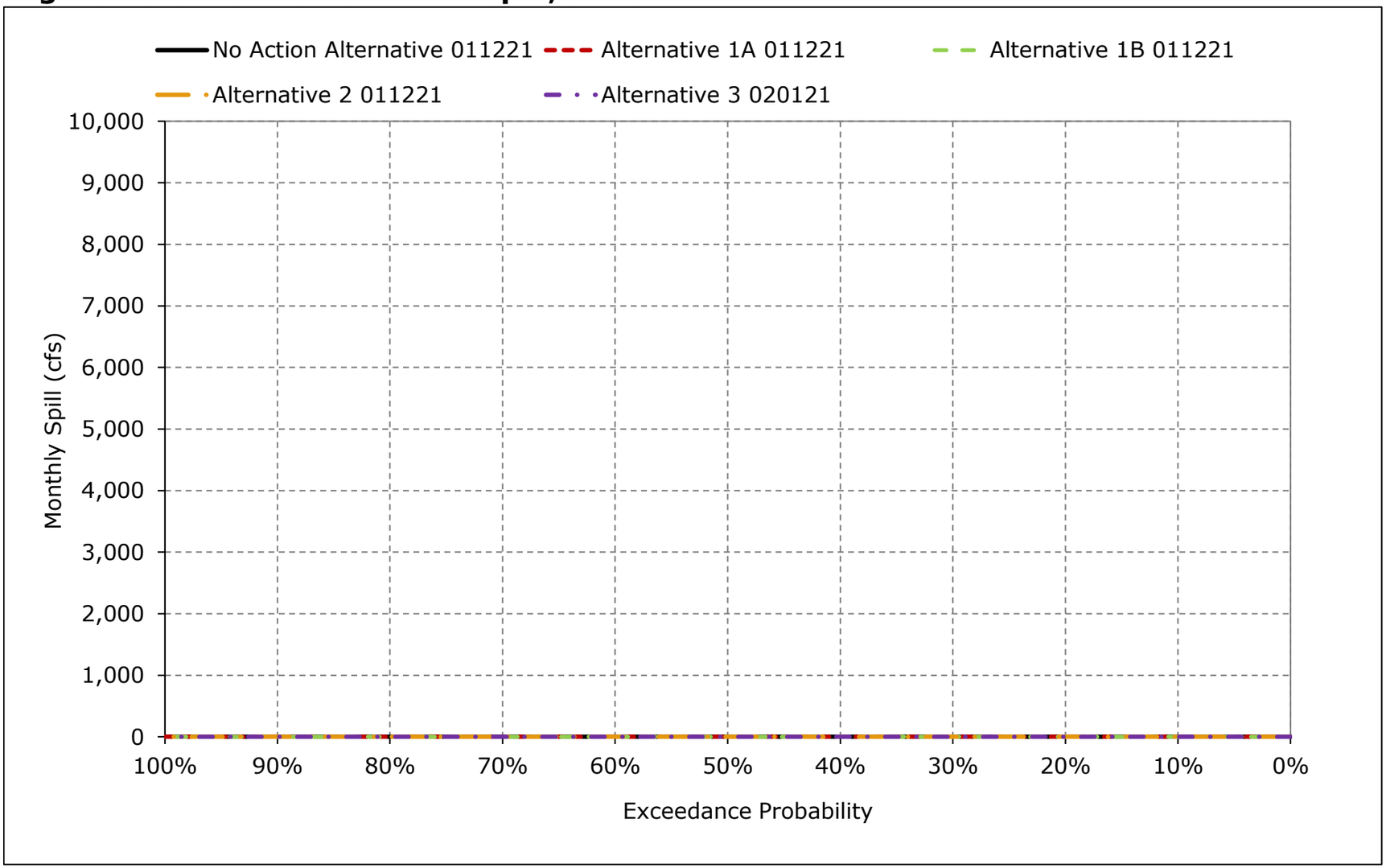


Figure 5C-6-16. Moulton Weir Spill, July

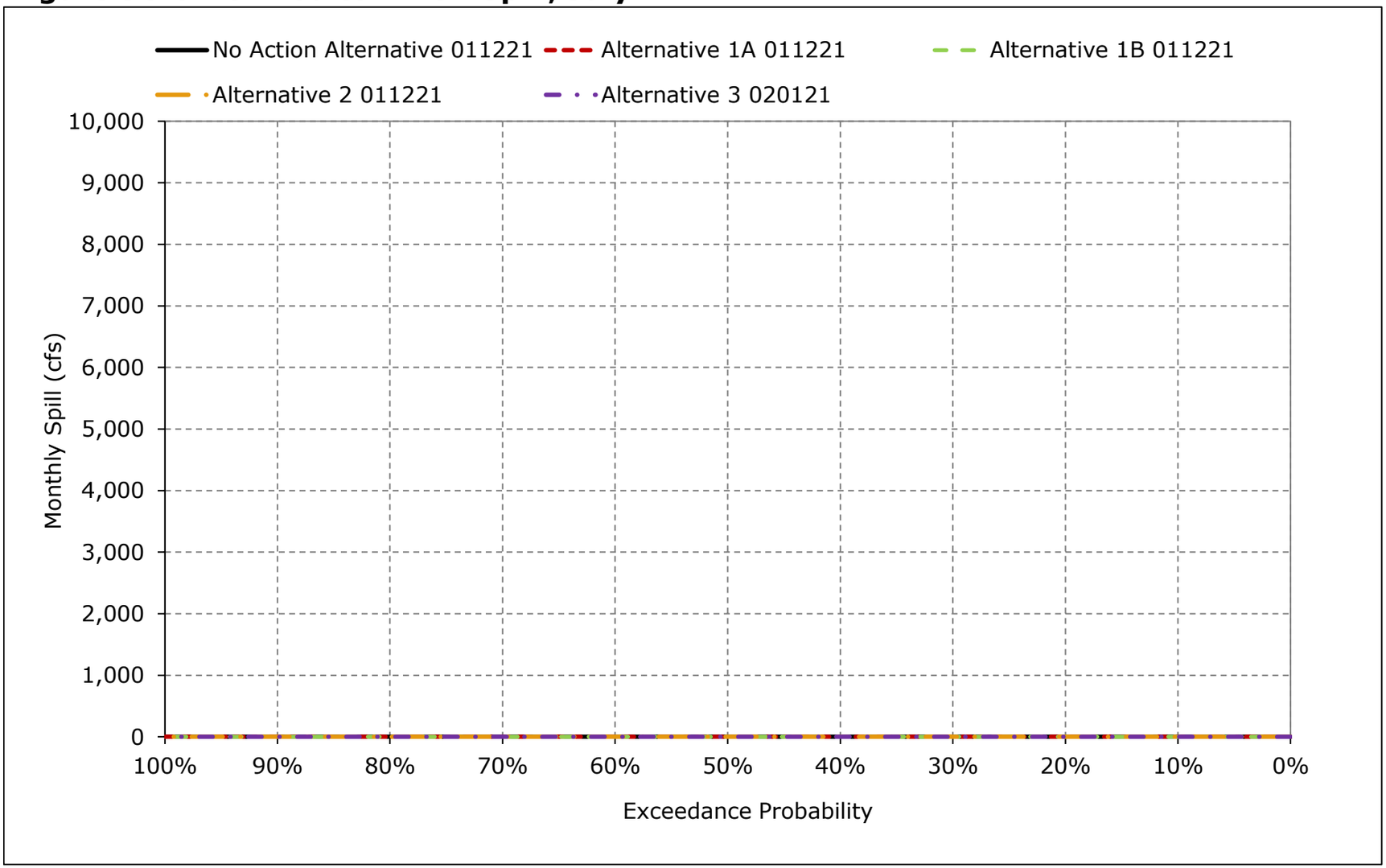


Figure 5C-6-17. Moulton Weir Spill, August

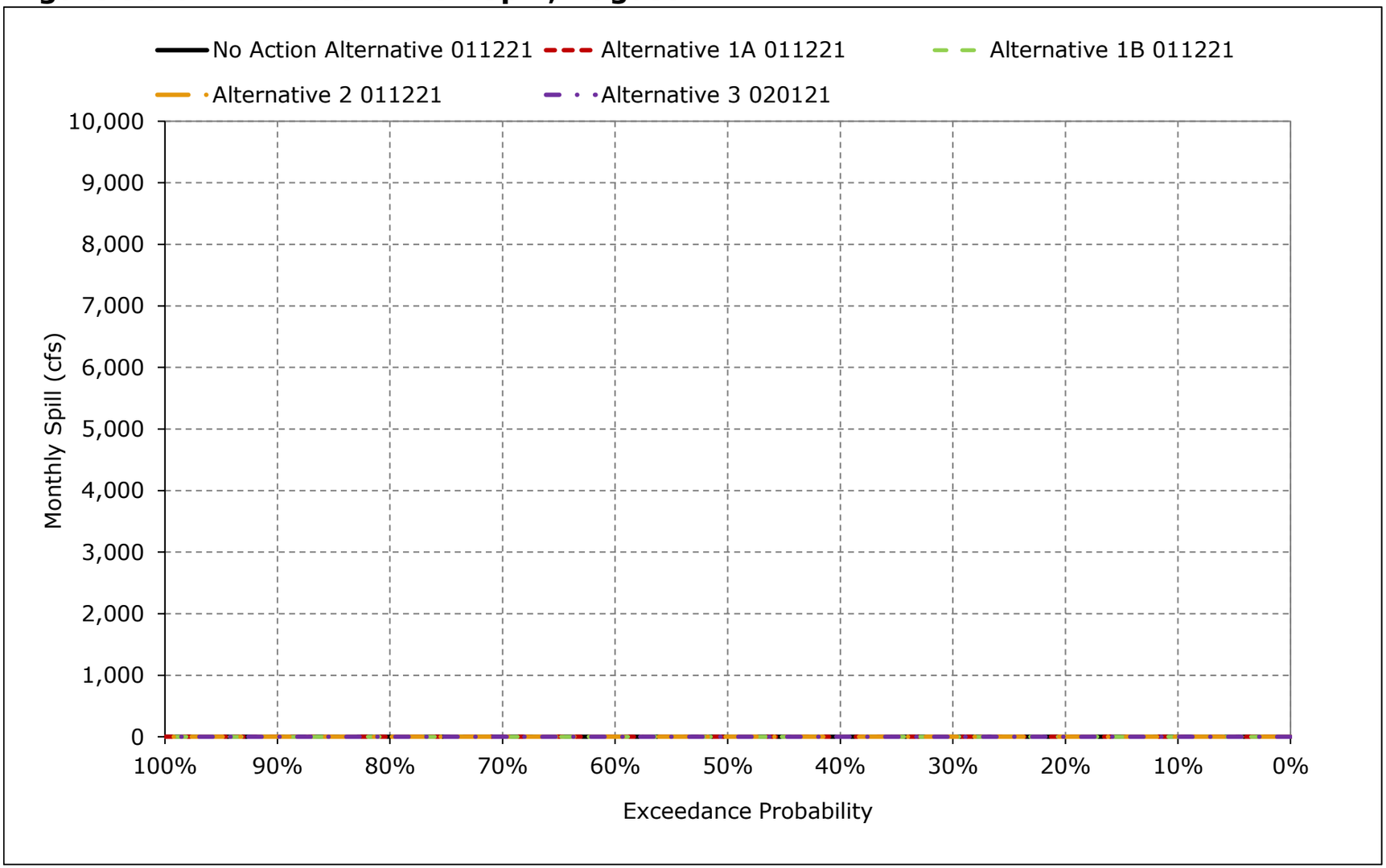


Figure 5C-6-18. Moulton Weir Spill, September

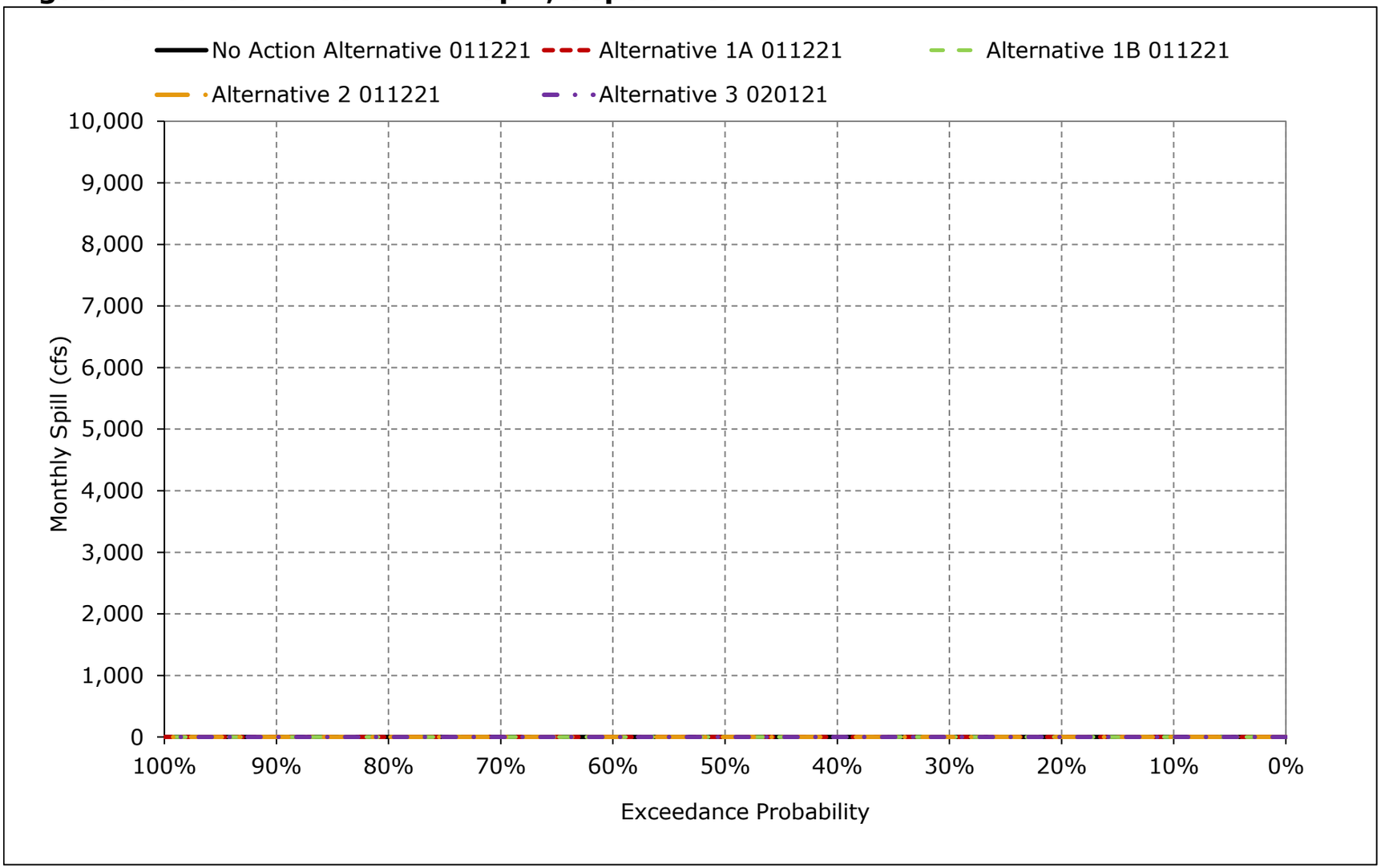


Table 5C-7-1a. Colusa Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,033	16,184	18,518	12,433	3,734	0	0	0	0	0
20%	0	0	2,279	7,846	9,890	4,404	756	0	0	0	0	0
30%	0	0	206	2,234	5,687	2,476	0	0	0	0	0	0
40%	0	0	0	245	2,425	534	0	0	0	0	0	0
50%	0	0	0	0	636	1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	8	188	1,755	4,526	5,993	3,813	1,329	75	23	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	61	1,916	11,439	14,627	8,821	3,472	146	71	0	0	0
Above Normal (15%)	0	742	1,372	4,337	6,079	6,268	1,432	194	0	0	0	0
Below Normal (17%)	47	70	2,027	971	1,710	143	109	2	0	0	0	0
Dry (22%)	0	218	2,716	440	783	337	0	0	0	0	0	0
Critical (15%)	0	0	28	13	14	0	0	0	0	0	0	0

Table 5C-7-1b. Colusa Weir Spill, Alternative 1A 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,014	15,662	16,813	12,123	3,201	0	0	0	0	0
20%	0	0	2,220	7,456	9,176	4,342	462	0	0	0	0	0
30%	0	0	209	2,043	5,410	1,750	0	0	0	0	0	0
40%	0	0	0	219	2,320	449	0	0	0	0	0	0
50%	0	0	0	0	506	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	8	176	1,722	4,314	5,743	3,619	1,249	69	22	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	60	1,913	11,018	14,091	8,515	3,261	124	71	0	0	0
Above Normal (15%)	0	677	1,353	3,892	5,773	5,780	1,386	194	0	0	0	0
Below Normal (17%)	50	70	1,923	915	1,639	90	73	11	0	0	0	0
Dry (22%)	0	211	2,663	425	681	264	0	0	0	0	0	0
Critical (15%)	0	0	28	9	8	0	0	0	0	0	0	0

Table 5C-7-1c. Colusa Weir Spill, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-19	-522	-1,705	-310	-533	0	0	0	0	0
20%	0	0	-59	-390	-714	-62	-294	0	0	0	0	0
30%	0	0	3	-191	-277	-727	0	0	0	0	0	0
40%	0	0	0	-26	-106	-85	0	0	0	0	0	0
50%	0	0	0	0	-130	-1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	-12	-33	-212	-250	-194	-80	-5	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-1	-3	-421	-536	-307	-211	-22	-1	0	0	0
Above Normal (15%)	0	-66	-19	-445	-306	-488	-47	0	0	0	0	0
Below Normal (17%)	3	0	-104	-57	-71	-53	-36	9	0	0	0	0
Dry (22%)	0	-7	-54	-15	-102	-73	0	0	0	0	0	0
Critical (15%)	0	0	0	-3	-6	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-7-2a. Colusa Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,033	16,184	18,518	12,433	3,734	0	0	0	0	0
20%	0	0	2,279	7,846	9,890	4,404	756	0	0	0	0	0
30%	0	0	206	2,234	5,687	2,476	0	0	0	0	0	0
40%	0	0	0	245	2,425	534	0	0	0	0	0	0
50%	0	0	0	0	636	1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	8	188	1,755	4,526	5,993	3,813	1,329	75	23	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	61	1,916	11,439	14,627	8,821	3,472	146	71	0	0	0
Above Normal (15%)	0	742	1,372	4,337	6,079	6,268	1,432	194	0	0	0	0
Below Normal (17%)	47	70	2,027	971	1,710	143	109	2	0	0	0	0
Dry (22%)	0	218	2,716	440	783	337	0	0	0	0	0	0
Critical (15%)	0	0	28	13	14	0	0	0	0	0	0	0

Table 5C-7-2b. Colusa Weir Spill, Alternative 1B 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,007	15,663	16,815	12,113	3,200	0	0	0	0	0
20%	0	0	2,211	7,452	9,305	4,302	462	0	0	0	0	0
30%	0	0	311	2,044	4,936	1,766	0	0	0	0	0	0
40%	0	0	0	217	2,321	430	0	0	0	0	0	0
50%	0	0	0	0	620	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	186	1,707	4,311	5,707	3,611	1,236	70	22	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	60	1,913	11,002	14,017	8,487	3,219	124	71	0	0	0
Above Normal (15%)	0	701	1,323	3,899	5,668	5,787	1,386	194	0	0	0	0
Below Normal (17%)	50	71	1,948	920	1,663	91	73	14	0	0	0	0
Dry (22%)	0	239	2,599	424	671	263	0	0	0	0	0	0
Critical (15%)	0	0	28	9	11	0	0	0	0	0	0	0

Table 5C-7-2c. Colusa Weir Spill, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-26	-521	-1,703	-320	-535	0	0	0	0	0
20%	0	0	-68	-394	-585	-102	-294	0	0	0	0	0
30%	0	0	105	-191	-751	-710	0	0	0	0	0	0
40%	0	0	0	-28	-105	-103	0	0	0	0	0	0
50%	0	0	0	0	-16	-1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	-2	-47	-215	-286	-202	-93	-5	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-1	-4	-437	-610	-335	-253	-22	-1	0	0	0
Above Normal (15%)	0	-41	-48	-438	-411	-481	-46	0	0	0	0	0
Below Normal (17%)	4	1	-78	-51	-47	-52	-36	12	0	0	0	0
Dry (22%)	0	22	-118	-16	-112	-74	0	0	0	0	0	0
Critical (15%)	0	0	0	-3	-2	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-7-3a. Colusa Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,033	16,184	18,518	12,433	3,734	0	0	0	0	0
20%	0	0	2,279	7,846	9,890	4,404	756	0	0	0	0	0
30%	0	0	206	2,234	5,687	2,476	0	0	0	0	0	0
40%	0	0	0	245	2,425	534	0	0	0	0	0	0
50%	0	0	0	0	636	1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	8	188	1,755	4,526	5,993	3,813	1,329	75	23	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	61	1,916	11,439	14,627	8,821	3,472	146	71	0	0	0
Above Normal (15%)	0	742	1,372	4,337	6,079	6,268	1,432	194	0	0	0	0
Below Normal (17%)	47	70	2,027	971	1,710	143	109	2	0	0	0	0
Dry (22%)	0	218	2,716	440	783	337	0	0	0	0	0	0
Critical (15%)	0	0	28	13	14	0	0	0	0	0	0	0

Table 5C-7-3b. Colusa Weir Spill, Alternative 2 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,015	15,677	17,500	12,122	3,326	0	0	0	0	0
20%	0	0	2,222	7,457	9,087	4,342	462	0	0	0	0	0
30%	0	0	209	2,043	4,989	1,750	0	0	0	0	0	0
40%	0	0	0	219	2,257	524	0	0	0	0	0	0
50%	0	0	0	0	506	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	177	1,724	4,307	5,740	3,633	1,256	69	22	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	60	1,913	10,998	14,146	8,561	3,281	124	71	0	0	0
Above Normal (15%)	0	678	1,353	3,891	5,726	5,774	1,386	194	0	0	0	0
Below Normal (17%)	50	70	1,924	915	1,559	91	73	11	0	0	0	0
Dry (22%)	0	211	2,673	425	681	265	0	0	0	0	0	0
Critical (15%)	0	0	28	9	8	0	0	0	0	0	0	0

Table 5C-7-3c. Colusa Weir Spill, Alternative 2 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-18	-507	-1,018	-311	-408	0	0	0	0	0
20%	0	0	-57	-389	-804	-62	-294	0	0	0	0	0
30%	0	0	3	-191	-698	-726	0	0	0	0	0	0
40%	0	0	0	-26	-169	-10	0	0	0	0	0	0
50%	0	0	0	0	-130	-1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	-11	-31	-219	-253	-180	-73	-5	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-1	-4	-442	-482	-261	-191	-22	-1	0	0	0
Above Normal (15%)	0	-64	-19	-446	-353	-494	-47	0	0	0	0	0
Below Normal (17%)	3	0	-103	-57	-151	-52	-36	9	0	0	0	0
Dry (22%)	0	-6	-44	-15	-102	-73	0	0	0	0	0	0
Critical (15%)	0	0	0	-3	-6	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-7-4a. Colusa Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,033	16,184	18,518	12,433	3,734	0	0	0	0	0
20%	0	0	2,279	7,846	9,890	4,404	756	0	0	0	0	0
30%	0	0	206	2,234	5,687	2,476	0	0	0	0	0	0
40%	0	0	0	245	2,425	534	0	0	0	0	0	0
50%	0	0	0	0	636	1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	8	188	1,755	4,526	5,993	3,813	1,329	75	23	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	61	1,916	11,439	14,627	8,821	3,472	146	71	0	0	0
Above Normal (15%)	0	742	1,372	4,337	6,079	6,268	1,432	194	0	0	0	0
Below Normal (17%)	47	70	2,027	971	1,710	143	109	2	0	0	0	0
Dry (22%)	0	218	2,716	440	783	337	0	0	0	0	0	0
Critical (15%)	0	0	28	13	14	0	0	0	0	0	0	0

Table 5C-7-4b. Colusa Weir Spill, Alternative 3 020121, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	6,017	15,664	16,823	12,092	3,200	0	0	0	0	0
20%	0	0	2,831	7,459	9,087	4,021	462	0	0	0	0	0
30%	0	0	370	2,043	5,178	1,820	0	0	0	0	0	0
40%	0	0	0	215	2,222	388	0	0	0	0	0	0
50%	0	0	0	0	737	0	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	196	1,722	4,332	5,757	3,583	1,198	71	22	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	60	1,914	11,070	14,052	8,411	3,102	124	71	0	0	0
Above Normal (15%)	0	762	1,271	3,900	5,888	5,760	1,382	194	0	0	0	0
Below Normal (17%)	51	70	2,011	921	1,727	90	73	23	0	0	0	0
Dry (22%)	0	246	2,649	424	653	263	0	0	0	0	0	0
Critical (15%)	0	0	28	9	8	0	0	0	0	0	0	0

Table 5C-7-4c. Colusa Weir Spill, Alternative 3 020121 minus No Action Alternative 011221, Monthly Spill (cfs)

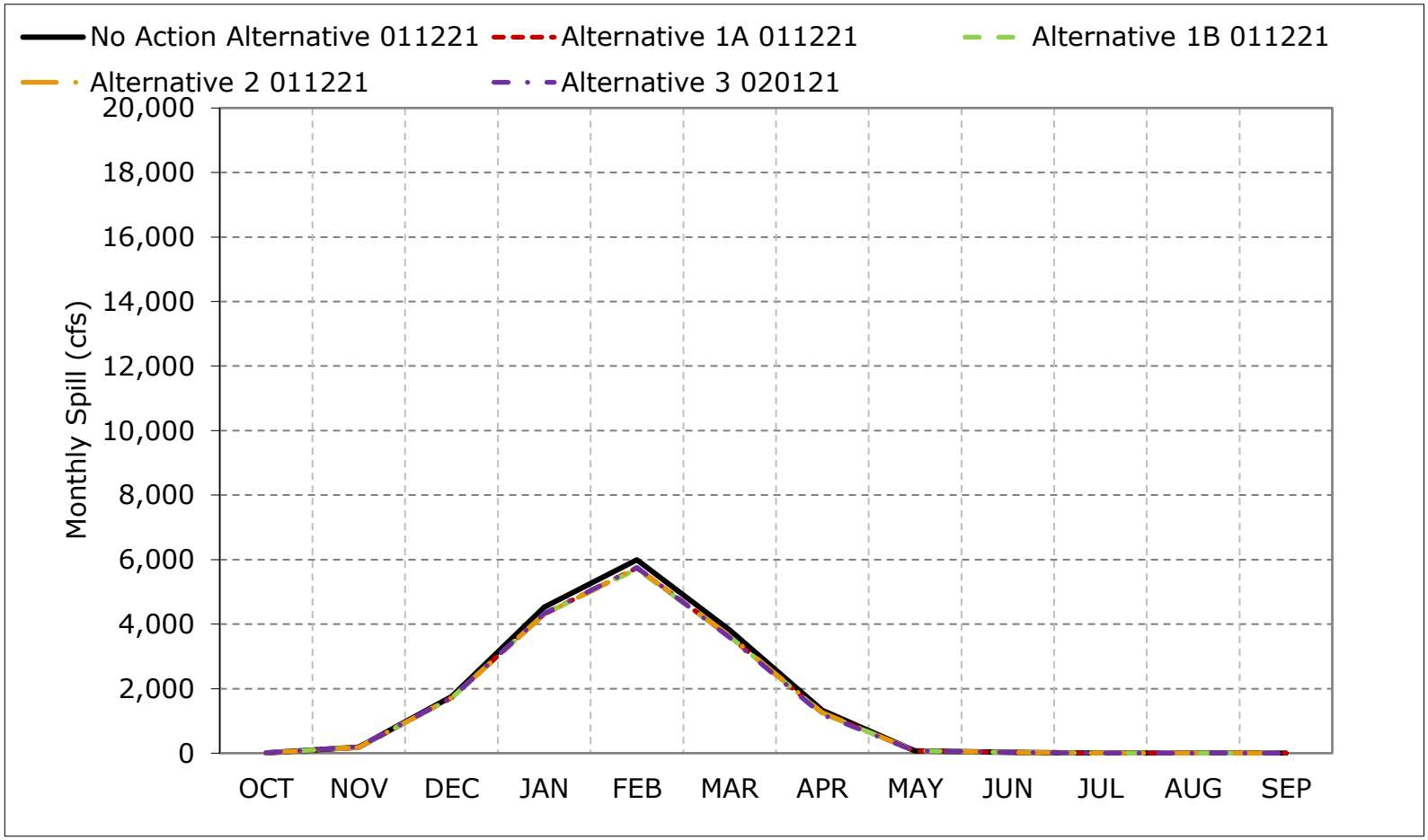
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	-16	-520	-1,695	-342	-534	0	0	0	0	0
20%	0	0	552	-387	-803	-383	-294	0	0	0	0	0
30%	0	0	164	-191	-509	-657	0	0	0	0	0	0
40%	0	0	0	-31	-204	-146	0	0	0	0	0	0
50%	0	0	0	0	101	-1	0	0	0	0	0	0
60%	0	0	0	0	0	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	9	-33	-194	-237	-230	-131	-3	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-1	-3	-369	-575	-410	-369	-22	-1	0	0	0
Above Normal (15%)	0	19	-101	-437	-190	-508	-51	0	0	0	0	0
Below Normal (17%)	5	1	-16	-50	17	-53	-36	21	0	0	0	0
Dry (22%)	0	28	-67	-16	-129	-74	0	0	0	0	0	0
Critical (15%)	0	0	0	-4	-6	0	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

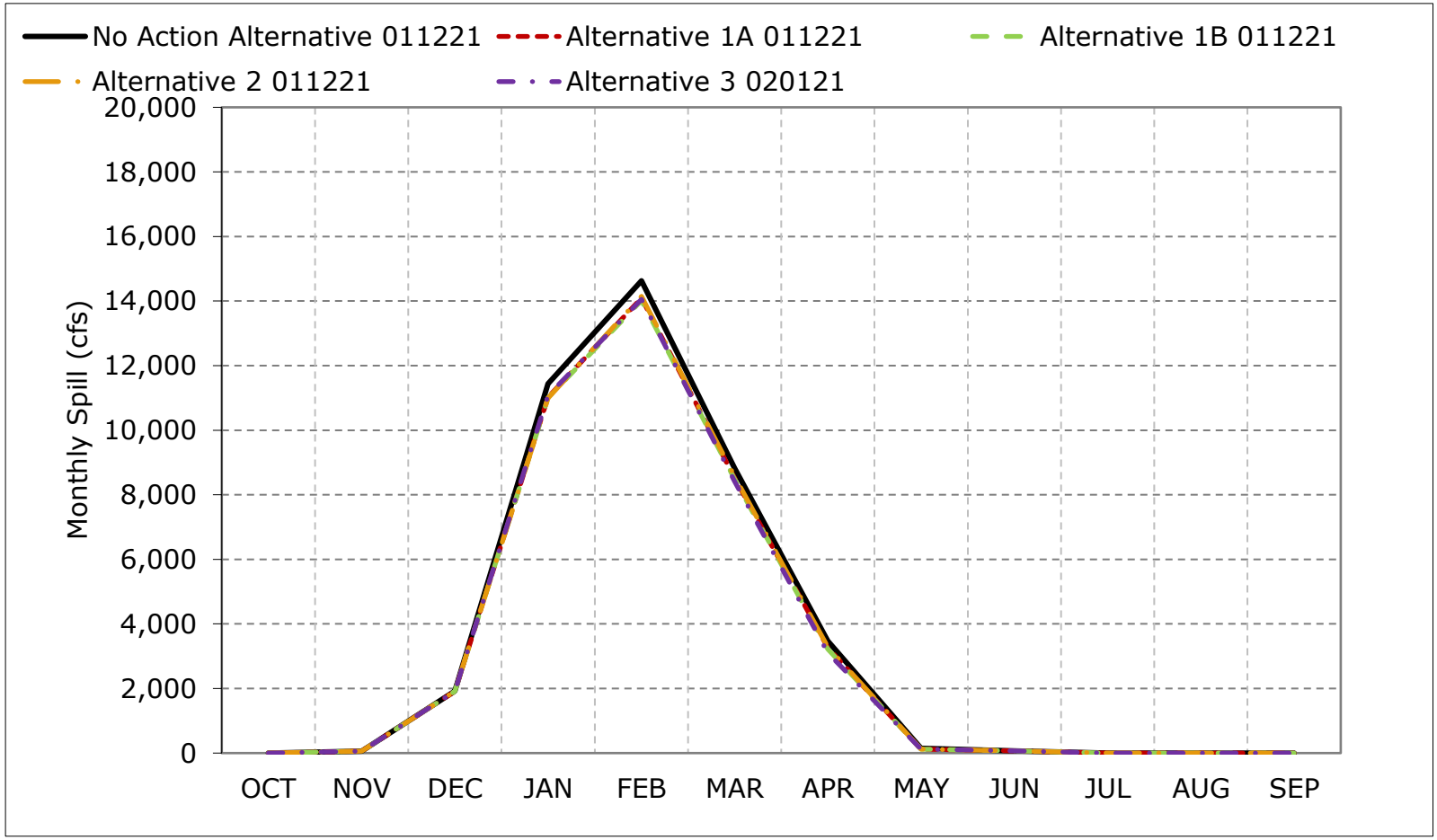
c These results are displayed with calendar year - year type sorting.

Figure 5C-7-1. Colusa Weir Spill, Long-Term Average Spill



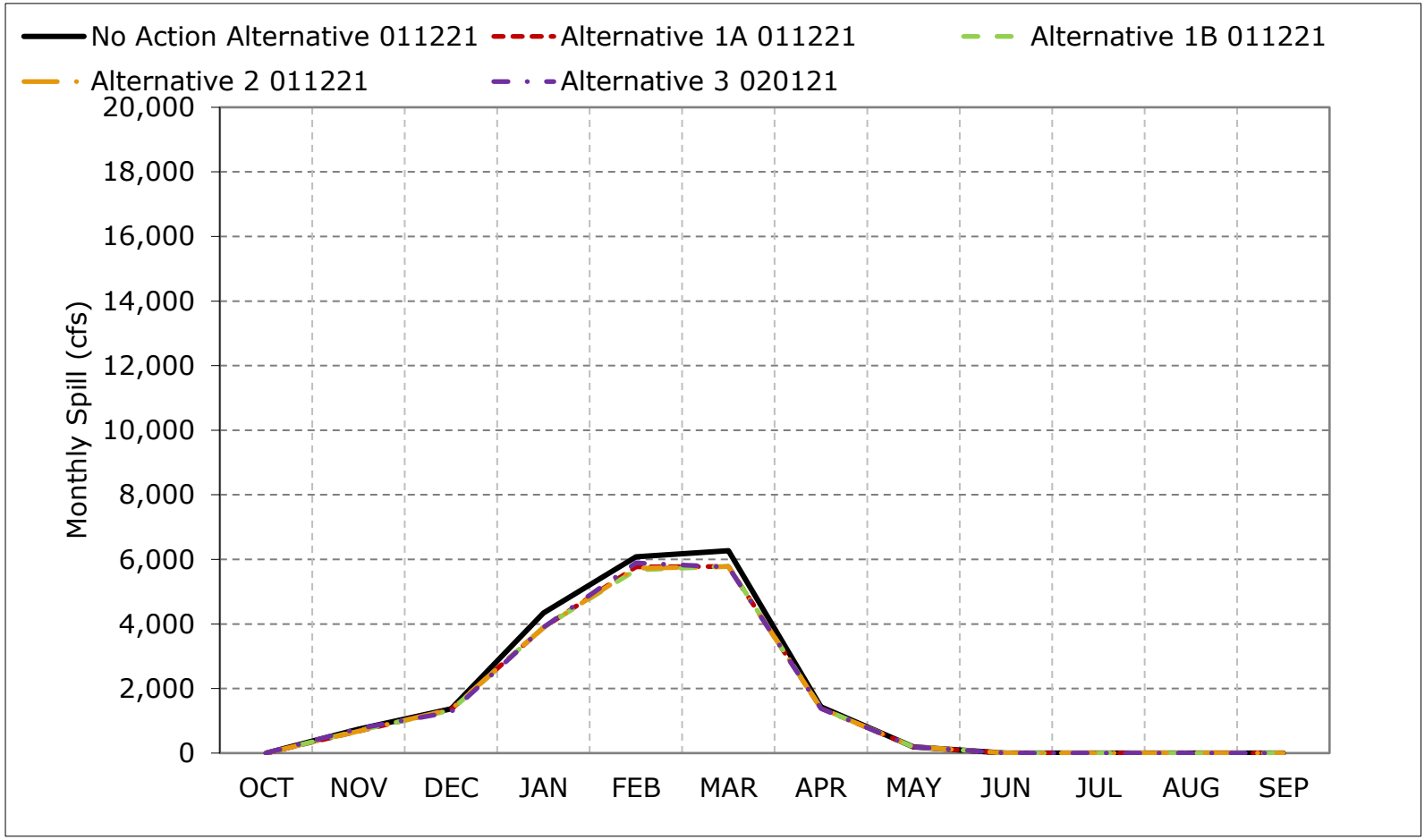
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-7-2. Colusa Weir Spill, Wet Year Average Spill



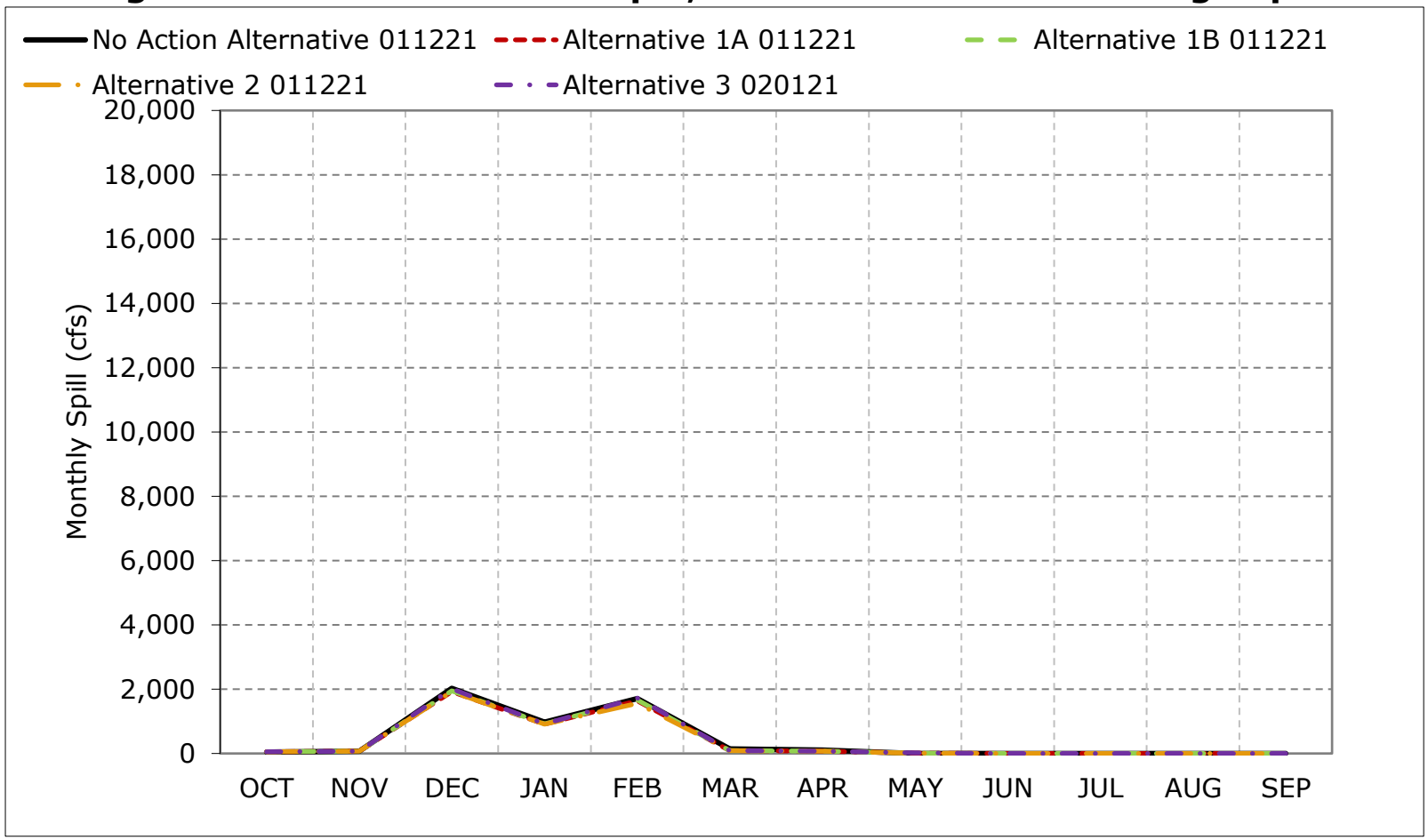
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-7-3. Colusa Weir Spill, Above Normal Year Average Spill



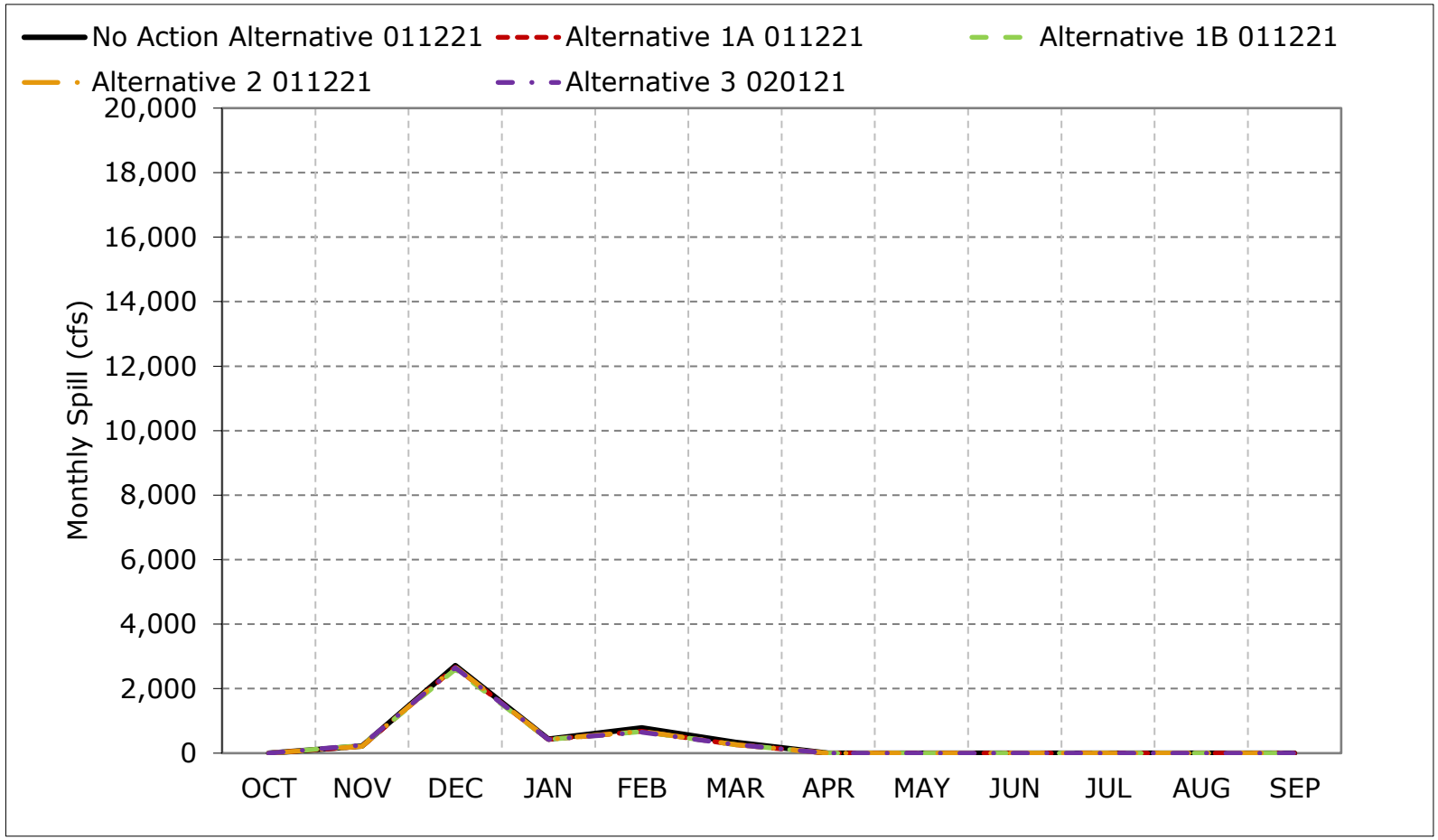
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-7-4. Colusa Weir Spill, Below Normal Year Average Spill



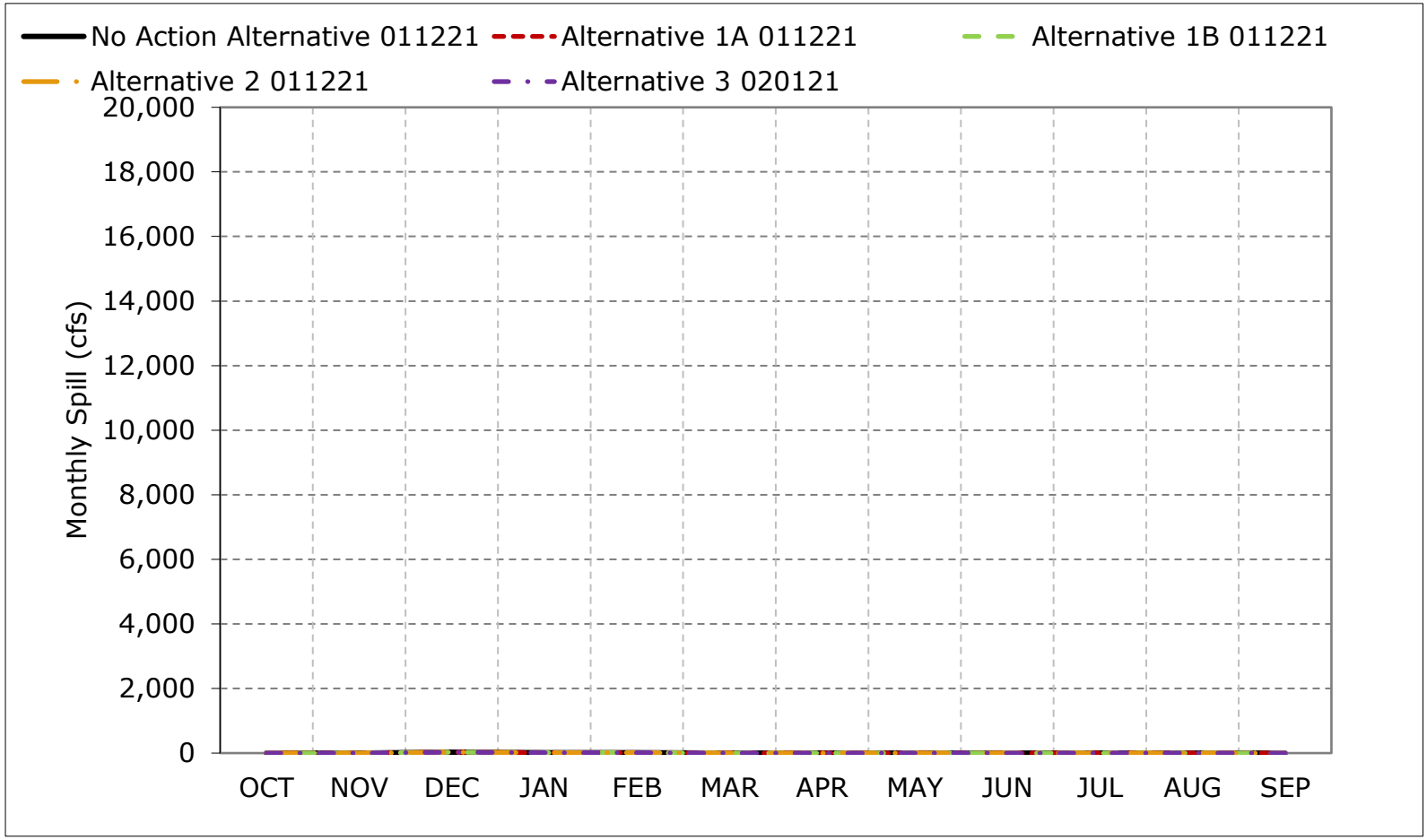
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-7-5. Colusa Weir Spill, Dry Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-7-6. Colusa Weir Spill, Critical Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-7-7. Colusa Weir Spill, October

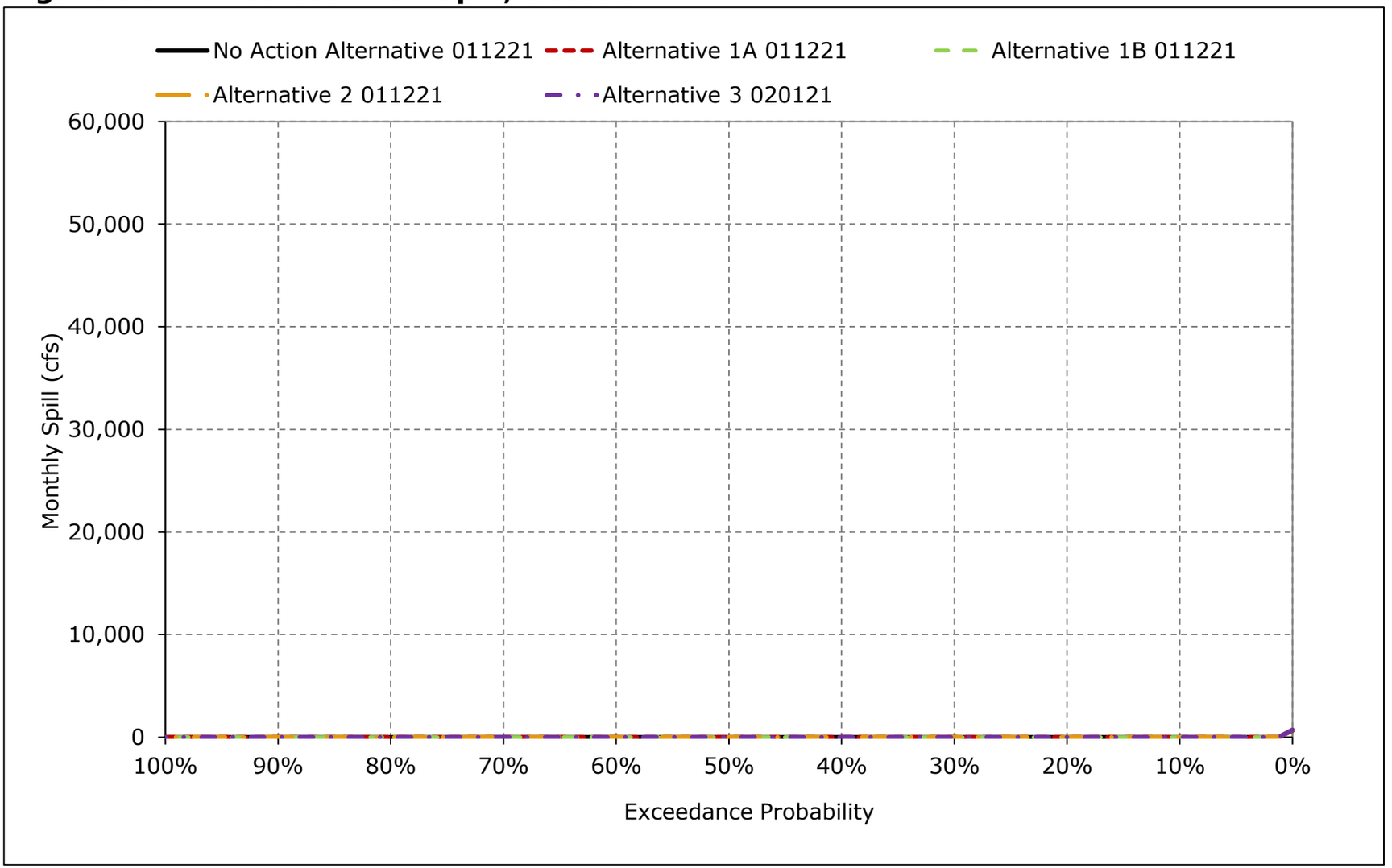


Figure 5C-7-8. Colusa Weir Spill, November

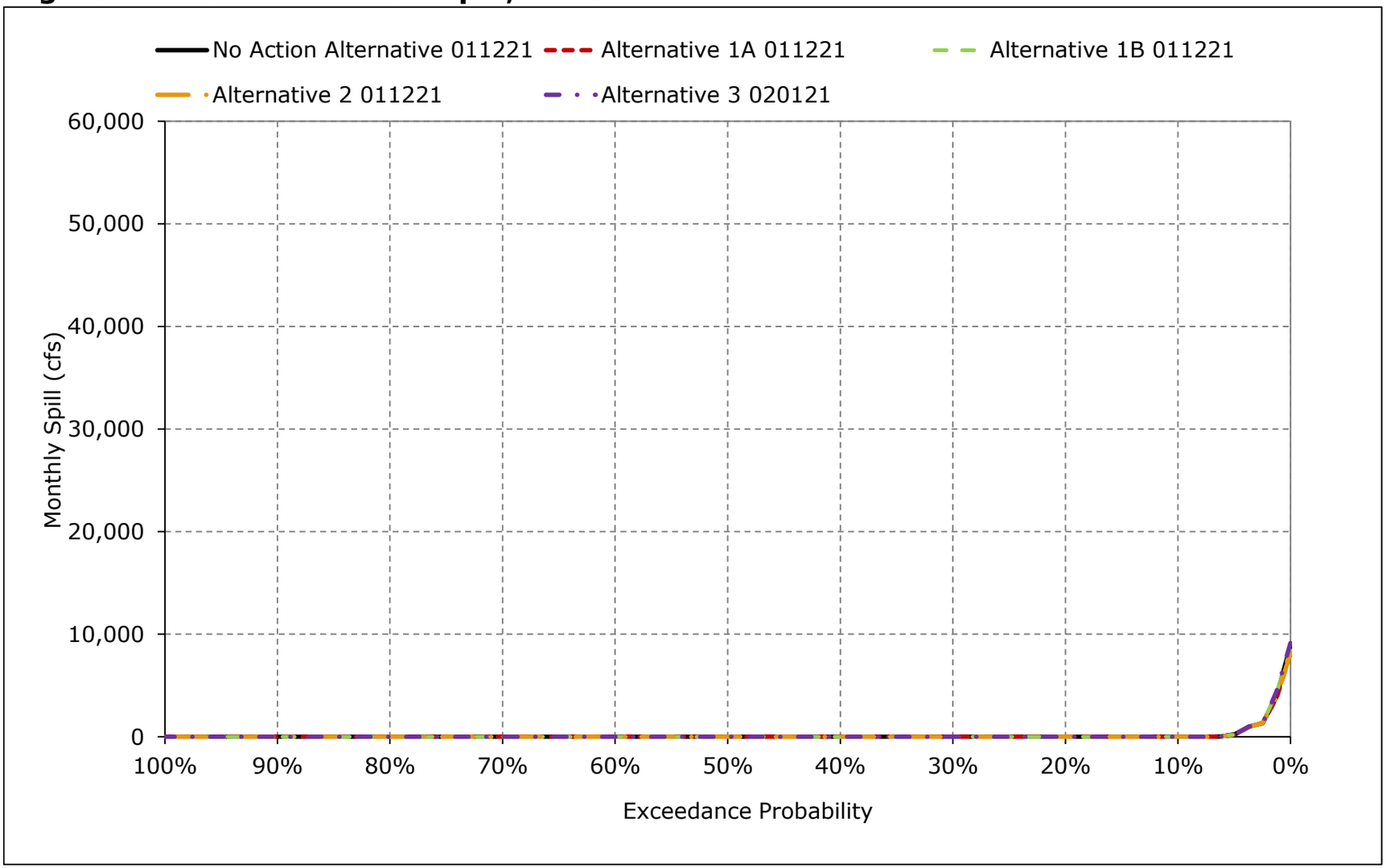


Figure 5C-7-9. Colusa Weir Spill, December

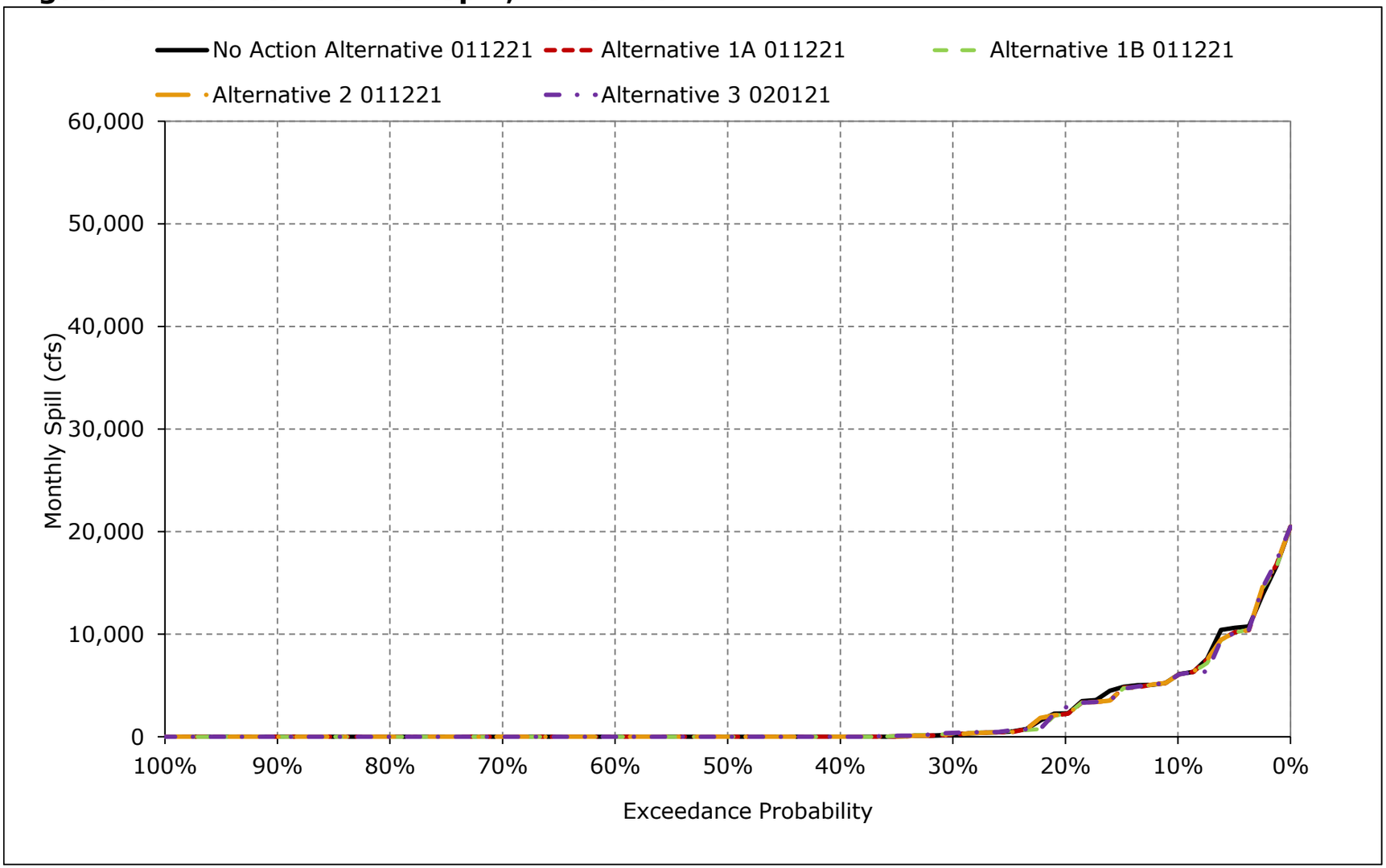


Figure 5C-7-10. Colusa Weir Spill, January

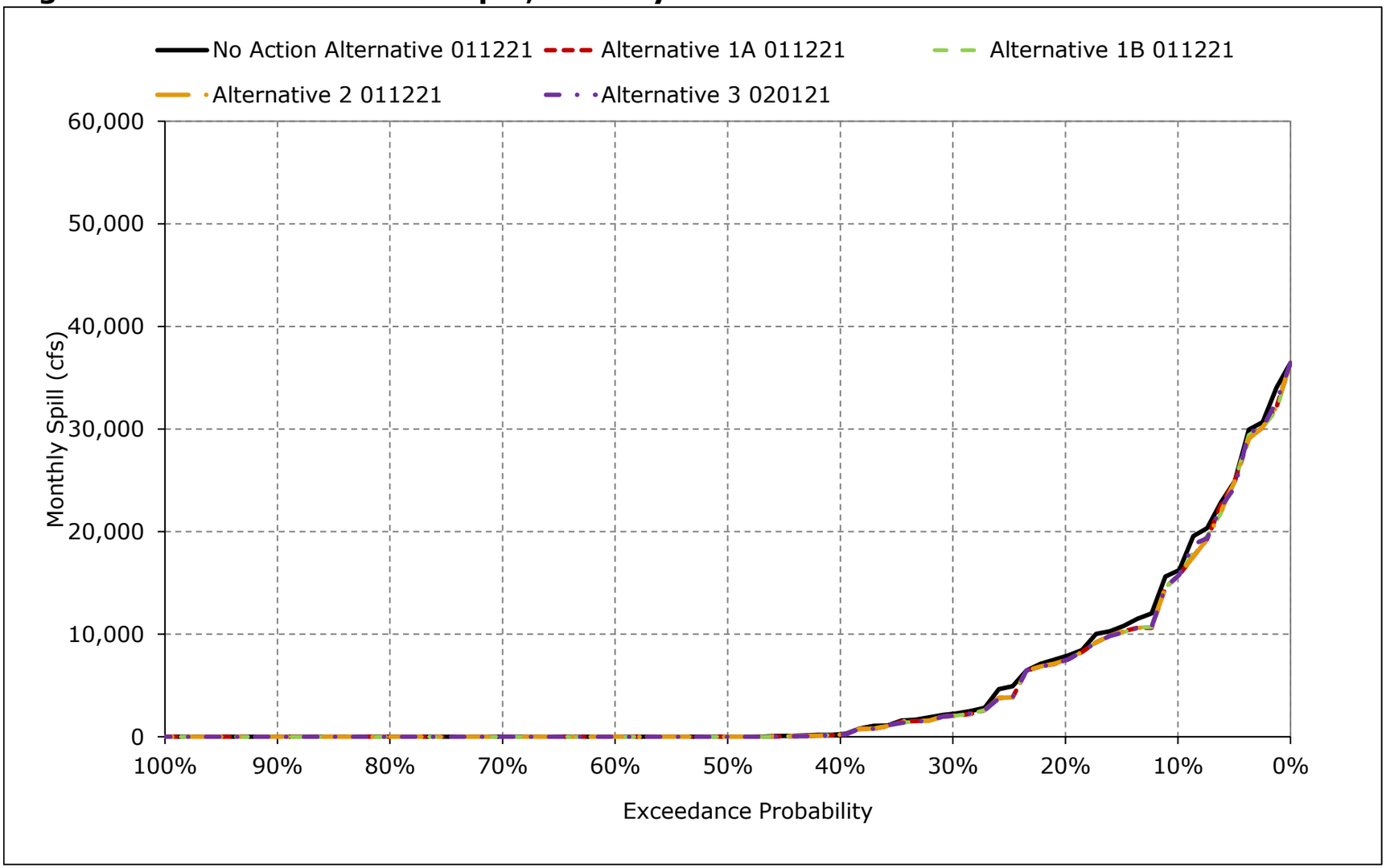


Figure 5C-7-11. Colusa Weir Spill, February

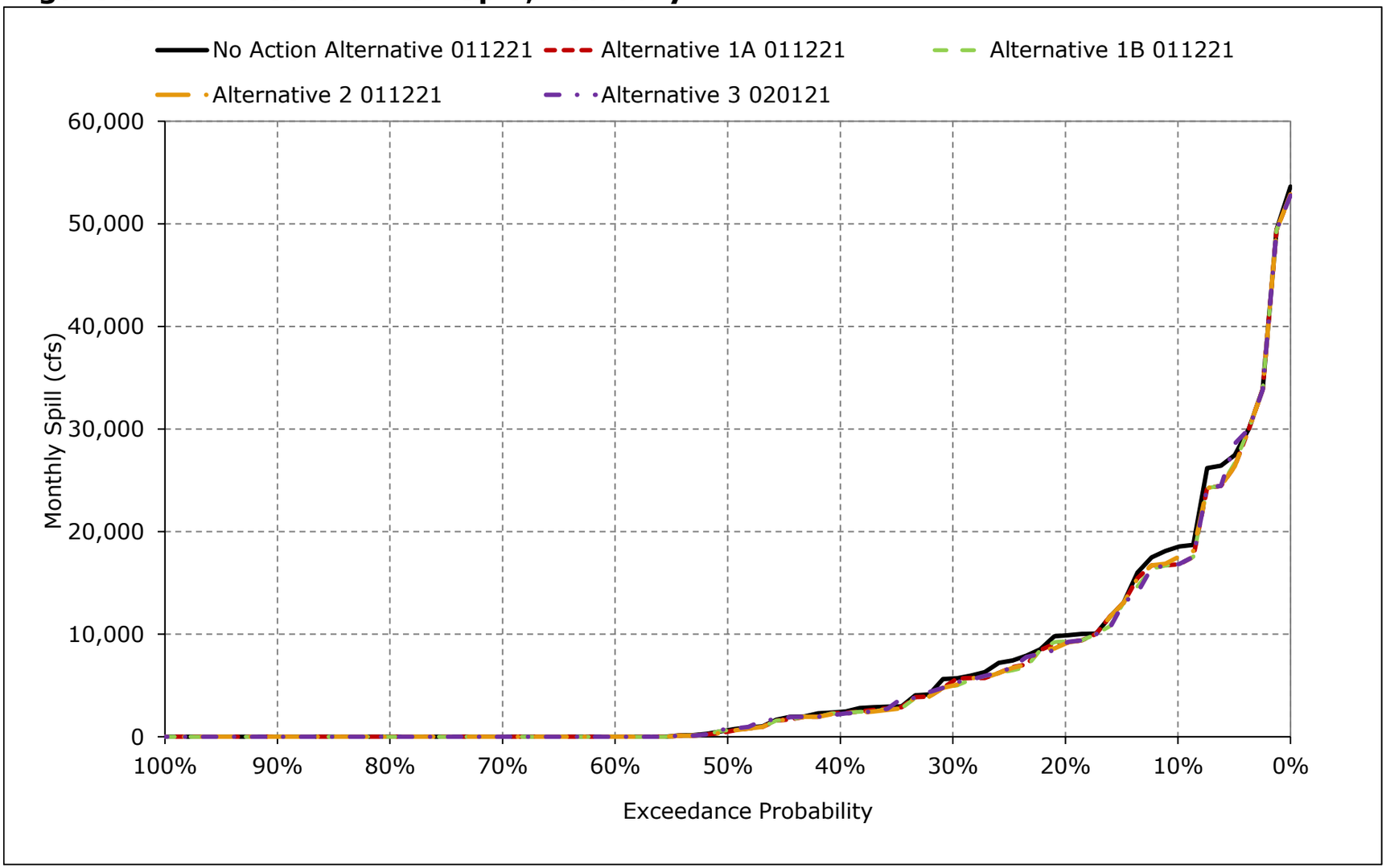


Figure 5C-7-12. Colusa Weir Spill, March

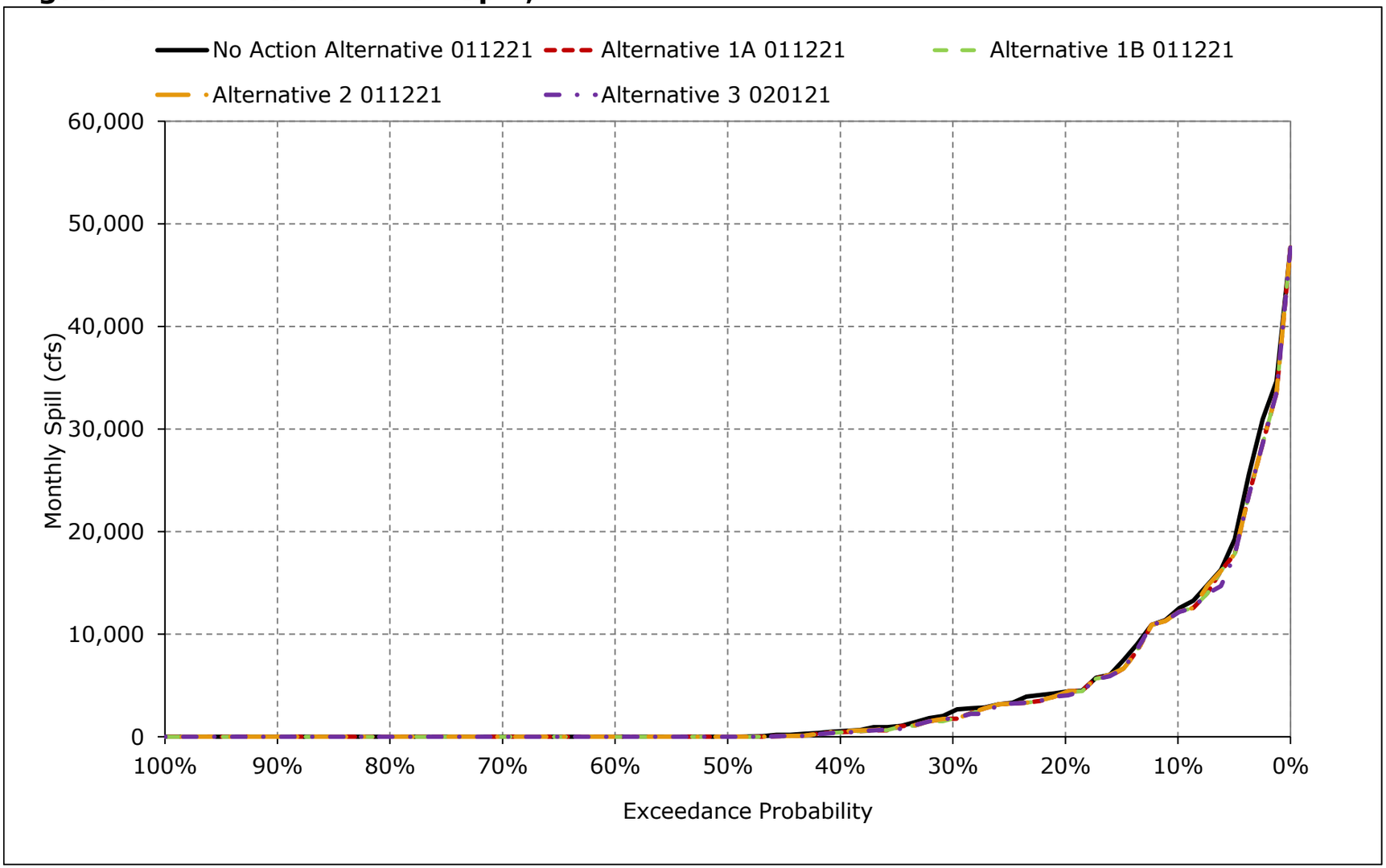


Figure 5C-7-13. Colusa Weir Spill, April

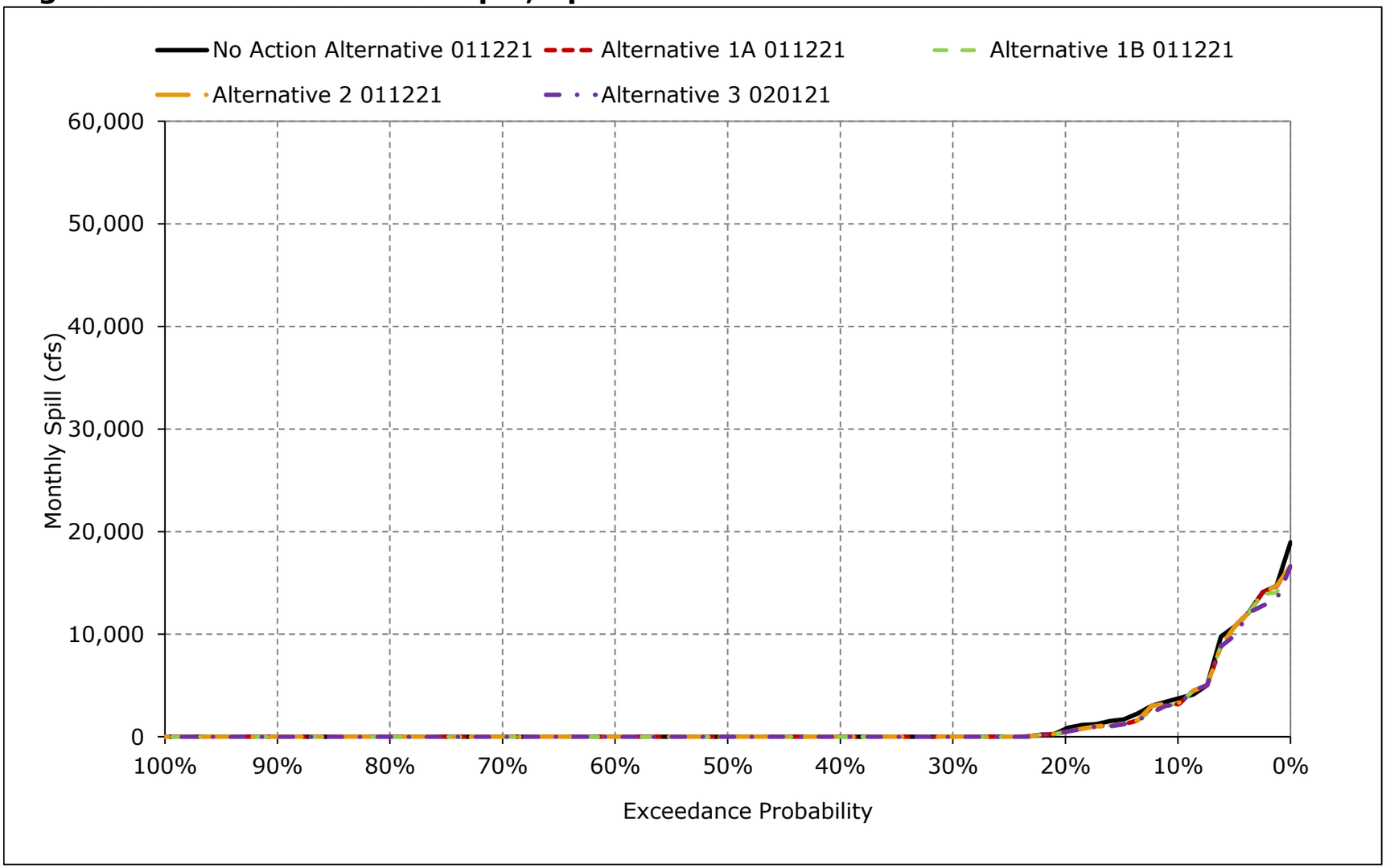


Figure 5C-7-14. Colusa Weir Spill, May

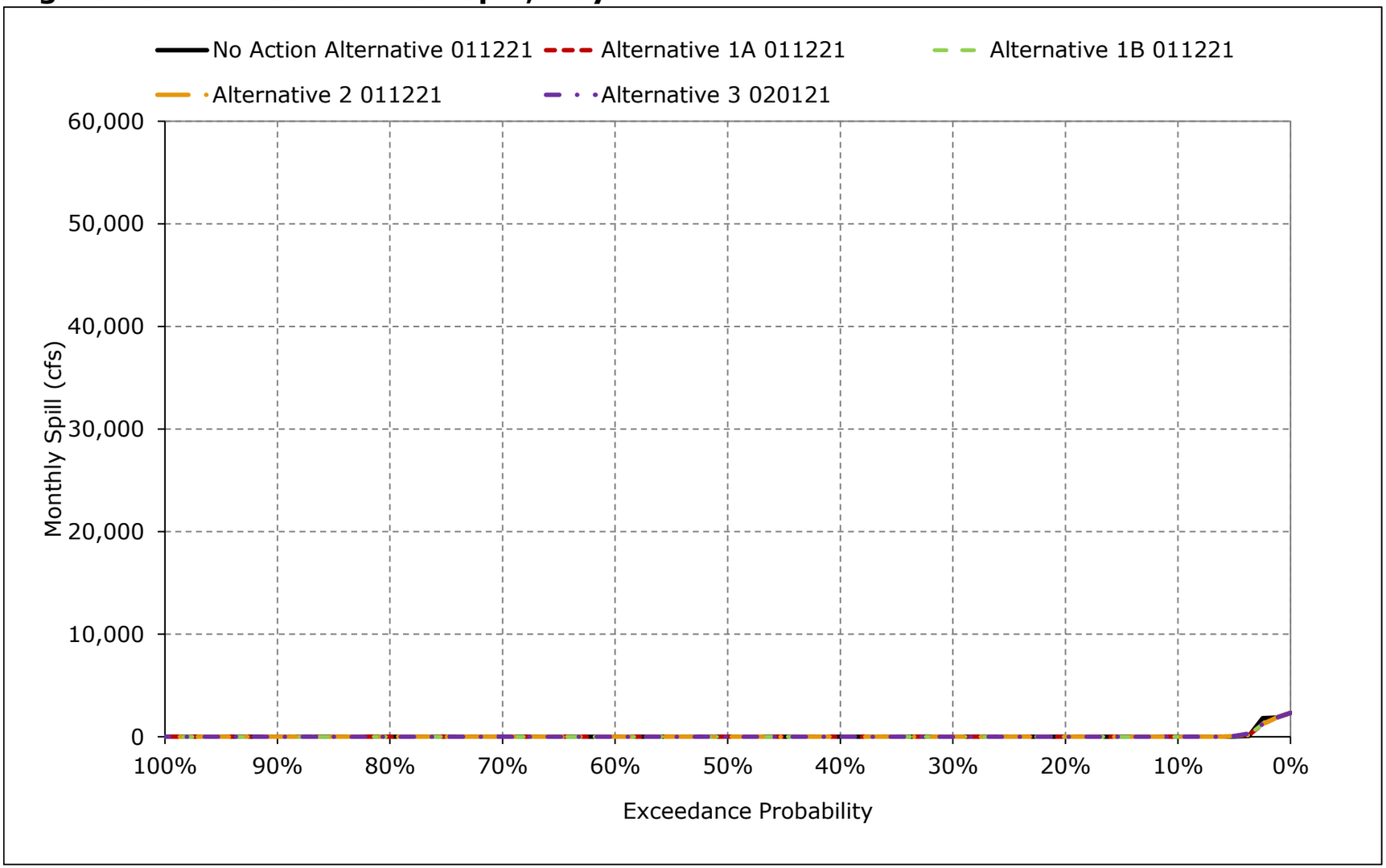


Figure 5C-7-15. Colusa Weir Spill, June

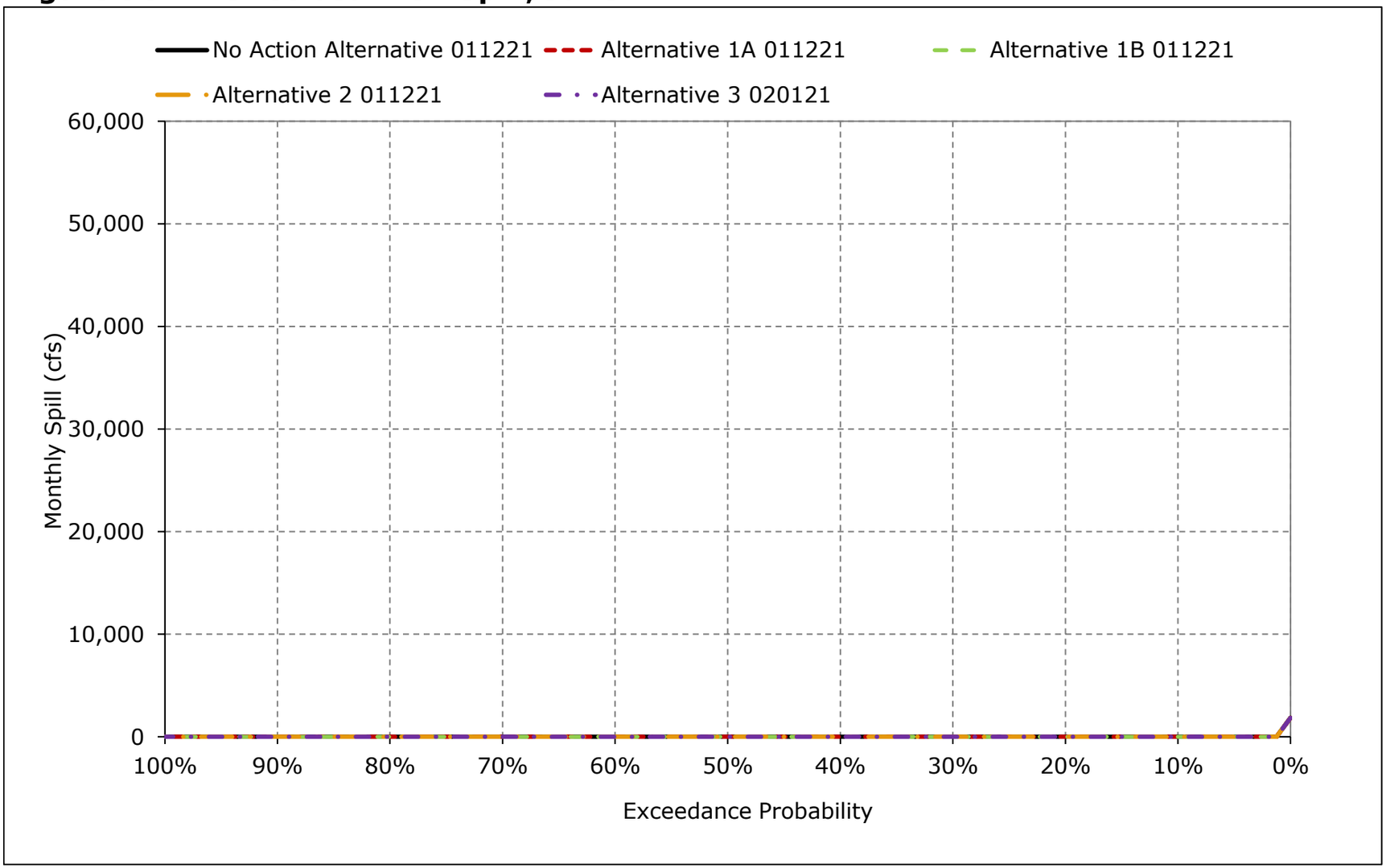


Figure 5C-7-16. Colusa Weir Spill, July

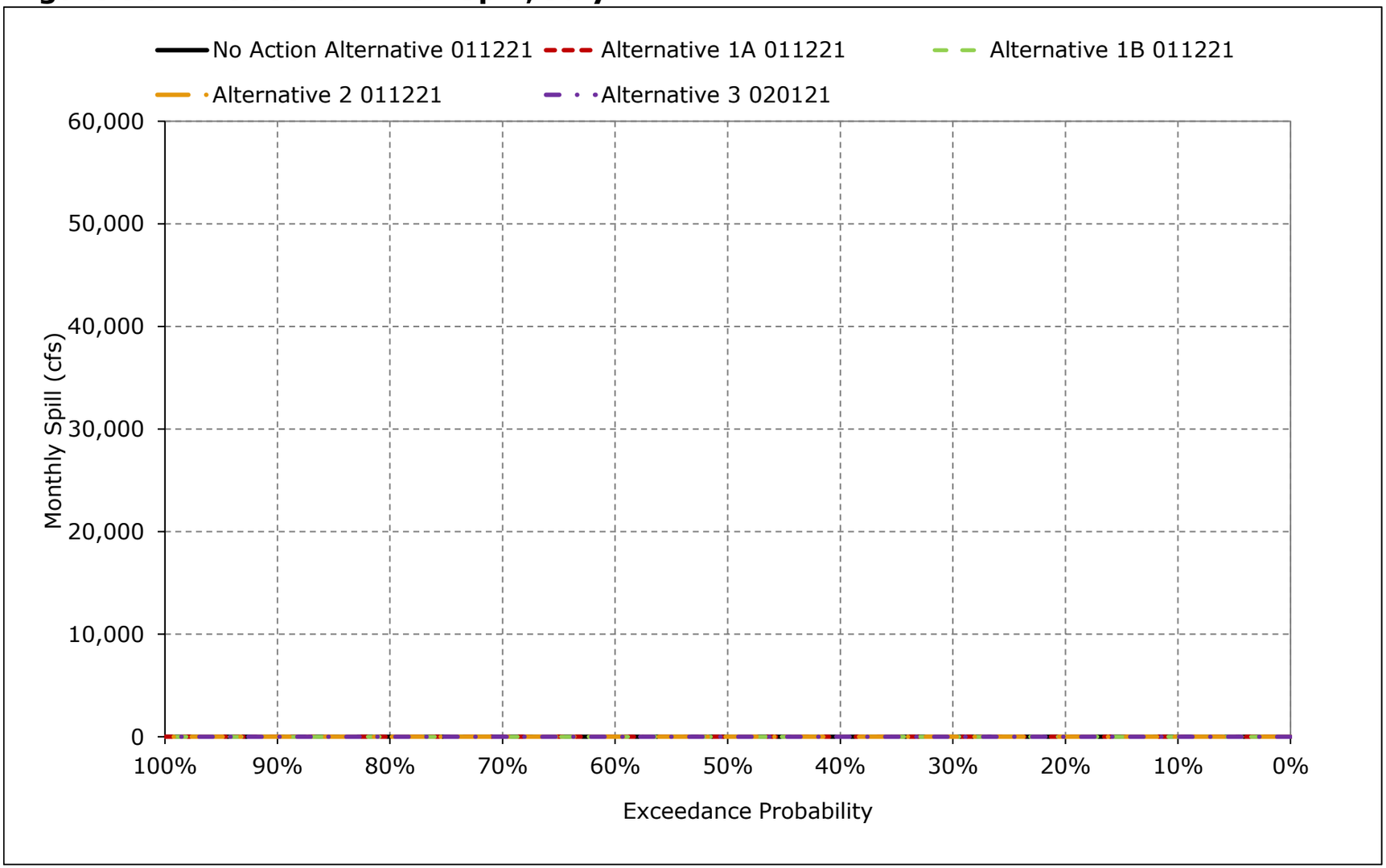


Figure 5C-7-17. Colusa Weir Spill, August

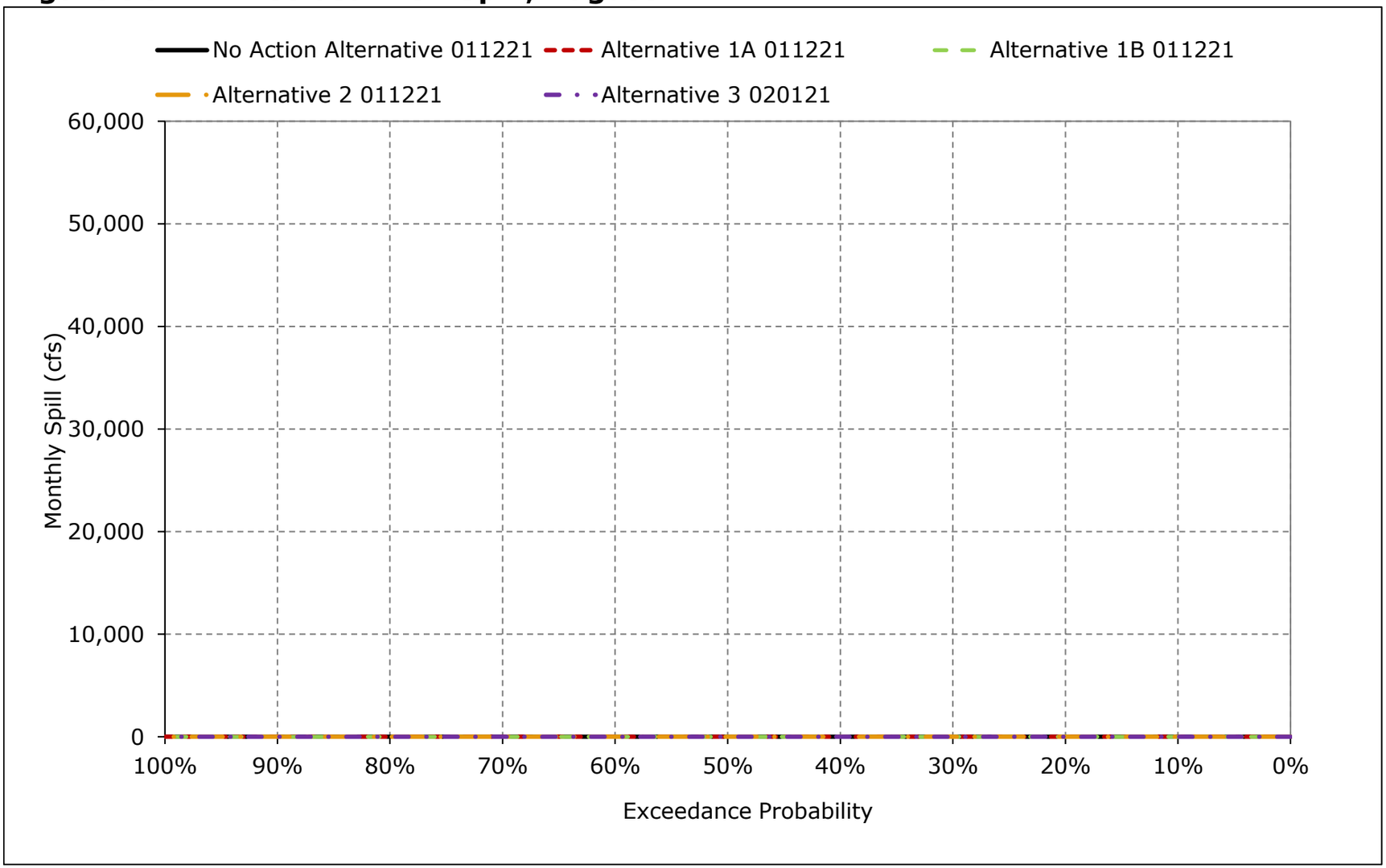


Figure 5C-7-18. Colusa Weir Spill, September

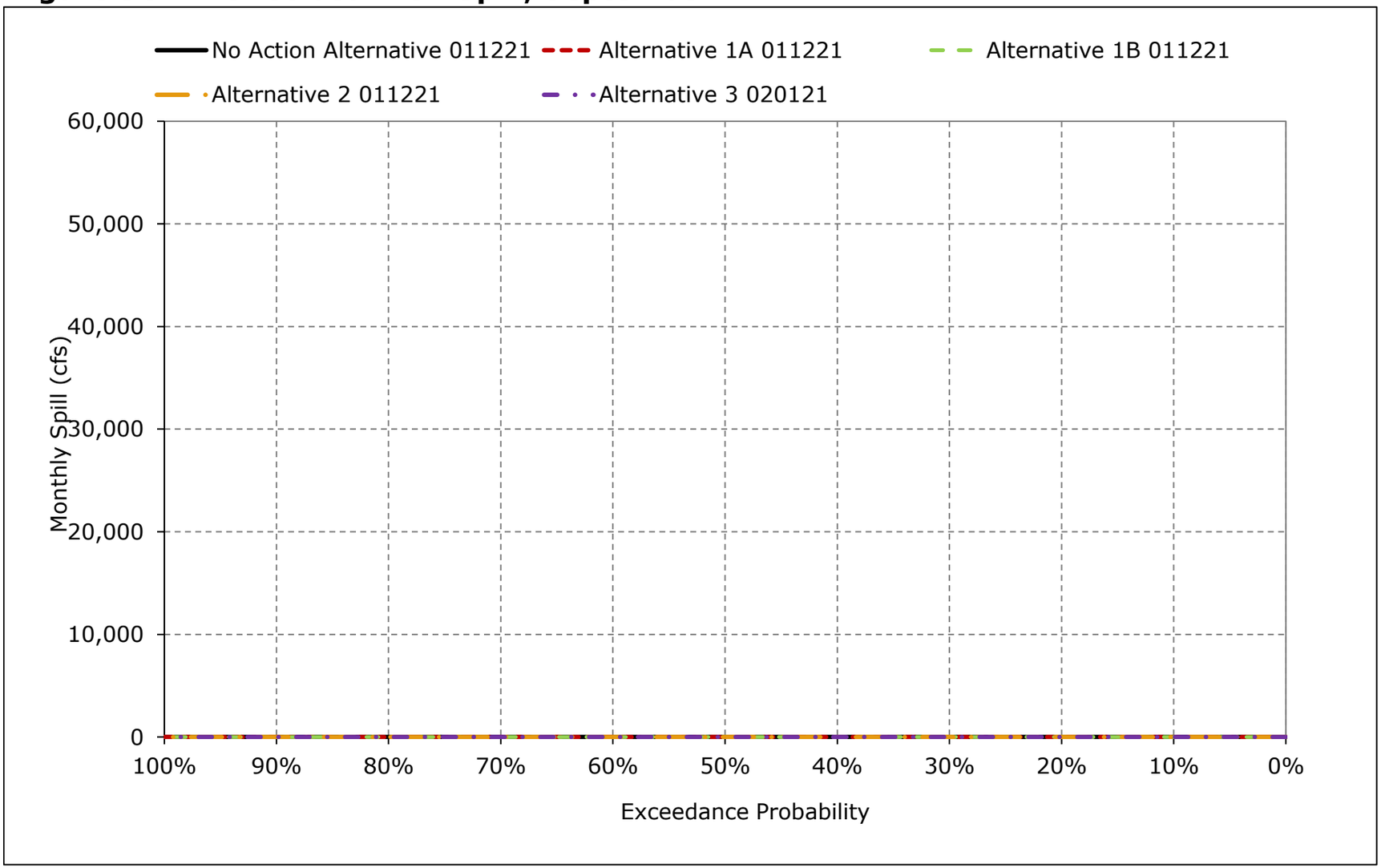


Table 5C-8-1a. Tisdale Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	11	4,748	9,067	10,623	6,790	3,475	0	0	0	0	0
20%	0	0	2,243	4,799	6,383	3,778	1,377	0	0	0	0	0
30%	0	0	531	2,104	4,193	2,506	18	0	0	0	0	0
40%	0	0	130	1,067	2,762	1,096	0	0	0	0	0	0
50%	0	0	0	77	1,040	222	0	0	0	0	0	0
60%	0	0	0	0	116	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	166	1,185	2,474	3,368	2,244	1,008	100	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	91	1,400	5,731	7,439	4,842	2,632	183	175	0	0	0
Above Normal (15%)	0	532	1,142	3,015	3,841	3,802	970	239	0	0	0	0
Below Normal (17%)	54	92	1,481	786	1,462	358	181	42	0	0	0	0
Dry (22%)	0	198	1,407	330	833	413	2	0	0	0	0	0
Critical (15%)	0	0	85	65	103	3	0	0	0	0	0	0

Table 5C-8-1b. Tisdale Weir Spill, Alternative 1A 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	18	4,429	8,822	9,969	6,487	3,111	0	0	0	0	0
20%	0	0	2,228	4,587	6,068	3,384	1,132	0	0	0	0	0
30%	0	0	525	1,922	3,994	2,364	19	0	0	0	0	0
40%	0	0	108	854	2,626	1,057	0	0	0	0	0	0
50%	0	0	0	66	911	142	0	0	0	0	0	0
60%	0	0	0	0	77	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	10	160	1,158	2,354	3,230	2,140	939	97	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	88	1,393	5,527	7,190	4,703	2,455	167	173	0	0	0
Above Normal (15%)	0	505	1,126	2,712	3,658	3,581	949	239	0	0	0	0
Below Normal (17%)	57	93	1,413	744	1,393	298	122	51	0	0	0	0
Dry (22%)	0	193	1,362	314	749	335	2	0	0	0	0	0
Critical (15%)	0	0	76	61	87	0	0	0	0	0	0	0

Table 5C-8-1c. Tisdale Weir Spill, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	7	-319	-245	-654	-303	-363	0	0	0	0	0
20%	0	0	-16	-212	-316	-394	-245	0	0	0	0	0
30%	0	0	-6	-182	-200	-143	1	0	0	0	0	0
40%	0	0	-22	-213	-136	-39	0	0	0	0	0	0
50%	0	0	0	-10	-129	-80	0	0	0	0	0	0
60%	0	0	0	0	-39	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	-6	-27	-120	-138	-104	-69	-3	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-3	-7	-204	-249	-139	-177	-16	-2	0	0	0
Above Normal (15%)	0	-27	-16	-303	-183	-221	-21	0	0	0	0	0
Below Normal (17%)	3	1	-68	-42	-69	-60	-59	9	0	0	0	0
Dry (22%)	0	-5	-45	-16	-84	-78	0	0	0	0	0	0
Critical (15%)	0	0	-9	-5	-16	-3	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-8-2a. Tisdale Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	11	4,748	9,067	10,623	6,790	3,475	0	0	0	0	0
20%	0	0	2,243	4,799	6,383	3,778	1,377	0	0	0	0	0
30%	0	0	531	2,104	4,193	2,506	18	0	0	0	0	0
40%	0	0	130	1,067	2,762	1,096	0	0	0	0	0	0
50%	0	0	0	77	1,040	222	0	0	0	0	0	0
60%	0	0	0	0	116	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	166	1,185	2,474	3,368	2,244	1,008	100	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	91	1,400	5,731	7,439	4,842	2,632	183	175	0	0	0
Above Normal (15%)	0	532	1,142	3,015	3,841	3,802	970	239	0	0	0	0
Below Normal (17%)	54	92	1,481	786	1,462	358	181	42	0	0	0	0
Dry (22%)	0	198	1,407	330	833	413	2	0	0	0	0	0
Critical (15%)	0	0	85	65	103	3	0	0	0	0	0	0

Table 5C-8-2b. Tisdale Weir Spill, Alternative 1B 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	21	4,428	8,895	9,970	6,429	3,111	0	0	0	0	0
20%	0	0	2,246	4,587	6,004	3,403	1,132	0	0	0	0	0
30%	0	0	603	1,903	3,909	2,354	19	0	0	0	0	0
40%	0	0	177	848	2,626	1,055	0	0	0	0	0	0
50%	0	0	0	66	927	140	0	0	0	0	0	0
60%	0	0	0	0	74	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	10	168	1,155	2,352	3,229	2,135	929	97	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	88	1,396	5,517	7,187	4,686	2,423	168	173	0	0	0
Above Normal (15%)	0	514	1,104	2,715	3,607	3,591	955	239	0	0	0	0
Below Normal (17%)	57	105	1,441	748	1,440	298	122	53	0	0	0	0
Dry (22%)	0	214	1,339	314	745	330	2	0	0	0	0	0
Critical (15%)	0	0	76	60	89	0	0	0	0	0	0	0

Table 5C-8-2c. Tisdale Weir Spill, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	10	-319	-172	-653	-362	-363	0	0	0	0	0
20%	0	0	3	-212	-380	-375	-245	0	0	0	0	0
30%	0	0	72	-201	-284	-152	1	0	0	0	0	0
40%	0	0	47	-218	-136	-42	0	0	0	0	0	0
50%	0	0	0	-10	-114	-82	0	0	0	0	0	0
60%	0	0	0	0	-42	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	2	-30	-122	-139	-109	-79	-3	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-3	-4	-214	-253	-156	-209	-16	-1	0	0	0
Above Normal (15%)	0	-18	-38	-300	-234	-211	-15	0	0	0	0	0
Below Normal (17%)	4	13	-39	-37	-21	-60	-59	12	0	0	0	0
Dry (22%)	0	17	-68	-16	-88	-83	0	0	0	0	0	0
Critical (15%)	0	0	-9	-5	-13	-3	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-8-3a. Tisdale Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	11	4,748	9,067	10,623	6,790	3,475	0	0	0	0	0
20%	0	0	2,243	4,799	6,383	3,778	1,377	0	0	0	0	0
30%	0	0	531	2,104	4,193	2,506	18	0	0	0	0	0
40%	0	0	130	1,067	2,762	1,096	0	0	0	0	0	0
50%	0	0	0	77	1,040	222	0	0	0	0	0	0
60%	0	0	0	0	116	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	166	1,185	2,474	3,368	2,244	1,008	100	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	91	1,400	5,731	7,439	4,842	2,632	183	175	0	0	0
Above Normal (15%)	0	532	1,142	3,015	3,841	3,802	970	239	0	0	0	0
Below Normal (17%)	54	92	1,481	786	1,462	358	181	42	0	0	0	0
Dry (22%)	0	198	1,407	330	833	413	2	0	0	0	0	0
Critical (15%)	0	0	85	65	103	3	0	0	0	0	0	0

Table 5C-8-3b. Tisdale Weir Spill, Alternative 2 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	0	4,429	8,818	10,010	6,765	3,111	0	0	0	0	0
20%	0	0	2,228	4,587	6,069	3,384	1,132	0	0	0	0	0
30%	0	0	525	1,965	3,934	2,370	19	0	0	0	0	0
40%	0	0	109	1,000	2,626	1,058	0	0	0	0	0	0
50%	0	0	0	66	910	140	0	0	0	0	0	0
60%	0	0	0	0	75	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	10	160	1,159	2,356	3,229	2,150	946	97	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	88	1,393	5,533	7,209	4,733	2,478	168	173	0	0	0
Above Normal (15%)	0	505	1,126	2,712	3,647	3,580	949	239	0	0	0	0
Below Normal (17%)	57	91	1,414	744	1,359	298	122	51	0	0	0	0
Dry (22%)	0	193	1,366	314	749	338	1	0	0	0	0	0
Critical (15%)	0	0	76	61	87	0	0	0	0	0	0	0

Table 5C-8-3c. Tisdale Weir Spill, Alternative 2 011221 minus No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-11	-318	-249	-613	-26	-363	0	0	0	0	0
20%	0	0	-16	-212	-314	-394	-245	0	0	0	0	0
30%	0	0	-5	-138	-259	-136	1	0	0	0	0	0
40%	0	0	-21	-67	-136	-39	0	0	0	0	0	0
50%	0	0	0	-10	-130	-82	0	0	0	0	0	0
60%	0	0	0	0	-41	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	-6	-26	-119	-140	-94	-62	-3	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-3	-7	-198	-231	-109	-154	-15	-1	0	0	0
Above Normal (15%)	0	-27	-17	-303	-194	-221	-21	0	0	0	0	0
Below Normal (17%)	4	-1	-67	-42	-102	-60	-59	9	0	0	0	0
Dry (22%)	0	-5	-41	-16	-84	-75	0	0	0	0	0	0
Critical (15%)	0	0	-9	-5	-16	-3	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-8-4a. Tisdale Weir Spill, No Action Alternative 011221, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	11	4,748	9,067	10,623	6,790	3,475	0	0	0	0	0
20%	0	0	2,243	4,799	6,383	3,778	1,377	0	0	0	0	0
30%	0	0	531	2,104	4,193	2,506	18	0	0	0	0	0
40%	0	0	130	1,067	2,762	1,096	0	0	0	0	0	0
50%	0	0	0	77	1,040	222	0	0	0	0	0	0
60%	0	0	0	0	116	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	9	166	1,185	2,474	3,368	2,244	1,008	100	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	91	1,400	5,731	7,439	4,842	2,632	183	175	0	0	0
Above Normal (15%)	0	532	1,142	3,015	3,841	3,802	970	239	0	0	0	0
Below Normal (17%)	54	92	1,481	786	1,462	358	181	42	0	0	0	0
Dry (22%)	0	198	1,407	330	833	413	2	0	0	0	0	0
Critical (15%)	0	0	85	65	103	3	0	0	0	0	0	0

Table 5C-8-4b. Tisdale Weir Spill, Alternative 3 020121, Monthly Spill (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	5	4,429	8,854	9,975	6,422	3,111	0	0	0	0	0
20%	0	0	2,663	4,589	5,870	3,404	1,133	0	0	0	0	0
30%	0	0	735	1,913	3,842	2,341	20	0	0	0	0	0
40%	0	0	203	852	2,767	1,022	0	0	0	0	0	0
50%	0	0	0	67	908	178	0	0	0	0	0	0
60%	0	0	0	0	77	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	10	171	1,177	2,357	3,254	2,124	910	99	55	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	88	1,396	5,533	7,209	4,635	2,363	168	174	0	0	0
Above Normal (15%)	0	540	1,127	2,714	3,705	3,571	952	239	0	0	0	0
Below Normal (17%)	59	96	1,482	749	1,471	304	122	63	0	0	0	0
Dry (22%)	0	218	1,391	314	738	362	2	0	0	0	0	0
Critical (15%)	0	0	76	60	86	0	0	0	0	0	0	0

Table 5C-8-4c. Tisdale Weir Spill, Alternative 3 020121 minus No Action Alternative 011221, Monthly Spill (cfs)

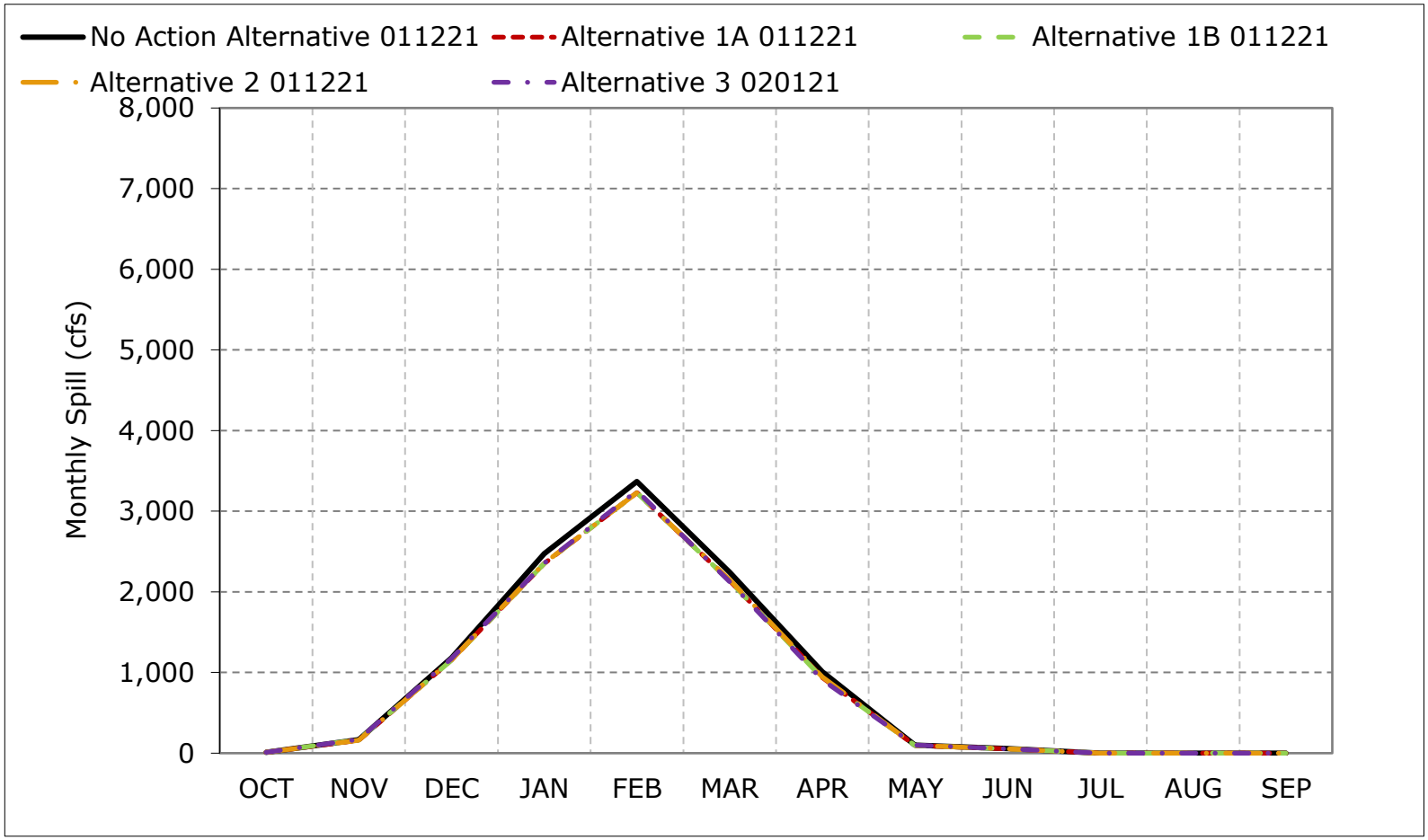
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-6	-319	-213	-648	-369	-363	0	0	0	0	0
20%	0	0	419	-210	-513	-375	-244	0	0	0	0	0
30%	0	0	205	-190	-351	-165	1	0	0	0	0	0
40%	0	0	73	-215	5	-74	0	0	0	0	0	0
50%	0	0	0	-10	-132	-43	0	0	0	0	0	0
60%	0	0	0	0	-39	0	0	0	0	0	0	0
70%	0	0	0	0	0	0	0	0	0	0	0	0
80%	0	0	0	0	0	0	0	0	0	0	0	0
90%	0	0	0	0	0	0	0	0	0	0	0	0
Long Term												
Full Simulation Period[a]	1	5	-8	-117	-115	-120	-98	-1	0	0	0	0
Water Year Types[b,c]												
Wet (32%)	0	-3	-4	-198	-230	-207	-269	-15	-1	0	0	0
Above Normal (15%)	0	8	-15	-301	-136	-231	-19	0	0	0	0	0
Below Normal (17%)	5	3	1	-37	9	-54	-59	21	0	0	0	0
Dry (22%)	0	21	-16	-16	-95	-51	0	0	0	0	0	0
Critical (15%)	0	0	-9	-5	-16	-3	0	0	0	0	0	0

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

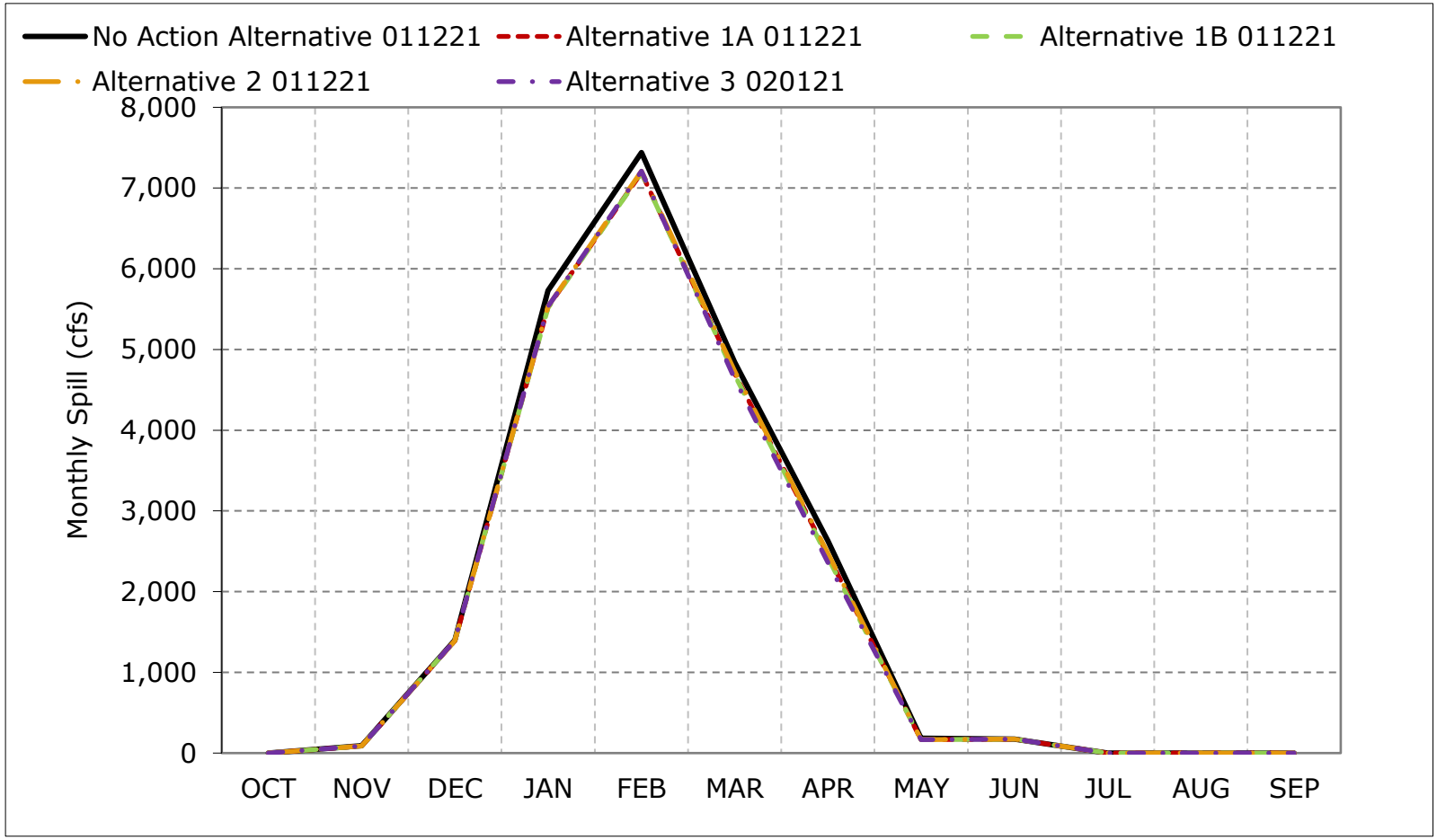
c These results are displayed with calendar year - year type sorting.

Figure 5C-8-1. Tisdale Weir Spill, Long-Term Average Spill



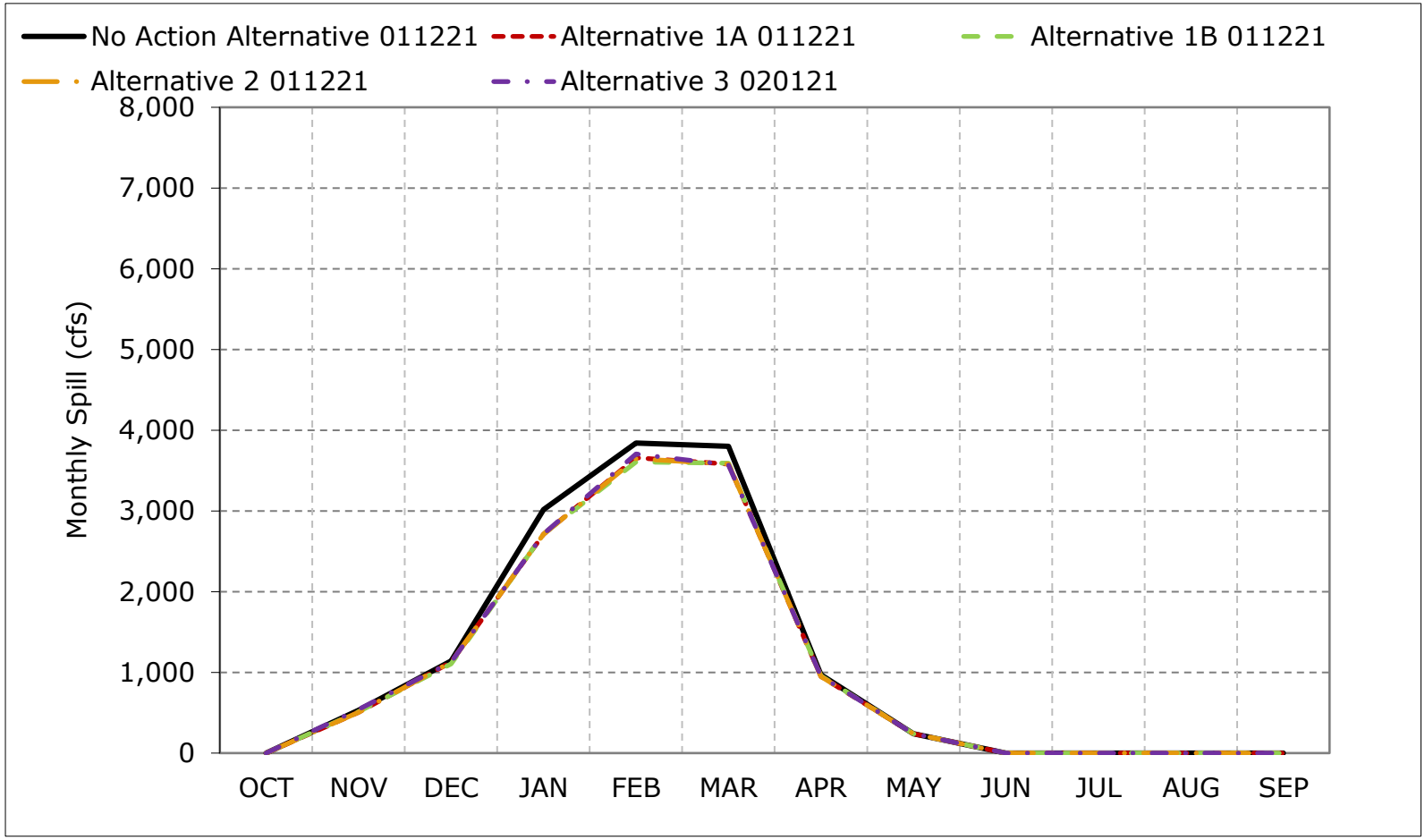
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-8-2. Tisdale Weir Spill, Wet Year Average Spill



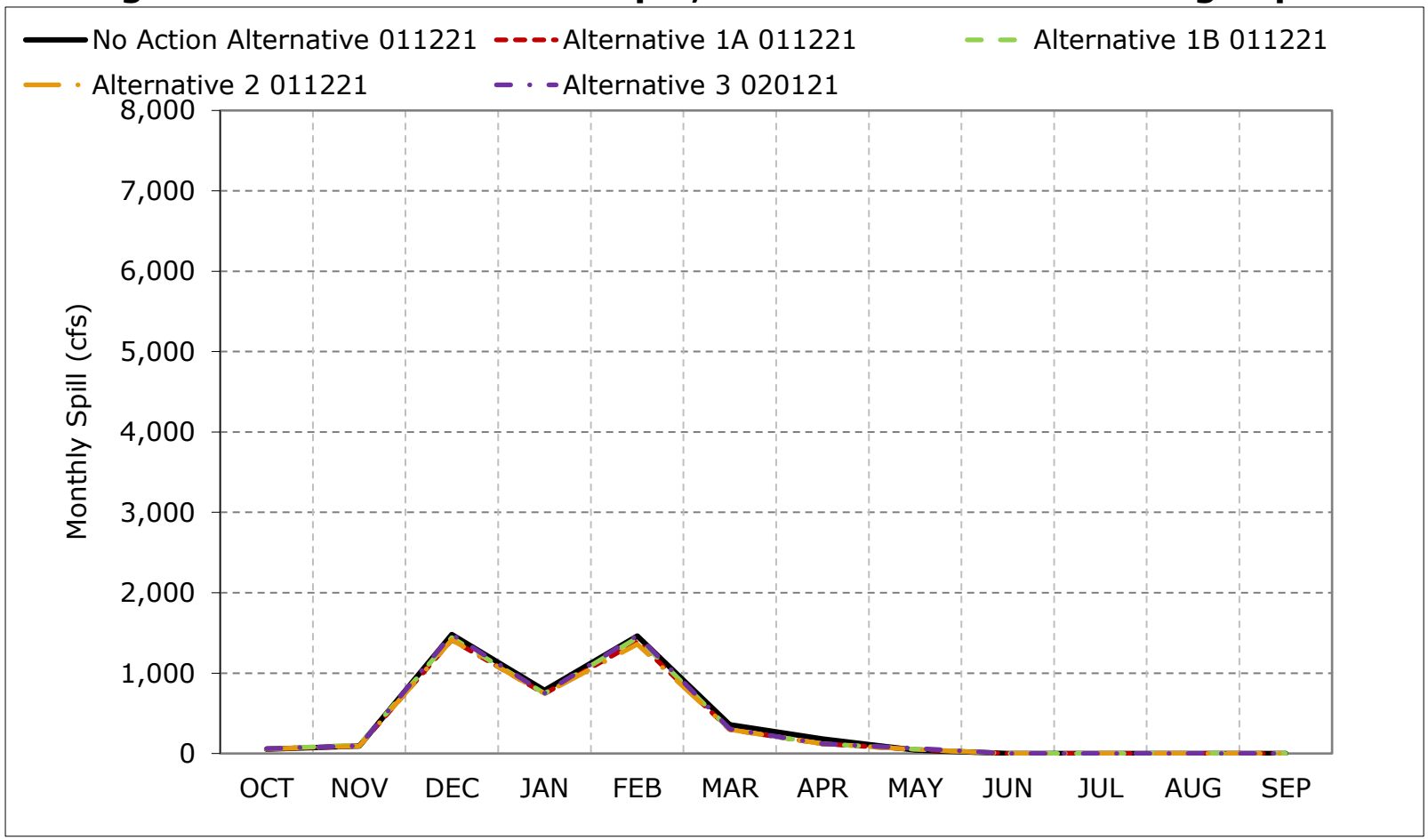
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-8-3. Tisdale Weir Spill, Above Normal Year Average Spill



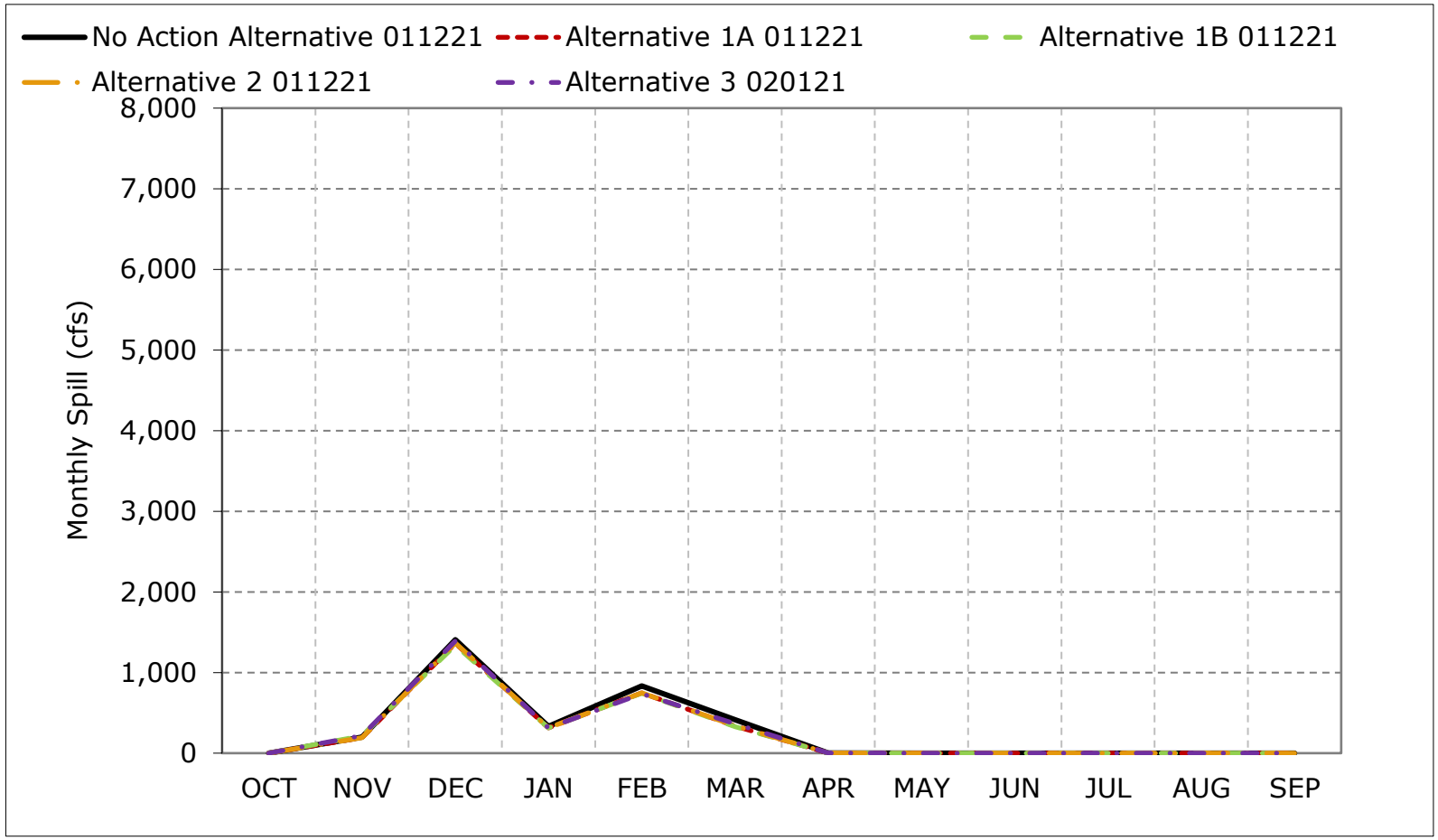
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-8-4. Tisdale Weir Spill, Below Normal Year Average Spill



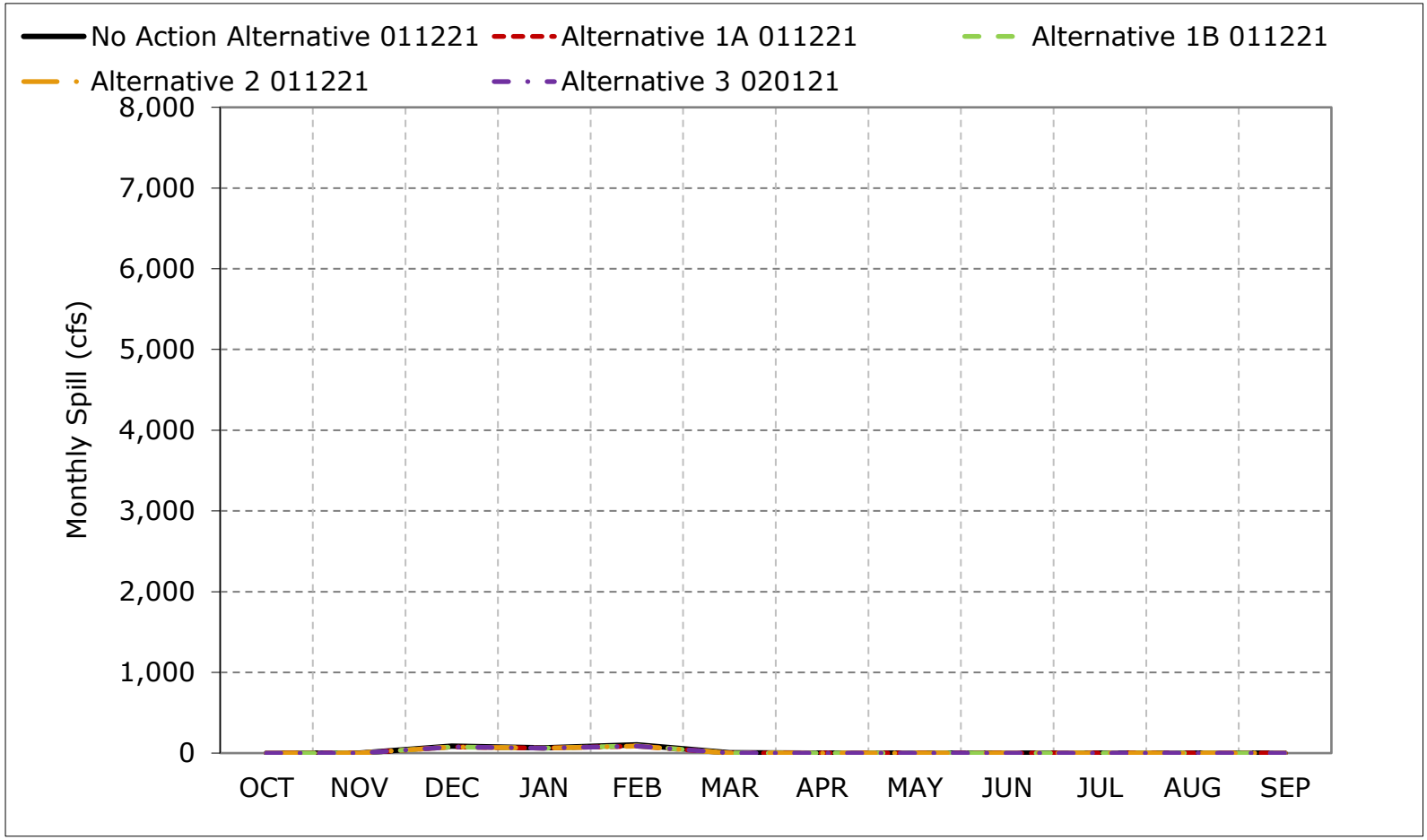
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-8-5. Tisdale Weir Spill, Dry Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-8-6. Tisdale Weir Spill, Critical Year Average Spill



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-8-7. Tisdale Weir Spill, October

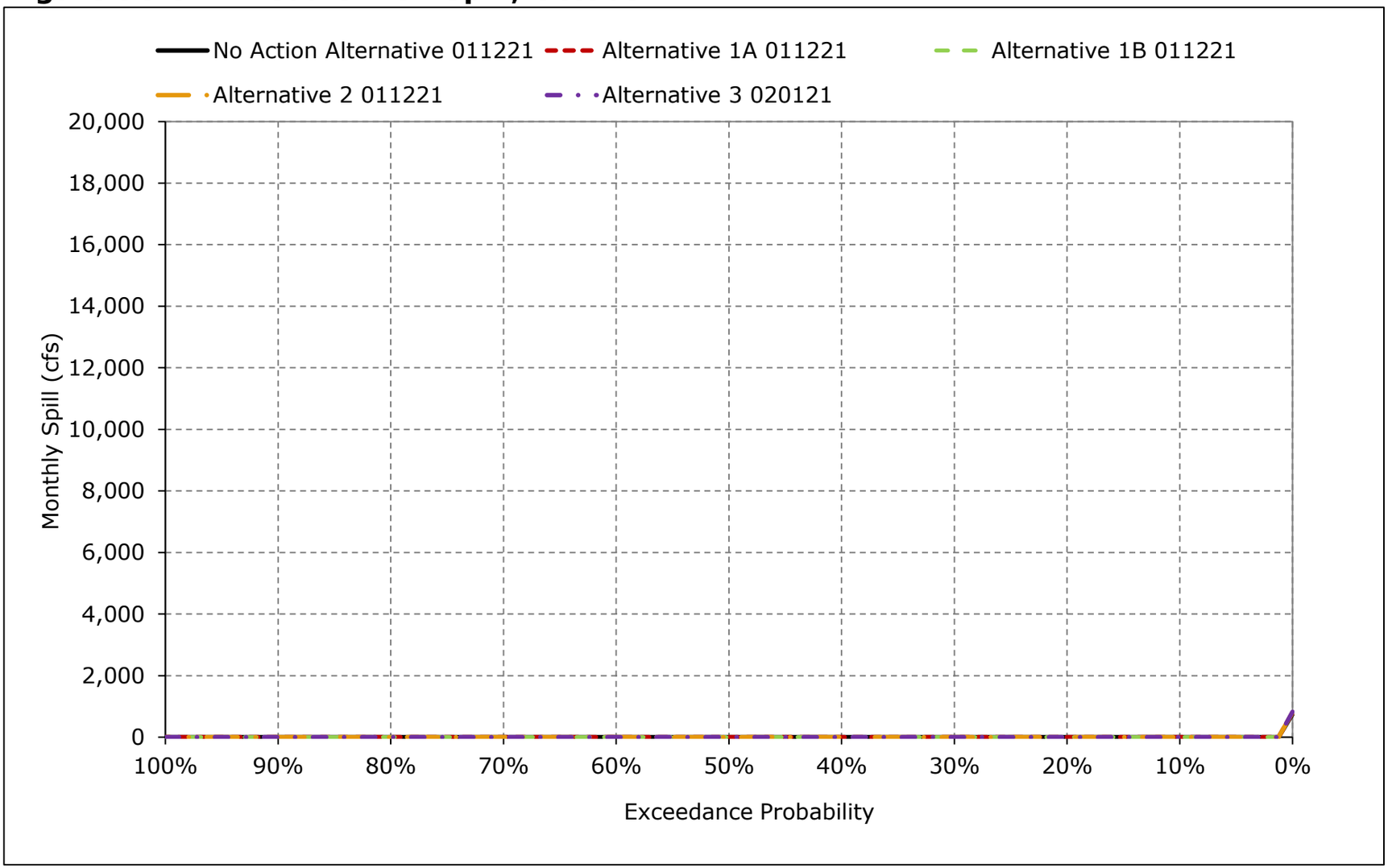


Figure 5C-8-8. Tisdale Weir Spill, November

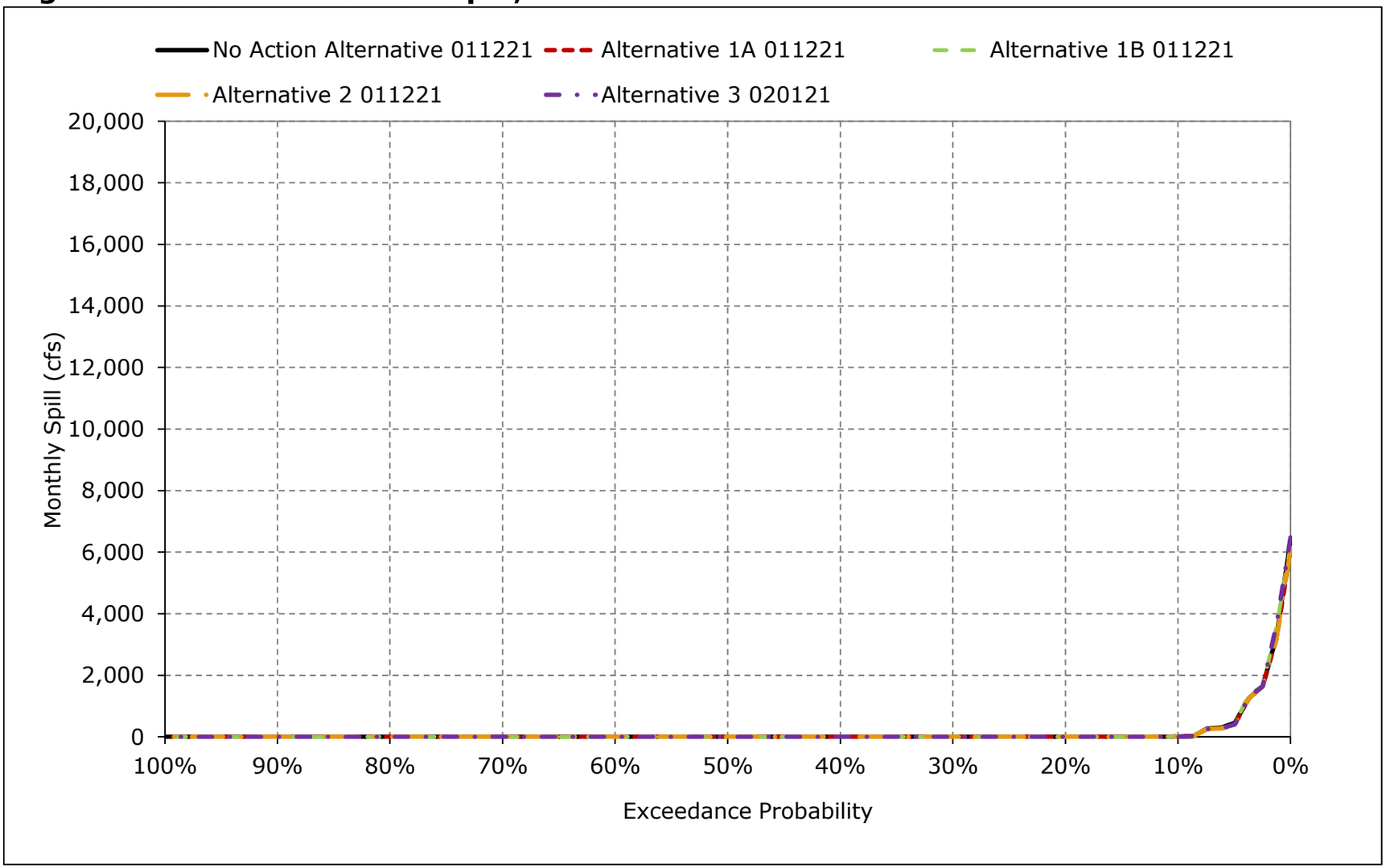


Figure 5C-8-9. Tisdale Weir Spill, December

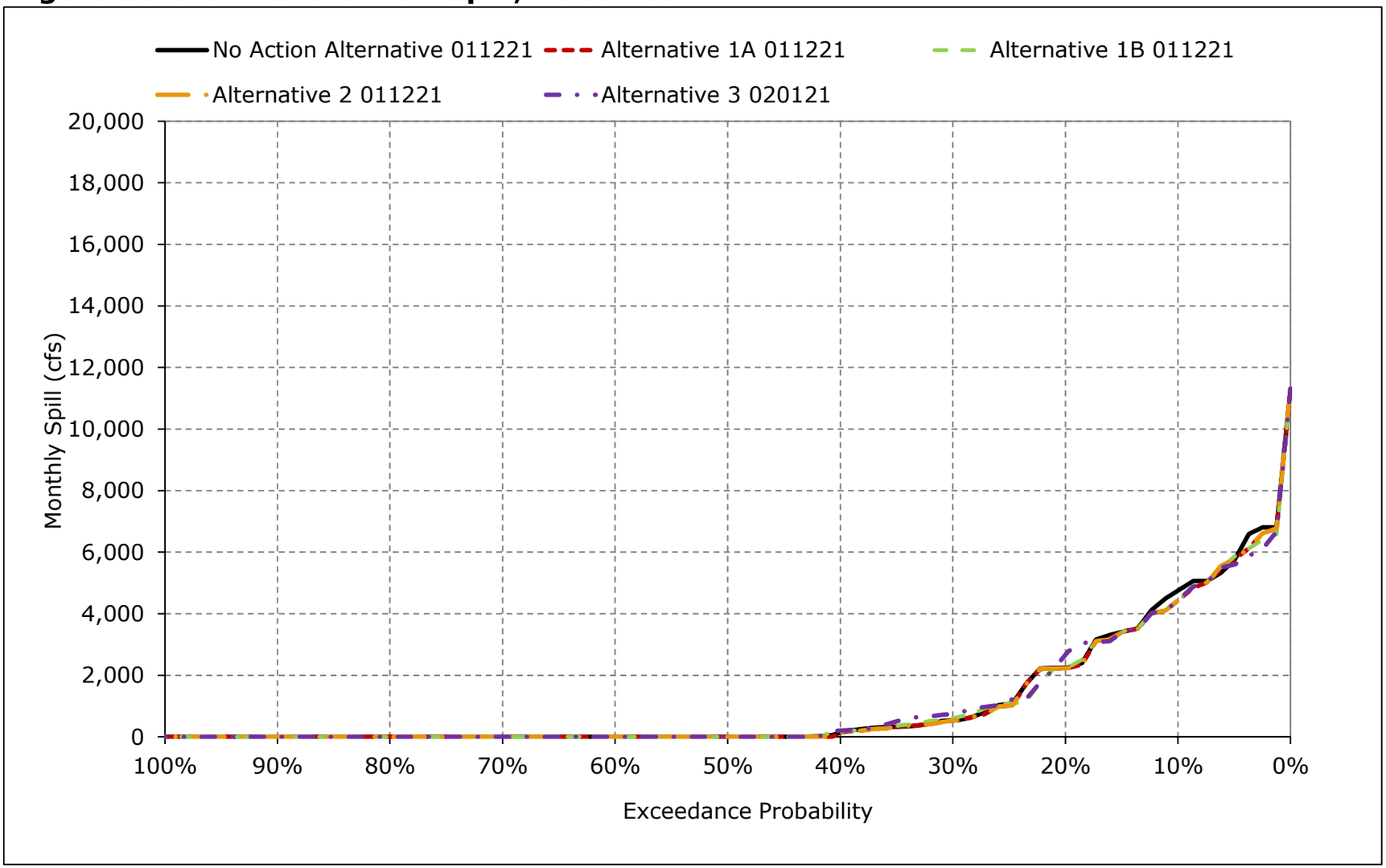


Figure 5C-8-10. Tisdale Weir Spill, January

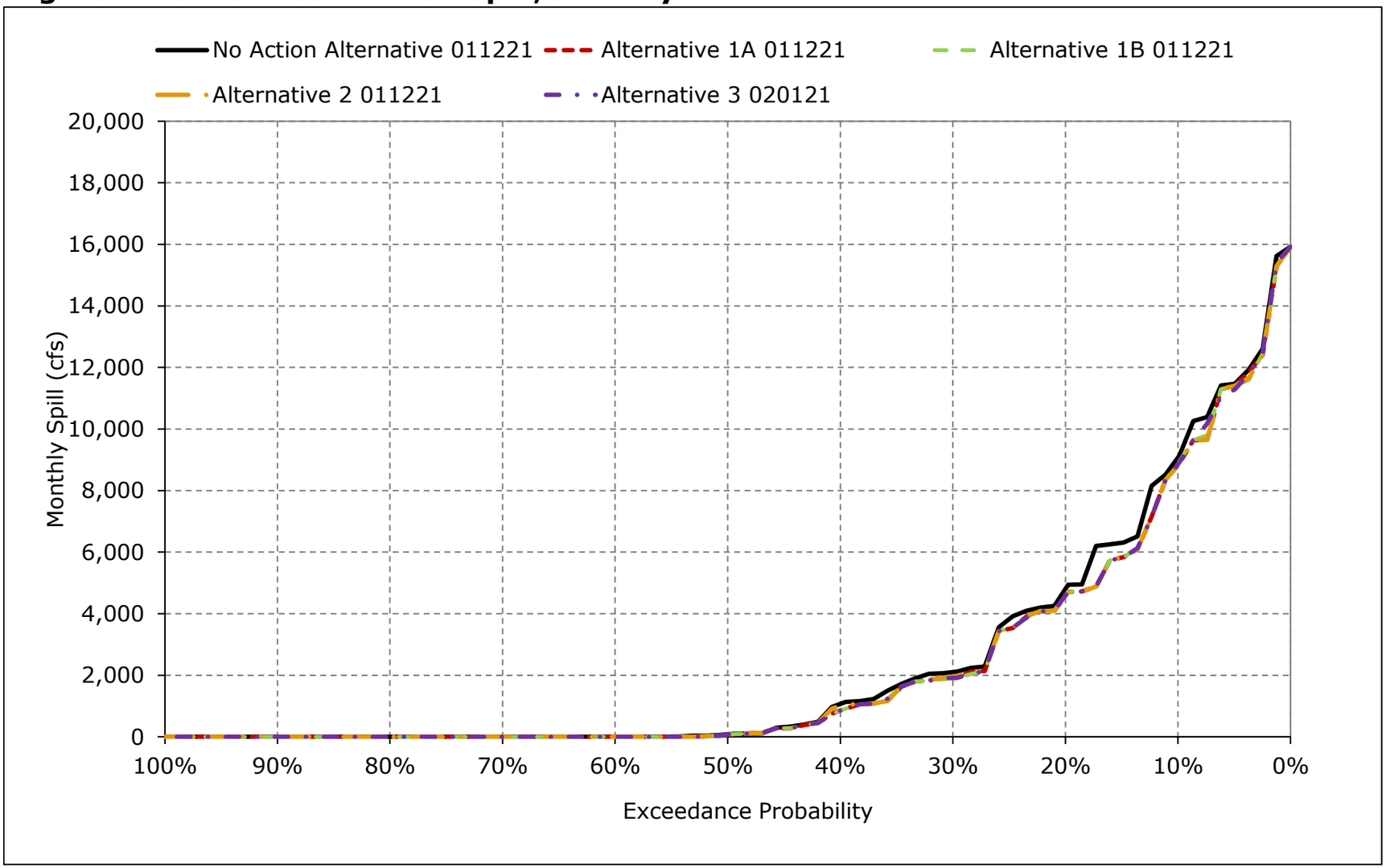


Figure 5C-8-11. Tisdale Weir Spill, February

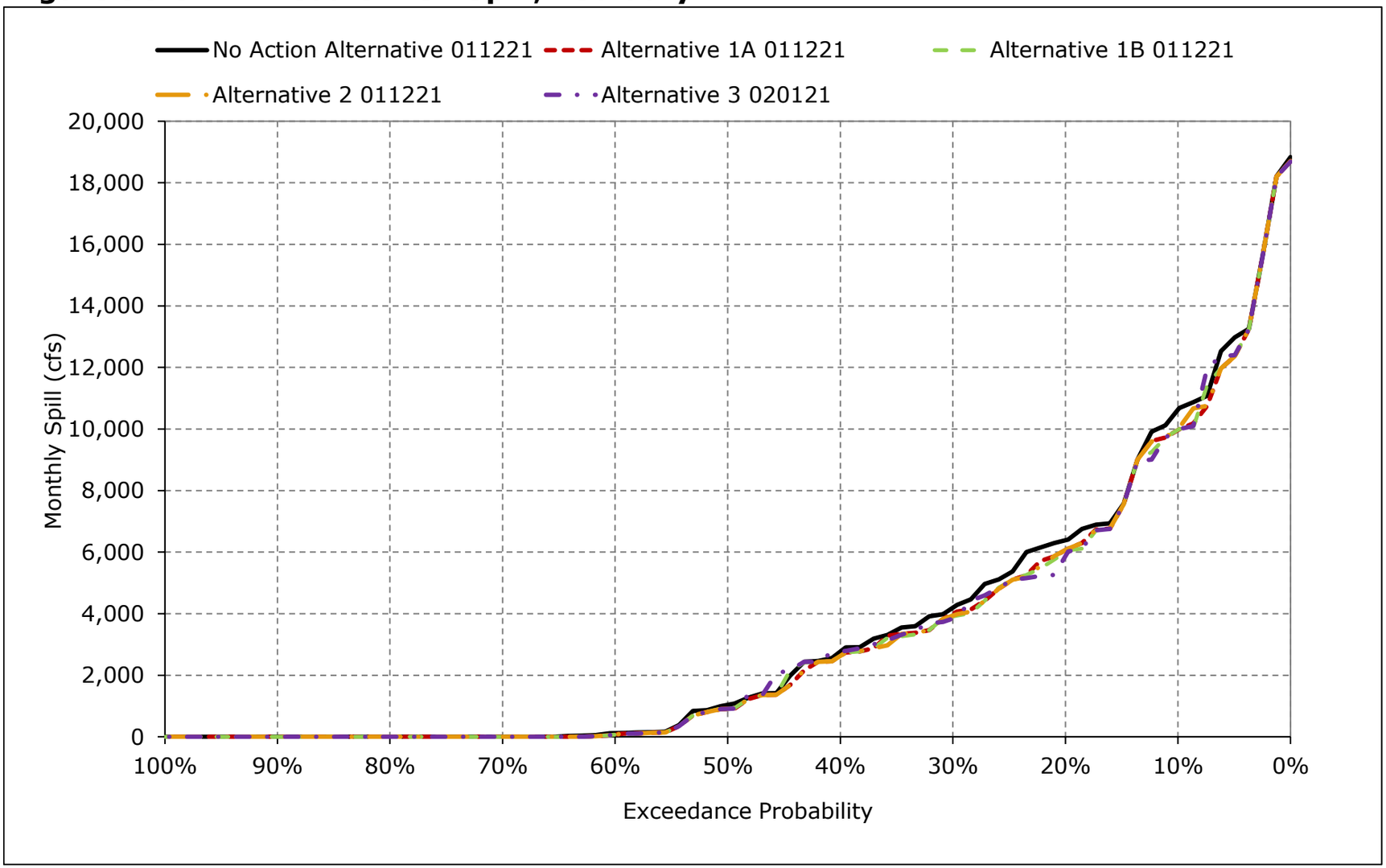


Figure 5C-8-12. Tisdale Weir Spill, March

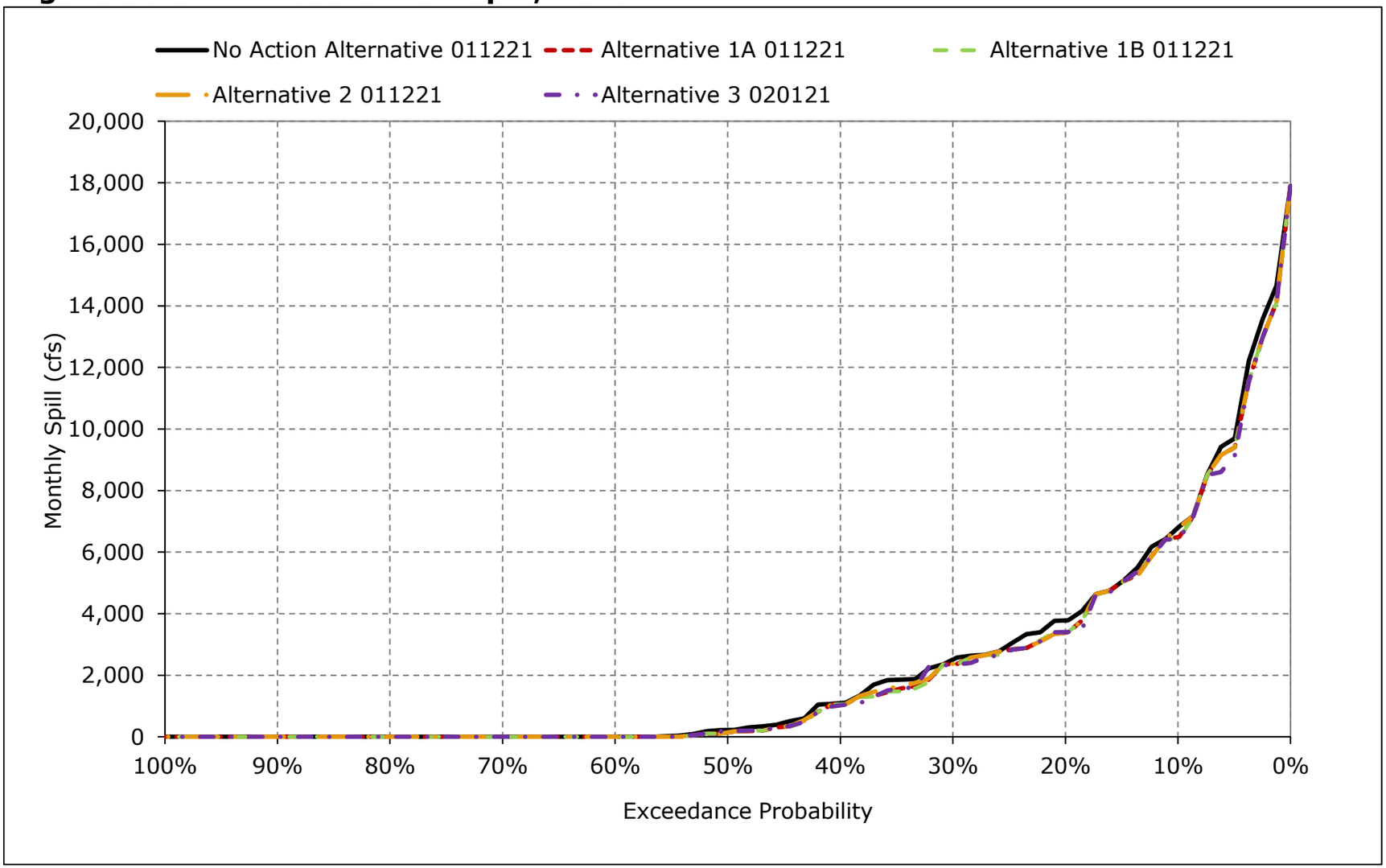


Figure 5C-8-13. Tisdale Weir Spill, April

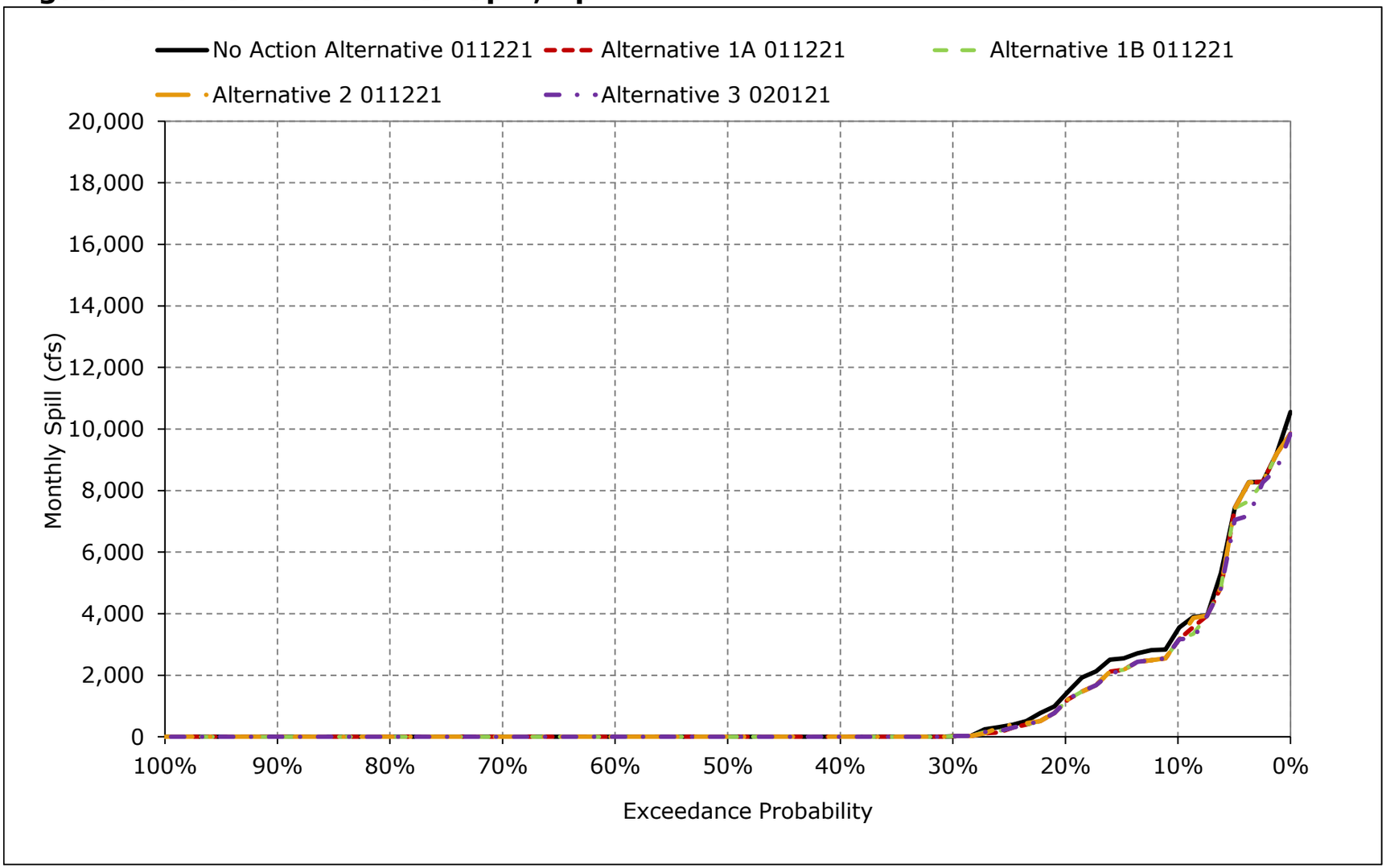


Figure 5C-8-14. Tisdale Weir Spill, May

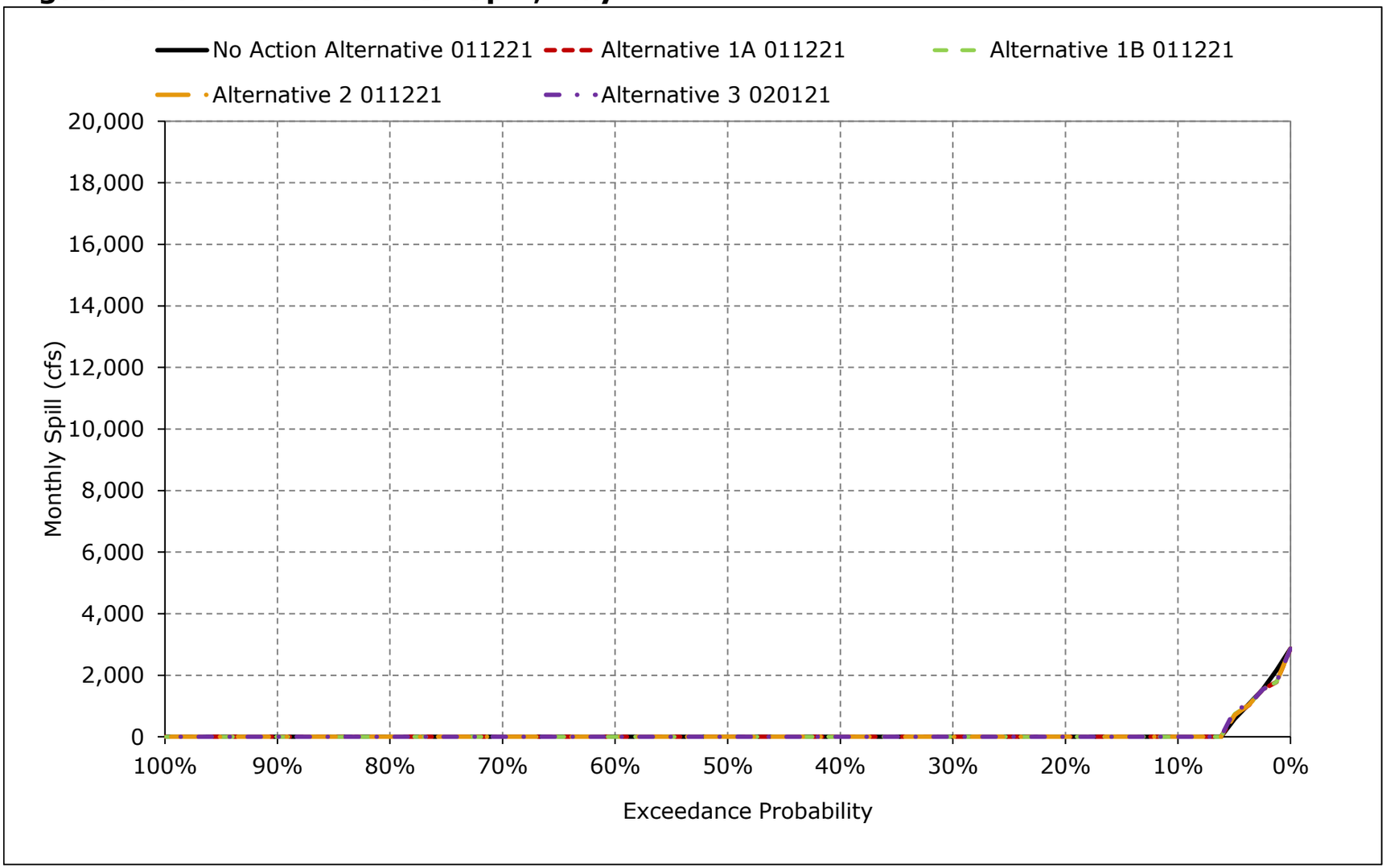


Figure 5C-8-15. Tisdale Weir Spill, June

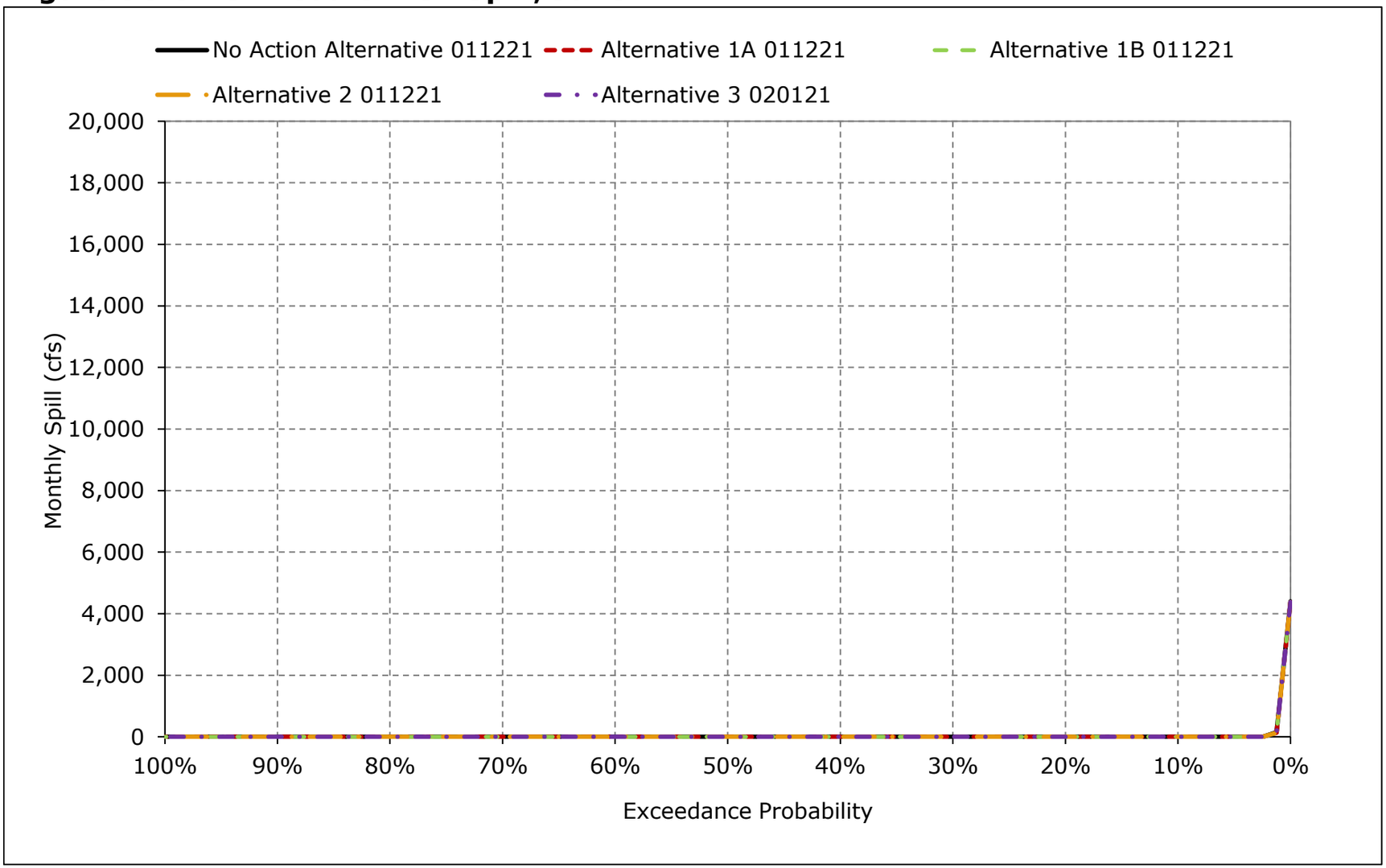


Figure 5C-8-16. Tisdale Weir Spill, July

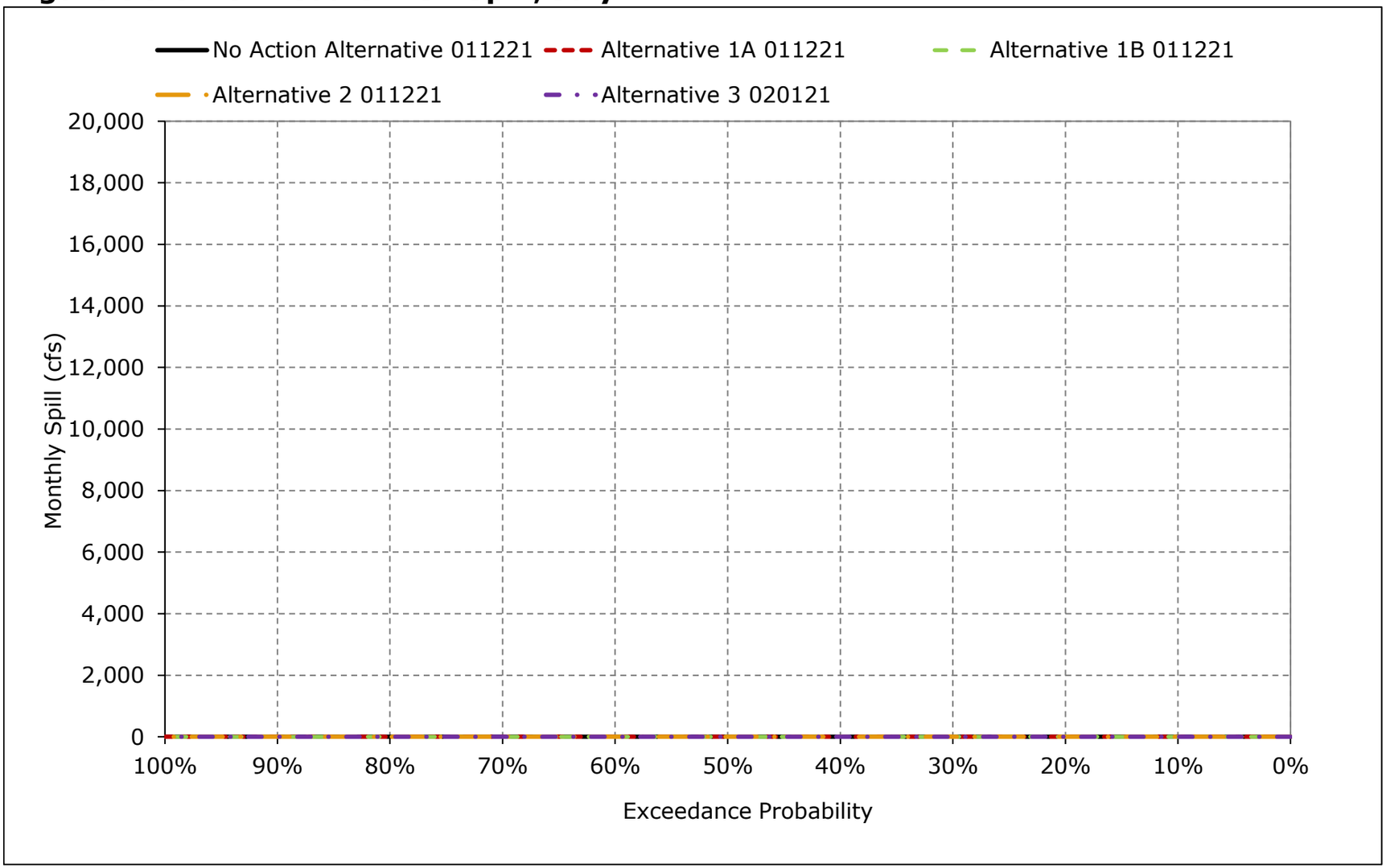


Figure 5C-8-17. Tisdale Weir Spill, August

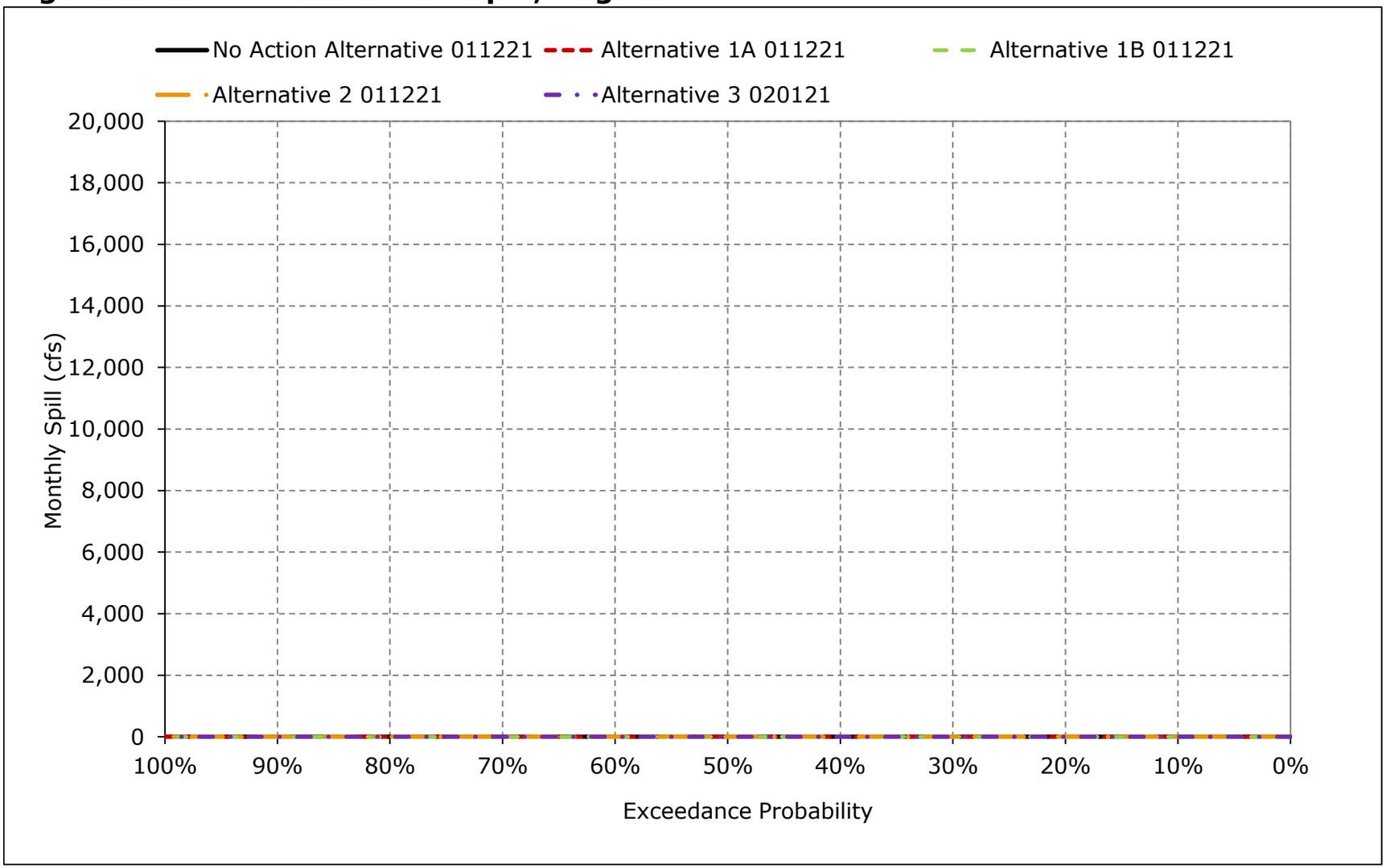


Figure 5C-8-18. Tisdale Weir Spill, September

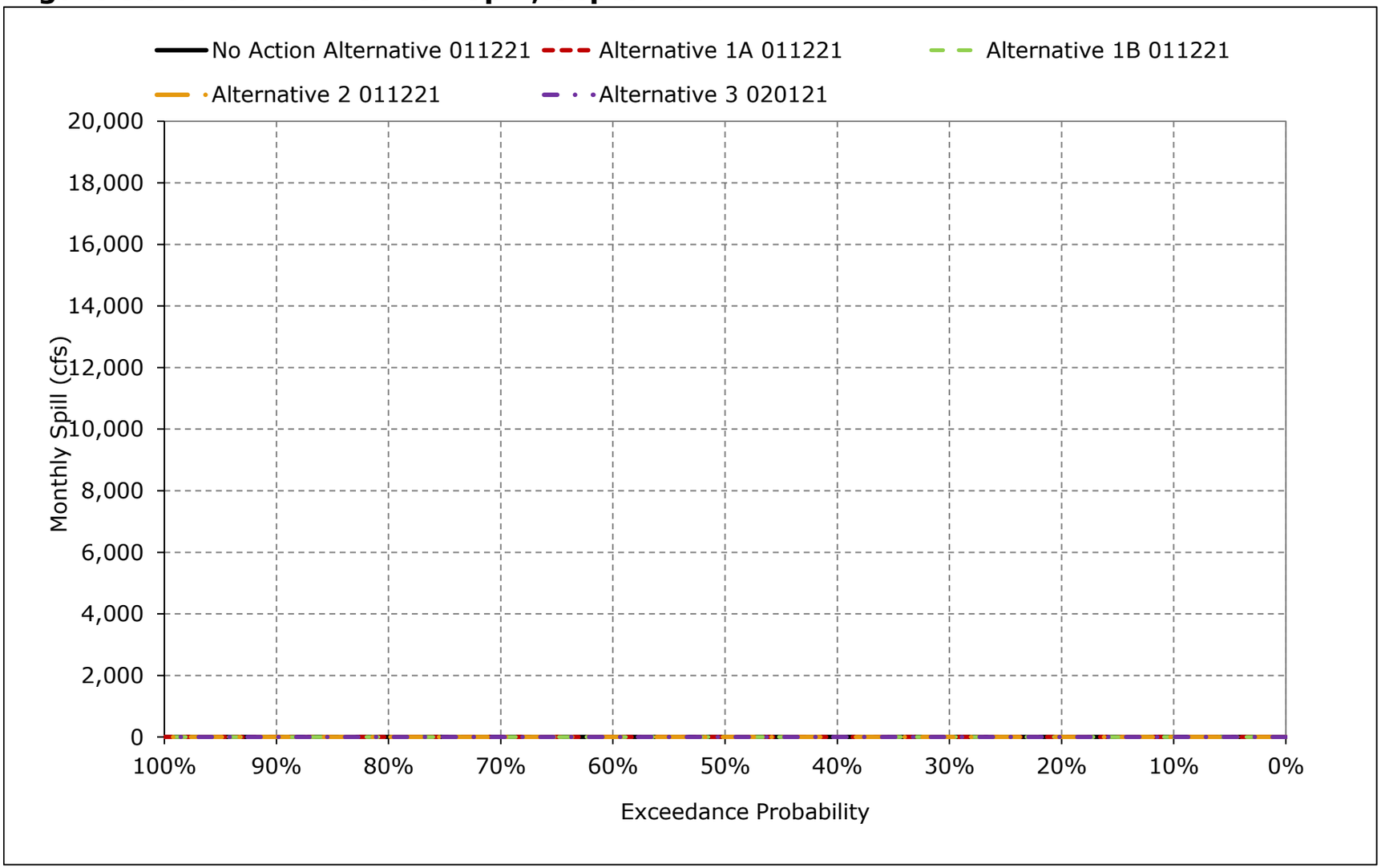


Table 5C-9-1a. Sacramento River Flow at Wilkins Slough, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,746	20,568	25,458	26,440	24,518	21,866	12,605	8,117	9,051	7,324	10,689
20%	7,848	8,123	17,139	22,168	24,473	21,850	17,242	8,792	7,066	8,170	6,850	9,513
30%	6,754	7,172	14,449	17,458	21,736	19,282	13,128	5,541	6,397	7,665	6,383	8,258
40%	6,315	6,741	11,528	15,211	20,091	16,571	9,934	5,253	5,885	7,293	5,967	7,602
50%	5,744	6,505	8,726	11,865	15,169	13,895	8,414	4,675	5,275	6,716	5,352	6,017
60%	5,335	5,989	7,993	9,485	13,292	12,069	7,345	4,355	5,031	6,053	5,176	5,203
70%	5,114	5,527	6,917	8,223	10,408	9,762	6,927	4,198	4,842	5,237	5,009	4,891
80%	4,716	5,062	6,086	6,912	7,915	8,828	5,992	3,762	4,521	4,776	4,836	4,534
90%	4,338	4,610	5,520	6,087	6,523	6,731	4,938	3,490	3,913	4,309	4,299	4,152
Long Term												
Full Simulation Period[a]	6,319	7,062	11,436	13,877	16,350	14,966	11,146	6,542	6,154	6,643	5,749	6,929
Water Year Types[b,c]												
Wet (32%)	7,991	7,742	12,383	19,762	22,725	19,926	16,991	9,825	7,588	7,067	6,466	9,933
Above Normal (15%)	6,369	8,280	11,643	17,095	19,327	19,059	12,357	7,068	6,078	7,789	6,331	7,823
Below Normal (17%)	6,313	7,511	12,793	12,096	14,428	12,137	9,265	5,231	5,594	6,734	5,204	5,470
Dry (22%)	4,946	6,013	11,454	8,440	11,977	11,375	7,048	4,210	5,490	6,372	5,185	4,742
Critical (15%)	4,713	5,423	7,567	8,144	8,365	8,816	5,609	3,928	4,774	4,875	5,095	4,512

Table 5C-9-1b. Sacramento River Flow at Wilkins Slough, Alternative 1A 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,697	20,295	25,159	26,204	24,139	20,405	12,491	7,865	9,130	7,422	10,577
20%	7,836	7,773	16,872	20,989	24,118	21,560	16,210	8,756	7,183	8,529	6,889	9,596
30%	6,835	7,214	14,056	16,371	20,481	18,262	13,082	5,500	6,165	8,014	6,545	8,337
40%	6,447	6,661	10,965	14,640	19,276	14,443	9,847	5,063	5,645	7,559	6,058	7,639
50%	5,967	6,396	8,446	11,411	14,576	12,376	8,349	4,617	5,224	6,929	5,663	6,438
60%	5,685	5,691	7,604	9,029	12,775	10,744	7,315	4,249	5,021	6,564	5,308	5,574
70%	5,359	5,326	6,826	8,188	10,413	8,781	6,808	4,119	4,780	5,290	5,122	5,073
80%	5,048	5,031	5,919	6,813	7,609	8,001	5,892	3,688	4,537	4,940	4,917	4,758
90%	4,477	4,545	5,402	5,834	6,348	6,800	4,946	3,332	3,823	4,578	4,426	4,348
Long Term												
Full Simulation Period[a]	6,440	6,956	11,202	13,475	15,881	14,192	10,910	6,340	6,016	6,891	5,887	7,058
Water Year Types[b,c]												
Wet (32%)	7,827	7,542	12,207	19,325	22,334	19,385	16,502	9,571	7,386	7,038	6,347	9,891
Above Normal (15%)	6,425	8,117	11,376	16,370	18,556	17,773	12,141	6,970	5,902	7,840	6,298	7,848
Below Normal (17%)	6,469	7,504	12,681	11,637	13,718	11,018	9,089	5,205	5,431	6,867	5,263	5,587
Dry (22%)	5,166	5,988	11,235	8,182	11,570	10,540	6,979	4,062	5,419	7,061	5,819	5,113
Critical (15%)	5,330	5,340	7,073	7,987	8,217	8,543	5,585	3,454	4,736	5,399	5,312	4,763

Table 5C-9-1c. Sacramento River Flow at Wilkins Slough, Alternative 1A 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-50	-273	-299	-236	-379	-1,461	-113	-252	79	98	-112
20%	-12	-350	-268	-1,180	-355	-290	-1,032	-36	116	359	39	84
30%	81	42	-393	-1,087	-1,256	-1,020	-46	-41	-231	349	161	79
40%	132	-80	-563	-571	-815	-2,128	-87	-190	-239	267	91	37
50%	223	-109	-279	-454	-593	-1,520	-65	-58	-51	213	311	422
60%	351	-299	-390	-456	-517	-1,325	-29	-107	-10	511	132	371
70%	245	-200	-91	-35	6	-980	-119	-79	-62	53	114	182
80%	332	-31	-167	-99	-306	-826	-100	-74	16	164	80	224
90%	139	-65	-118	-254	-175	70	9	-158	-90	269	127	196
Long Term												
Full Simulation Period[a]	121	-106	-234	-403	-469	-774	-236	-201	-139	249	138	129
Water Year Types[b,c]												
Wet (32%)	-165	-200	-176	-437	-391	-541	-490	-253	-201	-29	-119	-41
Above Normal (15%)	56	-162	-267	-726	-771	-1,286	-216	-98	-176	51	-33	24
Below Normal (17%)	155	-8	-112	-460	-710	-1,119	-175	-26	-163	133	60	117
Dry (22%)	220	-25	-219	-258	-407	-835	-69	-148	-71	689	634	370
Critical (15%)	617	-83	-494	-157	-148	-274	-24	-475	-38	524	217	251

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-9-2a. Sacramento River Flow at Wilkins Slough, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,746	20,568	25,458	26,440	24,518	21,866	12,605	8,117	9,051	7,324	10,689
20%	7,848	8,123	17,139	22,168	24,473	21,850	17,242	8,792	7,066	8,170	6,850	9,513
30%	6,754	7,172	14,449	17,458	21,736	19,282	13,128	5,541	6,397	7,665	6,383	8,258
40%	6,315	6,741	11,528	15,211	20,091	16,571	9,934	5,253	5,885	7,293	5,967	7,602
50%	5,744	6,505	8,726	11,865	15,169	13,895	8,414	4,675	5,275	6,716	5,352	6,017
60%	5,335	5,989	7,993	9,485	13,292	12,069	7,345	4,355	5,031	6,053	5,176	5,203
70%	5,114	5,527	6,917	8,223	10,408	9,762	6,927	4,198	4,842	5,237	5,009	4,891
80%	4,716	5,062	6,086	6,912	7,915	8,828	5,992	3,762	4,521	4,776	4,836	4,534
90%	4,338	4,610	5,520	6,087	6,523	6,731	4,938	3,490	3,913	4,309	4,299	4,152
Long Term												
Full Simulation Period[a]	6,319	7,062	11,436	13,877	16,350	14,966	11,146	6,542	6,154	6,643	5,749	6,929
Water Year Types[b,c]												
Wet (32%)	7,991	7,742	12,383	19,762	22,725	19,926	16,991	9,825	7,588	7,067	6,466	9,933
Above Normal (15%)	6,369	8,280	11,643	17,095	19,327	19,059	12,357	7,068	6,078	7,789	6,331	7,823
Below Normal (17%)	6,313	7,511	12,793	12,096	14,428	12,137	9,265	5,231	5,594	6,734	5,204	5,470
Dry (22%)	4,946	6,013	11,454	8,440	11,977	11,375	7,048	4,210	5,490	6,372	5,185	4,742
Critical (15%)	4,713	5,423	7,567	8,144	8,365	8,816	5,609	3,928	4,774	4,875	5,095	4,512

Table 5C-9-2b. Sacramento River Flow at Wilkins Slough, Alternative 1B 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,707	20,317	25,163	26,447	24,119	20,385	12,382	8,311	9,176	7,421	10,841
20%	7,777	7,770	16,718	20,991	24,046	21,479	16,333	8,757	7,155	8,461	6,890	9,628
30%	6,868	7,217	14,588	16,380	20,598	18,274	13,082	5,564	6,166	7,994	6,450	8,482
40%	6,353	6,728	10,980	14,699	19,165	14,444	9,859	5,067	5,581	7,553	6,109	7,686
50%	5,867	6,401	8,428	11,425	14,579	12,406	8,404	4,620	5,220	6,963	5,697	6,460
60%	5,663	5,707	7,608	9,030	12,748	10,737	7,317	4,238	4,996	6,501	5,388	5,646
70%	5,346	5,518	6,814	8,077	10,411	8,780	6,808	4,047	4,775	5,470	5,167	5,039
80%	5,058	5,132	5,954	6,830	7,609	7,978	5,892	3,687	4,362	4,894	4,966	4,789
90%	4,533	4,697	5,573	5,835	6,347	6,804	4,951	3,333	3,860	4,588	4,569	4,372
Long Term												
Full Simulation Period[a]	6,421	7,028	11,273	13,439	15,855	14,172	10,909	6,321	5,986	6,882	5,913	7,114
Water Year Types[b,c]												
Wet (32%)	7,822	7,490	12,210	19,260	22,293	19,368	16,462	9,487	7,355	7,038	6,347	9,931
Above Normal (15%)	6,460	8,053	11,508	16,377	18,474	17,775	12,189	6,975	5,741	7,771	6,334	8,165
Below Normal (17%)	6,527	7,614	12,767	11,620	13,709	11,019	9,099	5,241	5,362	6,852	5,285	5,631
Dry (22%)	5,064	6,226	11,342	8,182	11,564	10,501	6,977	4,057	5,506	7,080	5,792	5,059
Critical (15%)	5,261	5,525	7,161	7,897	8,228	8,493	5,609	3,460	4,712	5,391	5,465	4,771

Table 5C-9-2c. Sacramento River Flow at Wilkins Slough, Alternative 1B 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-40	-251	-295	7	-400	-1,481	-223	195	125	97	153
20%	-71	-353	-422	-1,177	-427	-371	-909	-35	89	291	39	115
30%	114	45	139	-1,079	-1,138	-1,008	-46	23	-231	329	67	224
40%	38	-12	-548	-512	-925	-2,127	-75	-186	-304	260	141	84
50%	123	-104	-298	-439	-590	-1,489	-10	-56	-55	247	345	443
60%	328	-282	-385	-455	-544	-1,332	-28	-118	-35	448	212	444
70%	232	-9	-103	-146	4	-981	-119	-151	-67	233	159	148
80%	342	70	-132	-82	-306	-849	-100	-74	-159	118	130	254
90%	195	86	53	-253	-176	73	14	-157	-53	279	270	221
Long Term												
Full Simulation Period[a]	102	-34	-163	-439	-495	-795	-236	-221	-169	239	164	184
Water Year Types[b,c]												
Wet (32%)	-169	-252	-172	-503	-431	-558	-529	-337	-233	-30	-119	-2
Above Normal (15%)	91	-226	-135	-718	-853	-1,284	-169	-93	-338	-17	3	342
Below Normal (17%)	214	103	-26	-477	-720	-1,118	-165	10	-232	117	81	162
Dry (22%)	118	213	-113	-258	-413	-873	-71	-153	16	708	607	316
Critical (15%)	548	102	-407	-247	-137	-323	0	-468	-63	516	369	259

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-9-3a. Sacramento River Flow at Wilkins Slough, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,746	20,568	25,458	26,440	24,518	21,866	12,605	8,117	9,051	7,324	10,689
20%	7,848	8,123	17,139	22,168	24,473	21,850	17,242	8,792	7,066	8,170	6,850	9,513
30%	6,754	7,172	14,449	17,458	21,736	19,282	13,128	5,541	6,397	7,665	6,383	8,258
40%	6,315	6,741	11,528	15,211	20,091	16,571	9,934	5,253	5,885	7,293	5,967	7,602
50%	5,744	6,505	8,726	11,865	15,169	13,895	8,414	4,675	5,275	6,716	5,352	6,017
60%	5,335	5,989	7,993	9,485	13,292	12,069	7,345	4,355	5,031	6,053	5,176	5,203
70%	5,114	5,527	6,917	8,223	10,408	9,762	6,927	4,198	4,842	5,237	5,009	4,891
80%	4,716	5,062	6,086	6,912	7,915	8,828	5,992	3,762	4,521	4,776	4,836	4,534
90%	4,338	4,610	5,520	6,087	6,523	6,731	4,938	3,490	3,913	4,309	4,299	4,152
Long Term												
Full Simulation Period[a]	6,319	7,062	11,436	13,877	16,350	14,966	11,146	6,542	6,154	6,643	5,749	6,929
Water Year Types[b,c]												
Wet (32%)	7,991	7,742	12,383	19,762	22,725	19,926	16,991	9,825	7,588	7,067	6,466	9,933
Above Normal (15%)	6,369	8,280	11,643	17,095	19,327	19,059	12,357	7,068	6,078	7,789	6,331	7,823
Below Normal (17%)	6,313	7,511	12,793	12,096	14,428	12,137	9,265	5,231	5,594	6,734	5,204	5,470
Dry (22%)	4,946	6,013	11,454	8,440	11,977	11,375	7,048	4,210	5,490	6,372	5,185	4,742
Critical (15%)	4,713	5,423	7,567	8,144	8,365	8,816	5,609	3,928	4,774	4,875	5,095	4,512

Table 5C-9-3b. Sacramento River Flow at Wilkins Slough, Alternative 2 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,697	20,299	25,159	26,403	24,139	20,844	12,509	7,874	9,130	7,689	10,682
20%	7,899	7,773	16,870	20,989	24,213	21,560	16,210	8,757	7,183	8,587	6,911	9,596
30%	6,835	7,244	14,056	16,480	20,479	18,375	13,081	5,500	6,166	8,000	6,545	8,337
40%	6,447	6,676	10,964	14,639	19,256	14,443	9,846	5,063	5,645	7,464	6,072	7,637
50%	5,951	6,434	8,403	11,410	14,576	12,563	8,349	4,617	5,227	6,937	5,624	6,447
60%	5,670	5,706	7,608	9,026	12,775	10,740	7,311	4,249	5,021	6,566	5,308	5,580
70%	5,360	5,378	6,826	8,066	10,411	8,777	6,808	4,095	4,781	5,290	5,109	5,021
80%	5,050	5,036	5,910	6,813	7,609	8,003	5,892	3,688	4,521	4,964	4,940	4,757
90%	4,511	4,611	5,587	5,834	6,348	6,790	4,947	3,332	3,823	4,578	4,566	4,350
Long Term												
Full Simulation Period[a]	6,439	6,968	11,201	13,479	15,887	14,235	10,934	6,341	6,008	6,884	5,902	7,067
Water Year Types[b,c]												
Wet (32%)	7,831	7,546	12,184	19,377	22,352	19,466	16,574	9,581	7,391	7,041	6,382	9,924
Above Normal (15%)	6,426	8,122	11,376	16,370	18,557	17,790	12,142	6,970	5,903	7,845	6,298	7,852
Below Normal (17%)	6,511	7,444	12,681	11,635	13,710	11,019	9,088	5,205	5,431	6,871	5,273	5,588
Dry (22%)	5,170	5,986	11,219	8,180	11,571	10,608	6,984	4,062	5,397	7,059	5,777	5,113
Critical (15%)	5,253	5,478	7,143	7,908	8,223	8,541	5,585	3,438	4,708	5,337	5,390	4,745

Table 5C-9-3c. Sacramento River Flow at Wilkins Slough, Alternative 2 011221 minus No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	0	-50	-269	-299	-38	-379	-1,022	-96	-243	79	365	-7
20%	51	-350	-269	-1,179	-260	-289	-1,032	-35	116	416	61	84
30%	81	72	-393	-978	-1,257	-907	-47	-42	-231	335	161	79
40%	132	-65	-564	-572	-835	-2,128	-88	-190	-239	171	105	36
50%	207	-71	-322	-454	-593	-1,332	-65	-58	-48	221	272	431
60%	335	-284	-385	-460	-517	-1,328	-33	-107	-10	513	132	377
70%	246	-148	-91	-157	4	-985	-119	-104	-62	53	100	130
80%	334	-26	-176	-99	-305	-825	-100	-74	0	188	104	223
90%	173	1	67	-254	-175	59	9	-158	-89	269	267	198
Long Term												
Full Simulation Period[a]	119	-95	-235	-399	-463	-731	-212	-200	-146	242	153	137
Water Year Types[b,c]												
Wet (32%)	-160	-196	-199	-386	-373	-459	-417	-244	-197	-26	-84	-8
Above Normal (15%)	57	-158	-267	-725	-770	-1,269	-215	-98	-176	56	-33	29
Below Normal (17%)	197	-67	-112	-462	-718	-1,117	-176	-26	-163	137	70	118
Dry (22%)	224	-27	-235	-259	-406	-767	-65	-148	-93	687	591	371
Critical (15%)	540	55	-424	-235	-142	-276	-24	-491	-66	462	295	233

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

c These results are displayed with calendar year - year type sorting.

Table 5C-9-4a. Sacramento River Flow at Wilkins Slough, No Action Alternative 011221, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,145	9,746	20,568	25,458	26,440	24,518	21,866	12,605	8,117	9,051	7,324	10,689
20%	7,848	8,123	17,139	22,168	24,473	21,850	17,242	8,792	7,066	8,170	6,850	9,513
30%	6,754	7,172	14,449	17,458	21,736	19,282	13,128	5,541	6,397	7,665	6,383	8,258
40%	6,315	6,741	11,528	15,211	20,091	16,571	9,934	5,253	5,885	7,293	5,967	7,602
50%	5,744	6,505	8,726	11,865	15,169	13,895	8,414	4,675	5,275	6,716	5,352	6,017
60%	5,335	5,989	7,993	9,485	13,292	12,069	7,345	4,355	5,031	6,053	5,176	5,203
70%	5,114	5,527	6,917	8,223	10,408	9,762	6,927	4,198	4,842	5,237	5,009	4,891
80%	4,716	5,062	6,086	6,912	7,915	8,828	5,992	3,762	4,521	4,776	4,836	4,534
90%	4,338	4,610	5,520	6,087	6,523	6,731	4,938	3,490	3,913	4,309	4,299	4,152
Long Term												
Full Simulation Period[a]	6,319	7,062	11,436	13,877	16,350	14,966	11,146	6,542	6,154	6,643	5,749	6,929
Water Year Types[b,c]												
Wet (32%)	7,991	7,742	12,383	19,762	22,725	19,926	16,991	9,825	7,588	7,067	6,466	9,933
Above Normal (15%)	6,369	8,280	11,643	17,095	19,327	19,059	12,357	7,068	6,078	7,789	6,331	7,823
Below Normal (17%)	6,313	7,511	12,793	12,096	14,428	12,137	9,265	5,231	5,594	6,734	5,204	5,470
Dry (22%)	4,946	6,013	11,454	8,440	11,977	11,375	7,048	4,210	5,490	6,372	5,185	4,742
Critical (15%)	4,713	5,423	7,567	8,144	8,365	8,816	5,609	3,928	4,774	4,875	5,095	4,512

Table 5C-9-4b. Sacramento River Flow at Wilkins Slough, Alternative 3 020121, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	9,165	9,520	20,358	25,160	26,382	24,139	20,450	12,118	7,928	10,100	7,351	10,578
20%	7,978	7,656	16,939	20,996	23,954	20,749	16,335	8,758	7,186	8,915	6,804	9,701
30%	7,239	7,252	15,238	16,385	20,623	17,674	13,074	5,481	6,181	8,136	6,425	8,693
40%	6,404	6,820	10,982	14,676	19,218	14,445	9,872	5,142	5,610	7,415	6,039	7,903
50%	5,931	6,397	8,393	11,415	14,579	12,540	8,406	4,668	5,247	6,901	5,522	6,650
60%	5,768	5,755	7,609	9,029	12,888	10,835	7,327	4,253	4,988	6,471	5,219	5,552
70%	5,324	5,517	6,558	8,110	10,415	8,777	6,809	4,143	4,754	5,288	5,028	4,994
80%	5,057	5,073	5,977	6,843	7,612	8,015	5,903	3,689	4,498	4,992	4,855	4,749
90%	4,619	4,752	5,534	5,834	6,347	6,613	4,916	3,339	3,982	4,621	4,465	4,372
Long Term												
Full Simulation Period[a]	6,520	7,050	11,318	13,440	15,878	14,119	10,882	6,324	5,997	7,041	5,784	7,153
Water Year Types[b,c]												
Wet (32%)	7,825	7,497	12,188	19,273	22,323	19,187	16,391	9,368	7,314	7,037	6,344	9,892
Above Normal (15%)	6,813	7,949	11,521	16,380	18,655	17,707	12,184	6,976	5,742	8,626	6,092	8,585
Below Normal (17%)	6,755	7,636	12,889	11,617	13,606	10,998	9,099	5,331	5,393	7,257	5,281	5,713
Dry (22%)	5,160	6,394	11,480	8,195	11,593	10,595	6,963	4,161	5,611	7,009	5,500	4,969
Critical (15%)	5,166	5,486	7,151	7,853	8,215	8,479	5,605	3,478	4,682	5,260	5,273	4,740

Table 5C-9-4c. Sacramento River Flow at Wilkins Slough, Alternative 3 020121 minus No Action Alternative 011221, Monthly Flow (cfs)

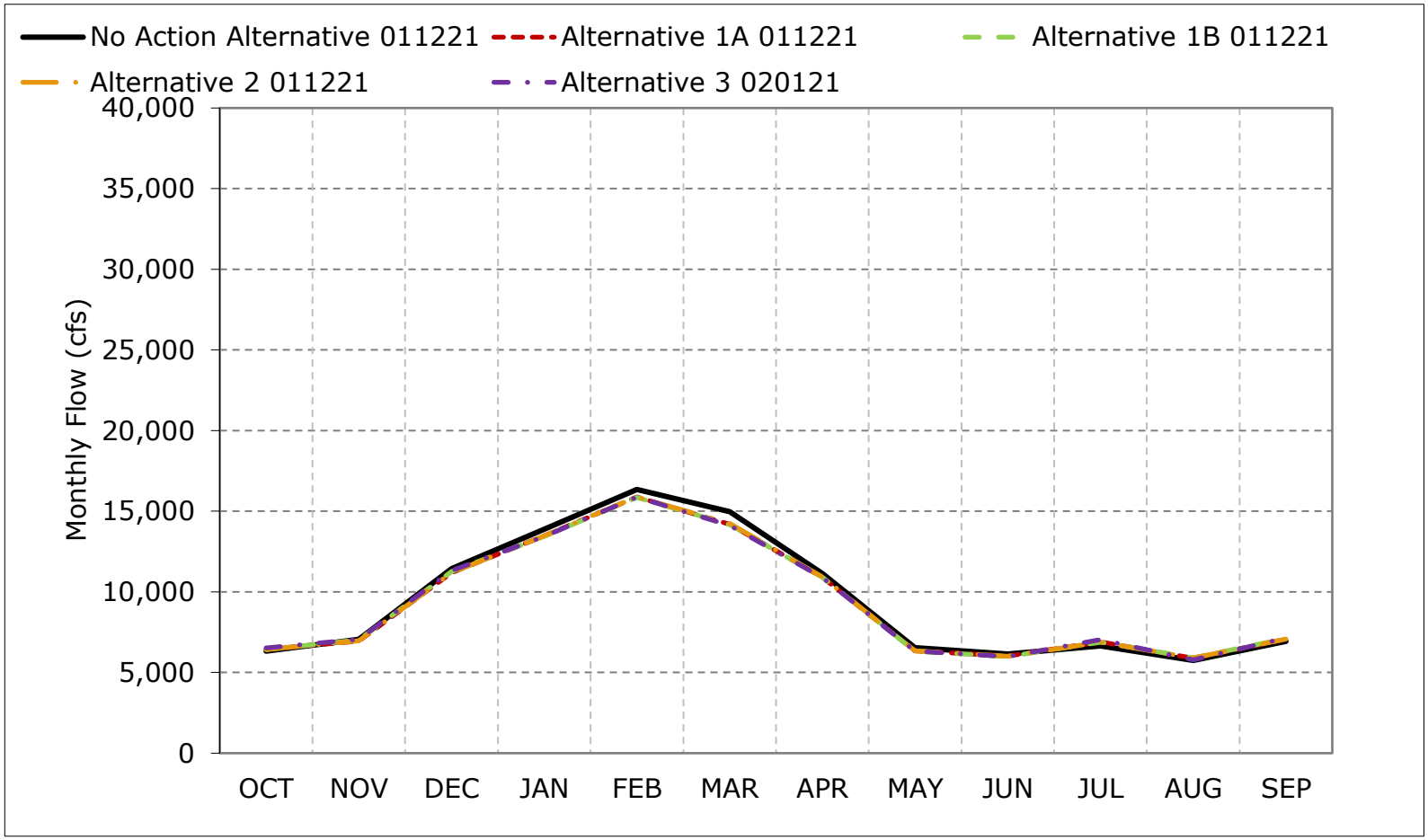
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	20	-227	-211	-298	-58	-380	-1,416	-487	-189	1,049	26	-110
20%	130	-467	-200	-1,172	-519	-1,100	-908	-34	120	745	-46	189
30%	485	80	789	-1,073	-1,113	-1,608	-54	-60	-216	472	41	436
40%	88	79	-546	-535	-873	-2,127	-62	-111	-274	122	72	302
50%	188	-108	-333	-449	-591	-1,355	-9	-7	-27	185	171	633
60%	433	-235	-384	-457	-404	-1,234	-18	-103	-44	418	42	349
70%	210	-10	-359	-113	7	-985	-119	-55	-88	51	20	103
80%	341	11	-109	-69	-302	-813	-89	-73	-23	217	19	215
90%	281	142	14	-254	-175	-118	-22	-151	69	312	165	220
Long Term												
Full Simulation Period[a]	201	-12	-119	-438	-472	-847	-263	-218	-157	398	35	223
Water Year Types[b,c]												
Wet (32%)	-166	-245	-195	-489	-402	-739	-601	-457	-274	-31	-122	-41
Above Normal (15%)	444	-331	-122	-715	-671	-1,352	-173	-92	-336	838	-238	762
Below Normal (17%)	442	125	96	-479	-822	-1,139	-166	100	-202	523	78	243
Dry (22%)	213	381	26	-245	-384	-780	-85	-49	121	637	315	226
Critical (15%)	453	63	-416	-290	-150	-337	-4	-450	-92	385	177	228

a Based on the 82-year simulation period.

b As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

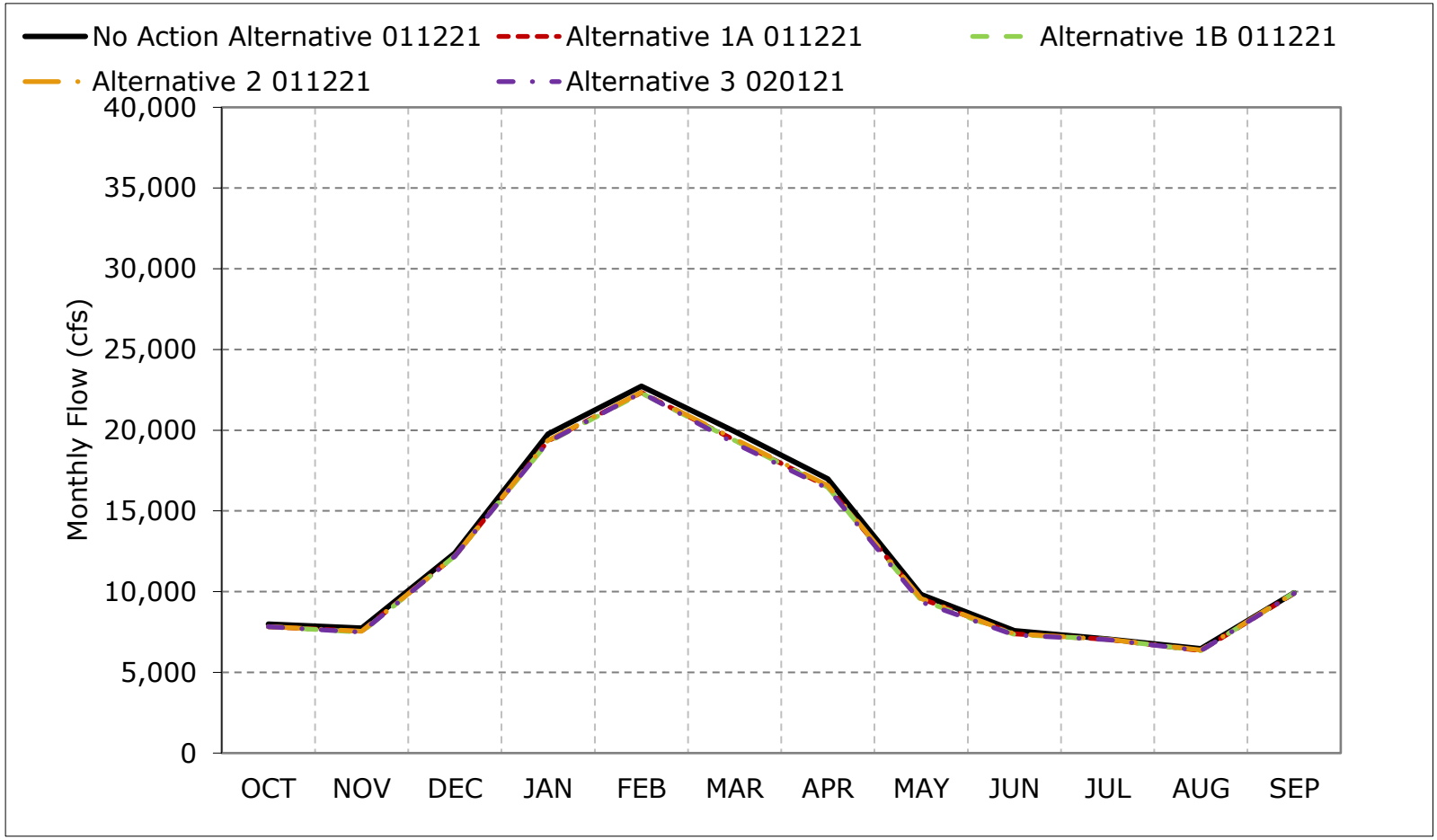
c These results are displayed with calendar year - year type sorting.

Figure 5C-9-1. Sacramento River Flow at Wilkins Slough, Long-Term Average Flow



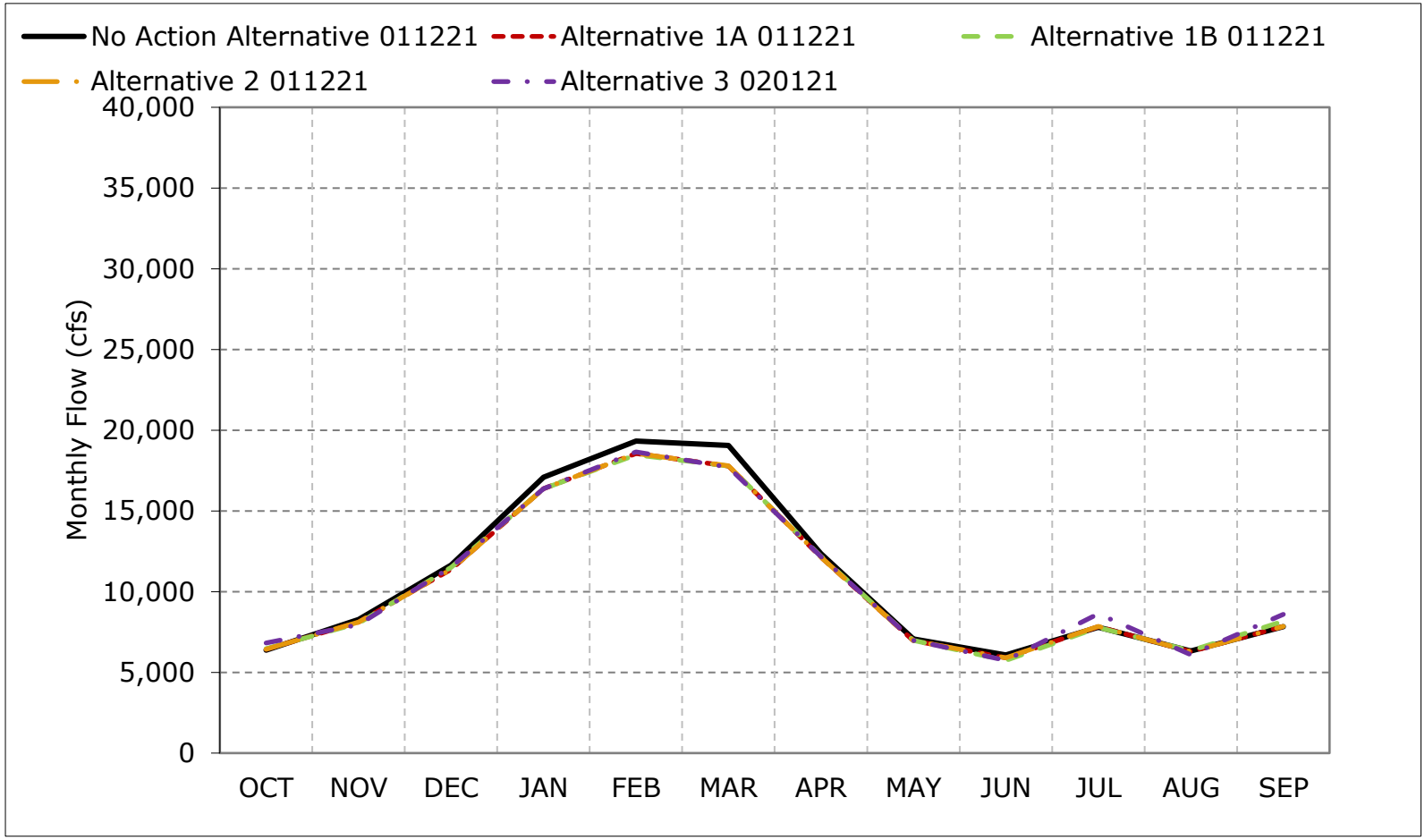
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-9-2. Sacramento River Flow at Wilkins Slough, Wet Year Average Flow



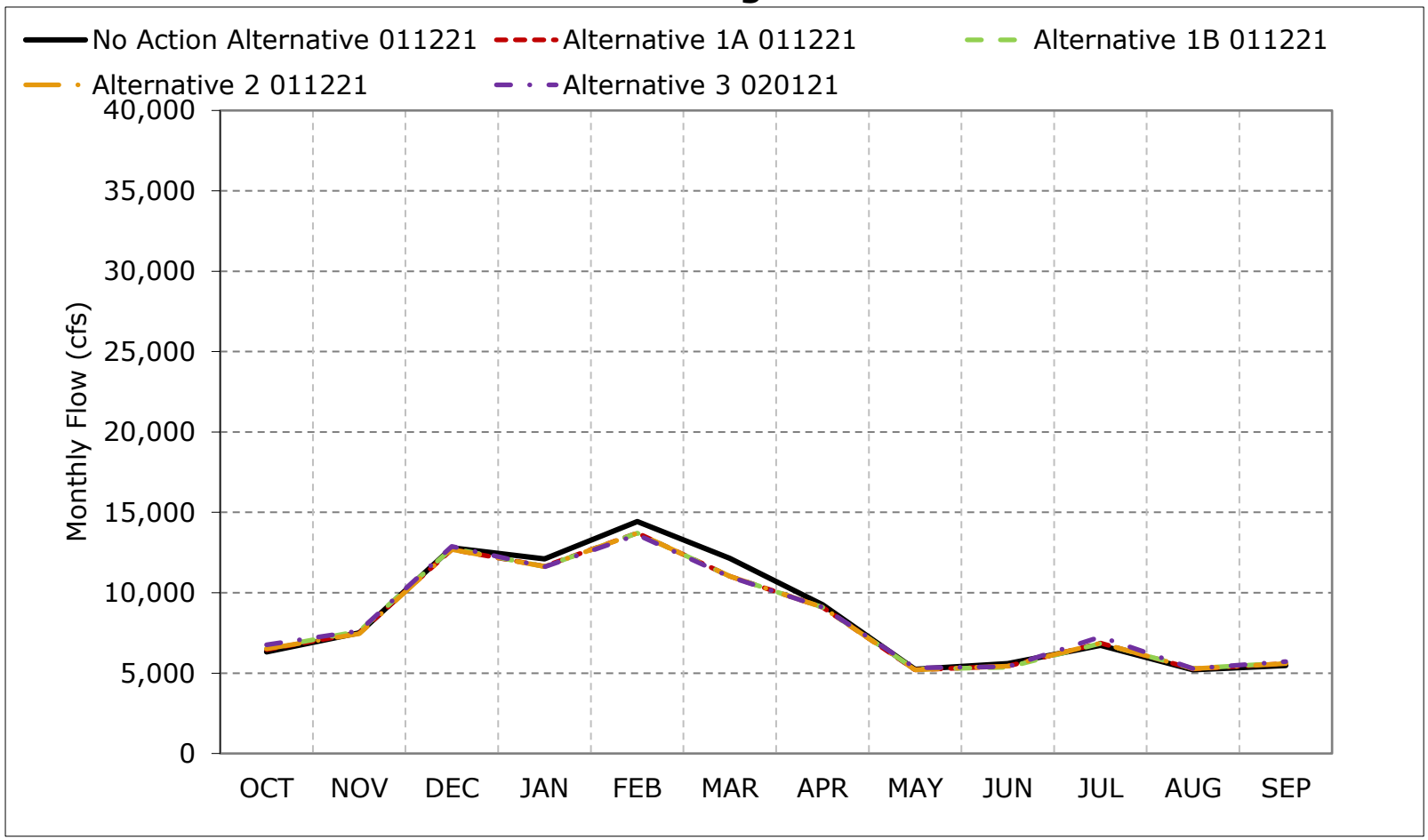
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-9-3. Sacramento River Flow at Wilkins Slough, Above Normal Year Average Flow



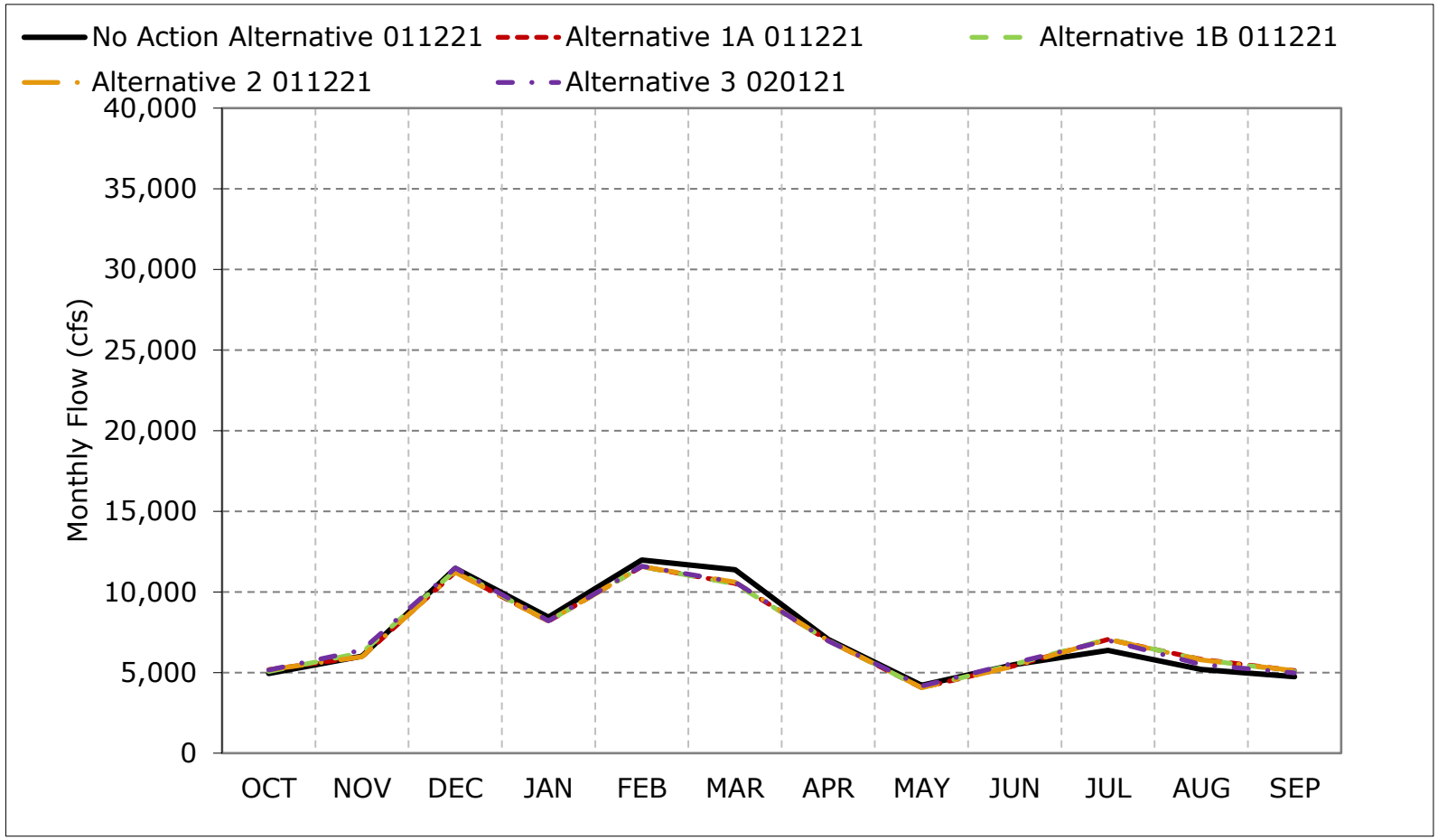
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-9-4. Sacramento River Flow at Wilkins Slough, Below Normal Year Average Flow



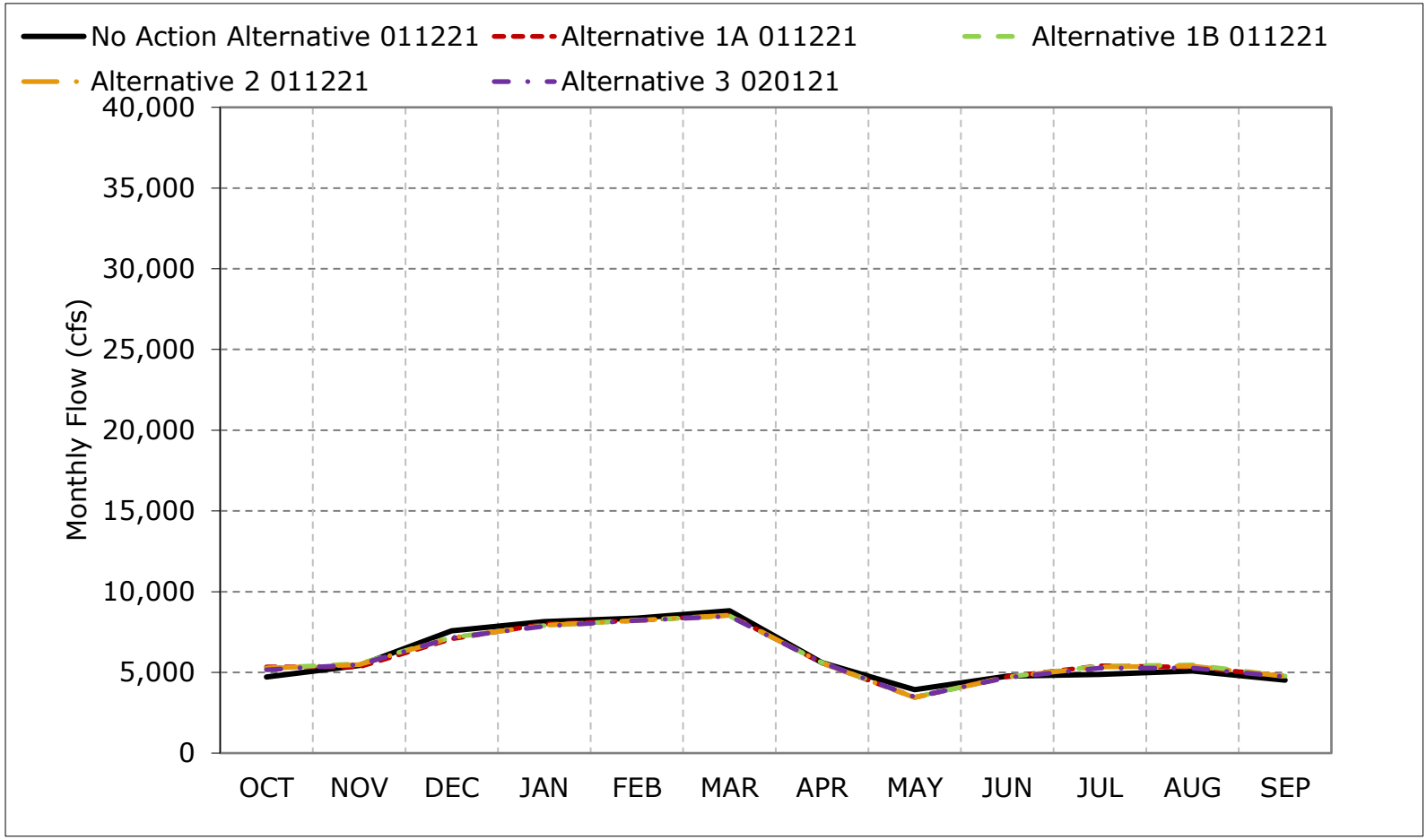
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-9-5. Sacramento River Flow at Wilkins Slough, Dry Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-9-6. Sacramento River Flow at Wilkins Slough, Critical Year Average Flow



*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with calendar year - year type sorting.

Figure 5C-9-7. Sacramento River Flow at Wilkins Slough, October

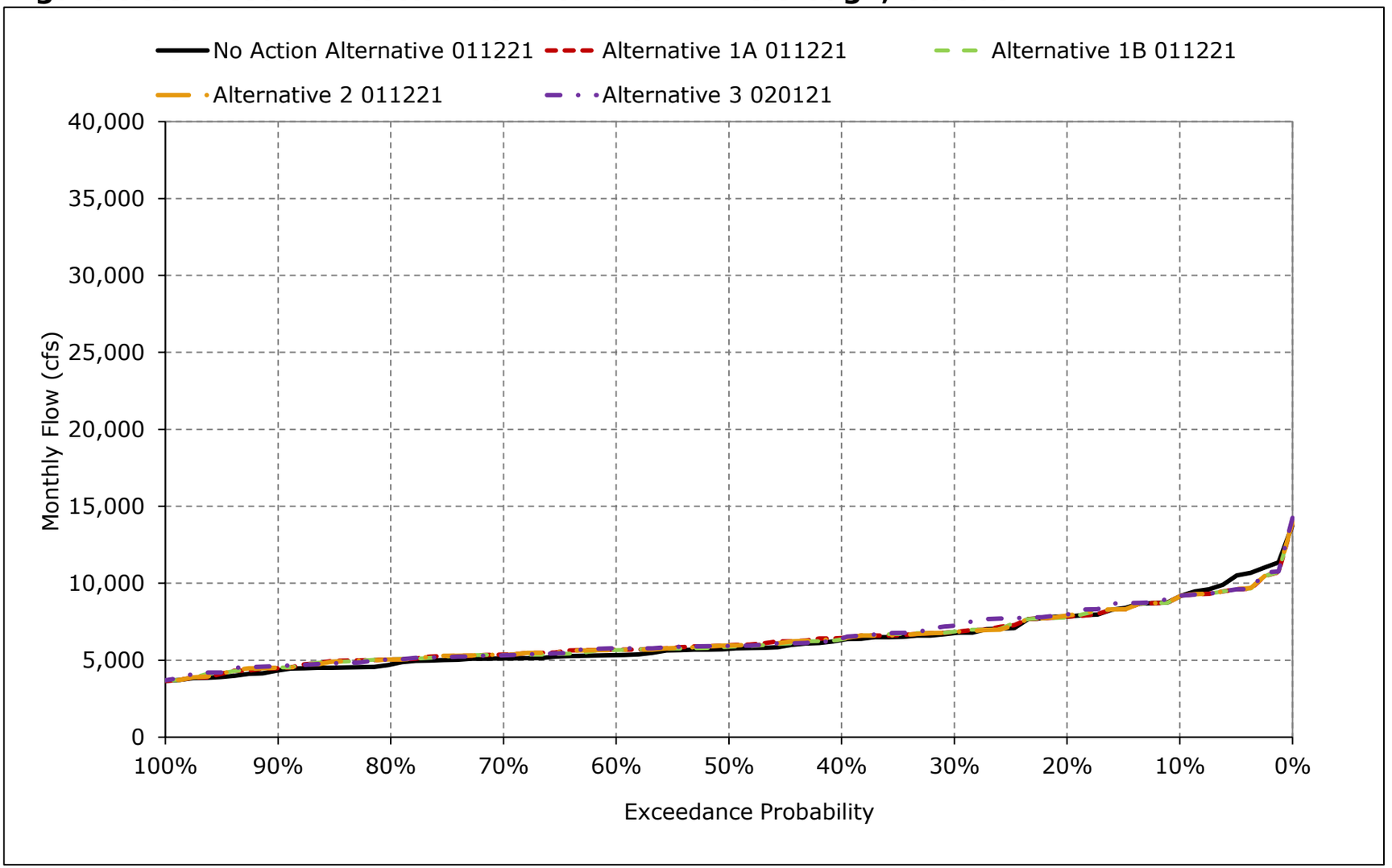


Figure 5C-9-8. Sacramento River Flow at Wilkins Slough, November

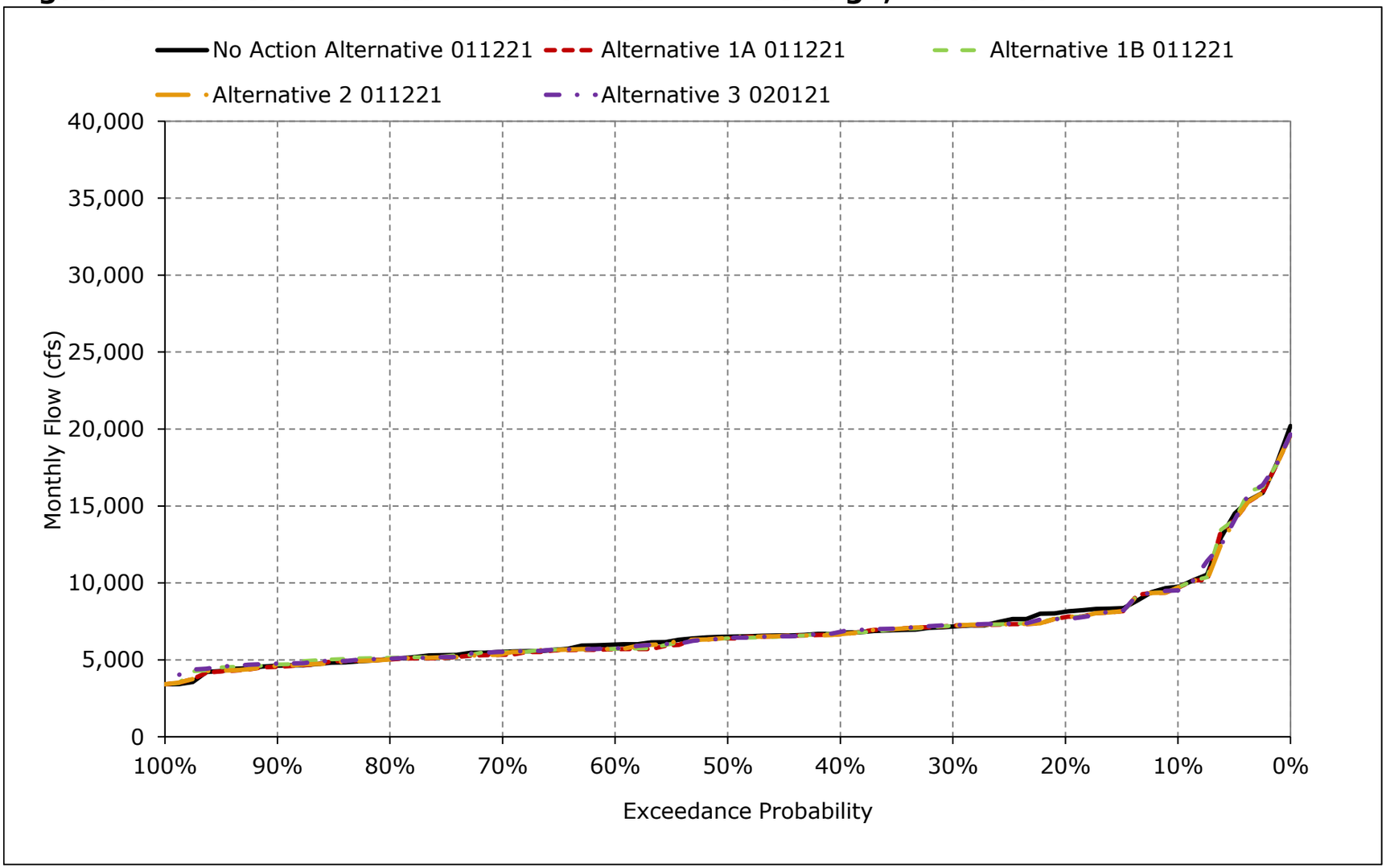


Figure 5C-9-9. Sacramento River Flow at Wilkins Slough, December

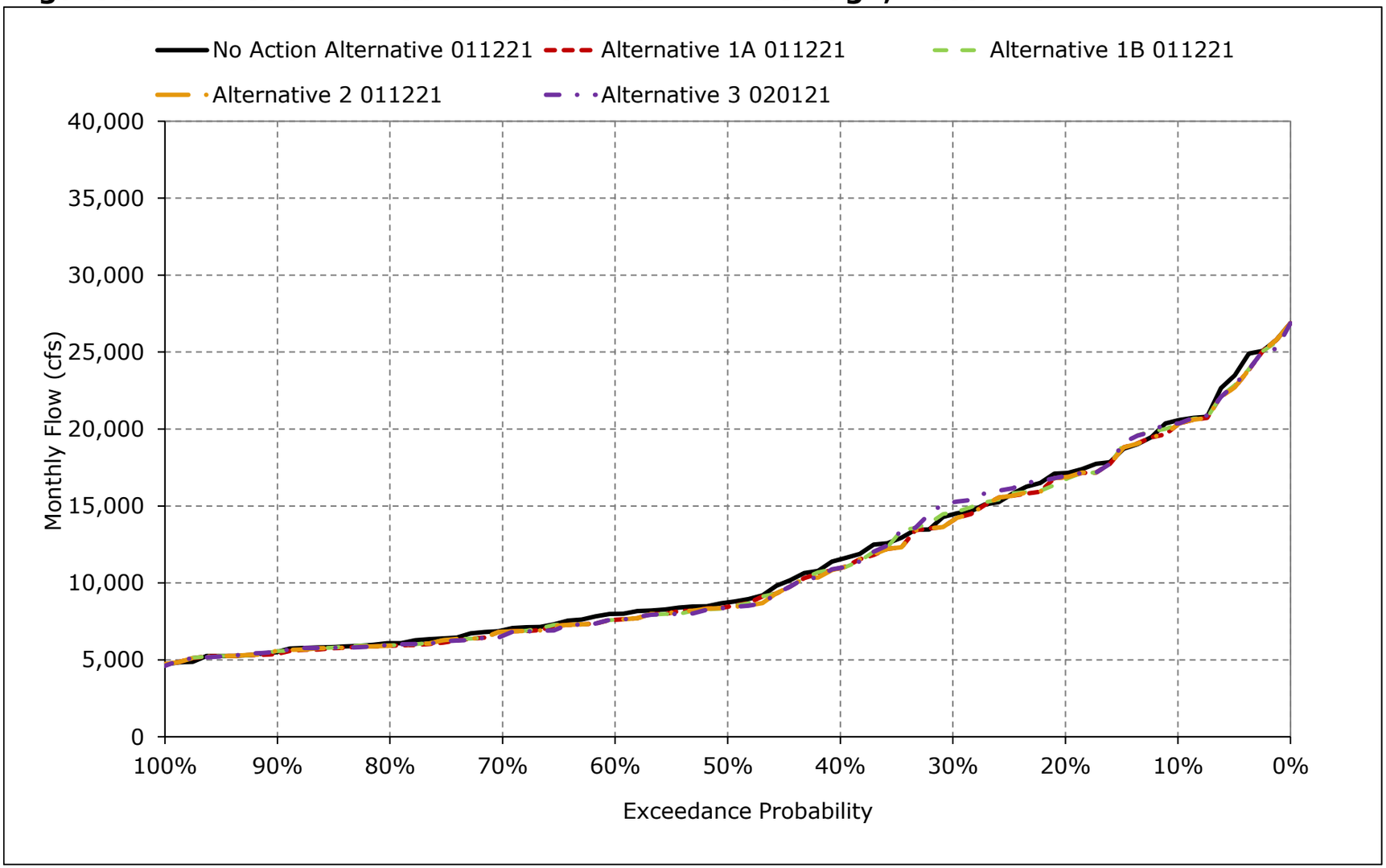


Figure 5C-9-10. Sacramento River Flow at Wilkins Slough, January

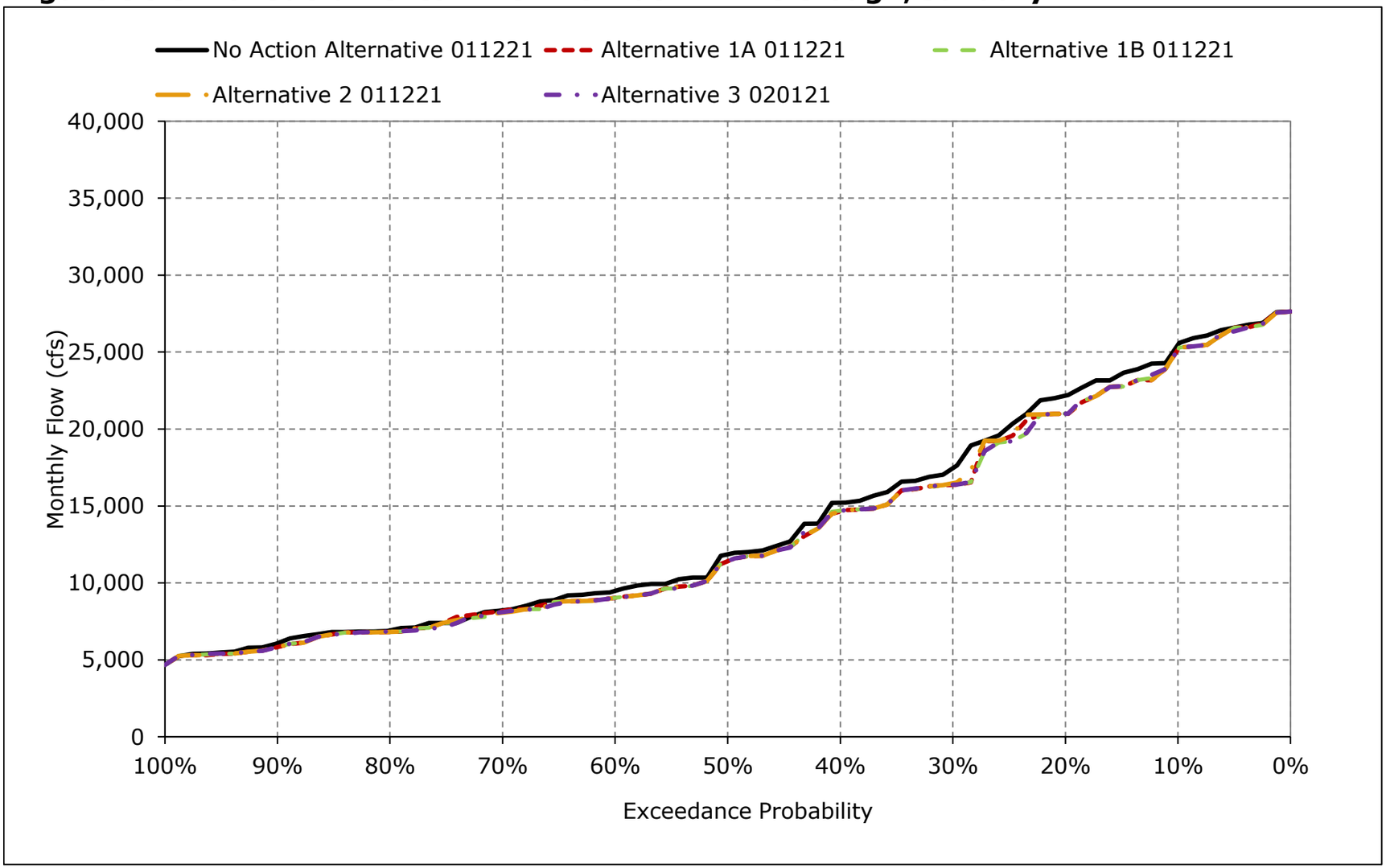


Figure 5C-9-11. Sacramento River Flow at Wilkins Slough, February

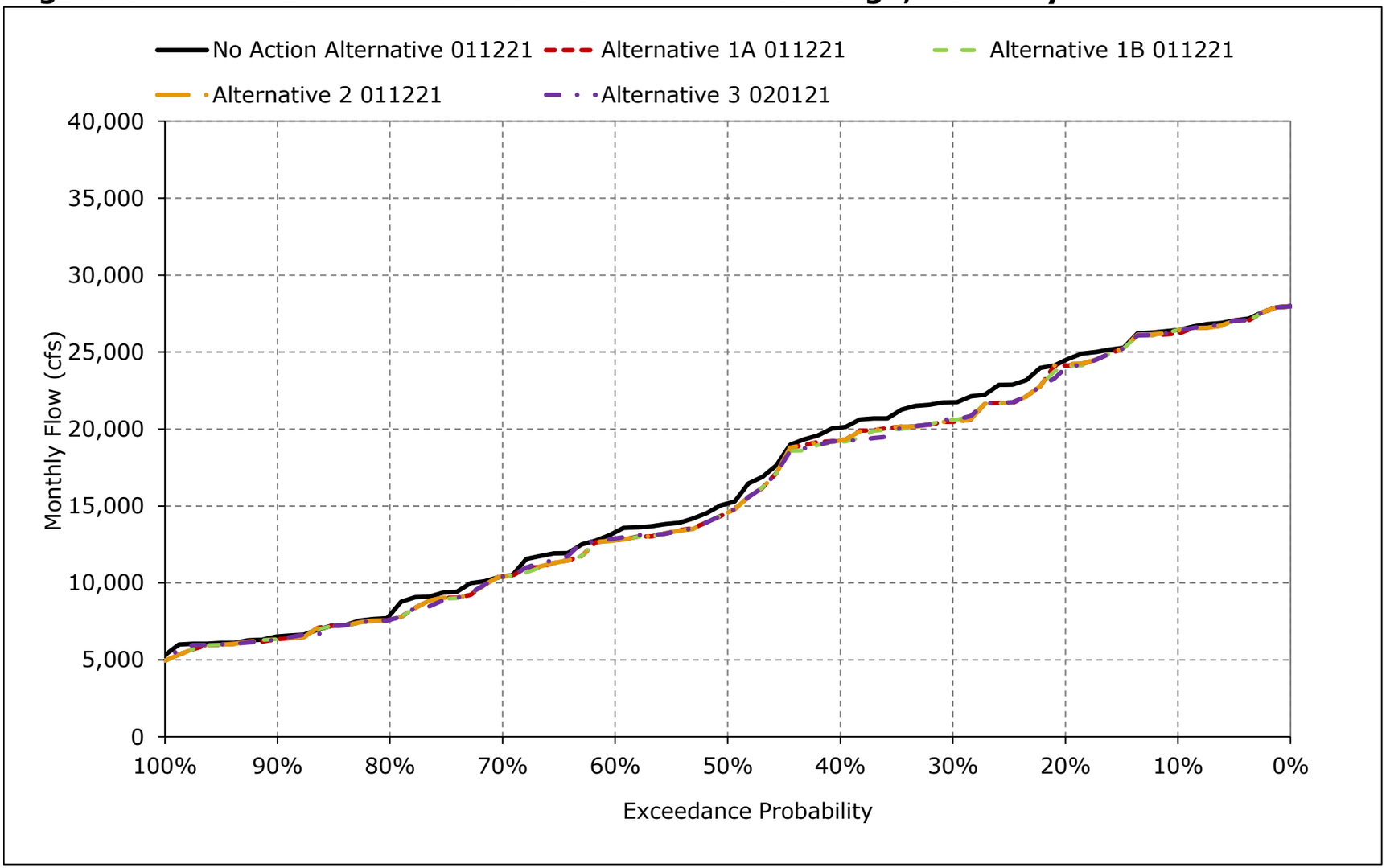


Figure 5C-9-12. Sacramento River Flow at Wilkins Slough, March

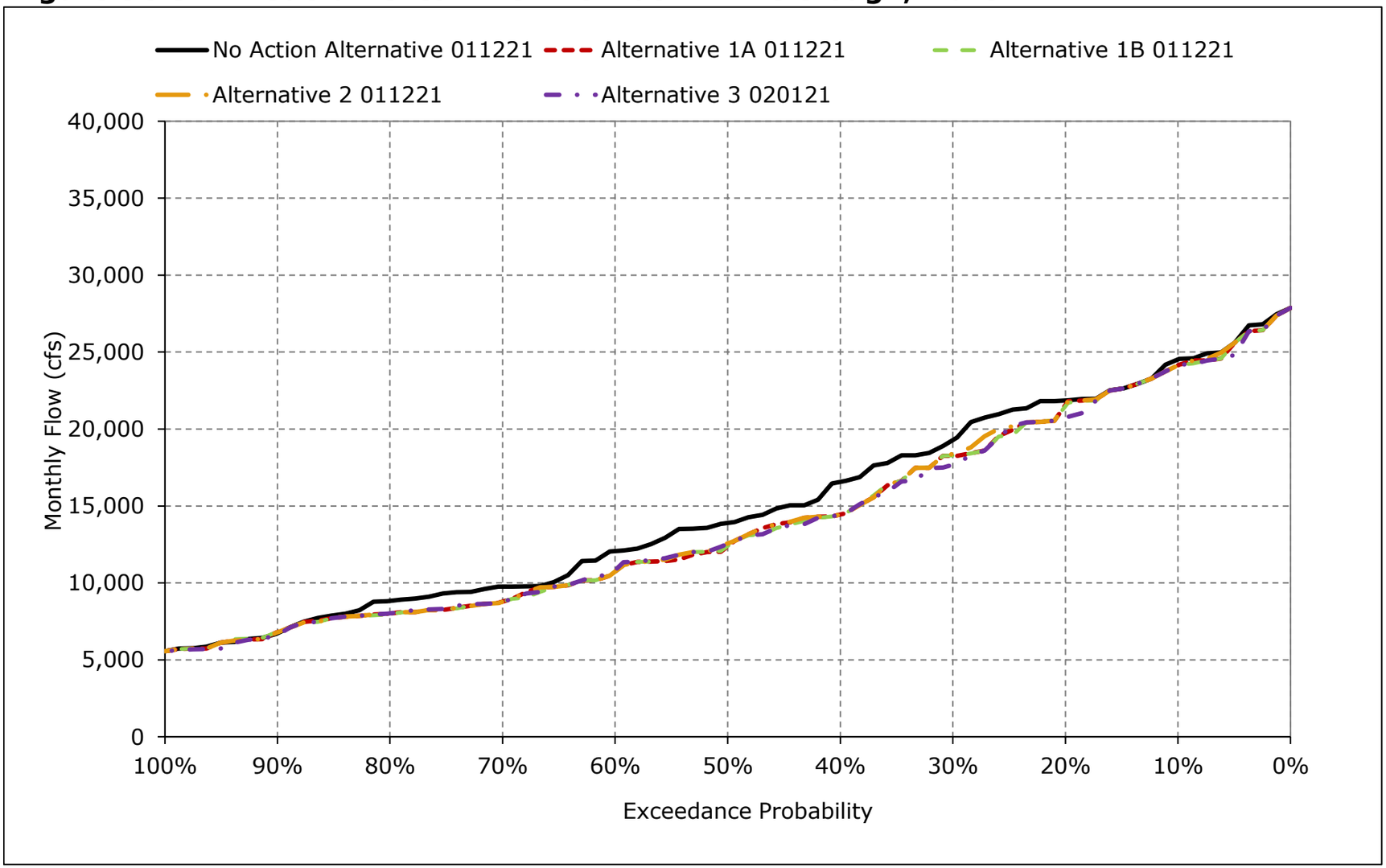


Figure 5C-9-13. Sacramento River Flow at Wilkins Slough, April

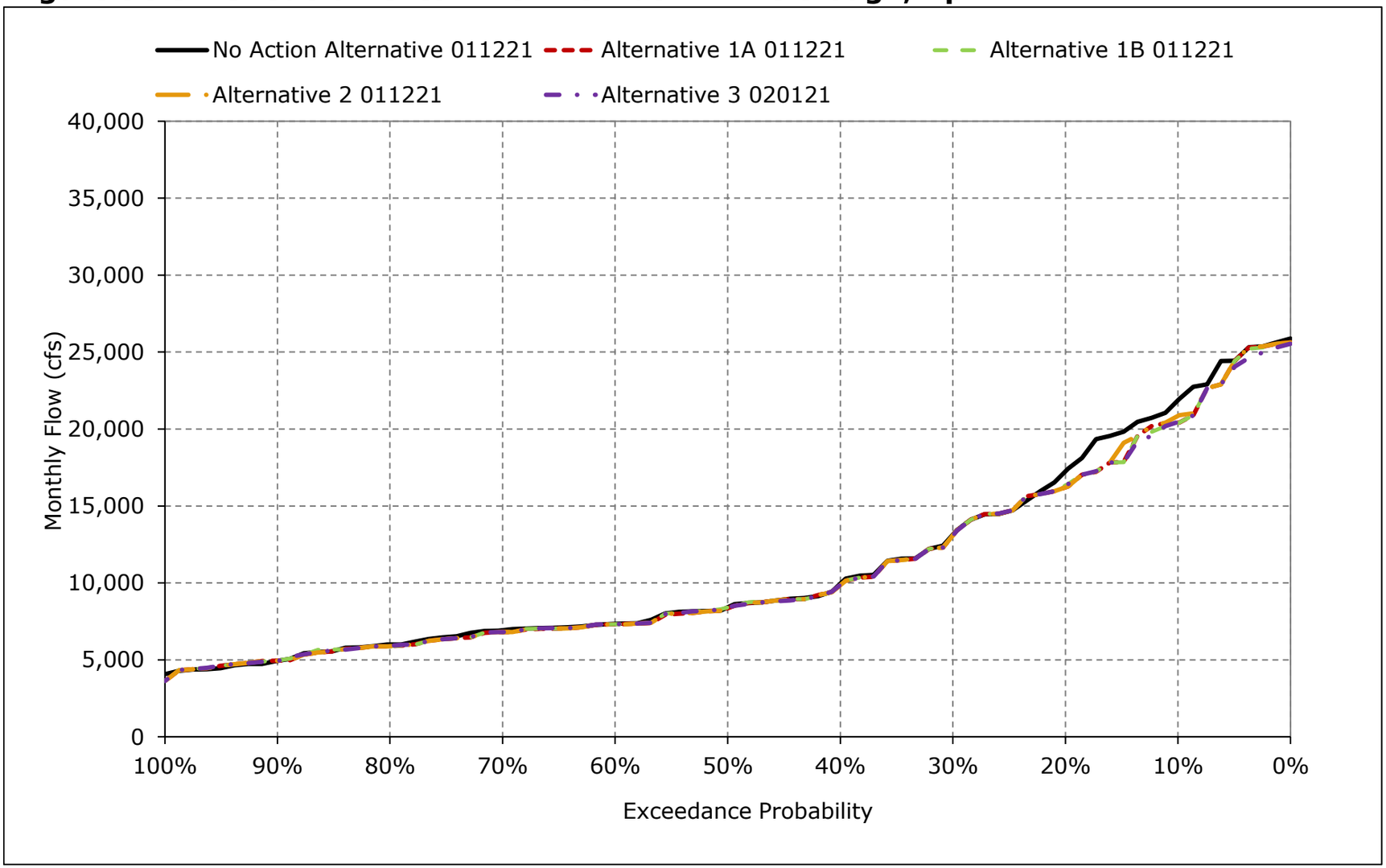


Figure 5C-9-14. Sacramento River Flow at Wilkins Slough, May

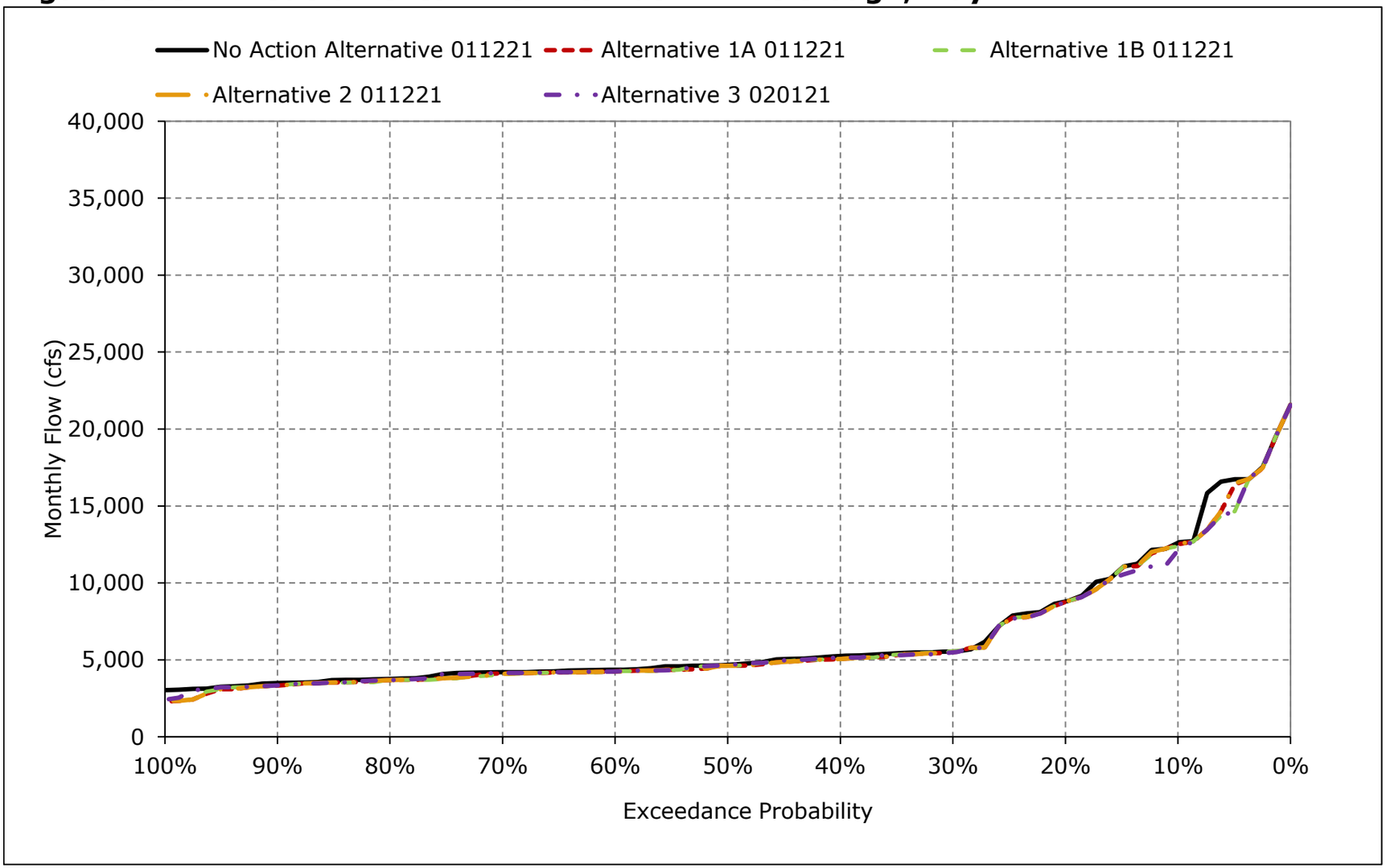


Figure 5C-9-15. Sacramento River Flow at Wilkins Slough, June

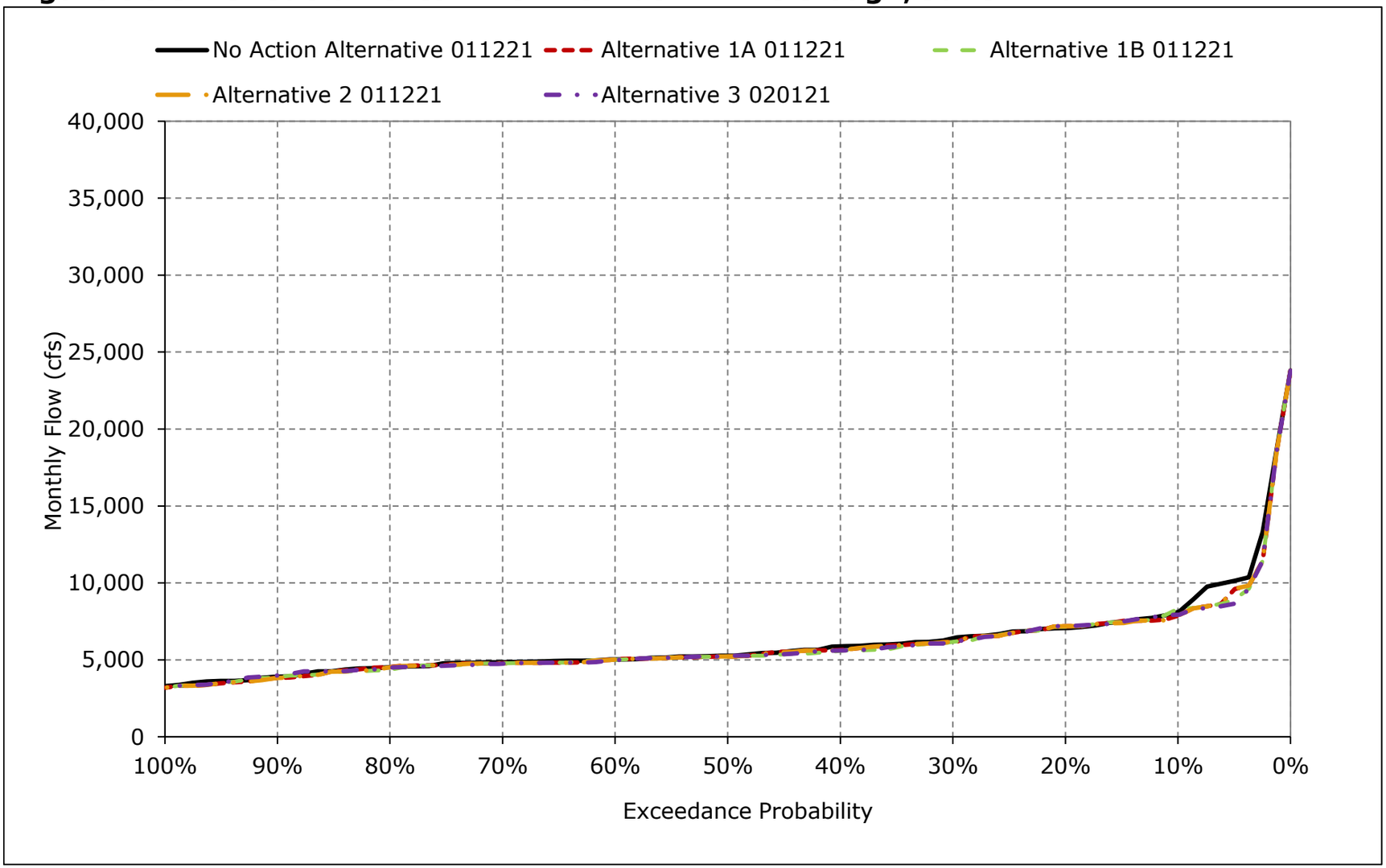


Figure 5C-9-16. Sacramento River Flow at Wilkins Slough, July

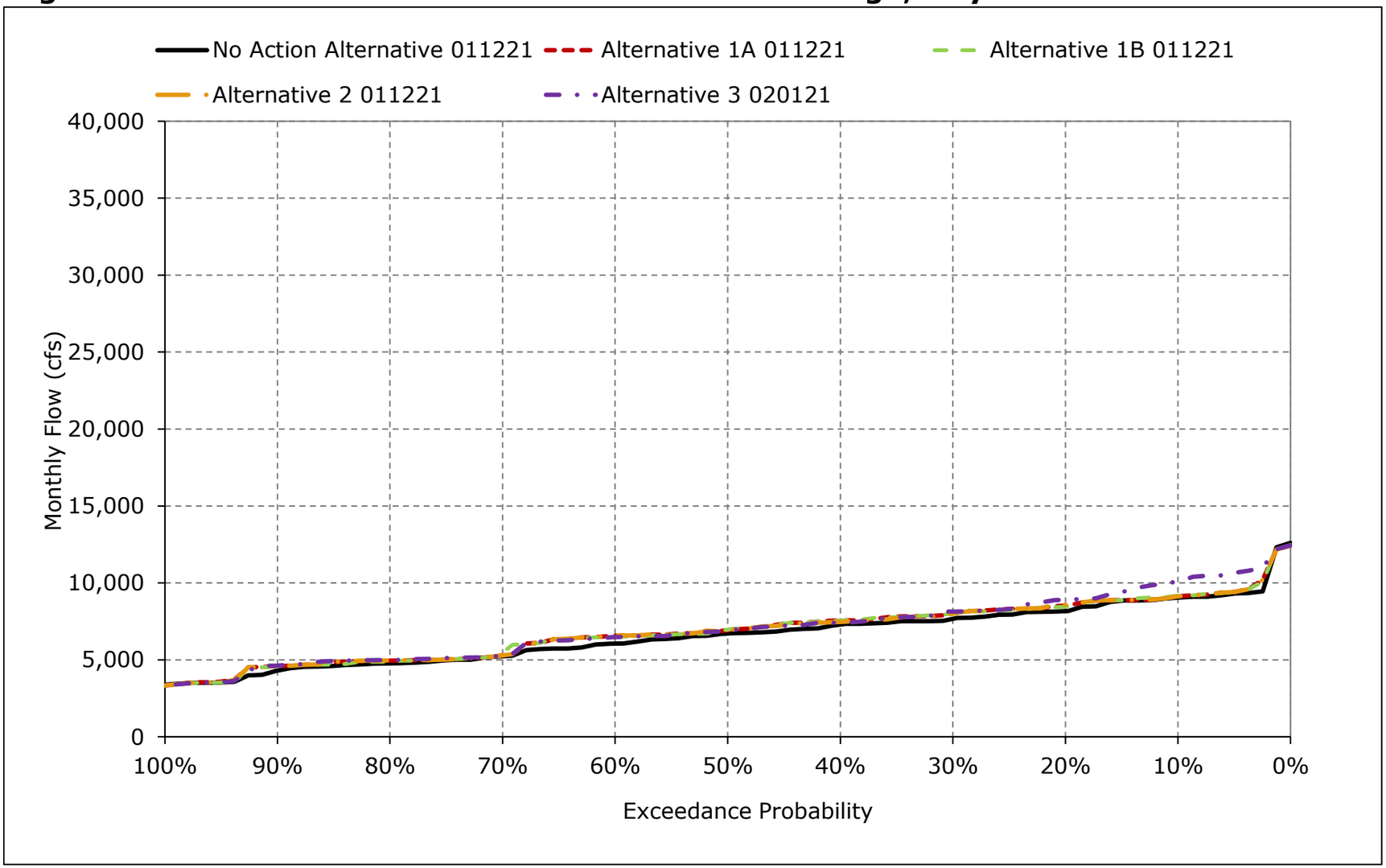


Figure 5C-9-17. Sacramento River Flow at Wilkins Slough, August

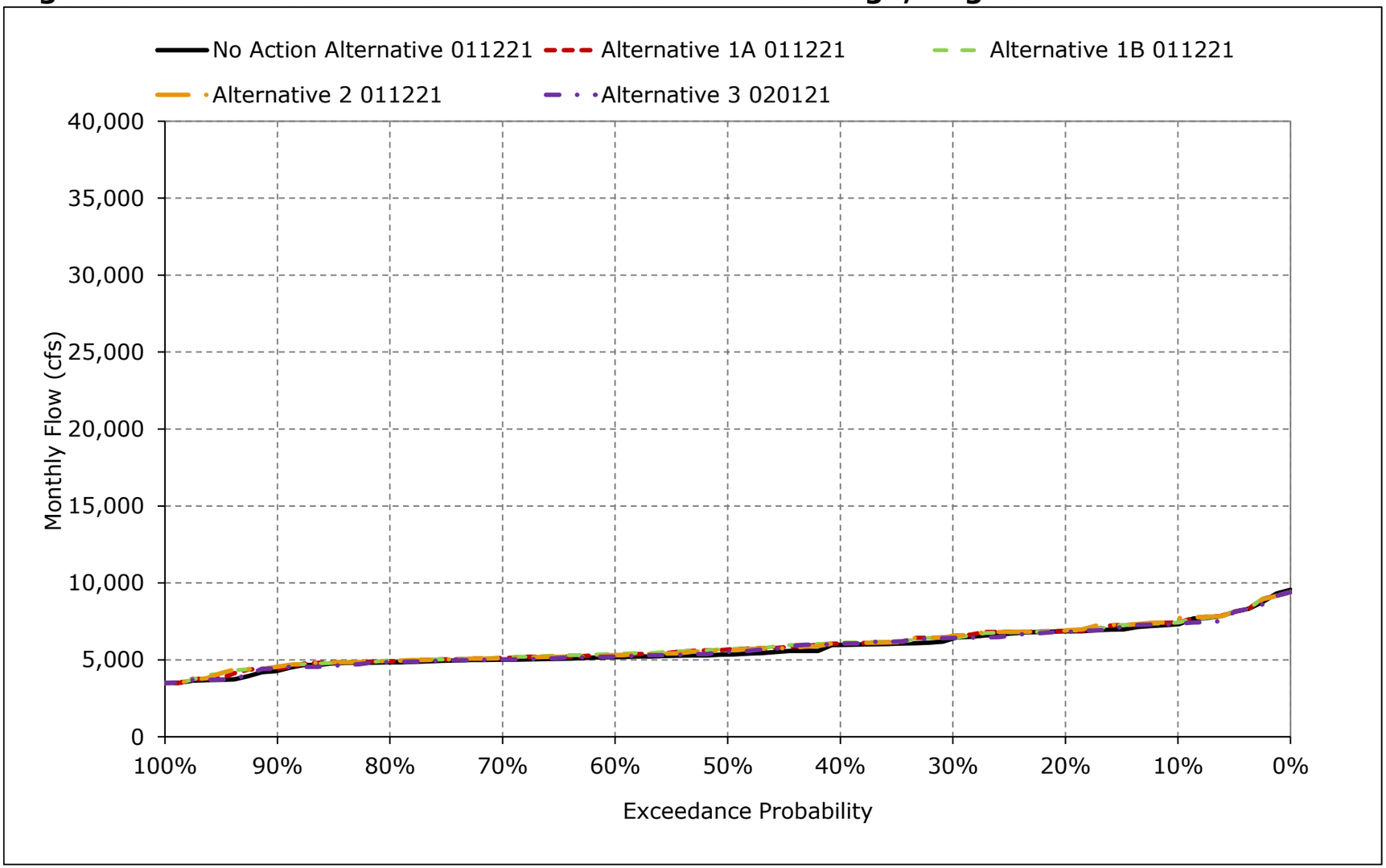


Figure 5C-9-18. Sacramento River Flow at Wilkins Slough, September