

# Appendix 5B3 Delta Operations

## 1 Results

The following results of the CalSim II model are included for Delta operations at key project locations for the following alternatives:

- No Action Alternative 051422
- Alternative 1A 051722
- Alternative 1B 051722
- Alternative 2 051722
- Alternative 3 051722

**Table 5B3-1. Delta Operations Locations and Parameters**

<b>Section</b>	<b>Output Parameters</b>	<b>Table Numbers</b>	<b>Figure Numbers</b>
Delta	Sacramento River Flow at Freeport	5B3-1-1a to 5B3-1-4c	5B3-1-1 to 5B3-1-18
Delta	DCC Flow	5B3-2-1a to 5B3-2-4c	5B3-2-1 to 5B3-2-18
Delta	Yolo Bypass Flow	5B3-3-1a to 5B3-3-4c	5B3-3-1 to 5B3-3-18
Delta	Sacramento River Flow at Rio Vista	5B3-4-1a to 5B3-4-4c	5B3-4-1 to 5B3-4-18
Delta	Delta Outflow	5B3-5-1a to 5B3-5-4c	5B3-5-1 to 5B3-5-18
Delta	Old and Middle River Flow	5B3-6-1a to 5B3-6-4c	5B3-6-1 to 5B3-6-18
Delta	San Joaquin River at Vernalis	5B3-7-1a to 5B3-7-4c	5B3-7-1 to 5B3-7-18
Delta	San Joaquin River at Vernalis (60-20-20)	5B3-8-1a to 5B3-8-4c	5B3-8-1 to 5B3-8-18

## **2 Report Formats**

Reports include monthly tables, monthly pattern charts, and monthly exceedance charts. Monthly tables compare 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) present all alternatives. Monthly exceedance charts (all months) present all alternatives.

**Table 5B3-1-1a. Sacramento River Flow at Freeport, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,769	25,060	48,629	58,060	67,132	62,020	52,838	43,515	26,803	24,169	17,879	22,320
<b>20% Exceedance</b>	14,082	15,436	34,020	53,086	58,429	51,373	40,727	31,813	20,079	23,116	17,201	21,607
<b>30% Exceedance</b>	12,353	14,228	22,801	39,024	51,511	39,753	25,503	20,938	15,566	21,244	16,664	20,761
<b>40% Exceedance</b>	11,795	13,585	19,424	26,919	45,431	32,886	22,851	17,218	15,055	19,890	16,018	19,877
<b>50% Exceedance</b>	10,524	13,146	15,777	23,987	33,108	25,215	18,582	15,189	14,552	19,056	15,440	14,339
<b>60% Exceedance</b>	9,116	11,615	15,282	18,930	25,707	21,781	15,260	13,444	14,147	16,972	13,512	10,723
<b>70% Exceedance</b>	8,464	9,646	14,559	14,657	21,712	18,995	12,812	12,049	13,277	15,822	10,339	10,015
<b>80% Exceedance</b>	7,090	8,653	11,909	12,780	17,732	14,905	12,211	10,597	12,406	13,438	9,649	9,379
<b>90% Exceedance</b>	7,000	7,000	9,643	11,697	14,663	11,431	10,991	9,565	10,996	10,083	8,548	7,804
<b>Full Simulation Period Average<sup>a</sup></b>	11,068	14,359	22,793	30,163	37,672	32,209	24,970	20,751	17,185	18,068	13,859	15,118
<b>Wet Water Years (32%)</b>	14,038	18,156	25,908	48,604	56,569	49,188	40,251	33,461	23,936	19,381	16,536	21,337
<b>Above Normal Water Years (15%)</b>	12,192	15,926	23,396	36,672	44,437	43,369	27,475	23,421	16,743	21,473	16,963	21,226
<b>Below Normal Water Years (17%)</b>	12,021	15,161	26,156	22,358	33,251	22,267	19,429	16,222	14,485	21,112	15,711	12,412
<b>Dry Water Years (22%)</b>	7,748	11,618	22,224	16,351	23,302	20,376	14,518	12,138	14,206	16,746	9,886	9,546
<b>Critical Water Years (15%)</b>	7,376	7,740	12,374	13,524	16,675	13,611	11,501	8,743	10,621	10,249	8,751	7,051

**Table 5B3-1-1b. Sacramento River Flow at Freeport, Alternative 1A 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,768	23,447	48,177	56,599	66,721	62,018	52,556	43,386	26,150	24,170	17,863	22,602
<b>20% Exceedance</b>	13,985	15,381	32,503	50,580	57,391	49,721	40,727	31,794	20,078	23,173	17,230	21,626
<b>30% Exceedance</b>	12,561	14,275	22,237	37,513	49,955	37,942	25,518	20,936	15,578	21,249	16,731	20,883
<b>40% Exceedance</b>	11,772	13,585	18,709	25,959	43,707	31,601	22,839	17,218	15,069	20,146	16,081	20,015
<b>50% Exceedance</b>	10,592	13,146	15,778	22,445	31,816	24,418	18,605	15,239	14,555	19,127	15,426	14,323
<b>60% Exceedance</b>	10,139	11,933	15,351	18,933	25,332	21,010	15,243	13,443	14,128	18,087	14,090	11,328
<b>70% Exceedance</b>	9,548	10,869	14,585	14,658	21,519	18,889	12,990	12,049	13,336	16,085	11,765	10,838
<b>80% Exceedance</b>	8,762	9,544	11,940	12,793	18,143	14,932	12,217	10,635	12,425	14,374	11,097	10,181
<b>90% Exceedance</b>	7,371	7,174	9,690	11,712	14,675	11,451	11,047	9,572	10,996	11,169	10,418	8,797
<b>Full Simulation Period Average<sup>a</sup></b>	11,449	14,486	22,371	29,686	37,151	31,710	24,791	20,720	17,192	18,433	14,386	15,547
<b>Wet Water Years (32%)</b>	13,997	17,940	25,618	48,156	56,136	48,895	39,778	33,296	23,946	19,393	16,547	21,443
<b>Above Normal Water Years (15%)</b>	12,362	15,921	22,780	35,544	43,405	42,466	27,515	23,385	16,707	21,531	16,991	21,271
<b>Below Normal Water Years (17%)</b>	12,277	15,414	25,461	21,817	32,642	21,761	19,179	16,229	14,512	21,150	15,818	12,634
<b>Dry Water Years (22%)</b>	8,898	12,174	21,674	16,148	22,720	19,699	14,553	12,208	14,208	17,701	11,259	10,543
<b>Critical Water Years (15%)</b>	7,874	7,951	12,364	13,300	16,671	13,344	11,502	8,815	10,644	11,181	10,117	7,952

**Table 5B3-1-1c. Sacramento River Flow at Freeport, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-1	-1,613	-452	-1,460	-411	-2	-282	-129	-653	1	-16	282
<b>20% Exceedance</b>	-96	-55	-1,517	-2,505	-1,038	-1,652	-1	-19	0	57	29	19
<b>30% Exceedance</b>	208	47	-564	-1,511	-1,556	-1,811	15	-2	11	5	67	122
<b>40% Exceedance</b>	-23	0	-716	-960	-1,724	-1,285	-12	1	14	256	63	138
<b>50% Exceedance</b>	68	0	1	-1,542	-1,292	-797	23	50	3	71	-14	-16
<b>60% Exceedance</b>	1,023	318	69	4	-375	-771	-17	0	-19	1,115	578	604
<b>70% Exceedance</b>	1,084	1,222	26	1	-193	-106	177	0	59	264	1,426	822
<b>80% Exceedance</b>	1,672	891	31	13	411	28	5	38	19	936	1,448	802
<b>90% Exceedance</b>	371	174	47	14	12	20	56	6	0	1,086	1,870	993
<b>Full Simulation Period Average<sup>a</sup></b>	381	127	-423	-477	-521	-499	-179	-30	6	365	527	429
<b>Wet Water Years (32%)</b>	-41	-216	-290	-448	-433	-293	-473	-165	10	12	11	106
<b>Above Normal Water Years (15%)</b>	170	-6	-616	-1,128	-1,033	-903	40	-35	-36	58	29	45
<b>Below Normal Water Years (17%)</b>	256	253	-694	-542	-609	-506	-250	7	27	38	107	222
<b>Dry Water Years (22%)</b>	1,150	556	-550	-203	-582	-677	35	70	2	955	1,373	997
<b>Critical Water Years (15%)</b>	498	211	-10	-225	-4	-267	1	72	23	932	1,367	902

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-1-2a. Sacramento River Flow at Freeport, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,769	25,060	48,629	58,060	67,132	62,020	52,838	43,515	26,803	24,169	17,879	22,320
<b>20% Exceedance</b>	14,082	15,436	34,020	53,086	58,429	51,373	40,727	31,813	20,079	23,116	17,201	21,607
<b>30% Exceedance</b>	12,353	14,228	22,801	39,024	51,511	39,753	25,503	20,938	15,566	21,244	16,664	20,761
<b>40% Exceedance</b>	11,795	13,585	19,424	26,919	45,431	32,886	22,851	17,218	15,055	19,890	16,018	19,877
<b>50% Exceedance</b>	10,524	13,146	15,777	23,987	33,108	25,215	18,582	15,189	14,552	19,056	15,440	14,339
<b>60% Exceedance</b>	9,116	11,615	15,282	18,930	25,707	21,781	15,260	13,444	14,147	16,972	13,512	10,723
<b>70% Exceedance</b>	8,464	9,646	14,559	14,657	21,712	18,995	12,812	12,049	13,277	15,822	10,339	10,015
<b>80% Exceedance</b>	7,090	8,653	11,909	12,780	17,732	14,905	12,211	10,597	12,406	13,438	9,649	9,379
<b>90% Exceedance</b>	7,000	7,000	9,643	11,697	14,663	11,431	10,991	9,565	10,996	10,083	8,548	7,804
<b>Full Simulation Period Average<sup>a</sup></b>	11,068	14,359	22,793	30,163	37,672	32,209	24,970	20,751	17,185	18,068	13,859	15,118
<b>Wet Water Years (32%)</b>	14,038	18,156	25,908	48,604	56,569	49,188	40,251	33,461	23,936	19,381	16,536	21,337
<b>Above Normal Water Years (15%)</b>	12,192	15,926	23,396	36,672	44,437	43,369	27,475	23,421	16,743	21,473	16,963	21,226
<b>Below Normal Water Years (17%)</b>	12,021	15,161	26,156	22,358	33,251	22,267	19,429	16,222	14,485	21,112	15,711	12,412
<b>Dry Water Years (22%)</b>	7,748	11,618	22,224	16,351	23,302	20,376	14,518	12,138	14,206	16,746	9,886	9,546
<b>Critical Water Years (15%)</b>	7,376	7,740	12,374	13,524	16,675	13,611	11,501	8,743	10,621	10,249	8,751	7,051

**Table 5B3-1-2b. Sacramento River Flow at Freeport, Alternative 1B 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,769	23,392	48,017	55,881	66,575	62,005	52,556	43,394	26,151	24,170	17,882	22,455
<b>20% Exceedance</b>	13,985	15,383	32,722	50,573	57,420	49,443	40,725	31,791	19,775	23,223	17,287	21,676
<b>30% Exceedance</b>	12,689	14,275	22,332	37,522	50,184	37,941	25,537	21,205	15,566	21,251	16,713	21,133
<b>40% Exceedance</b>	11,835	13,585	18,556	25,891	44,455	31,602	22,842	17,218	15,062	20,082	16,081	20,064
<b>50% Exceedance</b>	10,674	13,146	15,771	22,398	31,835	24,419	18,327	15,191	14,606	19,103	15,411	14,517
<b>60% Exceedance</b>	10,151	12,076	15,288	18,935	25,259	21,022	15,243	13,443	14,128	18,087	14,235	11,436
<b>70% Exceedance</b>	9,514	11,012	14,590	14,661	21,518	18,277	12,989	12,252	13,336	16,440	11,743	10,833
<b>80% Exceedance</b>	8,938	9,339	11,958	12,795	18,082	14,932	12,217	10,627	12,326	14,375	10,867	10,150
<b>90% Exceedance</b>	7,257	7,193	9,832	11,701	14,675	11,666	10,819	9,617	11,092	11,149	10,175	8,801
<b>Full Simulation Period Average<sup>a</sup></b>	11,491	14,482	22,415	29,622	37,204	31,692	24,777	20,797	17,169	18,439	14,362	15,574
<b>Wet Water Years (32%)</b>	14,029	17,816	25,571	48,018	56,217	48,783	39,750	33,488	23,919	19,412	16,572	21,443
<b>Above Normal Water Years (15%)</b>	12,499	15,962	22,869	35,514	43,502	42,406	27,543	23,487	16,645	21,548	16,998	21,377
<b>Below Normal Water Years (17%)</b>	12,284	15,643	25,582	21,736	32,630	21,772	19,195	16,219	14,484	21,194	15,823	12,714
<b>Dry Water Years (22%)</b>	8,989	12,136	21,786	16,134	22,779	19,660	14,504	12,228	14,230	17,698	11,149	10,561
<b>Critical Water Years (15%)</b>	7,814	7,941	12,374	13,300	16,681	13,566	11,488	8,801	10,613	11,122	10,054	7,911

**Table 5B3-1-2c. Sacramento River Flow at Freeport, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	1	-1,668	-612	-2,179	-557	-15	-283	-121	-652	1	2	136
<b>20% Exceedance</b>	-97	-53	-1,298	-2,512	-1,009	-1,930	-3	-21	-304	107	86	69
<b>30% Exceedance</b>	337	47	-469	-1,502	-1,327	-1,812	33	268	0	6	49	372
<b>40% Exceedance</b>	39	0	-869	-1,028	-976	-1,284	-9	1	8	192	63	187
<b>50% Exceedance</b>	149	0	-6	-1,588	-1,272	-797	-255	2	54	46	-29	177
<b>60% Exceedance</b>	1,035	461	6	5	-448	-759	-16	0	-19	1,115	724	713
<b>70% Exceedance</b>	1,050	1,365	31	4	-194	-718	177	203	59	619	1,404	817
<b>80% Exceedance</b>	1,849	686	49	15	351	28	5	31	-80	937	1,218	771
<b>90% Exceedance</b>	257	193	189	4	12	234	-171	52	96	1,066	1,626	997
<b>Full Simulation Period Average<sup>a</sup></b>	423	123	-378	-542	-468	-518	-194	46	-16	371	503	456
<b>Wet Water Years (32%)</b>	-9	-340	-337	-585	-352	-405	-501	27	-17	30	35	107
<b>Above Normal Water Years (15%)</b>	306	36	-527	-1,158	-935	-962	68	66	-98	75	35	151
<b>Below Normal Water Years (17%)</b>	263	481	-573	-622	-621	-496	-235	-3	-1	82	112	302
<b>Dry Water Years (22%)</b>	1,241	518	-438	-216	-523	-716	-14	89	23	953	1,263	1,015
<b>Critical Water Years (15%)</b>	438	201	-1	-225	6	-44	-13	58	-8	873	1,303	861

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.



**Table 5B3-1-3a. Sacramento River Flow at Freeport, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,769	25,060	48,629	58,060	67,132	62,020	52,838	43,515	26,803	24,169	17,879	22,320
<b>20% Exceedance</b>	14,082	15,436	34,020	53,086	58,429	51,373	40,727	31,813	20,079	23,116	17,201	21,607
<b>30% Exceedance</b>	12,353	14,228	22,801	39,024	51,511	39,753	25,503	20,938	15,566	21,244	16,664	20,761
<b>40% Exceedance</b>	11,795	13,585	19,424	26,919	45,431	32,886	22,851	17,218	15,055	19,890	16,018	19,877
<b>50% Exceedance</b>	10,524	13,146	15,777	23,987	33,108	25,215	18,582	15,189	14,552	19,056	15,440	14,339
<b>60% Exceedance</b>	9,116	11,615	15,282	18,930	25,707	21,781	15,260	13,444	14,147	16,972	13,512	10,723
<b>70% Exceedance</b>	8,464	9,646	14,559	14,657	21,712	18,995	12,812	12,049	13,277	15,822	10,339	10,015
<b>80% Exceedance</b>	7,090	8,653	11,909	12,780	17,732	14,905	12,211	10,597	12,406	13,438	9,649	9,379
<b>90% Exceedance</b>	7,000	7,000	9,643	11,697	14,663	11,431	10,991	9,565	10,996	10,083	8,548	7,804
<b>Full Simulation Period Average<sup>a</sup></b>	11,068	14,359	22,793	30,163	37,672	32,209	24,970	20,751	17,185	18,068	13,859	15,118
<b>Wet Water Years (32%)</b>	14,038	18,156	25,908	48,604	56,569	49,188	40,251	33,461	23,936	19,381	16,536	21,337
<b>Above Normal Water Years (15%)</b>	12,192	15,926	23,396	36,672	44,437	43,369	27,475	23,421	16,743	21,473	16,963	21,226
<b>Below Normal Water Years (17%)</b>	12,021	15,161	26,156	22,358	33,251	22,267	19,429	16,222	14,485	21,112	15,711	12,412
<b>Dry Water Years (22%)</b>	7,748	11,618	22,224	16,351	23,302	20,376	14,518	12,138	14,206	16,746	9,886	9,546
<b>Critical Water Years (15%)</b>	7,376	7,740	12,374	13,524	16,675	13,611	11,501	8,743	10,621	10,249	8,751	7,051

**Table 5B3-1-3b. Sacramento River Flow at Freeport, Alternative 2 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,768	23,447	48,177	56,634	67,134	62,016	52,562	43,394	26,151	24,170	17,863	22,455
<b>20% Exceedance</b>	13,985	15,373	32,519	50,580	57,272	49,948	40,726	31,795	20,081	23,174	17,230	21,626
<b>30% Exceedance</b>	12,560	14,275	22,236	37,513	49,965	37,942	25,518	20,935	15,578	21,249	16,734	20,991
<b>40% Exceedance</b>	11,772	13,585	18,708	25,918	43,450	31,602	22,834	17,218	15,069	20,146	16,081	20,015
<b>50% Exceedance</b>	10,620	13,146	15,778	22,466	31,815	24,418	18,605	15,239	14,555	19,168	15,425	14,323
<b>60% Exceedance</b>	10,055	11,935	15,350	18,933	25,340	21,010	15,243	13,443	14,128	18,059	14,104	11,325
<b>70% Exceedance</b>	9,414	11,010	14,585	14,658	21,519	18,889	12,990	12,049	13,336	16,085	11,736	10,837
<b>80% Exceedance</b>	8,813	9,152	11,946	12,793	18,167	14,932	12,217	10,635	12,425	14,374	10,998	10,124
<b>90% Exceedance</b>	7,271	7,179	9,689	11,712	14,675	11,451	11,047	9,572	11,003	11,166	10,265	8,759
<b>Full Simulation Period Average<sup>a</sup></b>	11,435	14,473	22,383	29,689	37,157	31,752	24,787	20,721	17,192	18,434	14,365	15,506
<b>Wet Water Years (32%)</b>	13,998	17,942	25,615	48,167	56,199	49,011	39,777	33,299	23,946	19,393	16,548	21,450
<b>Above Normal Water Years (15%)</b>	12,366	15,921	22,843	35,550	43,355	42,497	27,492	23,385	16,707	21,531	16,991	21,275
<b>Below Normal Water Years (17%)</b>	12,261	15,412	25,462	21,801	32,596	21,765	19,177	16,229	14,507	21,191	15,861	12,595
<b>Dry Water Years (22%)</b>	8,855	12,116	21,681	16,148	22,722	19,700	14,553	12,208	14,209	17,699	11,251	10,467
<b>Critical Water Years (15%)</b>	7,856	7,950	12,378	13,306	16,678	13,343	11,502	8,815	10,647	11,145	9,938	7,813

**Table 5B3-1-3c. Sacramento River Flow at Freeport, Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-1	-1,613	-452	-1,426	2	-4	-277	-121	-652	1	-16	136
<b>20% Exceedance</b>	-97	-63	-1,501	-2,506	-1,157	-1,425	-1	-18	2	57	29	19
<b>30% Exceedance</b>	208	47	-565	-1,511	-1,546	-1,811	14	-2	11	5	71	230
<b>40% Exceedance</b>	-23	0	-716	-1,001	-1,981	-1,284	-17	1	14	256	63	138
<b>50% Exceedance</b>	95	0	1	-1,521	-1,292	-797	23	49	3	112	-15	-16
<b>60% Exceedance</b>	939	320	68	3	-367	-771	-17	0	-19	1,087	593	601
<b>70% Exceedance</b>	950	1,364	26	1	-193	-106	177	0	59	264	1,397	822
<b>80% Exceedance</b>	1,723	499	37	13	435	28	5	38	19	936	1,349	744
<b>90% Exceedance</b>	271	179	46	15	12	19	56	6	7	1,083	1,717	956
<b>Full Simulation Period Average<sup>a</sup></b>	367	114	-411	-474	-514	-457	-183	-29	6	366	507	388
<b>Wet Water Years (32%)</b>	-41	-214	-293	-437	-370	-178	-474	-162	11	12	11	114
<b>Above Normal Water Years (15%)</b>	174	-5	-553	-1,122	-1,082	-872	17	-35	-36	58	29	49
<b>Below Normal Water Years (17%)</b>	240	251	-694	-557	-655	-502	-253	7	23	79	150	183
<b>Dry Water Years (22%)</b>	1,107	498	-542	-203	-580	-676	35	70	3	954	1,365	920
<b>Critical Water Years (15%)</b>	480	210	3	-219	3	-268	1	72	26	896	1,187	762

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-1-4a. Sacramento River Flow at Freeport, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	14,769	25,060	48,629	58,060	67,132	62,020	52,838	43,515	26,803	24,169	17,879	22,320
<b>20% Exceedance</b>	14,082	15,436	34,020	53,086	58,429	51,373	40,727	31,813	20,079	23,116	17,201	21,607
<b>30% Exceedance</b>	12,353	14,228	22,801	39,024	51,511	39,753	25,503	20,938	15,566	21,244	16,664	20,761
<b>40% Exceedance</b>	11,795	13,585	19,424	26,919	45,431	32,886	22,851	17,218	15,055	19,890	16,018	19,877
<b>50% Exceedance</b>	10,524	13,146	15,777	23,987	33,108	25,215	18,582	15,189	14,552	19,056	15,440	14,339
<b>60% Exceedance</b>	9,116	11,615	15,282	18,930	25,707	21,781	15,260	13,444	14,147	16,972	13,512	10,723
<b>70% Exceedance</b>	8,464	9,646	14,559	14,657	21,712	18,995	12,812	12,049	13,277	15,822	10,339	10,015
<b>80% Exceedance</b>	7,090	8,653	11,909	12,780	17,732	14,905	12,211	10,597	12,406	13,438	9,649	9,379
<b>90% Exceedance</b>	7,000	7,000	9,643	11,697	14,663	11,431	10,991	9,565	10,996	10,083	8,548	7,804
<b>Full Simulation Period Average<sup>a</sup></b>	11,068	14,359	22,793	30,163	37,672	32,209	24,970	20,751	17,185	18,068	13,859	15,118
<b>Wet Water Years (32%)</b>	14,038	18,156	25,908	48,604	56,569	49,188	40,251	33,461	23,936	19,381	16,536	21,337
<b>Above Normal Water Years (15%)</b>	12,192	15,926	23,396	36,672	44,437	43,369	27,475	23,421	16,743	21,473	16,963	21,226
<b>Below Normal Water Years (17%)</b>	12,021	15,161	26,156	22,358	33,251	22,267	19,429	16,222	14,485	21,112	15,711	12,412
<b>Dry Water Years (22%)</b>	7,748	11,618	22,224	16,351	23,302	20,376	14,518	12,138	14,206	16,746	9,886	9,546
<b>Critical Water Years (15%)</b>	7,376	7,740	12,374	13,524	16,675	13,611	11,501	8,743	10,621	10,249	8,751	7,051

**Table 5B3-1-4b. Sacramento River Flow at Freeport, Alternative 3 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	15,202	23,445	48,257	55,864	66,536	62,023	52,576	43,427	26,153	24,416	17,886	22,564
<b>20% Exceedance</b>	14,341	16,334	32,725	50,602	58,033	49,276	40,608	31,768	19,775	23,280	17,119	21,723
<b>30% Exceedance</b>	13,033	14,446	22,330	37,575	51,370	37,974	25,666	20,938	15,535	21,138	16,694	20,869
<b>40% Exceedance</b>	12,034	13,669	18,708	26,208	44,164	31,472	22,870	17,218	15,018	20,092	16,047	19,971
<b>50% Exceedance</b>	11,003	13,259	15,759	22,394	31,818	24,419	18,501	15,247	14,555	19,120	15,413	14,597
<b>60% Exceedance</b>	10,329	12,334	15,331	18,932	25,262	20,762	15,025	13,464	14,127	17,813	14,182	11,241
<b>70% Exceedance</b>	9,587	10,988	14,290	14,600	21,516	18,992	12,989	12,321	13,241	16,178	11,795	10,782
<b>80% Exceedance</b>	8,383	9,433	12,184	12,798	17,964	14,903	12,213	10,621	12,304	14,379	10,668	9,956
<b>90% Exceedance</b>	7,425	7,334	9,641	11,706	14,680	11,647	10,633	9,617	11,218	11,139	9,607	8,555
<b>Full Simulation Period Average<sup>a</sup></b>	11,612	14,730	22,544	29,640	37,195	31,630	24,738	20,816	17,148	18,460	14,290	15,460
<b>Wet Water Years (32%)</b>	14,015	17,884	25,633	48,051	56,082	48,671	39,667	33,443	23,918	19,415	16,574	21,424
<b>Above Normal Water Years (15%)</b>	12,881	16,524	22,805	35,575	43,667	42,309	27,403	23,695	16,582	21,606	17,010	21,369
<b>Below Normal Water Years (17%)</b>	12,865	16,329	25,749	21,692	32,719	21,515	19,164	16,245	14,426	21,198	15,806	12,657
<b>Dry Water Years (22%)</b>	8,864	12,262	22,104	16,137	22,778	19,788	14,561	12,226	14,247	17,796	11,018	10,419
<b>Critical Water Years (15%)</b>	7,800	7,938	12,509	13,340	16,647	13,592	11,495	8,797	10,575	11,048	9,761	7,462

**Table 5B3-1-4c. Sacramento River Flow at Freeport, Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	434	-1,615	-372	-2,195	-596	3	-263	-88	-650	247	7	244
<b>20% Exceedance</b>	259	898	-1,296	-2,484	-397	-2,098	-119	-45	-304	164	-82	116
<b>30% Exceedance</b>	681	218	-471	-1,448	-141	-1,779	163	0	-31	-106	31	108
<b>40% Exceedance</b>	238	84	-716	-711	-1,267	-1,414	19	1	-36	202	29	94
<b>50% Exceedance</b>	478	113	-18	-1,593	-1,289	-796	-80	57	3	64	-26	257
<b>60% Exceedance</b>	1,213	718	48	2	-445	-1,019	-234	21	-20	841	670	518
<b>70% Exceedance</b>	1,123	1,342	-269	-57	-196	-4	177	272	-36	356	1,456	767
<b>80% Exceedance</b>	1,293	780	275	18	232	-2	2	25	-102	942	1,019	576
<b>90% Exceedance</b>	425	334	-2	9	17	215	-357	52	222	1,057	1,058	751
<b>Full Simulation Period Average<sup>a</sup></b>	544	371	-250	-523	-477	-579	-233	65	-37	392	432	342
<b>Wet Water Years (32%)</b>	-24	-272	-276	-553	-486	-518	-584	-18	-17	34	38	87
<b>Above Normal Water Years (15%)</b>	688	598	-591	-1,097	-770	-1,060	-73	274	-161	132	47	143
<b>Below Normal Water Years (17%)</b>	844	1,167	-407	-666	-532	-752	-265	23	-59	86	95	245
<b>Dry Water Years (22%)</b>	1,116	644	-119	-214	-524	-588	43	88	41	1,050	1,133	873
<b>Critical Water Years (15%)</b>	425	198	135	-185	-29	-18	-6	54	-47	799	1,010	411

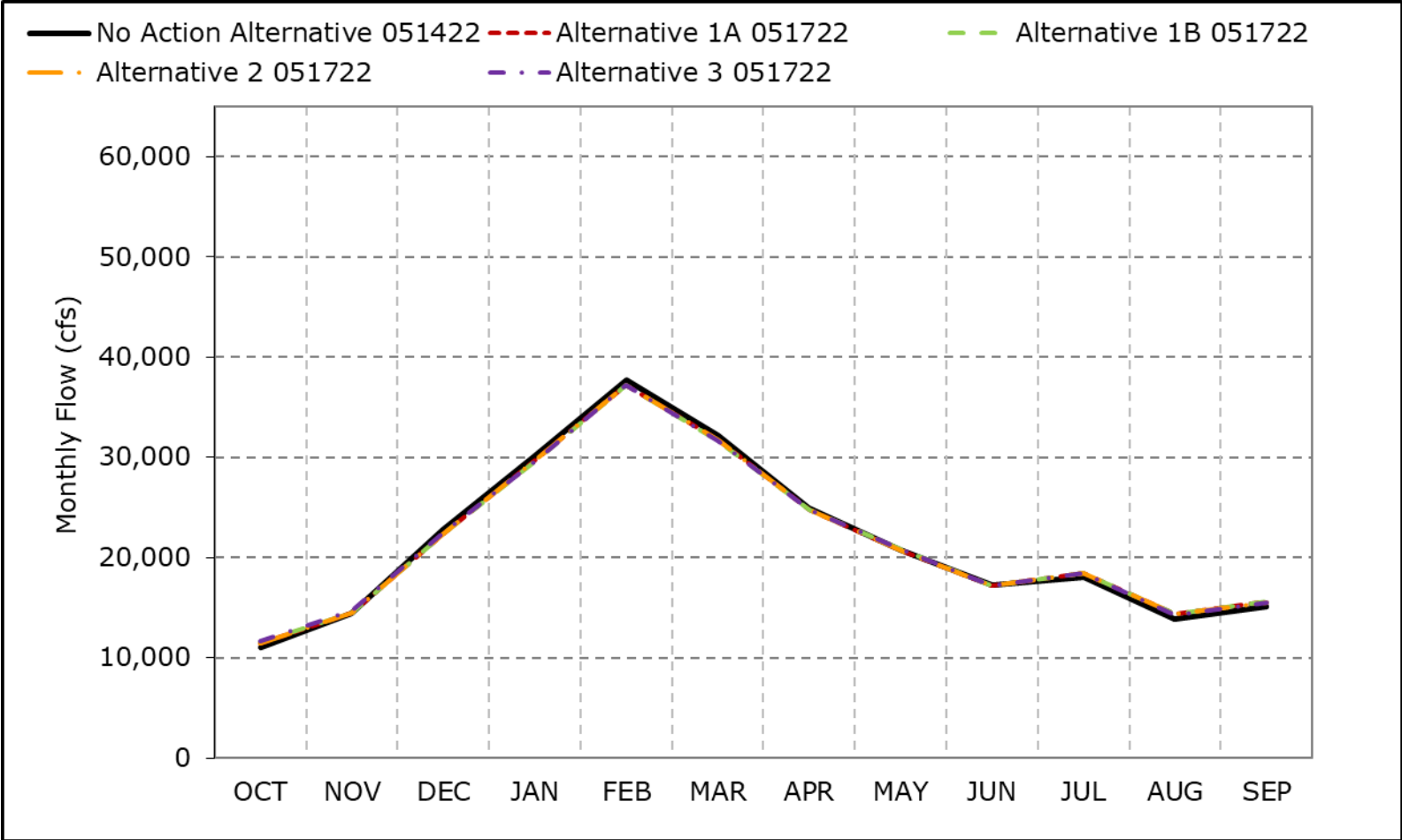
<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

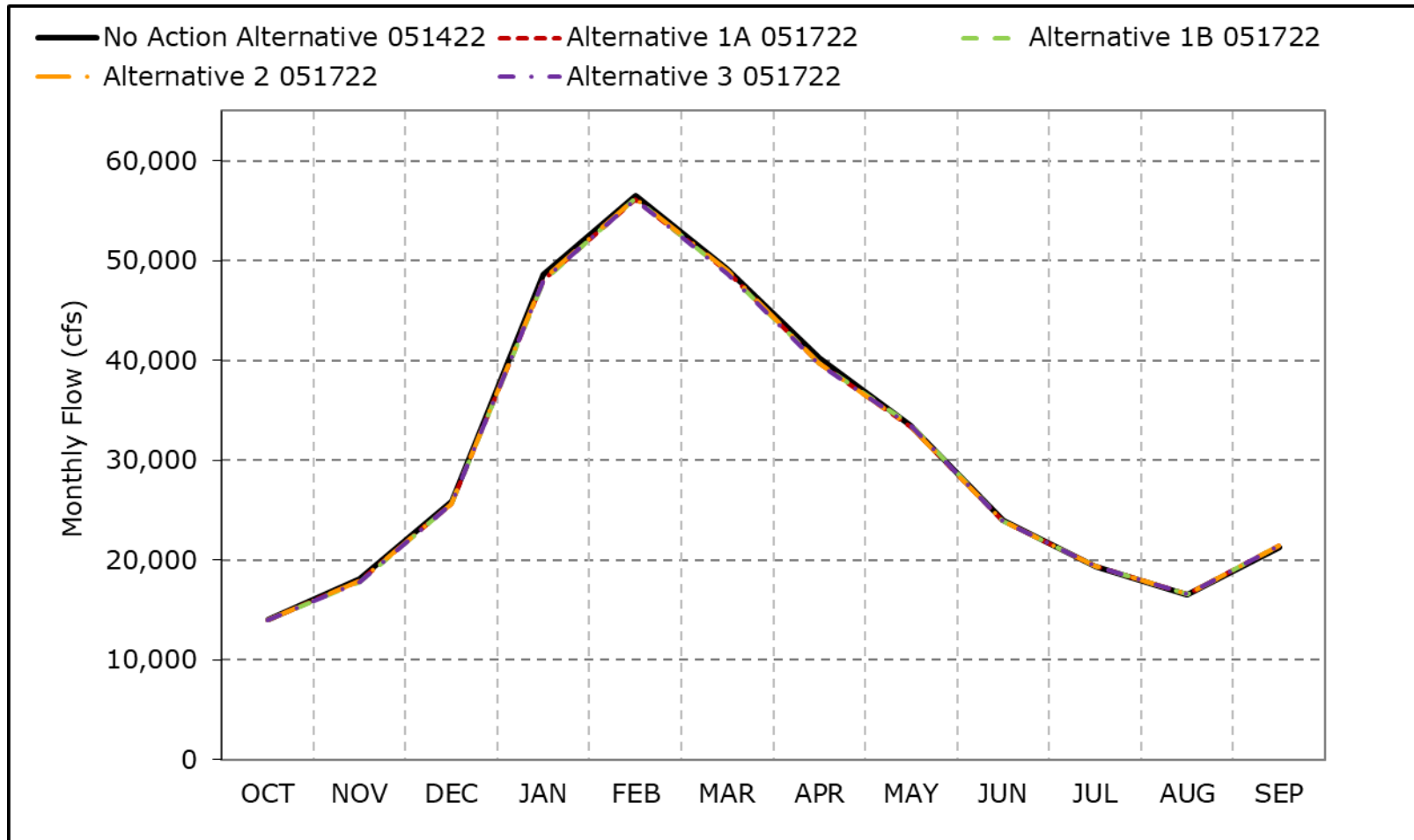
\* Water Year Types results are displayed with calendar year - year type sorting.

**Figure 5B3-1-1. Sacramento River Flow at Freeport, 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.  
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-2. Sacramento River Flow at Freeport, Wet Year Average Flow**

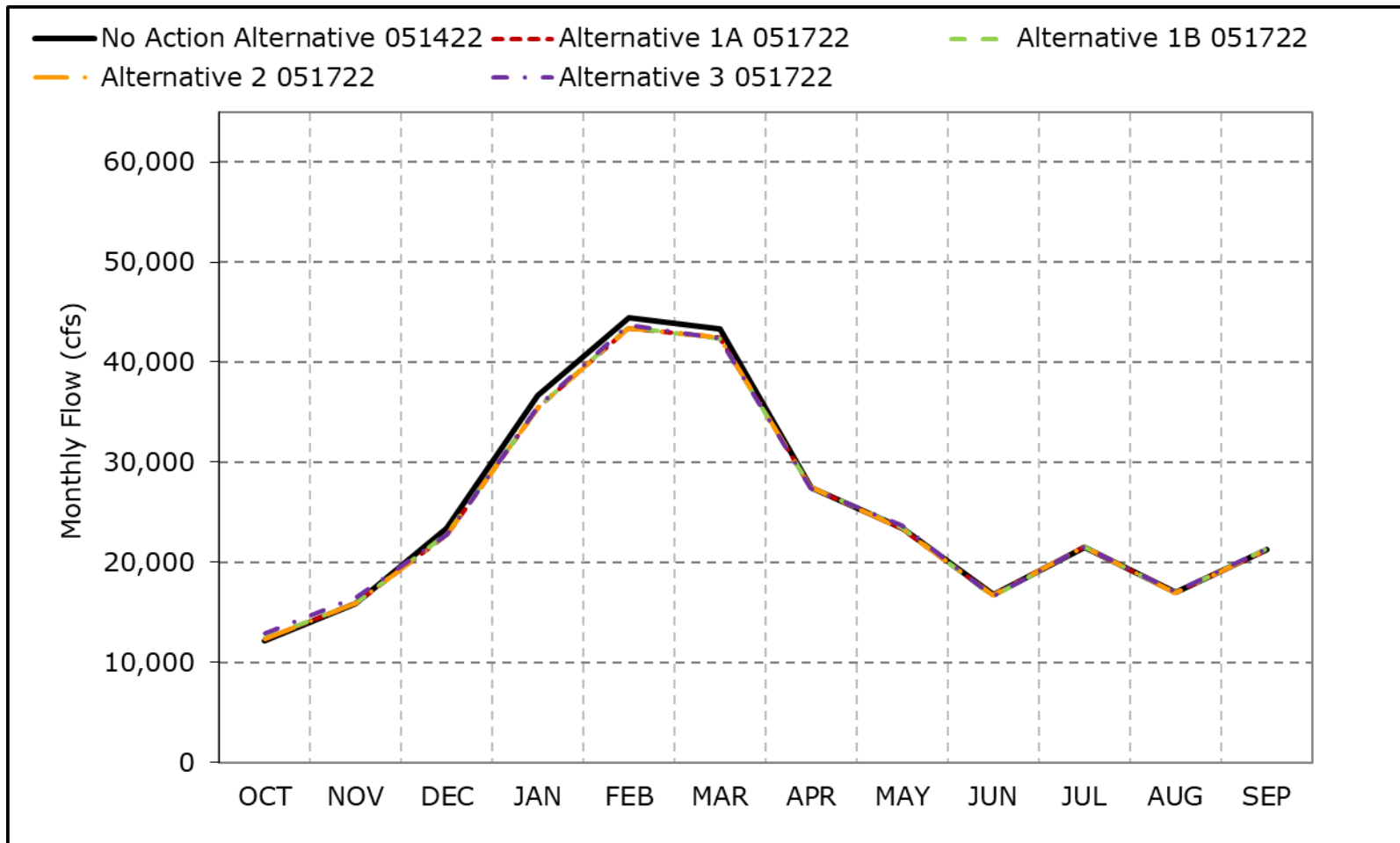


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-3. Sacramento River Flow at Freeport, Above Normal Year Average Flow**

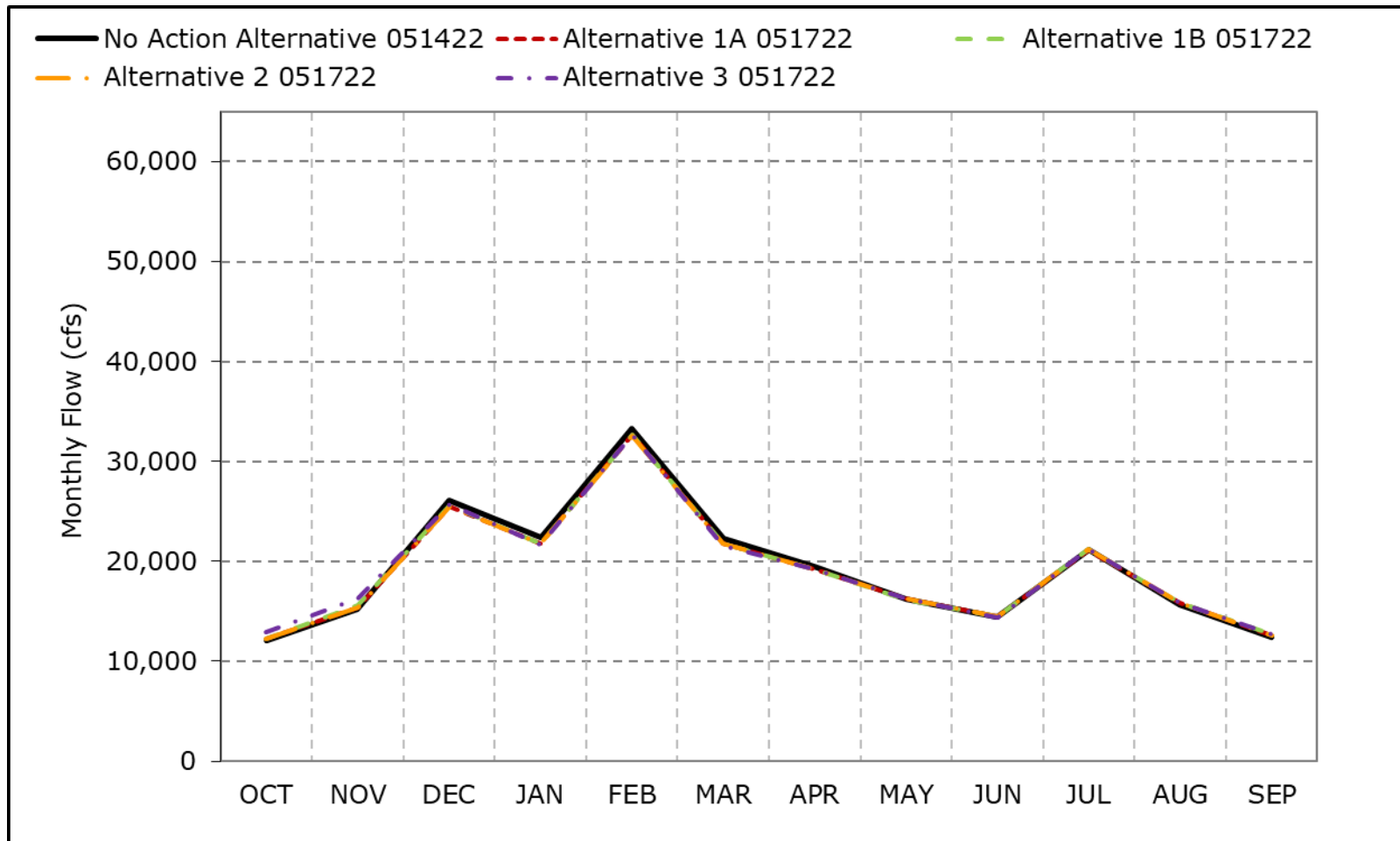


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-4. Sacramento River Flow at Freeport, Below Normal Year Average Flow**

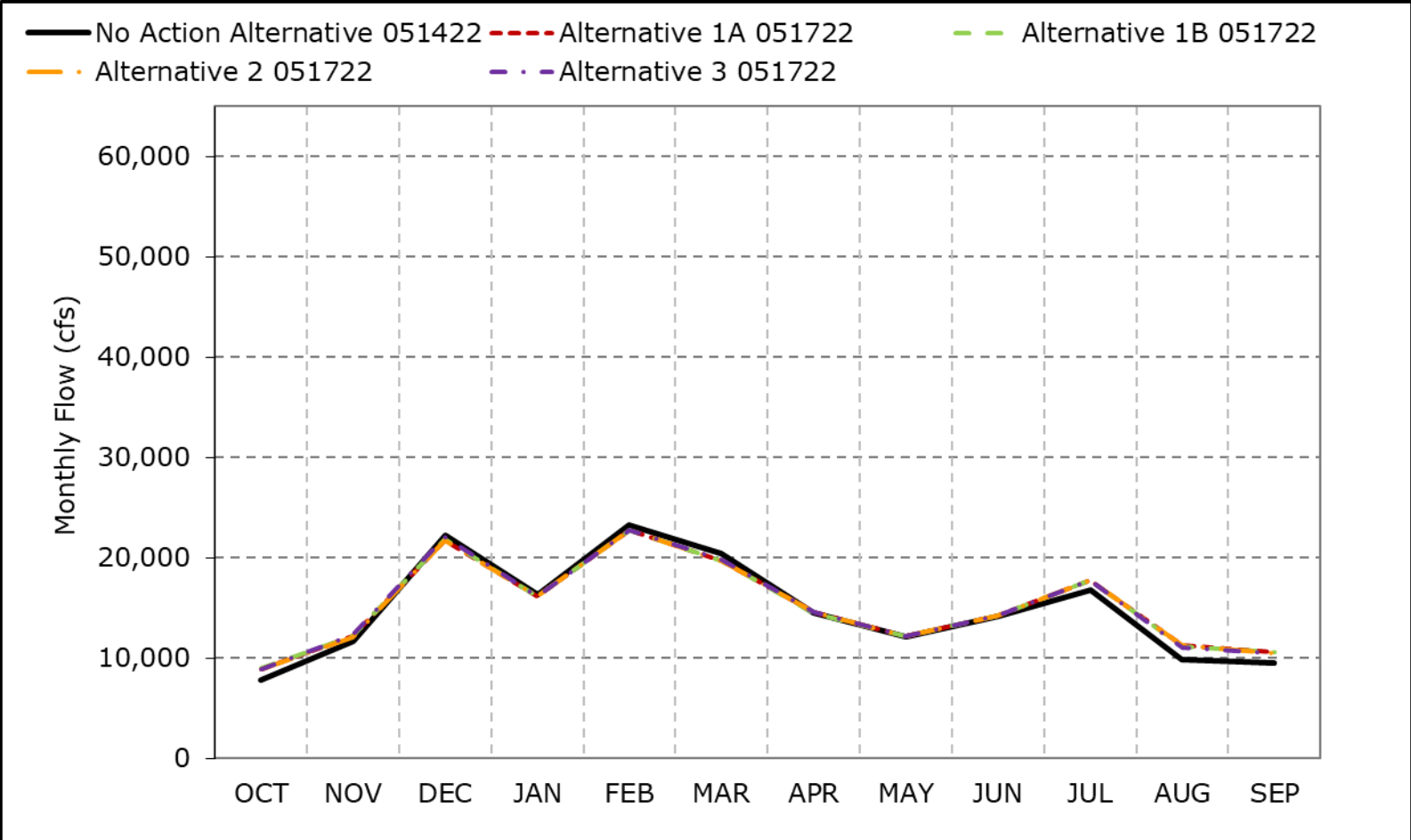


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-5. Sacramento River Flow at Freeport, Dry Year Average Flow**

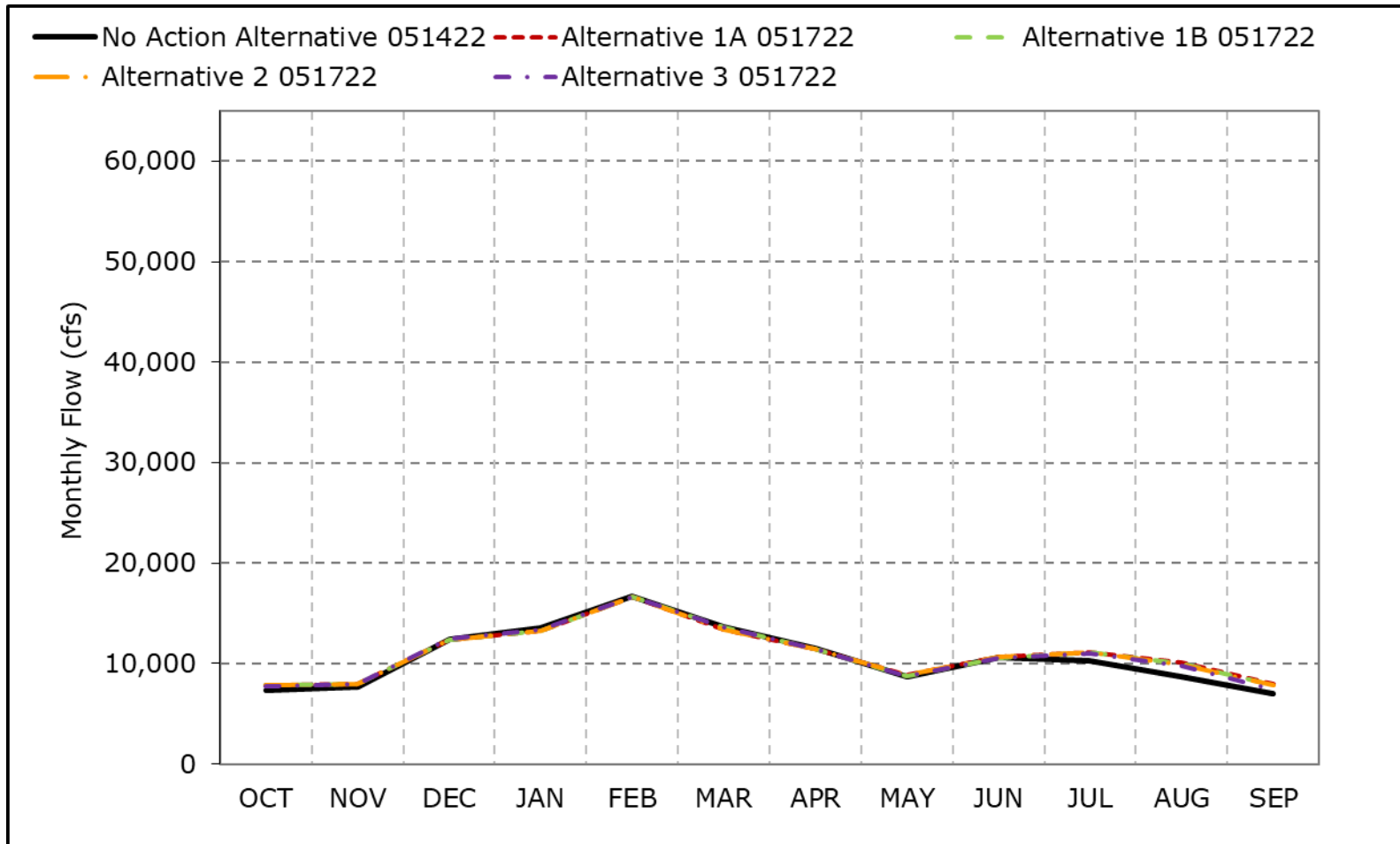


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-6. Sacramento River Flow at Freeport, Critical Year Average Flow**



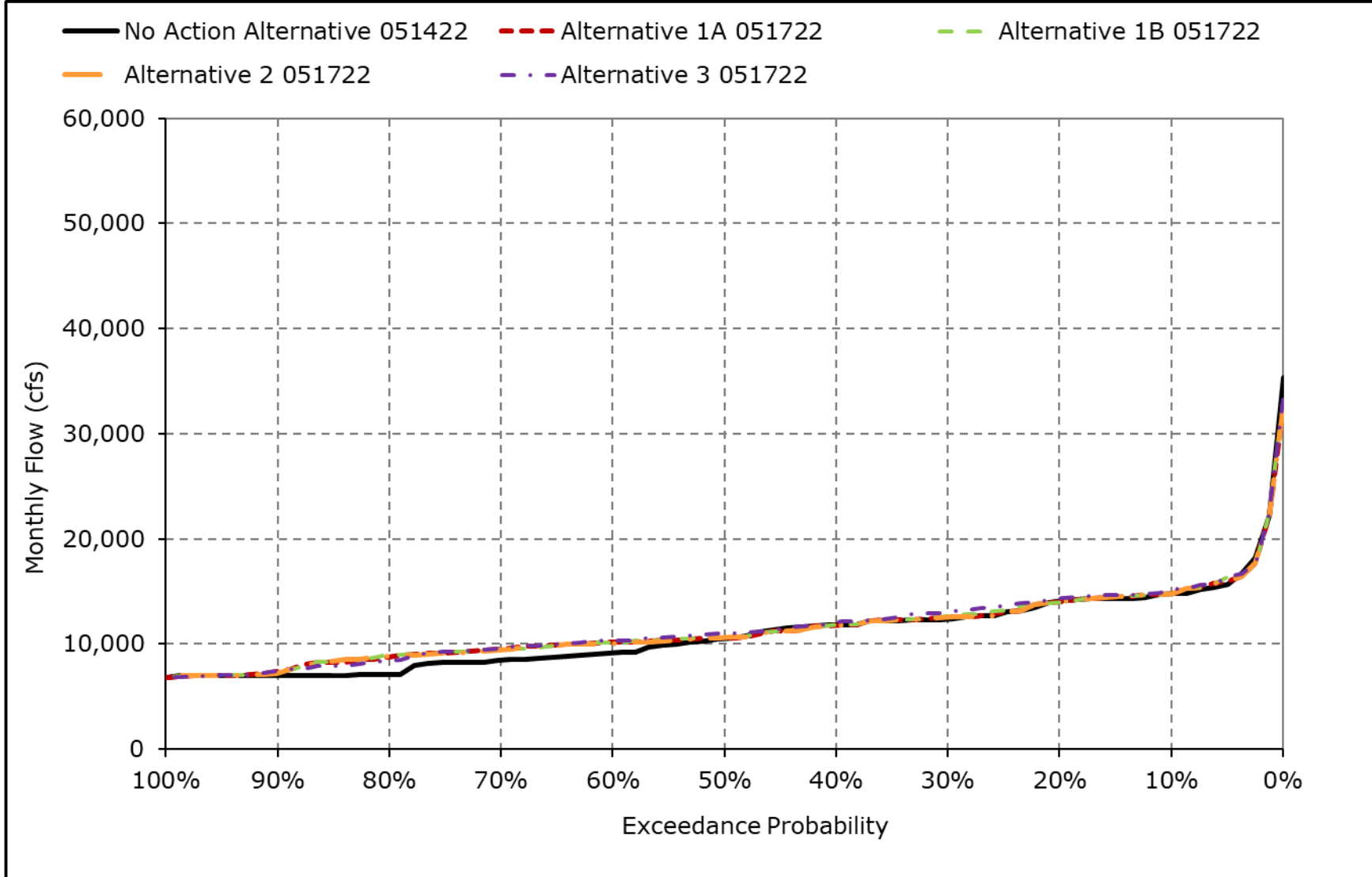
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

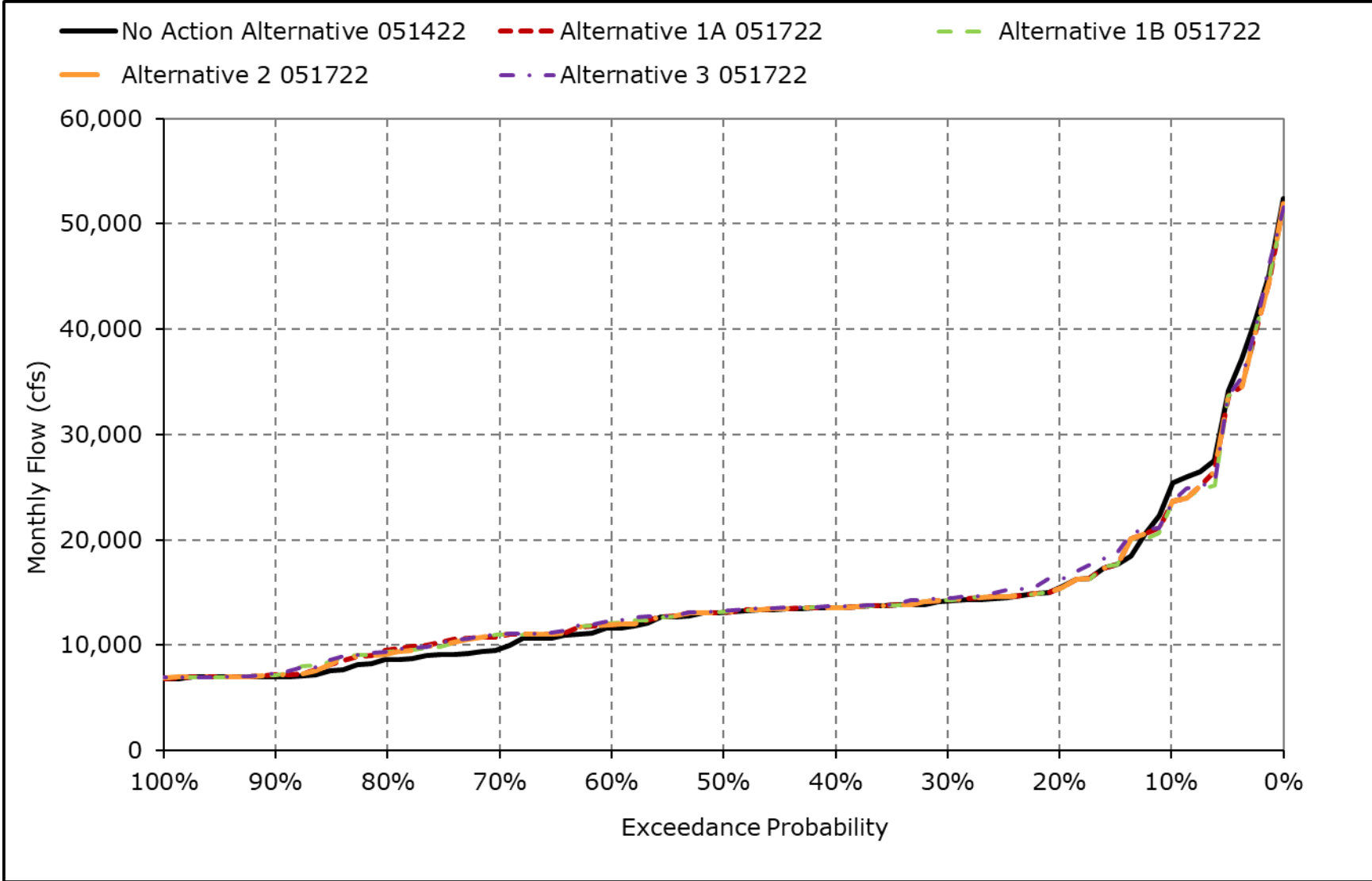


**Figure 5B3-1-7. Sacramento River Flow at Freeport, October**



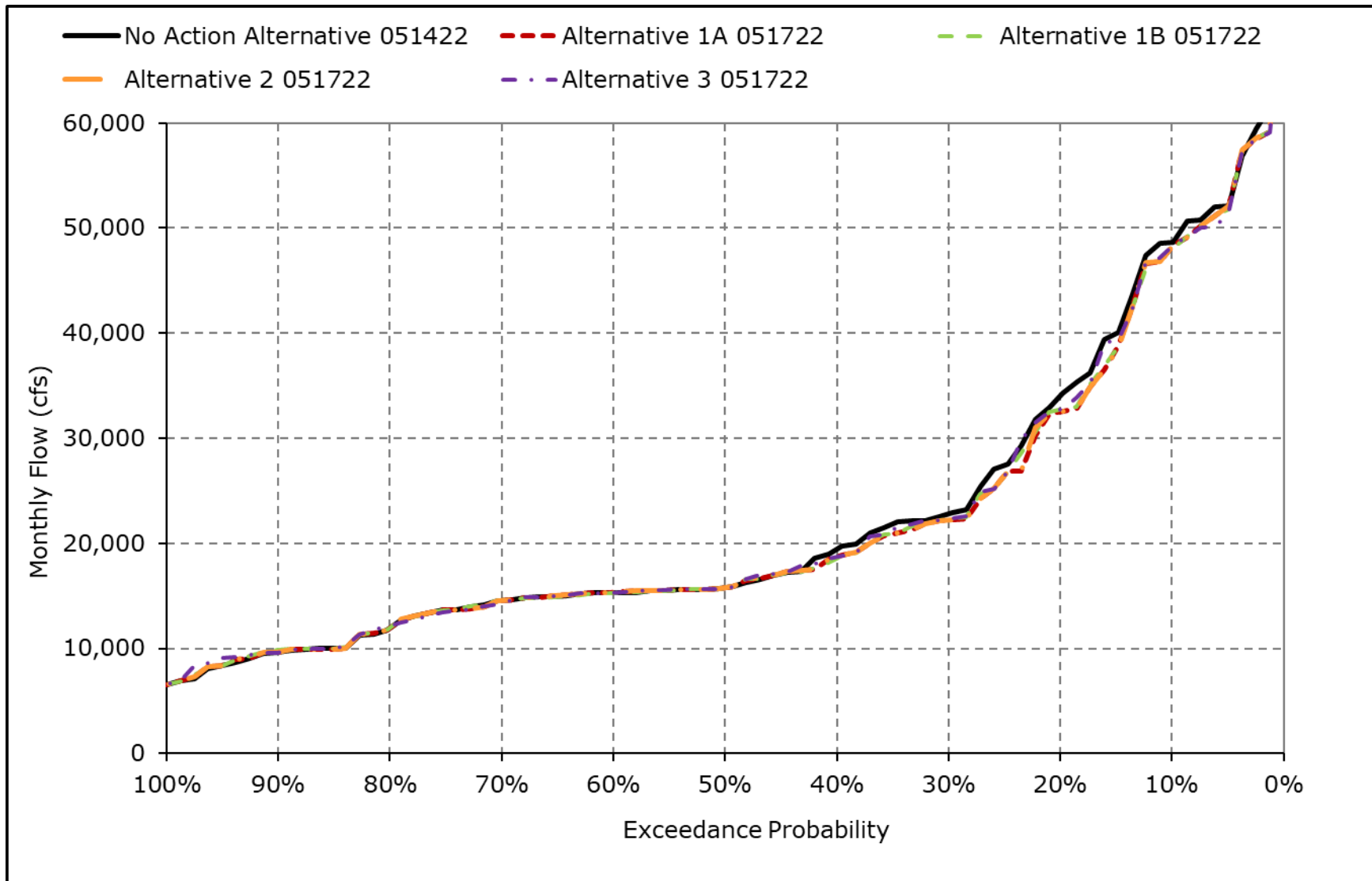
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-8. Sacramento River Flow at Freeport, November**



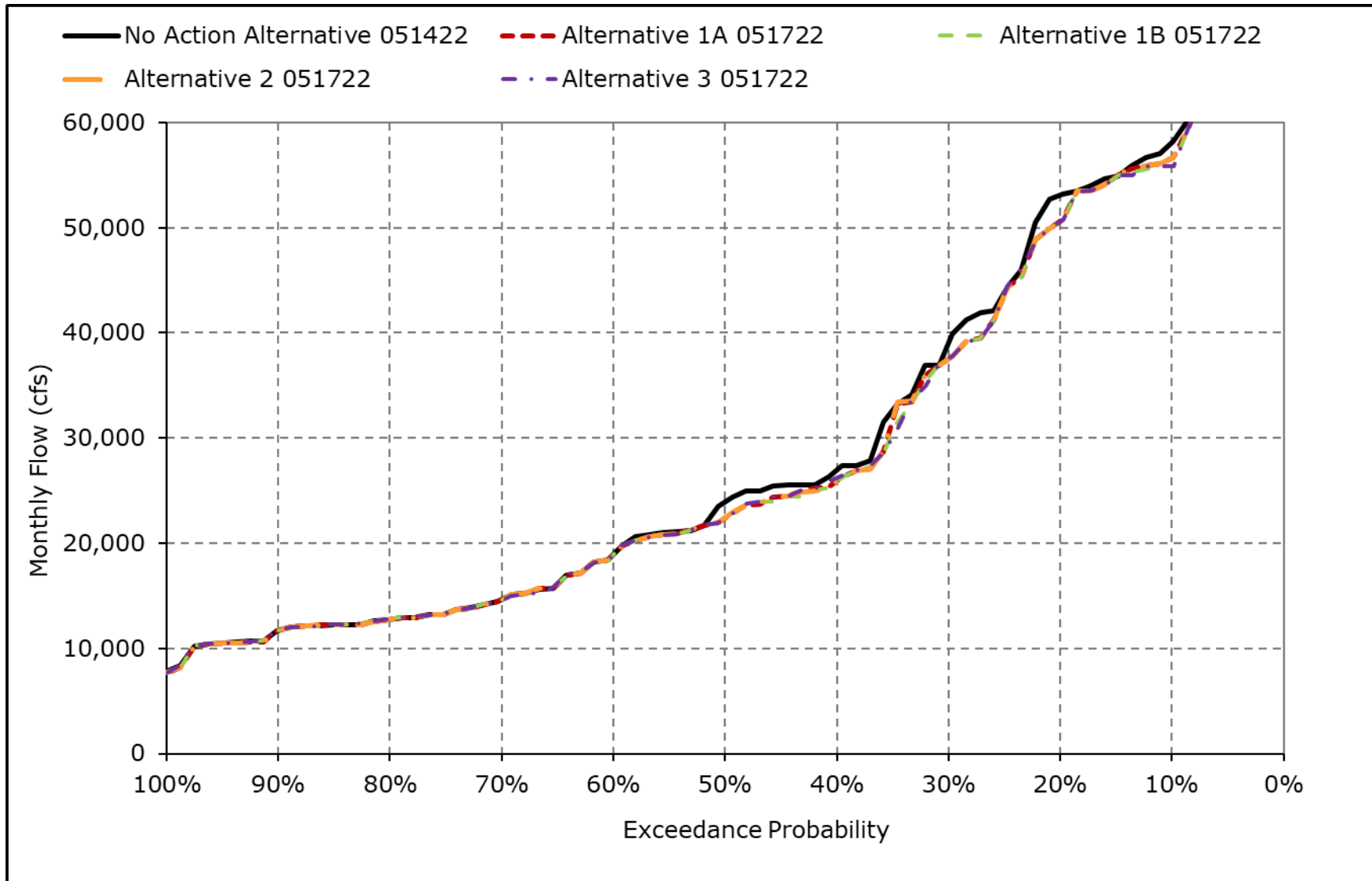
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-9. Sacramento River Flow at Freeport, December**



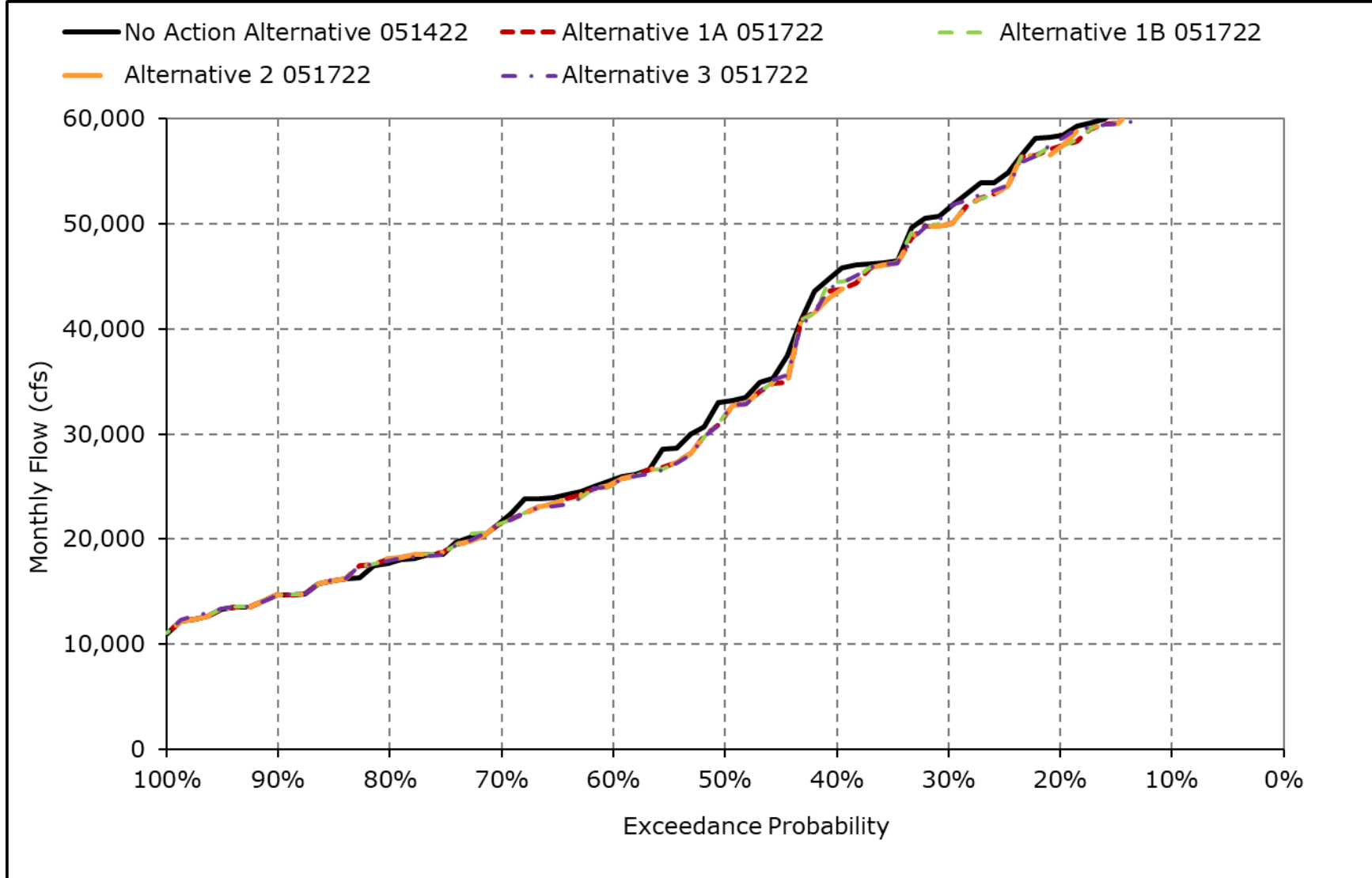
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-10. Sacramento River Flow at Freeport, January**



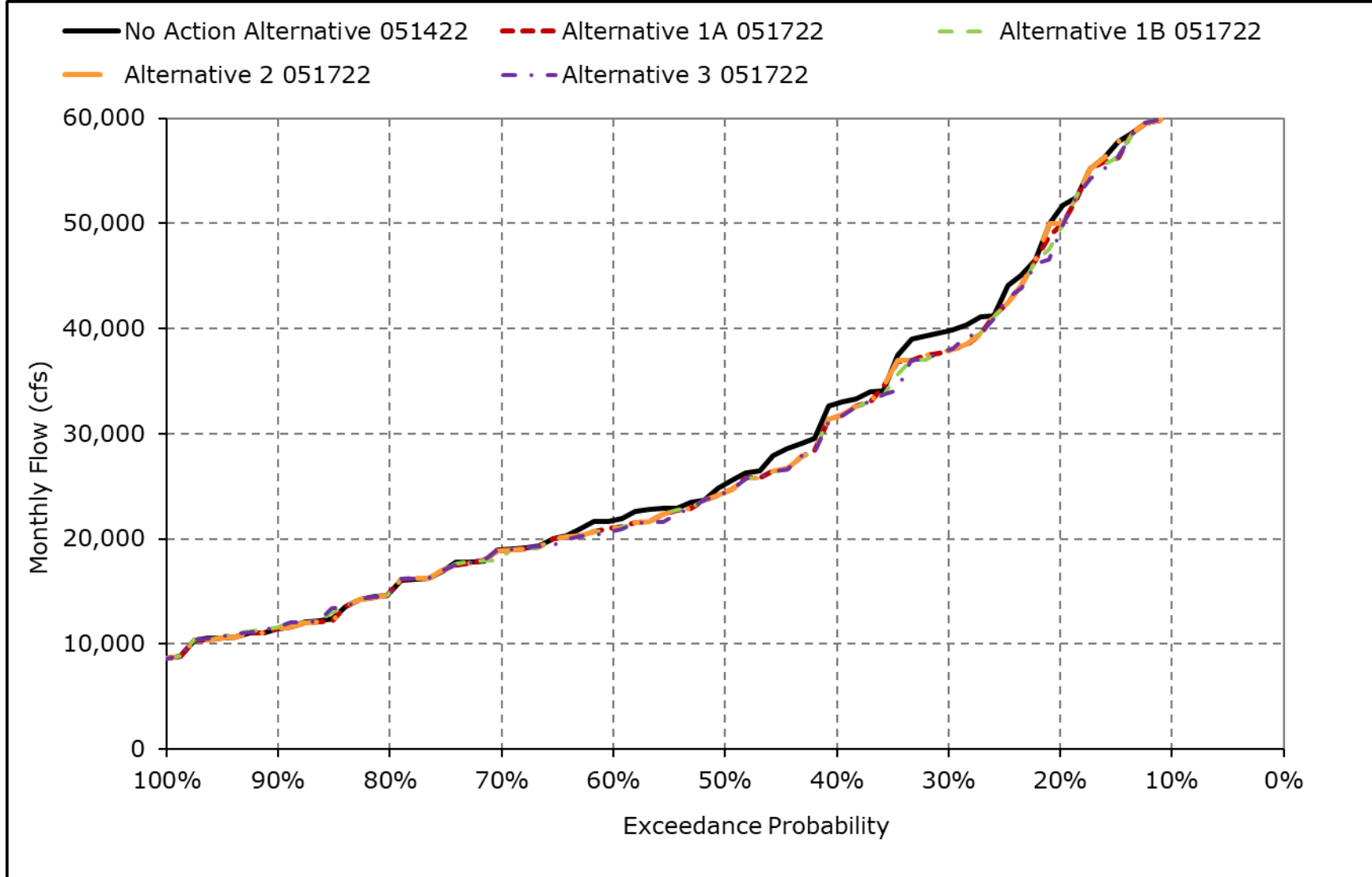
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-11. Sacramento River Flow at Freeport, February**



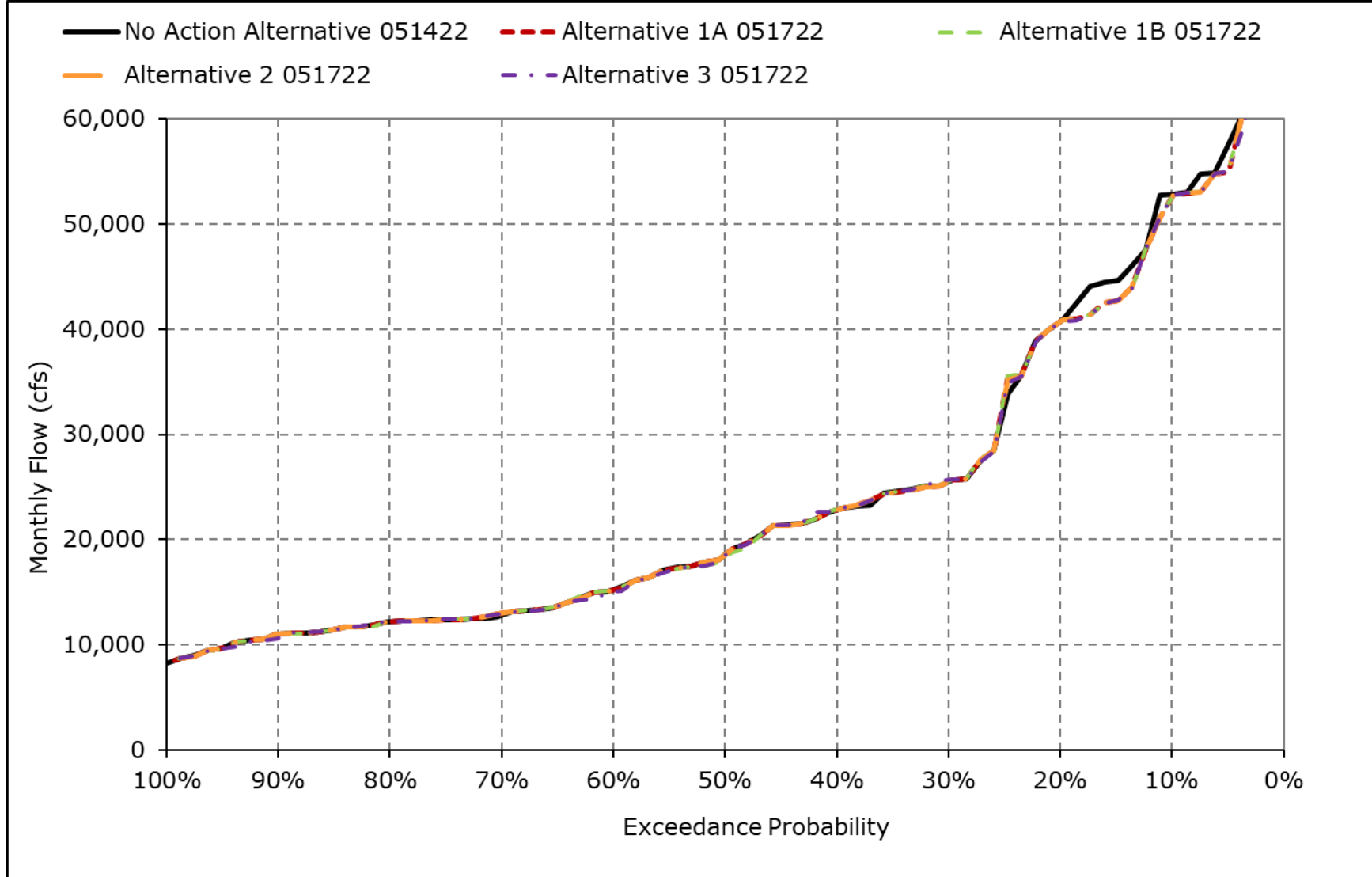
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-12. Sacramento River Flow at Freeport, March**



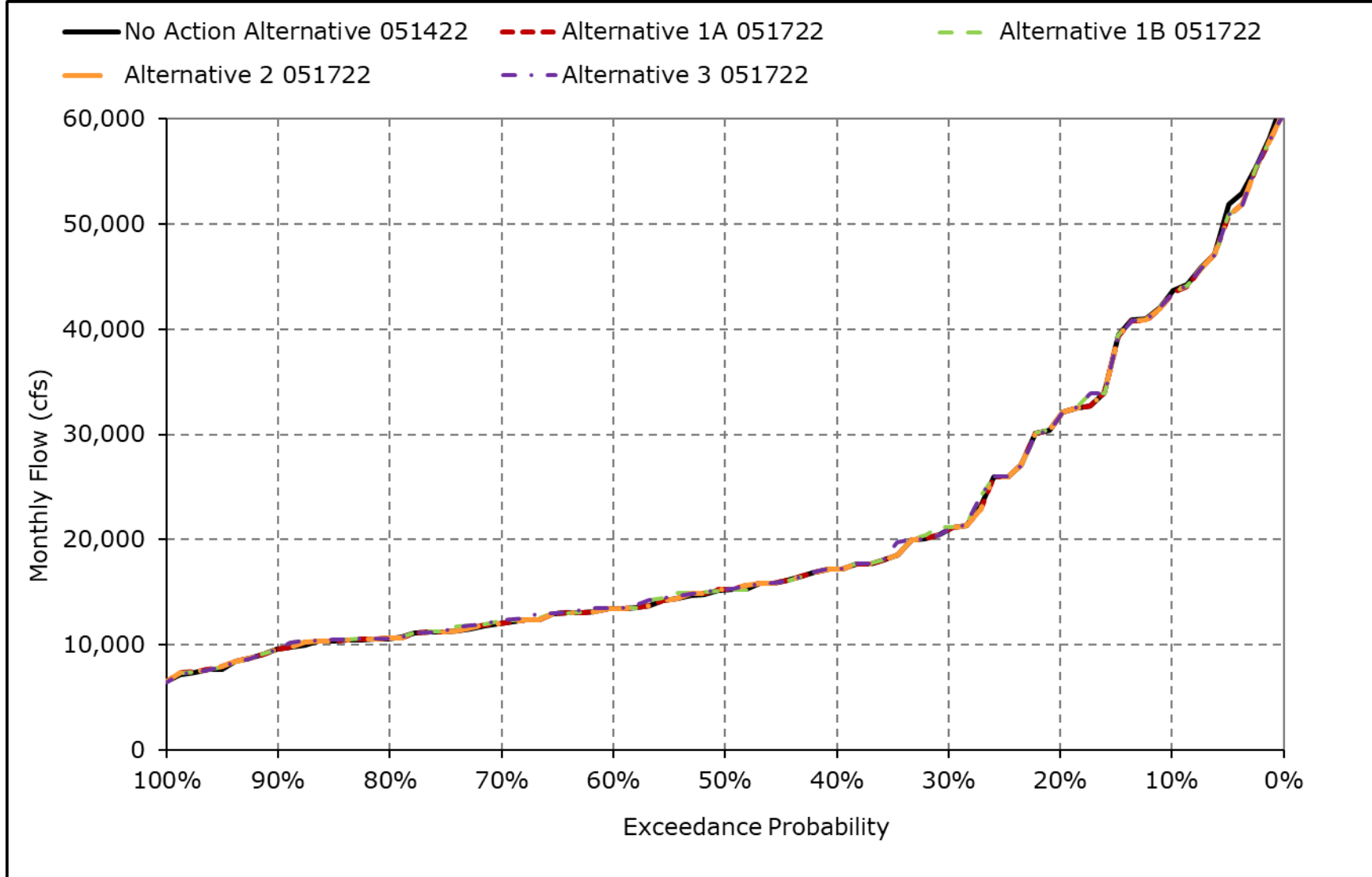
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-13. Sacramento River Flow at Freeport, April**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

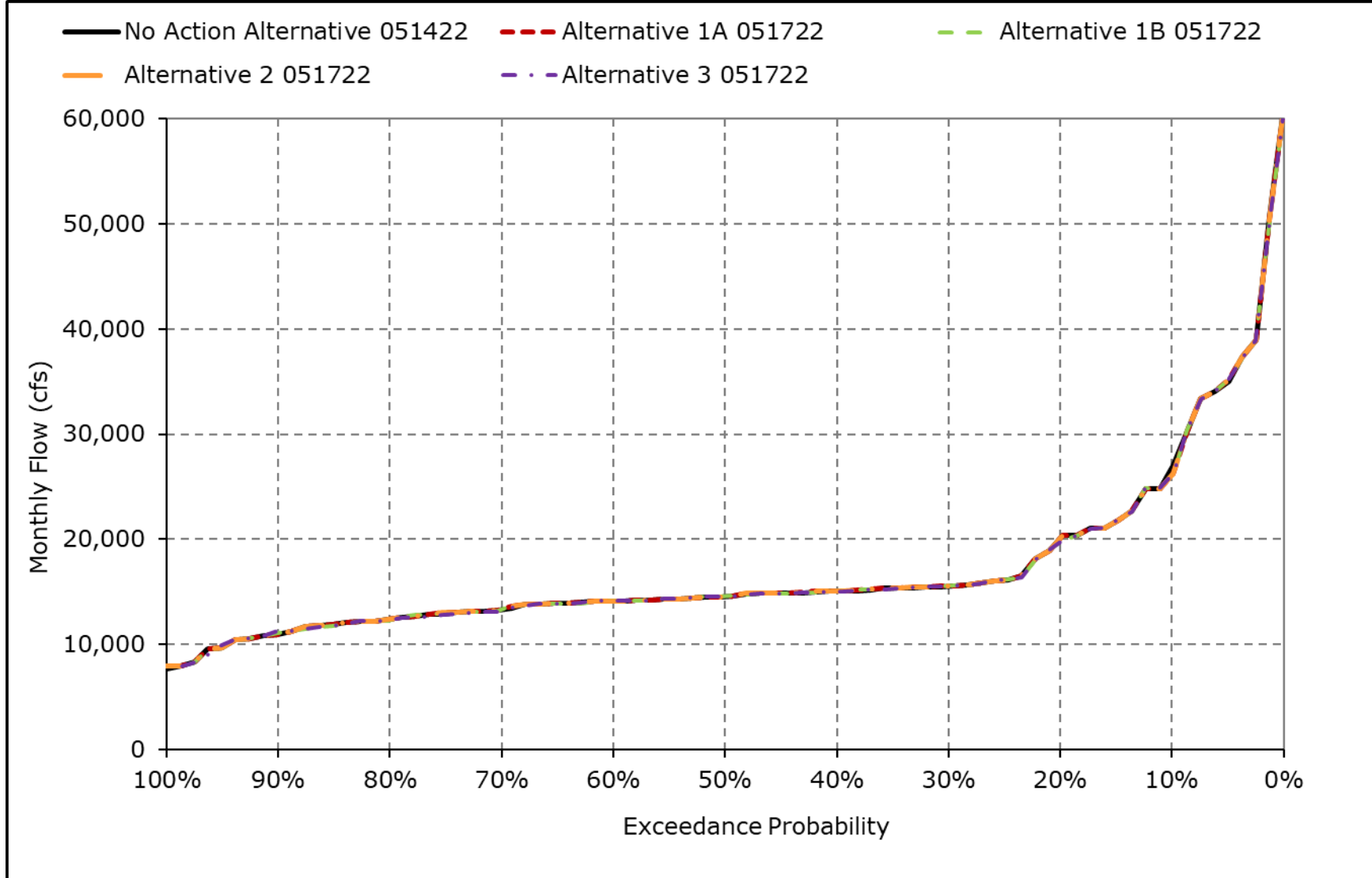
**Figure 5B3-1-14. Sacramento River Flow at Freeport, May**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

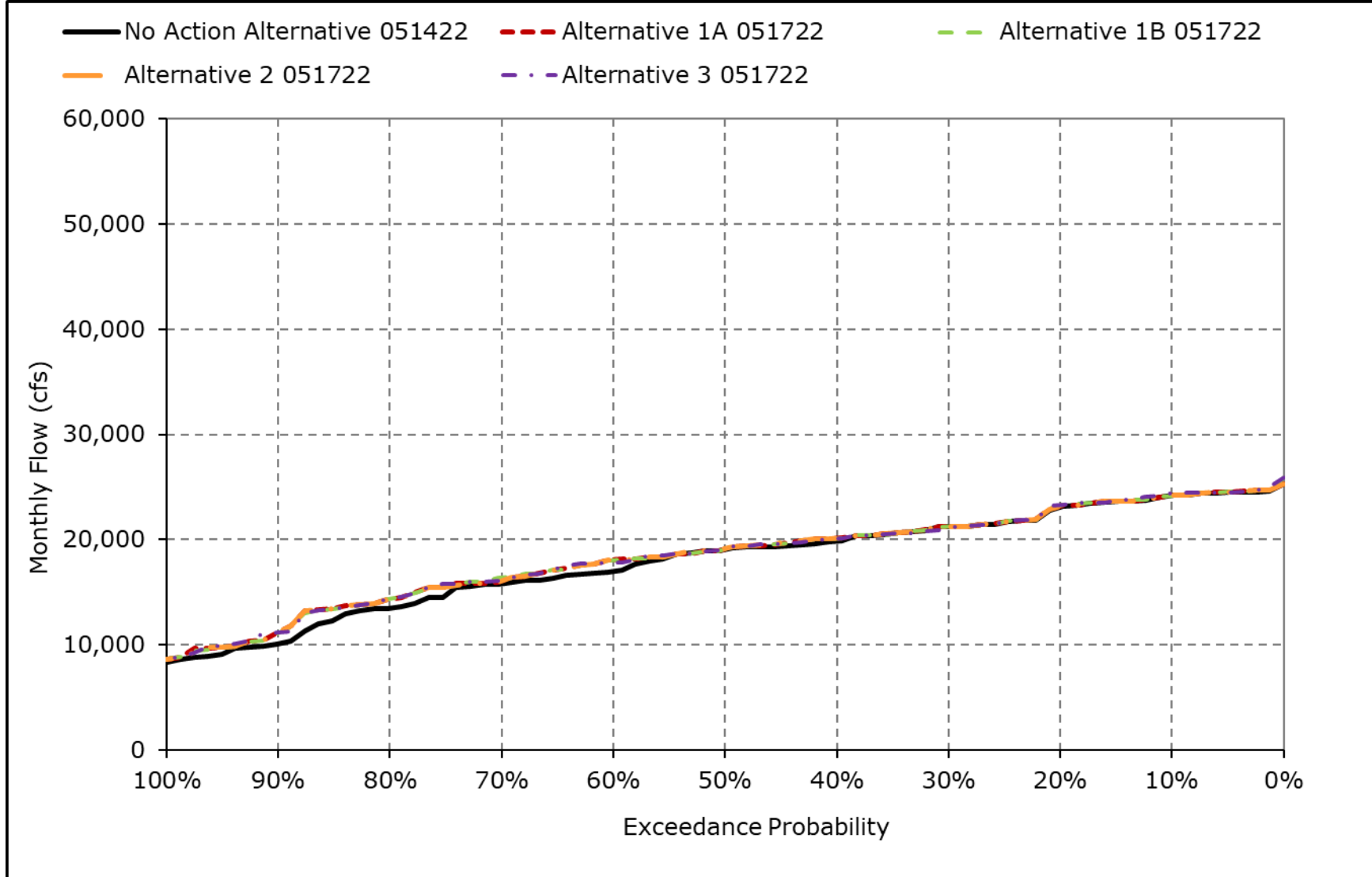


**Figure 5B3-1-15. Sacramento River Flow at Freeport, June**



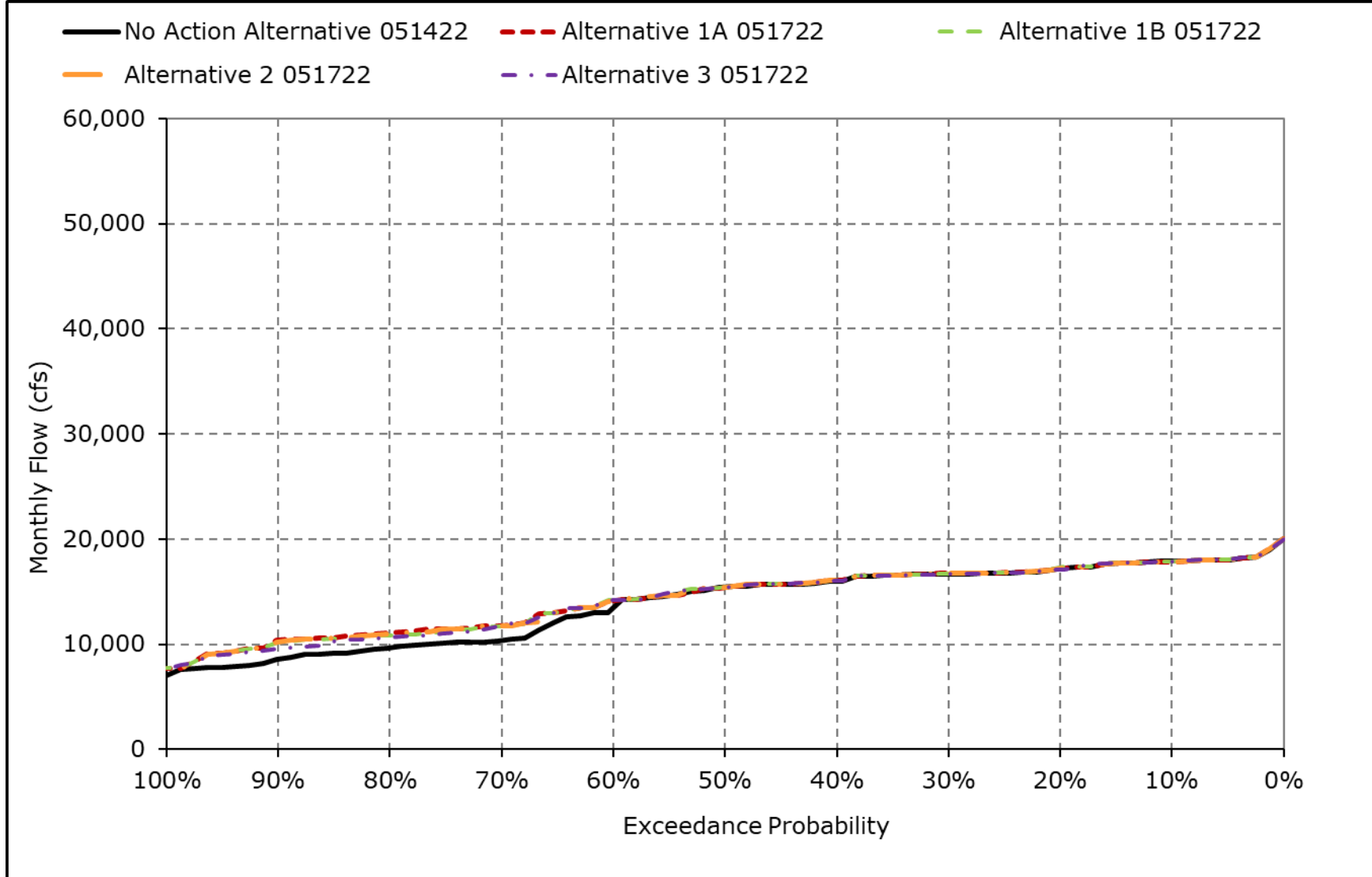
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-16. Sacramento River Flow at Freeport, July**



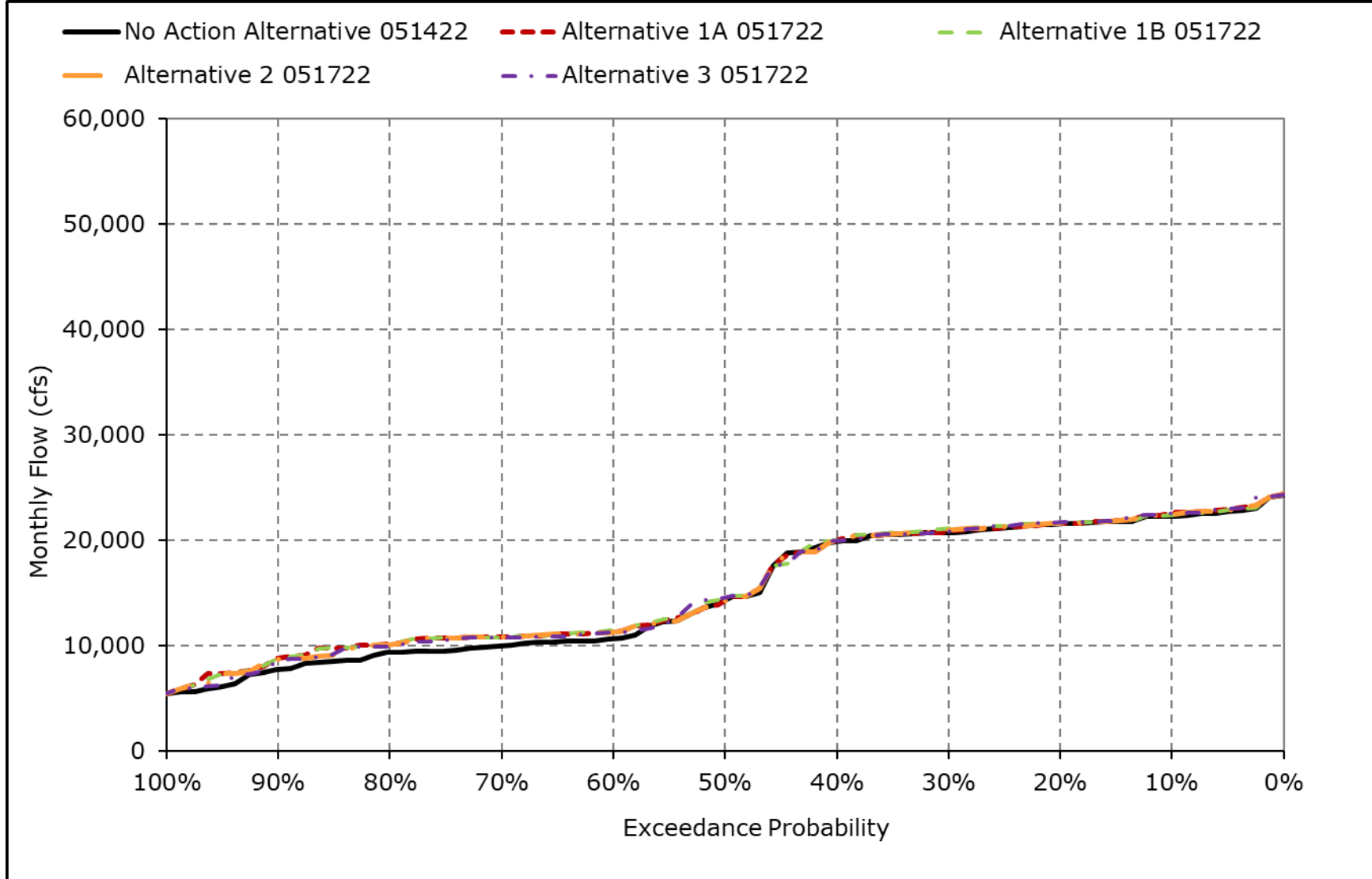
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-17. Sacramento River Flow at Freeport, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-1-18. Sacramento River Flow at Freeport, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Table 5B3-2-1a. DCC Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	1,888	1,666	1,010	0	0	0	0	0	3,034	4,475	3,326	4,177
<b>20% Exceedance</b>	1,683	1,564	836	0	0	0	0	0	2,479	4,205	3,197	4,042
<b>30% Exceedance</b>	1,554	1,359	757	0	0	0	0	0	2,403	3,923	3,095	3,883
<b>40% Exceedance</b>	1,480	1,153	675	0	0	0	0	0	2,314	3,664	2,972	3,714
<b>50% Exceedance</b>	1,378	1,005	416	0	0	0	0	0	2,254	3,510	2,865	2,668
<b>60% Exceedance</b>	1,274	860	0	0	0	0	0	0	2,096	3,110	2,497	1,980
<b>70% Exceedance</b>	1,166	732	0	0	0	0	0	0	1,943	2,910	1,895	1,846
<b>80% Exceedance</b>	639	0	0	0	0	0	0	0	1,711	2,462	1,765	1,724
<b>90% Exceedance</b>	519	0	0	0	0	0	0	0	119	1,786	1,557	1,425
<b>Full Simulation Period Average<sup>a</sup></b>	1,264	939	428	0	0	0	0	0	2,067	3,289	2,564	2,735
<b>Wet Water Years (32%)</b>	1,122	1,088	501	0	0	0	0	0	2,070	3,416	3,071	3,991
<b>Above Normal Water Years (15%)</b>	1,421	1,121	432	0	0	0	0	0	1,869	3,994	3,153	3,970
<b>Below Normal Water Years (17%)</b>	1,664	763	362	0	0	0	0	0	2,314	3,925	2,914	2,300
<b>Dry Water Years (22%)</b>	1,039	791	358	0	0	0	0	0	2,266	3,096	1,810	1,756
<b>Critical Water Years (15%)</b>	1,282	859	443	0	0	0	0	0	1,674	1,858	1,595	753

**Table 5B3-2-1b. DCC Flow, Alternative 1A 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	1,940	1,656	1,014	0	0	0	0	0	3,035	4,476	3,325	4,231
<b>20% Exceedance</b>	1,833	1,544	829	0	0	0	0	0	2,486	4,227	3,202	4,046
<b>30% Exceedance</b>	1,700	1,372	765	0	0	0	0	0	2,405	3,927	3,107	3,906
<b>40% Exceedance</b>	1,536	1,250	689	0	0	0	0	0	2,315	3,720	2,984	3,740
<b>50% Exceedance</b>	1,461	1,088	418	0	0	0	0	0	2,249	3,510	2,864	2,665
<b>60% Exceedance</b>	1,314	872	0	0	0	0	0	0	2,096	3,306	2,606	2,093
<b>70% Exceedance</b>	1,097	805	0	0	0	0	0	0	1,945	2,927	2,168	2,001
<b>80% Exceedance</b>	804	22	0	0	0	0	0	0	1,711	2,579	2,041	1,880
<b>90% Exceedance</b>	442	0	0	0	0	0	0	0	123	1,912	1,912	1,614
<b>Full Simulation Period Average<sup>a</sup></b>	1,316	960	431	0	0	0	0	0	2,070	3,358	2,664	2,804
<b>Wet Water Years (32%)</b>	1,131	1,085	504	0	0	0	0	0	2,072	3,418	3,073	4,011
<b>Above Normal Water Years (15%)</b>	1,427	1,127	433	0	0	0	0	0	1,873	4,005	3,158	3,979
<b>Below Normal Water Years (17%)</b>	1,745	805	367	0	0	0	0	0	2,318	3,932	2,935	2,342
<b>Dry Water Years (22%)</b>	1,119	845	362	0	0	0	0	0	2,266	3,277	2,071	1,945
<b>Critical Water Years (15%)</b>	1,403	873	446	0	0	0	0	0	1,677	2,035	1,854	841

**Table 5B3-2-1c. DCC Flow, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	52	-11	4	0	0	0	0	0	0	1	-1	53
<b>20% Exceedance</b>	150	-20	-7	0	0	0	0	0	7	22	6	4
<b>30% Exceedance</b>	146	14	7	0	0	0	0	0	2	4	12	23
<b>40% Exceedance</b>	55	97	14	0	0	0	0	0	1	56	12	26
<b>50% Exceedance</b>	83	83	2	0	0	0	0	0	-5	-1	-1	-3
<b>60% Exceedance</b>	40	12	0	0	0	0	0	0	0	196	109	113
<b>70% Exceedance</b>	-69	73	0	0	0	0	0	0	2	17	274	156
<b>80% Exceedance</b>	165	22	0	0	0	0	0	0	0	116	276	156
<b>90% Exceedance</b>	-76	0	0	0	0	0	0	0	4	126	354	189
<b>Full Simulation Period Average<sup>a</sup></b>	53	21	3	0	0	0	0	0	2	69	100	69
<b>Wet Water Years (32%)</b>	9	-3	3	0	0	0	0	0	2	2	2	20
<b>Above Normal Water Years (15%)</b>	6	6	1	0	0	0	0	0	4	11	5	9
<b>Below Normal Water Years (17%)</b>	81	42	5	0	0	0	0	0	4	7	20	42
<b>Dry Water Years (22%)</b>	80	54	4	0	0	0	0	0	0	181	260	189
<b>Critical Water Years (15%)</b>	120	14	3	0	0	0	0	0	4	177	259	88

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-2-2a. DCC Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,888	1,666	1,010	0	0	0	0	0	3,034	4,475	3,326	4,177
20% Exceedance	1,683	1,564	836	0	0	0	0	0	2,479	4,205	3,197	4,042
30% Exceedance	1,554	1,359	757	0	0	0	0	0	2,403	3,923	3,095	3,883
40% Exceedance	1,480	1,153	675	0	0	0	0	0	2,314	3,664	2,972	3,714
50% Exceedance	1,378	1,005	416	0	0	0	0	0	2,254	3,510	2,865	2,668
60% Exceedance	1,274	860	0	0	0	0	0	0	2,096	3,110	2,497	1,980
70% Exceedance	1,166	732	0	0	0	0	0	0	1,943	2,910	1,895	1,846
80% Exceedance	639	0	0	0	0	0	0	0	1,711	2,462	1,765	1,724
90% Exceedance	519	0	0	0	0	0	0	0	119	1,786	1,557	1,425
<b>Full Simulation Period Average<sup>a</sup></b>	<b>1,264</b>	<b>939</b>	<b>428</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,067</b>	<b>3,289</b>	<b>2,564</b>	<b>2,735</b>
<b>Wet Water Years (32%)</b>	<b>1,122</b>	<b>1,088</b>	<b>501</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,070</b>	<b>3,416</b>	<b>3,071</b>	<b>3,991</b>
<b>Above Normal Water Years (15%)</b>	<b>1,421</b>	<b>1,121</b>	<b>432</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,869</b>	<b>3,994</b>	<b>3,153</b>	<b>3,970</b>
<b>Below Normal Water Years (17%)</b>	<b>1,664</b>	<b>763</b>	<b>362</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,314</b>	<b>3,925</b>	<b>2,914</b>	<b>2,300</b>
<b>Dry Water Years (22%)</b>	<b>1,039</b>	<b>791</b>	<b>358</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,266</b>	<b>3,096</b>	<b>1,810</b>	<b>1,756</b>
<b>Critical Water Years (15%)</b>	<b>1,282</b>	<b>859</b>	<b>443</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,674</b>	<b>1,858</b>	<b>1,595</b>	<b>753</b>

**Table 5B3-2-2b. DCC Flow, Alternative 1B 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,947	1,656	1,014	0	0	0	0	0	3,035	4,475	3,331	4,203
20% Exceedance	1,808	1,546	845	0	0	0	0	0	2,479	4,229	3,213	4,055
30% Exceedance	1,718	1,417	769	0	0	0	0	0	2,400	3,928	3,104	3,952
40% Exceedance	1,550	1,265	688	0	0	0	0	0	2,324	3,716	2,984	3,749
50% Exceedance	1,452	1,077	419	0	0	0	0	0	2,249	3,503	2,861	2,697
60% Exceedance	1,319	875	0	0	0	0	0	0	2,096	3,306	2,634	2,115
70% Exceedance	1,097	789	0	0	0	0	0	0	1,939	2,975	2,164	2,000
80% Exceedance	806	61	0	0	0	0	0	0	1,714	2,579	1,996	1,870
90% Exceedance	442	0	0	0	0	0	0	0	123	1,900	1,864	1,615
<b>Full Simulation Period Average<sup>a</sup></b>	<b>1,320</b>	<b>966</b>	<b>432</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,066</b>	<b>3,358</b>	<b>2,659</b>	<b>2,810</b>
<b>Wet Water Years (32%)</b>	<b>1,134</b>	<b>1,085</b>	<b>507</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,068</b>	<b>3,417</b>	<b>3,078</b>	<b>4,011</b>
<b>Above Normal Water Years (15%)</b>	<b>1,450</b>	<b>1,112</b>	<b>434</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,862</b>	<b>4,008</b>	<b>3,159</b>	<b>3,999</b>
<b>Below Normal Water Years (17%)</b>	<b>1,732</b>	<b>863</b>	<b>370</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,314</b>	<b>3,940</b>	<b>2,936</b>	<b>2,357</b>
<b>Dry Water Years (22%)</b>	<b>1,131</b>	<b>840</b>	<b>363</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,270</b>	<b>3,277</b>	<b>2,050</b>	<b>1,949</b>
<b>Critical Water Years (15%)</b>	<b>1,396</b>	<b>871</b>	<b>447</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,672</b>	<b>2,024</b>	<b>1,842</b>	<b>841</b>

**Table 5B3-2-2c. DCC Flow, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	59	-11	4	0	0	0	0	0	0	0	5	26
20% Exceedance	124	-19	10	0	0	0	0	0	0	24	16	13
30% Exceedance	164	58	11	0	0	0	0	0	-3	5	9	69
40% Exceedance	69	112	12	0	0	0	0	0	11	51	12	36
50% Exceedance	74	72	4	0	0	0	0	0	-5	-7	-4	29
60% Exceedance	44	15	0	0	0	0	0	0	0	196	137	136
70% Exceedance	-69	57	0	0	0	0	0	0	-4	65	270	155
80% Exceedance	167	61	0	0	0	0	0	0	3	117	231	146
90% Exceedance	-76	0	0	0	0	0	0	0	4	113	307	190
<b>Full Simulation Period Average<sup>a</sup></b>	<b>56</b>	<b>27</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1</b>	<b>69</b>	<b>95</b>	<b>76</b>
<b>Wet Water Years (32%)</b>	<b>11</b>	<b>-3</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3</b>	<b>1</b>	<b>7</b>	<b>20</b>
<b>Above Normal Water Years (15%)</b>	<b>28</b>	<b>-9</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-6</b>	<b>14</b>	<b>7</b>	<b>29</b>
<b>Below Normal Water Years (17%)</b>	<b>69</b>	<b>100</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>21</b>	<b>57</b>
<b>Dry Water Years (22%)</b>	<b>91</b>	<b>49</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>181</b>	<b>239</b>	<b>192</b>
<b>Critical Water Years (15%)</b>	<b>114</b>	<b>11</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-1</b>	<b>166</b>	<b>247</b>	<b>88</b>

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-2-3a. DCC Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	1,888	1,666	1,010	0	0	0	0	0	3,034	4,475	3,326	4,177
<b>20% Exceedance</b>	1,683	1,564	836	0	0	0	0	0	2,479	4,205	3,197	4,042
<b>30% Exceedance</b>	1,554	1,359	757	0	0	0	0	0	2,403	3,923	3,095	3,883
<b>40% Exceedance</b>	1,480	1,153	675	0	0	0	0	0	2,314	3,664	2,972	3,714
<b>50% Exceedance</b>	1,378	1,005	416	0	0	0	0	0	2,254	3,510	2,865	2,668
<b>60% Exceedance</b>	1,274	860	0	0	0	0	0	0	2,096	3,110	2,497	1,980
<b>70% Exceedance</b>	1,166	732	0	0	0	0	0	0	1,943	2,910	1,895	1,846
<b>80% Exceedance</b>	639	0	0	0	0	0	0	0	1,711	2,462	1,765	1,724
<b>90% Exceedance</b>	519	0	0	0	0	0	0	0	119	1,786	1,557	1,425
<b>Full Simulation Period Average<sup>a</sup></b>	1,264	939	428	0	0	0	0	0	2,067	3,289	2,564	2,735
<b>Wet Water Years (32%)</b>	1,122	1,088	501	0	0	0	0	0	2,070	3,416	3,071	3,991
<b>Above Normal Water Years (15%)</b>	1,421	1,121	432	0	0	0	0	0	1,869	3,994	3,153	3,970
<b>Below Normal Water Years (17%)</b>	1,664	763	362	0	0	0	0	0	2,314	3,925	2,914	2,300
<b>Dry Water Years (22%)</b>	1,039	791	358	0	0	0	0	0	2,266	3,096	1,810	1,756
<b>Critical Water Years (15%)</b>	1,282	859	443	0	0	0	0	0	1,674	1,858	1,595	753

**Table 5B3-2-3b. DCC Flow, Alternative 2 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	1,940	1,656	1,014	0	0	0	0	0	3,035	4,476	3,325	4,203
<b>20% Exceedance</b>	1,833	1,544	828	0	0	0	0	0	2,486	4,227	3,202	4,046
<b>30% Exceedance</b>	1,700	1,372	765	0	0	0	0	0	2,405	3,927	3,108	3,927
<b>40% Exceedance</b>	1,538	1,231	689	0	0	0	0	0	2,315	3,720	2,984	3,740
<b>50% Exceedance</b>	1,461	1,093	418	0	0	0	0	0	2,249	3,521	2,863	2,665
<b>60% Exceedance</b>	1,302	869	0	0	0	0	0	0	2,096	3,306	2,609	2,092
<b>70% Exceedance</b>	1,097	805	0	0	0	0	0	0	1,945	2,927	2,164	2,001
<b>80% Exceedance</b>	796	22	0	0	0	0	0	0	1,711	2,579	2,023	1,868
<b>90% Exceedance</b>	513	0	0	0	0	0	0	0	123	1,912	1,882	1,607
<b>Full Simulation Period Average<sup>a</sup></b>	1,323	958	431	0	0	0	0	0	2,070	3,359	2,660	2,798
<b>Wet Water Years (32%)</b>	1,131	1,085	504	0	0	0	0	0	2,072	3,418	3,073	4,013
<b>Above Normal Water Years (15%)</b>	1,428	1,127	433	0	0	0	0	0	1,873	4,005	3,158	3,979
<b>Below Normal Water Years (17%)</b>	1,742	804	367	0	0	0	0	0	2,317	3,940	2,943	2,334
<b>Dry Water Years (22%)</b>	1,149	837	363	0	0	0	0	0	2,266	3,277	2,069	1,931
<b>Critical Water Years (15%)</b>	1,405	872	447	0	0	0	0	0	1,678	2,028	1,820	825

**Table 5B3-2-3c. DCC Flow, Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	52	-11	4	0	0	0	0	0	0	1	-1	26
<b>20% Exceedance</b>	150	-20	-8	0	0	0	0	0	7	22	5	4
<b>30% Exceedance</b>	146	14	7	0	0	0	0	0	2	4	13	44
<b>40% Exceedance</b>	58	78	14	0	0	0	0	0	1	56	12	26
<b>50% Exceedance</b>	83	88	2	0	0	0	0	0	-5	11	-2	-3
<b>60% Exceedance</b>	28	8	0	0	0	0	0	0	0	196	112	112
<b>70% Exceedance</b>	-69	73	0	0	0	0	0	0	2	17	269	155
<b>80% Exceedance</b>	157	22	0	0	0	0	0	0	0	116	258	144
<b>90% Exceedance</b>	-6	0	0	0	0	0	0	0	5	126	324	182
<b>Full Simulation Period Average<sup>a</sup></b>	59	19	3	0	0	0	0	0	2	69	96	63
<b>Wet Water Years (32%)</b>	9	-3	3	0	0	0	0	0	2	2	2	22
<b>Above Normal Water Years (15%)</b>	6	6	1	0	0	0	0	0	4	11	5	9
<b>Below Normal Water Years (17%)</b>	78	42	5	0	0	0	0	0	4	15	28	35
<b>Dry Water Years (22%)</b>	109	46	5	0	0	0	0	0	0	181	259	175
<b>Critical Water Years (15%)</b>	122	12	3	0	0	0	0	0	4	170	225	72

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-2-4a. DCC Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,888	1,666	1,010	0	0	0	0	0	3,034	4,475	3,326	4,177
20% Exceedance	1,683	1,564	836	0	0	0	0	0	2,479	4,205	3,197	4,042
30% Exceedance	1,554	1,359	757	0	0	0	0	0	2,403	3,923	3,095	3,883
40% Exceedance	1,480	1,153	675	0	0	0	0	0	2,314	3,664	2,972	3,714
50% Exceedance	1,378	1,005	416	0	0	0	0	0	2,254	3,510	2,865	2,668
60% Exceedance	1,274	860	0	0	0	0	0	0	2,096	3,110	2,497	1,980
70% Exceedance	1,166	732	0	0	0	0	0	0	1,943	2,910	1,895	1,846
80% Exceedance	639	0	0	0	0	0	0	0	1,711	2,462	1,765	1,724
90% Exceedance	519	0	0	0	0	0	0	0	119	1,786	1,557	1,425
<b>Full Simulation Period Average<sup>a</sup></b>	<b>1,264</b>	<b>939</b>	<b>428</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,067</b>	<b>3,289</b>	<b>2,564</b>	<b>2,735</b>
<b>Wet Water Years (32%)</b>	<b>1,122</b>	<b>1,088</b>	<b>501</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,070</b>	<b>3,416</b>	<b>3,071</b>	<b>3,991</b>
<b>Above Normal Water Years (15%)</b>	<b>1,421</b>	<b>1,121</b>	<b>432</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,869</b>	<b>3,994</b>	<b>3,153</b>	<b>3,970</b>
<b>Below Normal Water Years (17%)</b>	<b>1,664</b>	<b>763</b>	<b>362</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,314</b>	<b>3,925</b>	<b>2,914</b>	<b>2,300</b>
<b>Dry Water Years (22%)</b>	<b>1,039</b>	<b>791</b>	<b>358</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,266</b>	<b>3,096</b>	<b>1,810</b>	<b>1,756</b>
<b>Critical Water Years (15%)</b>	<b>1,282</b>	<b>859</b>	<b>443</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,674</b>	<b>1,858</b>	<b>1,595</b>	<b>753</b>

**Table 5B3-2-4b. DCC Flow, Alternative 3 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,910	1,671	1,009	0	0	0	0	0	3,035	4,504	3,331	4,223
20% Exceedance	1,825	1,587	848	0	0	0	0	0	2,479	4,270	3,180	4,065
30% Exceedance	1,702	1,443	761	0	0	0	0	0	2,391	3,876	3,101	3,903
40% Exceedance	1,584	1,251	687	0	0	0	0	0	2,319	3,711	2,978	3,731
50% Exceedance	1,467	1,042	424	0	0	0	0	0	2,251	3,509	2,861	2,714
60% Exceedance	1,329	870	0	0	0	0	0	0	2,086	3,287	2,624	2,075
70% Exceedance	1,193	791	0	0	0	0	0	0	1,939	2,956	2,171	1,990
80% Exceedance	814	0	0	0	0	0	0	0	1,719	2,580	1,961	1,836
90% Exceedance	447	0	0	0	0	0	0	0	123	2,011	1,757	1,567
<b>Full Simulation Period Average<sup>a</sup></b>	<b>1,325</b>	<b>962</b>	<b>429</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,063</b>	<b>3,362</b>	<b>2,645</b>	<b>2,796</b>
<b>Wet Water Years (32%)</b>	<b>1,140</b>	<b>1,082</b>	<b>505</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,068</b>	<b>3,417</b>	<b>3,078</b>	<b>4,008</b>
<b>Above Normal Water Years (15%)</b>	<b>1,471</b>	<b>1,116</b>	<b>417</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,852</b>	<b>4,019</b>	<b>3,162</b>	<b>3,997</b>
<b>Below Normal Water Years (17%)</b>	<b>1,571</b>	<b>775</b>	<b>374</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,304</b>	<b>3,941</b>	<b>2,933</b>	<b>2,346</b>
<b>Dry Water Years (22%)</b>	<b>1,268</b>	<b>891</b>	<b>359</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,273</b>	<b>3,296</b>	<b>2,025</b>	<b>1,922</b>
<b>Critical Water Years (15%)</b>	<b>1,379</b>	<b>870</b>	<b>445</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,666</b>	<b>2,010</b>	<b>1,787</b>	<b>802</b>

**Table 5B3-2-4c. DCC Flow, Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	21	5	-1	0	0	0	0	0	0	29	5	46
20% Exceedance	142	23	12	0	0	0	0	0	0	65	-17	23
30% Exceedance	148	84	3	0	0	0	0	0	-12	-47	6	20
40% Exceedance	104	98	11	0	0	0	0	0	5	47	5	18
50% Exceedance	89	37	9	0	0	0	0	0	-3	-1	-4	46
60% Exceedance	54	10	0	0	0	0	0	0	-10	176	127	95
70% Exceedance	28	58	0	0	0	0	0	0	-4	46	276	145
80% Exceedance	175	0	0	0	0	0	0	0	8	118	196	112
90% Exceedance	-72	0	0	0	0	0	0	0	4	225	199	142
<b>Full Simulation Period Average<sup>a</sup></b>	<b>61</b>	<b>23</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-5</b>	<b>73</b>	<b>82</b>	<b>61</b>
<b>Wet Water Years (32%)</b>	<b>18</b>	<b>-6</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-3</b>	<b>2</b>	<b>7</b>	<b>17</b>
<b>Above Normal Water Years (15%)</b>	<b>49</b>	<b>-5</b>	<b>-16</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-17</b>	<b>25</b>	<b>9</b>	<b>27</b>
<b>Below Normal Water Years (17%)</b>	<b>-92</b>	<b>12</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-10</b>	<b>16</b>	<b>18</b>	<b>46</b>
<b>Dry Water Years (22%)</b>	<b>228</b>	<b>100</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>199</b>	<b>215</b>	<b>165</b>
<b>Critical Water Years (15%)</b>	<b>97</b>	<b>11</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>-8</b>	<b>151</b>	<b>192</b>	<b>50</b>

<sup>a</sup> Based on the 82-year simulation period.

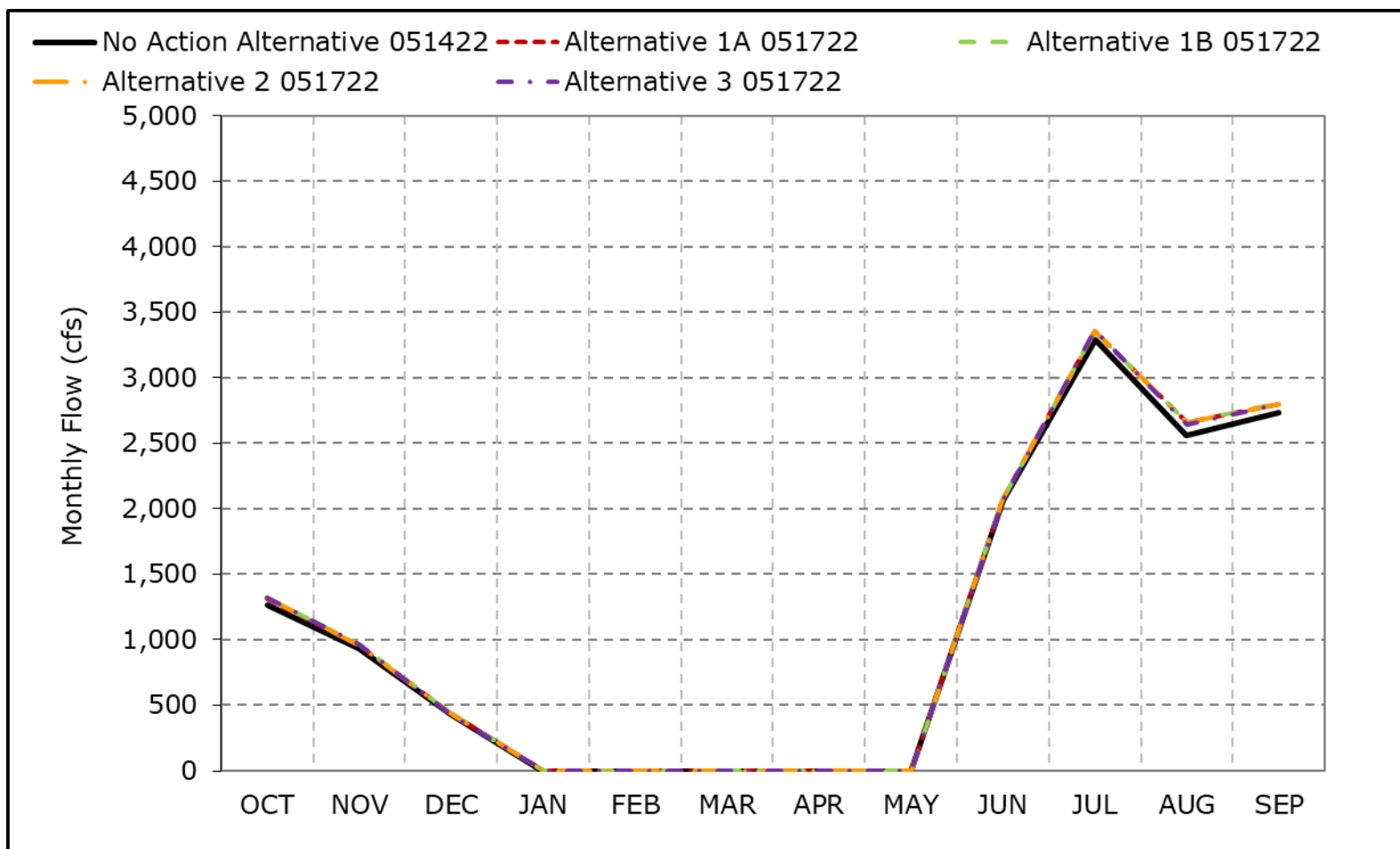
\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.



**Figure 5B3-2-1. DCC Flow, Long-Term Average Flow**

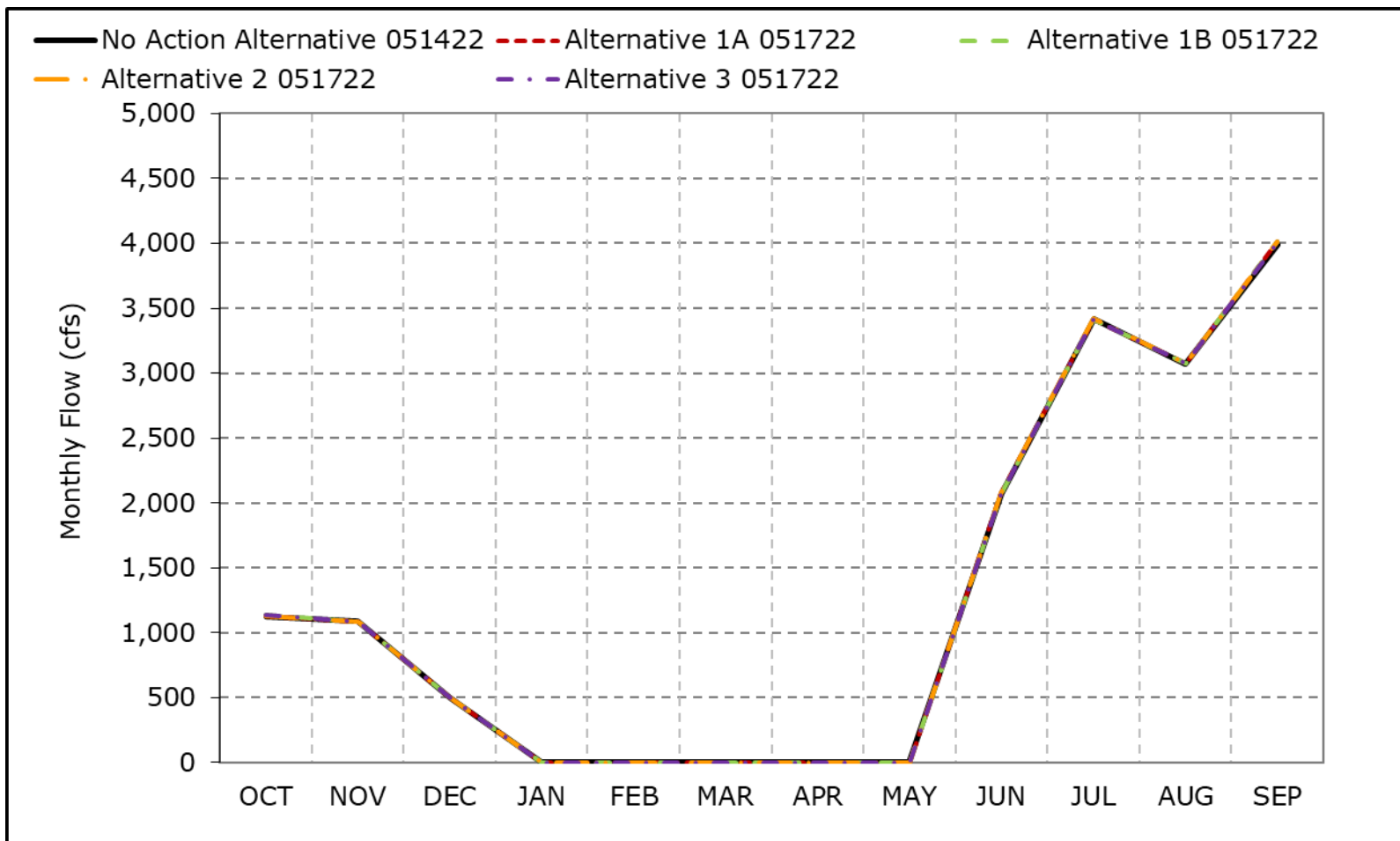


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-2. DCC Flow, Wet Year Average Flow**

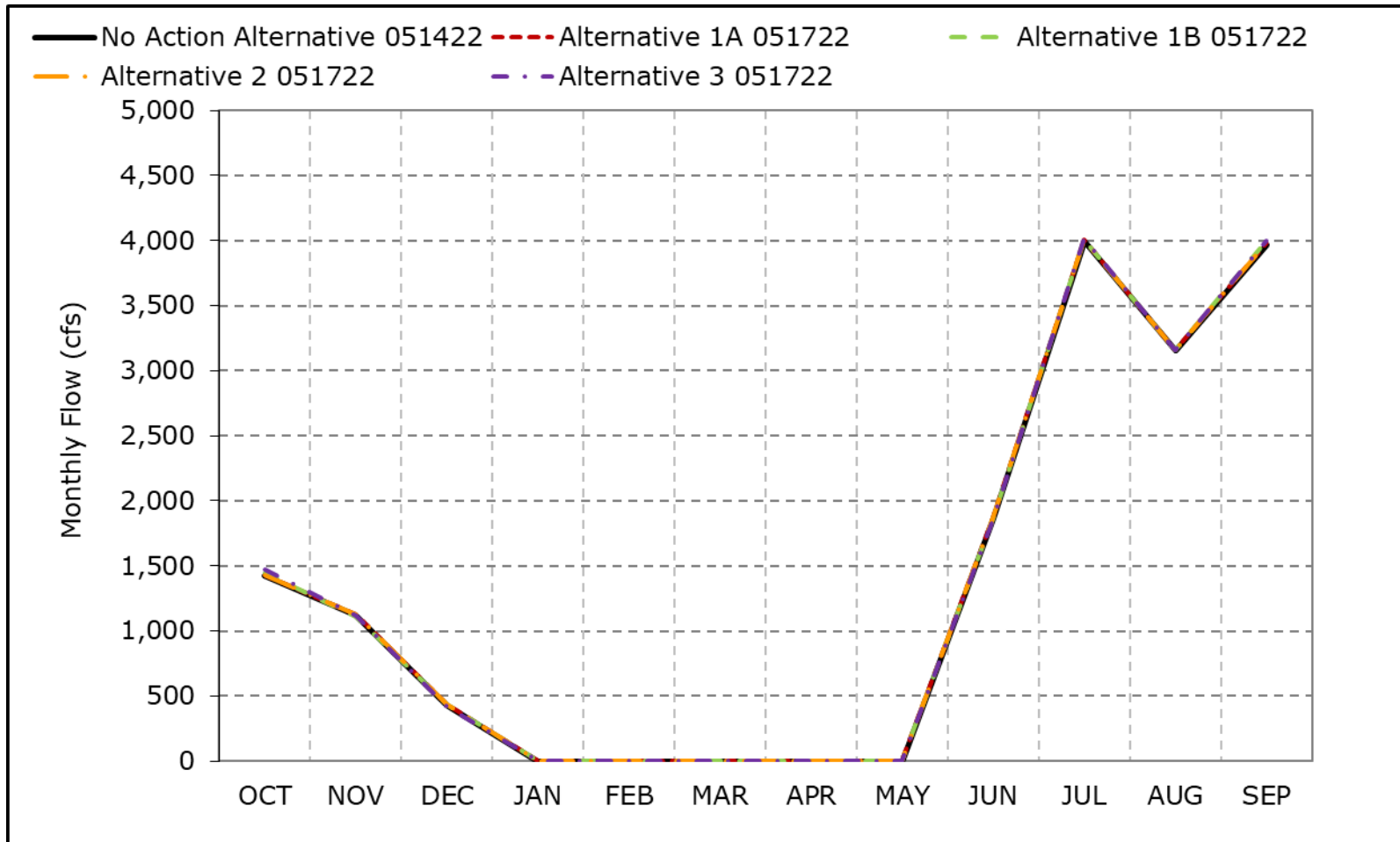


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-3. DCC Flow, Above Normal Year Average Flow**

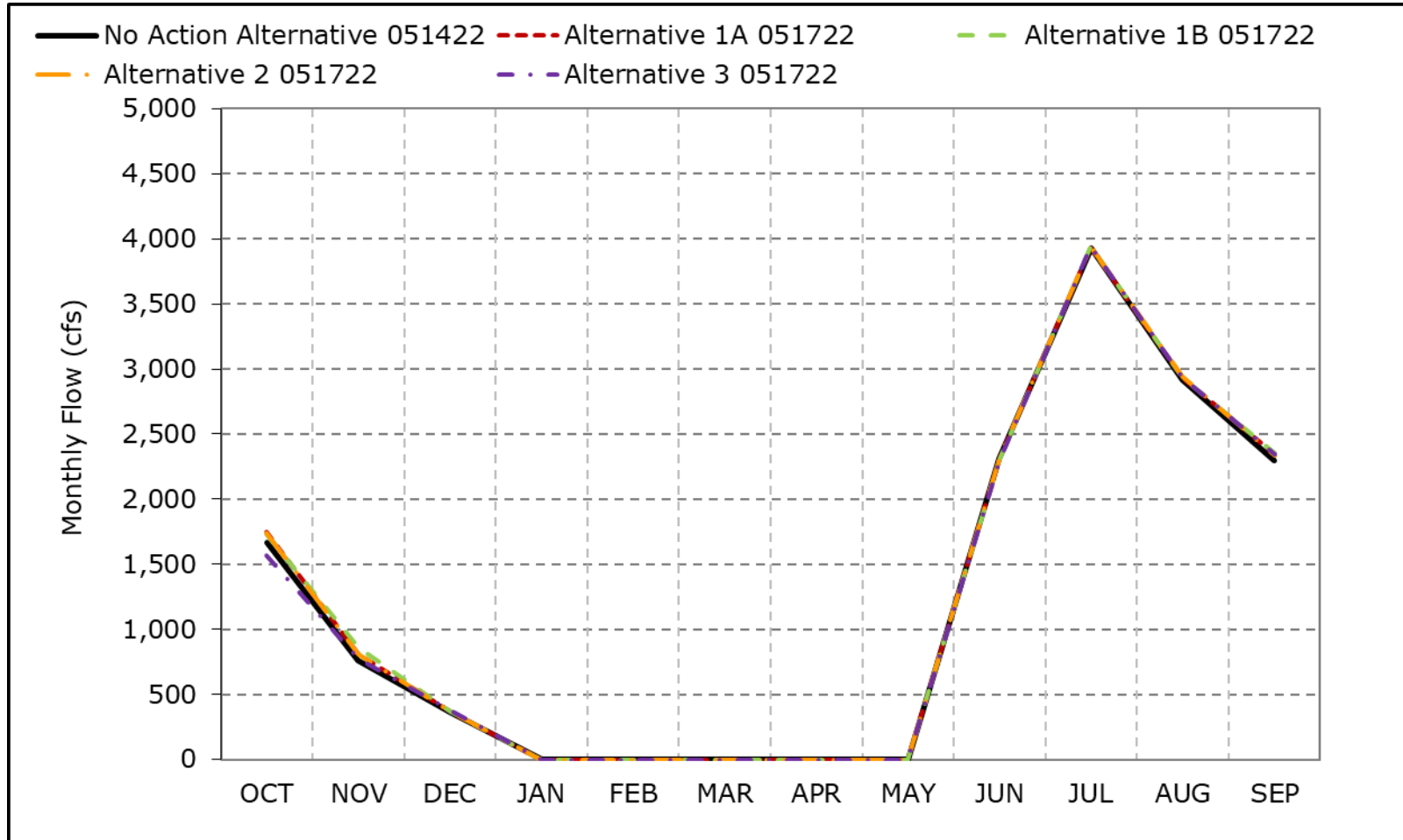


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-4. DCC Flow, Below Normal Year Average Flow**

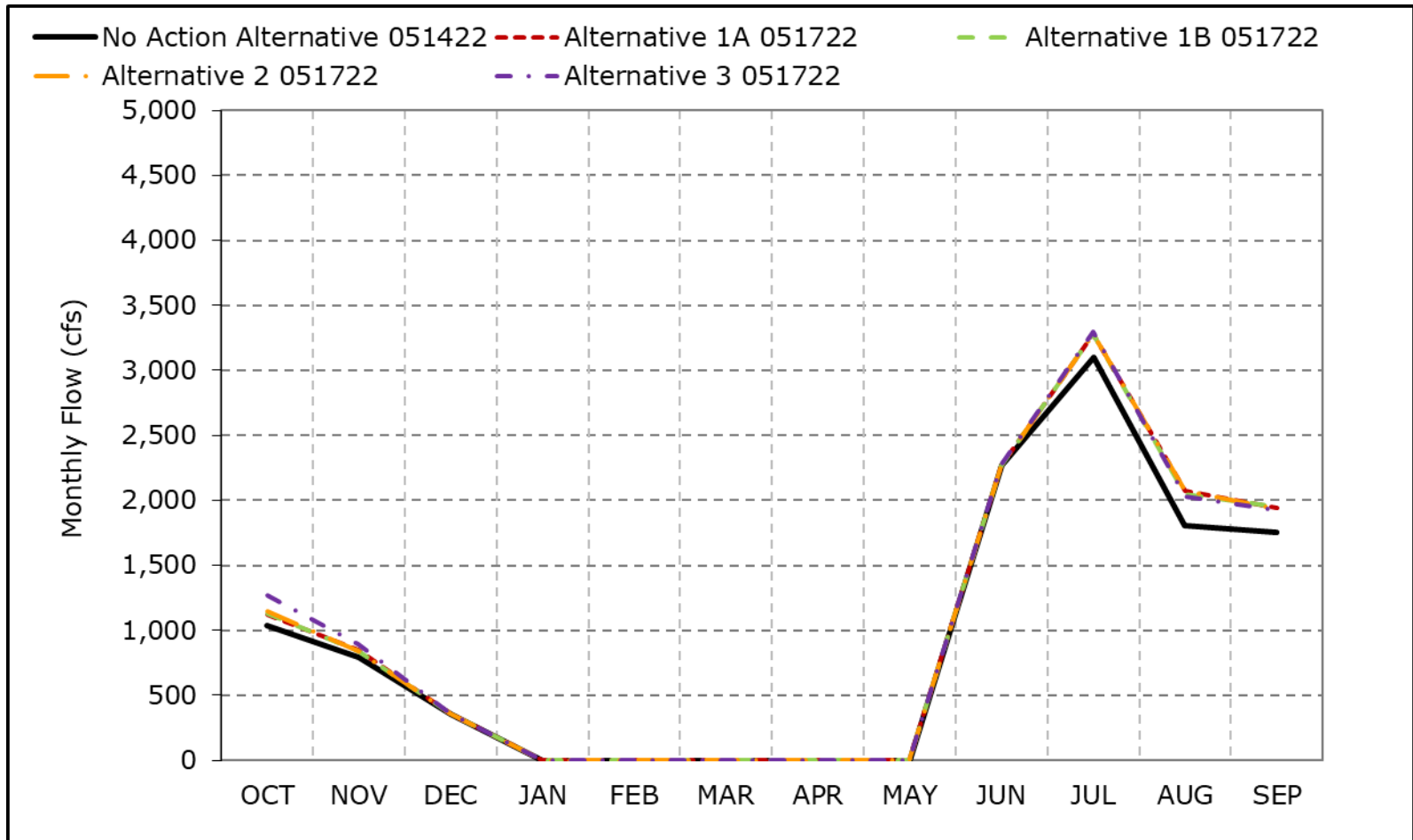


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-5. DCC Flow, Dry Year Average Flow**

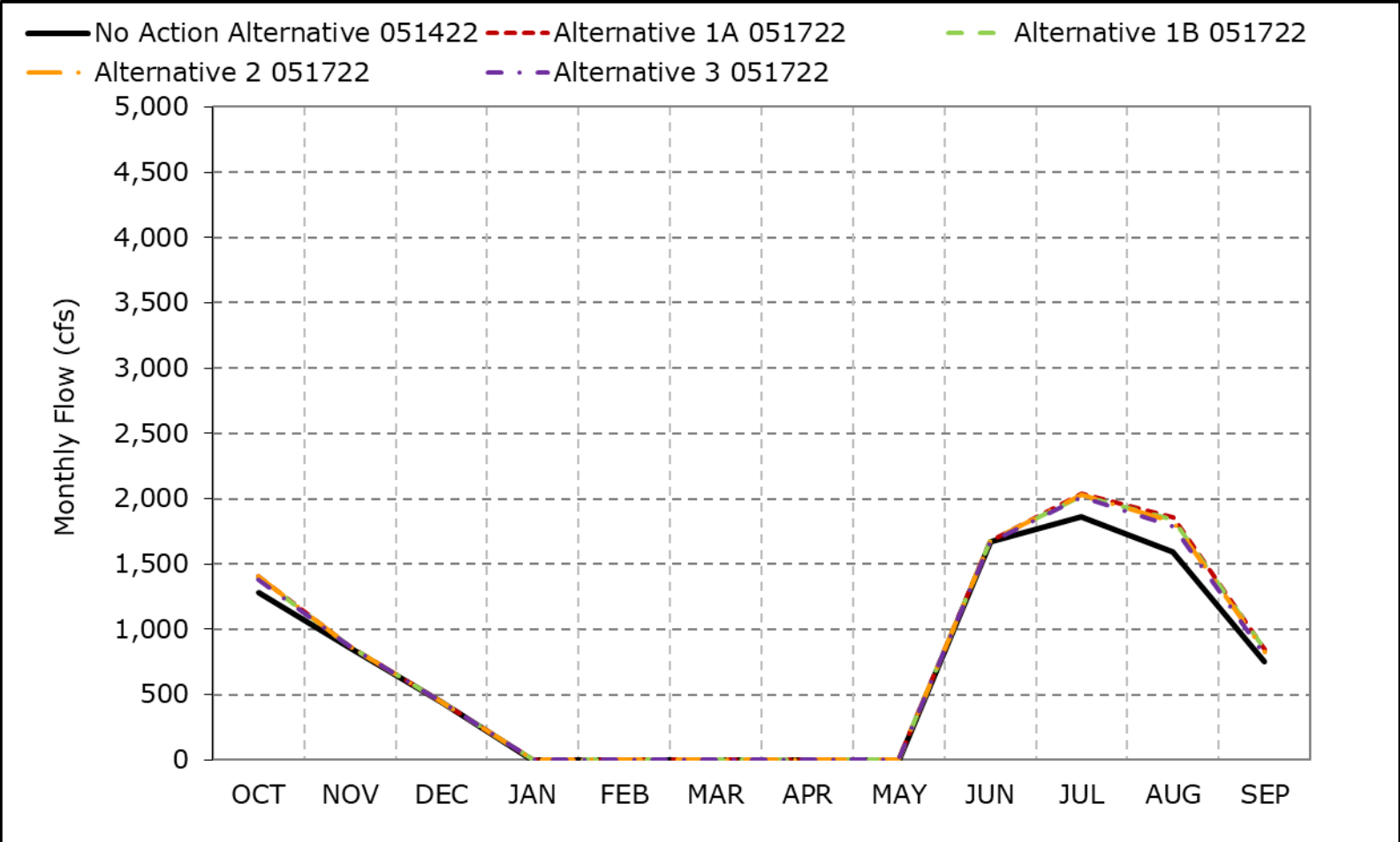


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

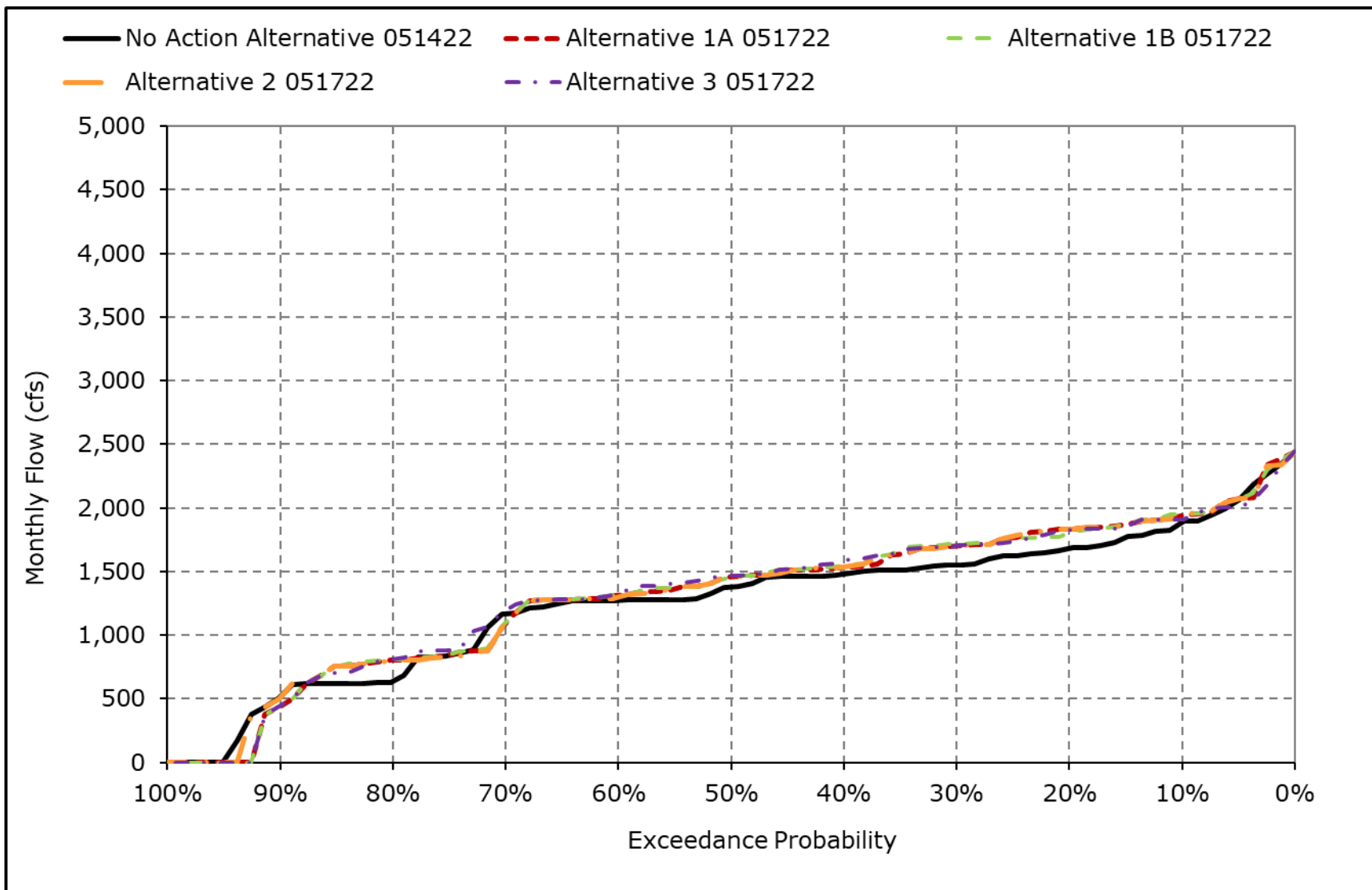
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-6. DCC Flow, Critical Year Average Flow**



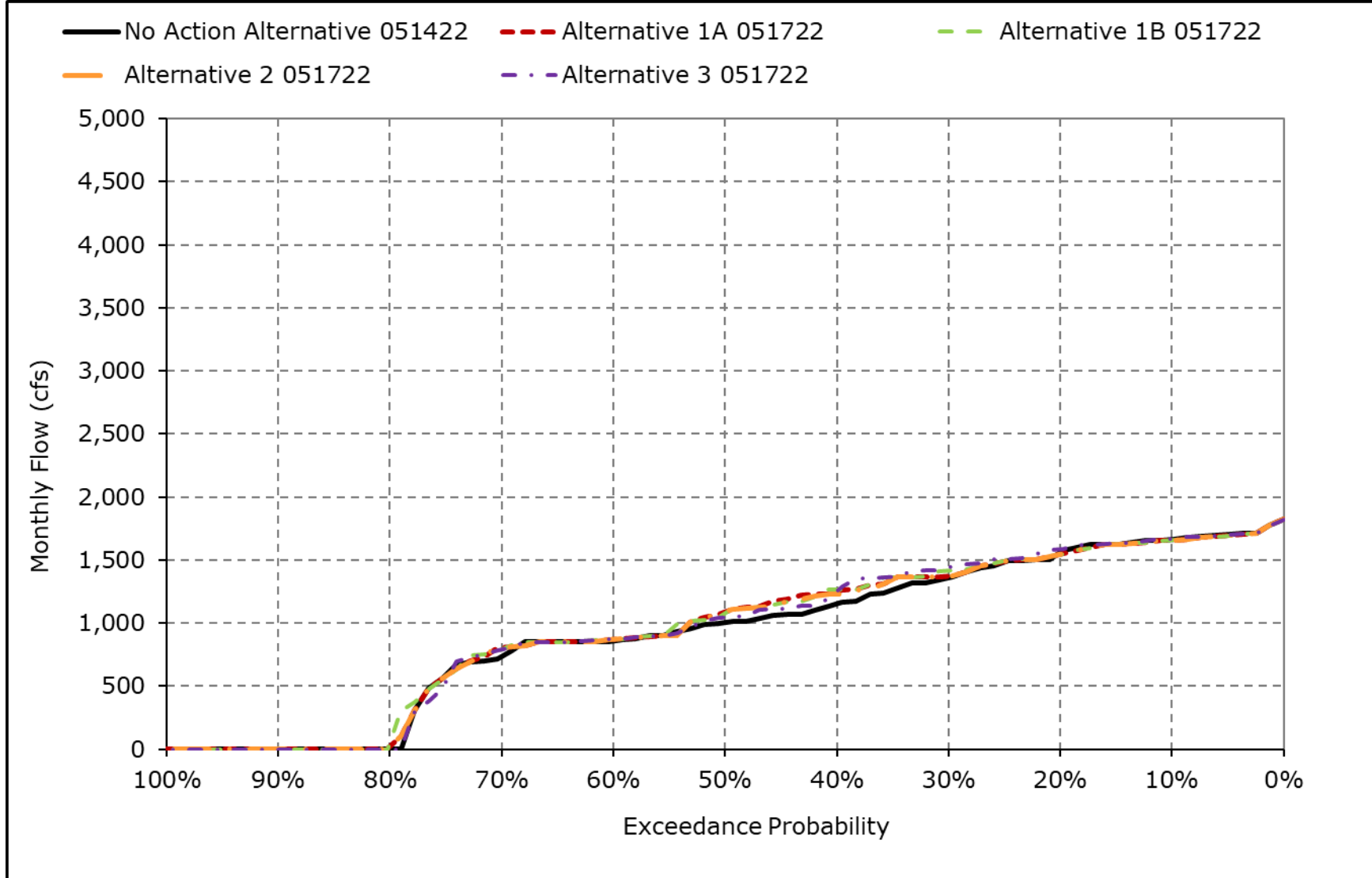
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).  
 \*These results are displayed with calendar year - year type sorting.  
 \*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-7. DCC Flow, October**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

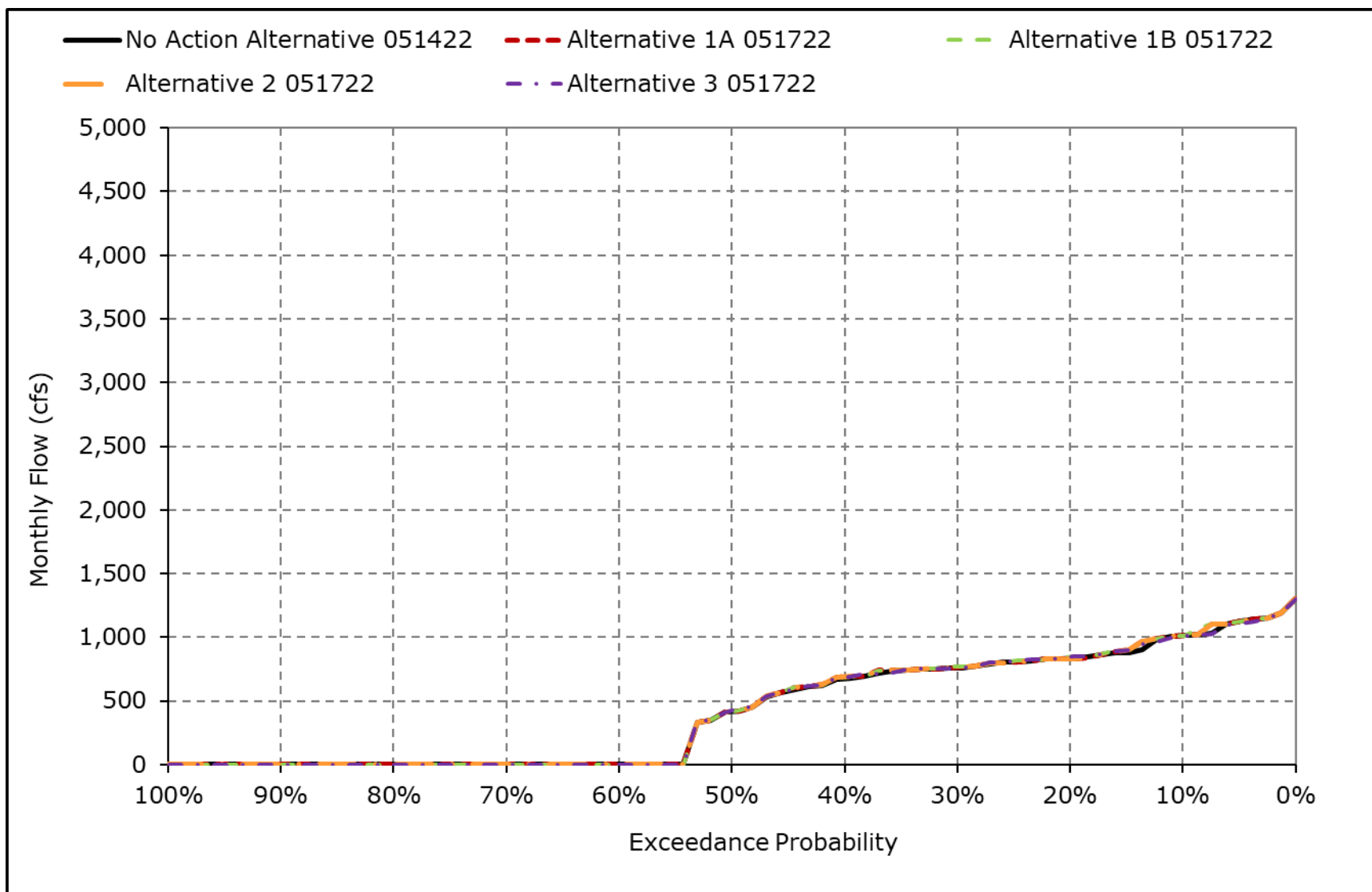
**Figure 5B3-2-8. DCC Flow, November**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

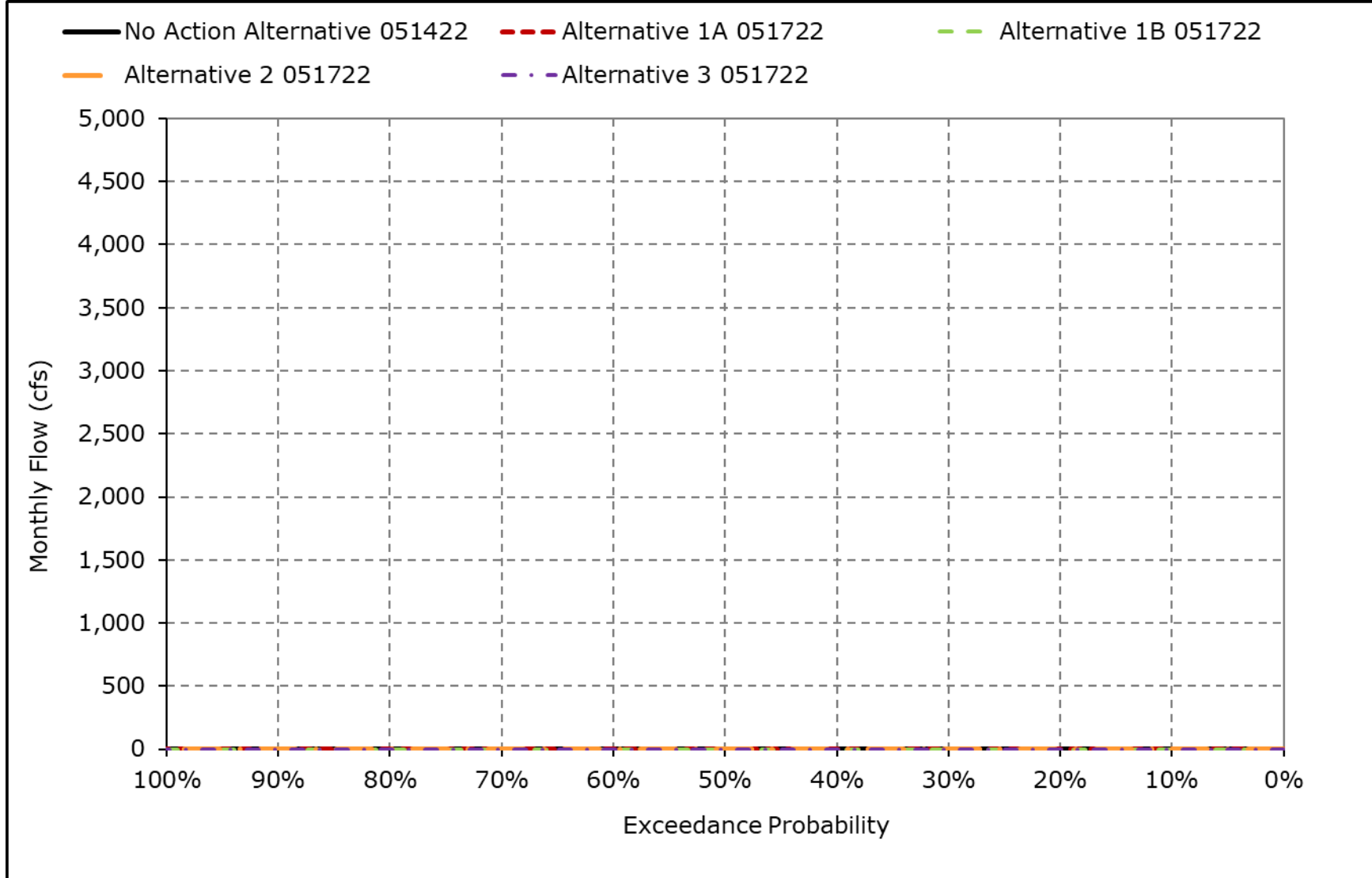


**Figure 5B3-2-9. DCC Flow, December**



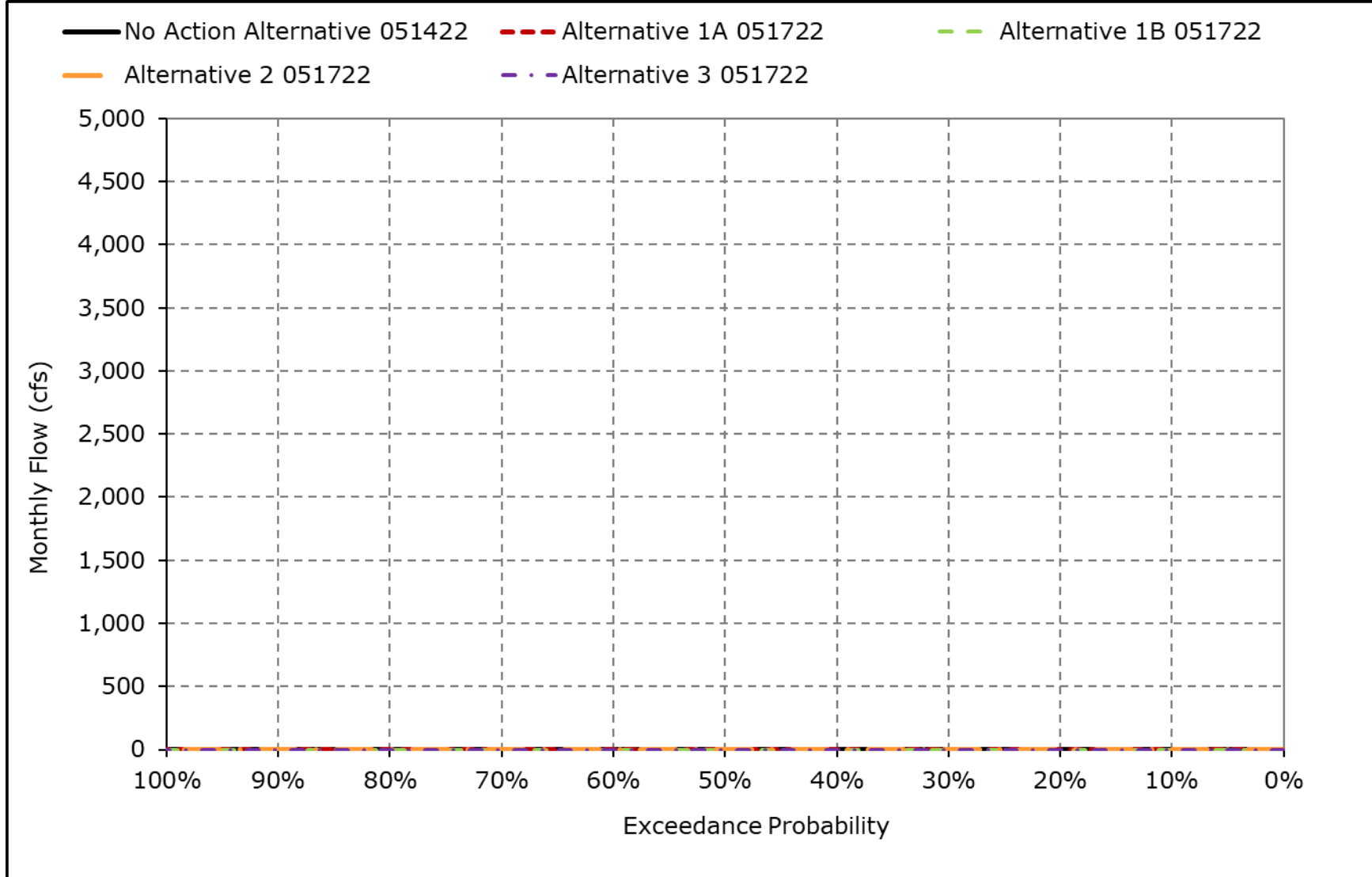
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-10. DCC Flow, January**



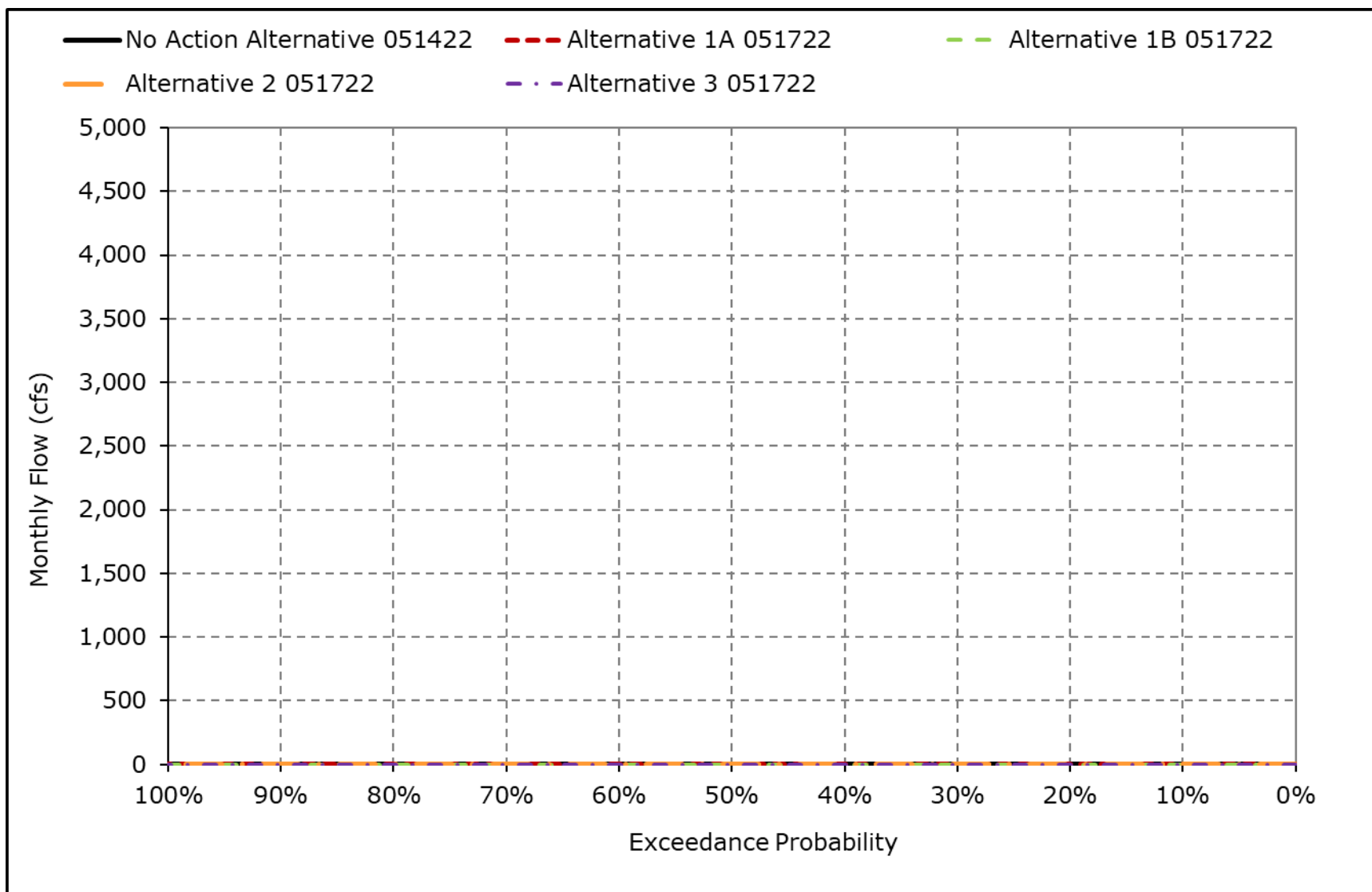
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-11. DCC Flow, February**



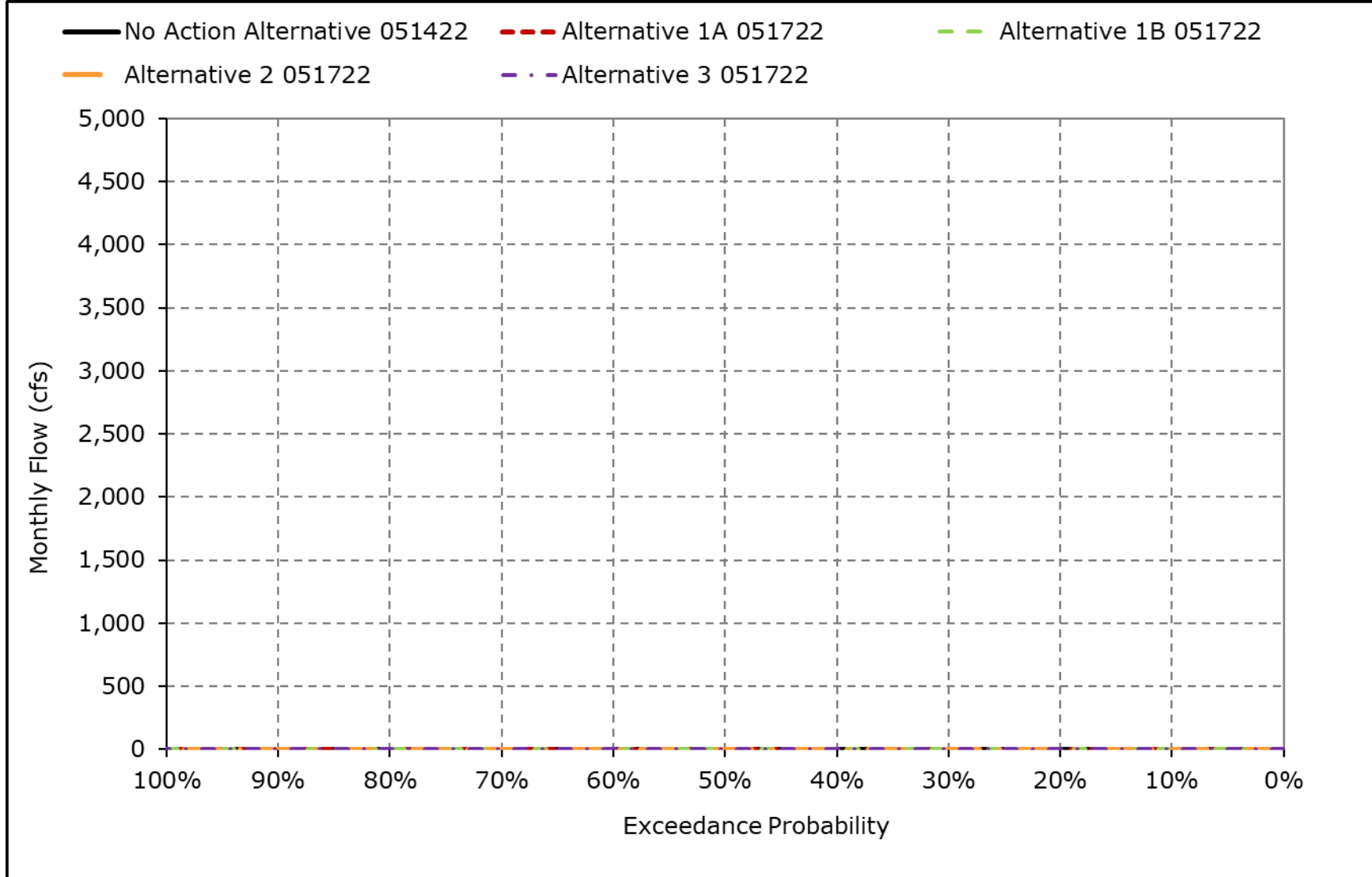
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-12. DCC Flow, March**



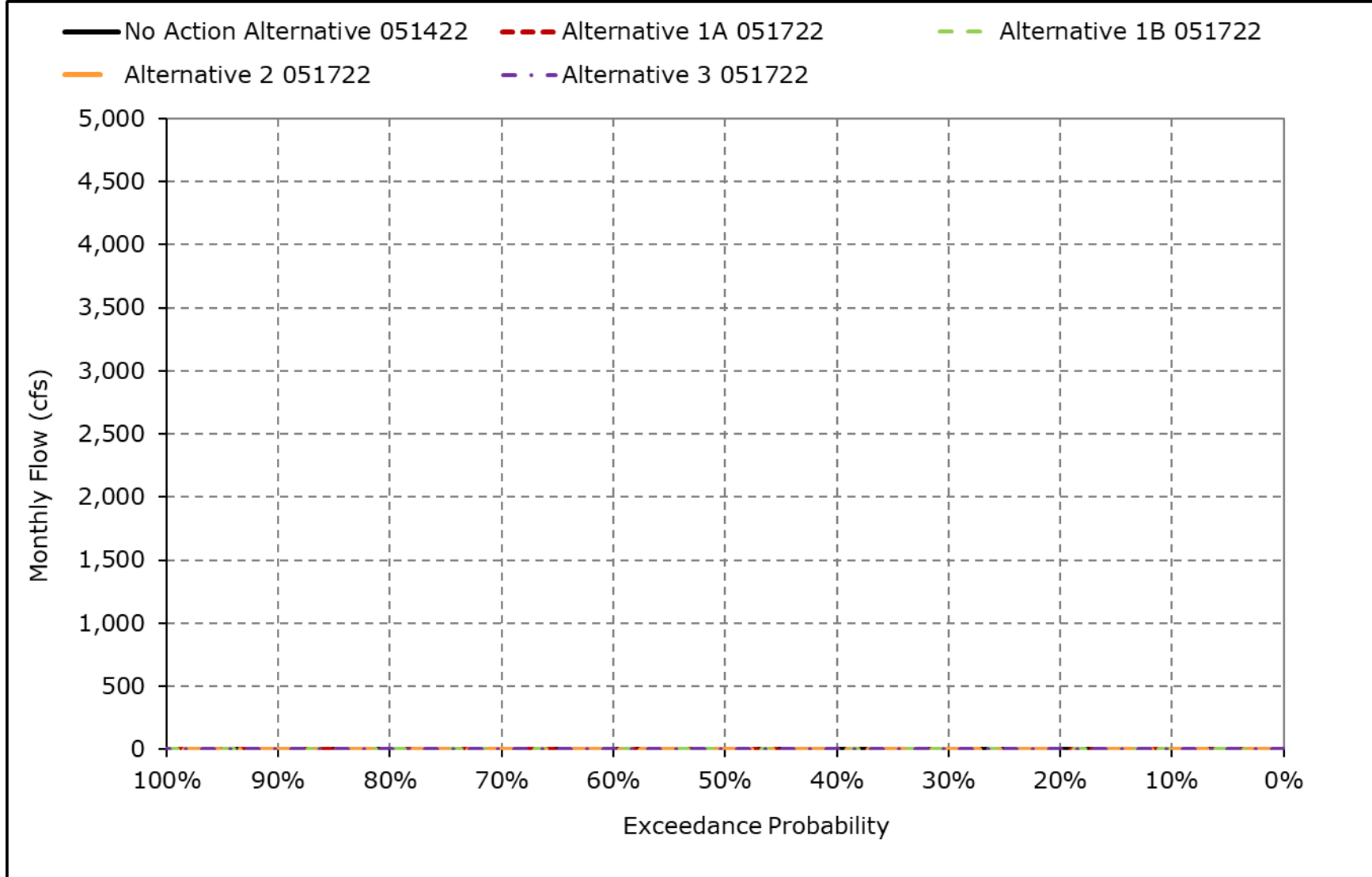
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-13. DCC Flow, April**



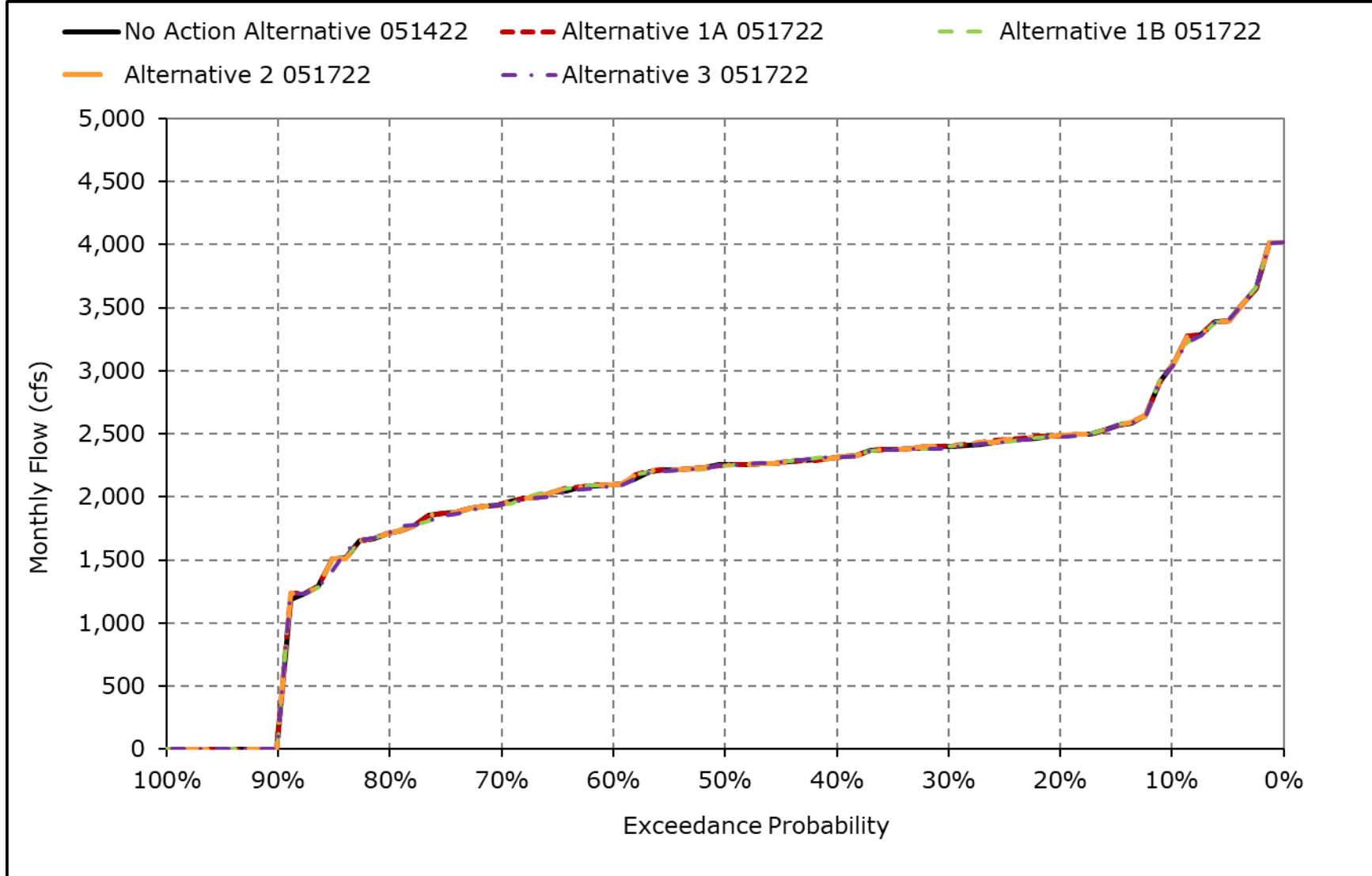
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-14. DCC Flow, May**



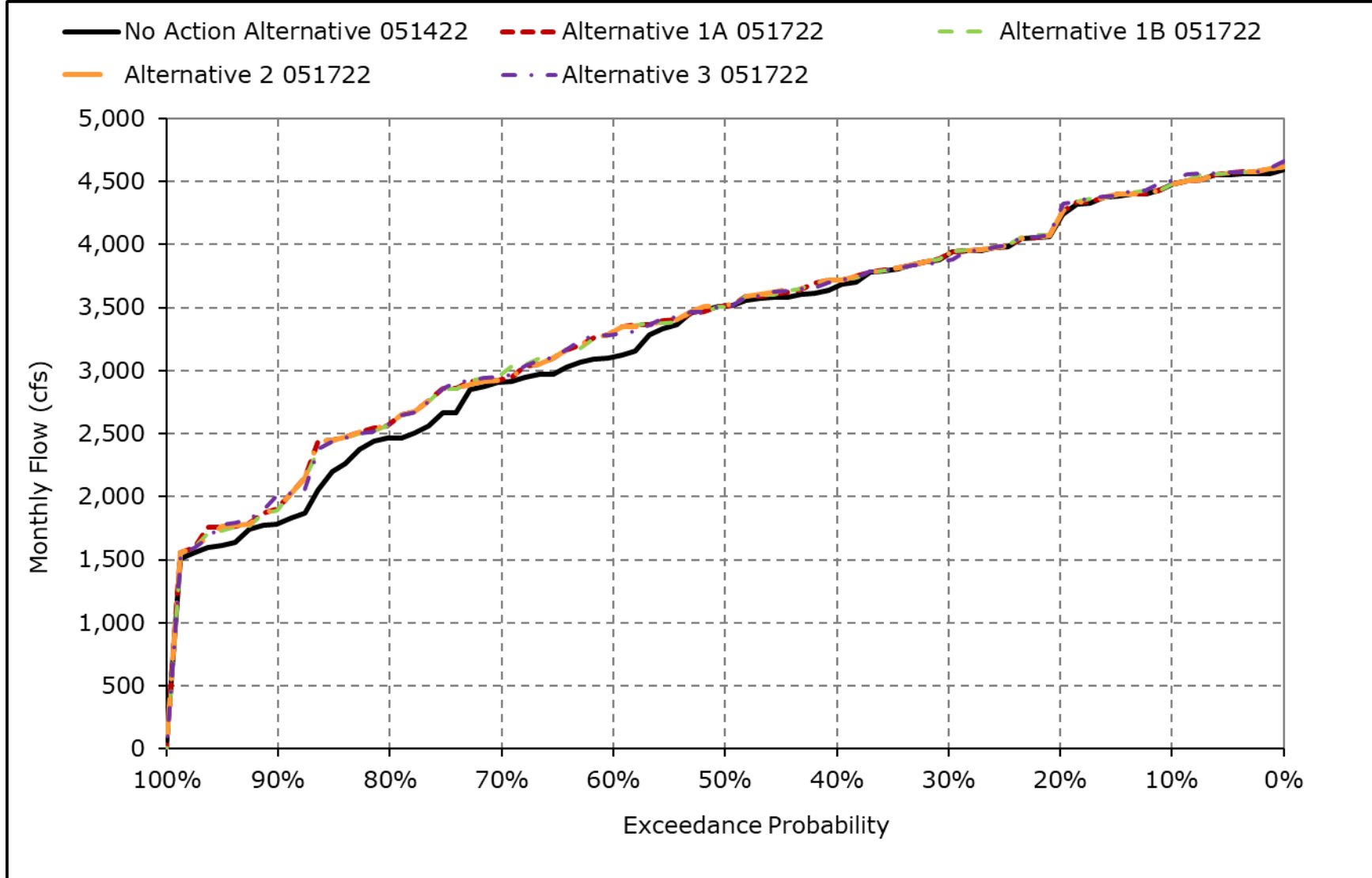
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-15. DCC Flow, June**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

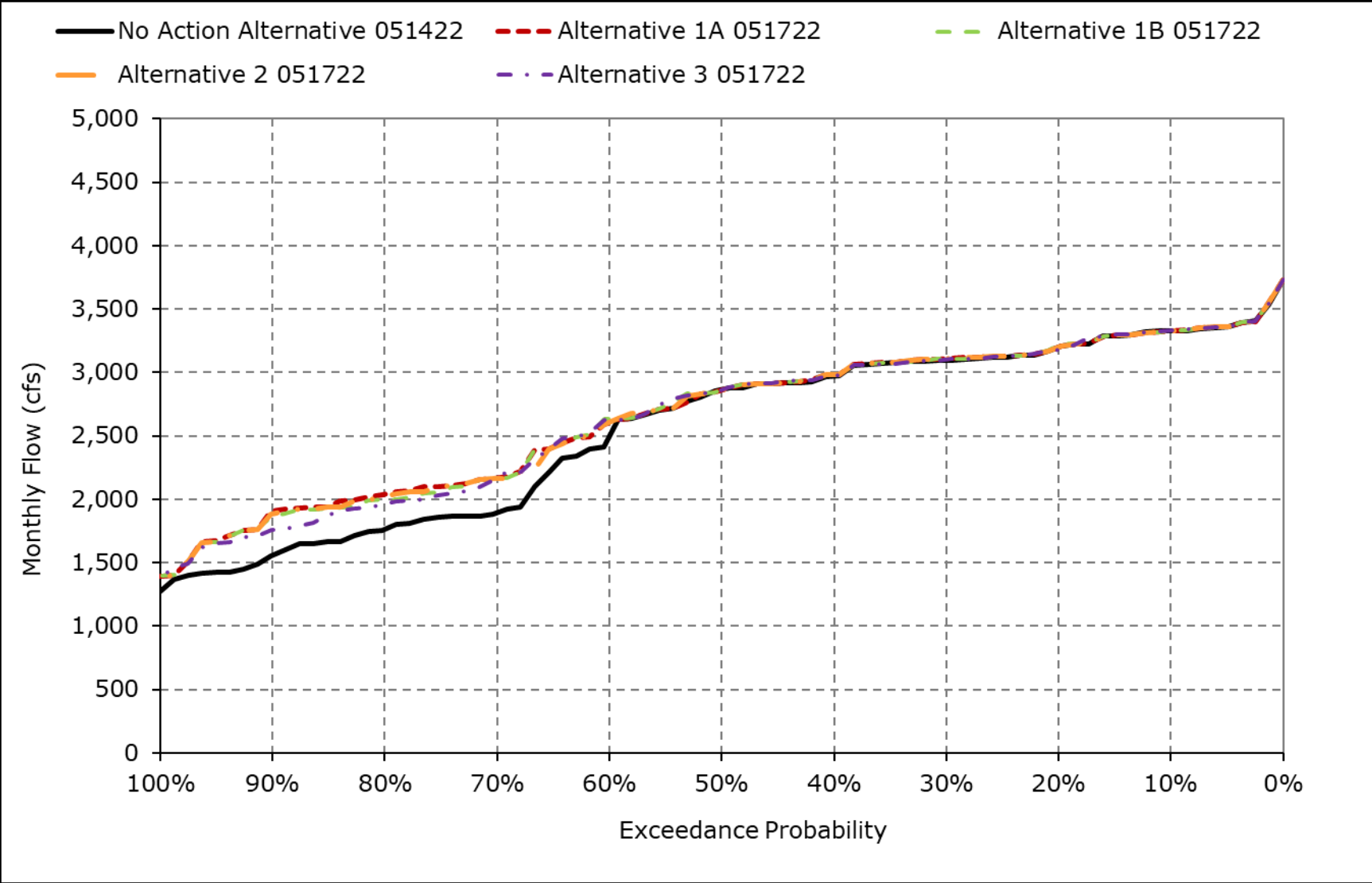
**Figure 5B3-2-16. DCC Flow, July**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

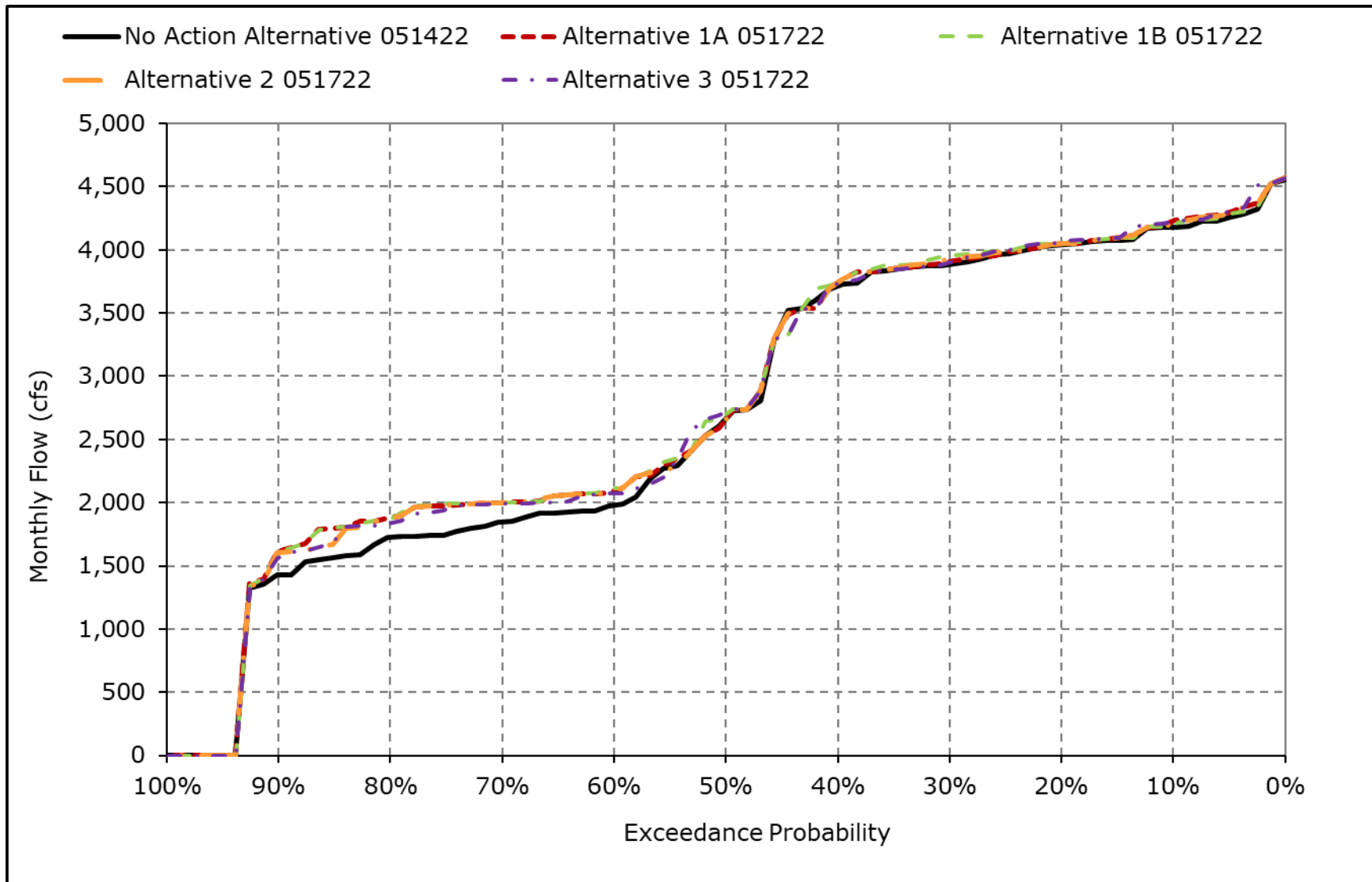


**Figure 5B3-2-17. DCC Flow, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-2-18. DCC Flow, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Table 5B3-3-1a. Yolo Bypass Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	63	707	12,952	33,887	47,138	23,642	7,047	820	68	48	183	140
20% Exceedance	61	155	4,833	15,926	16,035	9,011	3,186	78	68	48	55	60
30% Exceedance	58	47	1,649	6,444	10,621	5,001	1,068	74	68	48	55	59
40% Exceedance	53	20	542	2,953	8,787	2,880	331	71	68	48	55	59
50% Exceedance	45	10	232	751	3,515	1,408	139	68	67	48	55	59
60% Exceedance	40	7	123	431	1,351	641	113	65	67	48	55	59
70% Exceedance	29	2	42	203	454	204	92	63	66	48	55	58
80% Exceedance	16	0	20	64	155	69	80	59	64	48	55	55
90% Exceedance	4	0	1	22	47	37	58	53	62	48	54	52
<b>Full Simulation Period Average<sup>a</sup></b>	104	468	4,109	10,835	14,871	8,455	2,653	287	99	48	100	78
<b>Wet Water Years (32%)</b>	86	595	5,269	28,589	35,823	21,201	6,960	642	169	48	143	80
<b>Above Normal Water Years (15%)</b>	37	975	2,043	8,668	14,875	8,922	1,914	309	66	48	95	65
<b>Below Normal Water Years (17%)</b>	327	434	4,425	1,690	4,632	1,011	483	67	66	48	114	111
<b>Dry Water Years (22%)</b>	43	270	6,070	712	2,084	931	308	77	67	48	62	65
<b>Critical Water Years (15%)</b>	41	22	349	387	600	343	107	68	64	48	54	69

**Table 5B3-3-1b. Yolo Bypass Flow, Alternative 1A 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	449	759	12,456	31,118	44,619	23,606	6,594	806	68	48	450	463
20% Exceedance	419	155	4,402	15,211	15,871	8,413	3,171	78	68	48	445	436
30% Exceedance	398	47	1,285	6,256	9,839	4,301	1,071	74	68	48	445	403
40% Exceedance	386	19	524	2,741	8,534	2,821	331	71	68	48	445	403
50% Exceedance	101	10	220	728	3,300	1,365	139	68	67	48	444	377
60% Exceedance	61	7	120	440	1,336	642	113	65	67	48	432	98
70% Exceedance	53	4	42	203	429	204	92	63	66	48	79	59
80% Exceedance	41	0	20	77	156	71	80	59	64	48	55	59
90% Exceedance	13	0	1	22	47	37	58	53	62	48	55	57
<b>Full Simulation Period Average<sup>a</sup></b>	266	429	3,925	10,478	14,331	8,276	2,557	264	98	48	319	269
<b>Wet Water Years (32%)</b>	395	565	5,091	27,853	34,686	21,073	6,737	569	168	48	471	413
<b>Above Normal Water Years (15%)</b>	254	888	1,948	7,984	14,256	8,129	1,748	309	66	48	420	406
<b>Below Normal Water Years (17%)</b>	452	375	4,007	1,606	4,343	964	482	67	66	48	281	258
<b>Dry Water Years (22%)</b>	70	240	5,880	684	1,929	873	308	77	67	48	211	103
<b>Critical Water Years (15%)</b>	74	22	346	367	562	333	107	68	64	48	97	82

**Table 5B3-3-1c. Yolo Bypass Flow, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	386	52	-495	-2,768	-2,519	-36	-452	-14	0	0	266	323
20% Exceedance	358	0	-430	-714	-165	-598	-15	0	0	0	390	377
30% Exceedance	340	0	-364	-189	-782	-700	3	0	0	0	390	344
40% Exceedance	333	-1	-18	-212	-253	-60	0	0	0	0	390	344
50% Exceedance	56	0	-13	-24	-216	-43	0	0	0	0	389	318
60% Exceedance	21	0	-3	8	-15	1	0	0	0	0	377	39
70% Exceedance	24	2	0	0	-26	0	0	0	0	0	24	1
80% Exceedance	25	0	0	13	1	2	0	0	0	0	0	4
90% Exceedance	8	0	0	0	0	0	0	0	0	0	1	5
<b>Full Simulation Period Average<sup>a</sup></b>	162	-39	-184	-357	-540	-179	-95	-23	0	0	219	191
<b>Wet Water Years (32%)</b>	309	-30	-178	-736	-1,137	-128	-223	-73	-1	0	328	333
<b>Above Normal Water Years (15%)</b>	217	-88	-95	-685	-620	-793	-166	0	0	0	325	341
<b>Below Normal Water Years (17%)</b>	125	-58	-419	-84	-290	-48	-1	0	0	0	167	147
<b>Dry Water Years (22%)</b>	27	-30	-190	-28	-154	-58	0	0	0	0	149	38
<b>Critical Water Years (15%)</b>	33	0	-3	-20	-38	-10	0	0	0	0	42	12

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-3-2a. Yolo Bypass Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	63	707	12,952	33,887	47,138	23,642	7,047	820	68	48	183	140
<b>20% Exceedance</b>	61	155	4,833	15,926	16,035	9,011	3,186	78	68	48	55	60
<b>30% Exceedance</b>	58	47	1,649	6,444	10,621	5,001	1,068	74	68	48	55	59
<b>40% Exceedance</b>	53	20	542	2,953	8,787	2,880	331	71	68	48	55	59
<b>50% Exceedance</b>	45	10	232	751	3,515	1,408	139	68	67	48	55	59
<b>60% Exceedance</b>	40	7	123	431	1,351	641	113	65	67	48	55	59
<b>70% Exceedance</b>	29	2	42	203	454	204	92	63	66	48	55	58
<b>80% Exceedance</b>	16	0	20	64	155	69	80	59	64	48	55	55
<b>90% Exceedance</b>	4	0	1	22	47	37	58	53	62	48	54	52
<b>Full Simulation Period Average<sup>a</sup></b>	104	468	4,109	10,835	14,871	8,455	2,653	287	99	48	100	78
<b>Wet Water Years (32%)</b>	86	595	5,269	28,589	35,823	21,201	6,960	642	169	48	143	80
<b>Above Normal Water Years (15%)</b>	37	975	2,043	8,668	14,875	8,922	1,914	309	66	48	95	65
<b>Below Normal Water Years (17%)</b>	327	434	4,425	1,690	4,632	1,011	483	67	66	48	114	111
<b>Dry Water Years (22%)</b>	43	270	6,070	712	2,084	931	308	77	67	48	62	65
<b>Critical Water Years (15%)</b>	41	22	349	387	600	343	107	68	64	48	54	69

**Table 5B3-3-2b. Yolo Bypass Flow, Alternative 1B 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	447	759	12,414	31,129	44,554	23,596	6,594	806	68	48	450	462
<b>20% Exceedance</b>	406	155	4,527	14,809	15,871	8,360	3,171	78	68	48	445	417
<b>30% Exceedance</b>	393	48	1,285	6,256	9,857	4,302	1,071	74	68	48	445	403
<b>40% Exceedance</b>	240	19	422	2,602	8,590	2,787	331	71	68	48	445	403
<b>50% Exceedance</b>	63	10	207	728	3,300	1,342	139	68	67	48	444	291
<b>60% Exceedance</b>	60	7	116	440	1,337	643	113	65	67	48	432	84
<b>70% Exceedance</b>	53	3	42	203	429	204	92	63	66	48	55	59
<b>80% Exceedance</b>	40	0	20	64	156	71	80	59	64	48	55	59
<b>90% Exceedance</b>	13	0	1	22	47	37	58	53	62	48	55	57
<b>Full Simulation Period Average<sup>a</sup></b>	247	427	3,913	10,463	14,345	8,286	2,558	264	98	48	318	259
<b>Wet Water Years (32%)</b>	364	550	5,078	27,837	34,709	21,050	6,737	570	168	48	471	401
<b>Above Normal Water Years (15%)</b>	247	906	1,936	7,952	14,258	8,243	1,748	309	66	48	420	406
<b>Below Normal Water Years (17%)</b>	439	376	4,016	1,585	4,376	964	482	67	66	48	281	216
<b>Dry Water Years (22%)</b>	69	241	5,847	677	1,930	872	308	77	67	48	206	111
<b>Critical Water Years (15%)</b>	41	22	346	367	562	333	107	68	64	48	97	80

**Table 5B3-3-2c. Yolo Bypass Flow, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	383	52	-538	-2,758	-2,585	-46	-452	-14	0	0	266	322
<b>20% Exceedance</b>	345	0	-305	-1,117	-165	-651	-15	0	0	0	390	357
<b>30% Exceedance</b>	335	1	-364	-188	-764	-699	3	0	0	0	390	344
<b>40% Exceedance</b>	187	0	-120	-352	-197	-94	0	0	0	0	390	344
<b>50% Exceedance</b>	18	0	-25	-23	-216	-66	0	0	0	0	389	232
<b>60% Exceedance</b>	20	0	-7	9	-15	2	0	0	0	0	377	25
<b>70% Exceedance</b>	23	1	0	0	-25	0	0	0	0	0	0	1
<b>80% Exceedance</b>	24	0	0	0	1	2	0	0	0	0	0	4
<b>90% Exceedance</b>	8	0	0	0	0	0	0	0	0	0	1	5
<b>Full Simulation Period Average<sup>a</sup></b>	144	-41	-195	-372	-527	-170	-95	-23	0	0	218	181
<b>Wet Water Years (32%)</b>	278	-45	-191	-752	-1,114	-151	-223	-72	-1	0	328	320
<b>Above Normal Water Years (15%)</b>	210	-69	-107	-716	-617	-678	-166	0	0	0	325	341
<b>Below Normal Water Years (17%)</b>	112	-58	-410	-105	-256	-48	-1	0	0	0	167	105
<b>Dry Water Years (22%)</b>	26	-29	-223	-35	-153	-59	0	0	0	0	144	46
<b>Critical Water Years (15%)</b>	0	0	-3	-20	-38	-10	0	0	0	0	43	10

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-3-3a. Yolo Bypass Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	63	707	12,952	33,887	47,138	23,642	7,047	820	68	48	183	140
<b>20% Exceedance</b>	61	155	4,833	15,926	16,035	9,011	3,186	78	68	48	55	60
<b>30% Exceedance</b>	58	47	1,649	6,444	10,621	5,001	1,068	74	68	48	55	59
<b>40% Exceedance</b>	53	20	542	2,953	8,787	2,880	331	71	68	48	55	59
<b>50% Exceedance</b>	45	10	232	751	3,515	1,408	139	68	67	48	55	59
<b>60% Exceedance</b>	40	7	123	431	1,351	641	113	65	67	48	55	59
<b>70% Exceedance</b>	29	2	42	203	454	204	92	63	66	48	55	58
<b>80% Exceedance</b>	16	0	20	64	155	69	80	59	64	48	55	55
<b>90% Exceedance</b>	4	0	1	22	47	37	58	53	62	48	54	52
<b>Full Simulation Period Average<sup>a</sup></b>	104	468	4,109	10,835	14,871	8,455	2,653	287	99	48	100	78
<b>Wet Water Years (32%)</b>	86	595	5,269	28,589	35,823	21,201	6,960	642	169	48	143	80
<b>Above Normal Water Years (15%)</b>	37	975	2,043	8,668	14,875	8,922	1,914	309	66	48	95	65
<b>Below Normal Water Years (17%)</b>	327	434	4,425	1,690	4,632	1,011	483	67	66	48	114	111
<b>Dry Water Years (22%)</b>	43	270	6,070	712	2,084	931	308	77	67	48	62	65
<b>Critical Water Years (15%)</b>	41	22	349	387	600	343	107	68	64	48	54	69

**Table 5B3-3-3b. Yolo Bypass Flow, Alternative 2 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	448	759	12,419	31,112	45,436	23,606	6,594	809	68	48	482	463
<b>20% Exceedance</b>	409	155	4,403	15,214	15,871	8,655	3,171	78	68	48	445	443
<b>30% Exceedance</b>	403	47	1,285	6,256	9,839	4,301	1,072	74	68	48	445	403
<b>40% Exceedance</b>	395	19	524	2,688	8,534	2,821	331	71	68	48	445	403
<b>50% Exceedance</b>	143	10	220	728	3,300	1,367	139	68	67	48	445	403
<b>60% Exceedance</b>	63	7	120	440	1,336	642	113	65	67	48	444	167
<b>70% Exceedance</b>	53	3	42	203	429	204	92	63	66	48	373	59
<b>80% Exceedance</b>	43	0	20	77	156	71	80	59	64	48	55	59
<b>90% Exceedance</b>	19	0	1	22	47	37	58	53	62	48	55	57
<b>Full Simulation Period Average<sup>a</sup></b>	277	429	3,923	10,482	14,374	8,288	2,558	264	98	48	344	287
<b>Wet Water Years (32%)</b>	402	565	5,078	27,869	34,831	21,099	6,738	569	168	48	471	429
<b>Above Normal Water Years (15%)</b>	310	888	1,953	7,986	14,256	8,154	1,748	309	66	48	453	436
<b>Below Normal Water Years (17%)</b>	456	376	4,005	1,599	4,325	964	482	67	66	48	309	261
<b>Dry Water Years (22%)</b>	93	240	5,887	684	1,929	873	308	77	67	48	202	118
<b>Critical Water Years (15%)</b>	42	22	346	367	562	333	107	68	64	48	213	118

**Table 5B3-3-3c. Yolo Bypass Flow, Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	385	52	-532	-2,775	-1,702	-36	-452	-12	0	0	299	323
<b>20% Exceedance</b>	347	0	-430	-711	-165	-356	-15	0	0	0	390	383
<b>30% Exceedance</b>	345	0	-364	-188	-782	-700	3	0	0	0	390	344
<b>40% Exceedance</b>	341	-1	-18	-266	-253	-60	0	0	0	0	390	344
<b>50% Exceedance</b>	97	0	-13	-24	-216	-41	0	0	0	0	390	344
<b>60% Exceedance</b>	23	0	-3	9	-15	2	0	0	0	0	389	108
<b>70% Exceedance</b>	24	1	0	0	-25	0	0	0	0	0	318	1
<b>80% Exceedance</b>	27	0	0	13	1	2	0	0	0	0	0	4
<b>90% Exceedance</b>	15	0	0	0	0	0	0	0	0	0	1	5
<b>Full Simulation Period Average<sup>a</sup></b>	174	-39	-186	-353	-497	-167	-95	-23	0	0	244	209
<b>Wet Water Years (32%)</b>	317	-30	-191	-720	-992	-102	-222	-73	-1	0	328	349
<b>Above Normal Water Years (15%)</b>	273	-88	-90	-682	-620	-768	-166	0	0	0	358	371
<b>Below Normal Water Years (17%)</b>	129	-58	-421	-91	-308	-47	-1	0	0	0	195	150
<b>Dry Water Years (22%)</b>	51	-30	-183	-28	-154	-58	0	0	0	0	139	53
<b>Critical Water Years (15%)</b>	0	0	-3	-20	-38	-10	0	0	0	0	158	49

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-3-4a. Yolo Bypass Flow, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	63	707	12,952	33,887	47,138	23,642	7,047	820	68	48	183	140
20% Exceedance	61	155	4,833	15,926	16,035	9,011	3,186	78	68	48	55	60
30% Exceedance	58	47	1,649	6,444	10,621	5,001	1,068	74	68	48	55	59
40% Exceedance	53	20	542	2,953	8,787	2,880	331	71	68	48	55	59
50% Exceedance	45	10	232	751	3,515	1,408	139	68	67	48	55	59
60% Exceedance	40	7	123	431	1,351	641	113	65	67	48	55	59
70% Exceedance	29	2	42	203	454	204	92	63	66	48	55	58
80% Exceedance	16	0	20	64	155	69	80	59	64	48	55	55
90% Exceedance	4	0	1	22	47	37	58	53	62	48	54	52
<b>Full Simulation Period Average<sup>a</sup></b>	104	468	4,109	10,835	14,871	8,455	2,653	287	99	48	100	78
<b>Wet Water Years (32%)</b>	86	595	5,269	28,589	35,823	21,201	6,960	642	169	48	143	80
<b>Above Normal Water Years (15%)</b>	37	975	2,043	8,668	14,875	8,922	1,914	309	66	48	95	65
<b>Below Normal Water Years (17%)</b>	327	434	4,425	1,690	4,632	1,011	483	67	66	48	114	111
<b>Dry Water Years (22%)</b>	43	270	6,070	712	2,084	931	308	77	67	48	62	65
<b>Critical Water Years (15%)</b>	41	22	349	387	600	343	107	68	64	48	54	69

**Table 5B3-3-4b. Yolo Bypass Flow, Alternative 3 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	447	671	12,507	31,374	44,328	23,595	6,594	806	68	48	450	463
20% Exceedance	406	155	4,450	14,512	15,874	8,308	2,893	78	68	48	445	417
30% Exceedance	390	50	1,285	6,257	10,401	4,345	1,071	74	68	48	445	403
40% Exceedance	99	26	524	2,603	8,553	2,694	331	71	68	48	445	403
50% Exceedance	61	10	220	729	3,299	1,342	139	68	67	48	444	266
60% Exceedance	54	7	117	469	1,336	640	113	65	67	48	407	71
70% Exceedance	44	2	42	203	429	204	92	63	66	48	55	59
80% Exceedance	31	0	20	64	156	71	80	59	64	48	55	59
90% Exceedance	11	0	1	22	47	37	58	53	62	48	55	57
<b>Full Simulation Period Average<sup>a</sup></b>	231	437	3,951	10,475	14,284	8,249	2,537	264	98	48	313	254
<b>Wet Water Years (32%)</b>	323	551	5,105	27,863	34,462	20,923	6,673	570	168	48	471	389
<b>Above Normal Water Years (15%)</b>	188	955	1,867	7,974	14,294	8,262	1,749	309	66	48	420	392
<b>Below Normal Water Years (17%)</b>	438	383	4,000	1,588	4,448	958	482	67	66	48	253	232
<b>Dry Water Years (22%)</b>	90	247	6,038	677	1,929	880	308	77	67	48	209	109
<b>Critical Water Years (15%)</b>	41	22	346	368	561	333	107	68	64	48	90	69

**Table 5B3-3-4c. Yolo Bypass Flow, Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	384	-35	-444	-2,513	-2,810	-46	-453	-15	0	0	266	323
20% Exceedance	345	0	-383	-1,413	-161	-703	-293	0	0	0	390	357
30% Exceedance	333	3	-363	-187	-221	-656	3	0	0	0	390	344
40% Exceedance	46	6	-18	-351	-234	-187	0	0	0	0	390	344
50% Exceedance	16	0	-13	-22	-216	-66	0	0	0	0	389	207
60% Exceedance	13	0	-6	38	-15	-1	0	0	0	0	352	12
70% Exceedance	15	0	0	0	-26	0	0	0	0	0	0	1
80% Exceedance	15	0	0	0	1	2	0	0	0	0	0	4
90% Exceedance	7	0	0	1	0	0	0	0	0	0	1	5
<b>Full Simulation Period Average<sup>a</sup></b>	127	-31	-158	-360	-588	-206	-115	-23	0	0	213	176
<b>Wet Water Years (32%)</b>	237	-44	-163	-726	-1,361	-278	-287	-72	0	0	328	309
<b>Above Normal Water Years (15%)</b>	151	-20	-176	-694	-582	-659	-165	0	0	0	325	327
<b>Below Normal Water Years (17%)</b>	111	-51	-426	-102	-184	-53	-1	0	0	0	139	121
<b>Dry Water Years (22%)</b>	47	-23	-33	-35	-154	-51	0	0	0	0	146	44
<b>Critical Water Years (15%)</b>	0	0	-3	-20	-38	-10	0	0	0	0	36	0

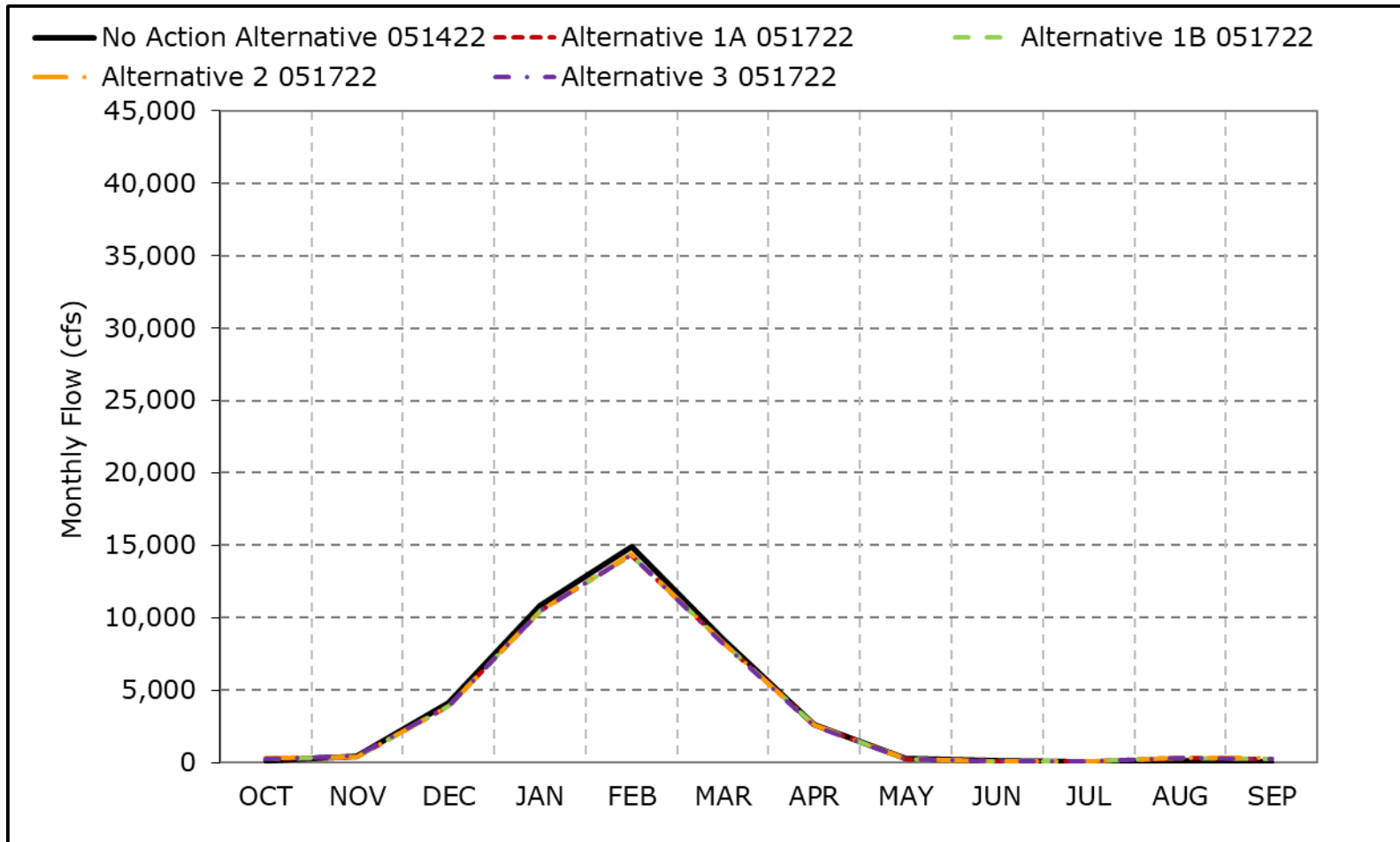
<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Figure 5B3-3-1. Yolo Bypass Flow, Long-Term Average Flow**

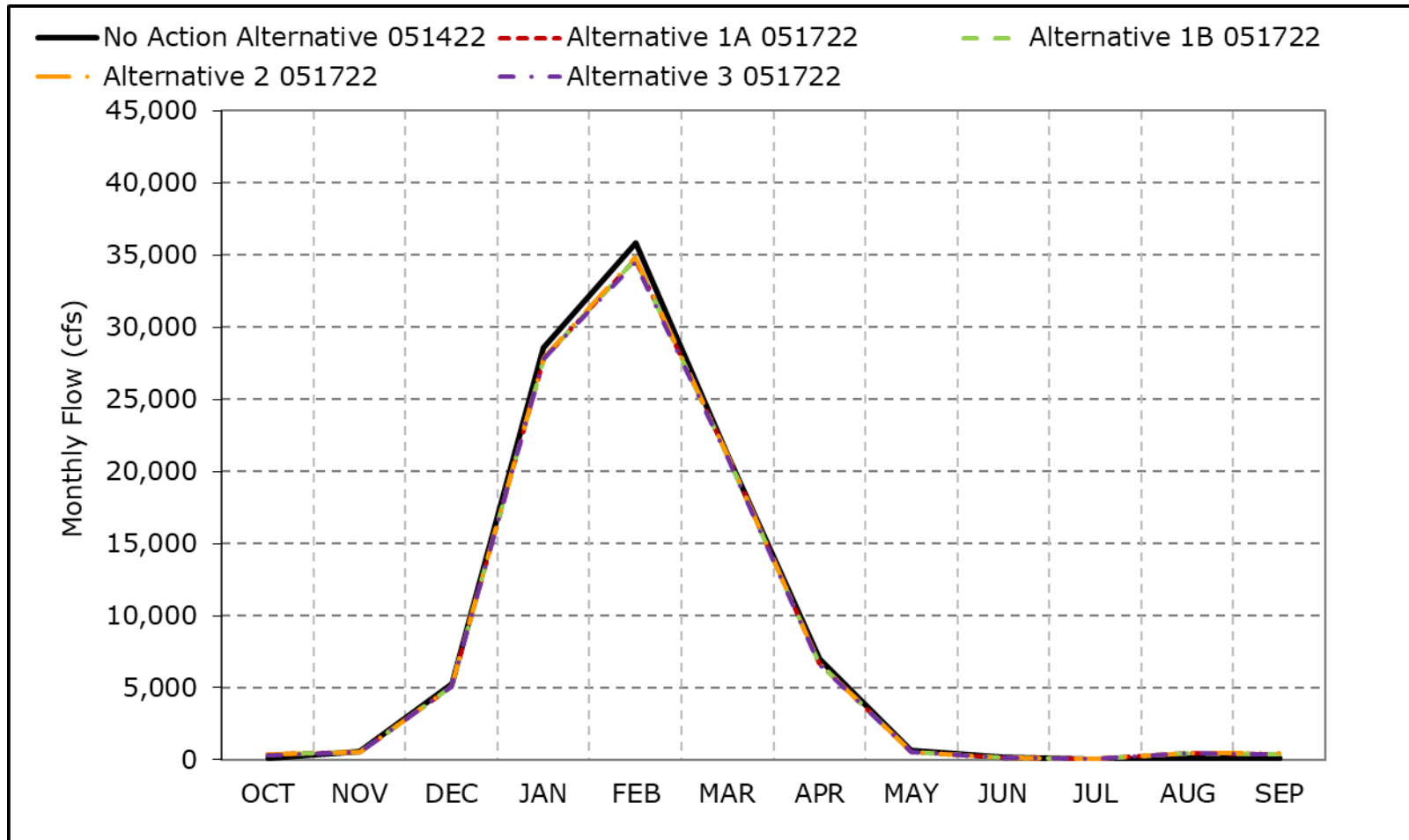


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-2. Yolo Bypass Flow, Wet Year Average Flow**



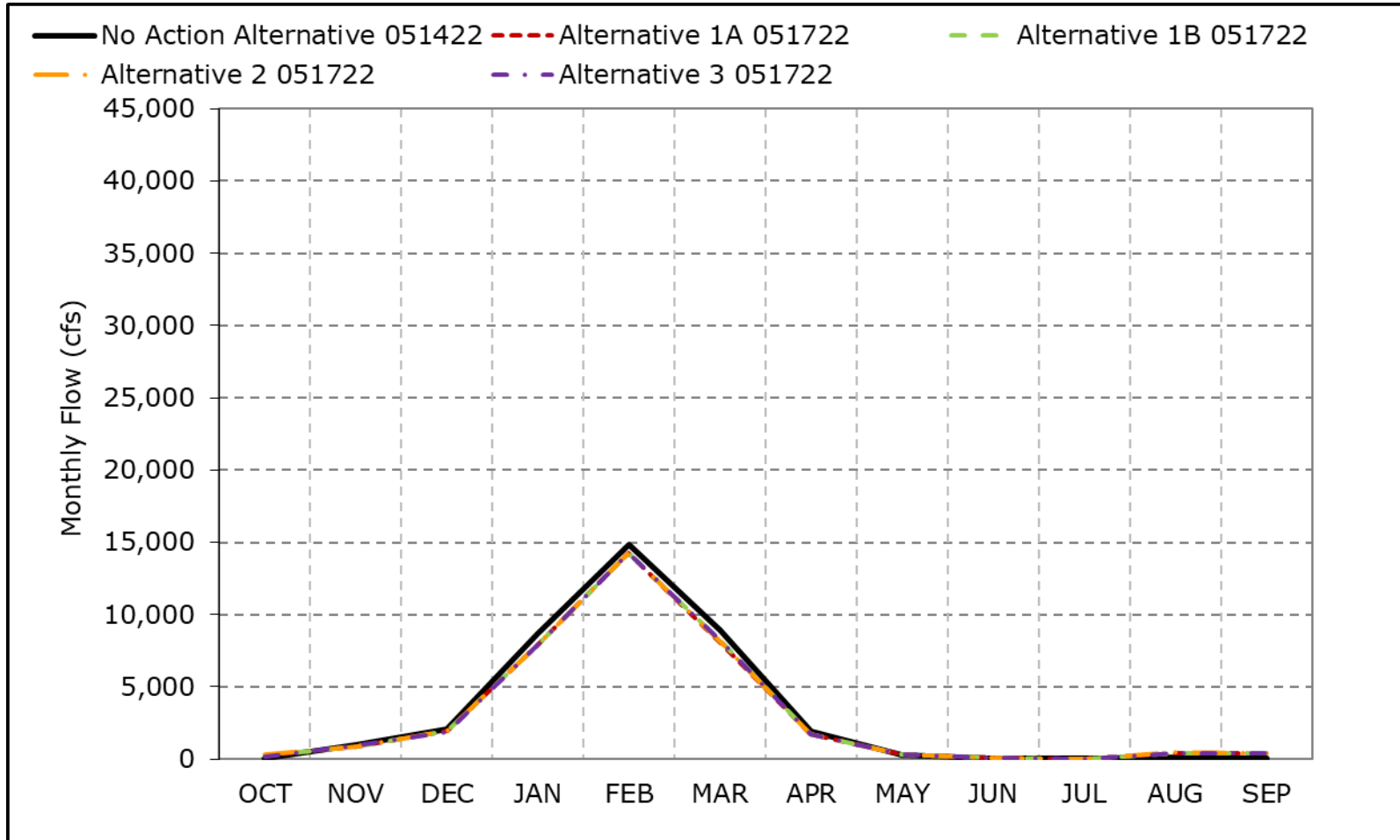
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.



**Figure 5B3-3-3. Yolo Bypass Flow, Above Normal Year Average Flow**

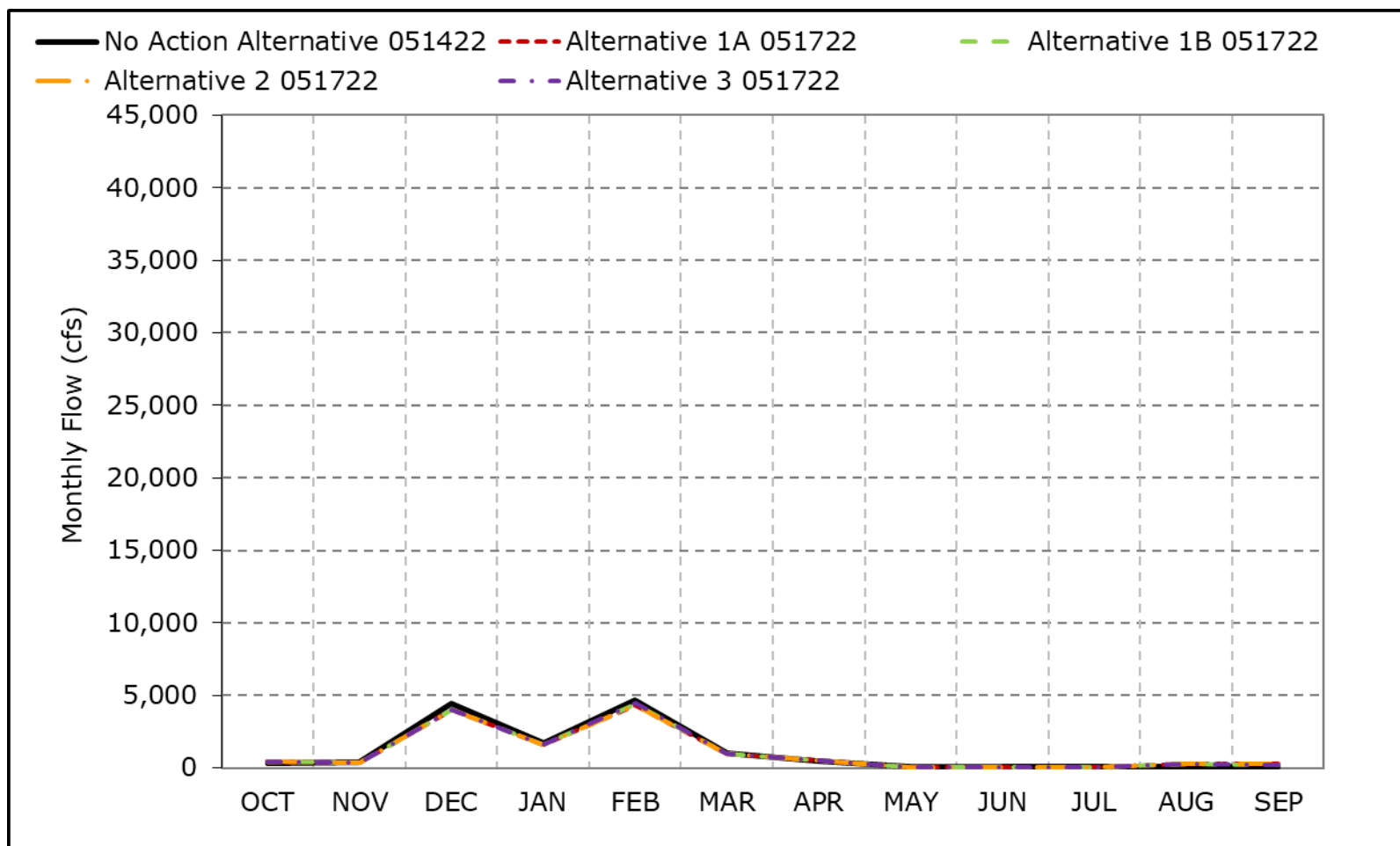


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-4. Yolo Bypass Flow, Below Normal Year Average Flow**

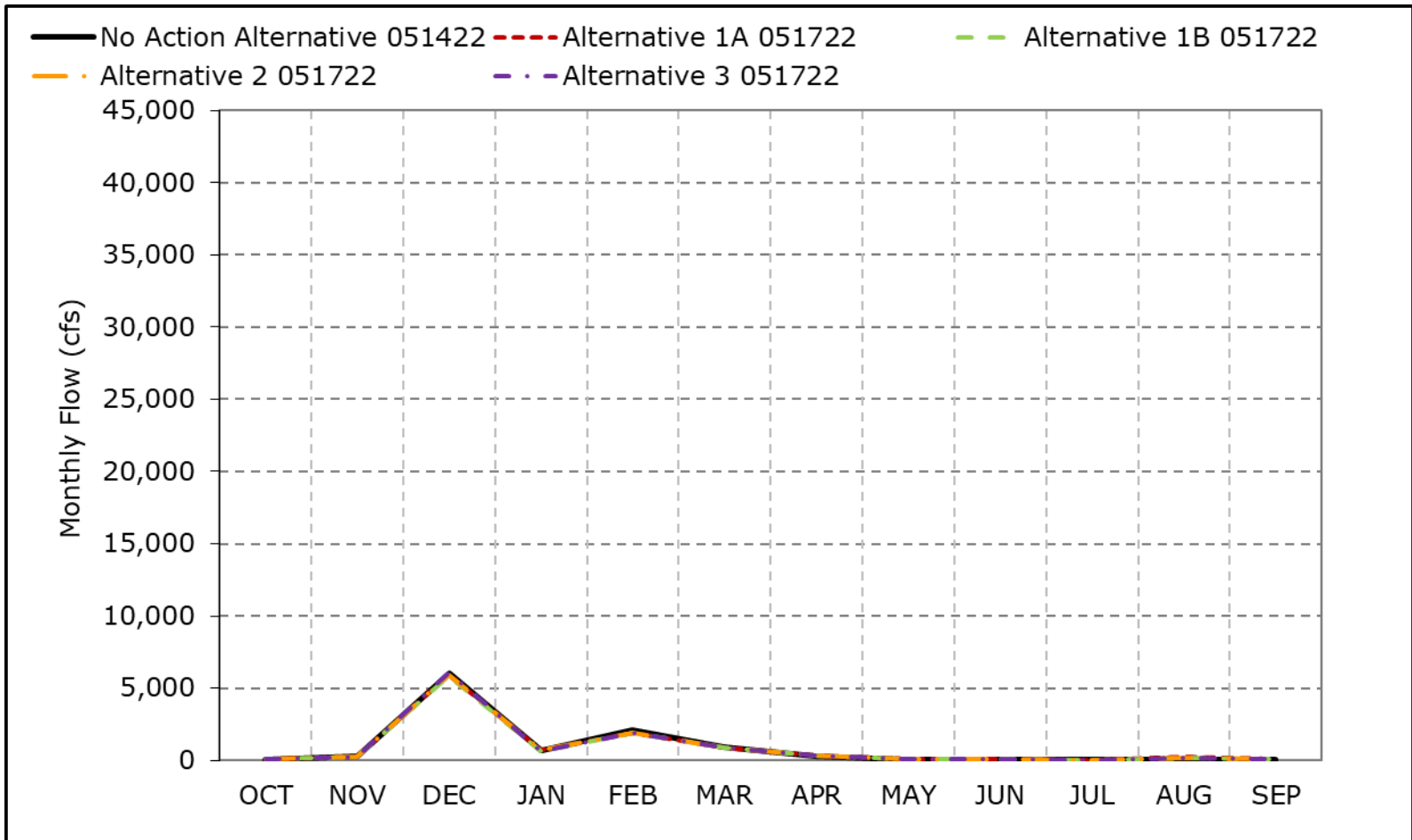


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-5. Yolo Bypass Flow, Dry Year Average Flow**

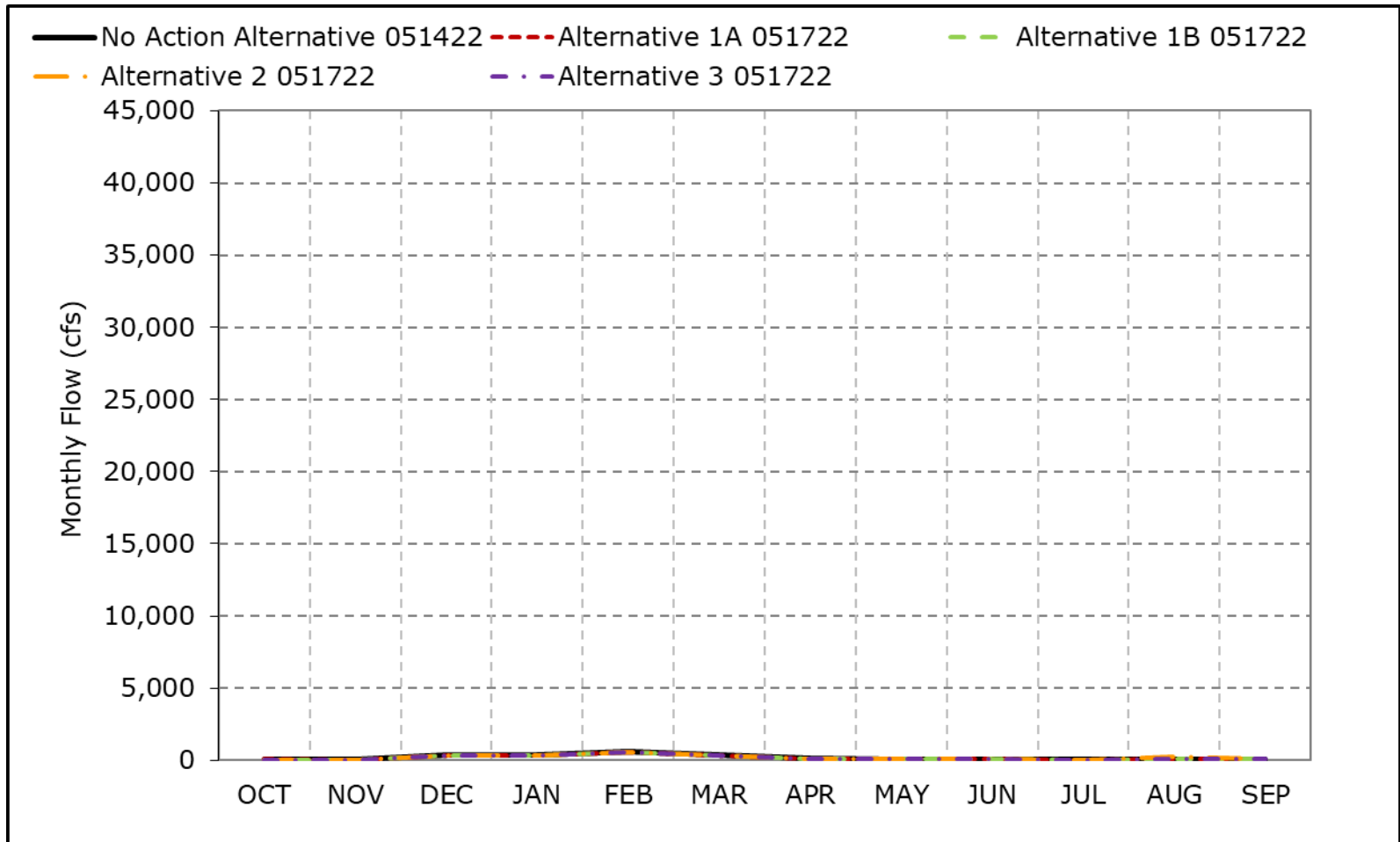


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-6. Yolo Bypass Flow, Critical Year Average Flow**

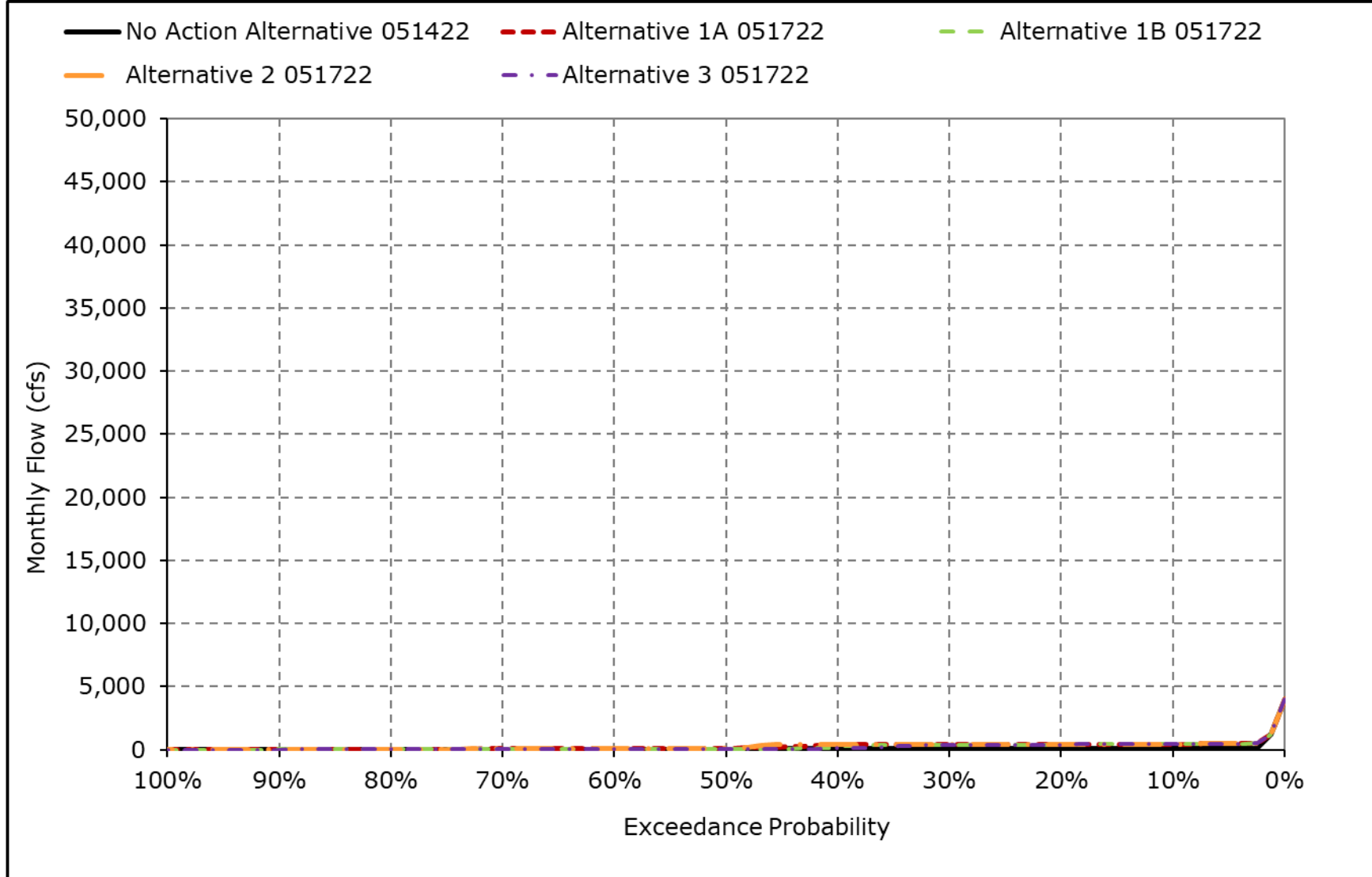


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

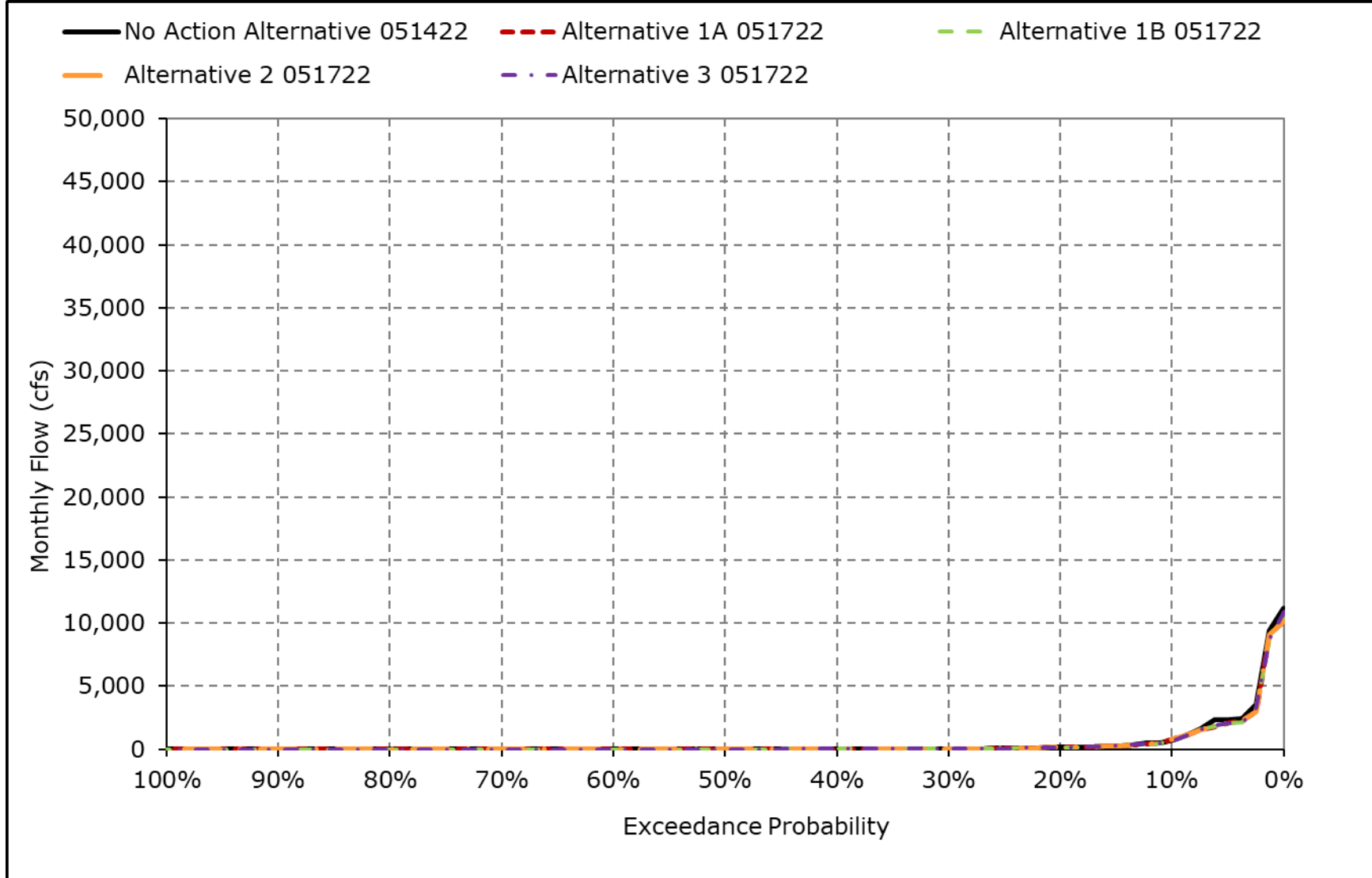
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-7. Yolo Bypass Flow, October**



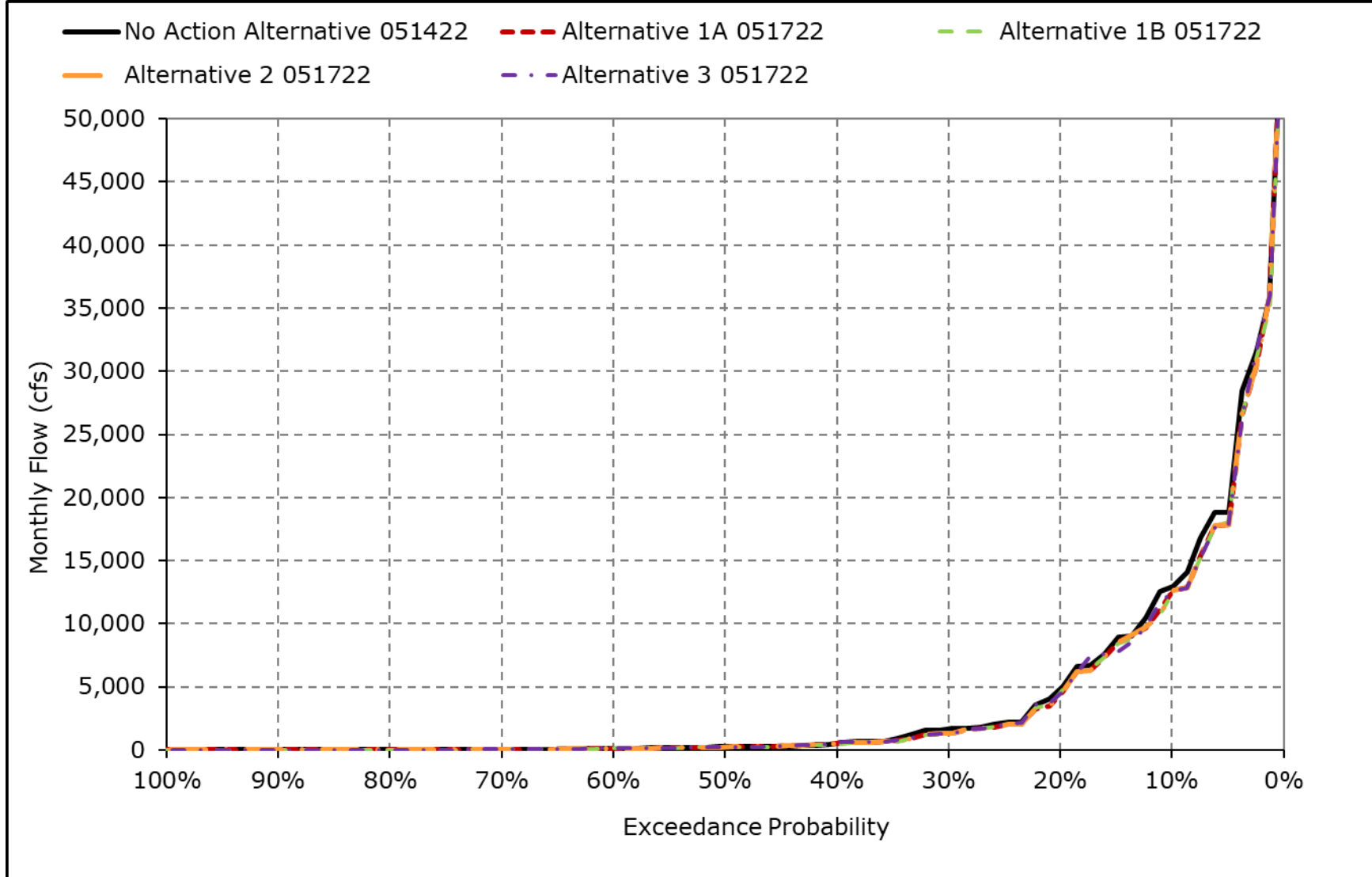
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-8. Yolo Bypass Flow, November**



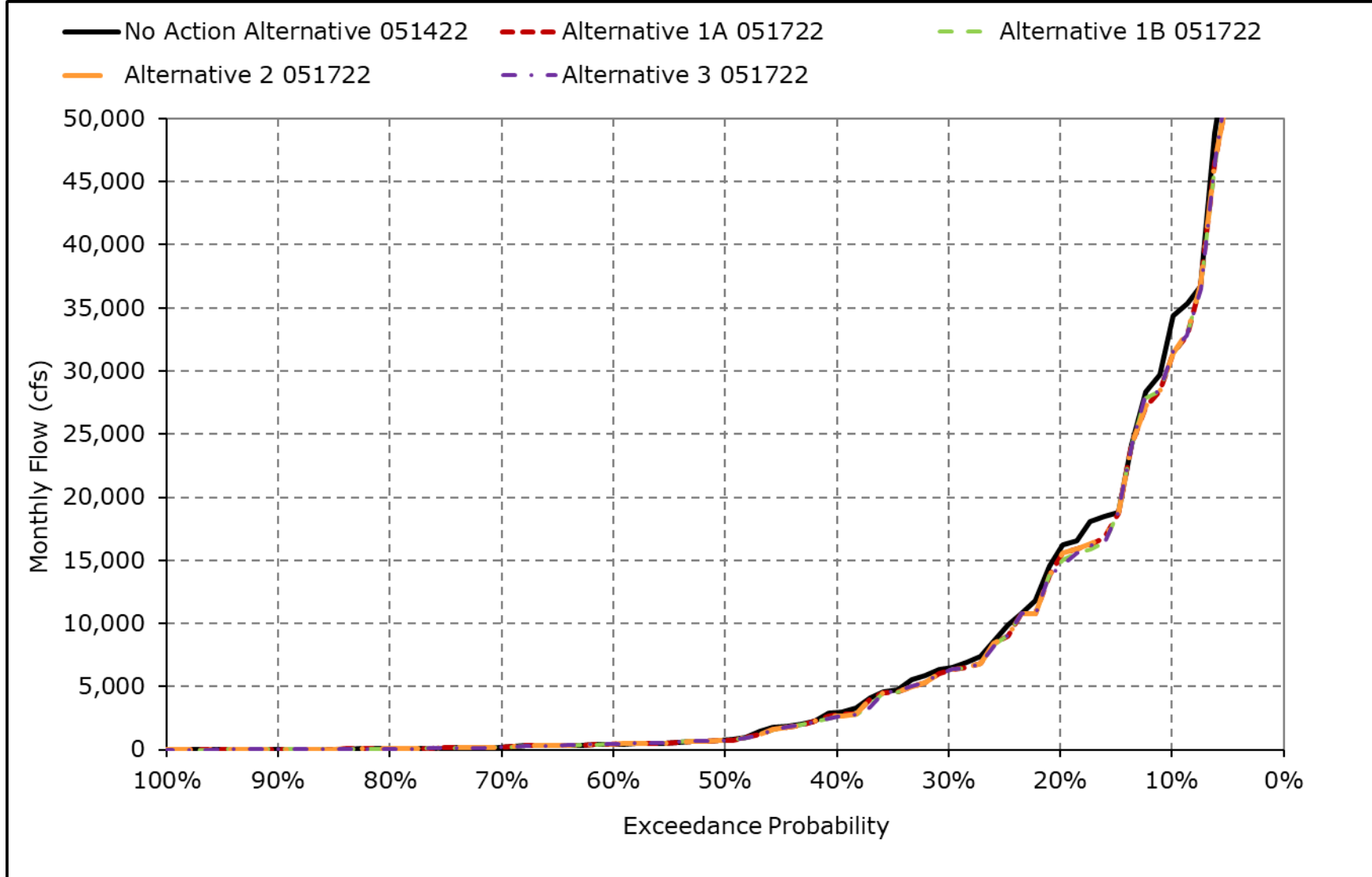
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-9. Yolo Bypass Flow, December**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

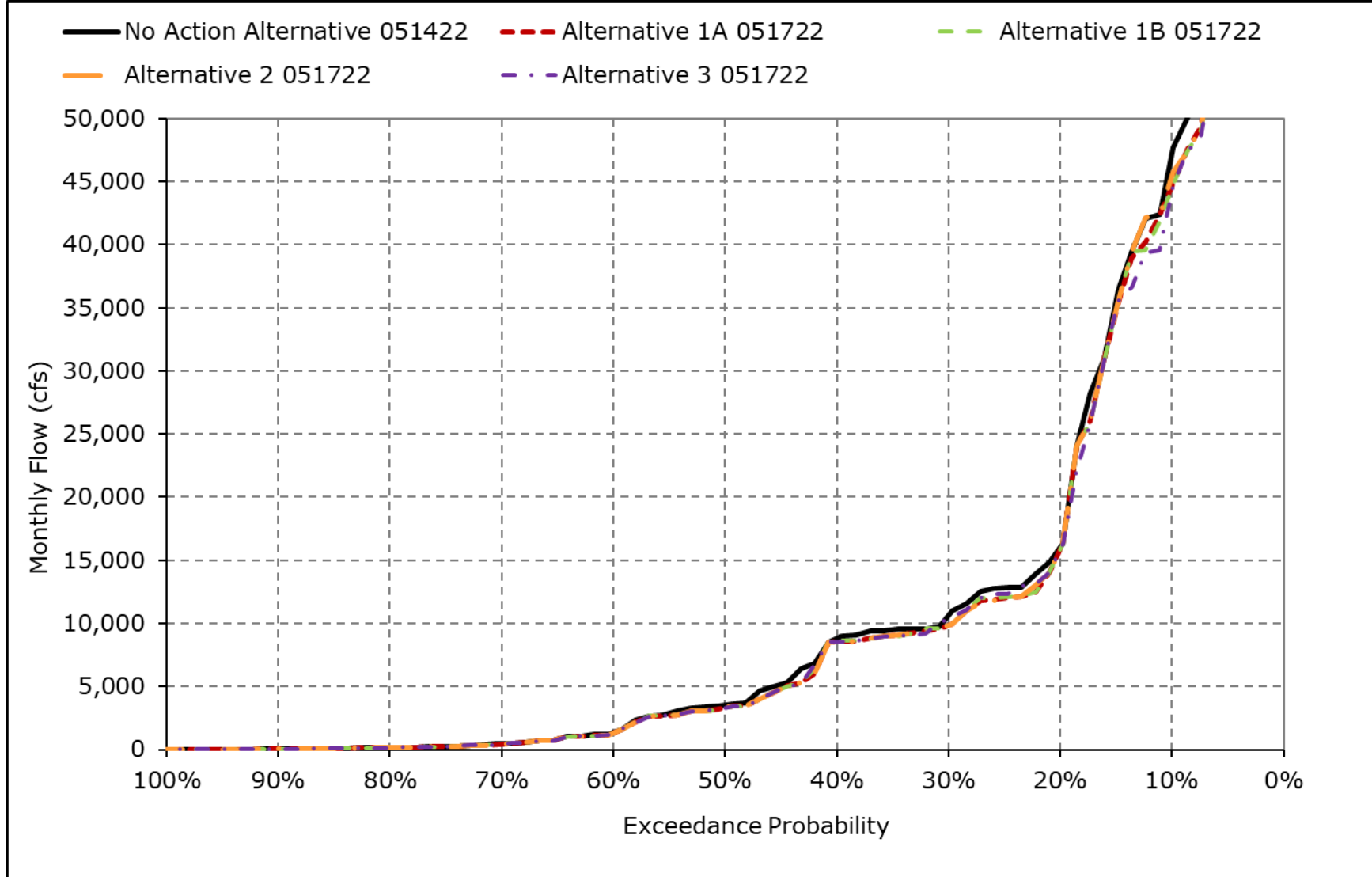
**Figure 5B3-3-10. Yolo Bypass Flow, January**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

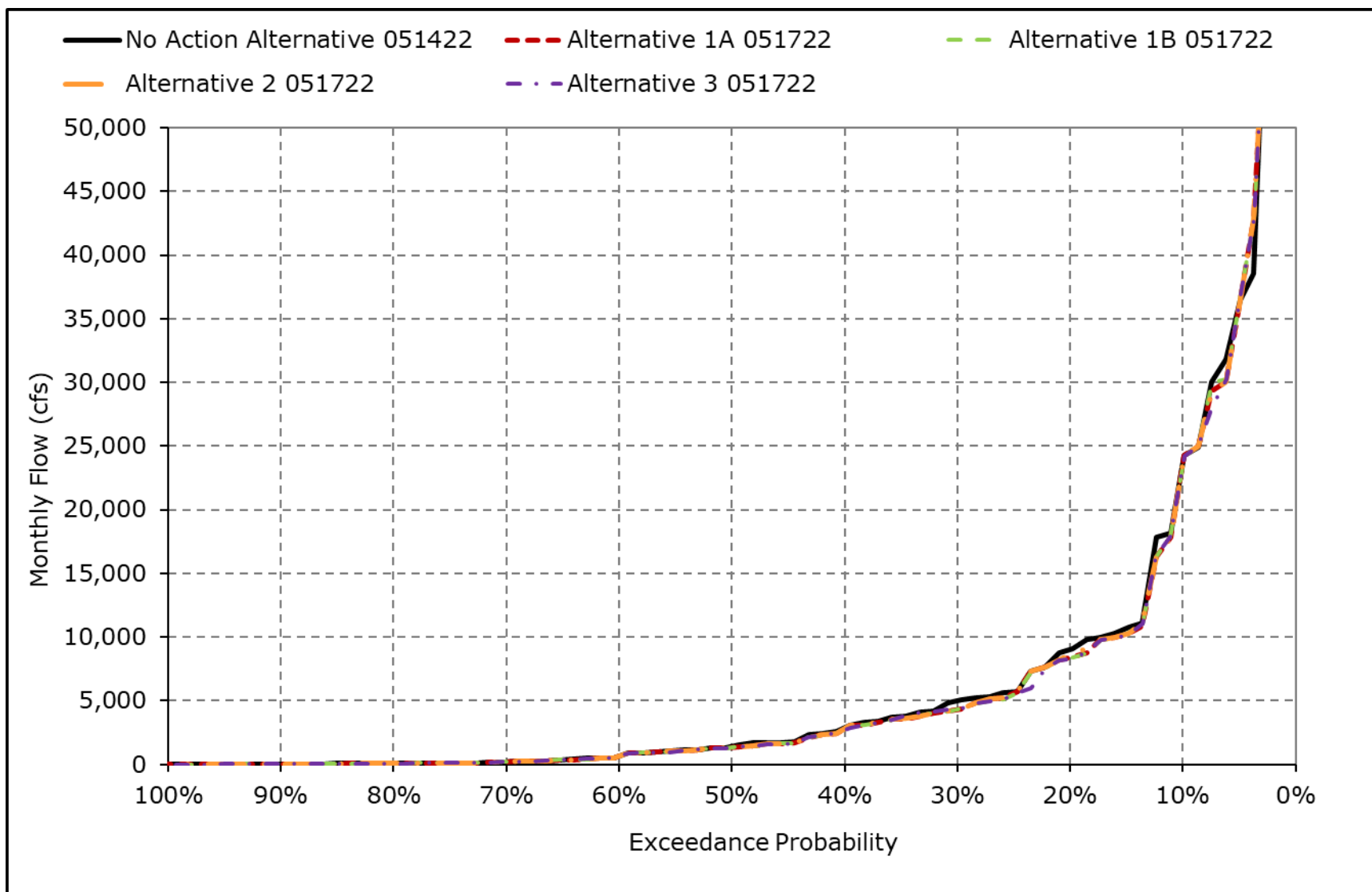


**Figure 5B3-3-11. Yolo Bypass Flow, February**



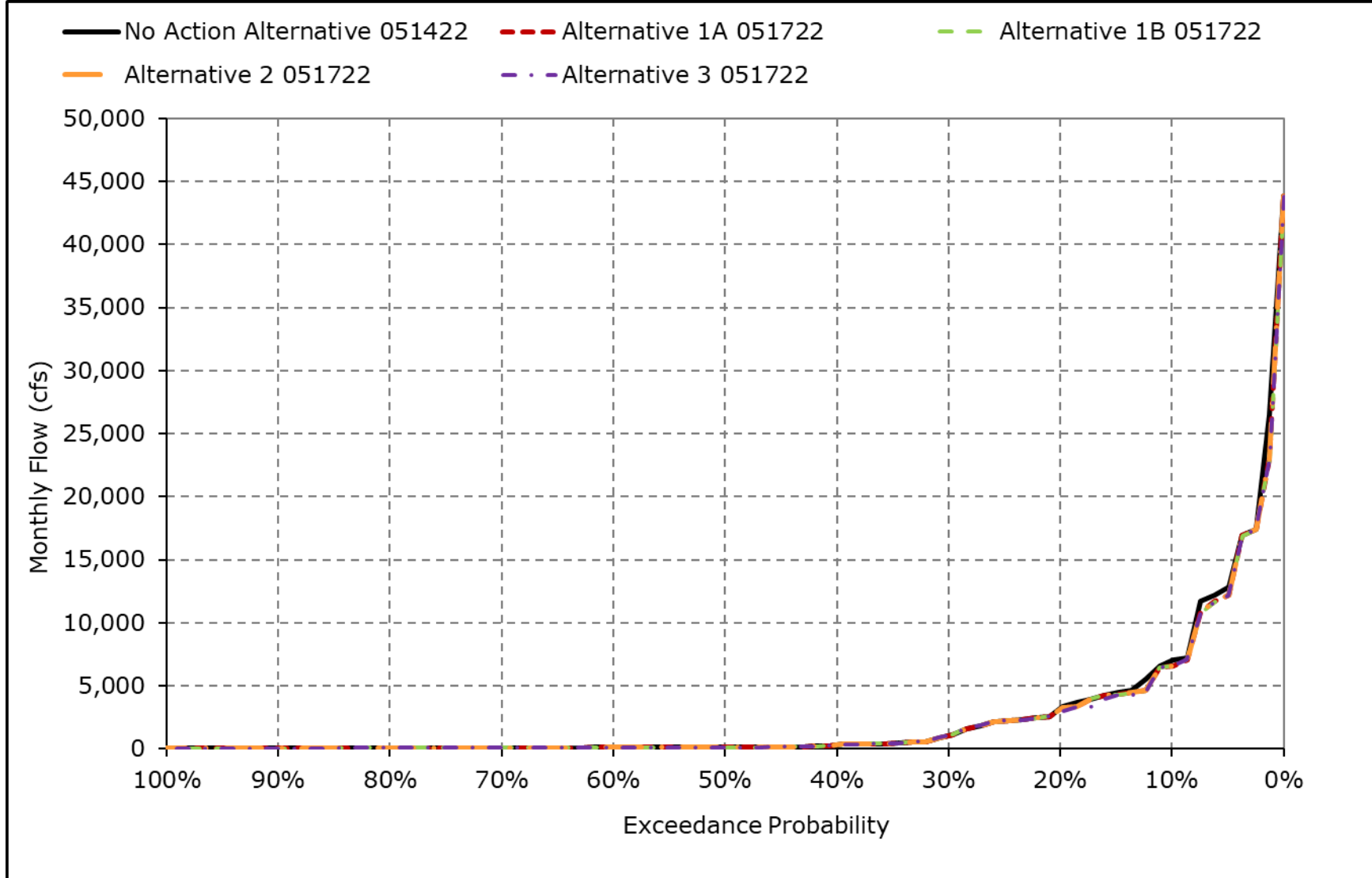
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-12. Yolo Bypass Flow, March**



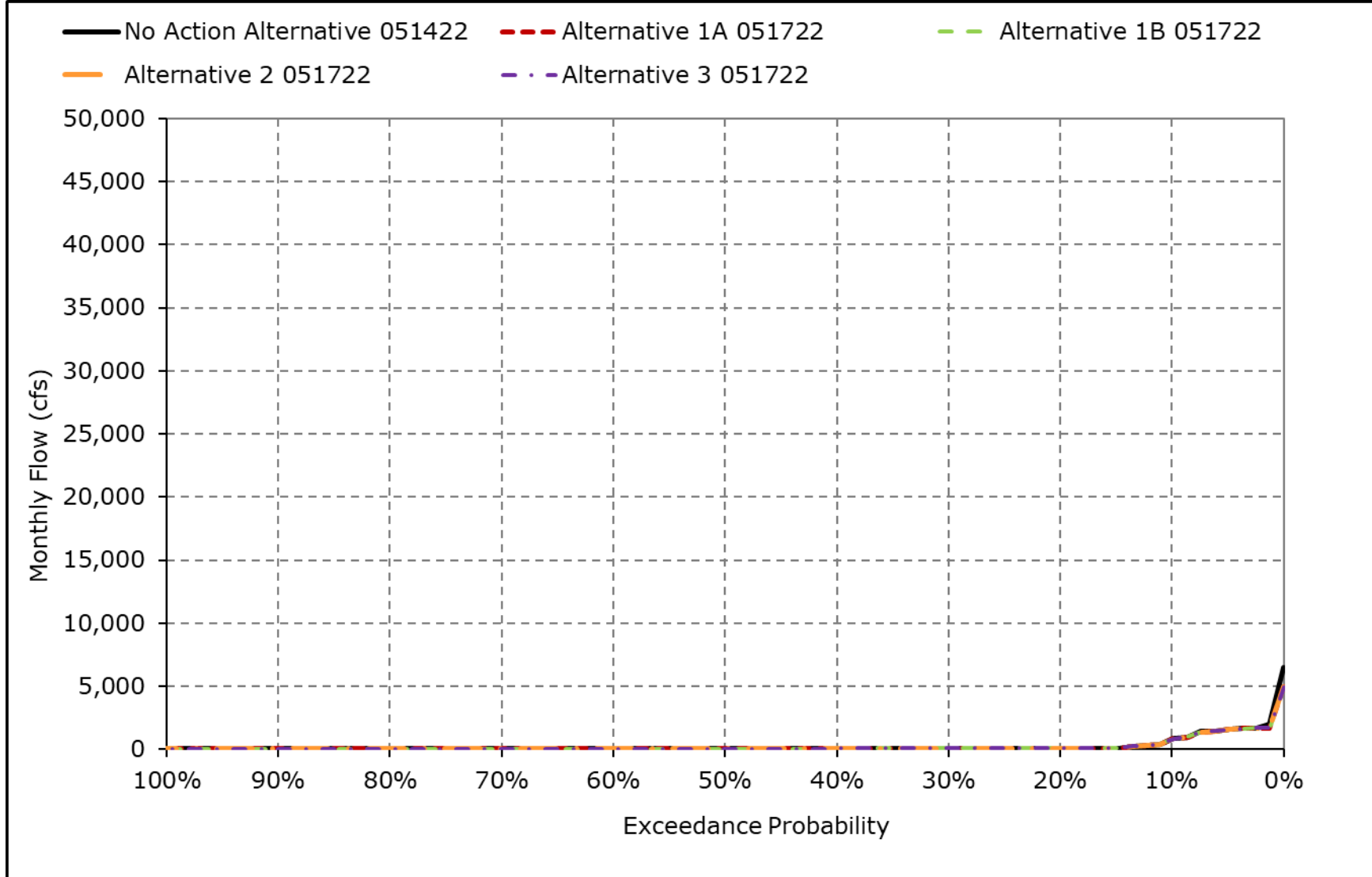
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-13. Yolo Bypass Flow, April**



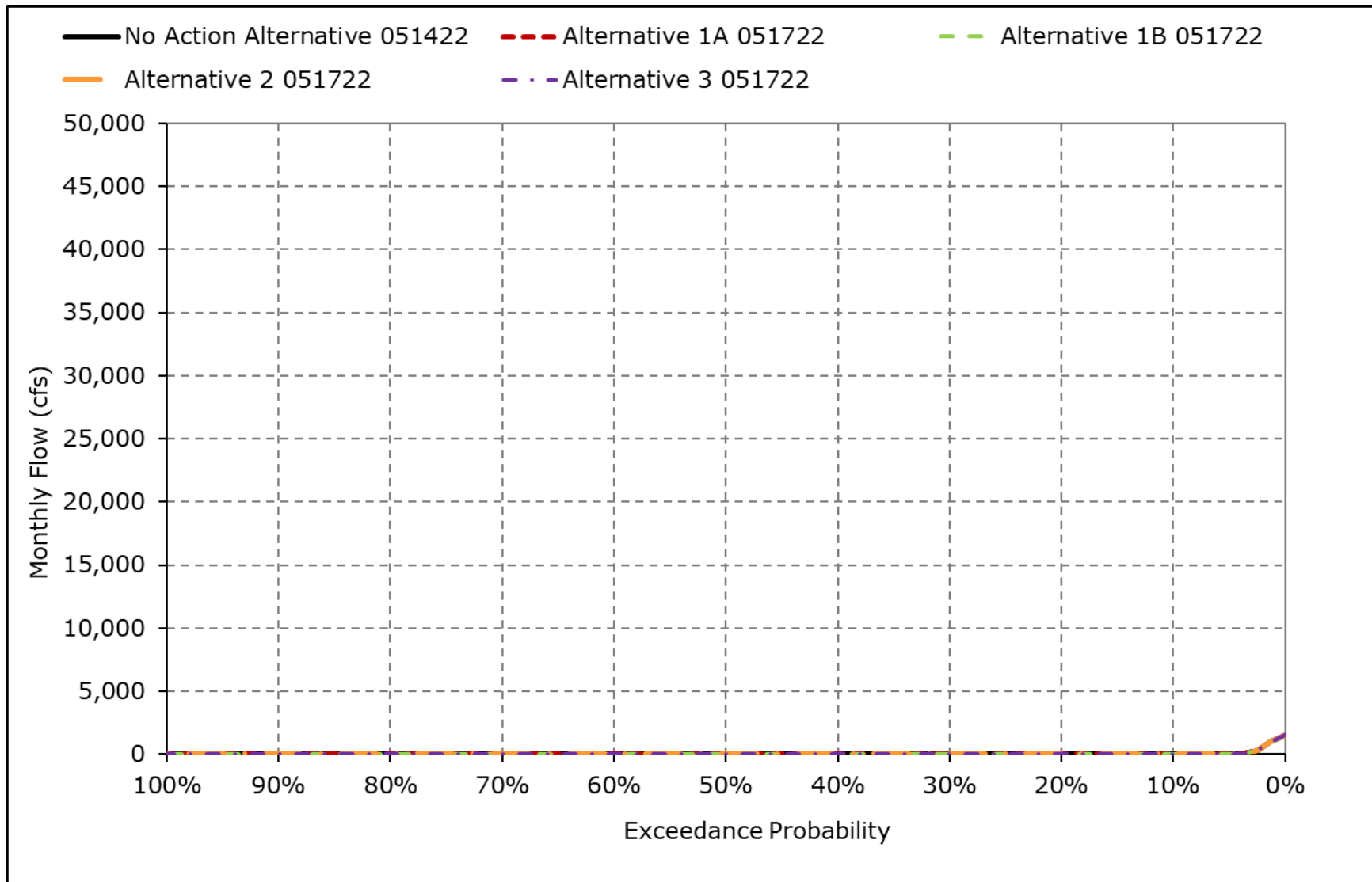
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-14. Yolo Bypass Flow, May**



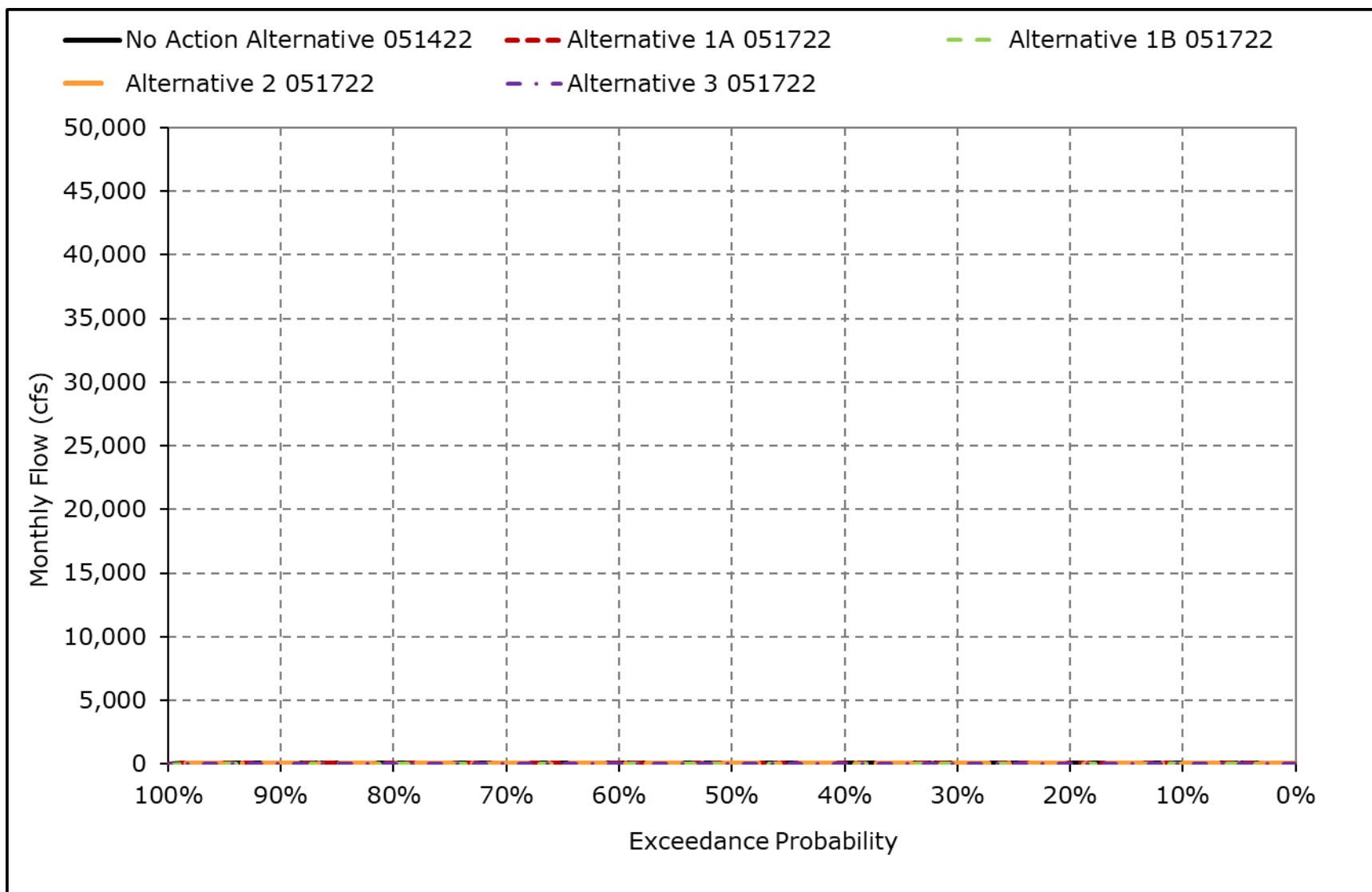
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-15. Yolo Bypass Flow, June**



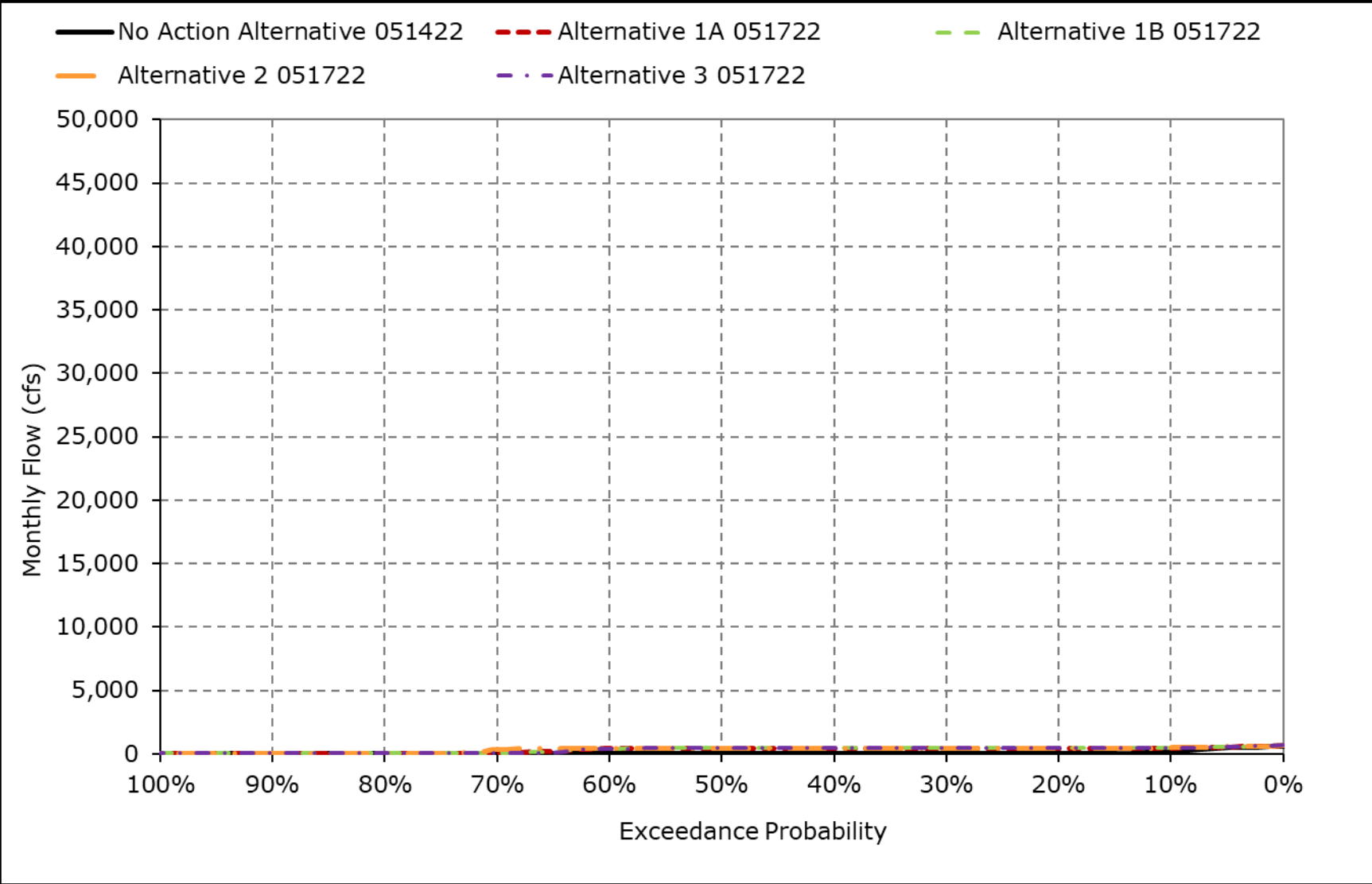
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-16. Yolo Bypass Flow, July**



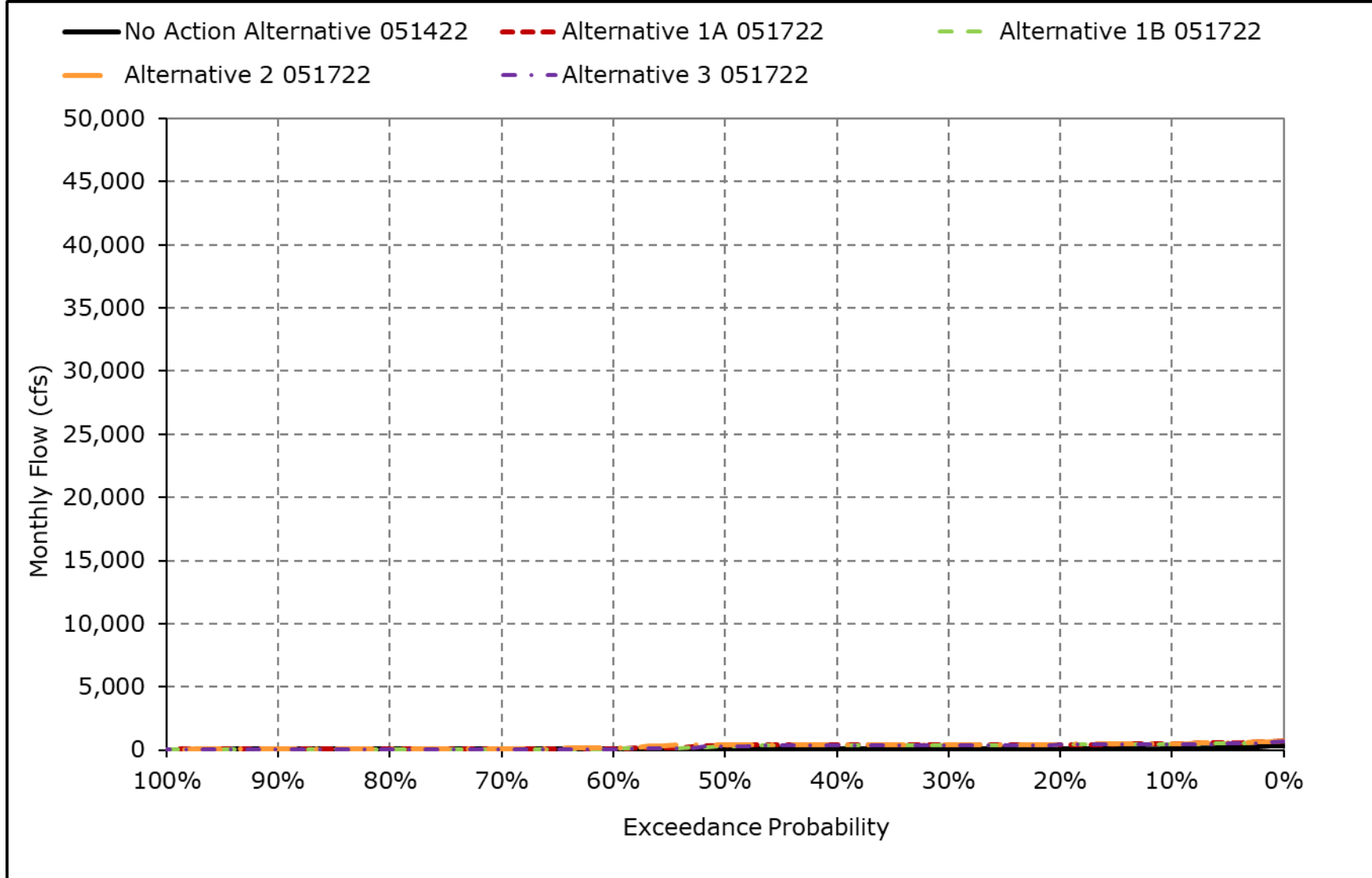
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-17. Yolo Bypass Flow, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-3-18. Yolo Bypass Flow, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.



**Table 5B3-4-1a. Sacramento River Flow at Rio Vista, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	10,440	20,855	57,689	86,646	107,913	76,756	53,788	36,421	20,830	14,125	10,333	13,686
<b>20% Exceedance</b>	9,363	11,636	34,495	58,608	67,893	51,029	37,509	25,930	11,905	13,367	9,923	13,104
<b>30% Exceedance</b>	7,667	9,456	19,768	41,069	55,739	38,603	21,281	16,355	8,719	12,131	9,585	12,601
<b>40% Exceedance</b>	7,106	8,752	15,742	26,040	47,027	29,284	19,473	13,153	8,426	11,171	9,138	11,917
<b>50% Exceedance</b>	5,855	8,436	12,053	20,761	31,143	21,596	14,524	11,438	8,005	10,654	8,747	8,196
<b>60% Exceedance</b>	4,861	7,519	11,016	15,854	23,251	19,187	11,720	9,826	7,736	9,224	7,358	5,816
<b>70% Exceedance</b>	4,437	5,865	10,553	12,157	17,872	15,476	9,571	8,591	7,173	8,447	5,153	5,230
<b>80% Exceedance</b>	4,000	5,005	8,228	10,044	14,381	11,654	8,991	7,426	6,477	6,920	4,703	4,721
<b>90% Exceedance</b>	3,453	4,071	6,161	9,095	11,567	8,395	8,036	6,440	5,470	4,562	3,938	3,857
<b>Full Simulation Period Average<sup>a</sup></b>	6,918	10,601	22,270	36,398	46,810	35,217	22,803	16,471	10,640	10,042	7,607	8,795
<b>Wet Water Years (32%)</b>	9,588	13,881	25,998	70,617	84,367	62,872	40,505	27,889	16,595	11,062	9,460	12,943
<b>Above Normal Water Years (15%)</b>	7,668	12,272	20,805	40,191	52,964	45,376	24,220	18,844	10,418	12,322	9,734	12,859
<b>Below Normal Water Years (17%)</b>	7,612	11,451	25,605	20,225	32,741	19,066	15,776	12,284	8,017	12,060	8,888	6,923
<b>Dry Water Years (22%)</b>	4,201	8,179	23,835	13,910	21,302	17,327	11,334	8,773	7,776	9,075	4,858	4,904
<b>Critical Water Years (15%)</b>	3,651	4,469	9,420	11,063	13,956	10,818	8,432	5,793	5,314	4,650	4,094	3,767

**Table 5B3-4-1b. Sacramento River Flow at Rio Vista, Alternative 1A 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	10,764	19,406	55,884	83,541	105,003	74,965	50,335	36,317	20,263	14,125	10,703	14,006
<b>20% Exceedance</b>	9,752	11,589	32,648	55,957	67,371	50,237	36,719	25,914	11,907	13,434	10,234	13,501
<b>30% Exceedance</b>	7,942	9,530	18,678	39,620	54,240	36,700	21,610	16,353	8,746	12,117	9,896	13,059
<b>40% Exceedance</b>	7,211	8,752	15,056	24,959	45,338	29,585	19,467	13,154	8,498	11,338	9,443	12,370
<b>50% Exceedance</b>	6,320	8,453	12,086	20,023	29,603	21,041	14,544	11,435	8,007	10,713	8,990	8,385
<b>60% Exceedance</b>	5,606	7,853	11,024	15,857	22,554	18,222	11,706	9,828	7,729	9,921	8,028	6,412
<b>70% Exceedance</b>	5,377	6,825	10,568	12,158	17,689	15,360	9,674	8,591	7,215	8,631	6,433	5,781
<b>80% Exceedance</b>	5,129	5,766	8,226	10,055	14,684	11,692	9,001	7,420	6,485	7,533	5,753	5,438
<b>90% Exceedance</b>	4,008	4,106	6,288	9,114	11,570	8,435	8,023	6,446	5,470	5,330	5,218	4,745
<b>Full Simulation Period Average<sup>a</sup></b>	7,356	10,652	21,718	35,627	45,818	34,605	22,552	16,422	10,642	10,279	8,173	9,284
<b>Wet Water Years (32%)</b>	9,853	13,666	25,565	69,492	82,854	62,490	39,872	27,673	16,602	11,067	9,792	13,345
<b>Above Normal Water Years (15%)</b>	8,026	12,173	20,178	38,528	51,448	43,800	24,088	18,814	10,383	12,359	10,077	13,229
<b>Below Normal Water Years (17%)</b>	7,884	11,570	24,578	19,671	31,923	18,579	15,558	12,291	8,035	12,065	9,106	7,211
<b>Dry Water Years (22%)</b>	5,139	8,575	23,164	13,705	20,645	16,681	11,364	8,836	7,777	9,705	5,922	5,611
<b>Critical Water Years (15%)</b>	3,984	4,642	9,413	10,848	13,914	10,575	8,429	5,856	5,330	5,272	5,050	4,467

**Table 5B3-4-1c. Sacramento River Flow at Rio Vista, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	324	-1,448	-1,805	-3,105	-2,910	-1,791	-3,453	-103	-566	0	371	320
<b>20% Exceedance</b>	389	-47	-1,847	-2,651	-522	-792	-790	-16	2	67	311	397
<b>30% Exceedance</b>	275	74	-1,090	-1,449	-1,500	-1,903	329	-2	27	-13	311	458
<b>40% Exceedance</b>	105	0	-686	-1,082	-1,689	301	-6	1	72	167	305	453
<b>50% Exceedance</b>	466	17	33	-738	-1,540	-556	20	-3	2	58	243	189
<b>60% Exceedance</b>	745	334	8	3	-696	-965	-14	2	-7	698	670	596
<b>70% Exceedance</b>	940	960	15	0	-183	-116	103	0	42	184	1,280	551
<b>80% Exceedance</b>	1,129	761	-2	11	303	37	10	-6	8	614	1,050	718
<b>90% Exceedance</b>	556	35	127	19	3	40	-13	6	0	768	1,280	888
<b>Full Simulation Period Average<sup>a</sup></b>	438	50	-553	-771	-992	-612	-251	-49	3	237	566	488
<b>Wet Water Years (32%)</b>	265	-214	-433	-1,125	-1,513	-382	-633	-216	6	5	332	402
<b>Above Normal Water Years (15%)</b>	359	-99	-627	-1,663	-1,516	-1,577	-131	-30	-36	37	343	370
<b>Below Normal Water Years (17%)</b>	272	119	-1,026	-554	-818	-487	-218	6	19	5	218	288
<b>Dry Water Years (22%)</b>	938	396	-672	-205	-657	-645	30	63	1	630	1,064	708
<b>Critical Water Years (15%)</b>	334	173	-7	-215	-42	-244	-3	63	16	623	956	700

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-4-2a. Sacramento River Flow at Rio Vista, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,440	20,855	57,689	86,646	107,913	76,756	53,788	36,421	20,830	14,125	10,333	13,686
20% Exceedance	9,363	11,636	34,495	58,608	67,893	51,029	37,509	25,930	11,905	13,367	9,923	13,104
30% Exceedance	7,667	9,456	19,768	41,069	55,739	38,603	21,281	16,355	8,719	12,131	9,585	12,601
40% Exceedance	7,106	8,752	15,742	26,040	47,027	29,284	19,473	13,153	8,426	11,171	9,138	11,917
50% Exceedance	5,855	8,436	12,053	20,761	31,143	21,596	14,524	11,438	8,005	10,654	8,747	8,196
60% Exceedance	4,861	7,519	11,016	15,854	23,251	19,187	11,720	9,826	7,736	9,224	7,358	5,816
70% Exceedance	4,437	5,865	10,553	12,157	17,872	15,476	9,571	8,591	7,173	8,447	5,153	5,230
80% Exceedance	4,000	5,005	8,228	10,044	14,381	11,654	8,991	7,426	6,477	6,920	4,703	4,721
90% Exceedance	3,453	4,071	6,161	9,095	11,567	8,395	8,036	6,440	5,470	4,562	3,938	3,857
<b>Full Simulation Period Average<sup>a</sup></b>	<b>6,918</b>	<b>10,601</b>	<b>22,270</b>	<b>36,398</b>	<b>46,810</b>	<b>35,217</b>	<b>22,803</b>	<b>16,471</b>	<b>10,640</b>	<b>10,042</b>	<b>7,607</b>	<b>8,795</b>
<b>Wet Water Years (32%)</b>	<b>9,588</b>	<b>13,881</b>	<b>25,998</b>	<b>70,617</b>	<b>84,367</b>	<b>62,872</b>	<b>40,505</b>	<b>27,889</b>	<b>16,595</b>	<b>11,062</b>	<b>9,460</b>	<b>12,943</b>
<b>Above Normal Water Years (15%)</b>	<b>7,668</b>	<b>12,272</b>	<b>20,805</b>	<b>40,191</b>	<b>52,964</b>	<b>45,376</b>	<b>24,220</b>	<b>18,844</b>	<b>10,418</b>	<b>12,322</b>	<b>9,734</b>	<b>12,859</b>
<b>Below Normal Water Years (17%)</b>	<b>7,612</b>	<b>11,451</b>	<b>25,605</b>	<b>20,225</b>	<b>32,741</b>	<b>19,066</b>	<b>15,776</b>	<b>12,284</b>	<b>8,017</b>	<b>12,060</b>	<b>8,888</b>	<b>6,923</b>
<b>Dry Water Years (22%)</b>	<b>4,201</b>	<b>8,179</b>	<b>23,835</b>	<b>13,910</b>	<b>21,302</b>	<b>17,327</b>	<b>11,334</b>	<b>8,773</b>	<b>7,776</b>	<b>9,075</b>	<b>4,858</b>	<b>4,904</b>
<b>Critical Water Years (15%)</b>	<b>3,651</b>	<b>4,469</b>	<b>9,420</b>	<b>11,063</b>	<b>13,956</b>	<b>10,818</b>	<b>8,432</b>	<b>5,793</b>	<b>5,314</b>	<b>4,650</b>	<b>4,094</b>	<b>3,767</b>

**Table 5B3-4-2b. Sacramento River Flow at Rio Vista, Alternative 1B 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,778	19,409	55,852	83,563	104,400	74,965	50,335	36,324	20,264	14,125	10,706	13,975
20% Exceedance	9,751	11,581	33,052	55,951	67,375	50,225	36,721	25,911	11,779	13,436	10,232	13,559
30% Exceedance	7,933	9,530	18,849	39,269	54,251	36,565	21,611	16,616	8,720	12,119	9,896	13,100
40% Exceedance	7,224	8,752	14,923	24,725	46,394	29,198	19,467	13,154	8,471	11,300	9,443	12,370
50% Exceedance	6,335	8,457	12,086	19,999	29,626	21,041	14,442	11,438	8,033	10,727	9,002	8,498
60% Exceedance	5,647	7,770	10,945	15,859	22,062	18,230	11,706	9,828	7,729	9,948	8,150	6,420
70% Exceedance	5,408	6,824	10,531	12,158	17,688	14,899	9,674	8,763	7,215	8,866	6,410	5,774
80% Exceedance	5,068	5,622	8,240	10,057	14,685	11,692	9,002	7,434	6,483	7,534	5,614	5,399
90% Exceedance	4,008	4,082	6,297	9,105	11,570	8,757	7,950	6,483	5,495	5,316	4,986	4,717
<b>Full Simulation Period Average<sup>a</sup></b>	<b>7,370</b>	<b>10,641</b>	<b>21,743</b>	<b>35,556</b>	<b>45,878</b>	<b>34,598</b>	<b>22,539</b>	<b>16,489</b>	<b>10,627</b>	<b>10,285</b>	<b>8,156</b>	<b>9,292</b>
<b>Wet Water Years (32%)</b>	<b>9,847</b>	<b>13,543</b>	<b>25,510</b>	<b>69,357</b>	<b>82,947</b>	<b>62,370</b>	<b>39,848</b>	<b>27,840</b>	<b>16,583</b>	<b>11,084</b>	<b>9,809</b>	<b>13,333</b>
<b>Above Normal Water Years (15%)</b>	<b>8,112</b>	<b>12,243</b>	<b>20,244</b>	<b>38,471</b>	<b>51,536</b>	<b>43,863</b>	<b>24,112</b>	<b>18,902</b>	<b>10,339</b>	<b>12,371</b>	<b>10,082</b>	<b>13,305</b>
<b>Below Normal Water Years (17%)</b>	<b>7,888</b>	<b>11,711</b>	<b>24,689</b>	<b>19,580</b>	<b>31,946</b>	<b>18,588</b>	<b>15,572</b>	<b>12,282</b>	<b>8,016</b>	<b>12,094</b>	<b>9,110</b>	<b>7,224</b>
<b>Dry Water Years (22%)</b>	<b>5,205</b>	<b>8,551</b>	<b>23,228</b>	<b>13,688</b>	<b>20,700</b>	<b>16,647</b>	<b>11,322</b>	<b>8,853</b>	<b>7,792</b>	<b>9,703</b>	<b>5,843</b>	<b>5,631</b>
<b>Critical Water Years (15%)</b>	<b>3,906</b>	<b>4,635</b>	<b>9,420</b>	<b>10,848</b>	<b>13,923</b>	<b>10,768</b>	<b>8,417</b>	<b>5,843</b>	<b>5,308</b>	<b>5,228</b>	<b>5,007</b>	<b>4,429</b>

**Table 5B3-4-2c. Sacramento River Flow at Rio Vista, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	339	-1,446	-1,837	-3,083	-3,513	-1,791	-3,453	-97	-566	0	374	289
20% Exceedance	388	-55	-1,443	-2,657	-518	-804	-788	-19	-126	68	309	454
30% Exceedance	265	74	-918	-1,800	-1,489	-2,038	330	262	0	-11	311	499
40% Exceedance	118	0	-818	-1,315	-633	-86	-6	1	45	129	305	453
50% Exceedance	480	21	33	-762	-1,517	-555	-82	1	27	72	255	302
60% Exceedance	786	251	-71	5	-1,189	-957	-14	2	-7	724	793	604
70% Exceedance	971	959	-22	1	-184	-577	102	172	42	420	1,257	544
80% Exceedance	1,068	617	12	13	303	38	11	8	6	614	911	678
90% Exceedance	556	11	136	10	4	362	-86	43	24	755	1,048	859
<b>Full Simulation Period Average<sup>a</sup></b>	<b>452</b>	<b>39</b>	<b>-527</b>	<b>-842</b>	<b>-932</b>	<b>-619</b>	<b>-264</b>	<b>17</b>	<b>-13</b>	<b>242</b>	<b>549</b>	<b>497</b>
<b>Wet Water Years (32%)</b>	<b>259</b>	<b>-338</b>	<b>-488</b>	<b>-1,260</b>	<b>-1,419</b>	<b>-502</b>	<b>-657</b>	<b>-49</b>	<b>-12</b>	<b>22</b>	<b>349</b>	<b>389</b>
<b>Above Normal Water Years (15%)</b>	<b>444</b>	<b>-29</b>	<b>-561</b>	<b>-1,721</b>	<b>-1,428</b>	<b>-1,514</b>	<b>-107</b>	<b>58</b>	<b>-79</b>	<b>49</b>	<b>347</b>	<b>445</b>
<b>Below Normal Water Years (17%)</b>	<b>276</b>	<b>260</b>	<b>-916</b>	<b>-644</b>	<b>-795</b>	<b>-478</b>	<b>-205</b>	<b>-3</b>	<b>-1</b>	<b>34</b>	<b>222</b>	<b>301</b>
<b>Dry Water Years (22%)</b>	<b>1,004</b>	<b>372</b>	<b>-608</b>	<b>-223</b>	<b>-602</b>	<b>-680</b>	<b>-12</b>	<b>80</b>	<b>16</b>	<b>628</b>	<b>985</b>	<b>728</b>
<b>Critical Water Years (15%)</b>	<b>255</b>	<b>167</b>	<b>0</b>	<b>-215</b>	<b>-33</b>	<b>-50</b>	<b>-15</b>	<b>50</b>	<b>-6</b>	<b>579</b>	<b>913</b>	<b>662</b>

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-4-3a. Sacramento River Flow at Rio Vista, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,440	20,855	57,689	86,646	107,913	76,756	53,788	36,421	20,830	14,125	10,333	13,686
20% Exceedance	9,363	11,636	34,495	58,608	67,893	51,029	37,509	25,930	11,905	13,367	9,923	13,104
30% Exceedance	7,667	9,456	19,768	41,069	55,739	38,603	21,281	16,355	8,719	12,131	9,585	12,601
40% Exceedance	7,106	8,752	15,742	26,040	47,027	29,284	19,473	13,153	8,426	11,171	9,138	11,917
50% Exceedance	5,855	8,436	12,053	20,761	31,143	21,596	14,524	11,438	8,005	10,654	8,747	8,196
60% Exceedance	4,861	7,519	11,016	15,854	23,251	19,187	11,720	9,826	7,736	9,224	7,358	5,816
70% Exceedance	4,437	5,865	10,553	12,157	17,872	15,476	9,571	8,591	7,173	8,447	5,153	5,230
80% Exceedance	4,000	5,005	8,228	10,044	14,381	11,654	8,991	7,426	6,477	6,920	4,703	4,721
90% Exceedance	3,453	4,071	6,161	9,095	11,567	8,395	8,036	6,440	5,470	4,562	3,938	3,857
<b>Full Simulation Period Average<sup>a</sup></b>	<b>6,918</b>	<b>10,601</b>	<b>22,270</b>	<b>36,398</b>	<b>46,810</b>	<b>35,217</b>	<b>22,803</b>	<b>16,471</b>	<b>10,640</b>	<b>10,042</b>	<b>7,607</b>	<b>8,795</b>
<b>Wet Water Years (32%)</b>	<b>9,588</b>	<b>13,881</b>	<b>25,998</b>	<b>70,617</b>	<b>84,367</b>	<b>62,872</b>	<b>40,505</b>	<b>27,889</b>	<b>16,595</b>	<b>11,062</b>	<b>9,460</b>	<b>12,943</b>
<b>Above Normal Water Years (15%)</b>	<b>7,668</b>	<b>12,272</b>	<b>20,805</b>	<b>40,191</b>	<b>52,964</b>	<b>45,376</b>	<b>24,220</b>	<b>18,844</b>	<b>10,418</b>	<b>12,322</b>	<b>9,734</b>	<b>12,859</b>
<b>Below Normal Water Years (17%)</b>	<b>7,612</b>	<b>11,451</b>	<b>25,605</b>	<b>20,225</b>	<b>32,741</b>	<b>19,066</b>	<b>15,776</b>	<b>12,284</b>	<b>8,017</b>	<b>12,060</b>	<b>8,888</b>	<b>6,923</b>
<b>Dry Water Years (22%)</b>	<b>4,201</b>	<b>8,179</b>	<b>23,835</b>	<b>13,910</b>	<b>21,302</b>	<b>17,327</b>	<b>11,334</b>	<b>8,773</b>	<b>7,776</b>	<b>9,075</b>	<b>4,858</b>	<b>4,904</b>
<b>Critical Water Years (15%)</b>	<b>3,651</b>	<b>4,469</b>	<b>9,420</b>	<b>11,063</b>	<b>13,956</b>	<b>10,818</b>	<b>8,432</b>	<b>5,793</b>	<b>5,314</b>	<b>4,650</b>	<b>4,094</b>	<b>3,767</b>

**Table 5B3-4-3b. Sacramento River Flow at Rio Vista, Alternative 2 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,764	19,406	55,888	83,904	105,002	74,965	50,334	36,323	20,264	14,125	10,755	14,141
20% Exceedance	9,752	11,582	33,231	55,962	67,371	50,409	36,713	25,915	11,907	13,435	10,234	13,503
30% Exceedance	7,899	9,530	18,678	39,619	54,269	36,701	21,610	16,353	8,746	12,117	9,896	13,085
40% Exceedance	7,190	8,752	15,056	24,733	44,920	29,586	19,467	13,154	8,498	11,338	9,443	12,370
50% Exceedance	6,350	8,453	12,086	20,043	29,603	21,041	14,544	11,435	8,007	10,741	8,990	8,385
60% Exceedance	5,595	7,853	11,024	15,857	22,554	18,222	11,706	9,828	7,729	9,884	8,045	6,420
70% Exceedance	5,360	6,825	10,568	12,158	17,689	15,360	9,674	8,591	7,215	8,632	6,272	5,799
80% Exceedance	5,161	5,658	8,221	10,055	14,684	11,692	9,001	7,420	6,485	7,533	5,749	5,608
90% Exceedance	4,005	4,133	6,286	9,114	11,570	8,435	8,023	6,446	5,470	5,328	5,099	4,551
<b>Full Simulation Period Average<sup>a</sup></b>	<b>7,349</b>	<b>10,643</b>	<b>21,725</b>	<b>35,633</b>	<b>45,866</b>	<b>34,653</b>	<b>22,548</b>	<b>16,423</b>	<b>10,643</b>	<b>10,280</b>	<b>8,184</b>	<b>9,273</b>
<b>Wet Water Years (32%)</b>	<b>9,861</b>	<b>13,668</b>	<b>25,550</b>	<b>69,518</b>	<b>83,053</b>	<b>62,616</b>	<b>39,871</b>	<b>27,676</b>	<b>16,602</b>	<b>11,067</b>	<b>9,792</b>	<b>13,366</b>
<b>Above Normal Water Years (15%)</b>	<b>8,085</b>	<b>12,174</b>	<b>20,238</b>	<b>38,535</b>	<b>51,405</b>	<b>43,852</b>	<b>24,068</b>	<b>18,814</b>	<b>10,383</b>	<b>12,359</b>	<b>10,110</b>	<b>13,261</b>
<b>Below Normal Water Years (17%)</b>	<b>7,874</b>	<b>11,569</b>	<b>24,577</b>	<b>19,650</b>	<b>31,865</b>	<b>18,584</b>	<b>15,556</b>	<b>12,291</b>	<b>8,032</b>	<b>12,093</b>	<b>9,163</b>	<b>7,189</b>
<b>Dry Water Years (22%)</b>	<b>5,097</b>	<b>8,533</b>	<b>23,175</b>	<b>13,705</b>	<b>20,644</b>	<b>16,682</b>	<b>11,364</b>	<b>8,836</b>	<b>7,778</b>	<b>9,704</b>	<b>5,907</b>	<b>5,575</b>
<b>Critical Water Years (15%)</b>	<b>3,934</b>	<b>4,642</b>	<b>9,425</b>	<b>10,853</b>	<b>13,919</b>	<b>10,574</b>	<b>8,429</b>	<b>5,855</b>	<b>5,332</b>	<b>5,248</b>	<b>5,044</b>	<b>4,400</b>

**Table 5B3-4-3c. Sacramento River Flow at Rio Vista, Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	324	-1,449	-1,801	-2,743	-2,911	-1,791	-3,453	-97	-566	0	423	455
20% Exceedance	389	-54	-1,264	-2,646	-522	-620	-796	-15	2	67	311	398
30% Exceedance	232	74	-1,090	-1,449	-1,470	-1,902	329	-2	27	-13	311	484
40% Exceedance	84	0	-686	-1,307	-2,108	303	-6	0	72	167	305	453
50% Exceedance	495	17	33	-717	-1,540	-556	20	-3	2	86	243	189
60% Exceedance	734	334	8	3	-696	-965	-14	2	-7	661	687	604
70% Exceedance	923	960	15	0	-183	-116	103	0	42	186	1,119	569
80% Exceedance	1,161	653	-7	11	302	38	10	-6	8	614	1,046	887
90% Exceedance	552	62	125	19	3	40	-13	6	0	766	1,161	693
<b>Full Simulation Period Average<sup>a</sup></b>	<b>430</b>	<b>42</b>	<b>-545</b>	<b>-765</b>	<b>-944</b>	<b>-564</b>	<b>-255</b>	<b>-48</b>	<b>3</b>	<b>238</b>	<b>577</b>	<b>478</b>
<b>Wet Water Years (32%)</b>	<b>272</b>	<b>-212</b>	<b>-448</b>	<b>-1,099</b>	<b>-1,313</b>	<b>-256</b>	<b>-634</b>	<b>-213</b>	<b>7</b>	<b>5</b>	<b>332</b>	<b>422</b>
<b>Above Normal Water Years (15%)</b>	<b>418</b>	<b>-98</b>	<b>-567</b>	<b>-1,656</b>	<b>-1,559</b>	<b>-1,525</b>	<b>-152</b>	<b>-30</b>	<b>-36</b>	<b>37</b>	<b>375</b>	<b>402</b>
<b>Below Normal Water Years (17%)</b>	<b>261</b>	<b>118</b>	<b>-1,028</b>	<b>-574</b>	<b>-876</b>	<b>-483</b>	<b>-220</b>	<b>6</b>	<b>16</b>	<b>32</b>	<b>275</b>	<b>265</b>
<b>Dry Water Years (22%)</b>	<b>896</b>	<b>354</b>	<b>-660</b>	<b>-205</b>	<b>-658</b>	<b>-645</b>	<b>30</b>	<b>63</b>	<b>2</b>	<b>629</b>	<b>1,049</b>	<b>671</b>
<b>Critical Water Years (15%)</b>	<b>284</b>	<b>173</b>	<b>4</b>	<b>-210</b>	<b>-36</b>	<b>-244</b>	<b>-3</b>	<b>62</b>	<b>18</b>	<b>598</b>	<b>950</b>	<b>633</b>

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-4-4a. Sacramento River Flow at Rio Vista, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	10,440	20,855	57,689	86,646	107,913	76,756	53,788	36,421	20,830	14,125	10,333	13,686
<b>20% Exceedance</b>	9,363	11,636	34,495	58,608	67,893	51,029	37,509	25,930	11,905	13,367	9,923	13,104
<b>30% Exceedance</b>	7,667	9,456	19,768	41,069	55,739	38,603	21,281	16,355	8,719	12,131	9,585	12,601
<b>40% Exceedance</b>	7,106	8,752	15,742	26,040	47,027	29,284	19,473	13,153	8,426	11,171	9,138	11,917
<b>50% Exceedance</b>	5,855	8,436	12,053	20,761	31,143	21,596	14,524	11,438	8,005	10,654	8,747	8,196
<b>60% Exceedance</b>	4,861	7,519	11,016	15,854	23,251	19,187	11,720	9,826	7,736	9,224	7,358	5,816
<b>70% Exceedance</b>	4,437	5,865	10,553	12,157	17,872	15,476	9,571	8,591	7,173	8,447	5,153	5,230
<b>80% Exceedance</b>	4,000	5,005	8,228	10,044	14,381	11,654	8,991	7,426	6,477	6,920	4,703	4,721
<b>90% Exceedance</b>	3,453	4,071	6,161	9,095	11,567	8,395	8,036	6,440	5,470	4,562	3,938	3,857
<b>Full Simulation Period Average<sup>a</sup></b>	6,918	10,601	22,270	36,398	46,810	35,217	22,803	16,471	10,640	10,042	7,607	8,795
<b>Wet Water Years (32%)</b>	9,588	13,881	25,998	70,617	84,367	62,872	40,505	27,889	16,595	11,062	9,460	12,943
<b>Above Normal Water Years (15%)</b>	7,668	12,272	20,805	40,191	52,964	45,376	24,220	18,844	10,418	12,322	9,734	12,859
<b>Below Normal Water Years (17%)</b>	7,612	11,451	25,605	20,225	32,741	19,066	15,776	12,284	8,017	12,060	8,888	6,923
<b>Dry Water Years (22%)</b>	4,201	8,179	23,835	13,910	21,302	17,327	11,334	8,773	7,776	9,075	4,858	4,904
<b>Critical Water Years (15%)</b>	3,651	4,469	9,420	11,063	13,956	10,818	8,432	5,793	5,314	4,650	4,094	3,767

**Table 5B3-4-4b. Sacramento River Flow at Rio Vista, Alternative 3 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	10,892	19,448	55,767	83,395	104,686	74,234	50,336	36,352	20,266	14,272	10,734	14,124
<b>20% Exceedance</b>	10,158	12,272	33,478	56,680	67,488	50,180	36,726	25,891	11,779	13,474	10,251	13,544
<b>30% Exceedance</b>	8,399	9,652	18,898	38,837	54,562	36,862	21,609	16,355	8,707	12,050	9,896	13,027
<b>40% Exceedance</b>	7,246	8,794	15,056	24,737	46,074	29,197	19,466	13,154	8,410	11,299	9,414	12,241
<b>50% Exceedance</b>	6,570	8,464	12,076	20,141	29,606	21,042	14,487	11,442	8,007	10,709	8,983	8,442
<b>60% Exceedance</b>	5,659	7,948	11,024	15,856	22,064	18,191	11,497	9,894	7,728	9,857	7,892	6,333
<b>70% Exceedance</b>	5,318	6,799	10,533	12,118	17,686	15,555	9,674	8,775	7,173	8,668	6,296	5,715
<b>80% Exceedance</b>	4,768	5,705	8,448	10,059	14,650	11,666	9,003	7,436	6,483	7,534	5,559	5,241
<b>90% Exceedance</b>	3,946	4,078	6,235	9,105	11,571	8,743	7,806	6,483	5,584	5,270	4,681	4,394
<b>Full Simulation Period Average<sup>a</sup></b>	7,451	10,871	21,895	35,584	45,808	34,508	22,485	16,506	10,612	10,300	8,103	9,203
<b>Wet Water Years (32%)</b>	9,788	13,607	25,592	69,411	82,583	62,144	39,712	27,802	16,583	11,086	9,810	13,308
<b>Above Normal Water Years (15%)</b>	8,356	12,781	20,134	38,546	51,714	43,797	23,991	19,082	10,295	12,412	10,091	13,286
<b>Below Normal Water Years (17%)</b>	8,537	12,401	24,814	19,545	32,095	18,360	15,545	12,304	7,975	12,100	9,073	7,197
<b>Dry Water Years (22%)</b>	4,987	8,617	23,698	13,690	20,692	16,765	11,371	8,851	7,804	9,769	5,757	5,534
<b>Critical Water Years (15%)</b>	3,912	4,633	9,532	10,883	13,892	10,793	8,422	5,840	5,281	5,178	4,802	4,071

**Table 5B3-4-4c. Sacramento River Flow at Rio Vista, Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	453	-1,406	-1,923	-3,251	-3,227	-2,522	-3,452	-68	-564	147	402	438
<b>20% Exceedance</b>	796	636	-1,017	-1,929	-405	-849	-783	-39	-126	107	328	440
<b>30% Exceedance</b>	731	196	-870	-2,232	-1,177	-1,741	328	0	-12	-81	311	425
<b>40% Exceedance</b>	140	41	-686	-1,303	-954	-87	-7	1	-16	128	277	324
<b>50% Exceedance</b>	716	28	23	-619	-1,537	-554	-37	4	2	55	236	246
<b>60% Exceedance</b>	798	429	8	2	-1,187	-996	-223	67	-8	633	534	517
<b>70% Exceedance</b>	881	934	-20	-39	-185	79	102	184	0	222	1,143	485
<b>80% Exceedance</b>	768	700	221	15	269	12	12	10	6	615	856	520
<b>90% Exceedance</b>	493	7	74	10	4	348	-230	43	113	708	742	537
<b>Full Simulation Period Average<sup>a</sup></b>	533	270	-375	-814	-1,002	-709	-318	35	-28	257	496	408
<b>Wet Water Years (32%)</b>	199	-274	-406	-1,206	-1,783	-728	-793	-87	-12	24	350	365
<b>Above Normal Water Years (15%)</b>	688	509	-671	-1,646	-1,250	-1,579	-228	238	-124	90	357	427
<b>Below Normal Water Years (17%)</b>	925	950	-791	-680	-646	-706	-231	20	-42	39	185	274
<b>Dry Water Years (22%)</b>	786	438	-137	-221	-610	-561	37	78	29	695	899	630
<b>Critical Water Years (15%)</b>	261	165	112	-180	-64	-26	-10	47	-33	529	708	304

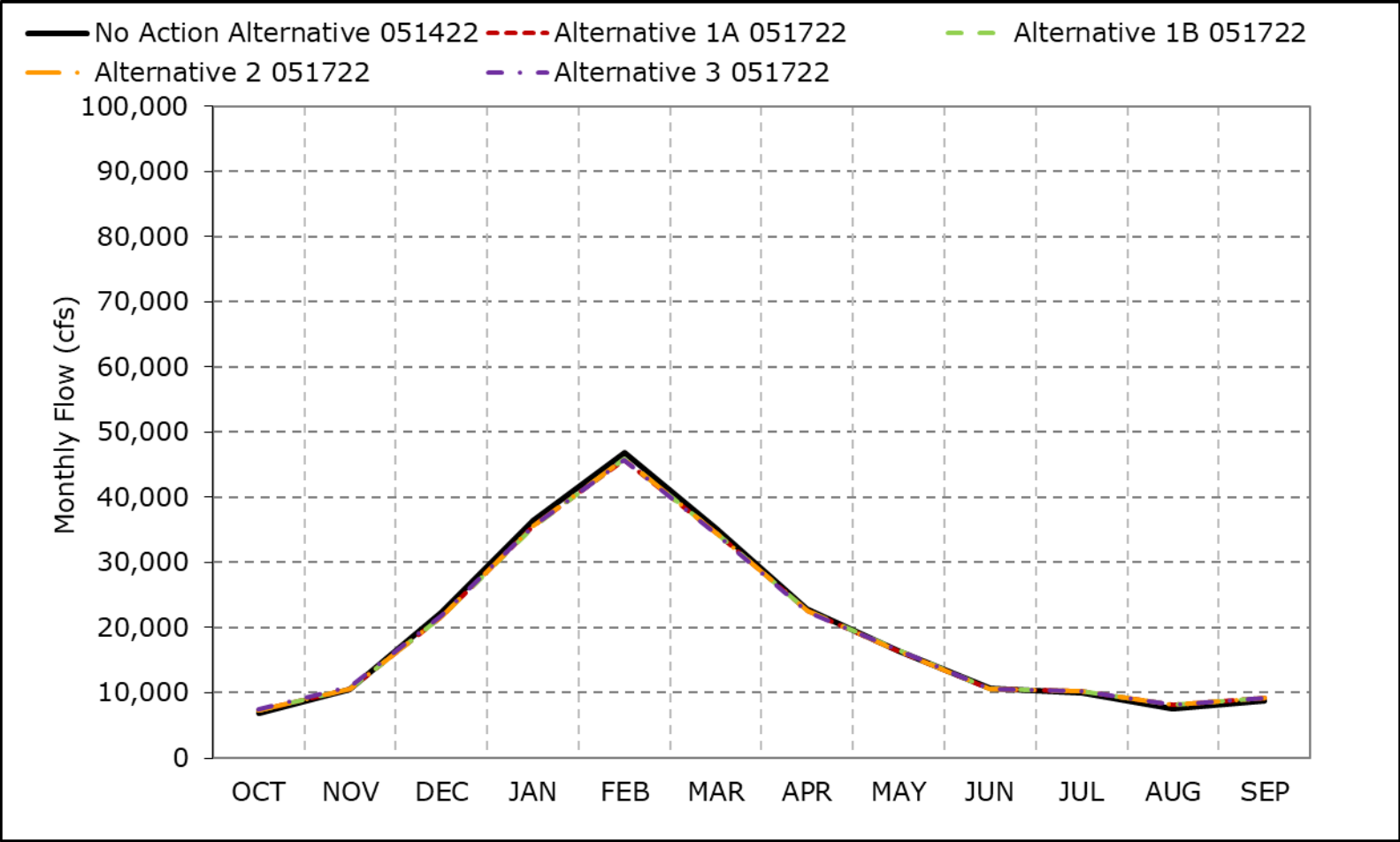
<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

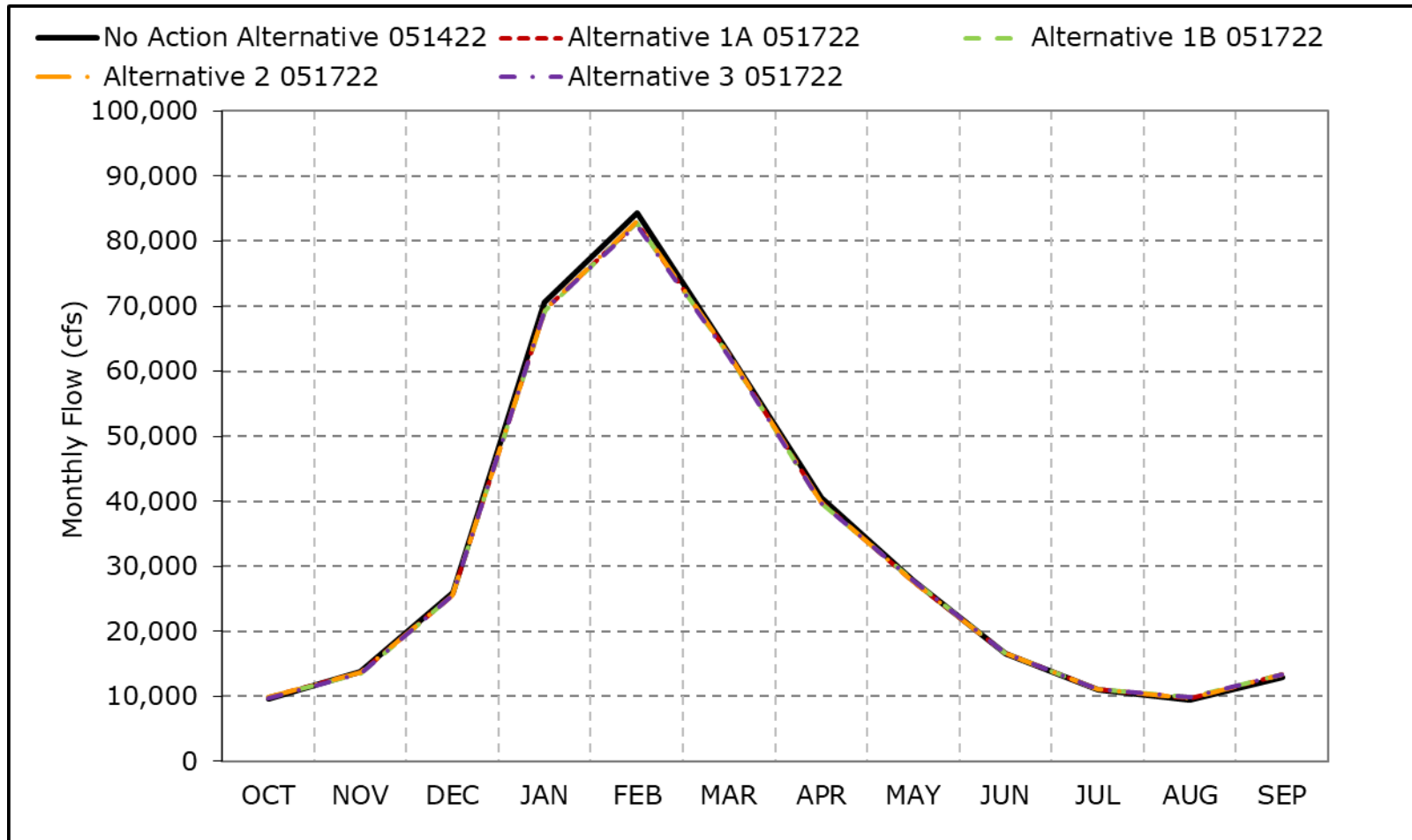
\* Water Year Types results are displayed with calendar year - year type sorting.

**Figure 5B3-4-1. Sacramento River Flow at Rio Vista, 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.  
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-2. Sacramento River Flow at Rio Vista, Wet Year Average Flow**

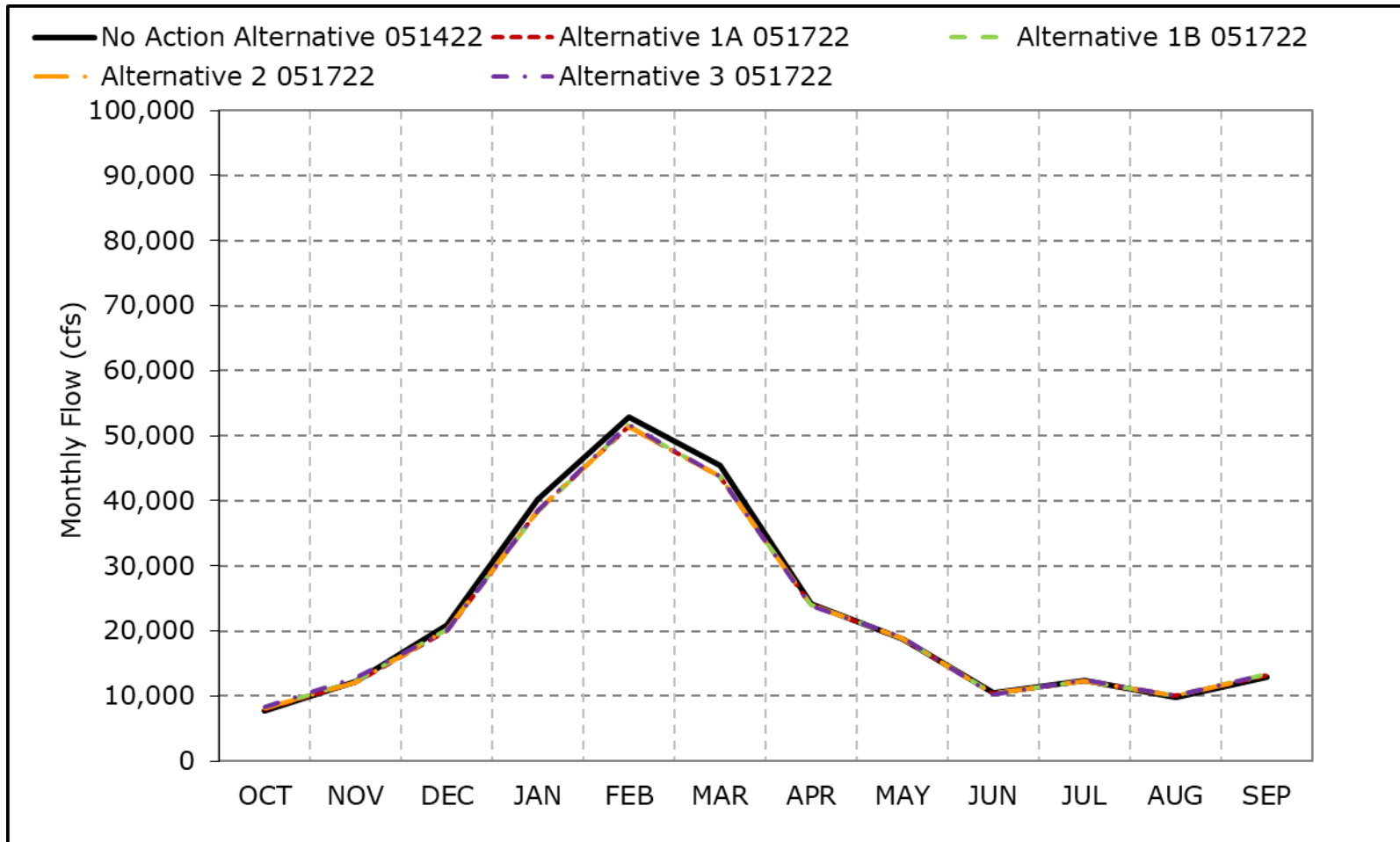


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

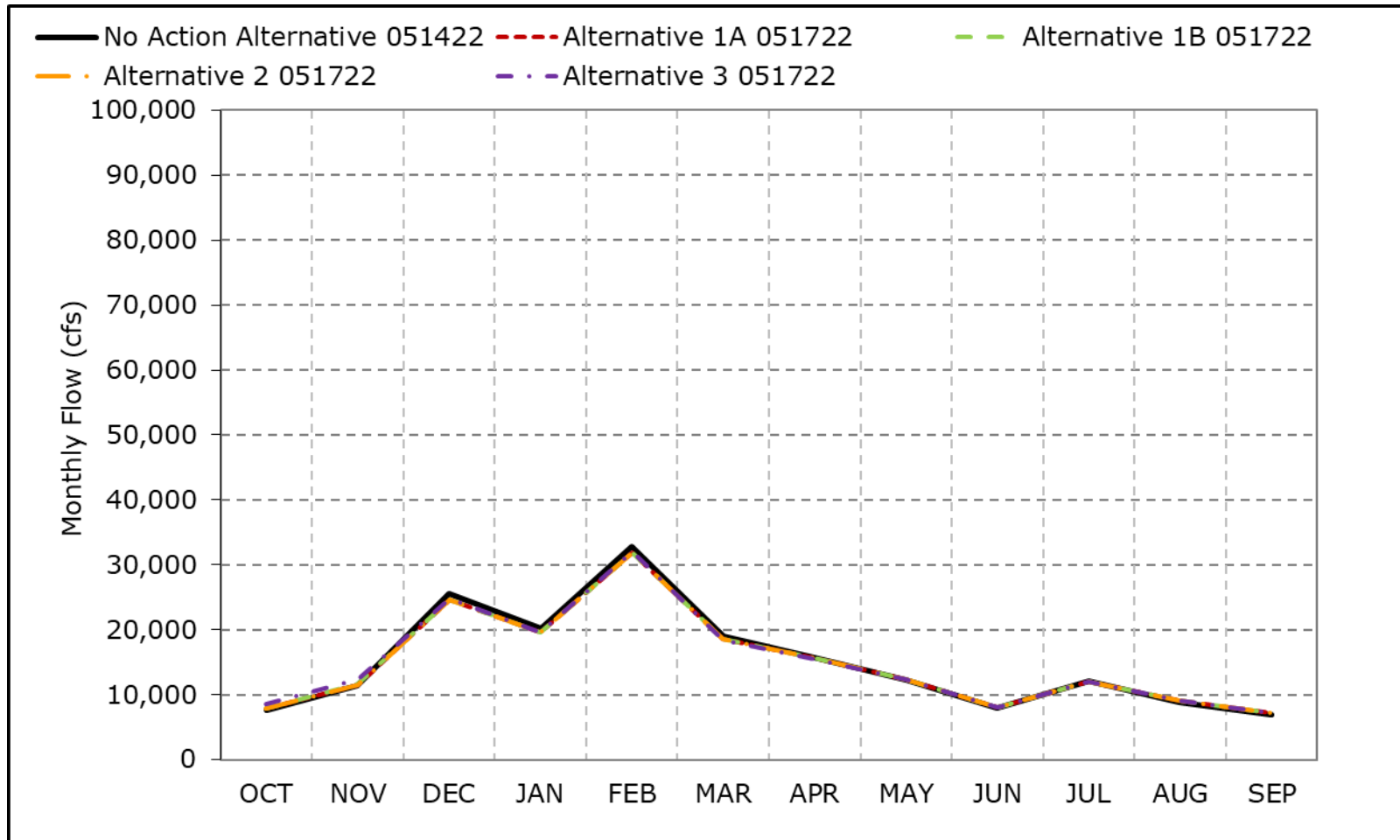
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-3. Sacramento River Flow at Rio Vista, 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.  
 \*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-4. Sacramento River Flow at Rio Vista, Below Normal Year Average Flow**



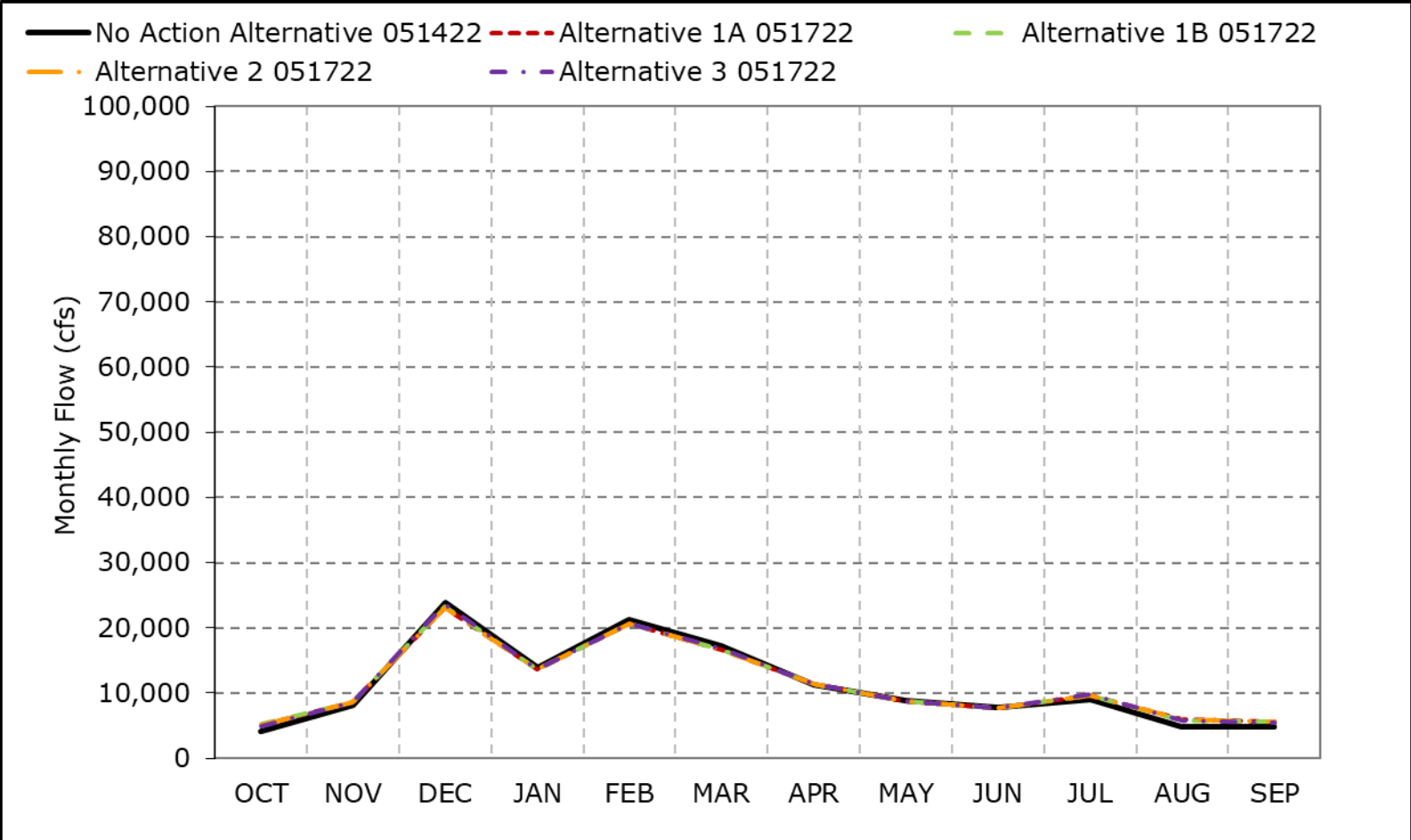
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

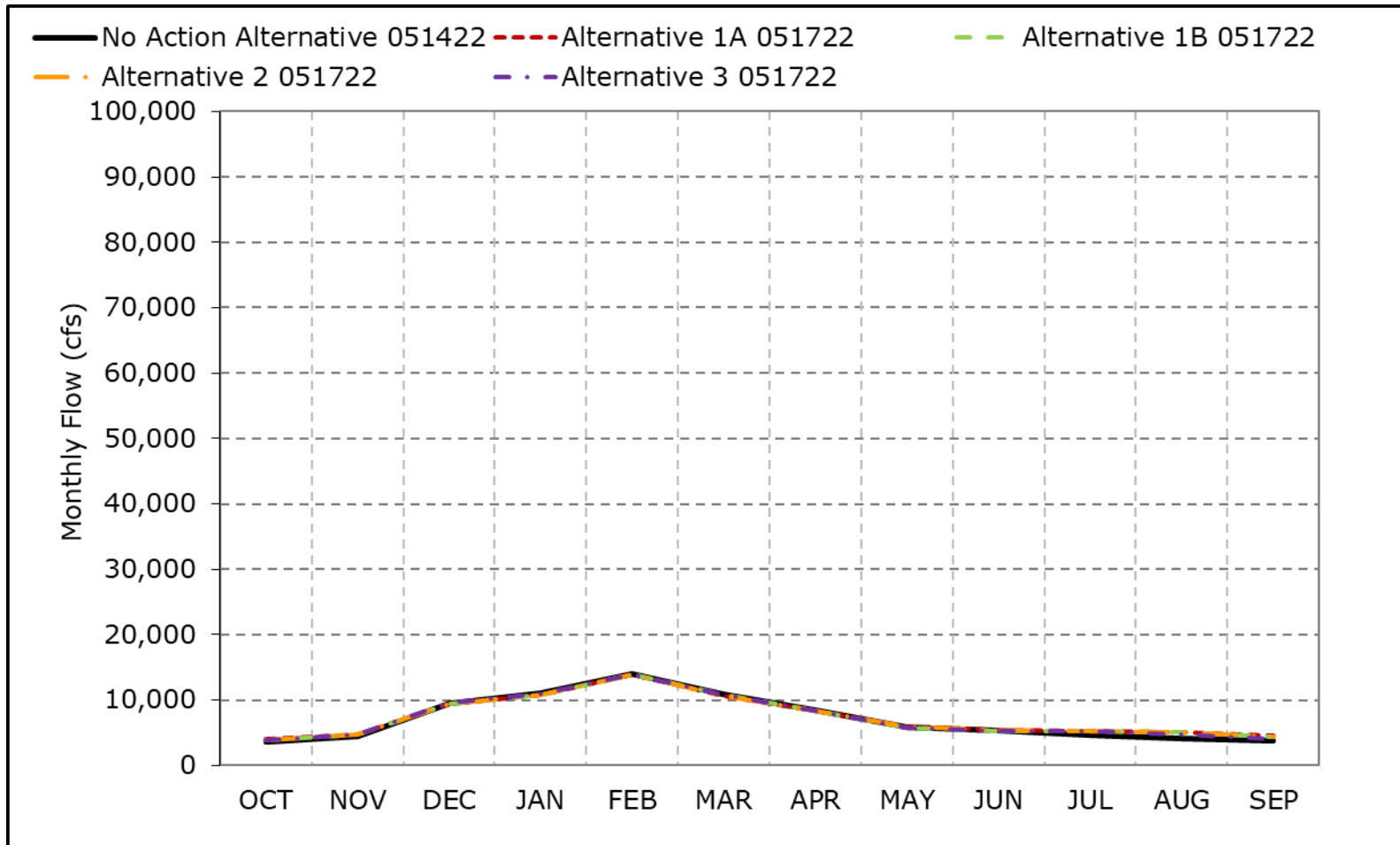


**Figure 5B3-4-5. Sacramento River Flow at Rio Vista, Dry Year Average Flow**



\*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.  
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-6. Sacramento River Flow at Rio Vista, Critical Year Average Flow**

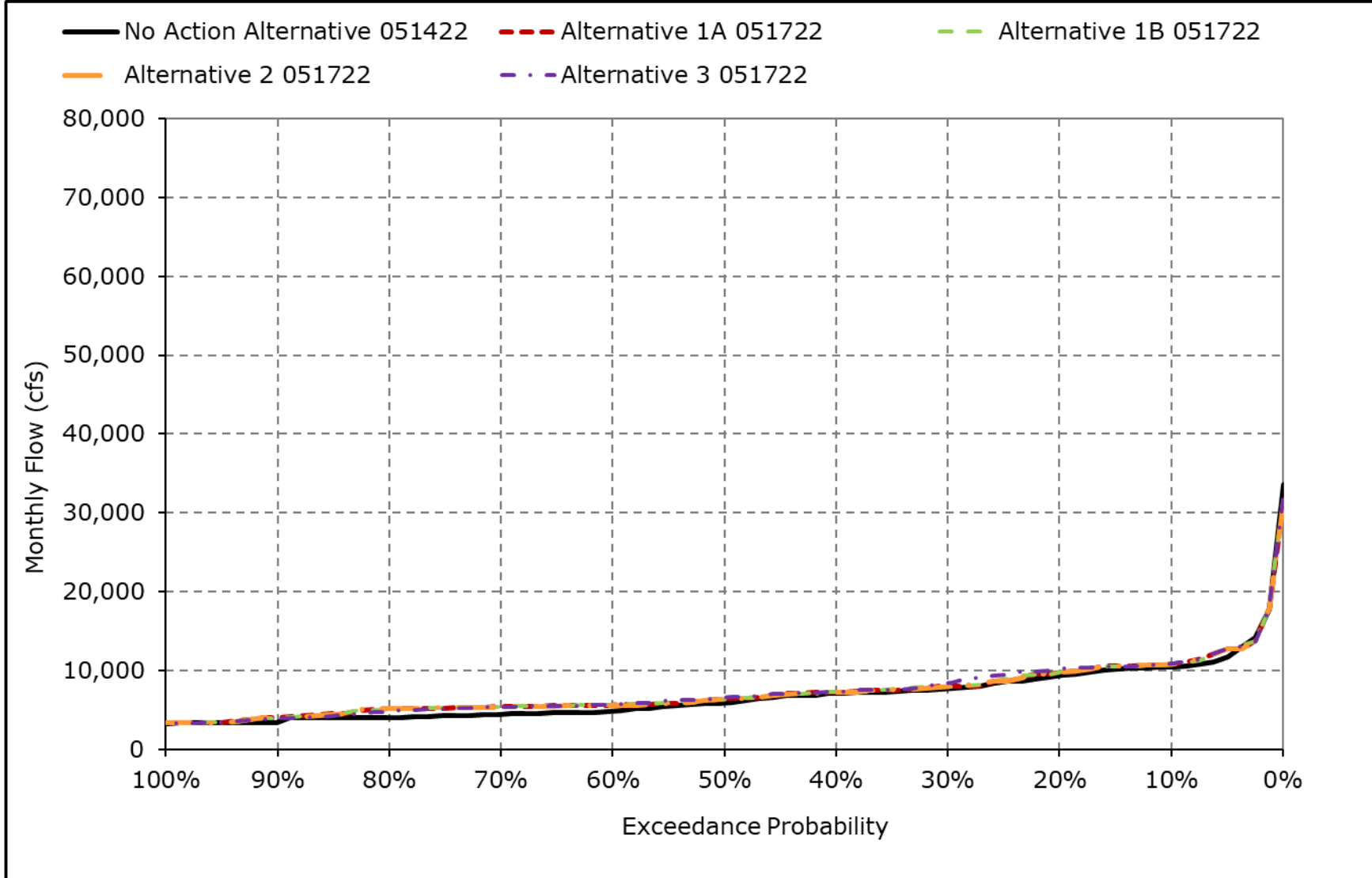


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

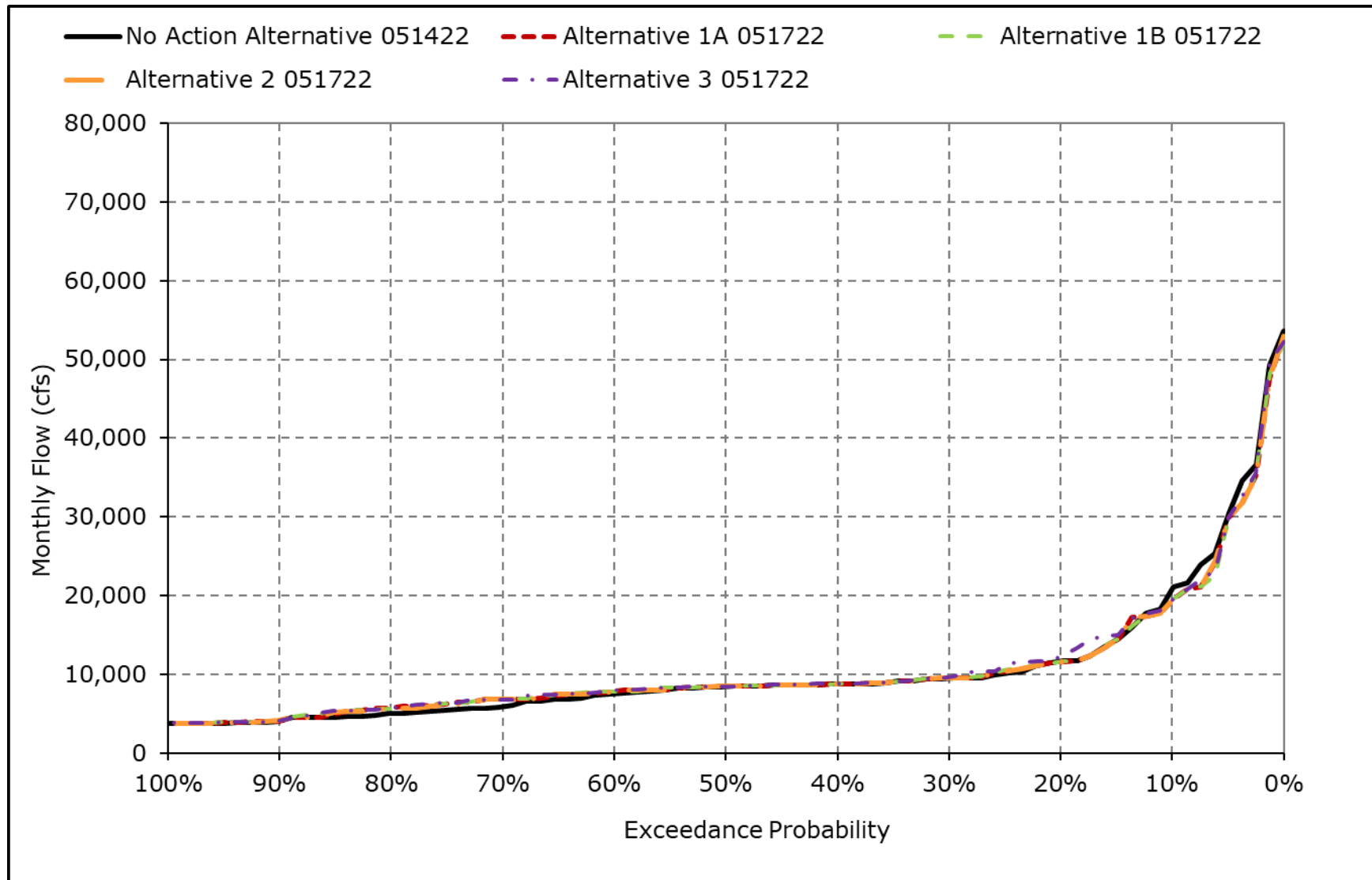
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-7. Sacramento River Flow at Rio Vista, October**



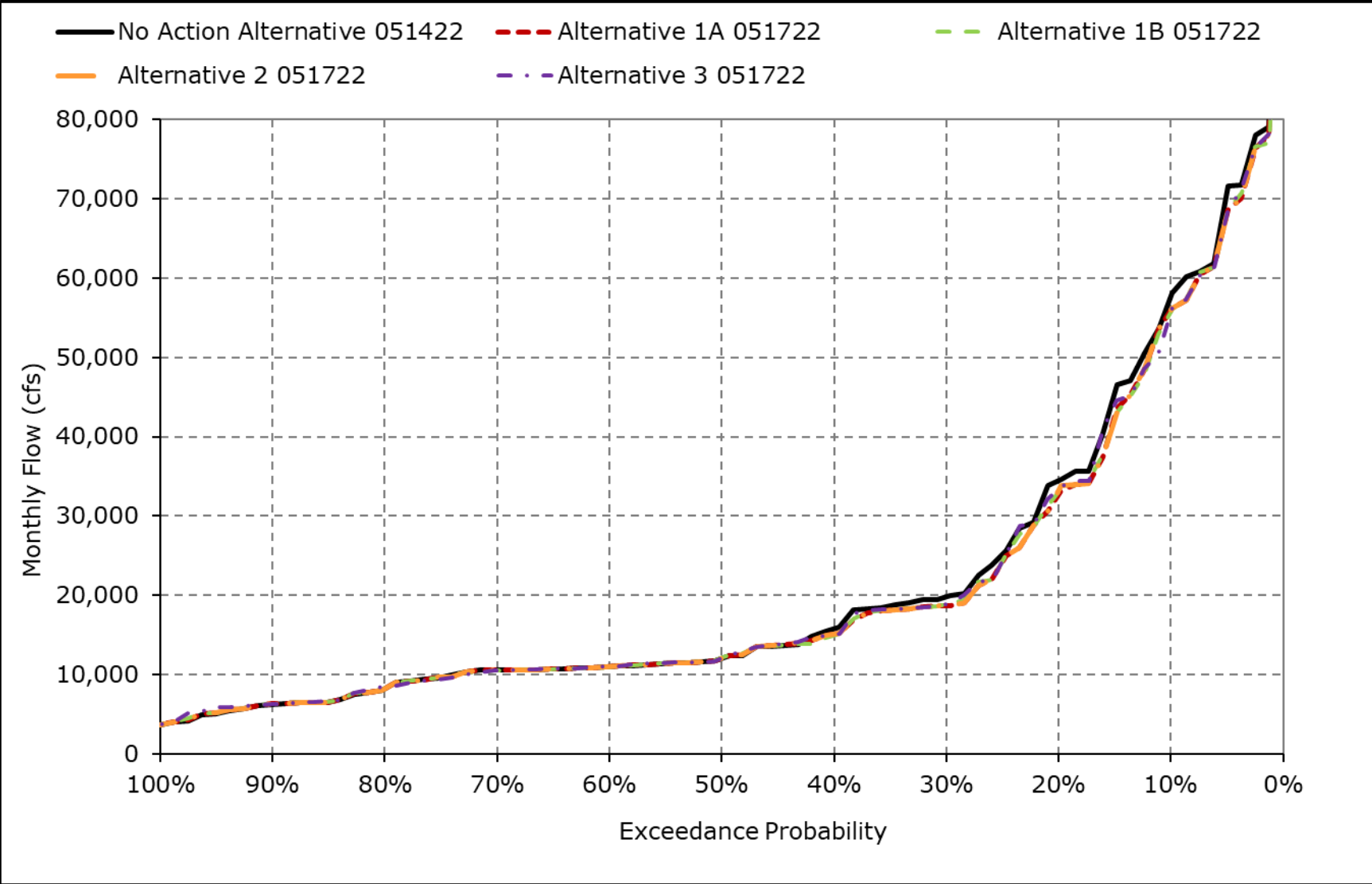
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-8. Sacramento River Flow at Rio Vista, November**



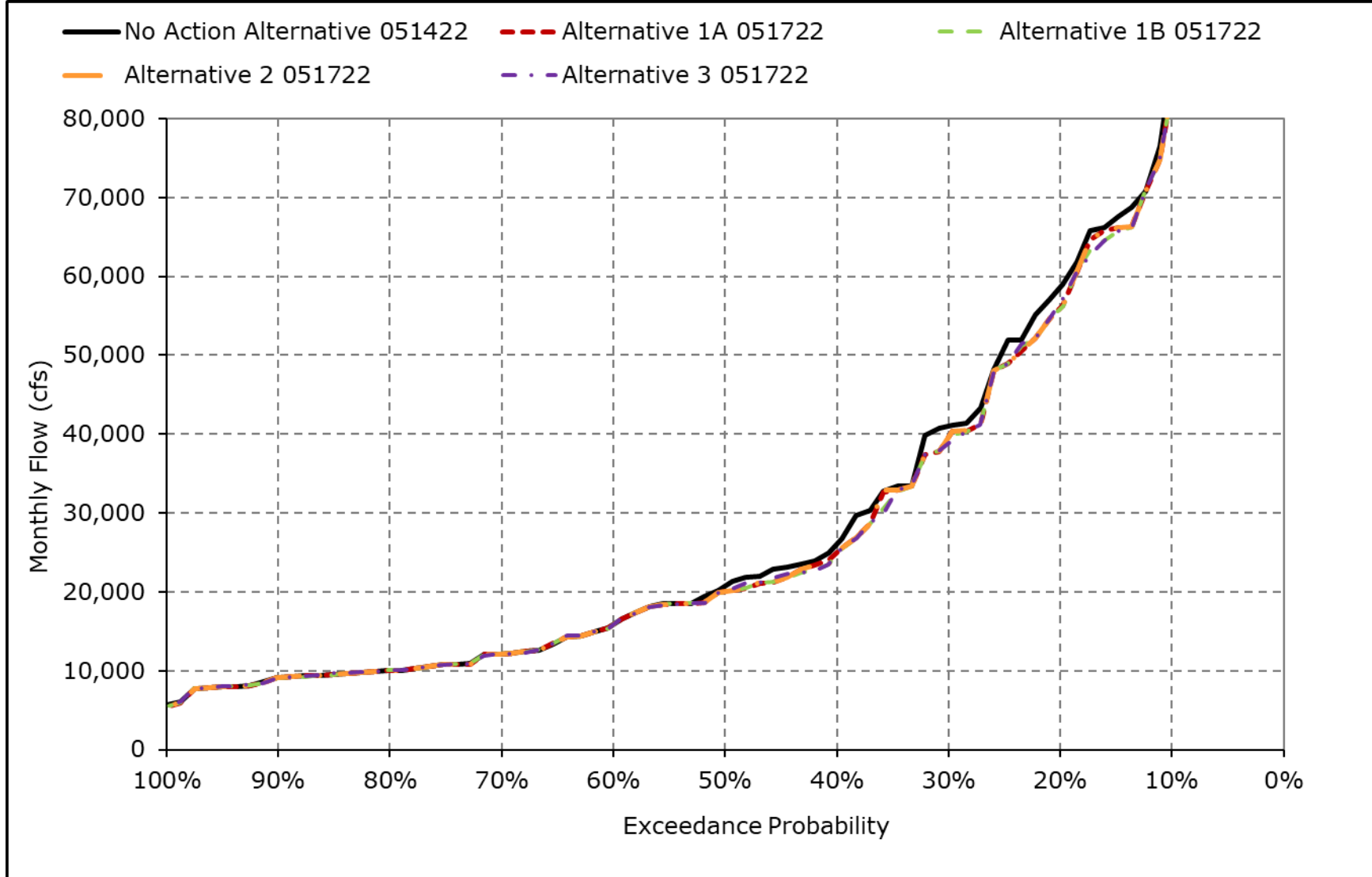
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-9. Sacramento River Flow at Rio Vista, December**



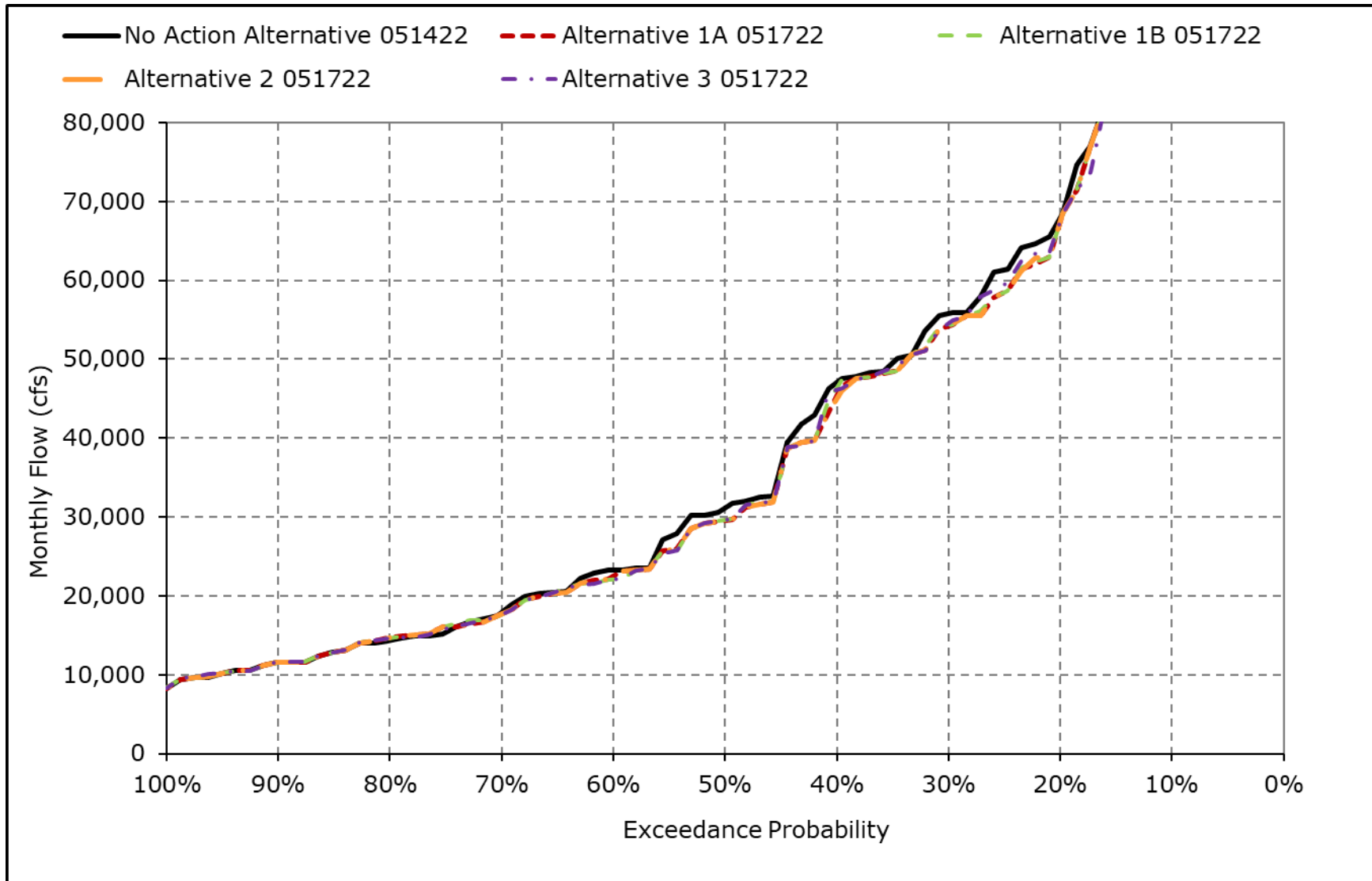
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-10. Sacramento River Flow at Rio Vista, January**



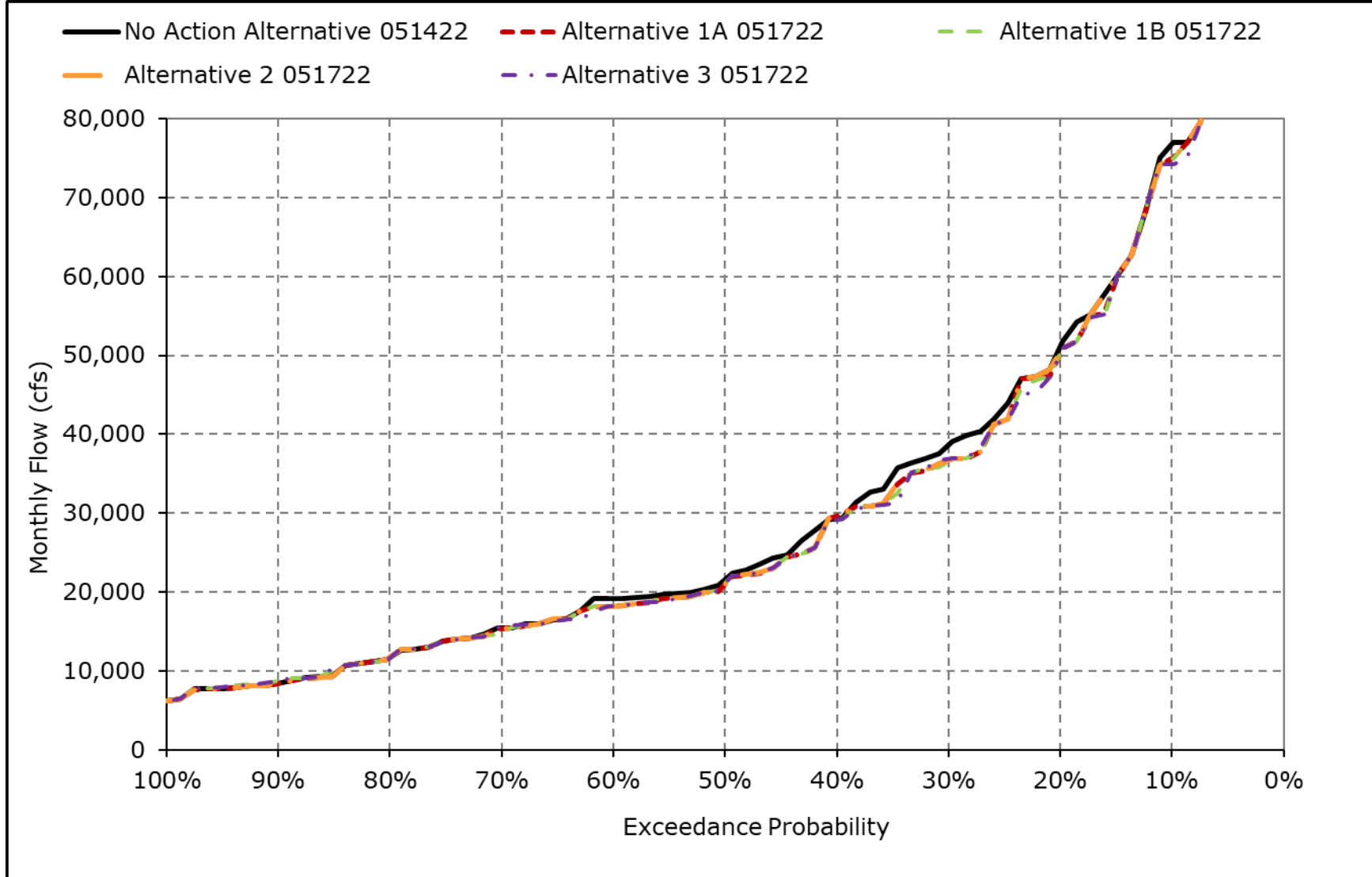
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-11. Sacramento River Flow at Rio Vista, February**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

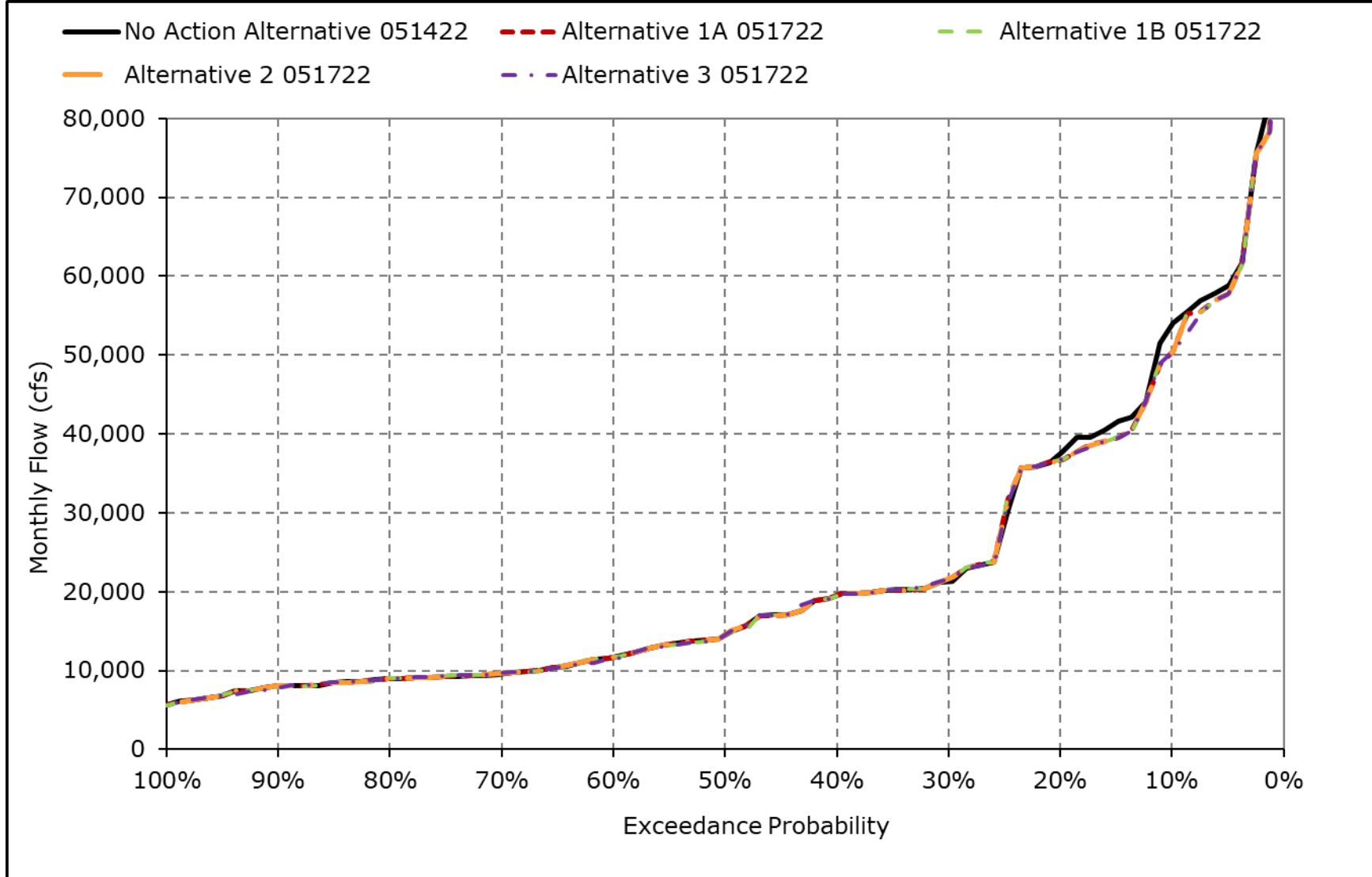
**Figure 5B3-4-12. Sacramento River Flow at Rio Vista, March**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

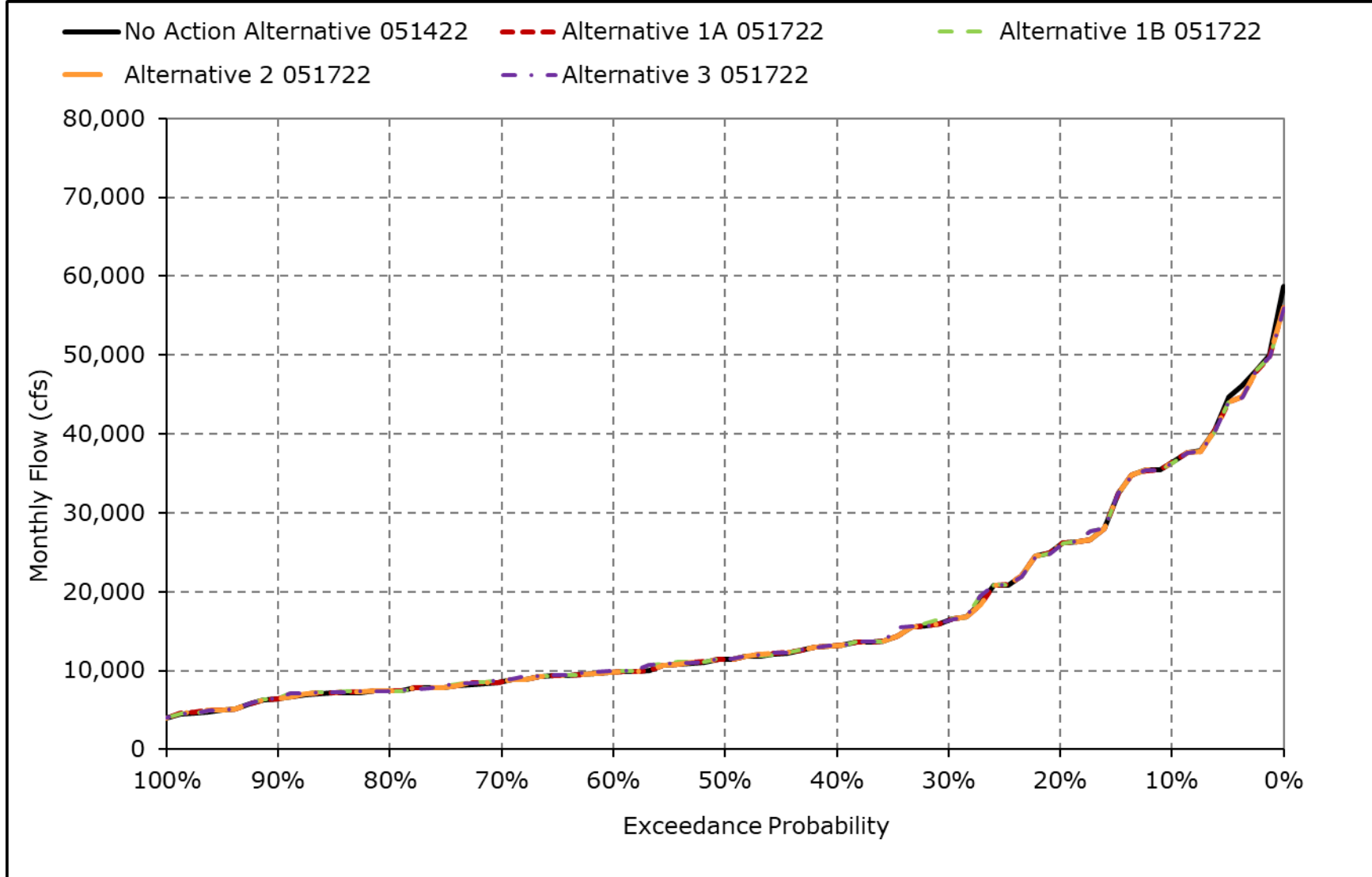


**Figure 5B3-4-13. Sacramento River Flow at Rio Vista, April**



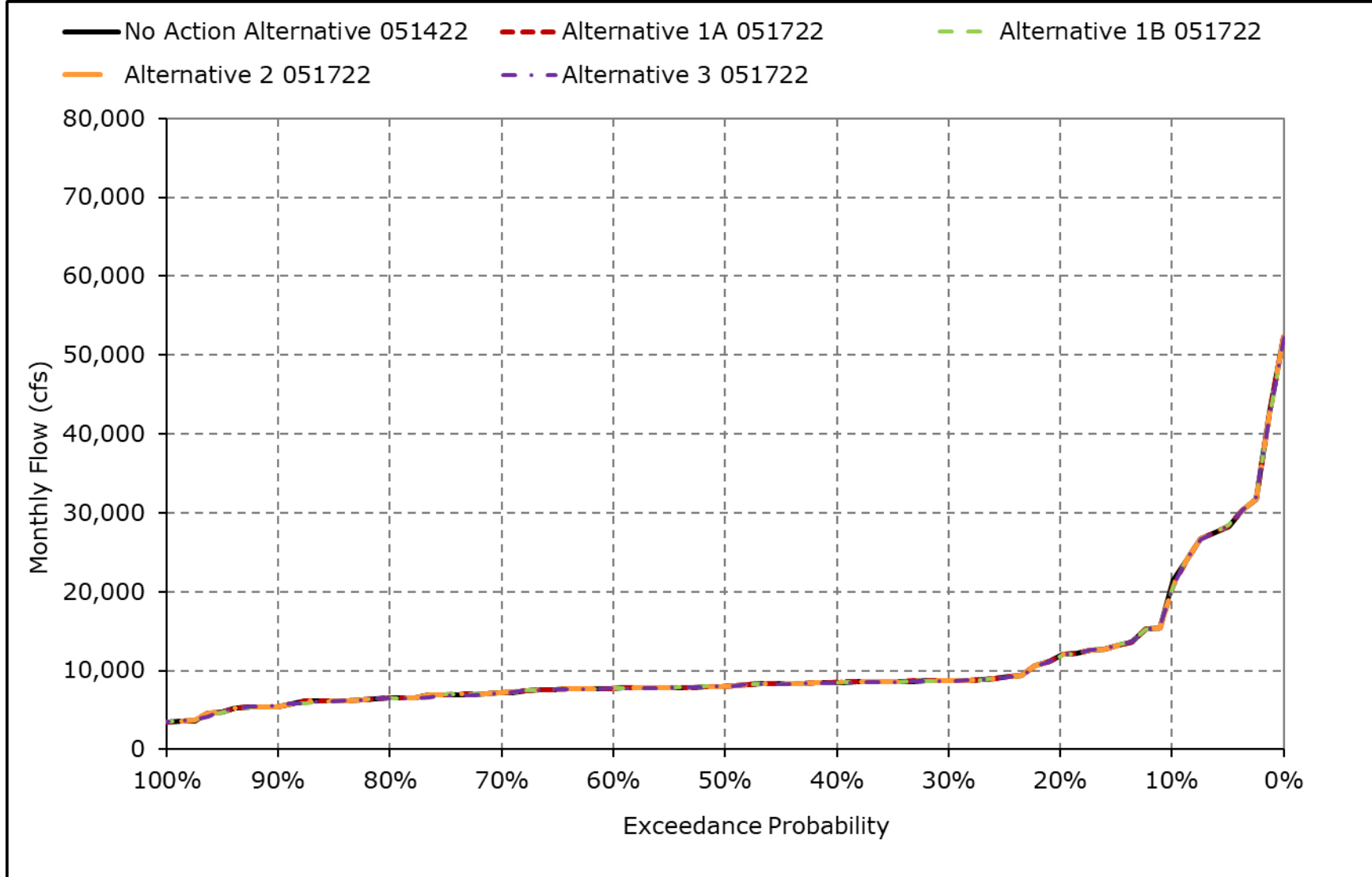
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-14. Sacramento River Flow at Rio Vista, May**



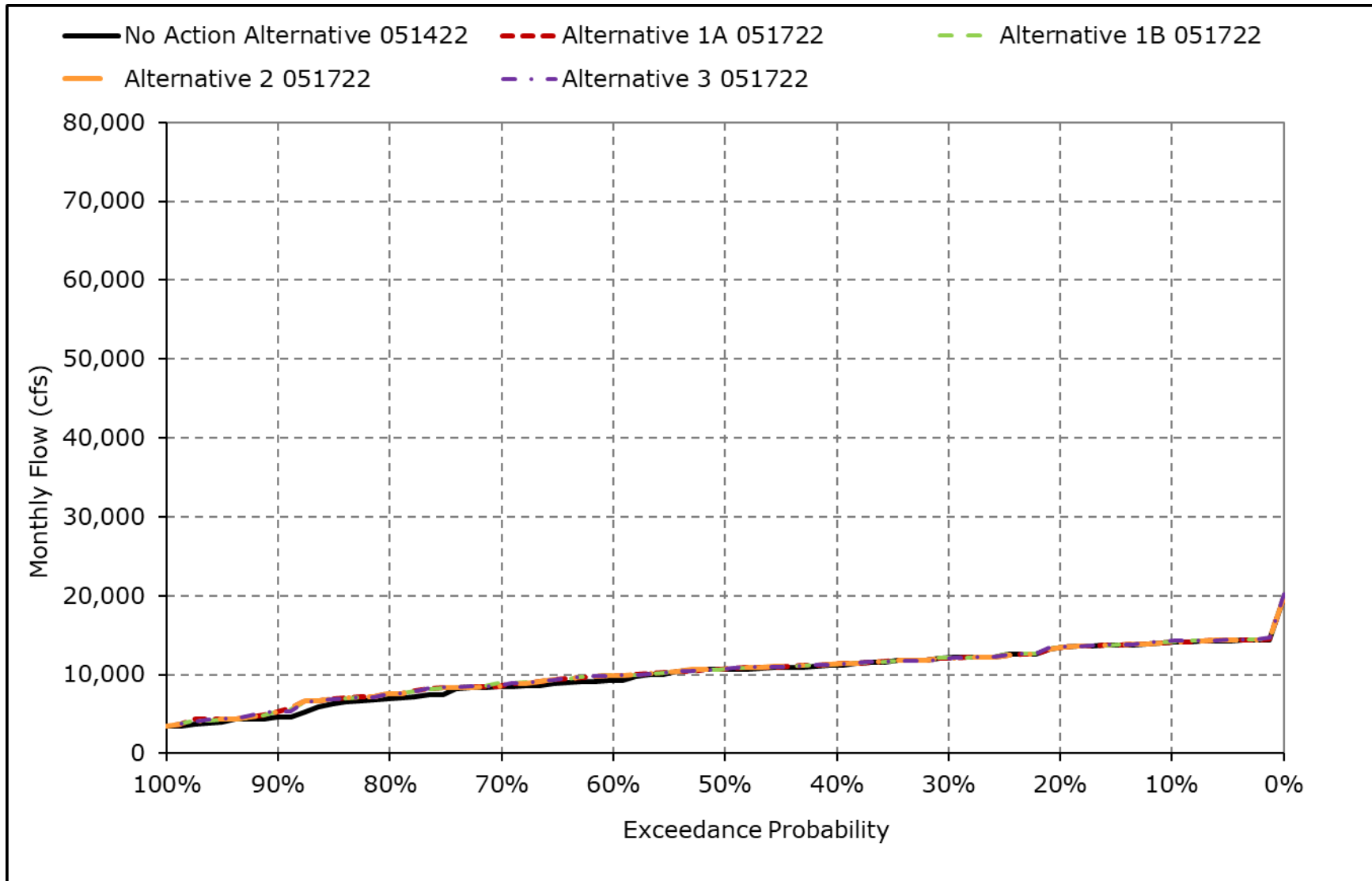
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-15. Sacramento River Flow at Rio Vista, June**



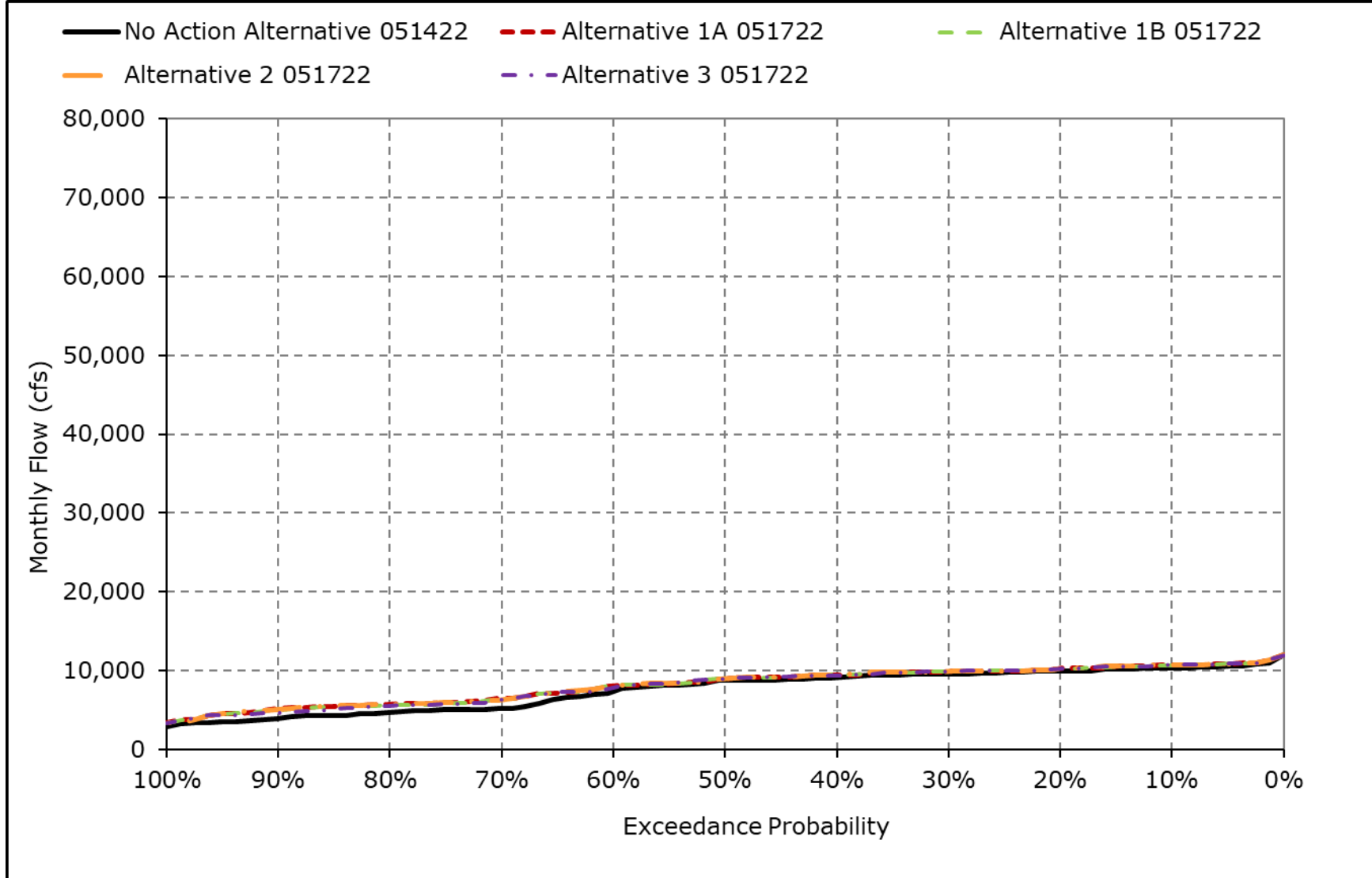
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-16. Sacramento River Flow at Rio Vista, July**



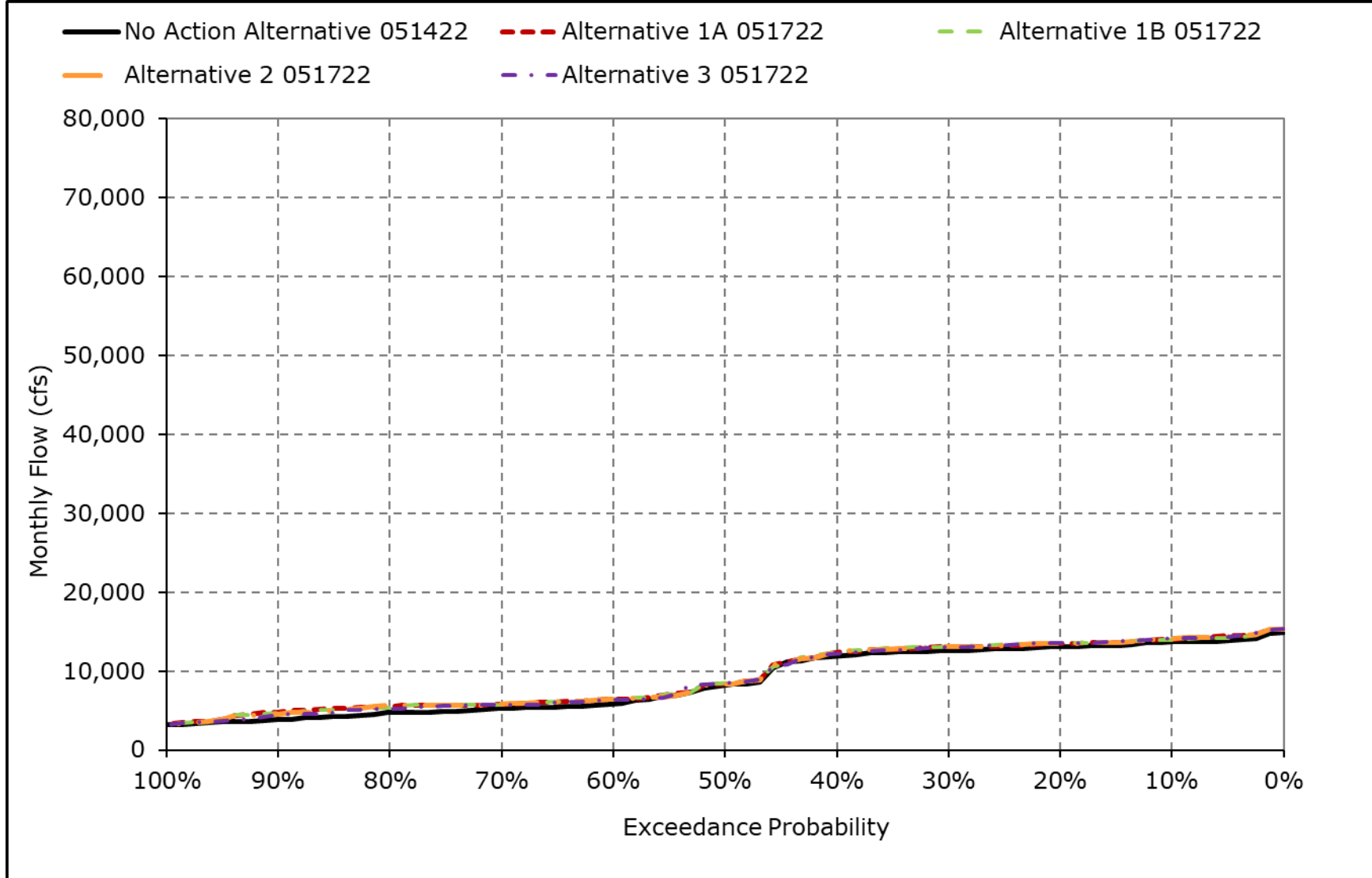
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-17. Sacramento River Flow at Rio Vista, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-4-18. Sacramento River Flow at Rio Vista, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Table 5B3-5-1a. Delta Outflow, No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,138	18,660	65,227	100,114	129,853	90,514	70,579	46,454	30,726	11,672	7,696	12,803
<b>20% Exceedance</b>	8,305	7,898	36,861	67,830	83,471	64,999	49,925	31,488	14,688	9,673	6,596	12,232
<b>30% Exceedance</b>	7,684	5,384	18,945	47,178	64,254	46,009	29,197	21,035	10,281	8,382	6,154	11,750
<b>40% Exceedance</b>	6,980	5,005	13,099	27,806	54,311	35,250	26,102	17,470	8,658	8,000	5,673	11,250
<b>50% Exceedance</b>	5,402	4,926	9,356	23,219	36,297	26,607	20,779	15,363	7,827	8,000	4,270	4,068
<b>60% Exceedance</b>	4,378	4,500	6,437	15,729	24,759	22,132	15,366	11,097	7,536	6,500	4,000	3,013
<b>70% Exceedance</b>	4,000	4,500	5,120	11,605	18,507	16,375	12,535	9,372	7,150	5,492	3,850	3,000
<b>80% Exceedance</b>	4,000	4,500	4,630	8,661	14,643	12,821	11,244	7,210	6,478	5,000	3,500	3,000
<b>90% Exceedance</b>	4,000	3,804	4,500	7,420	10,039	8,974	9,568	6,180	4,778	4,000	3,500	3,000
<b>Full Simulation Period Average<sup>a</sup></b>	6,432	8,782	22,285	41,901	54,440	43,147	30,213	21,063	12,911	8,183	5,251	7,517
<b>Wet Water Years (32%)</b>	8,744	11,731	26,384	84,727	100,499	79,534	54,518	38,005	23,349	11,768	7,348	13,004
<b>Above Normal Water Years (15%)</b>	7,173	8,490	19,049	46,599	62,329	55,309	32,164	23,615	12,017	9,727	6,270	11,573
<b>Below Normal Water Years (17%)</b>	6,111	10,090	26,806	21,983	38,261	23,137	21,867	15,321	8,258	7,503	4,040	3,511
<b>Dry Water Years (22%)</b>	4,129	7,056	24,247	13,418	22,542	19,385	14,090	9,607	7,056	5,278	3,626	3,013
<b>Critical Water Years (15%)</b>	4,514	3,749	8,423	10,372	13,481	11,136	9,525	5,686	5,397	4,020	3,536	3,000

**Table 5B3-5-1b. Delta Outflow, Alternative 1A 051722, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,422	16,335	63,312	99,811	126,669	88,663	67,706	46,325	30,658	11,672	8,065	13,279
<b>20% Exceedance</b>	8,401	6,614	33,628	65,348	81,669	63,235	47,326	31,486	14,690	9,689	6,987	12,443
<b>30% Exceedance</b>	7,971	5,486	17,648	44,175	61,915	42,738	29,246	21,036	10,281	8,386	6,494	12,186
<b>40% Exceedance</b>	7,229	5,076	12,656	26,733	54,060	35,606	26,424	17,465	8,721	8,000	6,071	11,653
<b>50% Exceedance</b>	5,235	4,937	9,695	21,370	35,460	25,831	20,786	15,359	7,839	7,989	4,555	4,163
<b>60% Exceedance</b>	4,486	4,744	6,452	15,732	24,630	20,966	15,387	11,099	7,543	6,497	4,221	3,457
<b>70% Exceedance</b>	4,353	4,544	5,092	11,606	18,299	16,333	12,643	9,324	7,162	5,590	4,002	3,271
<b>80% Exceedance</b>	4,264	4,500	4,632	8,558	14,741	13,016	11,248	7,214	6,479	5,096	3,850	3,242
<b>90% Exceedance</b>	4,048	3,774	4,500	7,372	10,040	8,974	9,566	6,305	4,794	4,249	3,645	3,053
<b>Full Simulation Period Average<sup>a</sup></b>	6,545	8,563	21,706	41,056	53,385	42,482	29,924	21,037	12,913	8,219	5,525	7,820
<b>Wet Water Years (32%)</b>	8,891	11,485	25,922	83,540	98,938	79,173	53,844	37,748	23,358	11,756	7,689	13,433
<b>Above Normal Water Years (15%)</b>	7,487	8,356	18,333	44,787	60,697	53,618	31,896	23,821	11,981	9,742	6,601	11,963
<b>Below Normal Water Years (17%)</b>	6,112	9,328	25,718	21,359	37,362	22,583	21,612	15,329	8,246	7,509	4,211	3,711
<b>Dry Water Years (22%)</b>	4,303	7,038	23,676	13,165	21,807	18,650	14,122	9,671	7,068	5,387	3,912	3,231
<b>Critical Water Years (15%)</b>	4,386	3,834	8,311	10,093	13,434	10,810	9,527	5,757	5,423	4,108	3,714	3,190

**Table 5B3-5-1c. Delta Outflow, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	284	-2,326	-1,914	-303	-3,185	-1,851	-2,872	-130	-68	0	370	476
<b>20% Exceedance</b>	96	-1,285	-3,233	-2,482	-1,802	-1,764	-2,600	-2	3	16	390	211
<b>30% Exceedance</b>	287	103	-1,297	-3,003	-2,339	-3,272	49	1	0	4	341	436
<b>40% Exceedance</b>	249	71	-443	-1,073	-252	356	322	-6	63	0	398	403
<b>50% Exceedance</b>	-167	11	339	-1,850	-836	-776	7	-3	12	-11	285	95
<b>60% Exceedance</b>	109	244	15	3	-129	-1,166	20	2	7	-3	221	444
<b>70% Exceedance</b>	353	44	-28	0	-208	-42	108	-49	12	98	153	271
<b>80% Exceedance</b>	264	0	2	-103	98	195	3	4	1	96	350	242
<b>90% Exceedance</b>	48	-30	0	-48	1	0	-1	125	16	249	145	53
<b>Full Simulation Period Average<sup>a</sup></b>	112	-219	-579	-845	-1,056	-665	-289	-26	2	36	275	303
<b>Wet Water Years (32%)</b>	146	-246	-462	-1,187	-1,561	-361	-674	-258	9	-12	341	429
<b>Above Normal Water Years (15%)</b>	314	-133	-715	-1,812	-1,632	-1,692	-269	206	-36	15	332	391
<b>Below Normal Water Years (17%)</b>	1	-762	-1,089	-625	-900	-554	-255	8	-12	5	171	200
<b>Dry Water Years (22%)</b>	174	-18	-572	-253	-735	-735	32	64	12	109	286	218
<b>Critical Water Years (15%)</b>	-128	84	-112	-279	-47	-325	2	72	26	87	178	190

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-5-2a. Delta Outflow, No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,138	18,660	65,227	100,114	129,853	90,514	70,579	46,454	30,726	11,672	7,696	12,803
<b>20% Exceedance</b>	8,305	7,898	36,861	67,830	83,471	64,999	49,925	31,488	14,688	9,673	6,596	12,232
<b>30% Exceedance</b>	7,684	5,384	18,945	47,178	64,254	46,009	29,197	21,035	10,281	8,382	6,154	11,750
<b>40% Exceedance</b>	6,980	5,005	13,099	27,806	54,311	35,250	26,102	17,470	8,658	8,000	5,673	11,250
<b>50% Exceedance</b>	5,402	4,926	9,356	23,219	36,297	26,607	20,779	15,363	7,827	8,000	4,270	4,068
<b>60% Exceedance</b>	4,378	4,500	6,437	15,729	24,759	22,132	15,366	11,097	7,536	6,500	4,000	3,013
<b>70% Exceedance</b>	4,000	4,500	5,120	11,605	18,507	16,375	12,535	9,372	7,150	5,492	3,850	3,000
<b>80% Exceedance</b>	4,000	4,500	4,630	8,661	14,643	12,821	11,244	7,210	6,478	5,000	3,500	3,000
<b>90% Exceedance</b>	4,000	3,804	4,500	7,420	10,039	8,974	9,568	6,180	4,778	4,000	3,500	3,000
<b>Full Simulation Period Average<sup>a</sup></b>	6,432	8,782	22,285	41,901	54,440	43,147	30,213	21,063	12,911	8,183	5,251	7,517
<b>Wet Water Years (32%)</b>	8,744	11,731	26,384	84,727	100,499	79,534	54,518	38,005	23,349	11,768	7,348	13,004
<b>Above Normal Water Years (15%)</b>	7,173	8,490	19,049	46,599	62,329	55,309	32,164	23,615	12,017	9,727	6,270	11,573
<b>Below Normal Water Years (17%)</b>	6,111	10,090	26,806	21,983	38,261	23,137	21,867	15,321	8,258	7,503	4,040	3,511
<b>Dry Water Years (22%)</b>	4,129	7,056	24,247	13,418	22,542	19,385	14,090	9,607	7,056	5,278	3,626	3,013
<b>Critical Water Years (15%)</b>	4,514	3,749	8,423	10,372	13,481	11,136	9,525	5,686	5,397	4,020	3,536	3,000

**Table 5B3-5-2b. Delta Outflow, Alternative 1B 051722, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,570	16,261	63,280	99,803	126,514	88,663	67,706	46,326	30,656	11,784	8,065	13,339
<b>20% Exceedance</b>	8,395	6,616	34,153	65,311	82,037	63,051	47,328	31,480	14,693	9,682	6,987	12,673
<b>30% Exceedance</b>	7,939	5,318	17,659	44,160	62,073	43,086	29,446	21,037	10,187	8,403	6,518	12,186
<b>40% Exceedance</b>	7,107	4,994	12,612	26,733	54,288	35,107	26,436	17,465	8,580	8,000	6,071	11,653
<b>50% Exceedance</b>	5,227	4,892	9,699	21,347	35,460	25,832	20,786	15,363	7,799	7,989	4,521	4,163
<b>60% Exceedance</b>	4,519	4,713	6,451	15,728	23,784	20,966	15,373	11,157	7,543	6,500	4,195	3,398
<b>70% Exceedance</b>	4,389	4,561	5,092	11,606	18,298	15,907	12,641	9,422	7,113	5,588	4,002	3,280
<b>80% Exceedance</b>	4,234	4,500	4,633	8,549	14,744	13,016	11,245	7,318	6,479	5,027	3,849	3,230
<b>90% Exceedance</b>	4,034	3,771	4,500	7,367	10,040	8,974	9,566	6,304	4,696	4,254	3,622	3,050
<b>Full Simulation Period Average<sup>a</sup></b>	6,549	8,505	21,891	40,975	53,453	42,444	29,910	21,100	12,891	8,225	5,520	7,828
<b>Wet Water Years (32%)</b>	8,876	11,345	25,872	83,389	99,032	79,051	53,818	37,948	23,331	11,751	7,686	13,422
<b>Above Normal Water Years (15%)</b>	7,545	8,415	18,405	44,725	60,841	53,673	31,917	23,922	11,931	9,759	6,596	12,068
<b>Below Normal Water Years (17%)</b>	6,102	9,365	25,811	21,252	37,383	22,590	21,625	15,317	8,229	7,529	4,211	3,693
<b>Dry Water Years (22%)</b>	4,327	6,912	24,456	13,146	21,870	18,610	14,076	9,617	7,065	5,386	3,907	3,238
<b>Critical Water Years (15%)</b>	4,363	3,829	8,330	10,086	13,431	10,810	9,518	5,743	5,411	4,123	3,698	3,176

**Table 5B3-5-2c. Delta Outflow, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	432	-2,400	-1,947	-311	-3,339	-1,851	-2,873	-129	-70	113	370	536
<b>20% Exceedance</b>	89	-1,282	-2,708	-2,519	-1,434	-1,948	-2,598	-8	5	9	390	441
<b>30% Exceedance</b>	255	-65	-1,286	-3,019	-2,181	-2,923	250	2	-94	21	364	436
<b>40% Exceedance</b>	127	-11	-486	-1,073	-24	-144	334	-6	-78	0	398	403
<b>50% Exceedance</b>	-175	-34	343	-1,872	-836	-775	7	1	-28	-11	251	95
<b>60% Exceedance</b>	142	213	15	0	-975	-1,166	6	59	7	0	195	386
<b>70% Exceedance</b>	389	61	-29	1	-209	-468	105	50	-36	96	152	280
<b>80% Exceedance</b>	234	0	4	-112	101	195	1	108	1	27	349	230
<b>90% Exceedance</b>	34	-34	0	-54	1	0	-1	124	-82	254	122	50
<b>Full Simulation Period Average<sup>a</sup></b>	116	-277	-394	-925	-988	-704	-303	37	-19	43	269	311
<b>Wet Water Years (32%)</b>	132	-386	-512	-1,339	-1,468	-483	-700	-57	-18	-17	338	418
<b>Above Normal Water Years (15%)</b>	372	-75	-644	-1,874	-1,488	-1,636	-247	307	-87	32	326	495
<b>Below Normal Water Years (17%)</b>	-8	-725	-996	-731	-878	-547	-241	-3	-30	26	171	182
<b>Dry Water Years (22%)</b>	198	-145	209	-272	-673	-775	-14	10	9	108	281	225
<b>Critical Water Years (15%)</b>	-152	79	-94	-286	-49	-325	-7	57	15	102	162	176

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.



**Table 5B3-5-3a. Delta Outflow, No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,138	18,660	65,227	100,114	129,853	90,514	70,579	46,454	30,726	11,672	7,696	12,803
<b>20% Exceedance</b>	8,305	7,898	36,861	67,830	83,471	64,999	49,925	31,488	14,688	9,673	6,596	12,232
<b>30% Exceedance</b>	7,684	5,384	18,945	47,178	64,254	46,009	29,197	21,035	10,281	8,382	6,154	11,750
<b>40% Exceedance</b>	6,980	5,005	13,099	27,806	54,311	35,250	26,102	17,470	8,658	8,000	5,673	11,250
<b>50% Exceedance</b>	5,402	4,926	9,356	23,219	36,297	26,607	20,779	15,363	7,827	8,000	4,270	4,068
<b>60% Exceedance</b>	4,378	4,500	6,437	15,729	24,759	22,132	15,366	11,097	7,536	6,500	4,000	3,013
<b>70% Exceedance</b>	4,000	4,500	5,120	11,605	18,507	16,375	12,535	9,372	7,150	5,492	3,850	3,000
<b>80% Exceedance</b>	4,000	4,500	4,630	8,661	14,643	12,821	11,244	7,210	6,478	5,000	3,500	3,000
<b>90% Exceedance</b>	4,000	3,804	4,500	7,420	10,039	8,974	9,568	6,180	4,778	4,000	3,500	3,000
<b>Full Simulation Period Average<sup>a</sup></b>	6,432	8,782	22,285	41,901	54,440	43,147	30,213	21,063	12,911	8,183	5,251	7,517
<b>Wet Water Years (32%)</b>	8,744	11,731	26,384	84,727	100,499	79,534	54,518	38,005	23,349	11,768	7,348	13,004
<b>Above Normal Water Years (15%)</b>	7,173	8,490	19,049	46,599	62,329	55,309	32,164	23,615	12,017	9,727	6,270	11,573
<b>Below Normal Water Years (17%)</b>	6,111	10,090	26,806	21,983	38,261	23,137	21,867	15,321	8,258	7,503	4,040	3,511
<b>Dry Water Years (22%)</b>	4,129	7,056	24,247	13,418	22,542	19,385	14,090	9,607	7,056	5,278	3,626	3,013
<b>Critical Water Years (15%)</b>	4,514	3,749	8,423	10,372	13,481	11,136	9,525	5,686	5,397	4,020	3,536	3,000

**Table 5B3-5-3b. Delta Outflow, Alternative 2 051722, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,422	16,367	63,317	99,852	126,767	88,663	67,706	46,349	30,657	11,672	8,065	13,204
<b>20% Exceedance</b>	8,575	6,605	33,635	65,355	80,979	64,008	47,318	31,486	14,691	9,689	6,987	12,623
<b>30% Exceedance</b>	8,005	5,486	17,635	44,175	61,943	42,854	29,247	21,036	10,281	8,386	6,494	12,215
<b>40% Exceedance</b>	7,229	5,052	12,665	26,733	53,670	35,608	26,424	17,465	8,721	8,000	6,071	11,653
<b>50% Exceedance</b>	5,248	4,937	9,692	21,392	35,459	25,831	20,786	15,359	7,839	7,989	4,534	4,163
<b>60% Exceedance</b>	4,536	4,741	6,452	15,731	24,630	20,966	15,385	11,099	7,543	6,497	4,294	3,464
<b>70% Exceedance</b>	4,358	4,551	5,120	11,606	18,299	16,332	12,643	9,324	7,162	5,590	4,006	3,291
<b>80% Exceedance</b>	4,258	4,500	4,632	8,559	14,741	13,016	11,247	7,214	6,479	5,096	3,933	3,245
<b>90% Exceedance</b>	4,079	3,665	4,506	7,373	10,040	8,974	9,566	6,304	4,794	4,247	3,718	3,032
<b>Full Simulation Period Average<sup>a</sup></b>	6,568	8,557	21,724	41,063	53,436	42,534	29,919	21,038	12,913	8,219	5,546	7,833
<b>Wet Water Years (32%)</b>	8,914	11,487	25,906	83,568	99,152	79,316	53,843	37,751	23,359	11,756	7,689	13,455
<b>Above Normal Water Years (15%)</b>	7,547	8,356	18,402	44,794	60,648	53,674	31,863	23,821	11,981	9,742	6,634	11,998
<b>Below Normal Water Years (17%)</b>	6,129	9,329	25,720	21,336	37,298	22,589	21,610	15,329	8,246	7,509	4,239	3,704
<b>Dry Water Years (22%)</b>	4,318	7,029	23,686	13,165	21,807	18,651	14,122	9,671	7,068	5,386	3,902	3,234
<b>Critical Water Years (15%)</b>	4,394	3,801	8,380	10,096	13,440	10,797	9,526	5,755	5,423	4,108	3,802	3,202

**Table 5B3-5-3c. Delta Outflow, Alternative 2 051722 minus No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	284	-2,293	-1,909	-262	-3,086	-1,851	-2,872	-106	-69	0	370	401
<b>20% Exceedance</b>	270	-1,293	-3,226	-2,474	-2,492	-991	-2,607	-2	4	16	390	391
<b>30% Exceedance</b>	321	103	-1,310	-3,003	-2,311	-3,156	50	1	0	4	341	465
<b>40% Exceedance</b>	249	47	-434	-1,073	-641	358	322	-6	63	0	398	403
<b>50% Exceedance</b>	-154	11	336	-1,827	-838	-776	6	-4	12	-11	263	95
<b>60% Exceedance</b>	158	241	15	3	-129	-1,166	19	2	7	-3	294	451
<b>70% Exceedance</b>	358	51	0	0	-208	-43	108	-49	12	98	157	291
<b>80% Exceedance</b>	258	0	2	-103	98	195	2	4	1	96	433	245
<b>90% Exceedance</b>	79	-139	6	-48	1	0	-1	124	16	247	218	32
<b>Full Simulation Period Average<sup>a</sup></b>	136	-225	-561	-838	-1,005	-613	-294	-25	2	36	295	316
<b>Wet Water Years (32%)</b>	170	-244	-478	-1,159	-1,347	-218	-675	-254	10	-12	341	451
<b>Above Normal Water Years (15%)</b>	374	-134	-646	-1,805	-1,681	-1,635	-301	206	-36	15	364	425
<b>Below Normal Water Years (17%)</b>	18	-761	-1,087	-647	-963	-549	-257	8	-12	6	199	192
<b>Dry Water Years (22%)</b>	190	-27	-561	-253	-735	-734	32	64	12	108	276	221
<b>Critical Water Years (15%)</b>	-120	52	-44	-276	-40	-339	2	70	26	87	266	202

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-5-4a. Delta Outflow, No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,138	18,660	65,227	100,114	129,853	90,514	70,579	46,454	30,726	11,672	7,696	12,803
<b>20% Exceedance</b>	8,305	7,898	36,861	67,830	83,471	64,999	49,925	31,488	14,688	9,673	6,596	12,232
<b>30% Exceedance</b>	7,684	5,384	18,945	47,178	64,254	46,009	29,197	21,035	10,281	8,382	6,154	11,750
<b>40% Exceedance</b>	6,980	5,005	13,099	27,806	54,311	35,250	26,102	17,470	8,658	8,000	5,673	11,250
<b>50% Exceedance</b>	5,402	4,926	9,356	23,219	36,297	26,607	20,779	15,363	7,827	8,000	4,270	4,068
<b>60% Exceedance</b>	4,378	4,500	6,437	15,729	24,759	22,132	15,366	11,097	7,536	6,500	4,000	3,013
<b>70% Exceedance</b>	4,000	4,500	5,120	11,605	18,507	16,375	12,535	9,372	7,150	5,492	3,850	3,000
<b>80% Exceedance</b>	4,000	4,500	4,630	8,661	14,643	12,821	11,244	7,210	6,478	5,000	3,500	3,000
<b>90% Exceedance</b>	4,000	3,804	4,500	7,420	10,039	8,974	9,568	6,180	4,778	4,000	3,500	3,000
<b>Full Simulation Period Average<sup>a</sup></b>	6,432	8,782	22,285	41,901	54,440	43,147	30,213	21,063	12,911	8,183	5,251	7,517
<b>Wet Water Years (32%)</b>	8,744	11,731	26,384	84,727	100,499	79,534	54,518	38,005	23,349	11,768	7,348	13,004
<b>Above Normal Water Years (15%)</b>	7,173	8,490	19,049	46,599	62,329	55,309	32,164	23,615	12,017	9,727	6,270	11,573
<b>Below Normal Water Years (17%)</b>	6,111	10,090	26,806	21,983	38,261	23,137	21,867	15,321	8,258	7,503	4,040	3,511
<b>Dry Water Years (22%)</b>	4,129	7,056	24,247	13,418	22,542	19,385	14,090	9,607	7,056	5,278	3,626	3,013
<b>Critical Water Years (15%)</b>	4,514	3,749	8,423	10,372	13,481	11,136	9,525	5,686	5,397	4,020	3,536	3,000

**Table 5B3-5-4b. Delta Outflow, Alternative 3 051722, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	9,585	17,521	63,198	99,510	126,022	88,368	67,725	46,321	30,656	11,791	8,056	13,390
<b>20% Exceedance</b>	8,723	8,712	34,952	65,225	82,876	63,066	47,378	31,450	14,684	9,784	6,987	12,594
<b>30% Exceedance</b>	7,939	6,185	17,719	44,149	61,930	43,168	29,491	21,037	10,187	8,399	6,518	12,179
<b>40% Exceedance</b>	7,319	5,035	13,067	26,743	53,181	35,109	26,434	17,536	8,553	8,000	6,071	11,555
<b>50% Exceedance</b>	5,365	4,937	9,663	21,293	35,465	25,833	20,785	15,367	7,799	7,989	4,435	4,339
<b>60% Exceedance</b>	4,670	4,689	6,437	15,840	23,781	20,869	15,218	11,337	7,543	6,500	4,118	3,325
<b>70% Exceedance</b>	4,379	4,547	5,095	11,559	18,296	16,480	12,334	9,422	7,113	5,572	3,993	3,252
<b>80% Exceedance</b>	4,235	4,500	4,625	8,550	14,705	13,017	11,235	7,318	6,479	5,106	3,782	3,099
<b>90% Exceedance</b>	4,012	3,615	4,500	7,579	10,022	8,974	9,570	6,300	4,583	4,252	3,577	3,025
<b>Full Simulation Period Average<sup>a</sup></b>	6,675	8,781	21,973	41,009	53,380	42,351	29,909	21,089	12,873	8,241	5,511	7,796
<b>Wet Water Years (32%)</b>	8,776	11,414	25,942	83,448	98,668	78,838	53,770	37,915	23,331	11,751	7,696	13,386
<b>Above Normal Water Years (15%)</b>	7,590	8,870	18,332	44,808	61,049	53,590	31,998	23,909	11,868	9,811	6,635	12,049
<b>Below Normal Water Years (17%)</b>	7,023	10,493	25,666	21,202	37,544	22,330	21,594	15,350	8,185	7,580	4,190	3,696
<b>Dry Water Years (22%)</b>	4,278	6,880	24,858	13,136	21,820	18,745	14,110	9,604	7,060	5,389	3,873	3,221
<b>Critical Water Years (15%)</b>	4,396	3,840	8,379	10,174	13,404	10,821	9,517	5,733	5,411	4,118	3,650	3,076

**Table 5B3-5-4c. Delta Outflow, Alternative 3 051722 minus No Action Alternative 051422, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	447	-1,139	-2,028	-604	-3,832	-2,146	-2,854	-133	-70	119	360	587
<b>20% Exceedance</b>	418	814	-1,909	-2,605	-594	-1,933	-2,547	-38	-4	111	390	361
<b>30% Exceedance</b>	255	801	-1,226	-3,029	-2,324	-2,841	295	2	-94	17	364	429
<b>40% Exceedance</b>	339	30	-32	-1,063	-1,130	-141	333	66	-105	0	398	305
<b>50% Exceedance</b>	-37	11	307	-1,926	-832	-774	6	5	-28	-11	165	271
<b>60% Exceedance</b>	292	189	0	111	-978	-1,263	-148	240	7	0	118	312
<b>70% Exceedance</b>	379	47	-26	-46	-211	105	-201	50	-36	80	143	252
<b>80% Exceedance</b>	235	0	-5	-111	61	196	-10	108	1	106	282	99
<b>90% Exceedance</b>	12	-189	0	159	-17	0	2	120	-196	252	77	25
<b>Full Simulation Period Average<sup>a</sup></b>	242	-2	-312	-892	-1,060	-797	-305	26	-37	59	260	279
<b>Wet Water Years (32%)</b>	32	-317	-442	-1,279	-1,831	-696	-748	-90	-18	-16	348	382
<b>Above Normal Water Years (15%)</b>	417	380	-717	-1,790	-1,281	-1,720	-166	294	-150	84	365	477
<b>Below Normal Water Years (17%)</b>	912	403	-1,140	-782	-717	-807	-273	29	-73	77	150	185
<b>Dry Water Years (22%)</b>	149	-177	611	-281	-722	-640	20	-3	3	111	246	209
<b>Critical Water Years (15%)</b>	-119	91	-45	-198	-76	-314	-8	47	15	98	114	76

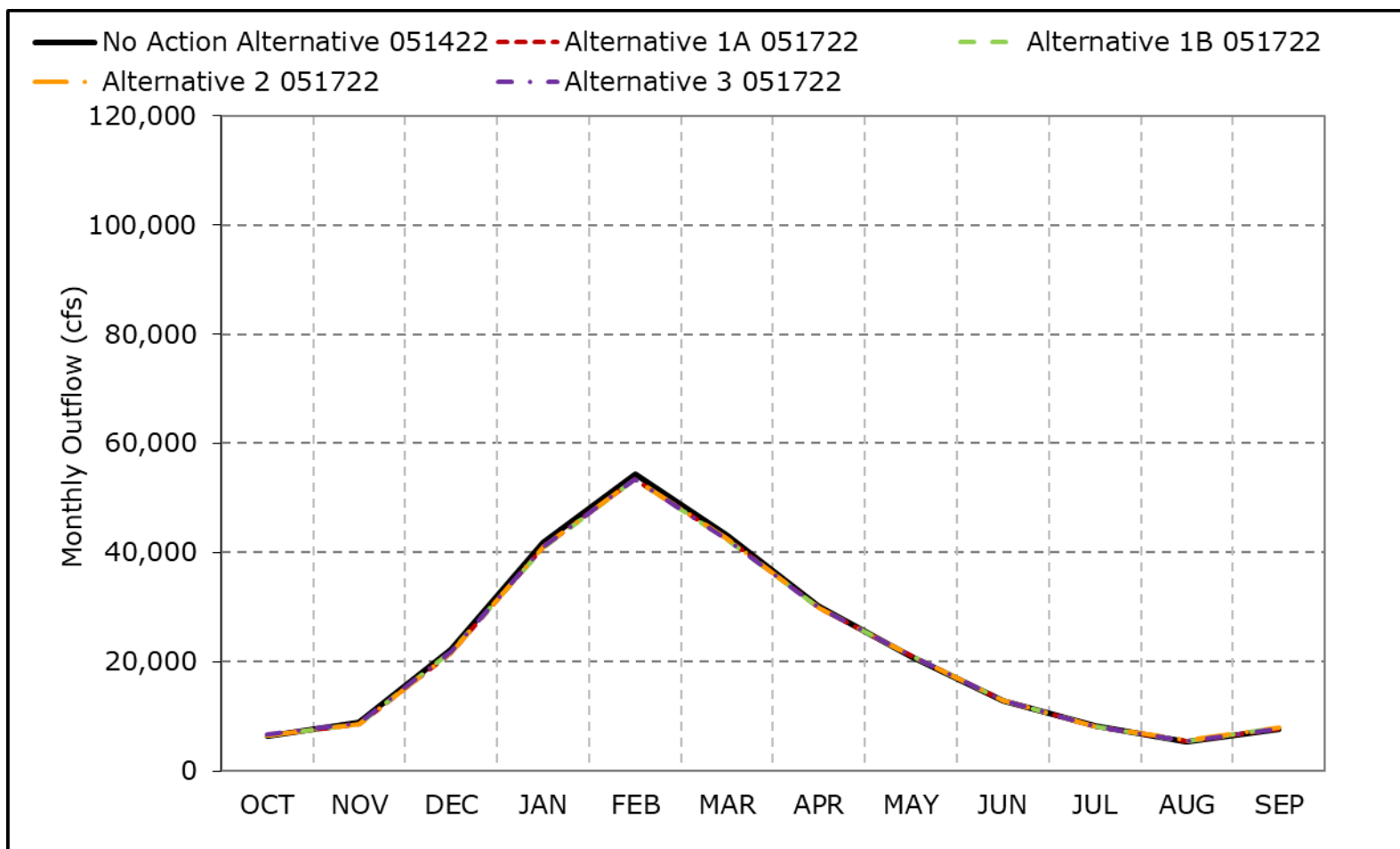
<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Figure 5B3-5-1. Delta Outflow, Long-Term Average Outflow**

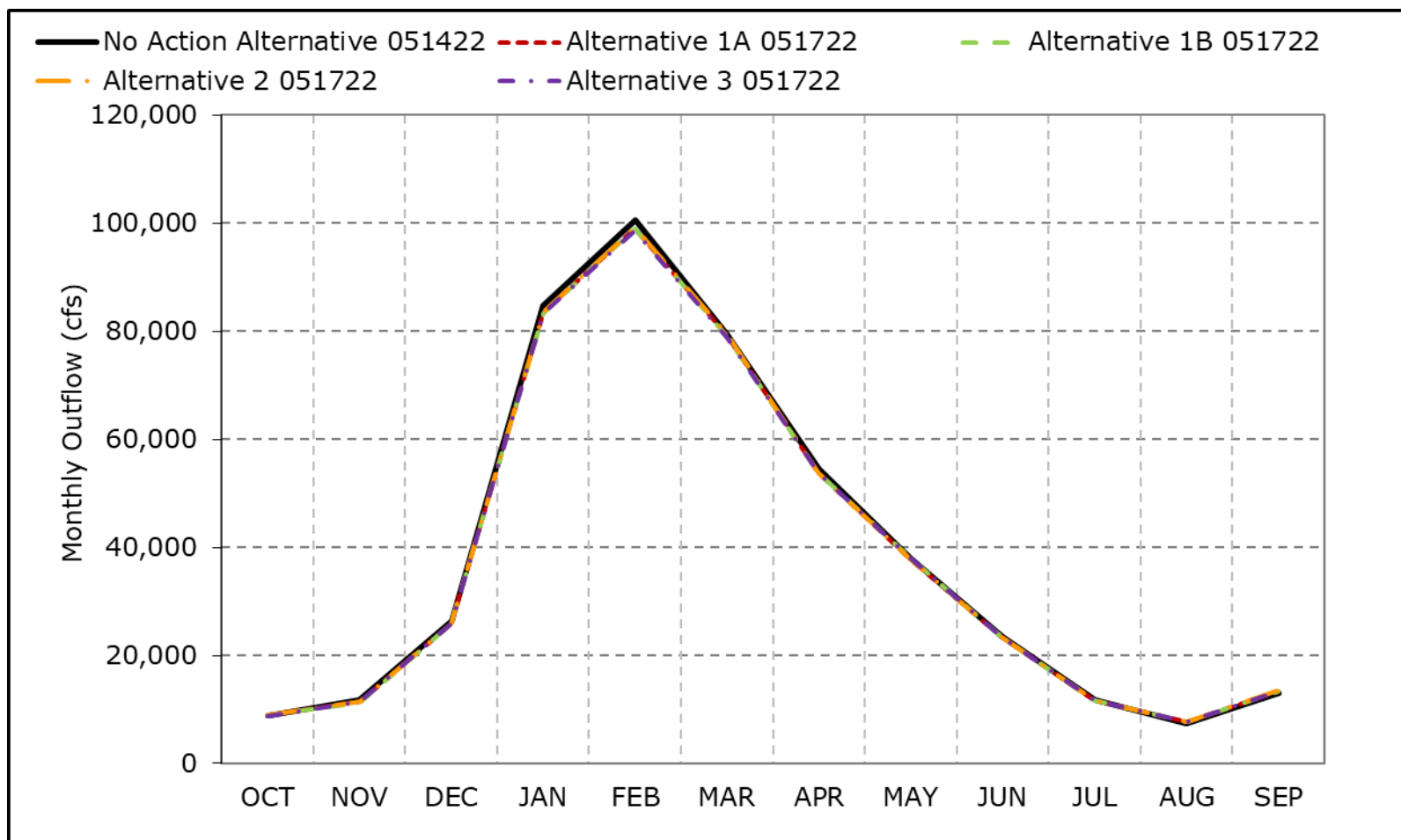


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-2. Delta Outflow, Wet Year Average Outflow**

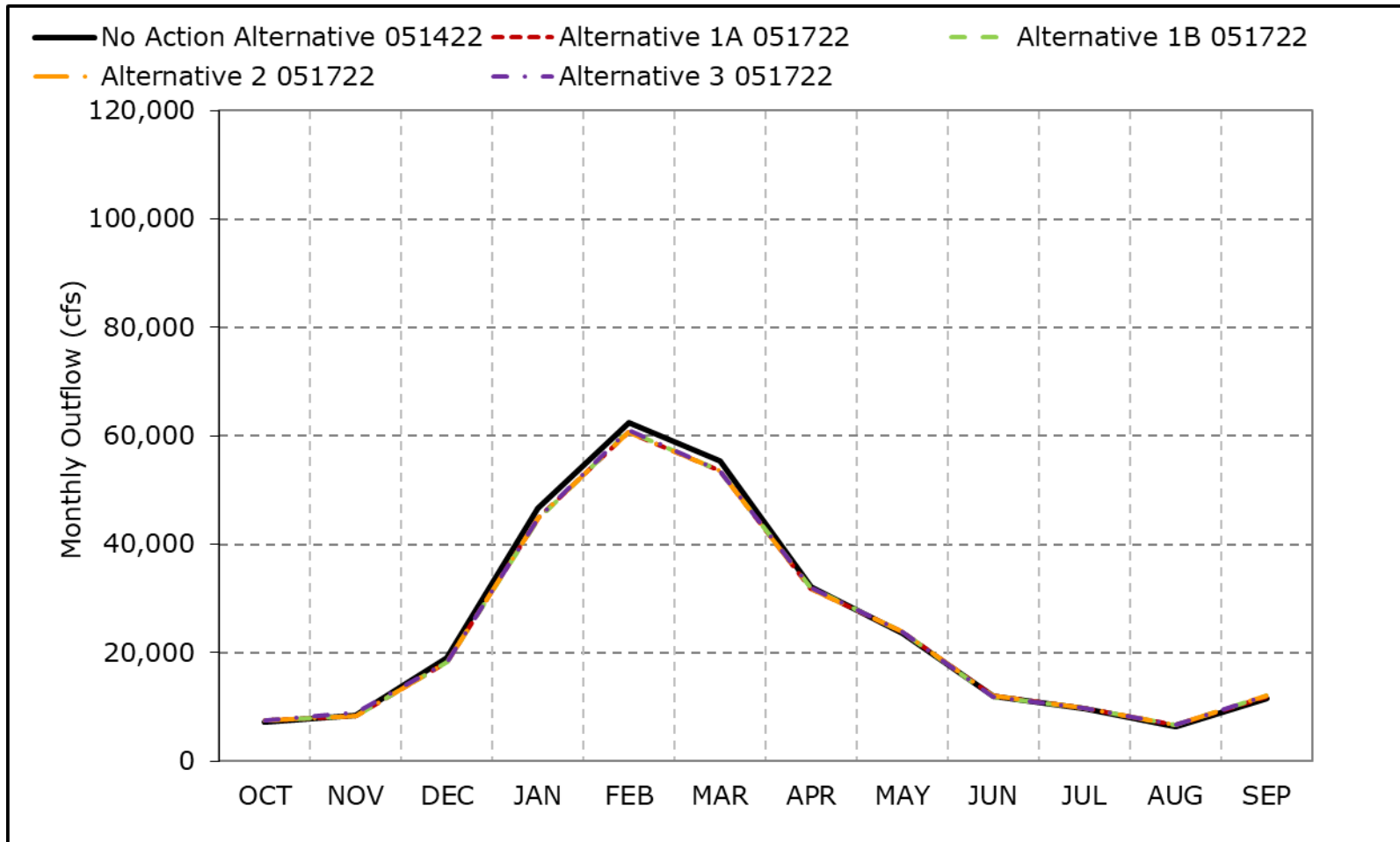


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-3. Delta Outflow, Above Normal Year Average Outflow**

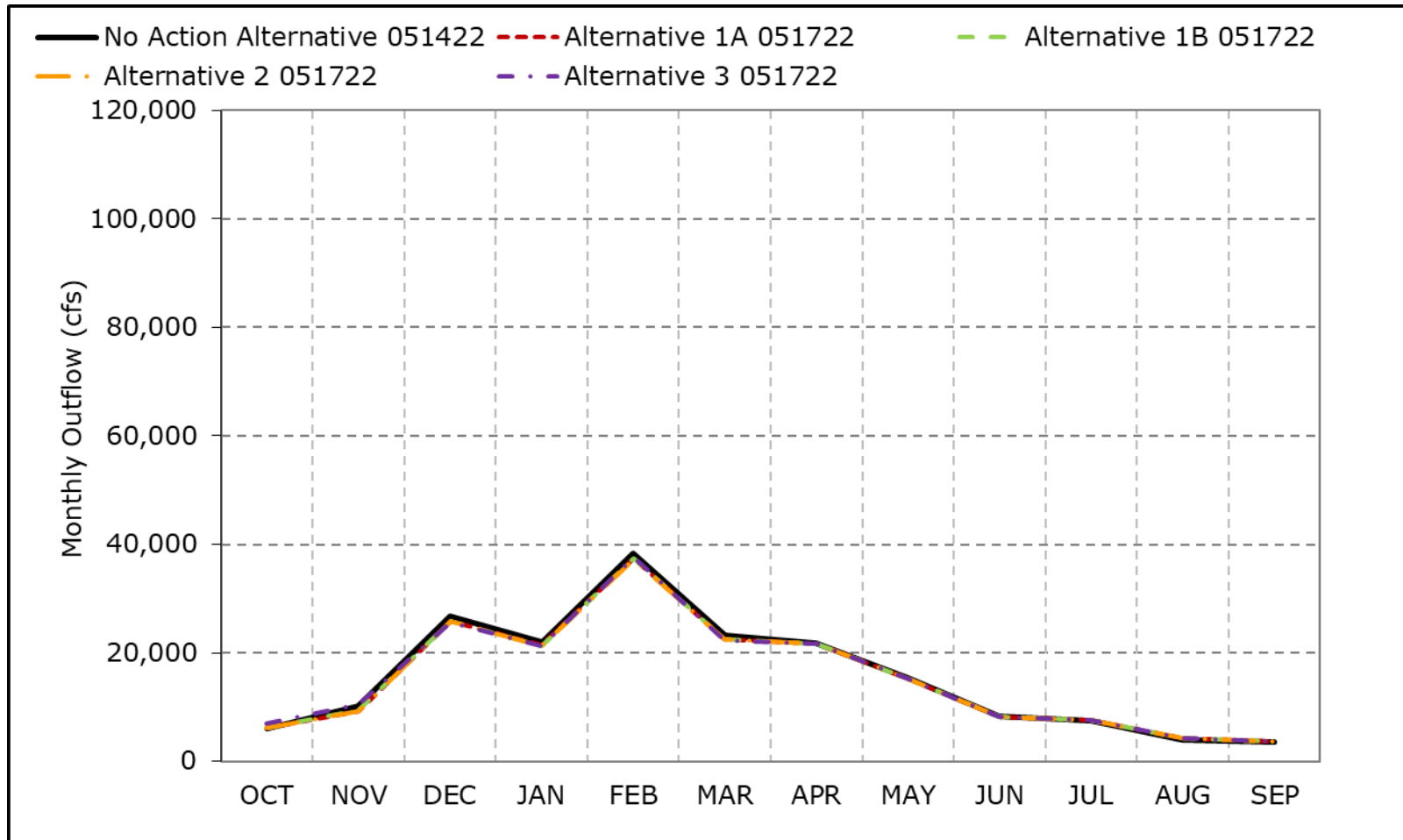


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-4. Delta Outflow, Below Normal Year Average Outflow**

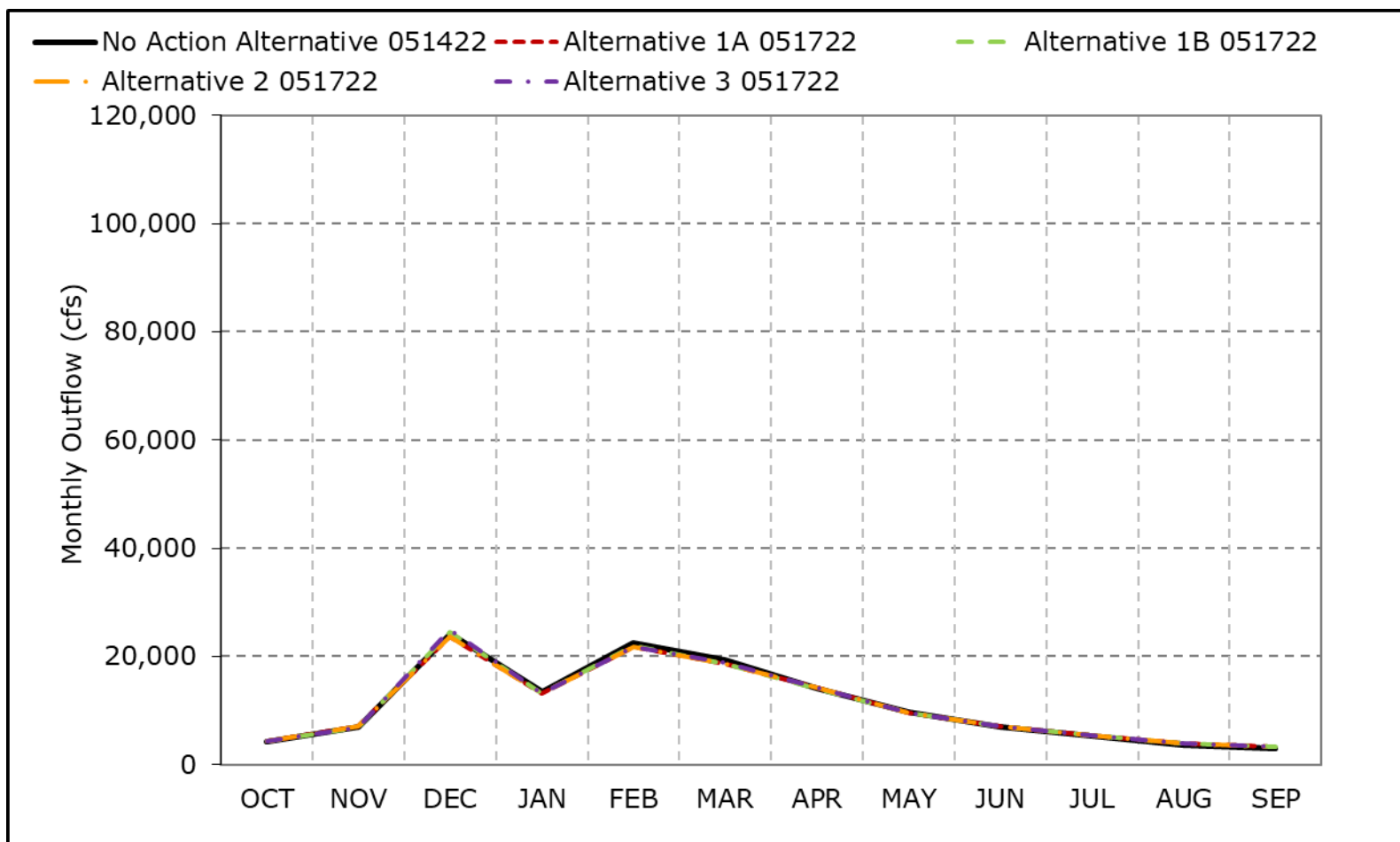


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-5. Delta Outflow, Dry Year Average Outflow**

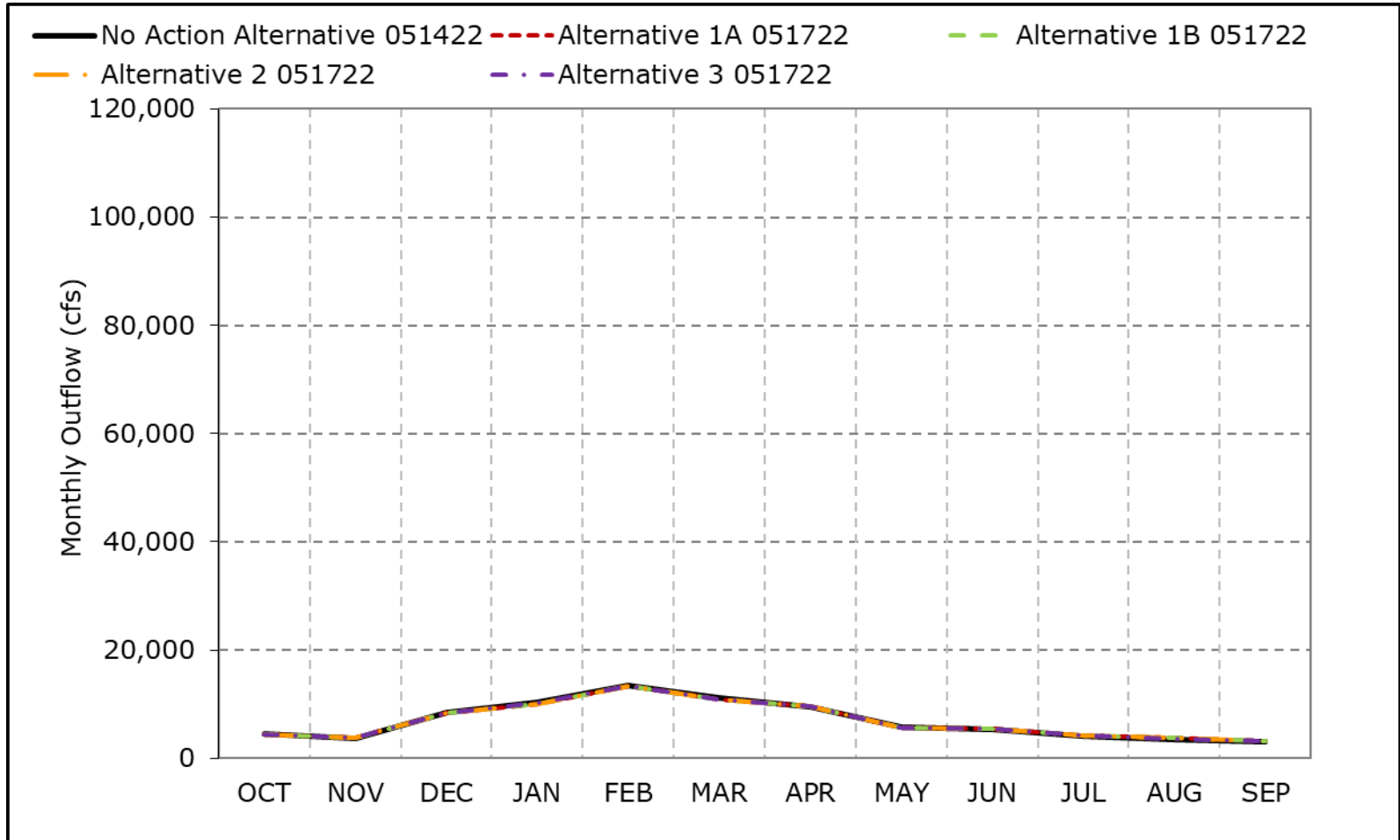


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-6. Delta Outflow, Critical Year Average Outflow**



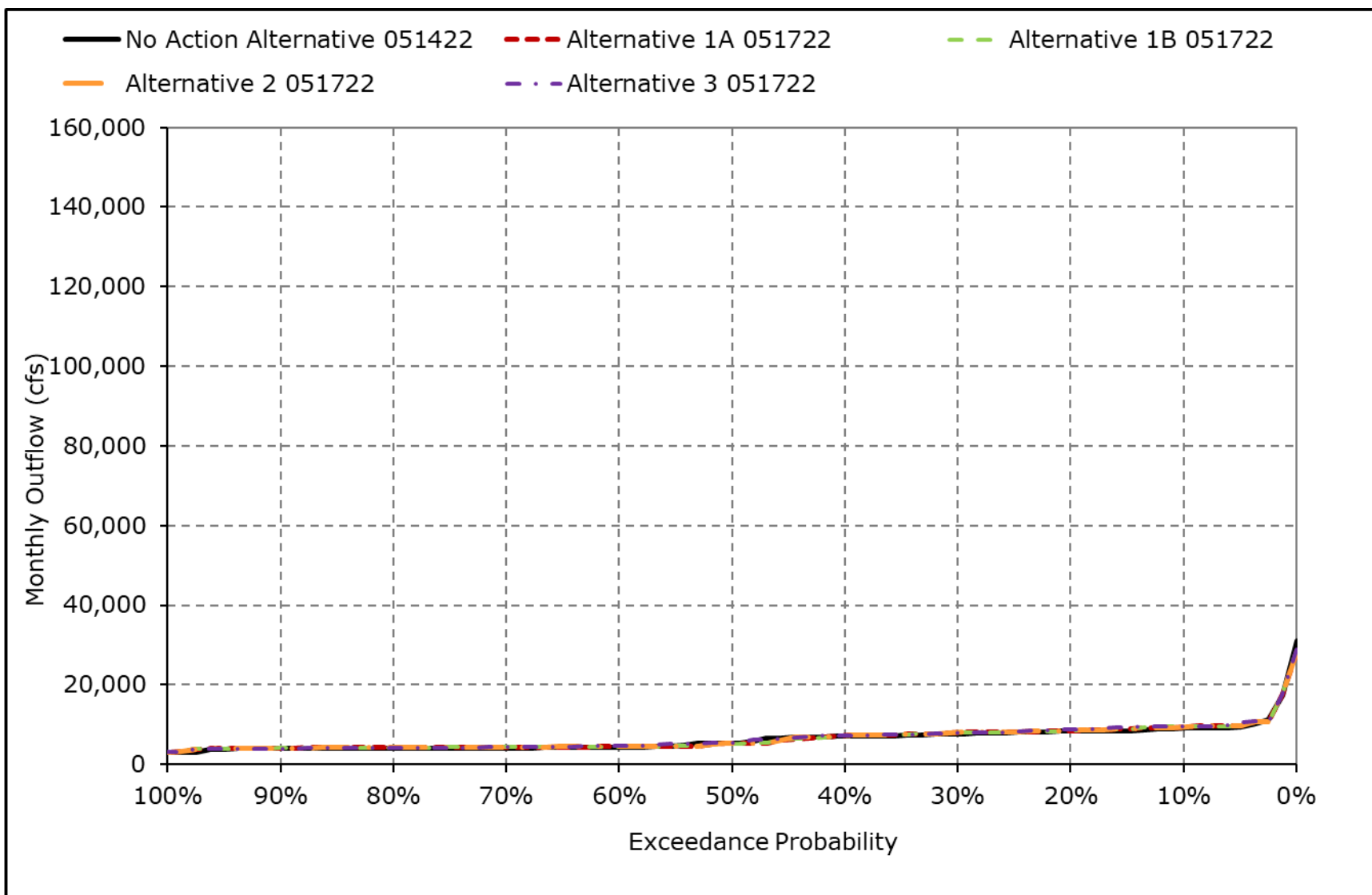
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

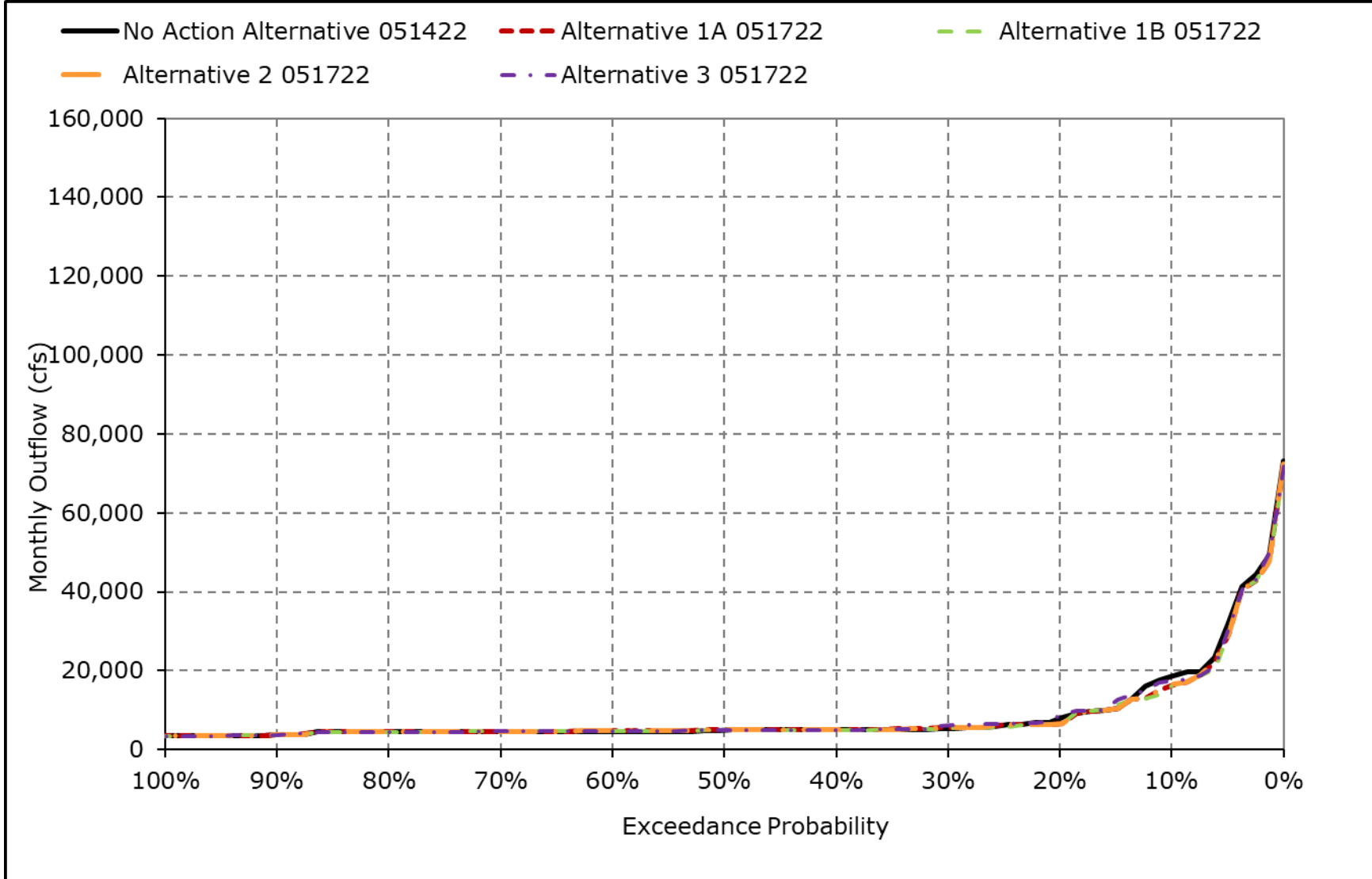


**Figure 5B3-5-7. Delta Outflow, October**



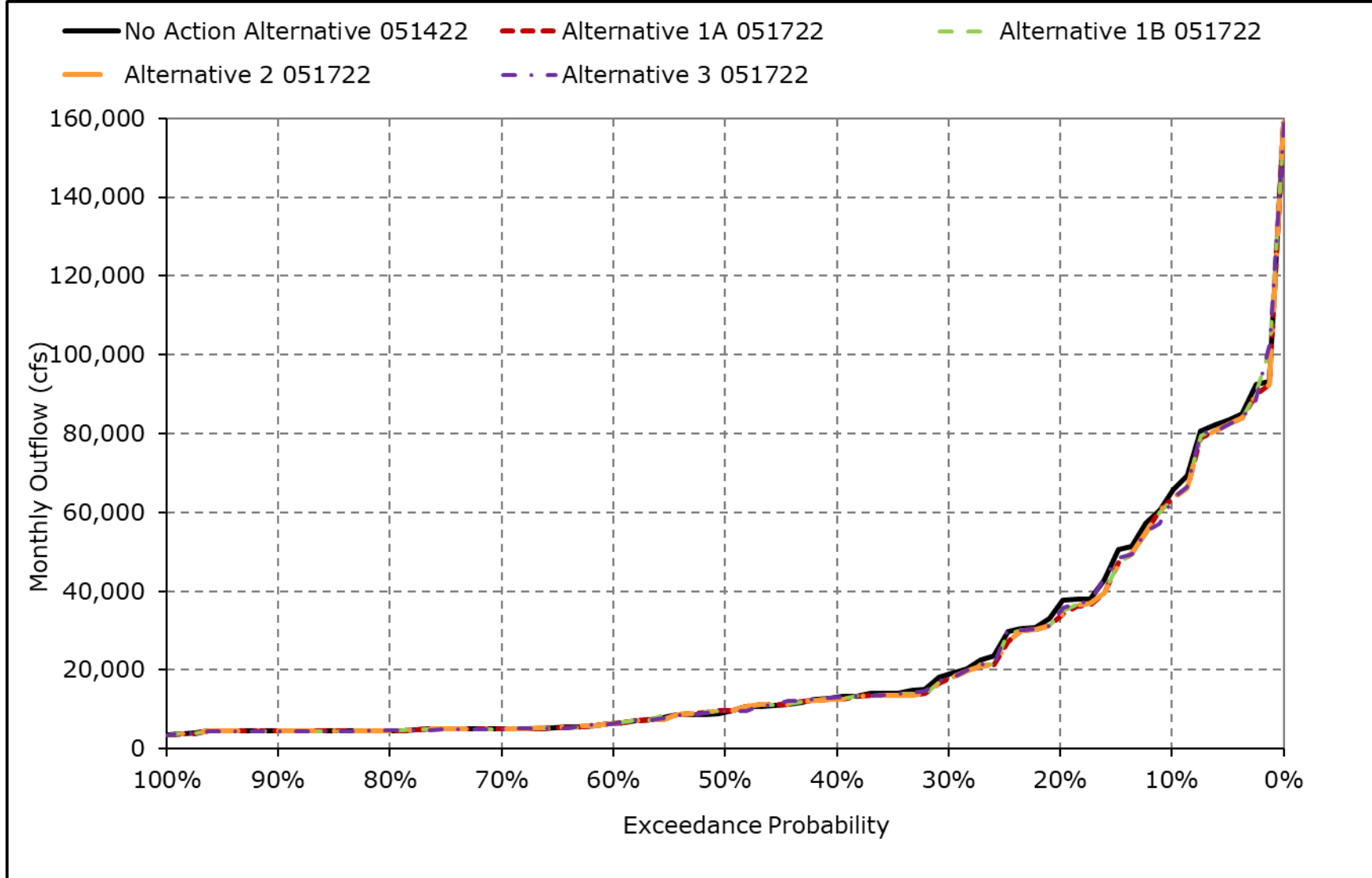
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-8. Delta Outflow, November**



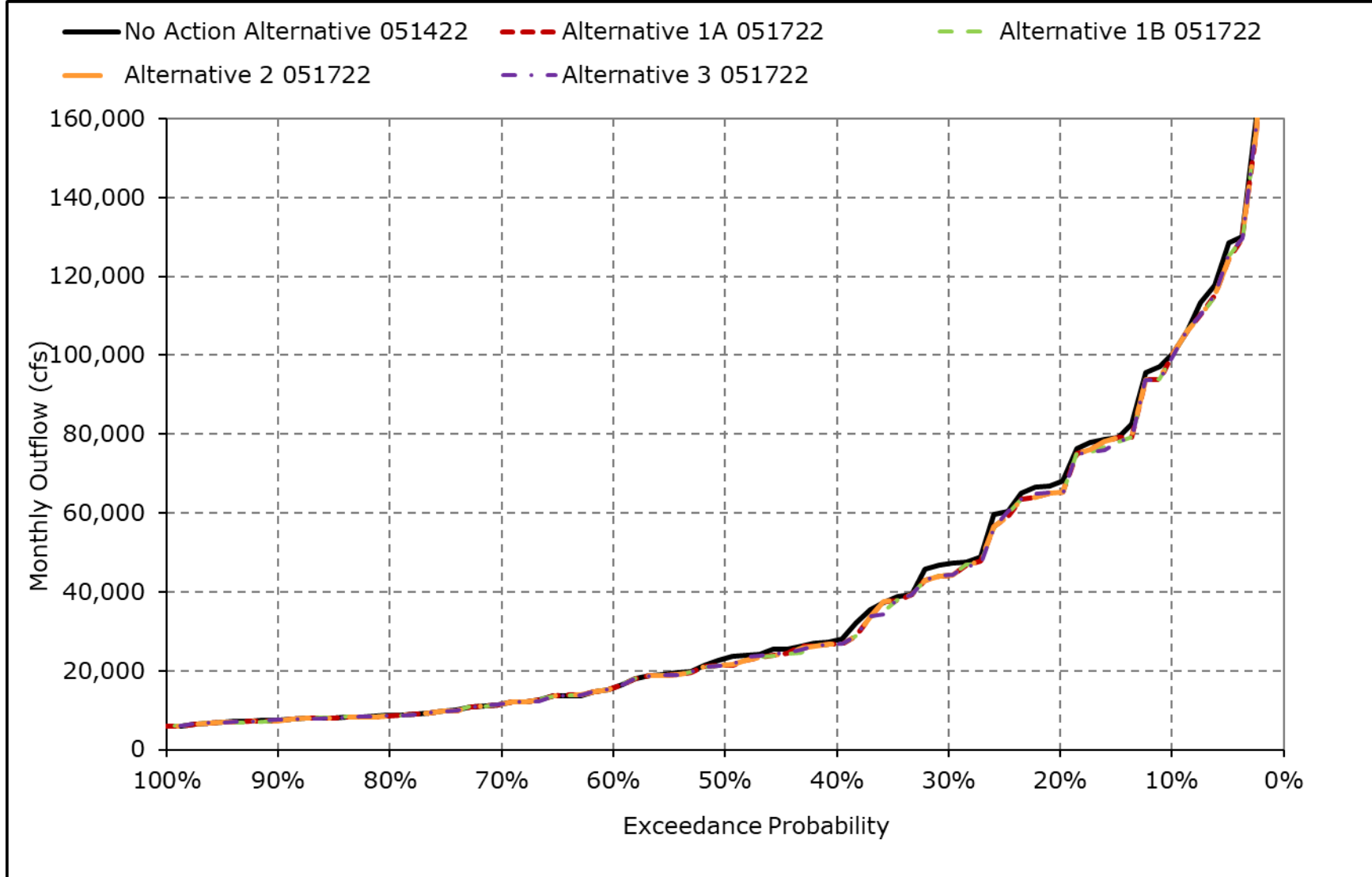
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-9. Delta Outflow, December**



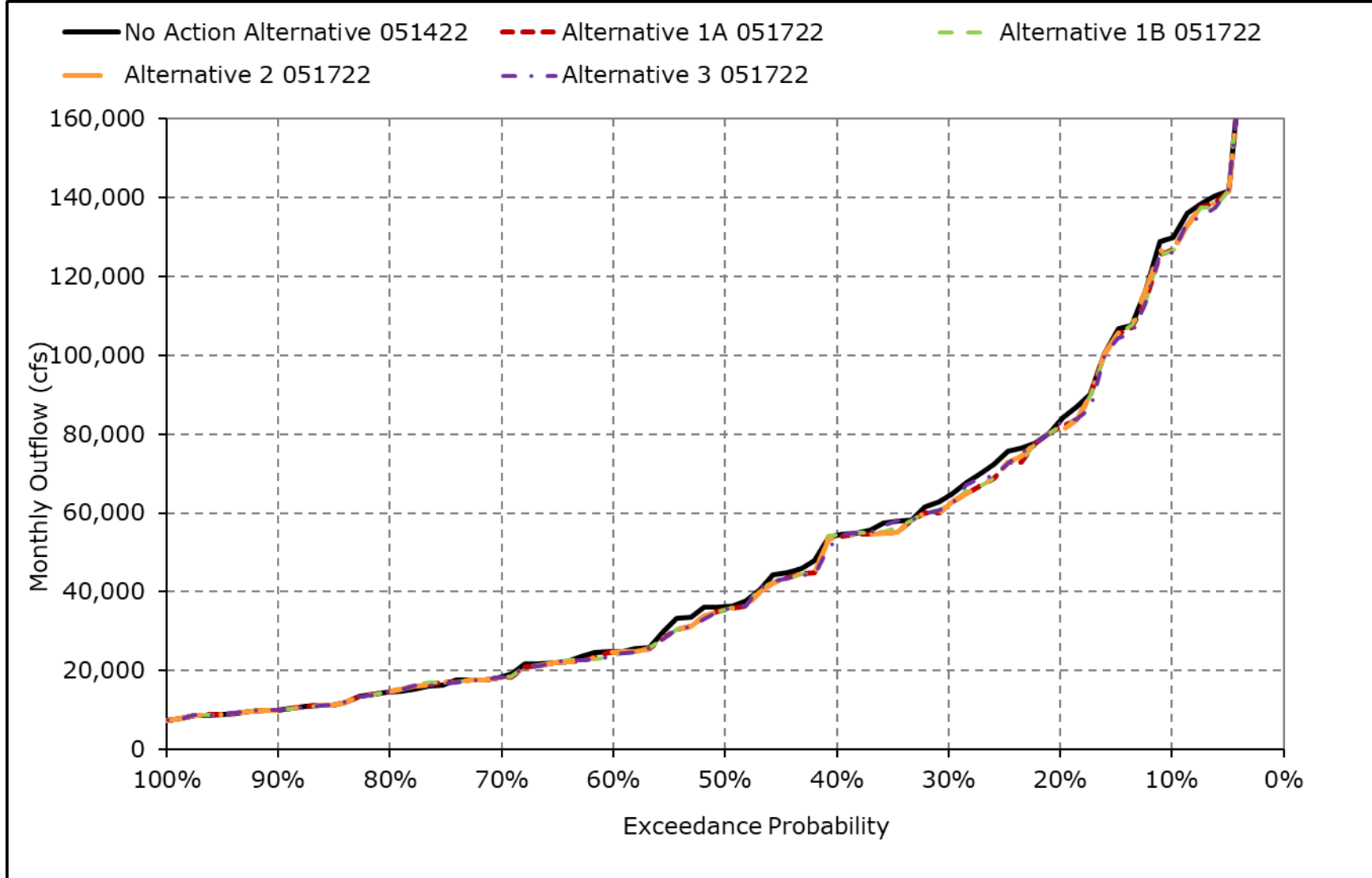
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-10. Delta Outflow, January**



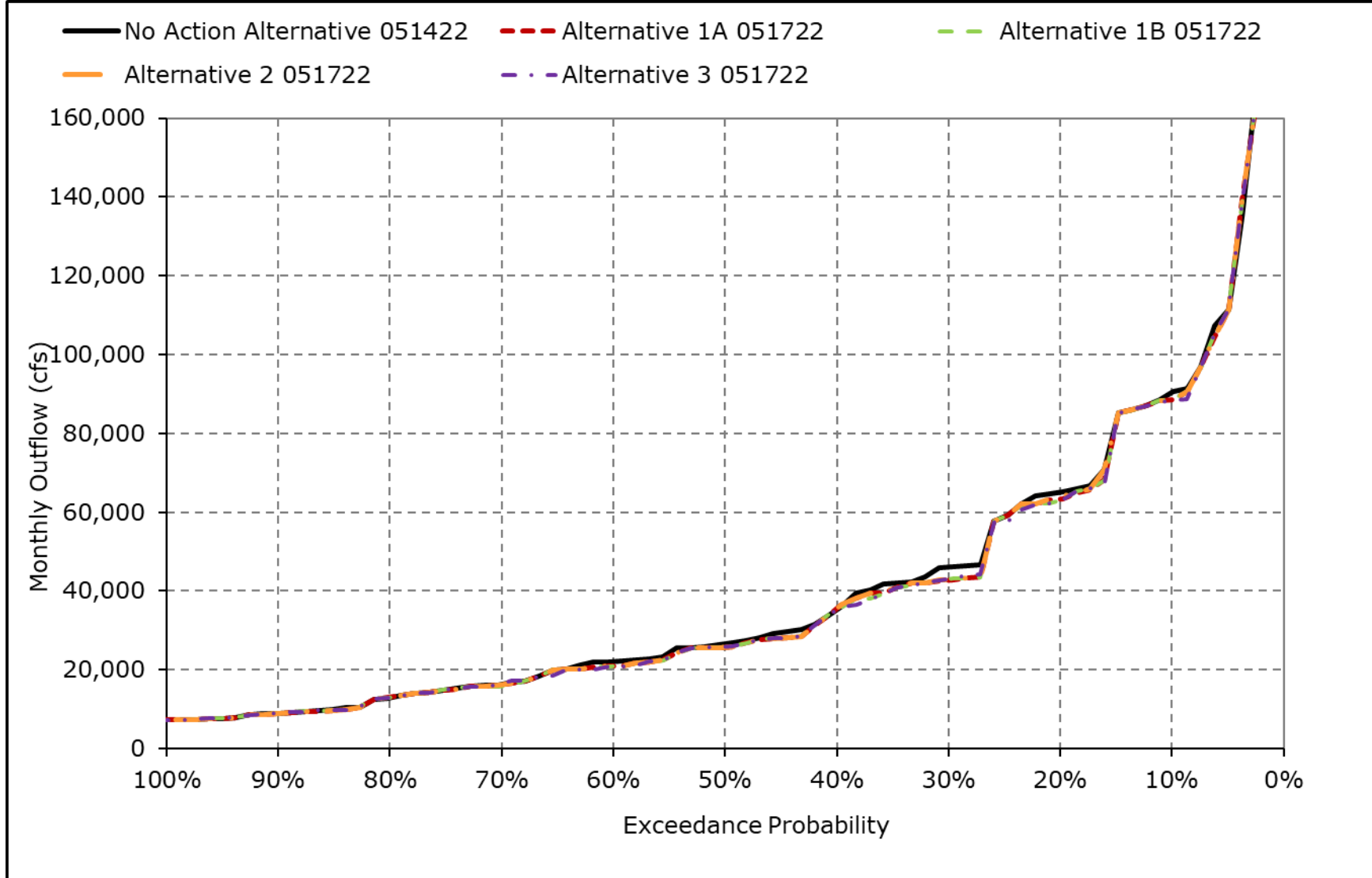
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-11. Delta Outflow, February**



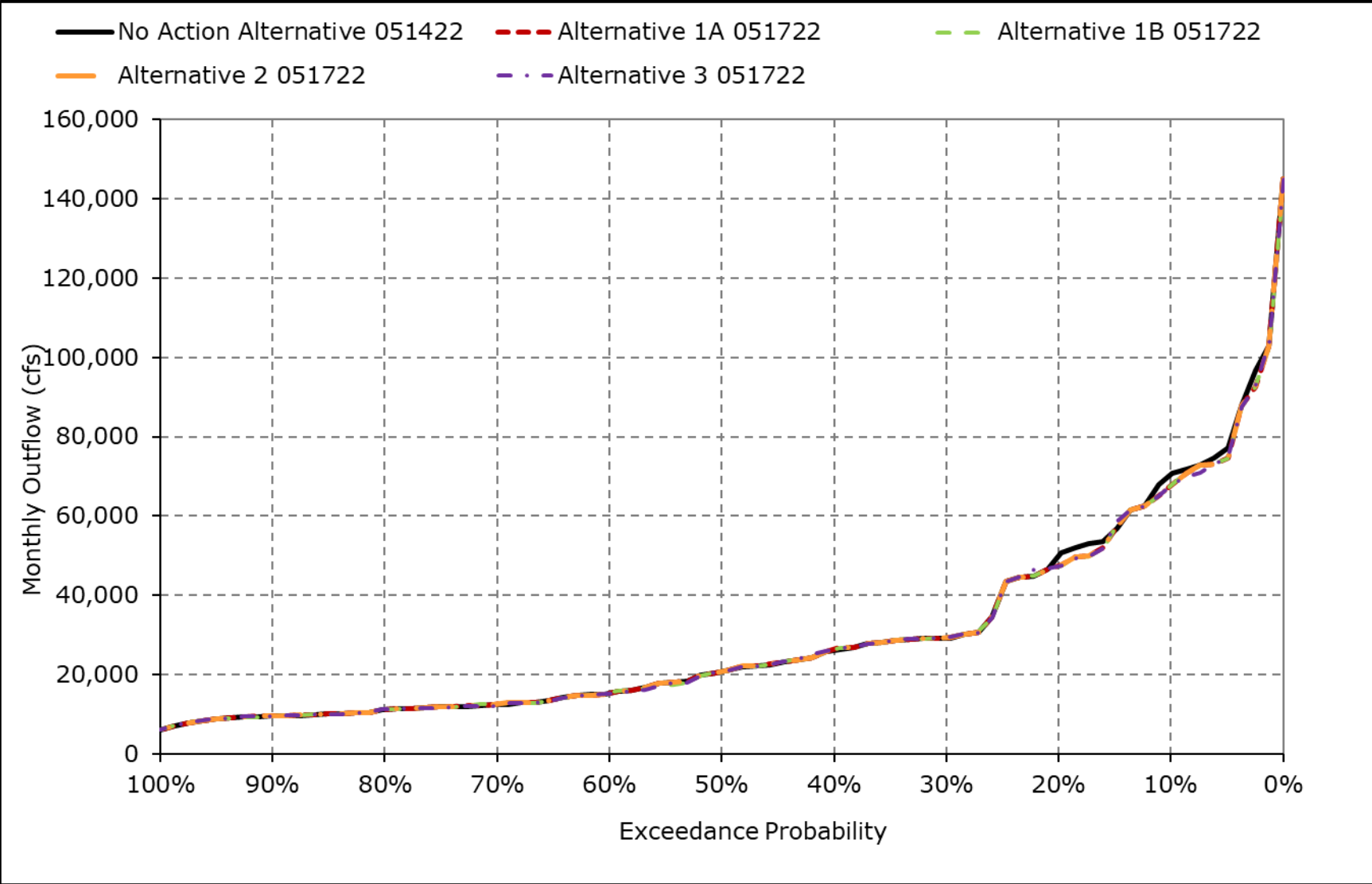
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-12. Delta Outflow, March**



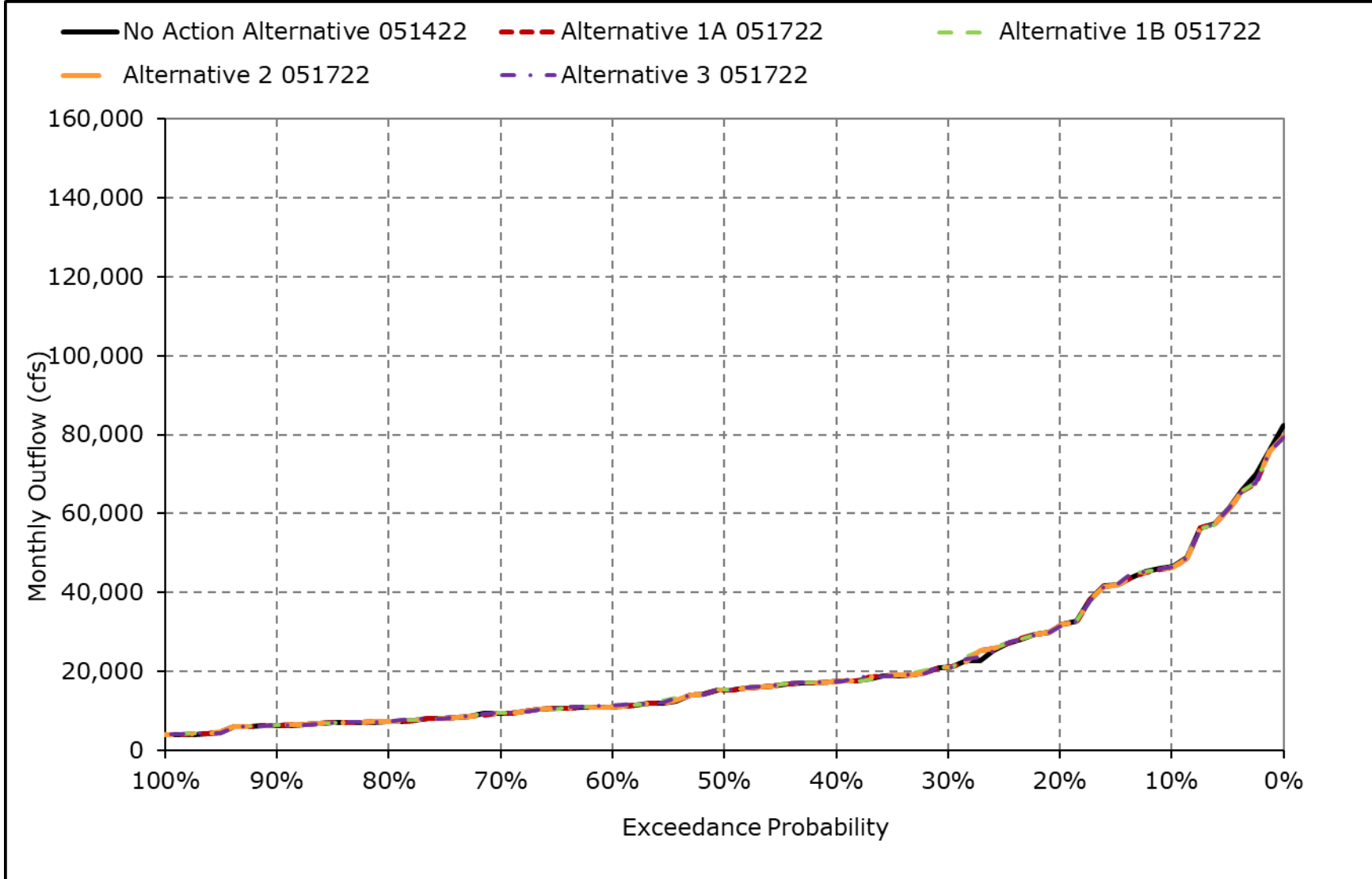
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-13. Delta Outflow, April**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

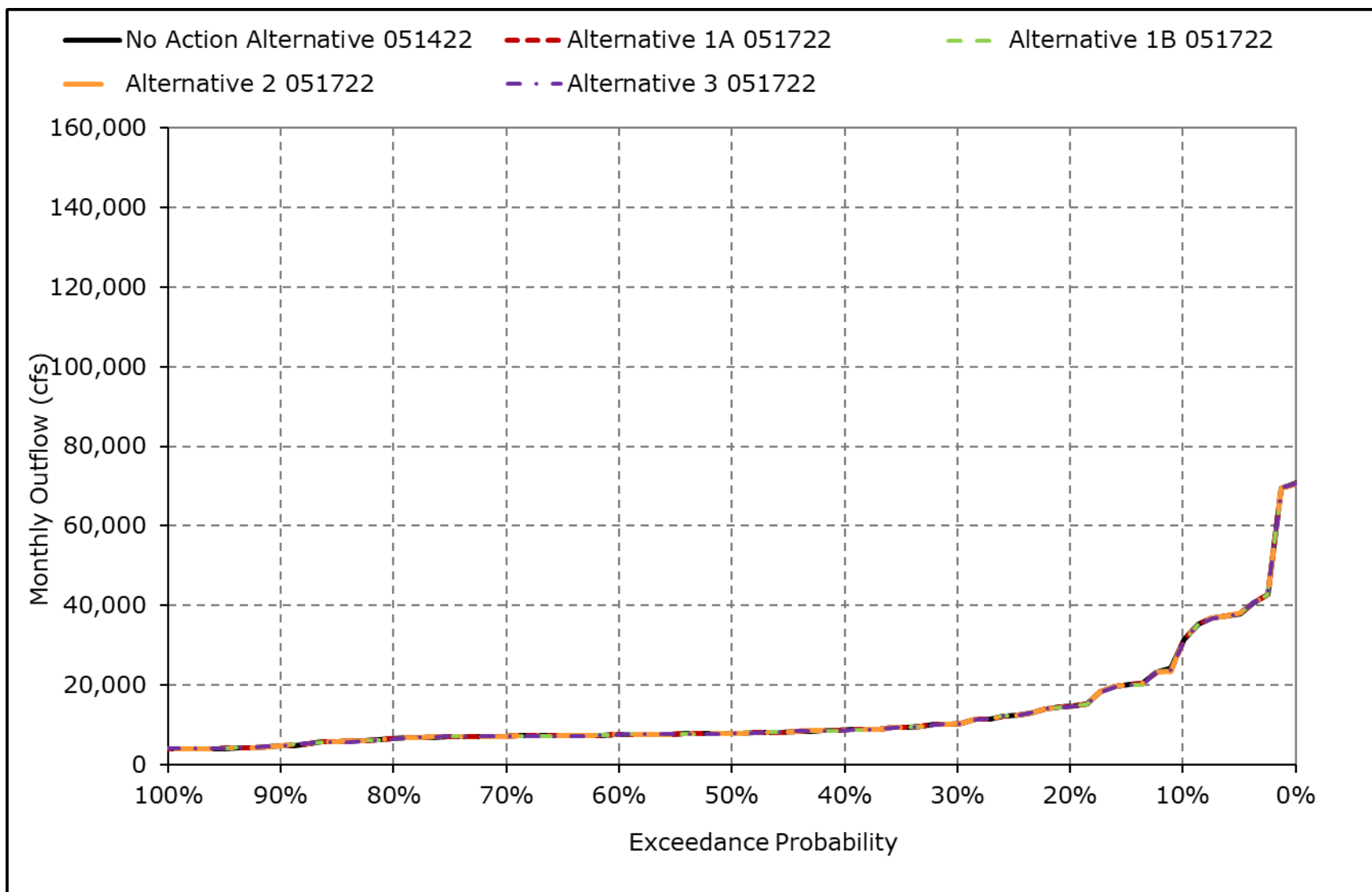
**Figure 5B3-5-14. Delta Outflow, May**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

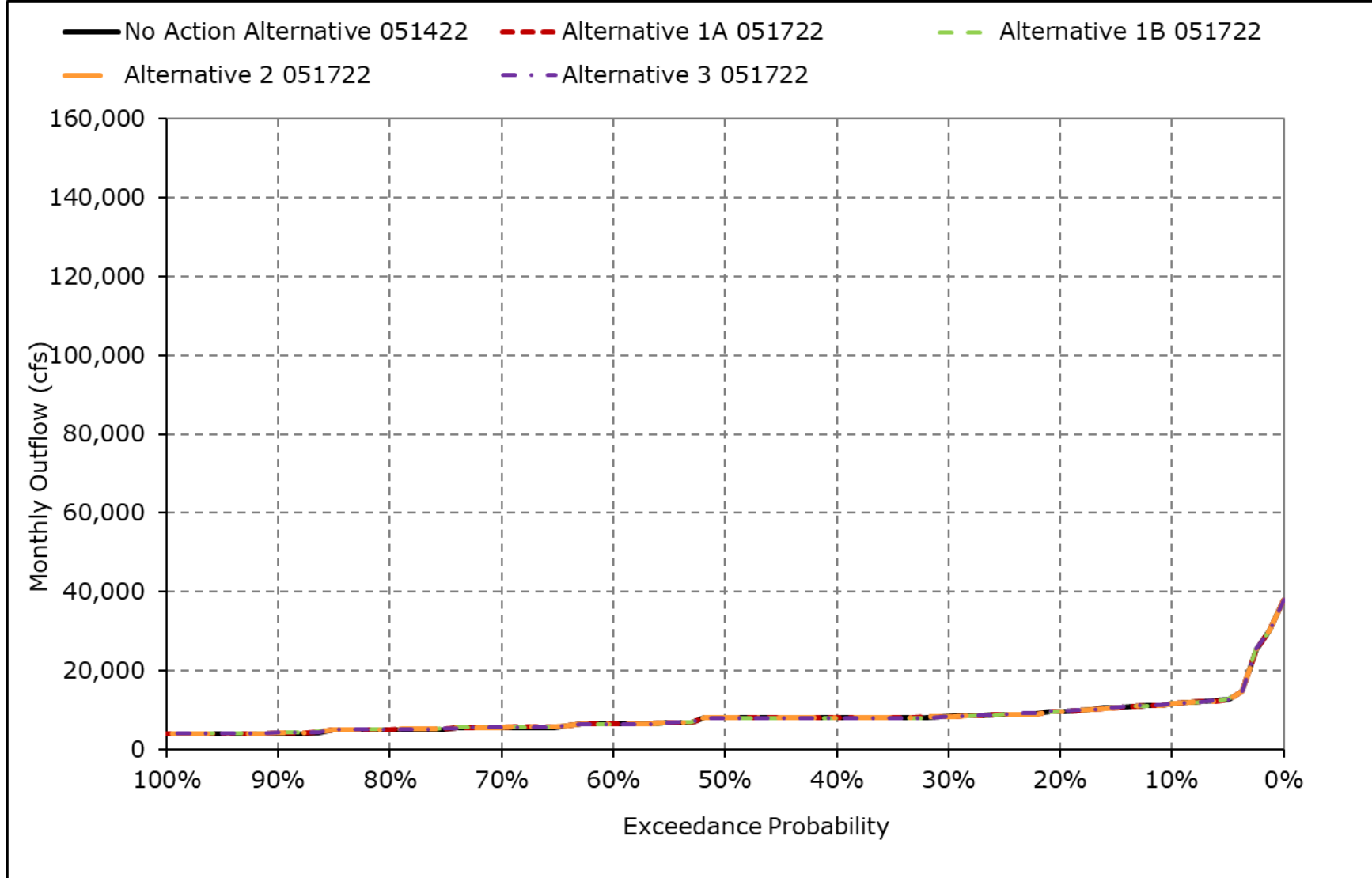


**Figure 5B3-5-15. Delta Outflow, June**



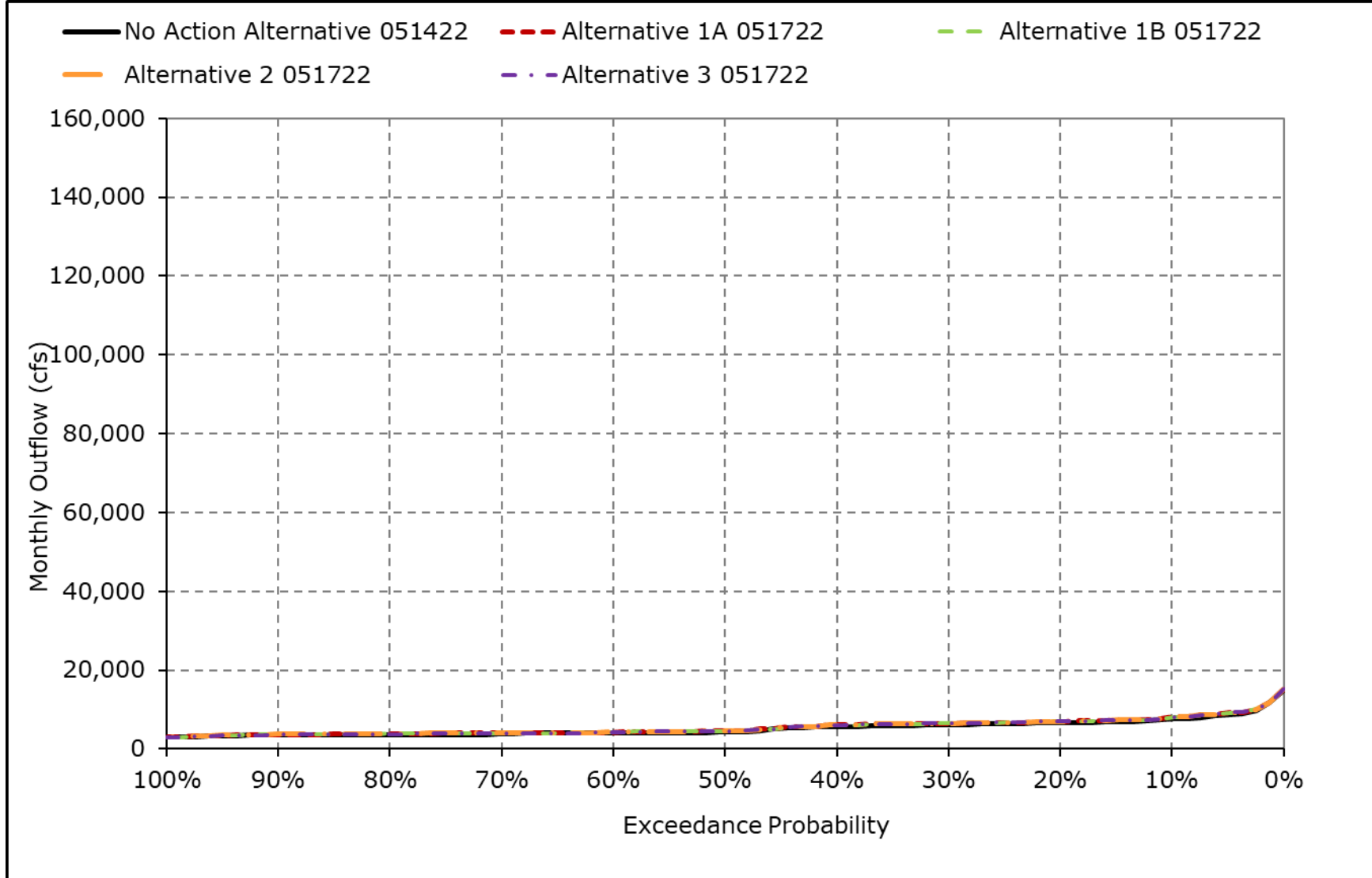
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-16. Delta Outflow, July**



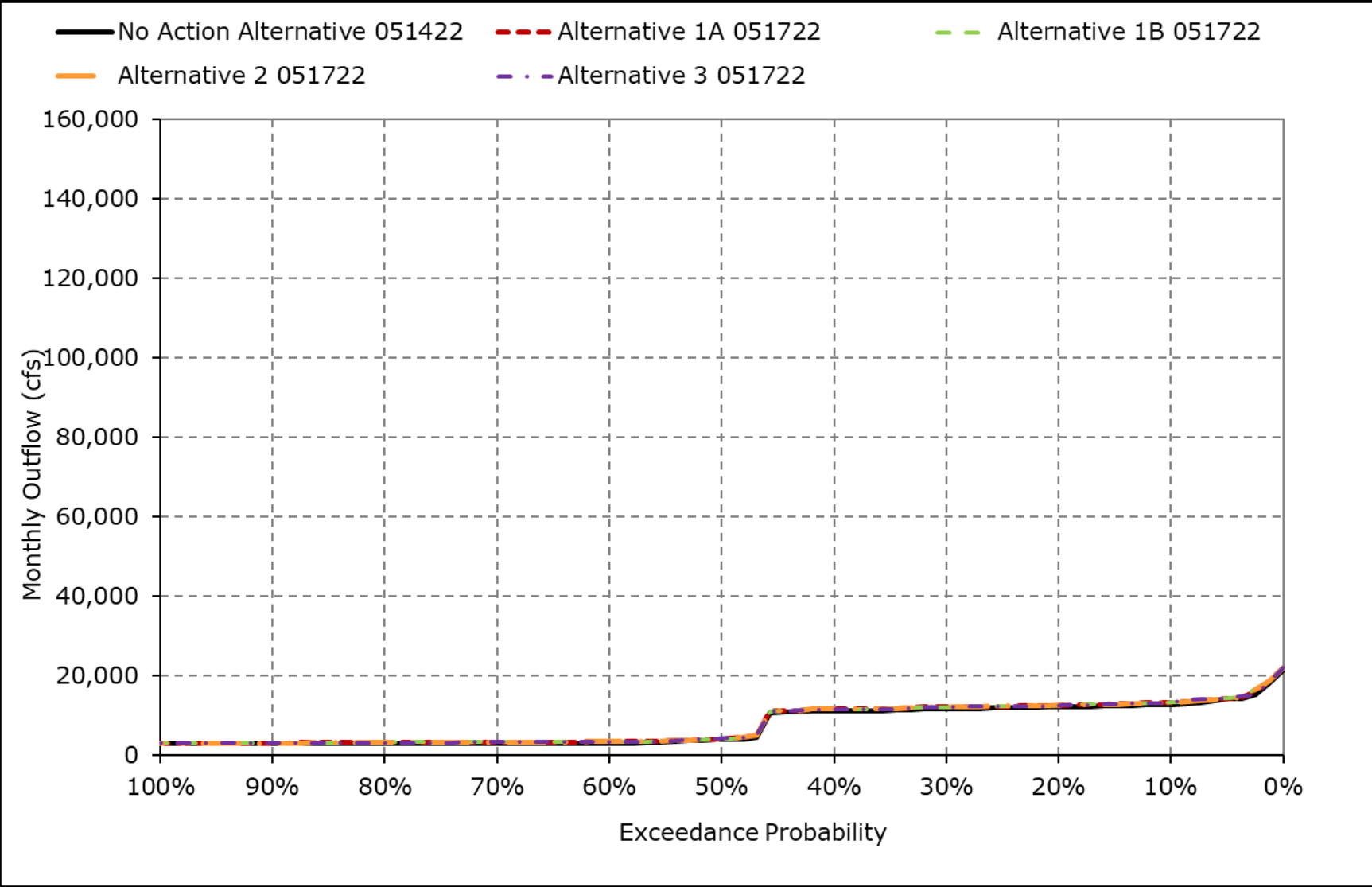
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-17. Delta Outflow, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-5-18. Delta Outflow, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Table 5B3-6-1a. Old and Middle River Flow, No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-2,713	-3,230	-3,857	-3,645	-3,397	-1,315	-574	-1,458	-1,895	-2,931	-3,147	-3,801
<b>20% Exceedance</b>	-3,335	-3,761	-4,760	-3,645	-4,464	-3,258	-952	-1,795	-3,699	-4,841	-4,455	-5,171
<b>30% Exceedance</b>	-3,978	-4,797	-5,290	-4,514	-4,464	-3,258	-1,102	-1,882	-4,468	-7,228	-5,064	-5,854
<b>40% Exceedance</b>	-4,255	-6,366	-5,290	-4,516	-4,464	-3,258	-1,267	-1,971	-5,000	-8,130	-6,839	-6,235
<b>50% Exceedance</b>	-4,785	-7,519	-5,290	-4,516	-4,464	-3,258	-1,465	-2,107	-5,000	-8,901	-7,602	-6,931
<b>60% Exceedance</b>	-5,115	-8,755	-6,690	-5,000	-4,483	-3,258	-1,629	-2,311	-5,000	-9,730	-8,923	-8,109
<b>70% Exceedance</b>	-5,296	-9,148	-9,345	-5,226	-4,483	-3,258	-1,931	-2,453	-5,000	-10,160	-9,309	-8,690
<b>80% Exceedance</b>	-6,310	-9,361	-9,632	-5,226	-5,000	-3,258	-2,125	-2,729	-5,000	-10,434	-9,807	-9,094
<b>90% Exceedance</b>	-7,565	-9,533	-9,800	-5,226	-5,000	-3,500	-2,325	-3,484	-5,000	-11,027	-10,283	-9,411
<b>Full Simulation Period Average<sup>a</sup></b>	-4,861	-6,831	-6,430	-3,955	-3,909	-2,440	-1,207	-2,001	-4,287	-7,953	-7,172	-6,875
<b>Wet Water Years (32%)</b>	-5,812	-8,705	-7,325	-2,458	-2,551	-964	-657	-1,599	-4,415	-8,075	-8,397	-8,045
<b>Above Normal Water Years (15%)</b>	-5,063	-8,733	-7,980	-4,331	-3,879	-2,745	-1,510	-2,418	-4,909	-9,274	-9,078	-8,699
<b>Below Normal Water Years (17%)</b>	-6,428	-6,475	-6,179	-4,686	-4,755	-3,270	-1,352	-2,278	-4,676	-10,462	-9,859	-8,018
<b>Dry Water Years (22%)</b>	-3,609	-5,131	-5,478	-5,017	-4,720	-3,304	-1,590	-2,218	-4,496	-8,126	-4,495	-5,555
<b>Critical Water Years (15%)</b>	-2,649	-3,832	-4,660	-4,376	-4,676	-3,065	-1,354	-1,805	-2,623	-3,178	-3,490	-3,165

**Table 5B3-6-1b. Old and Middle River Flow, Alternative 1A 051722, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-3,260	-3,349	-3,883	-3,645	-3,397	-1,321	-629	-978	-1,897	-3,149	-4,676	-4,539
<b>20% Exceedance</b>	-3,862	-4,308	-4,820	-3,645	-4,464	-3,258	-897	-1,794	-3,704	-5,698	-5,286	-5,824
<b>30% Exceedance</b>	-4,477	-5,492	-5,290	-4,516	-4,464	-3,258	-1,106	-1,886	-4,468	-7,410	-5,915	-6,274
<b>40% Exceedance</b>	-4,792	-6,912	-5,290	-4,516	-4,464	-3,258	-1,235	-1,971	-5,000	-8,628	-7,049	-6,746
<b>50% Exceedance</b>	-5,129	-8,471	-5,290	-4,516	-4,464	-3,258	-1,416	-2,107	-5,000	-9,103	-7,759	-7,137
<b>60% Exceedance</b>	-5,371	-8,875	-6,270	-5,000	-4,483	-3,258	-1,629	-2,309	-5,000	-9,878	-8,936	-8,146
<b>70% Exceedance</b>	-5,842	-9,163	-9,013	-5,226	-4,483	-3,258	-1,965	-2,422	-5,000	-10,323	-9,322	-8,689
<b>80% Exceedance</b>	-6,368	-9,375	-9,631	-5,226	-5,000	-3,258	-2,124	-2,650	-5,000	-10,460	-9,828	-9,079
<b>90% Exceedance</b>	-7,724	-9,533	-9,800	-5,226	-5,000	-3,500	-2,318	-3,484	-5,000	-11,103	-10,360	-9,405
<b>Full Simulation Period Average<sup>a</sup></b>	-5,252	-7,111	-6,406	-3,965	-3,904	-2,427	-1,220	-1,976	-4,291	-8,247	-7,598	-7,159
<b>Wet Water Years (32%)</b>	-5,923	-8,705	-7,319	-2,461	-2,543	-907	-637	-1,617	-4,415	-8,094	-8,392	-8,052
<b>Above Normal Water Years (15%)</b>	-5,129	-8,769	-7,987	-4,331	-3,860	-2,741	-1,641	-2,199	-4,909	-9,312	-9,098	-8,693
<b>Below Normal Water Years (17%)</b>	-6,779	-7,346	-6,157	-4,685	-4,756	-3,270	-1,356	-2,277	-4,711	-10,472	-9,934	-8,163
<b>Dry Water Years (22%)</b>	-4,516	-5,626	-5,325	-5,036	-4,721	-3,304	-1,592	-2,225	-4,487	-8,892	-5,623	-6,293
<b>Critical Water Years (15%)</b>	-3,240	-3,950	-4,757	-4,407	-4,680	-3,108	-1,350	-1,806	-2,620	-3,949	-4,615	-3,817

**Table 5B3-6-1c. Old and Middle River Flow, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-547	-120	-26	0	0	-5	-55	481	-2	-218	-1,529	-739
<b>20% Exceedance</b>	-527	-546	-60	0	0	0	55	1	-5	-858	-832	-653
<b>30% Exceedance</b>	-498	-695	0	-2	0	0	-4	-4	0	-182	-851	-421
<b>40% Exceedance</b>	-537	-546	0	0	0	0	32	0	0	-499	-211	-511
<b>50% Exceedance</b>	-344	-952	0	0	0	0	49	0	0	-202	-157	-206
<b>60% Exceedance</b>	-257	-121	420	0	0	0	1	1	0	-149	-13	-37
<b>70% Exceedance</b>	-546	-16	331	0	0	0	-35	31	0	-162	-12	1
<b>80% Exceedance</b>	-58	-13	1	0	0	0	1	78	0	-26	-22	15
<b>90% Exceedance</b>	-158	0	0	0	0	0	7	0	0	-76	-77	6
<b>Full Simulation Period Average<sup>a</sup></b>	-390	-280	24	-10	4	12	-13	25	-4	-294	-426	-284
<b>Wet Water Years (32%)</b>	-111	0	5	-3	8	57	20	-18	0	-19	5	-6
<b>Above Normal Water Years (15%)</b>	-67	-37	-7	0	19	4	-130	219	0	-38	-19	6
<b>Below Normal Water Years (17%)</b>	-351	-871	22	1	-1	0	-4	1	-36	-11	-75	-145
<b>Dry Water Years (22%)</b>	-907	-494	153	-19	-1	0	-2	-7	9	-765	-1,127	-739
<b>Critical Water Years (15%)</b>	-590	-118	-97	-31	-3	-42	5	-1	3	-772	-1,125	-652

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-6-2a. Old and Middle River Flow, No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-2,713	-3,230	-3,857	-3,645	-3,397	-1,315	-574	-1,458	-1,895	-2,931	-3,147	-3,801
<b>20% Exceedance</b>	-3,335	-3,761	-4,760	-3,645	-4,464	-3,258	-952	-1,795	-3,699	-4,841	-4,455	-5,171
<b>30% Exceedance</b>	-3,978	-4,797	-5,290	-4,514	-4,464	-3,258	-1,102	-1,882	-4,468	-7,228	-5,064	-5,854
<b>40% Exceedance</b>	-4,255	-6,366	-5,290	-4,516	-4,464	-3,258	-1,267	-1,971	-5,000	-8,130	-6,839	-6,235
<b>50% Exceedance</b>	-4,785	-7,519	-5,290	-4,516	-4,464	-3,258	-1,465	-2,107	-5,000	-8,901	-7,602	-6,931
<b>60% Exceedance</b>	-5,115	-8,755	-6,690	-5,000	-4,483	-3,258	-1,629	-2,311	-5,000	-9,730	-8,923	-8,109
<b>70% Exceedance</b>	-5,296	-9,148	-9,345	-5,226	-4,483	-3,258	-1,931	-2,453	-5,000	-10,160	-9,309	-8,690
<b>80% Exceedance</b>	-6,310	-9,361	-9,632	-5,226	-5,000	-3,258	-2,125	-2,729	-5,000	-10,434	-9,807	-9,094
<b>90% Exceedance</b>	-7,565	-9,533	-9,800	-5,226	-5,000	-3,500	-2,325	-3,484	-5,000	-11,027	-10,283	-9,411
<b>Full Simulation Period Average<sup>a</sup></b>	-4,861	-6,831	-6,430	-3,955	-3,909	-2,440	-1,207	-2,001	-4,287	-7,953	-7,172	-6,875
<b>Wet Water Years (32%)</b>	-5,812	-8,705	-7,325	-2,458	-2,551	-964	-657	-1,599	-4,415	-8,075	-8,397	-8,045
<b>Above Normal Water Years (15%)</b>	-5,063	-8,733	-7,980	-4,331	-3,879	-2,745	-1,510	-2,418	-4,909	-9,274	-9,078	-8,699
<b>Below Normal Water Years (17%)</b>	-6,428	-6,475	-6,179	-4,686	-4,755	-3,270	-1,352	-2,278	-4,676	-10,462	-9,859	-8,018
<b>Dry Water Years (22%)</b>	-3,609	-5,131	-5,478	-5,017	-4,720	-3,304	-1,590	-2,218	-4,496	-8,126	-4,495	-5,555
<b>Critical Water Years (15%)</b>	-2,649	-3,832	-4,660	-4,376	-4,676	-3,065	-1,354	-1,805	-2,623	-3,178	-3,490	-3,165

**Table 5B3-6-2b. Old and Middle River Flow, Alternative 1B 051722, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-3,381	-3,413	-3,594	-3,645	-3,397	-1,326	-629	-1,458	-1,885	-3,147	-4,654	-4,511
<b>20% Exceedance</b>	-3,882	-4,270	-4,785	-3,645	-4,464	-3,258	-897	-1,819	-3,756	-5,703	-5,085	-5,824
<b>30% Exceedance</b>	-4,370	-5,573	-5,244	-4,516	-4,464	-3,258	-1,092	-1,895	-4,468	-7,467	-5,729	-6,308
<b>40% Exceedance</b>	-4,784	-7,279	-5,290	-4,516	-4,464	-3,258	-1,242	-1,982	-5,000	-8,628	-7,066	-6,782
<b>50% Exceedance</b>	-5,122	-8,471	-5,290	-4,516	-4,464	-3,258	-1,416	-2,110	-5,000	-9,116	-7,849	-7,182
<b>60% Exceedance</b>	-5,462	-8,875	-5,942	-5,000	-4,483	-3,258	-1,628	-2,306	-5,000	-9,868	-8,936	-8,166
<b>70% Exceedance</b>	-5,834	-9,163	-9,078	-5,226	-4,483	-3,258	-1,966	-2,445	-5,000	-10,249	-9,335	-8,699
<b>80% Exceedance</b>	-6,599	-9,375	-9,620	-5,226	-5,000	-3,258	-2,126	-2,653	-5,000	-10,499	-9,858	-9,098
<b>90% Exceedance</b>	-7,814	-9,533	-9,746	-5,226	-5,000	-3,500	-2,318	-3,484	-5,000	-11,103	-10,347	-9,406
<b>Full Simulation Period Average<sup>a</sup></b>	-5,269	-7,159	-6,268	-3,966	-3,903	-2,454	-1,220	-1,989	-4,290	-8,247	-7,580	-7,168
<b>Wet Water Years (32%)</b>	-5,937	-8,705	-7,310	-2,459	-2,552	-895	-635	-1,611	-4,415	-8,115	-8,417	-8,051
<b>Above Normal Water Years (15%)</b>	-5,191	-8,771	-7,993	-4,331	-3,819	-2,741	-1,646	-2,199	-4,898	-9,313	-9,108	-8,698
<b>Below Normal Water Years (17%)</b>	-6,782	-7,522	-6,190	-4,691	-4,756	-3,273	-1,357	-2,278	-4,703	-10,494	-9,940	-8,215
<b>Dry Water Years (22%)</b>	-4,576	-5,709	-4,687	-5,036	-4,722	-3,304	-1,590	-2,293	-4,509	-8,890	-5,521	-6,310
<b>Critical Water Years (15%)</b>	-3,176	-3,946	-4,749	-4,414	-4,691	-3,311	-1,346	-1,806	-2,602	-3,877	-4,572	-3,791

**Table 5B3-6-2c. Old and Middle River Flow, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-669	-183	264	0	0	-10	-55	0	9	-216	-1,507	-711
<b>20% Exceedance</b>	-547	-509	-25	0	0	0	55	-24	-57	-863	-630	-653
<b>30% Exceedance</b>	-392	-777	47	-2	0	0	10	-12	0	-238	-665	-454
<b>40% Exceedance</b>	-529	-913	0	0	0	0	24	-10	0	-499	-227	-547
<b>50% Exceedance</b>	-337	-952	0	0	0	0	49	-3	0	-214	-246	-251
<b>60% Exceedance</b>	-347	-120	748	0	0	0	1	4	0	-138	-13	-57
<b>70% Exceedance</b>	-538	-16	267	0	0	0	-35	9	0	-89	-26	-9
<b>80% Exceedance</b>	-289	-13	12	0	0	0	-1	76	0	-64	-51	-4
<b>90% Exceedance</b>	-249	0	54	0	0	0	7	0	0	-76	-64	5
<b>Full Simulation Period Average<sup>a</sup></b>	-408	-328	161	-11	6	-14	-13	12	-3	-294	-408	-293
<b>Wet Water Years (32%)</b>	-124	0	14	-1	-2	68	22	-11	0	-40	-21	-5
<b>Above Normal Water Years (15%)</b>	-128	-38	-13	0	60	4	-136	219	11	-38	-30	1
<b>Below Normal Water Years (17%)</b>	-353	-1,047	-12	-5	-1	-3	-5	-1	-27	-32	-80	-197
<b>Dry Water Years (22%)</b>	-967	-578	792	-19	-2	0	-75	-14	-14	-764	-1,026	-755
<b>Critical Water Years (15%)</b>	-527	-114	-89	-38	-15	-245	9	-1	21	-700	-1,082	-626

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-6-3a. Old and Middle River Flow, No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-2,713	-3,230	-3,857	-3,645	-3,397	-1,315	-574	-1,458	-1,895	-2,931	-3,147	-3,801
<b>20% Exceedance</b>	-3,335	-3,761	-4,760	-3,645	-4,464	-3,258	-952	-1,795	-3,699	-4,841	-4,455	-5,171
<b>30% Exceedance</b>	-3,978	-4,797	-5,290	-4,514	-4,464	-3,258	-1,102	-1,882	-4,468	-7,228	-5,064	-5,854
<b>40% Exceedance</b>	-4,255	-6,366	-5,290	-4,516	-4,464	-3,258	-1,267	-1,971	-5,000	-8,130	-6,839	-6,235
<b>50% Exceedance</b>	-4,785	-7,519	-5,290	-4,516	-4,464	-3,258	-1,465	-2,107	-5,000	-8,901	-7,602	-6,931
<b>60% Exceedance</b>	-5,115	-8,755	-6,690	-5,000	-4,483	-3,258	-1,629	-2,311	-5,000	-9,730	-8,923	-8,109
<b>70% Exceedance</b>	-5,296	-9,148	-9,345	-5,226	-4,483	-3,258	-1,931	-2,453	-5,000	-10,160	-9,309	-8,690
<b>80% Exceedance</b>	-6,310	-9,361	-9,632	-5,226	-5,000	-3,258	-2,125	-2,729	-5,000	-10,434	-9,807	-9,094
<b>90% Exceedance</b>	-7,565	-9,533	-9,800	-5,226	-5,000	-3,500	-2,325	-3,484	-5,000	-11,027	-10,283	-9,411
<b>Full Simulation Period Average<sup>a</sup></b>	-4,861	-6,831	-6,430	-3,955	-3,909	-2,440	-1,207	-2,001	-4,287	-7,953	-7,172	-6,875
<b>Wet Water Years (32%)</b>	-5,812	-8,705	-7,325	-2,458	-2,551	-964	-657	-1,599	-4,415	-8,075	-8,397	-8,045
<b>Above Normal Water Years (15%)</b>	-5,063	-8,733	-7,980	-4,331	-3,879	-2,745	-1,510	-2,418	-4,909	-9,274	-9,078	-8,699
<b>Below Normal Water Years (17%)</b>	-6,428	-6,475	-6,179	-4,686	-4,755	-3,270	-1,352	-2,278	-4,676	-10,462	-9,859	-8,018
<b>Dry Water Years (22%)</b>	-3,609	-5,131	-5,478	-5,017	-4,720	-3,304	-1,590	-2,218	-4,496	-8,126	-4,495	-5,555
<b>Critical Water Years (15%)</b>	-2,649	-3,832	-4,660	-4,376	-4,676	-3,065	-1,354	-1,805	-2,623	-3,178	-3,490	-3,165

**Table 5B3-6-3b. Old and Middle River Flow, Alternative 2 051722, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-3,268	-3,350	-3,834	-3,645	-3,397	-1,320	-629	-978	-1,897	-3,156	-4,674	-4,512
<b>20% Exceedance</b>	-3,864	-4,346	-4,824	-3,645	-4,464	-3,258	-897	-1,794	-3,706	-5,697	-5,117	-5,626
<b>30% Exceedance</b>	-4,476	-5,488	-5,290	-4,516	-4,464	-3,258	-1,106	-1,886	-4,468	-7,410	-5,920	-6,274
<b>40% Exceedance</b>	-4,770	-6,915	-5,290	-4,516	-4,464	-3,258	-1,235	-1,971	-5,000	-8,628	-6,929	-6,744
<b>50% Exceedance</b>	-5,086	-8,471	-5,290	-4,516	-4,464	-3,258	-1,416	-2,107	-5,000	-9,118	-7,759	-7,183
<b>60% Exceedance</b>	-5,357	-8,875	-6,235	-5,000	-4,483	-3,258	-1,629	-2,309	-5,000	-9,910	-8,936	-8,073
<b>70% Exceedance</b>	-5,826	-9,163	-9,013	-5,226	-4,483	-3,258	-1,965	-2,422	-5,000	-10,322	-9,355	-8,689
<b>80% Exceedance</b>	-6,368	-9,375	-9,631	-5,226	-5,000	-3,258	-2,124	-2,650	-5,000	-10,460	-9,828	-9,079
<b>90% Exceedance</b>	-7,690	-9,533	-9,800	-5,226	-5,000	-3,500	-2,318	-3,484	-5,000	-11,103	-10,360	-9,405
<b>Full Simulation Period Average<sup>a</sup></b>	-5,227	-7,105	-6,398	-3,965	-3,902	-2,428	-1,221	-1,976	-4,291	-8,248	-7,583	-7,127
<b>Wet Water Years (32%)</b>	-5,908	-8,705	-7,319	-2,460	-2,537	-906	-637	-1,617	-4,415	-8,094	-8,392	-8,052
<b>Above Normal Water Years (15%)</b>	-5,130	-8,770	-7,986	-4,331	-3,860	-2,741	-1,649	-2,199	-4,909	-9,312	-9,097	-8,693
<b>Below Normal Water Years (17%)</b>	-6,750	-7,345	-6,153	-4,685	-4,756	-3,270	-1,355	-2,277	-4,708	-10,510	-9,974	-8,138
<b>Dry Water Years (22%)</b>	-4,486	-5,581	-5,327	-5,037	-4,721	-3,304	-1,592	-2,225	-4,487	-8,891	-5,616	-6,234
<b>Critical Water Years (15%)</b>	-3,186	-3,979	-4,707	-4,410	-4,680	-3,119	-1,350	-1,807	-2,623	-3,916	-4,475	-3,715

**Table 5B3-6-3c. Old and Middle River Flow, Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-555	-121	23	0	0	-4	-55	481	-2	-225	-1,527	-711
<b>20% Exceedance</b>	-529	-584	-64	0	0	0	55	1	-6	-856	-662	-455
<b>30% Exceedance</b>	-498	-691	0	-2	0	0	-4	-3	0	-182	-856	-421
<b>40% Exceedance</b>	-515	-549	0	0	0	0	32	0	0	-499	-90	-509
<b>50% Exceedance</b>	-302	-952	0	0	0	0	49	0	0	-217	-157	-251
<b>60% Exceedance</b>	-242	-120	455	0	0	0	1	1	0	-180	-13	36
<b>70% Exceedance</b>	-530	-16	331	0	0	0	-35	31	0	-162	-46	1
<b>80% Exceedance</b>	-58	-13	1	0	0	0	1	78	0	-26	-22	15
<b>90% Exceedance</b>	-125	0	0	0	0	0	7	0	0	-76	-77	6
<b>Full Simulation Period Average<sup>a</sup></b>	-366	-274	31	-10	6	11	-14	25	-4	-296	-411	-252
<b>Wet Water Years (32%)</b>	-96	0	5	-2	14	58	20	-18	0	-19	5	-7
<b>Above Normal Water Years (15%)</b>	-67	-37	-6	0	20	4	-138	219	0	-38	-19	6
<b>Below Normal Water Years (17%)</b>	-322	-869	25	1	-1	1	-3	1	-32	-48	-115	-120
<b>Dry Water Years (22%)</b>	-877	-450	151	-20	-1	0	-2	-7	8	-765	-1,120	-680
<b>Critical Water Years (15%)</b>	-536	-147	-47	-34	-4	-54	4	-2	0	-739	-985	-550

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-6-4a. Old and Middle River Flow, No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-2,713	-3,230	-3,857	-3,645	-3,397	-1,315	-574	-1,458	-1,895	-2,931	-3,147	-3,801
<b>20% Exceedance</b>	-3,335	-3,761	-4,760	-3,645	-4,464	-3,258	-952	-1,795	-3,699	-4,841	-4,455	-5,171
<b>30% Exceedance</b>	-3,978	-4,797	-5,290	-4,514	-4,464	-3,258	-1,102	-1,882	-4,468	-7,228	-5,064	-5,854
<b>40% Exceedance</b>	-4,255	-6,366	-5,290	-4,516	-4,464	-3,258	-1,267	-1,971	-5,000	-8,130	-6,839	-6,235
<b>50% Exceedance</b>	-4,785	-7,519	-5,290	-4,516	-4,464	-3,258	-1,465	-2,107	-5,000	-8,901	-7,602	-6,931
<b>60% Exceedance</b>	-5,115	-8,755	-6,690	-5,000	-4,483	-3,258	-1,629	-2,311	-5,000	-9,730	-8,923	-8,109
<b>70% Exceedance</b>	-5,296	-9,148	-9,345	-5,226	-4,483	-3,258	-1,931	-2,453	-5,000	-10,160	-9,309	-8,690
<b>80% Exceedance</b>	-6,310	-9,361	-9,632	-5,226	-5,000	-3,258	-2,125	-2,729	-5,000	-10,434	-9,807	-9,094
<b>90% Exceedance</b>	-7,565	-9,533	-9,800	-5,226	-5,000	-3,500	-2,325	-3,484	-5,000	-11,027	-10,283	-9,411
<b>Full Simulation Period Average<sup>a</sup></b>	-4,861	-6,831	-6,430	-3,955	-3,909	-2,440	-1,207	-2,001	-4,287	-7,953	-7,172	-6,875
<b>Wet Water Years (32%)</b>	-5,812	-8,705	-7,325	-2,458	-2,551	-964	-657	-1,599	-4,415	-8,075	-8,397	-8,045
<b>Above Normal Water Years (15%)</b>	-5,063	-8,733	-7,980	-4,331	-3,879	-2,745	-1,510	-2,418	-4,909	-9,274	-9,078	-8,699
<b>Below Normal Water Years (17%)</b>	-6,428	-6,475	-6,179	-4,686	-4,755	-3,270	-1,352	-2,278	-4,676	-10,462	-9,859	-8,018
<b>Dry Water Years (22%)</b>	-3,609	-5,131	-5,478	-5,017	-4,720	-3,304	-1,590	-2,218	-4,496	-8,126	-4,495	-5,555
<b>Critical Water Years (15%)</b>	-2,649	-3,832	-4,660	-4,376	-4,676	-3,065	-1,354	-1,805	-2,623	-3,178	-3,490	-3,165

**Table 5B3-6-4b. Old and Middle River Flow, Alternative 3 051722, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-3,021	-3,325	-3,908	-3,645	-3,397	-1,332	-326	-1,501	-1,849	-3,399	-4,197	-4,350
<b>20% Exceedance</b>	-3,817	-4,505	-4,860	-3,645	-4,464	-3,258	-897	-1,819	-3,927	-5,706	-5,024	-5,663
<b>30% Exceedance</b>	-4,274	-5,462	-5,290	-4,516	-4,464	-3,258	-1,082	-1,904	-4,468	-7,484	-5,706	-6,191
<b>40% Exceedance</b>	-4,735	-6,940	-5,290	-4,516	-4,464	-3,258	-1,242	-1,987	-5,000	-8,566	-7,029	-6,633
<b>50% Exceedance</b>	-5,107	-8,576	-5,290	-4,516	-4,464	-3,258	-1,418	-2,121	-5,000	-9,228	-7,856	-7,108
<b>60% Exceedance</b>	-5,403	-8,882	-6,625	-5,000	-4,483	-3,258	-1,626	-2,308	-5,000	-9,839	-8,936	-8,146
<b>70% Exceedance</b>	-5,846	-9,188	-8,945	-5,226	-4,483	-3,258	-1,963	-2,499	-5,000	-10,263	-9,314	-8,725
<b>80% Exceedance</b>	-6,641	-9,384	-9,633	-5,226	-5,000	-3,258	-2,122	-2,730	-5,000	-10,456	-9,858	-9,150
<b>90% Exceedance</b>	-8,099	-9,541	-9,800	-5,226	-5,000	-3,500	-2,318	-3,484	-5,000	-11,011	-10,218	-9,406
<b>Full Simulation Period Average<sup>a</sup></b>	-5,247	-7,144	-6,343	-3,963	-3,904	-2,449	-1,166	-2,017	-4,287	-8,251	-7,518	-7,089
<b>Wet Water Years (32%)</b>	-5,978	-8,706	-7,328	-2,459	-2,535	-870	-542	-1,600	-4,415	-8,119	-8,410	-8,055
<b>Above Normal Water Years (15%)</b>	-5,438	-8,917	-7,936	-4,331	-3,812	-2,746	-1,445	-2,400	-4,898	-9,319	-9,085	-8,696
<b>Below Normal Water Years (17%)</b>	-6,457	-7,125	-6,459	-4,699	-4,756	-3,271	-1,358	-2,272	-4,689	-10,453	-9,920	-8,171
<b>Dry Water Years (22%)</b>	-4,532	-5,860	-4,784	-5,047	-4,759	-3,305	-1,610	-2,303	-4,531	-8,979	-5,436	-6,195
<b>Critical Water Years (15%)</b>	-3,132	-3,932	-4,821	-4,370	-4,684	-3,326	-1,351	-1,811	-2,567	-3,807	-4,337	-3,467

**Table 5B3-6-4c. Old and Middle River Flow, Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	-309	-95	-51	0	0	-16	248	-43	46	-468	-1,050	-550
<b>20% Exceedance</b>	-482	-744	-100	0	0	0	55	-24	-227	-866	-569	-492
<b>30% Exceedance</b>	-295	-665	0	-2	0	0	19	-21	0	-256	-642	-337
<b>40% Exceedance</b>	-480	-574	0	0	0	0	24	-15	0	-436	-190	-398
<b>50% Exceedance</b>	-322	-1,057	0	0	0	0	48	-14	0	-326	-253	-177
<b>60% Exceedance</b>	-288	-127	65	0	0	0	3	2	0	-109	-13	-37
<b>70% Exceedance</b>	-549	-40	400	0	0	0	-33	-46	0	-102	-4	-35
<b>80% Exceedance</b>	-331	-23	-1	0	0	0	4	-1	0	-22	-51	-56
<b>90% Exceedance</b>	-534	-9	0	0	0	0	7	0	0	16	66	6
<b>Full Simulation Period Average<sup>a</sup></b>	-385	-313	86	-8	5	-9	41	-16	0	-298	-346	-213
<b>Wet Water Years (32%)</b>	-165	-1	-3	-1	15	94	115	-1	0	-43	-14	-10
<b>Above Normal Water Years (15%)</b>	-375	-184	44	0	67	-1	66	18	11	-45	-7	3
<b>Below Normal Water Years (17%)</b>	-29	-650	-281	-13	-1	-1	-6	6	-13	9	-60	-152
<b>Dry Water Years (22%)</b>	-922	-729	694	-30	-39	0	-21	-85	-36	-852	-940	-640
<b>Critical Water Years (15%)</b>	-483	-100	-161	6	-8	-261	3	-6	56	-629	-847	-302

<sup>a</sup> Based on the 82-year simulation period.

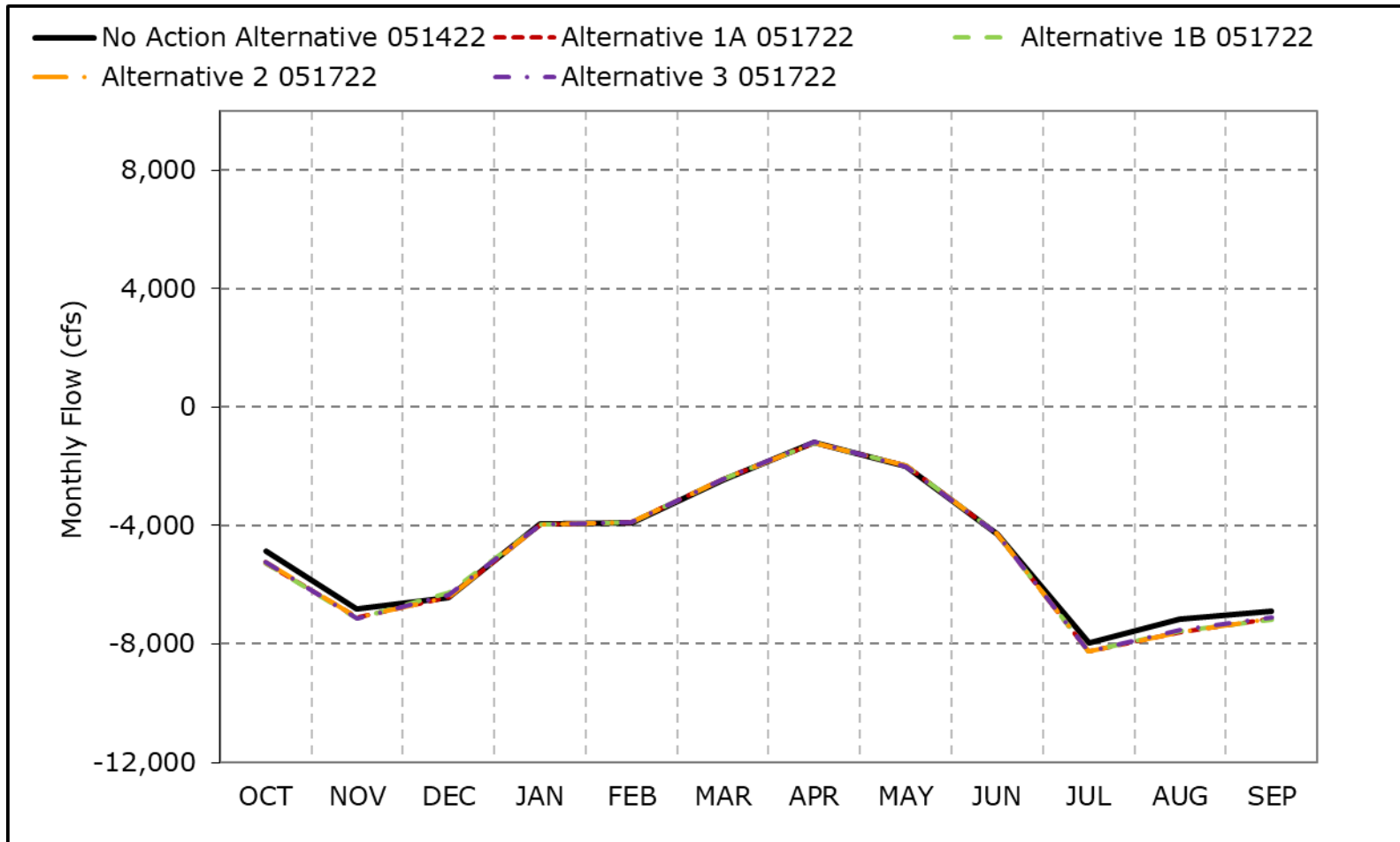
\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.



**Figure 5B3-6-1. Old and Middle River Flow, Long-Term Average Flow**

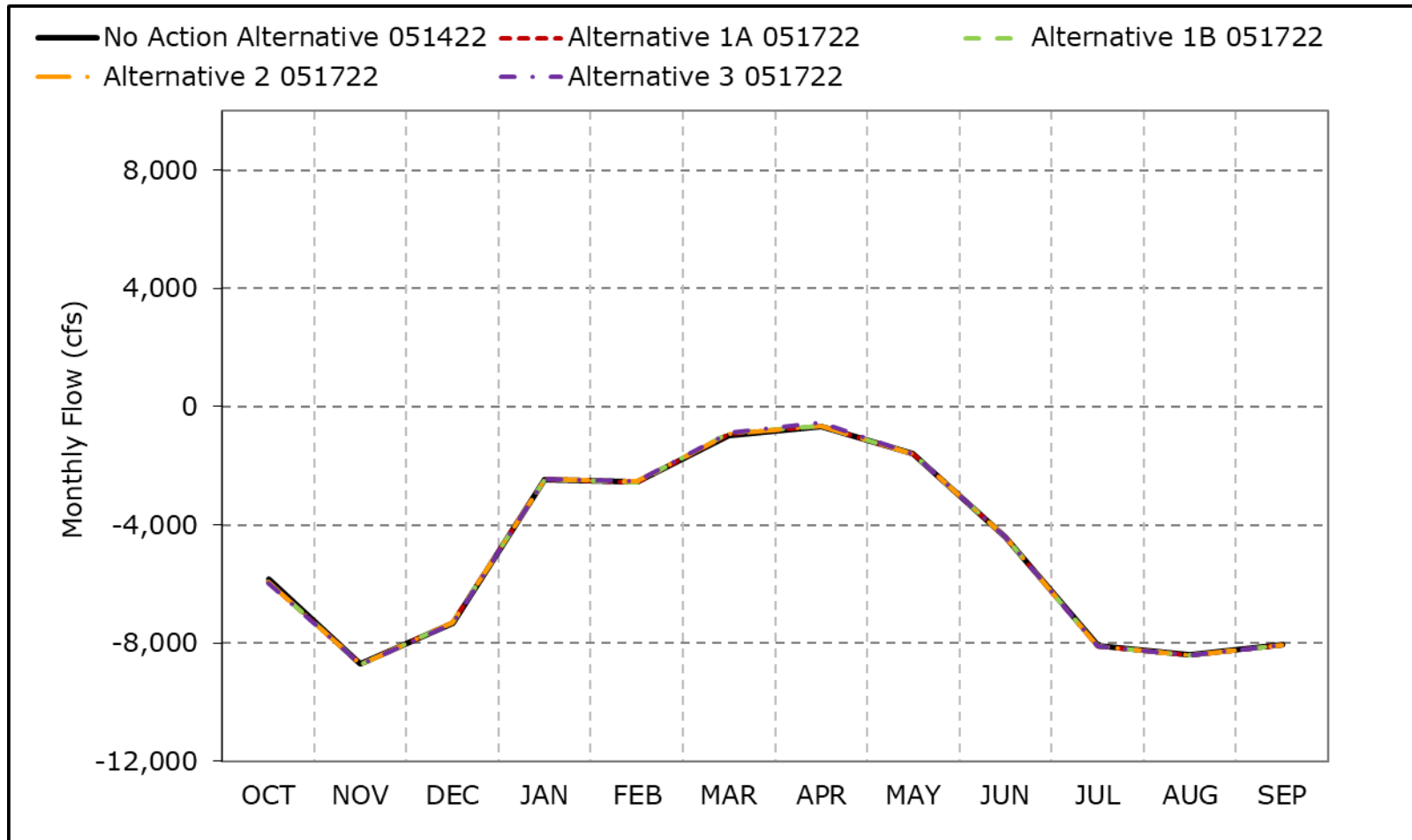


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-2. Old and Middle River Flow, Wet Year Average Flow**

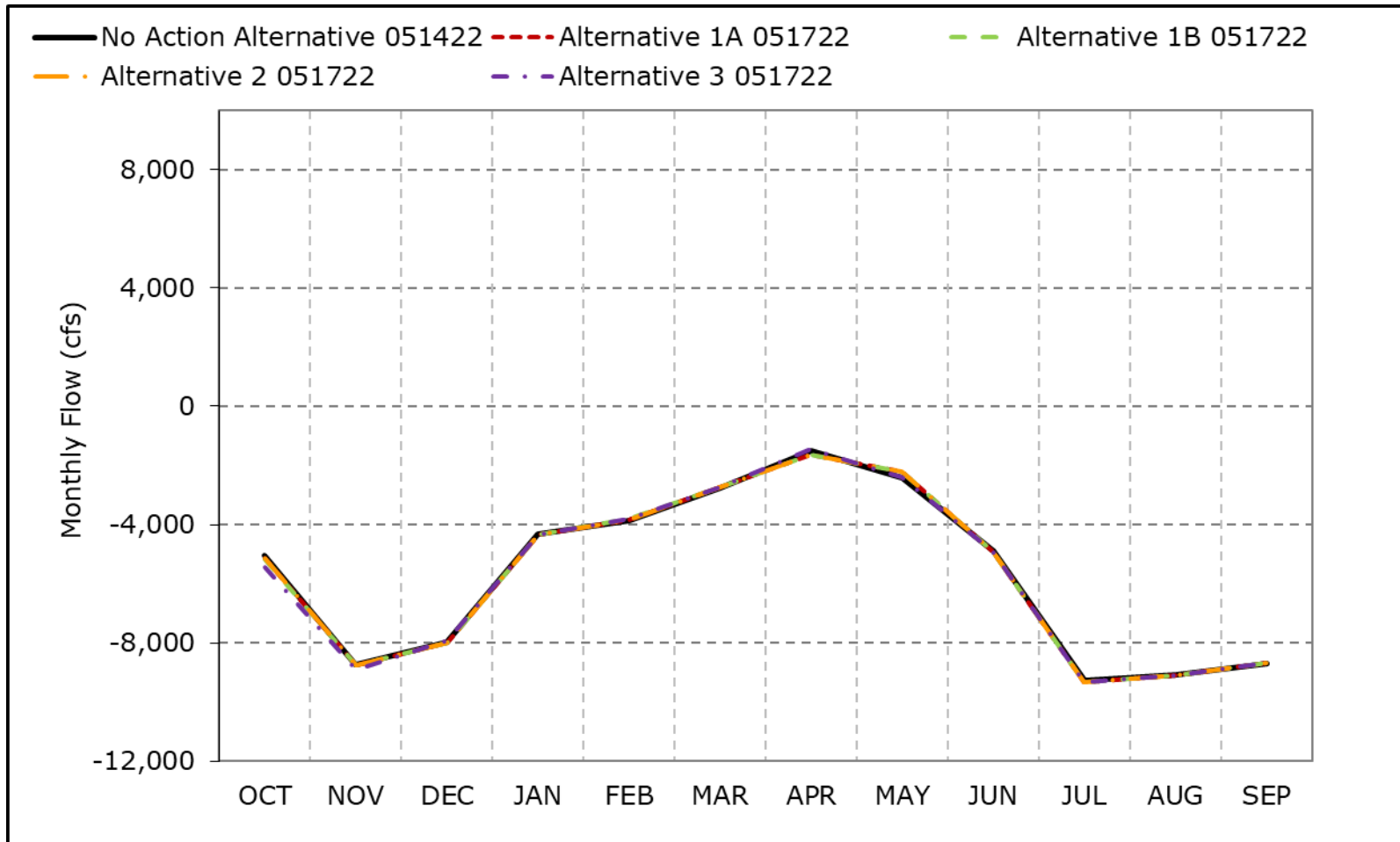


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-3. Old and Middle River Flow, Above Normal Year Average Flow**

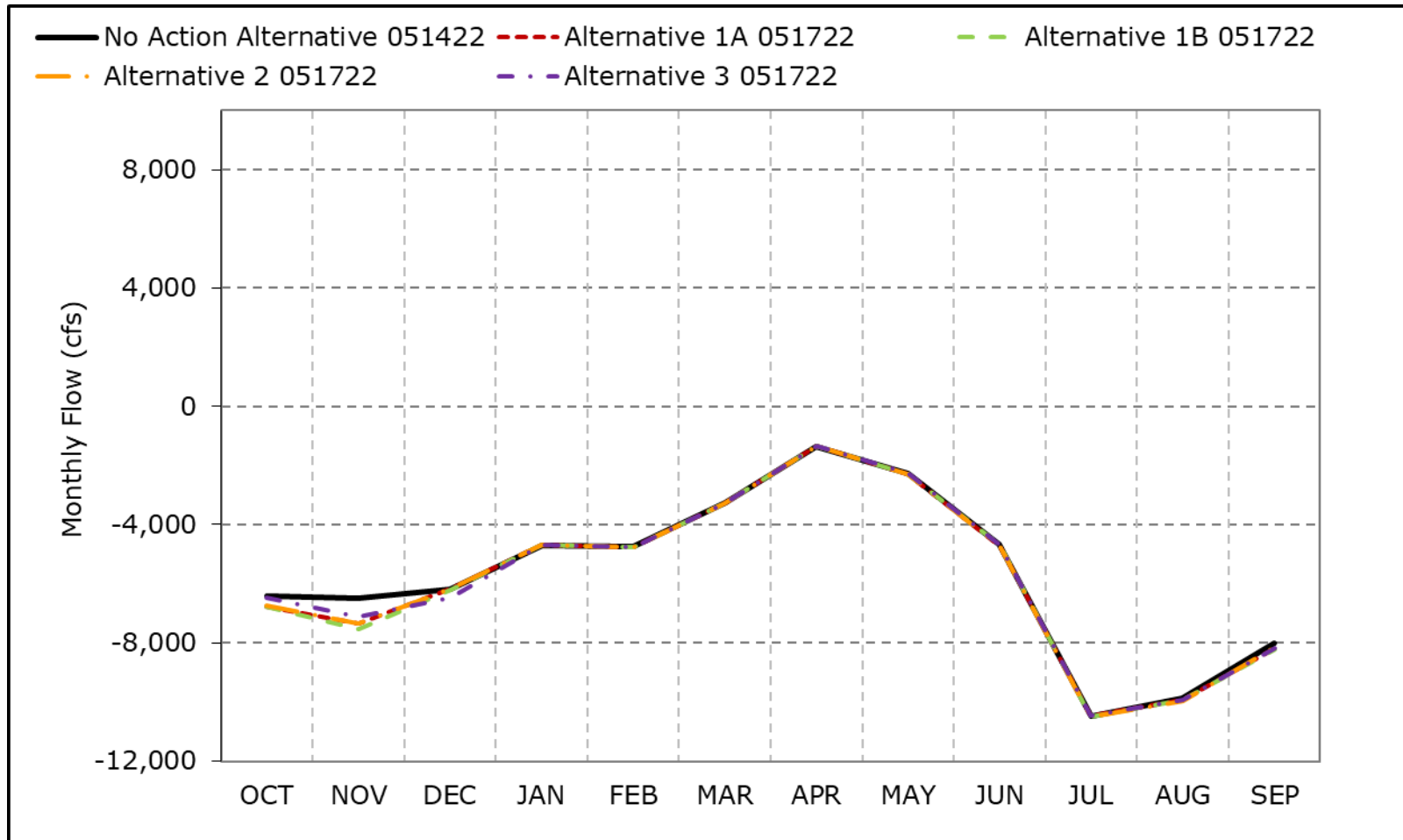


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-4. Old and Middle River Flow, Below Normal Year Average Flow**

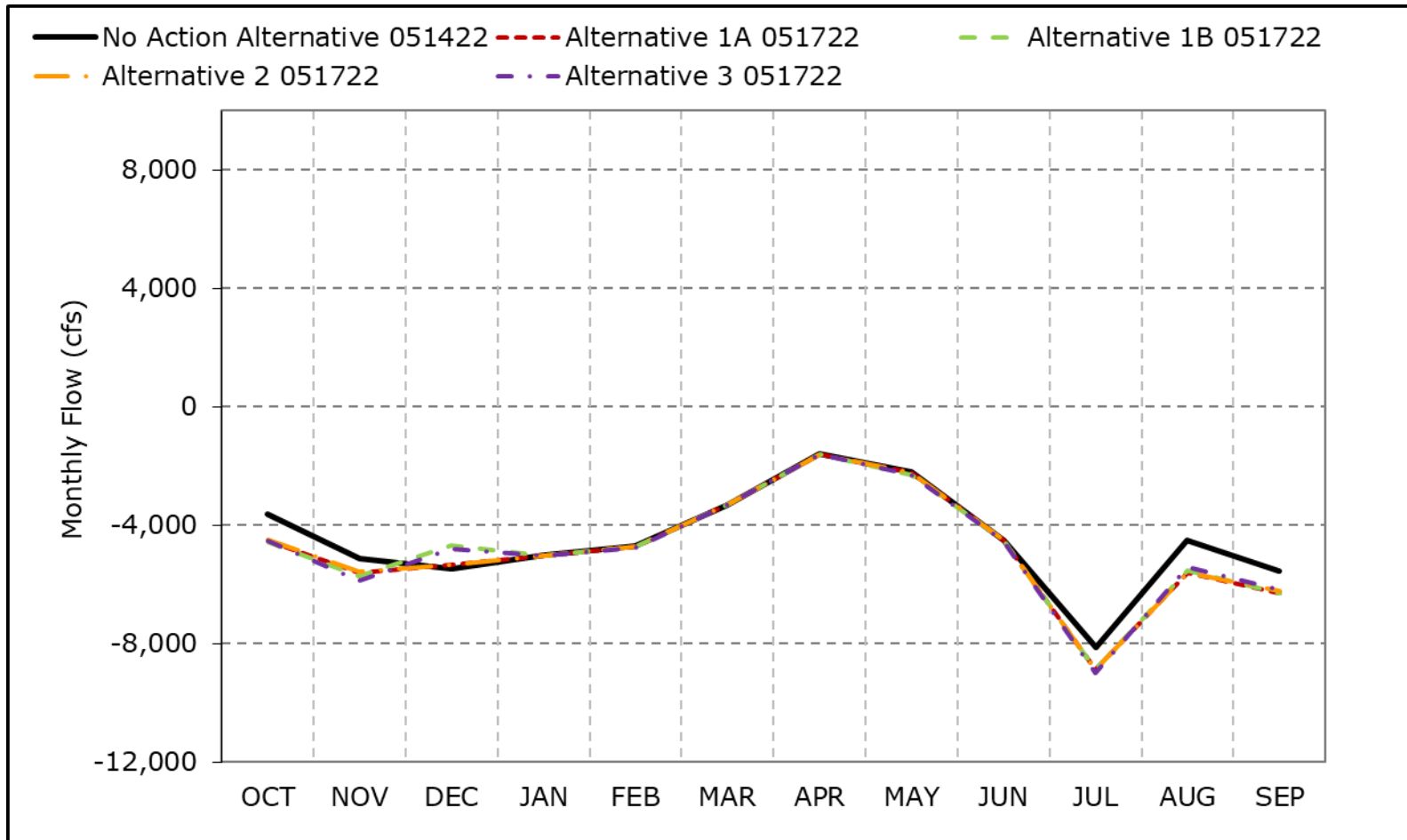


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-5. Old and Middle River Flow, Dry Year Average Flow**

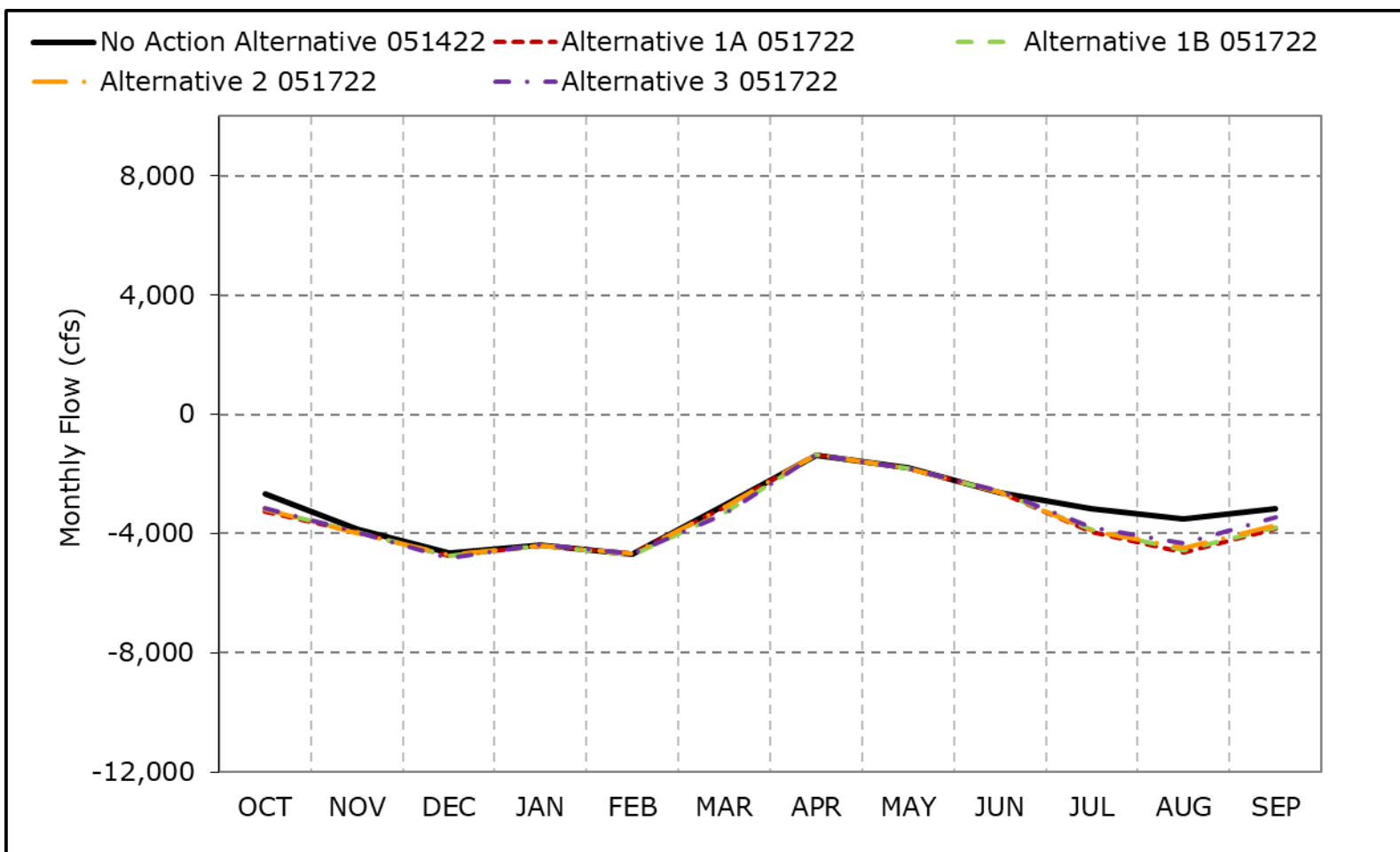


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-6. Old and Middle River Flow, Critical Year Average Flow**

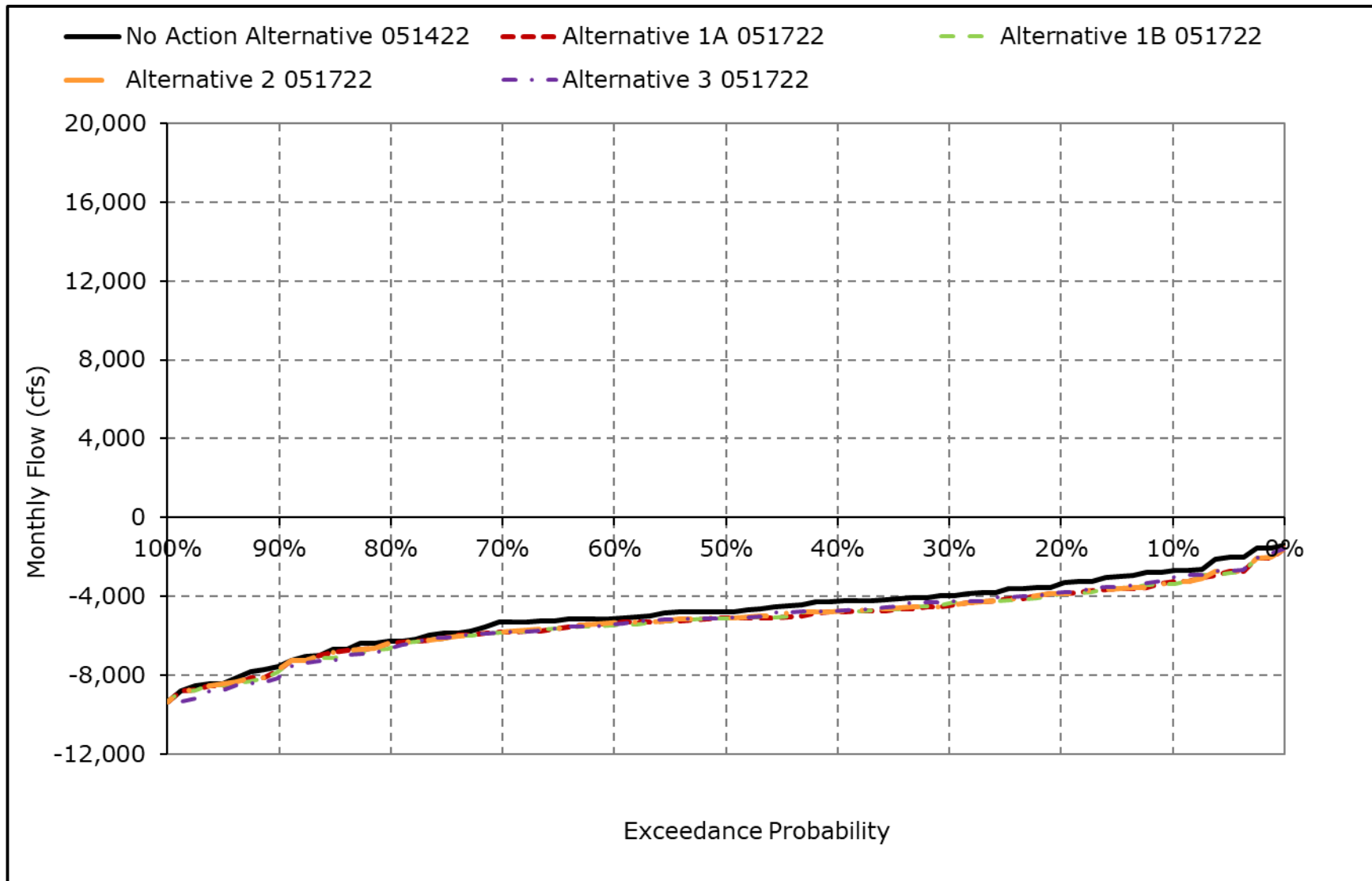


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

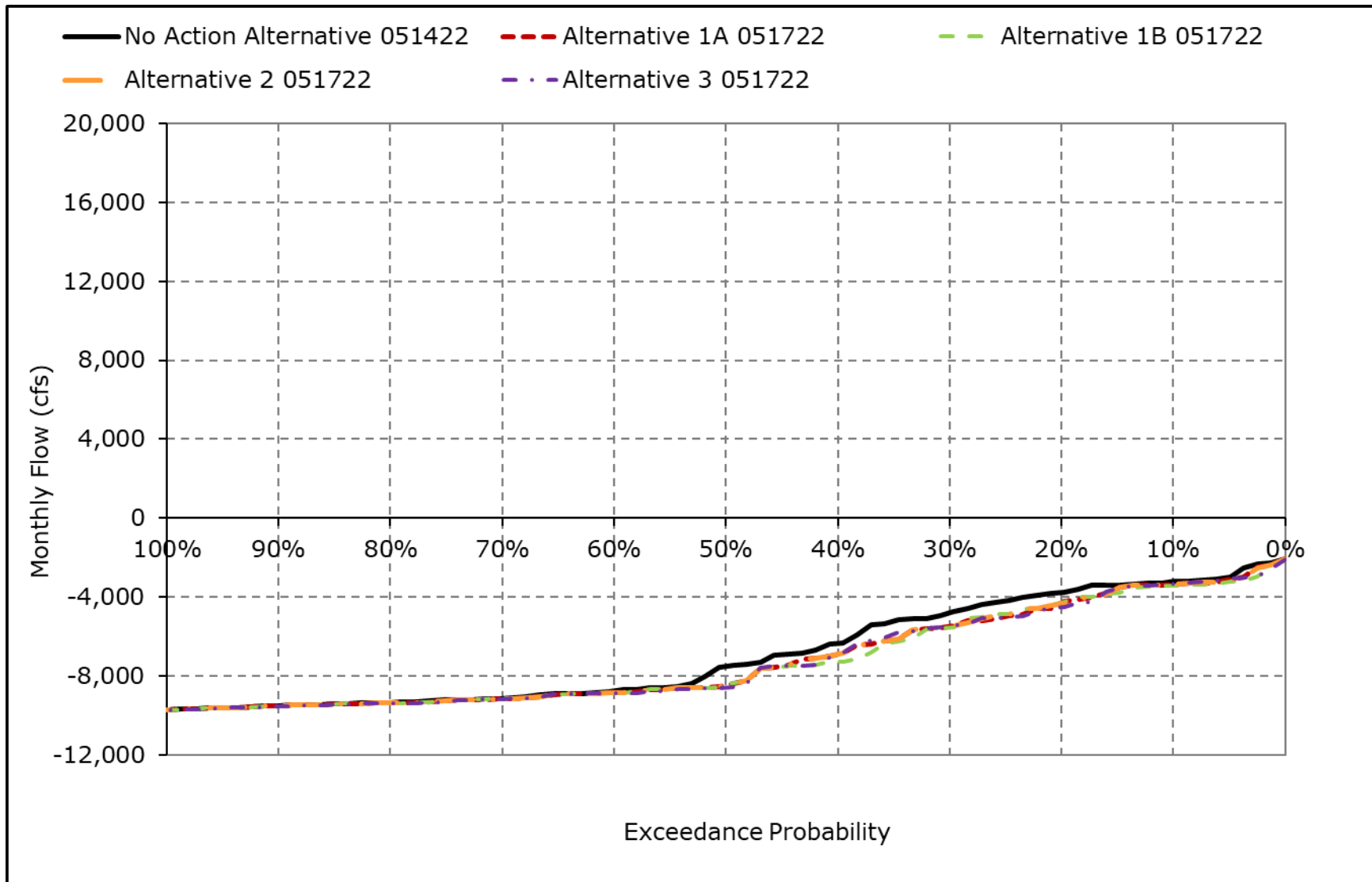
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-7. Old and Middle River Flow, October**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

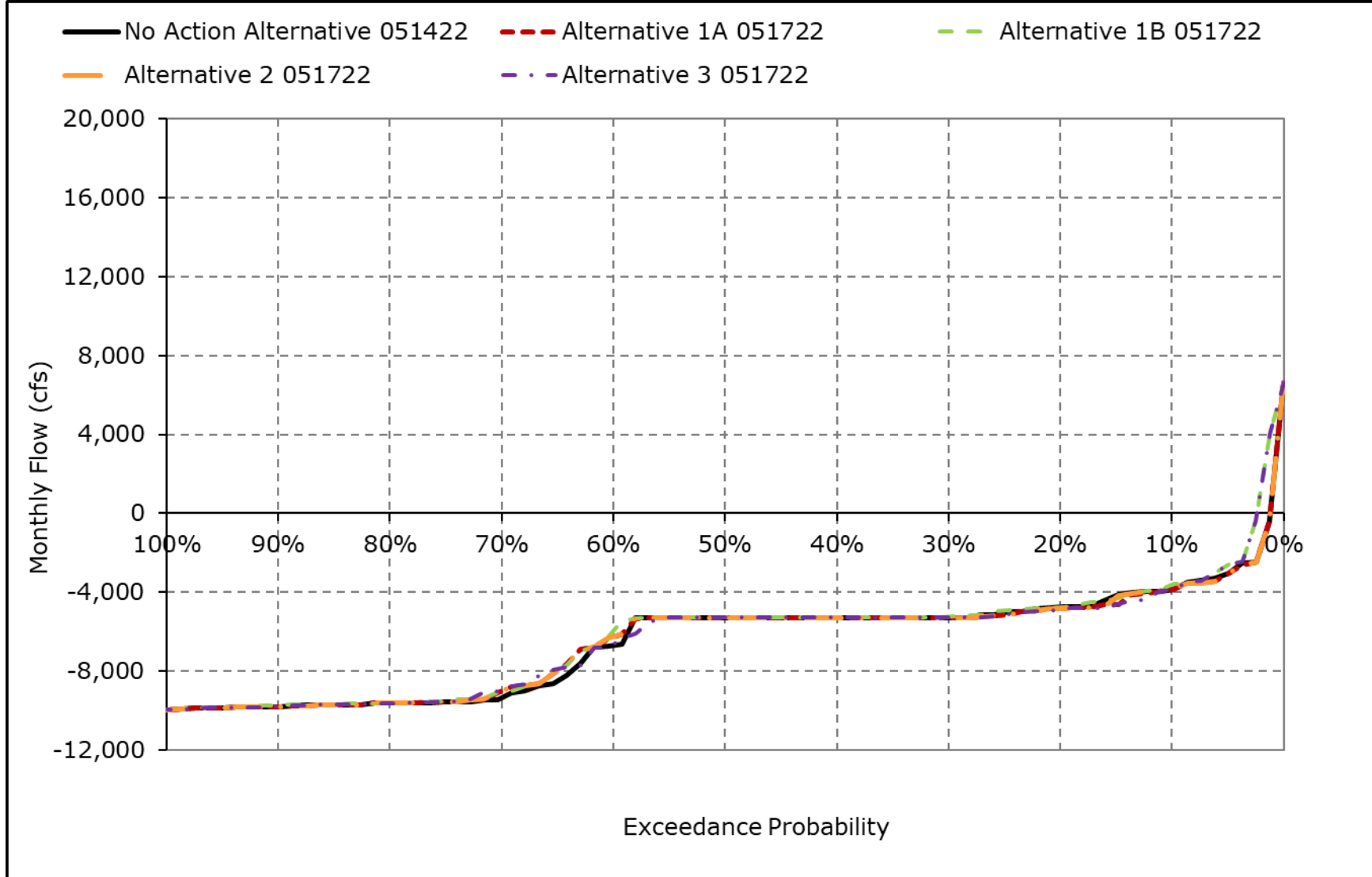
**Figure 5B3-6-8. Old and Middle River Flow, November**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

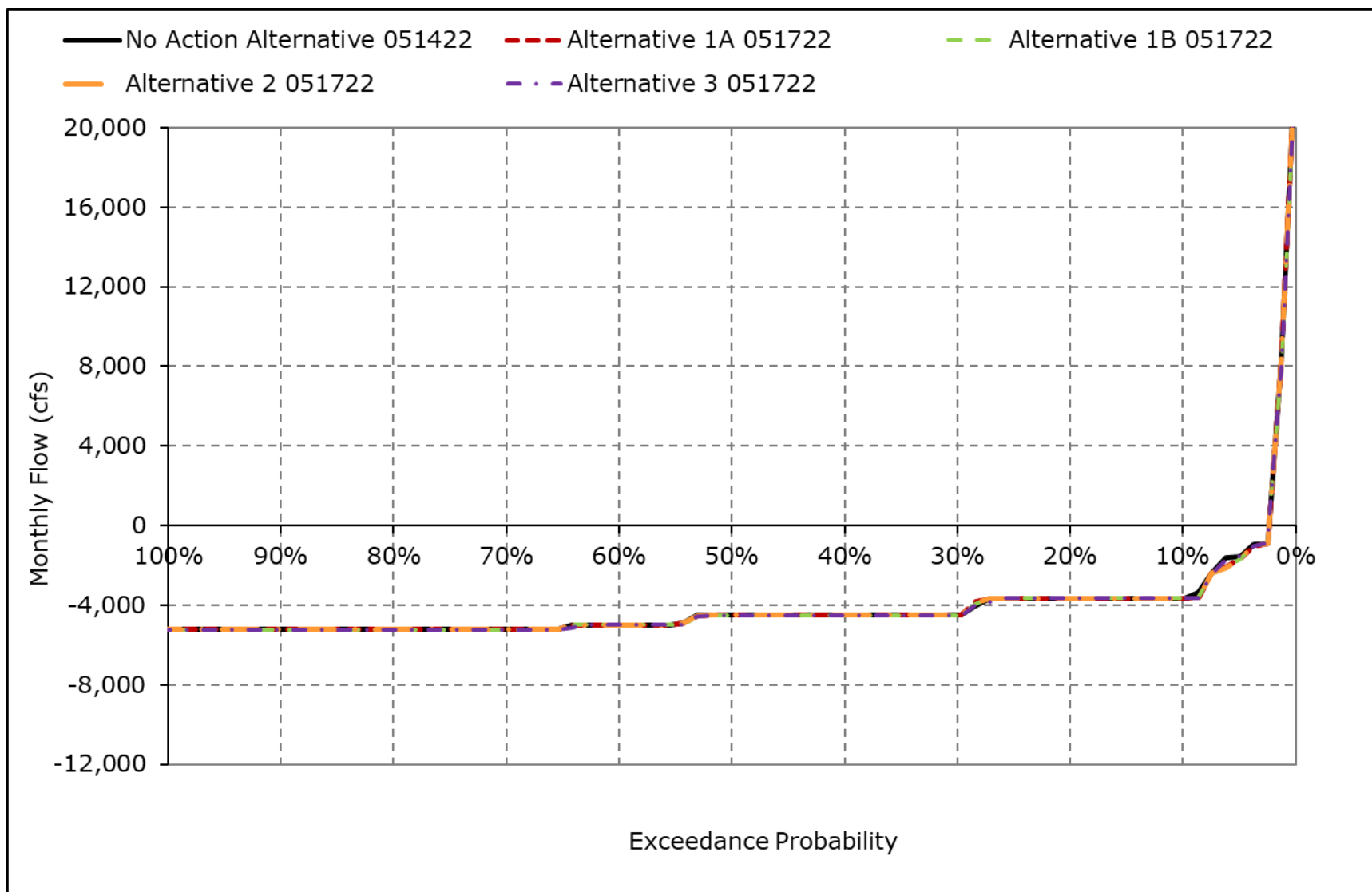


**Figure 5B3-6-9. Old and Middle River Flow, December**



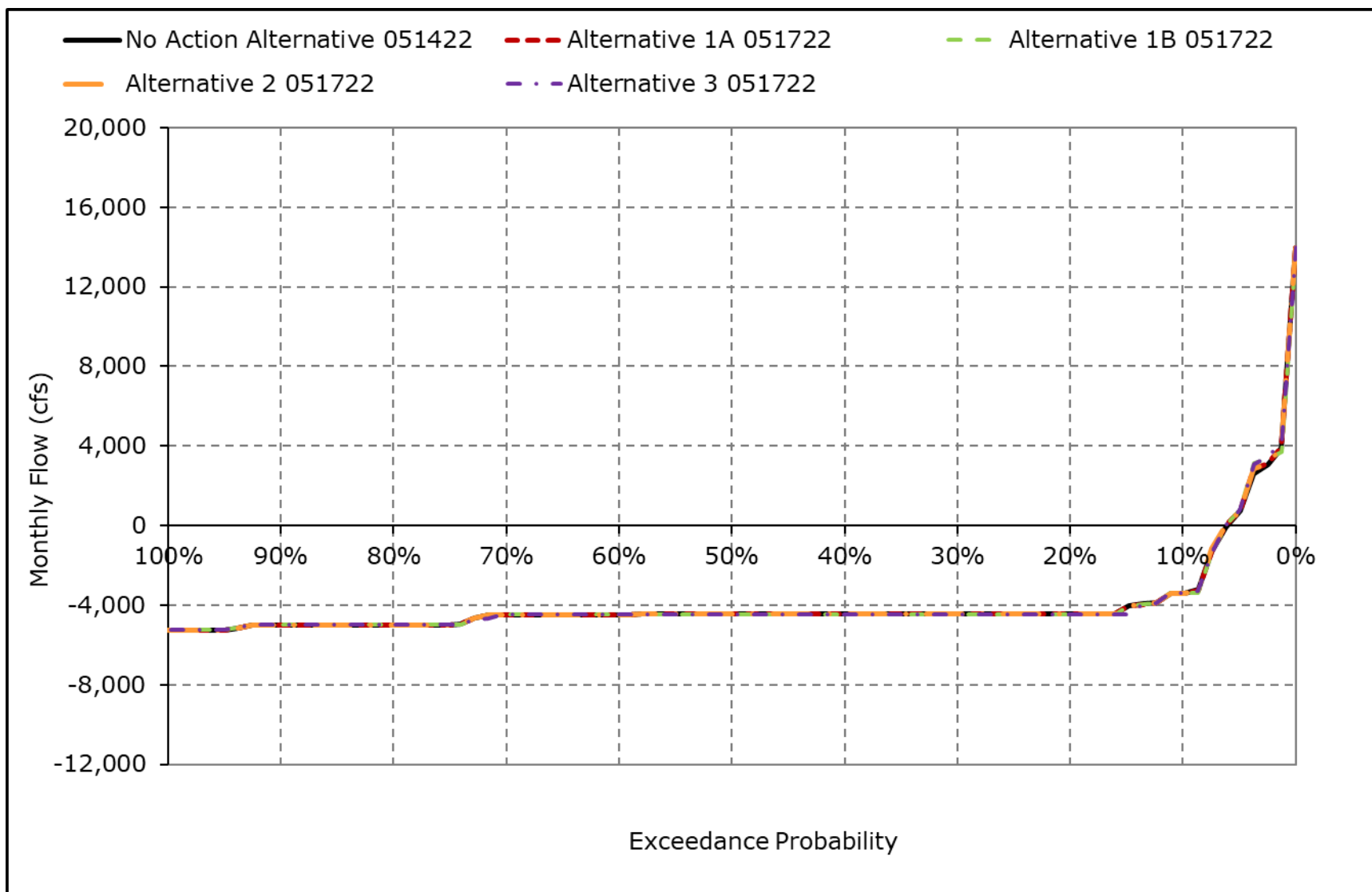
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-10. Old and Middle River Flow, January**



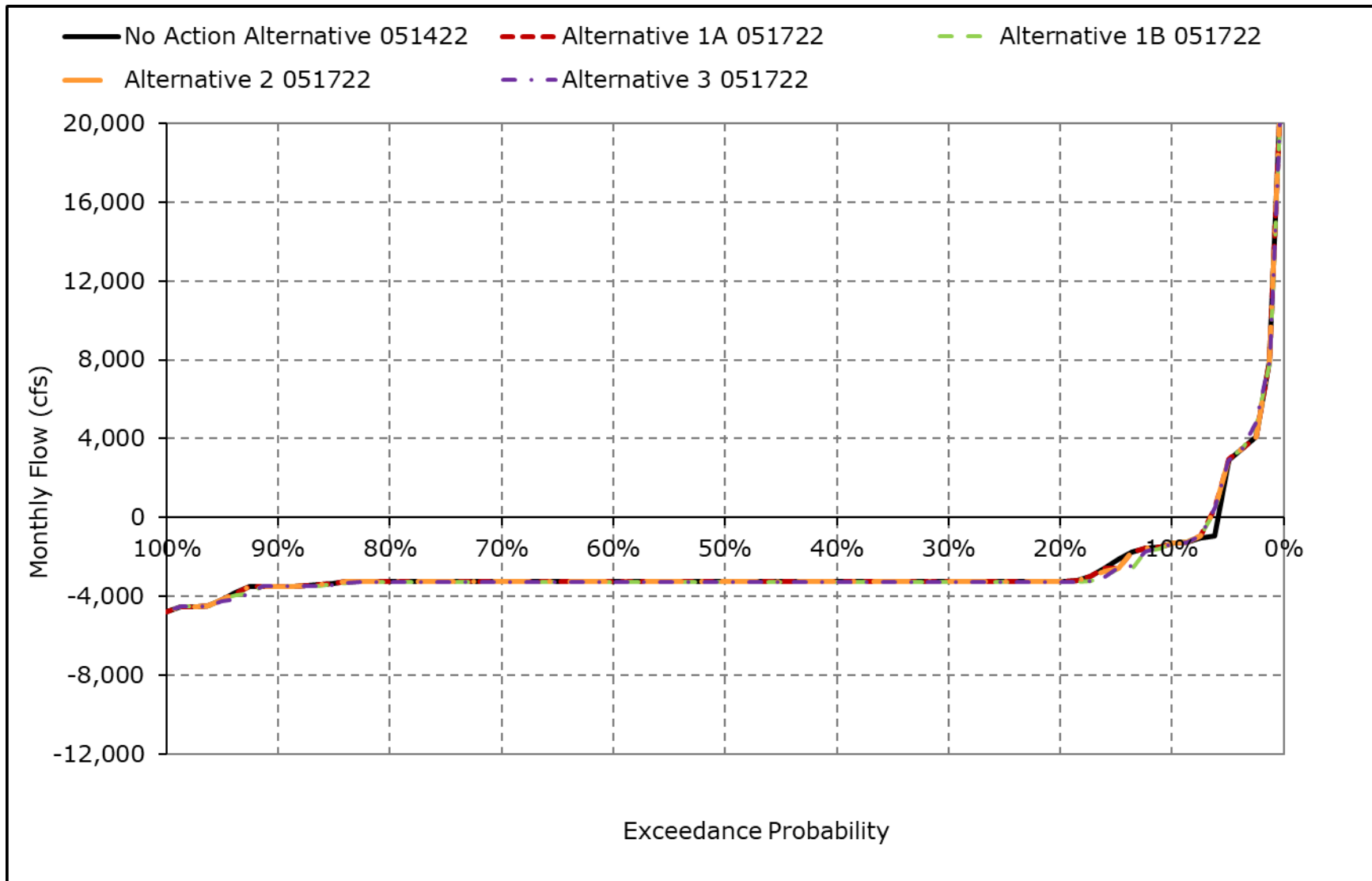
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-11. Old and Middle River Flow, February**



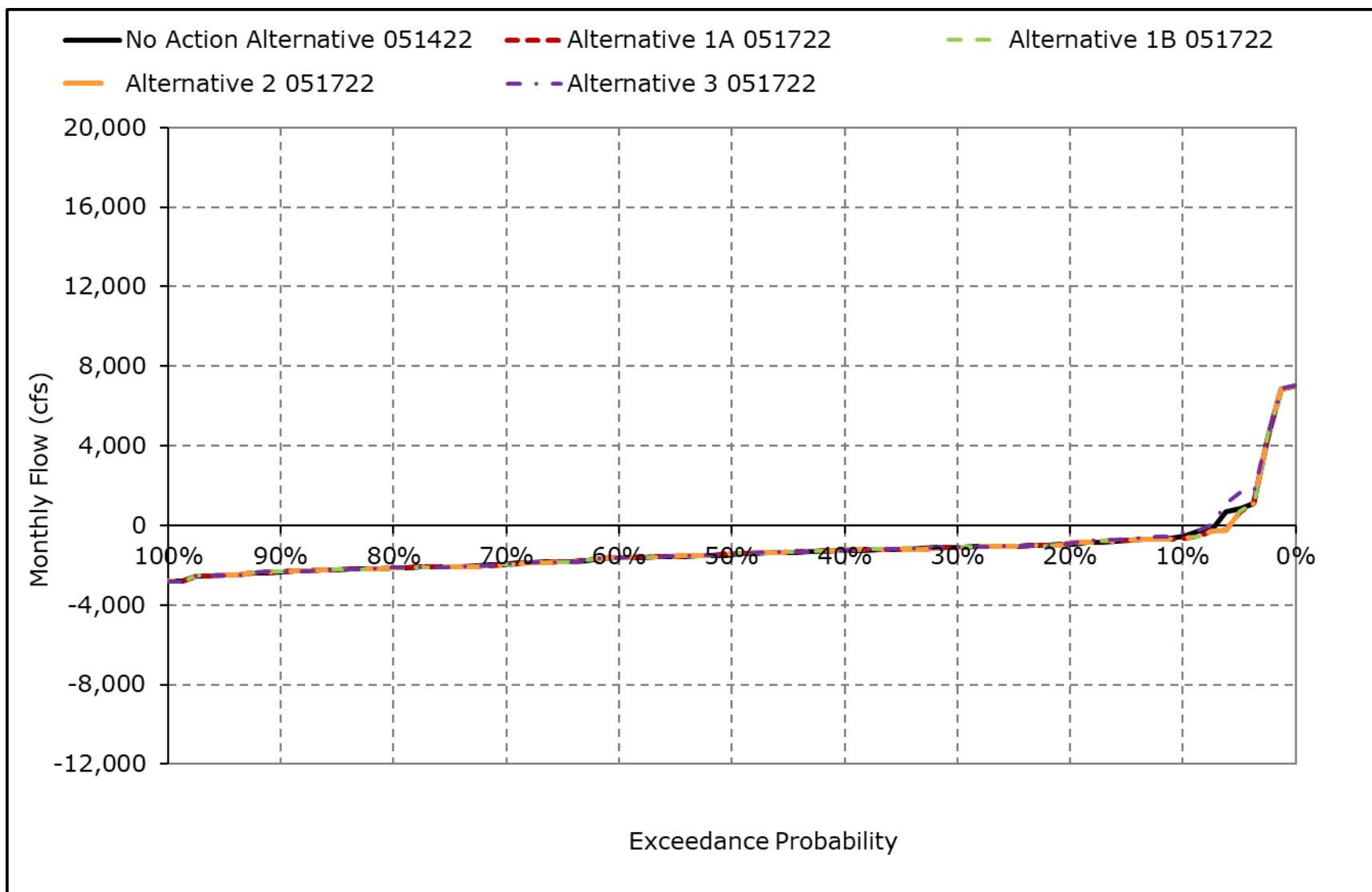
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-12. Old and Middle River Flow, March**



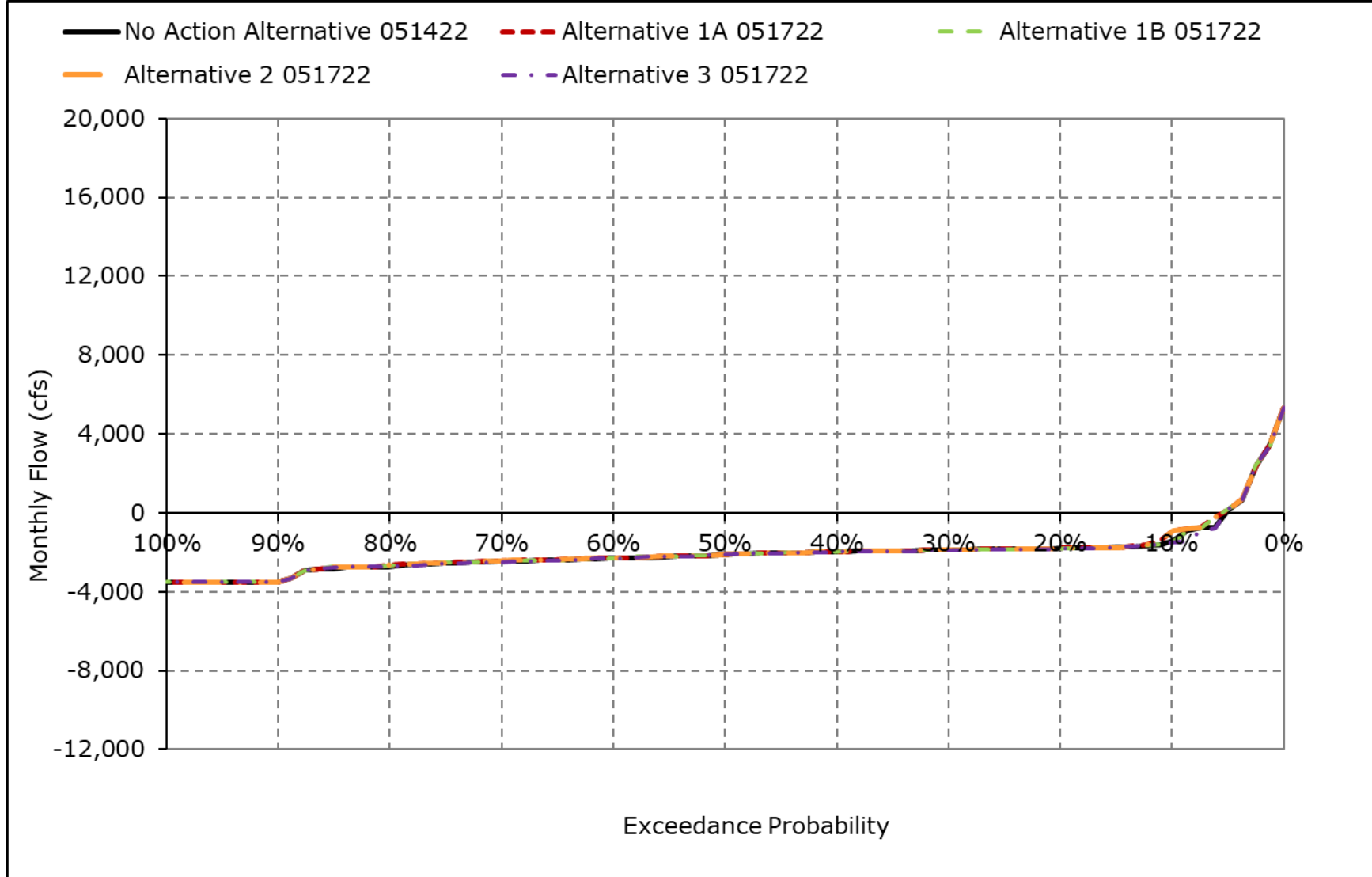
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-13. Old and Middle River Flow, April**



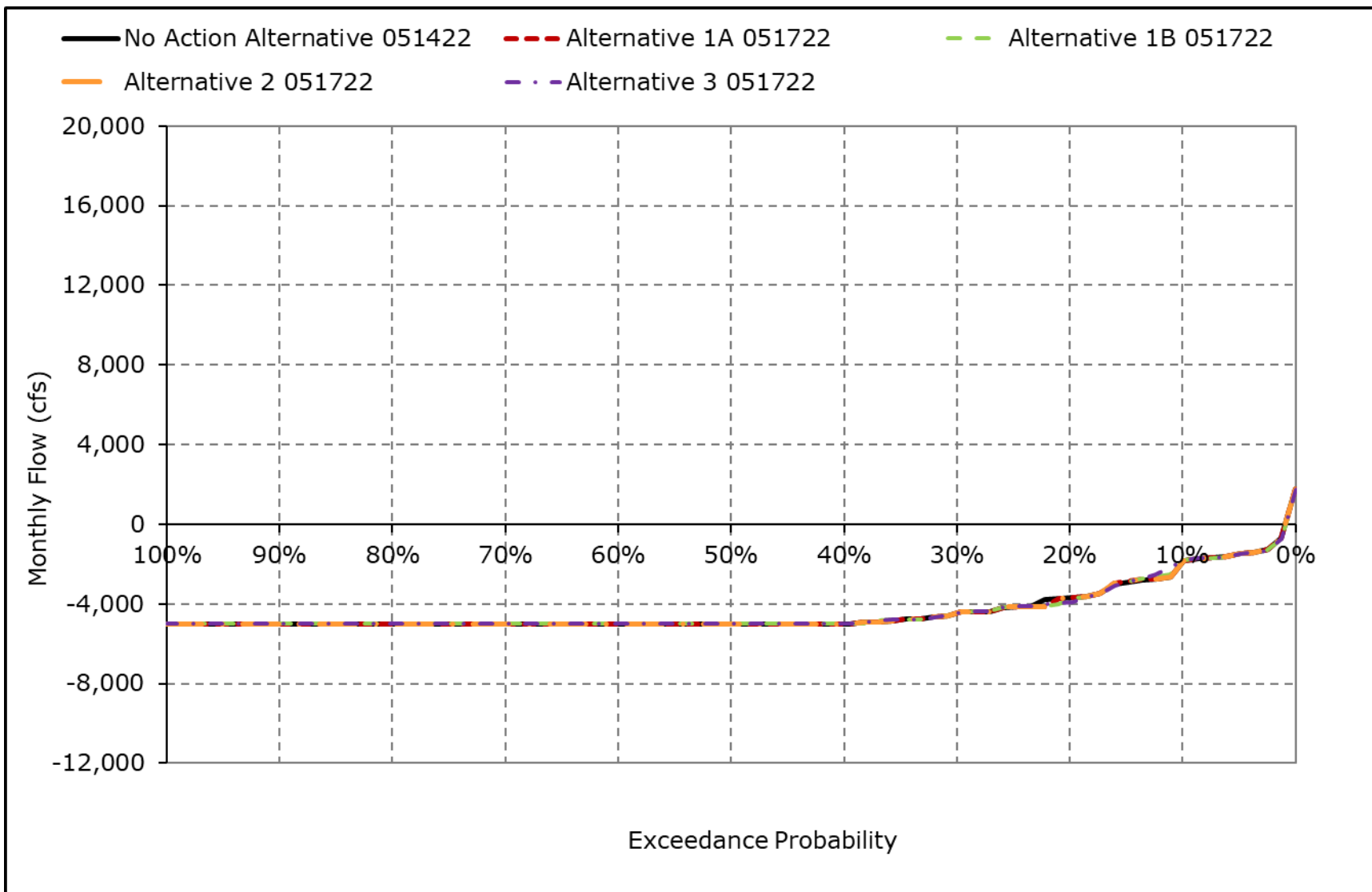
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-14. Old and Middle River Flow, May**



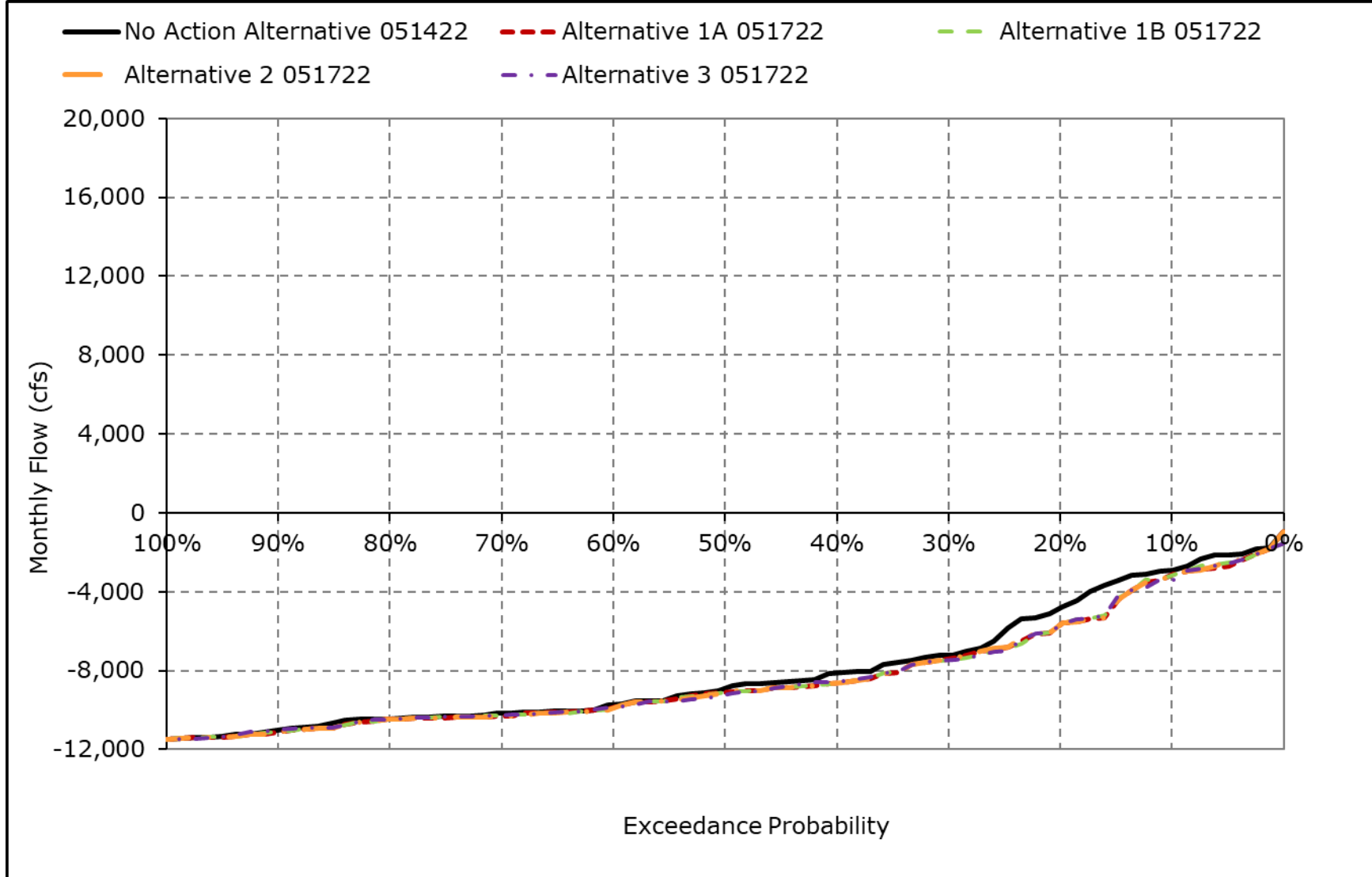
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-15. Old and Middle River Flow, June**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

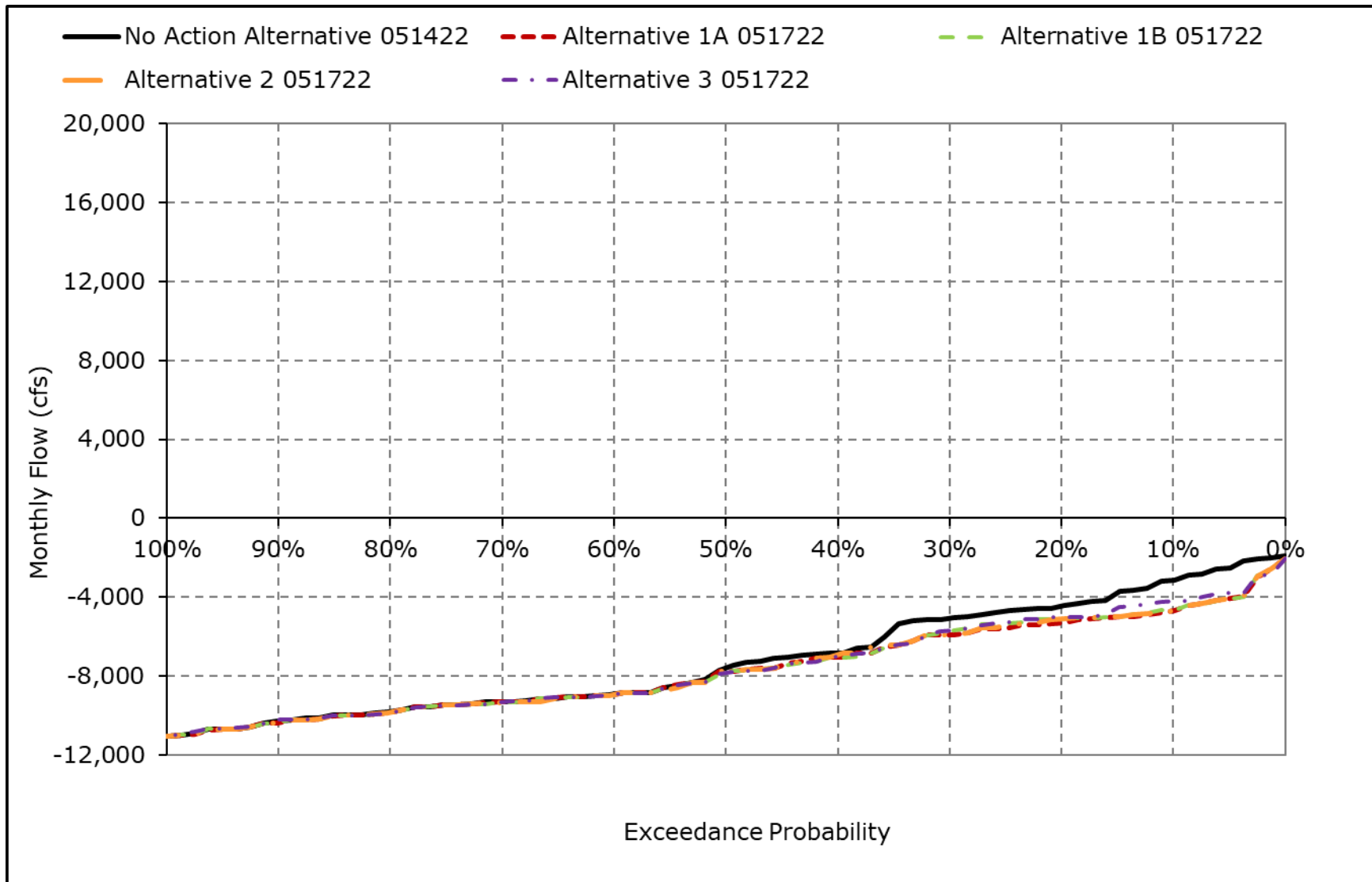
**Figure 5B3-6-16. Old and Middle River Flow, July**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

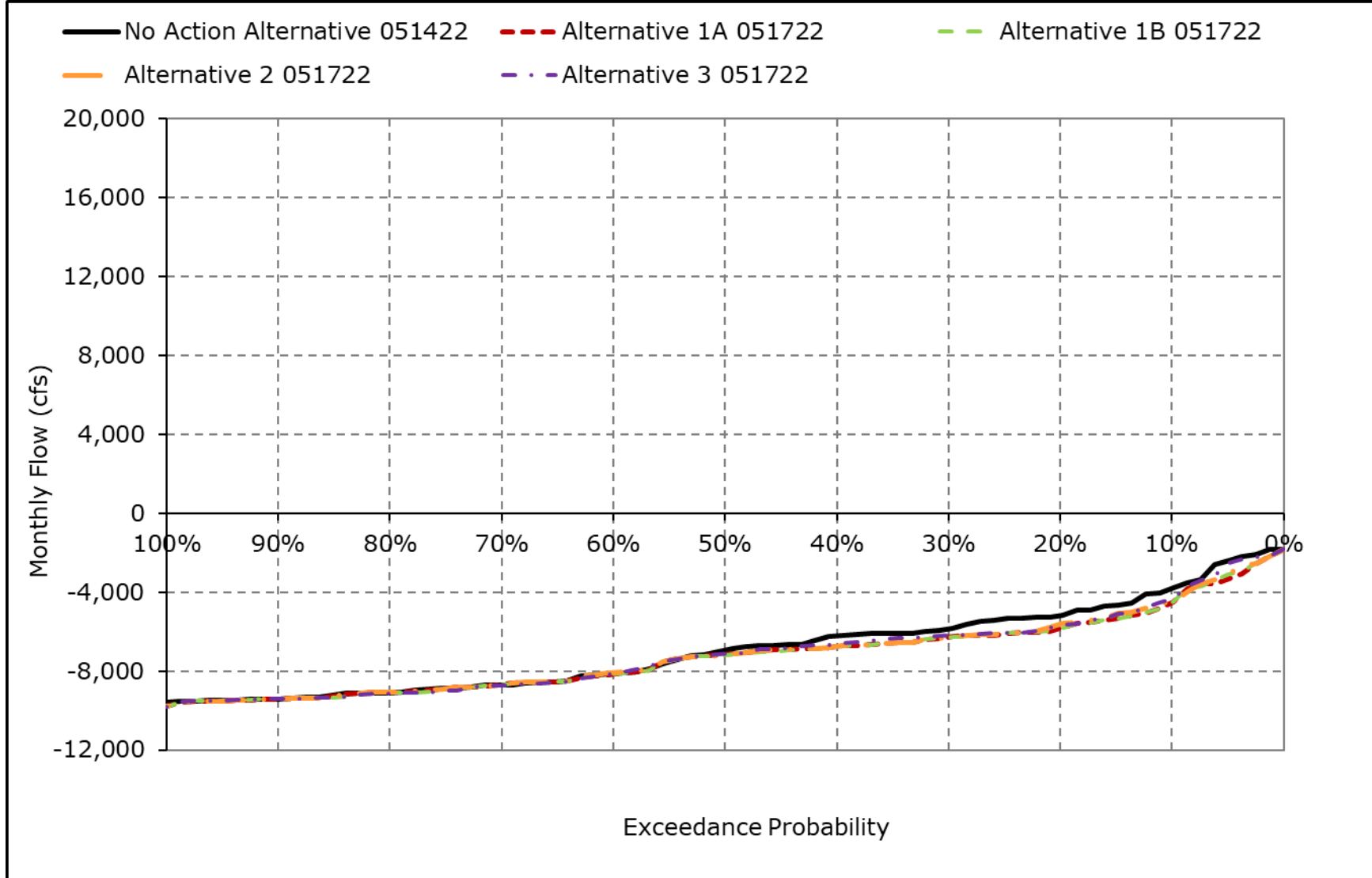


**Figure 5B3-6-17. Old and Middle River Flow, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-6-18. Old and Middle River Flow, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Table 5B3-7-1a. San Joaquin River at Vernalis, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,194	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,626	2,018	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,367	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,455	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	843	957	1,355

**Table 5B3-7-1b. San Joaquin River at Vernalis, Alternative 1A 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,194	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,627	2,019	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,367	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,455	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	843	957	1,355

**Table 5B3-7-1c. San Joaquin River at Vernalis, Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>20% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>30% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>40% Exceedance</b>	0	0	0	0	0	0	0	0	0	1	0	0
<b>50% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>60% Exceedance</b>	0	0	0	0	0	0	0	1	0	0	0	0
<b>70% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>80% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>90% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Wet Water Years (32%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Above Normal Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Below Normal Water Years (17%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Dry Water Years (22%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Critical Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-7-2a. San Joaquin River at Vernalis, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,626	2,018	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,367	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,455	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	843	957	1,355

**Table 5B3-7-2b. San Joaquin River at Vernalis, Alternative 1B 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,663	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,575	1,419	991	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,627	2,019	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,368	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,456	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	844	957	1,355

**Table 5B3-7-2c. San Joaquin River at Vernalis, Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>20% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>30% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>40% Exceedance</b>	0	0	0	0	0	0	0	0	0	1	0	0
<b>50% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>60% Exceedance</b>	0	0	0	0	0	0	0	1	0	0	0	0
<b>70% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>80% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>90% Exceedance</b>	0	0	0	0	0	0	2	3	-2	1	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Wet Water Years (32%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Above Normal Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Below Normal Water Years (17%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Dry Water Years (22%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Critical Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-7-3a. San Joaquin River at Vernalis, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,194	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,626	2,018	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,367	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,455	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	843	957	1,355

**Table 5B3-7-3b. San Joaquin River at Vernalis, Alternative 2 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,194	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,627	2,019	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,368	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,455	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	843	957	1,355

**Table 5B3-7-3c. San Joaquin River at Vernalis, Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>20% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>30% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>40% Exceedance</b>	0	0	0	0	0	0	0	0	0	1	0	0
<b>50% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>60% Exceedance</b>	0	0	0	0	0	0	0	1	0	0	0	0
<b>70% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>80% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>90% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Wet Water Years (32%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Above Normal Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Below Normal Water Years (17%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Dry Water Years (22%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Critical Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-7-4a. San Joaquin River at Vernalis, No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,283	6,810	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,370	7,011	7,685	5,701	4,722	2,626	2,018	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,435	4,647	2,367	1,857	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,371	2,516	1,455	1,190	1,286	1,747
<b>Critical Water Years (15%)</b>	1,667	1,389	1,424	1,429	1,762	1,429	1,516	1,464	973	843	957	1,355

**Table 5B3-7-4b. San Joaquin River at Vernalis, Alternative 3 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,663	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,507	2,419	1,737	2,197	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,016	2,109	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
<b>70% Exceedance</b>	2,129	1,634	1,628	1,759	2,247	2,215	3,205	2,285	1,445	1,195	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,537	1,853	1,720	2,567	2,058	1,315	1,103	1,236	1,659
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,584	1,536	1,576	1,419	993	930	1,059	1,464
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,143	5,620	4,501	3,246	2,088	2,323
<b>Wet Water Years (32%)</b>	3,220	3,384	4,517	9,488	11,733	12,943	12,481	10,172	9,284	6,811	3,306	3,297
<b>Above Normal Water Years (15%)</b>	2,611	2,058	2,450	4,077	6,369	7,011	7,685	5,701	4,722	2,626	2,018	2,324
<b>Below Normal Water Years (17%)</b>	2,488	2,254	3,570	2,959	5,427	4,523	6,434	4,646	2,367	1,856	1,886	2,085
<b>Dry Water Years (22%)</b>	2,054	1,689	2,191	1,881	2,336	2,392	3,372	2,517	1,457	1,191	1,287	1,747
<b>Critical Water Years (15%)</b>	1,668	1,389	1,424	1,429	1,762	1,429	1,516	1,465	974	844	957	1,355

**Table 5B3-7-4c. San Joaquin River at Vernalis, Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>20% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>30% Exceedance</b>	0	0	0	0	0	0	0	1	0	0	0	0
<b>40% Exceedance</b>	0	0	0	0	1	0	0	0	-2	0	-1	0
<b>50% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>60% Exceedance</b>	1	0	0	0	0	0	0	0	0	0	0	0
<b>70% Exceedance</b>	1	0	0	0	0	0	1	0	0	0	0	0
<b>80% Exceedance</b>	0	0	0	0	0	0	0	4	0	4	0	0
<b>90% Exceedance</b>	0	0	0	0	0	0	2	3	0	1	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Wet Water Years (32%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Above Normal Water Years (15%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Below Normal Water Years (17%)</b>	0	0	0	0	0	0	0	-1	-1	-1	-1	0
<b>Dry Water Years (22%)</b>	0	0	0	0	0	0	0	1	1	1	1	0
<b>Critical Water Years (15%)</b>	0	0	0	0	0	0	0	0	1	1	1	0

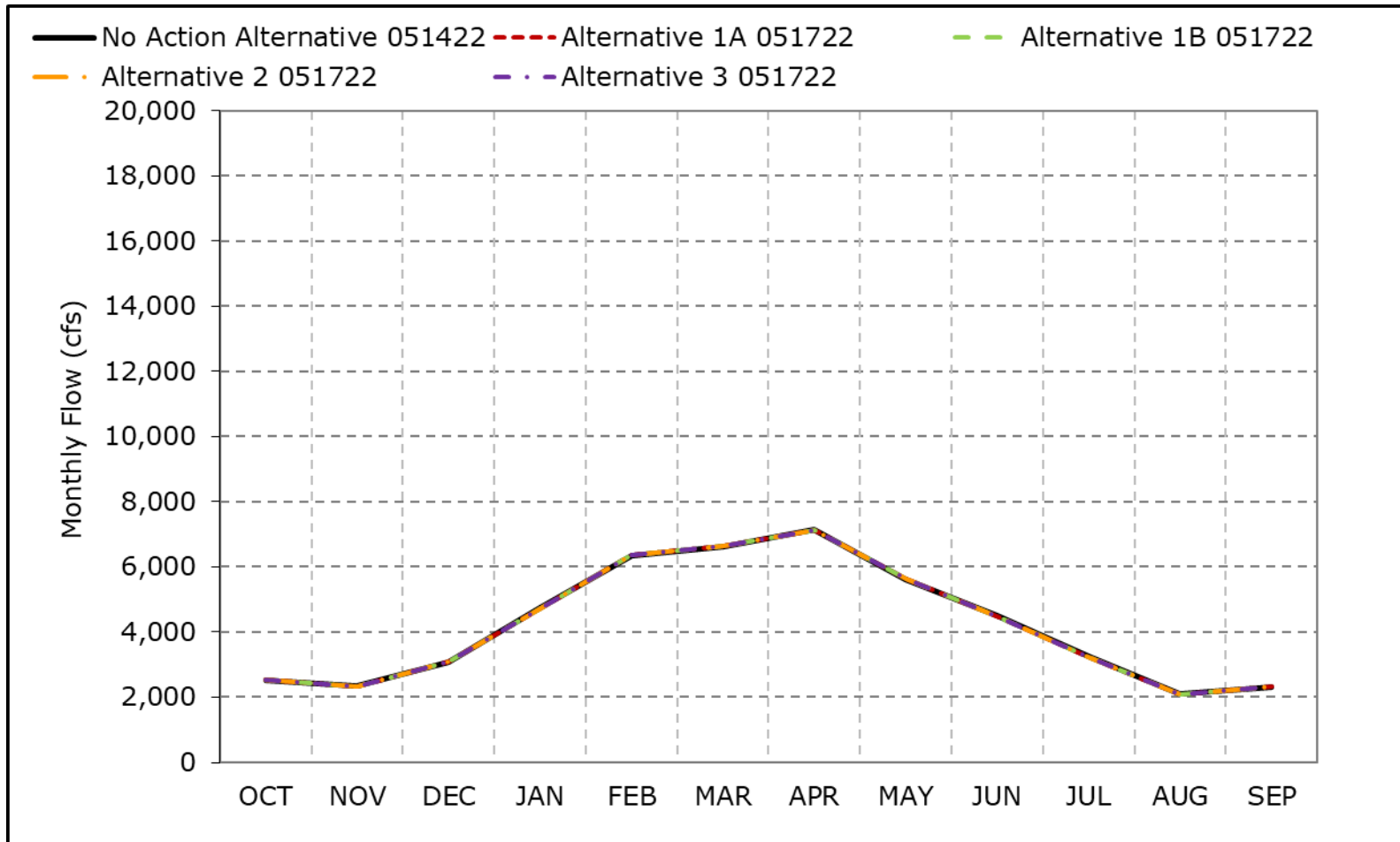
<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

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

\* Water Year Types results are displayed with calendar year - year type sorting.

**Figure 5B3-7-1. San Joaquin River at Vernalis, Long-Term Average Flow**

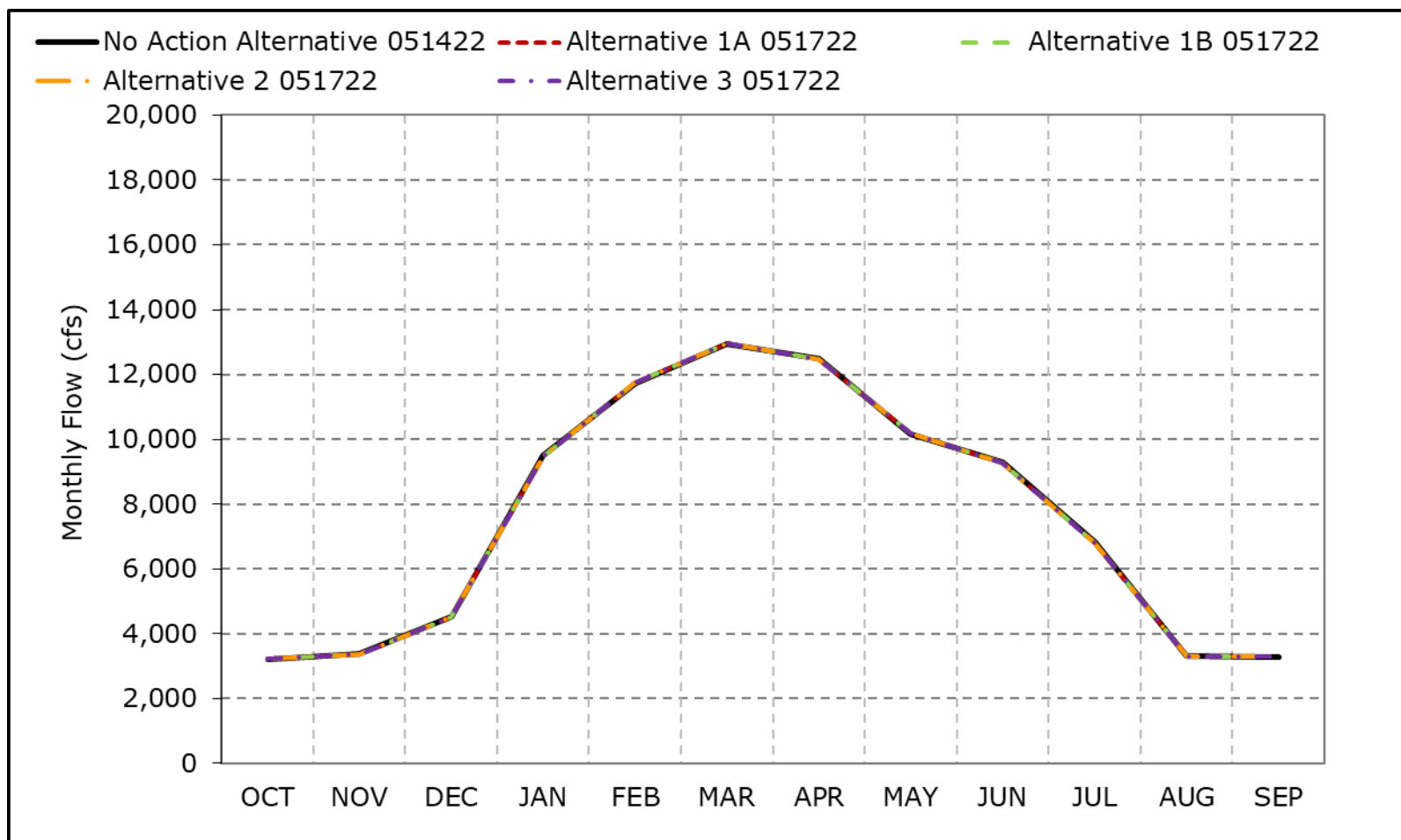


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-2. San Joaquin River at Vernalis, Wet Year Average Flow**



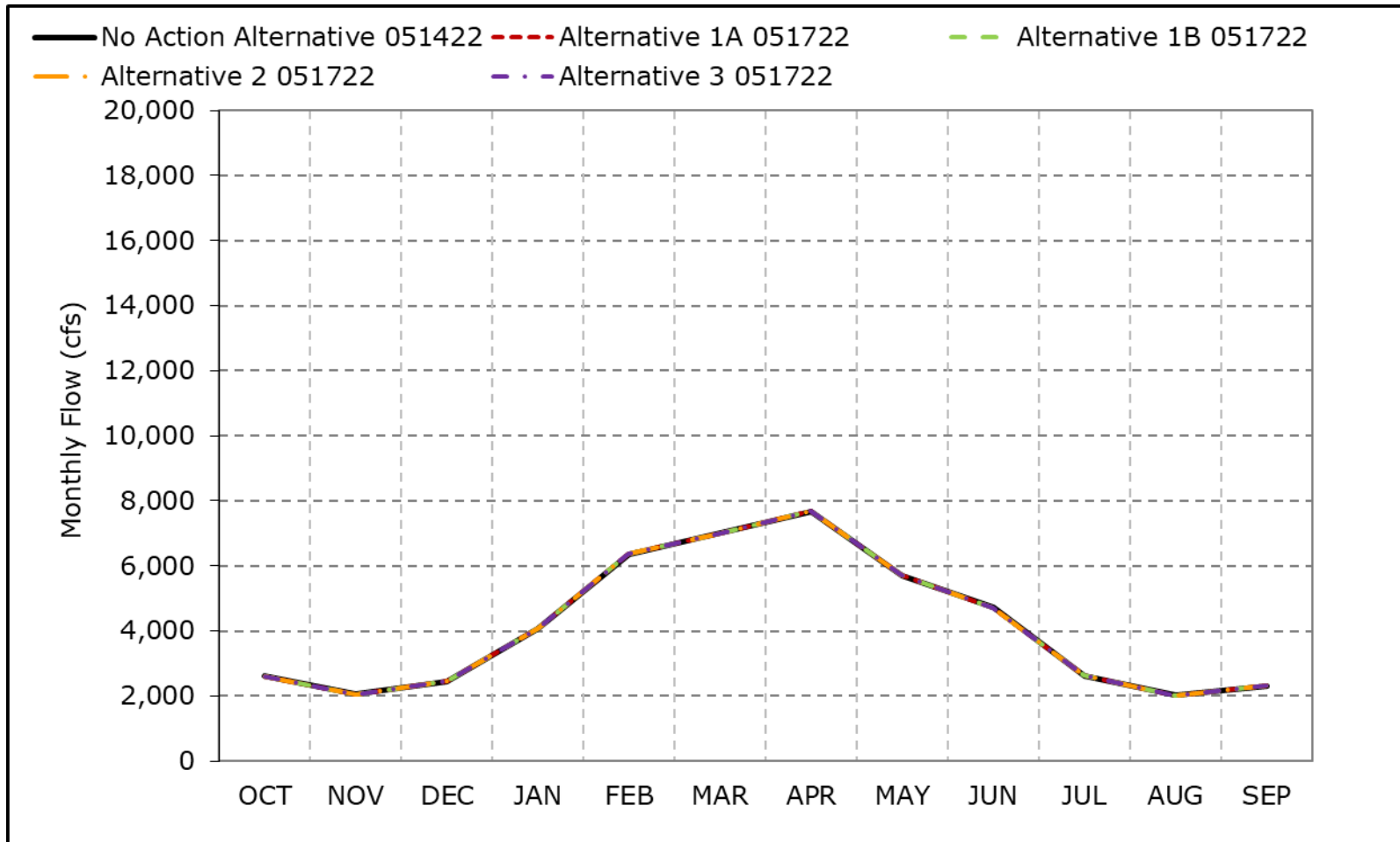
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.



**Figure 5B3-7-3. San Joaquin River at Vernalis, Above Normal Year Average Flow**

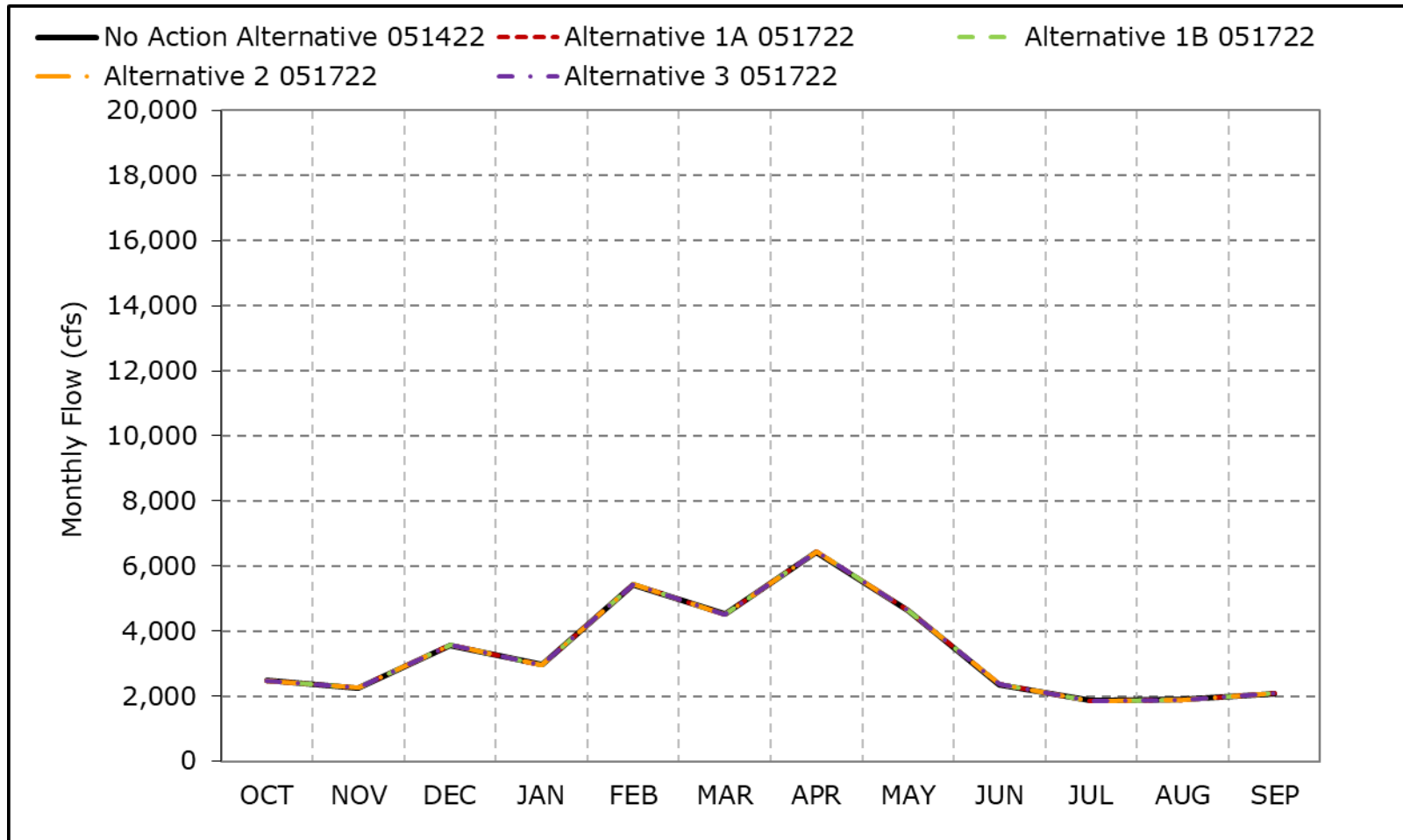


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-4. San Joaquin River at Vernalis, Below Normal Year Average Flow**

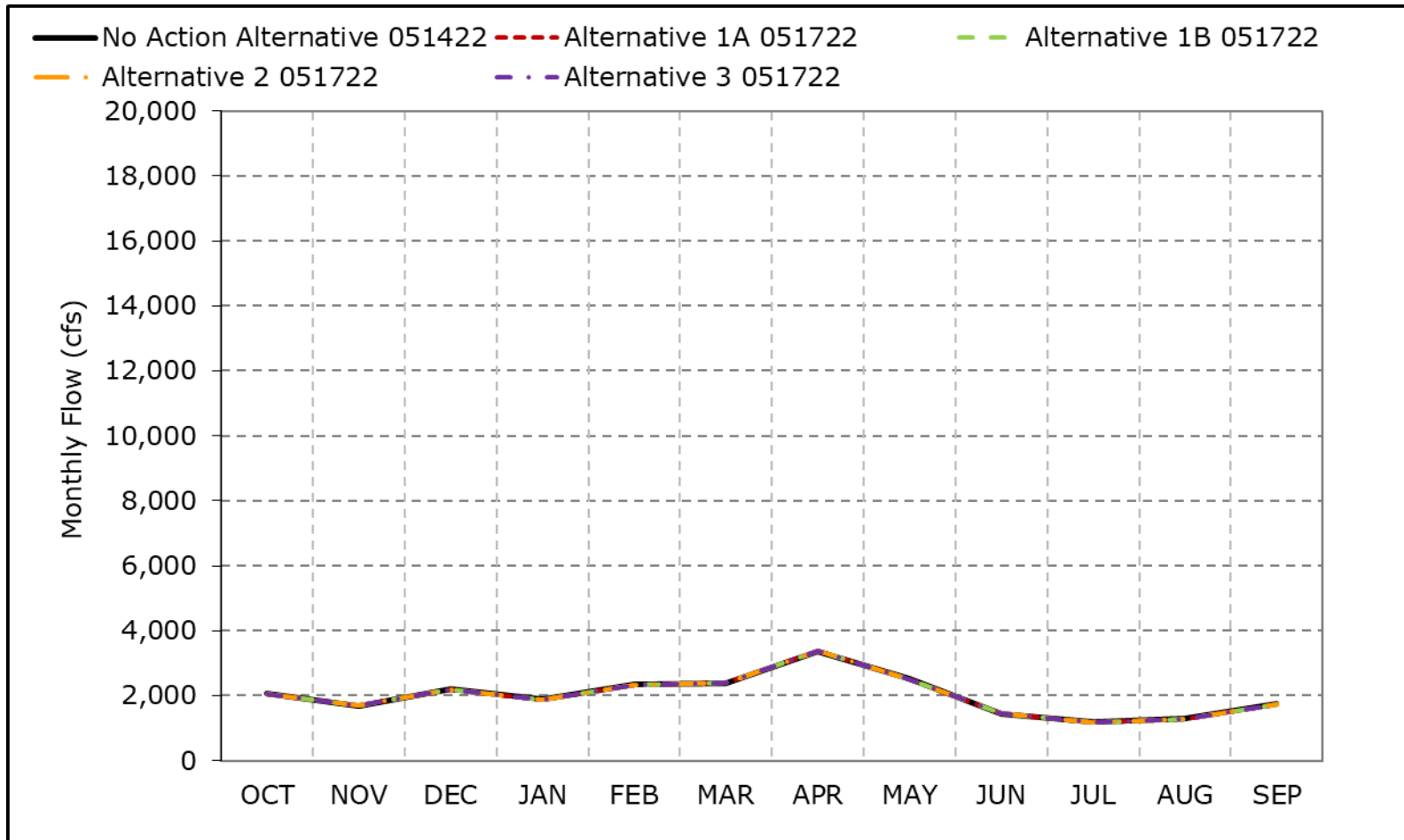


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-5. San Joaquin River at Vernalis, Dry Year Average Flow**

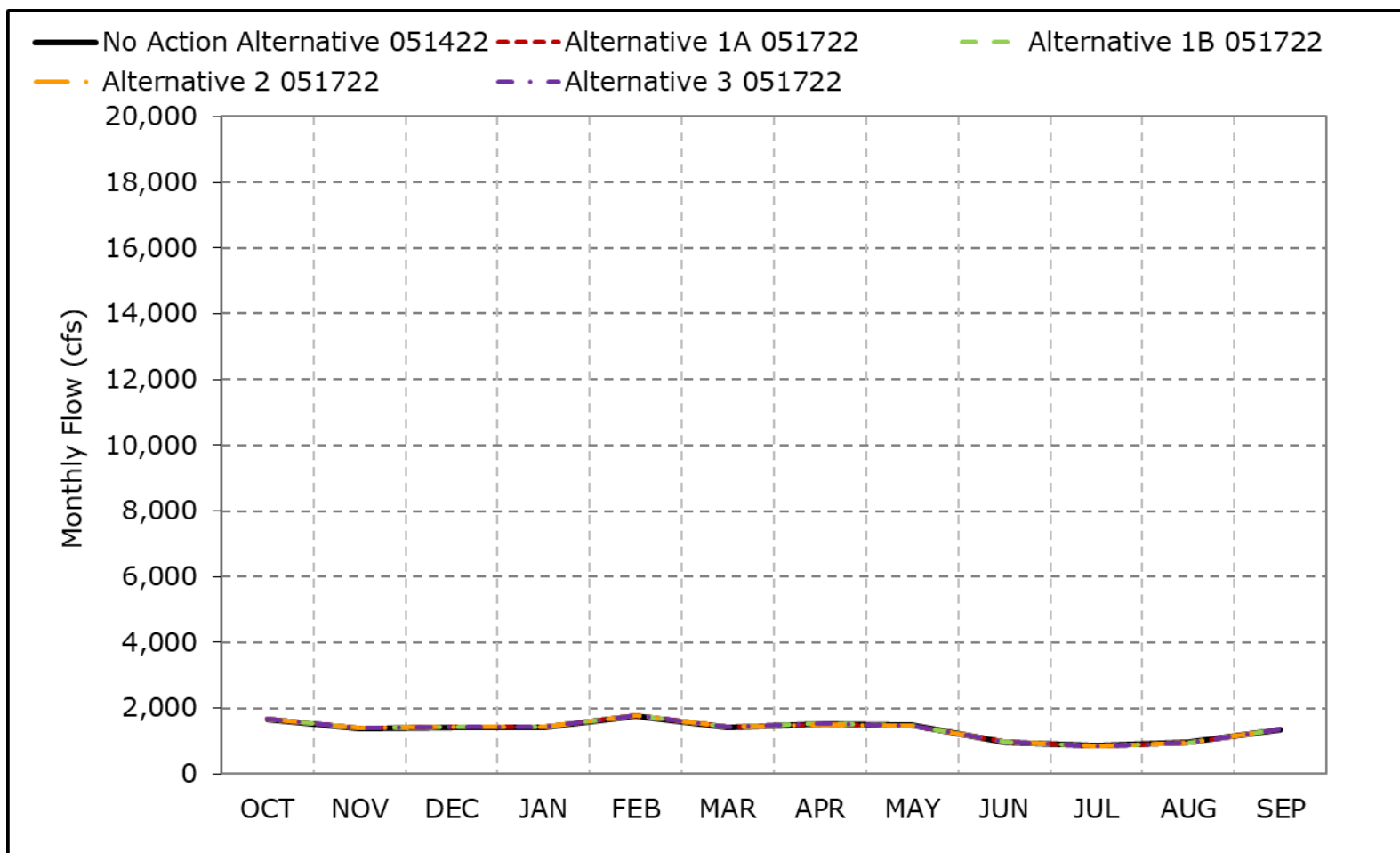


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-6. San Joaquin River at Vernalis, Critical Year Average Flow**

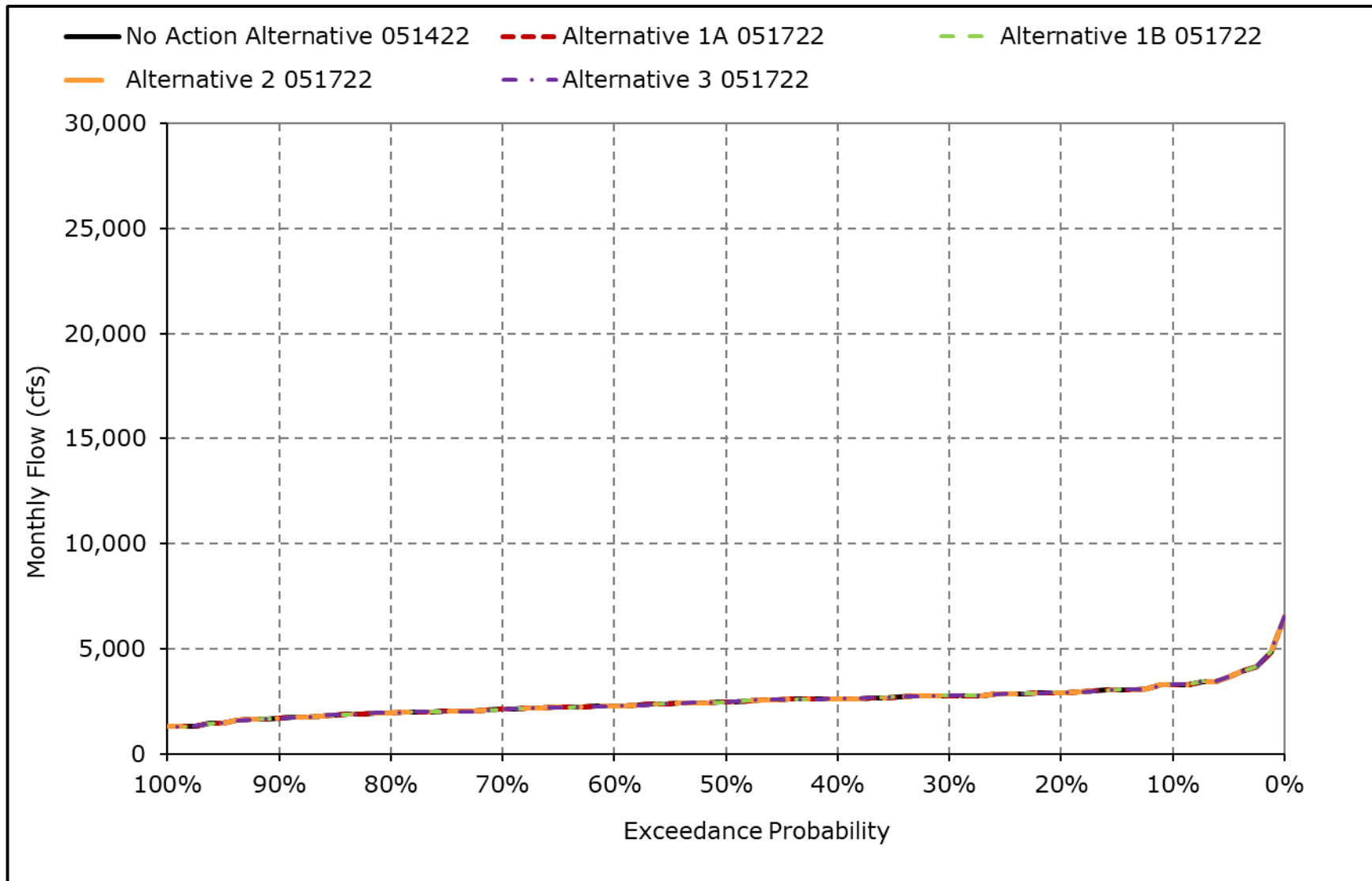


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

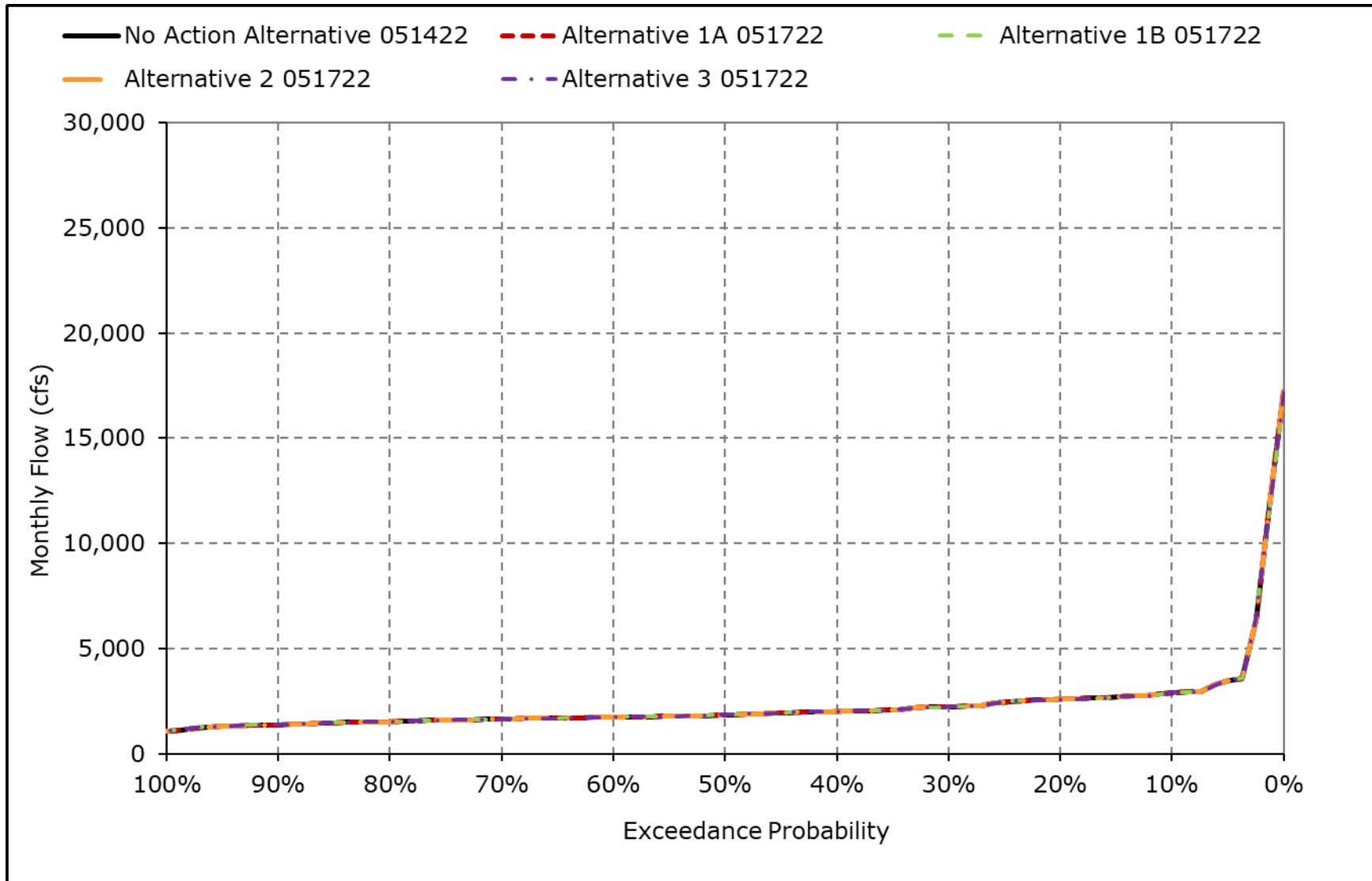
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-7. San Joaquin River at Vernalis, October**



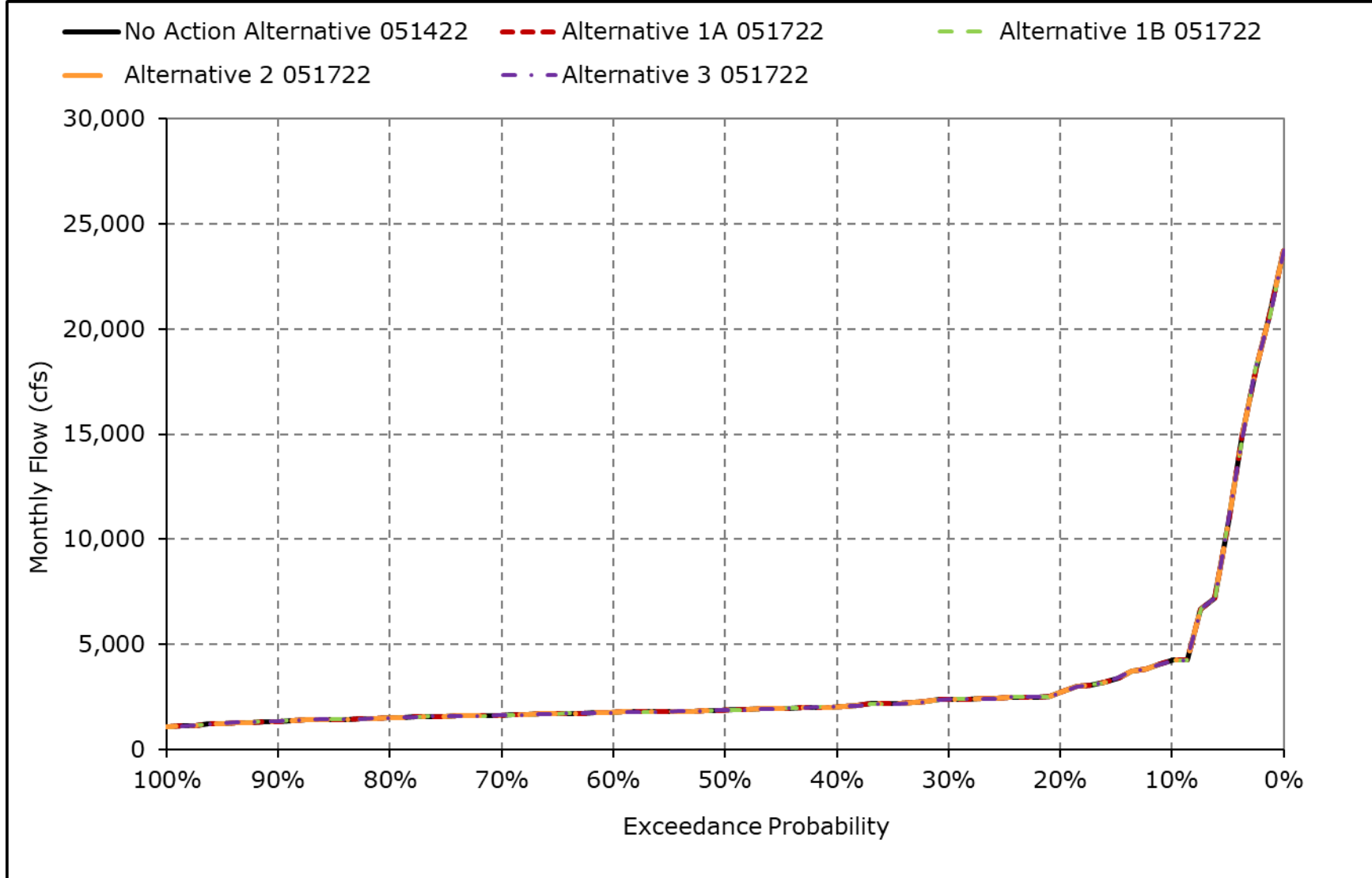
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-8. San Joaquin River at Vernalis, November**



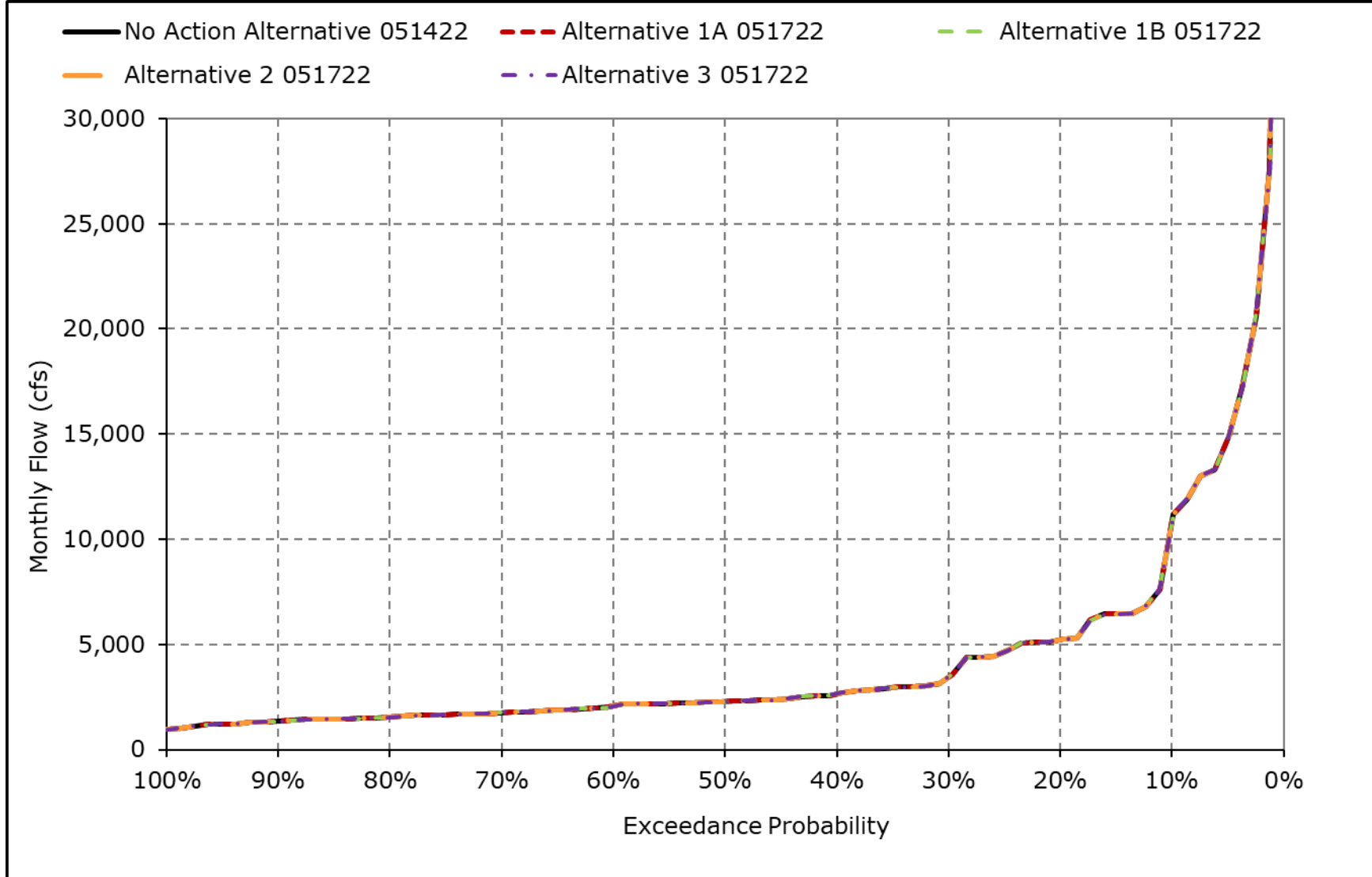
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-9. San Joaquin River at Vernalis, December**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

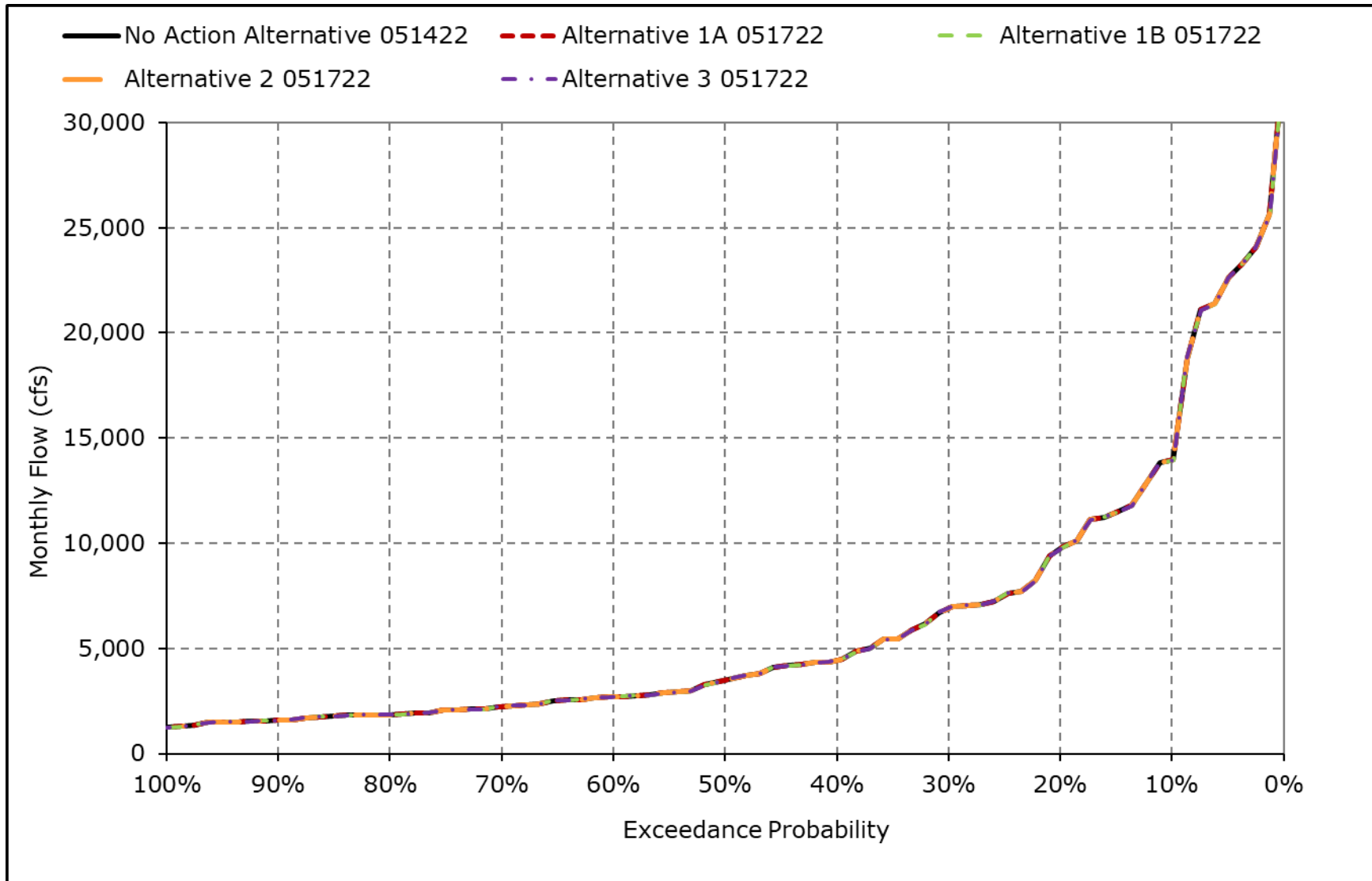
**Figure 5B3-7-10. San Joaquin River at Vernalis, January**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

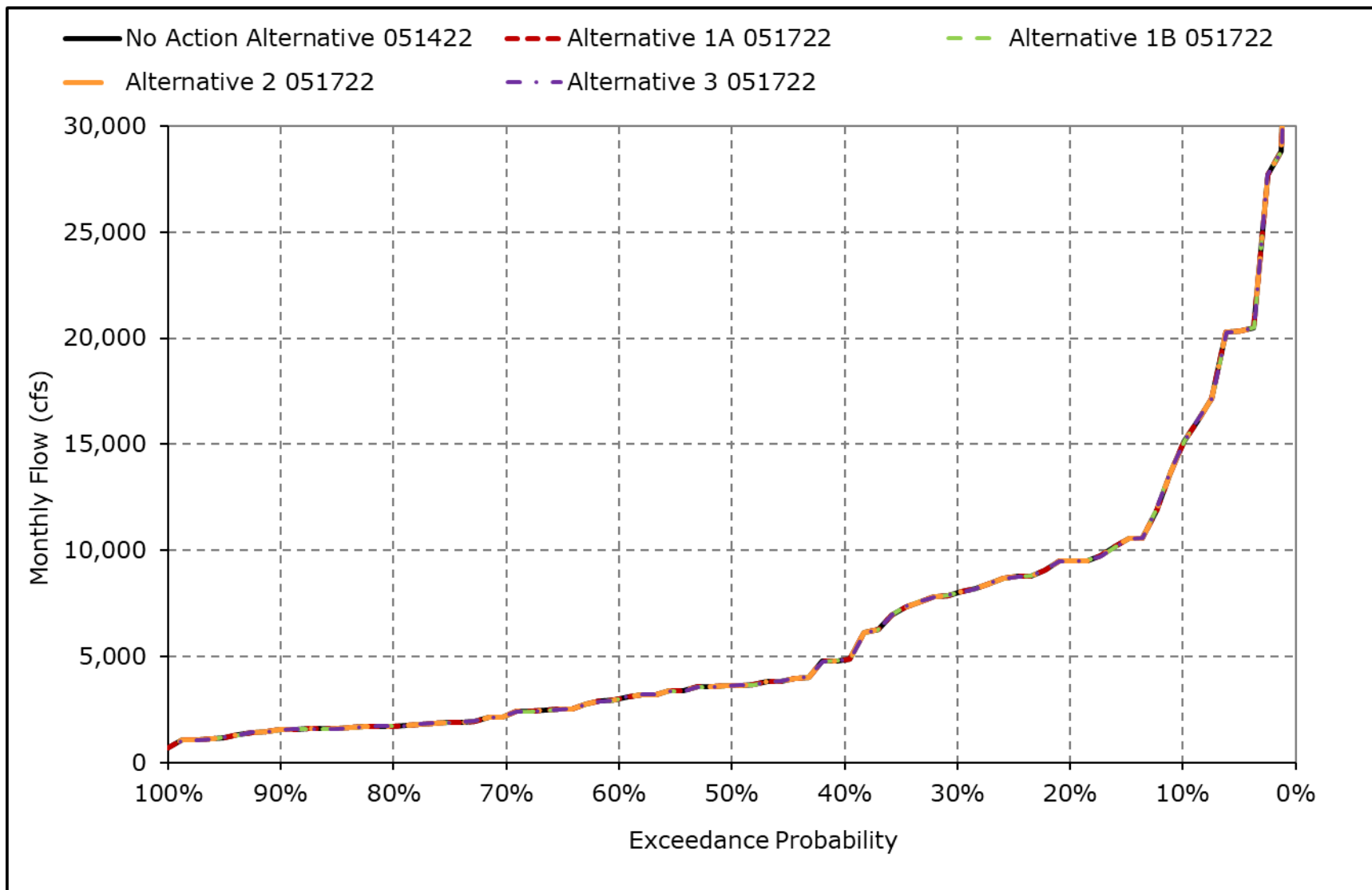


**Figure 5B3-7-11. San Joaquin River at Vernalis, February**



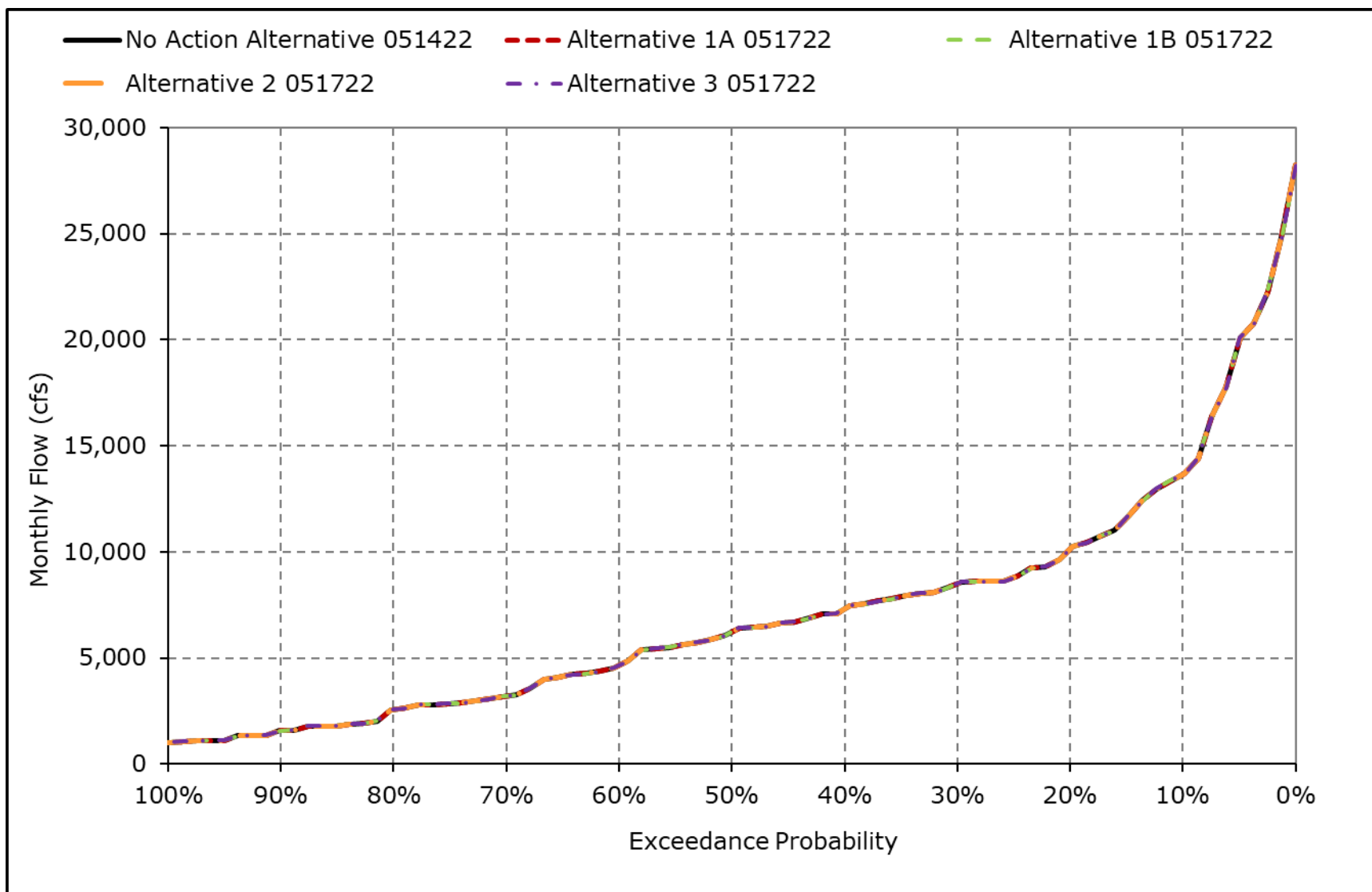
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-12. San Joaquin River at Vernalis, March**



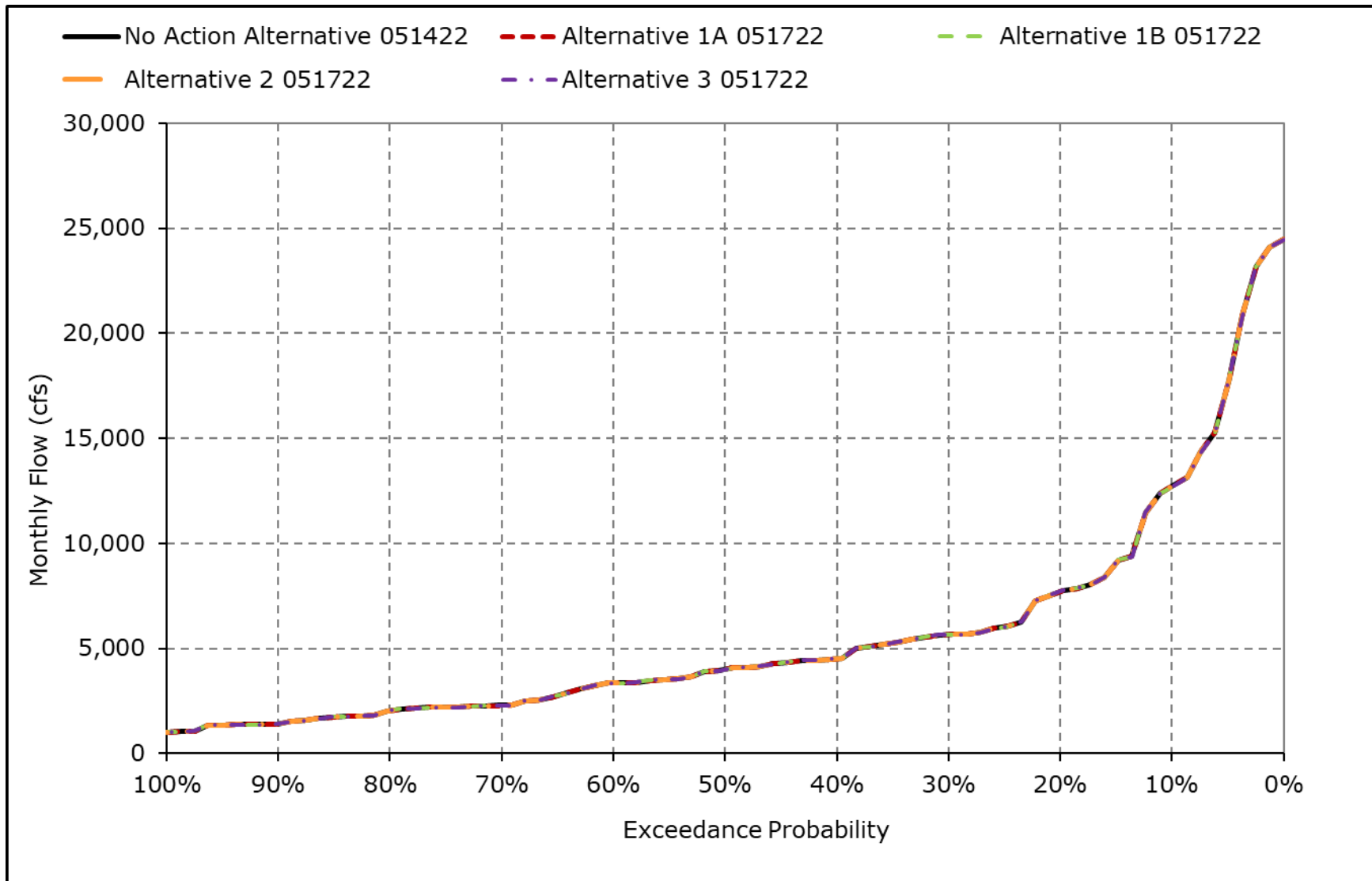
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-13. San Joaquin River at Vernalis, April**



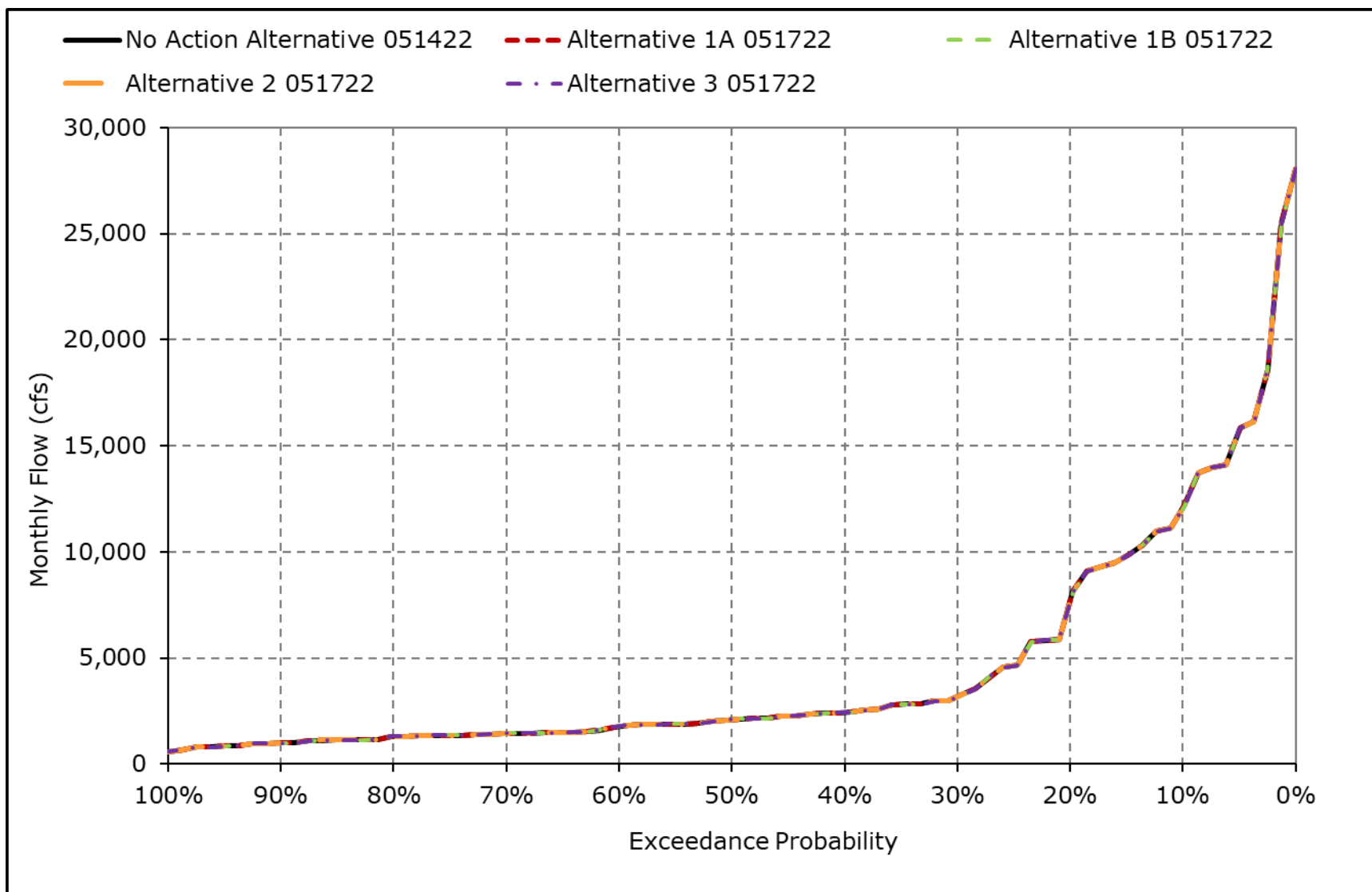
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-14. San Joaquin River at Vernalis, May**



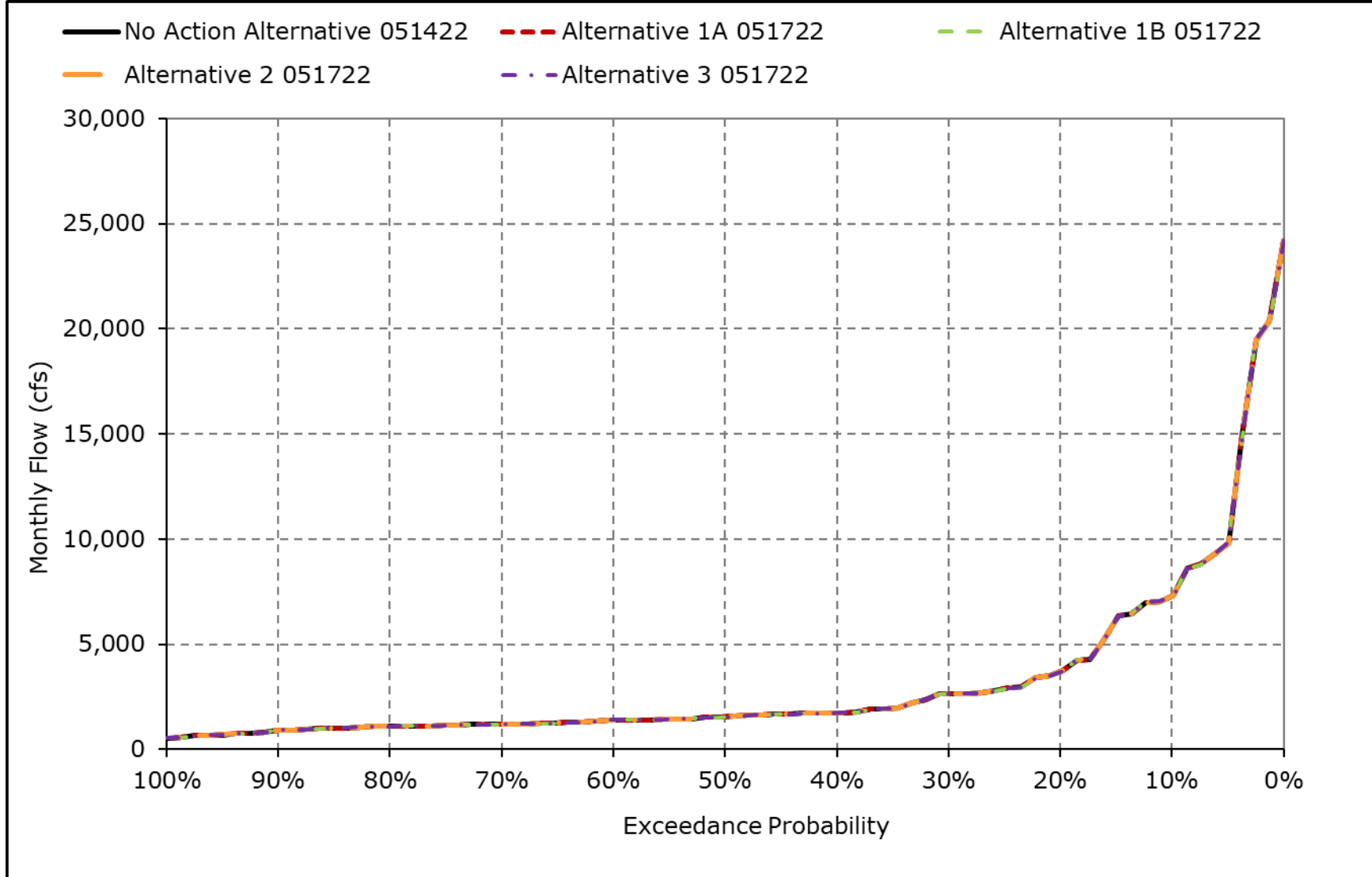
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-15. San Joaquin River at Vernalis, June**



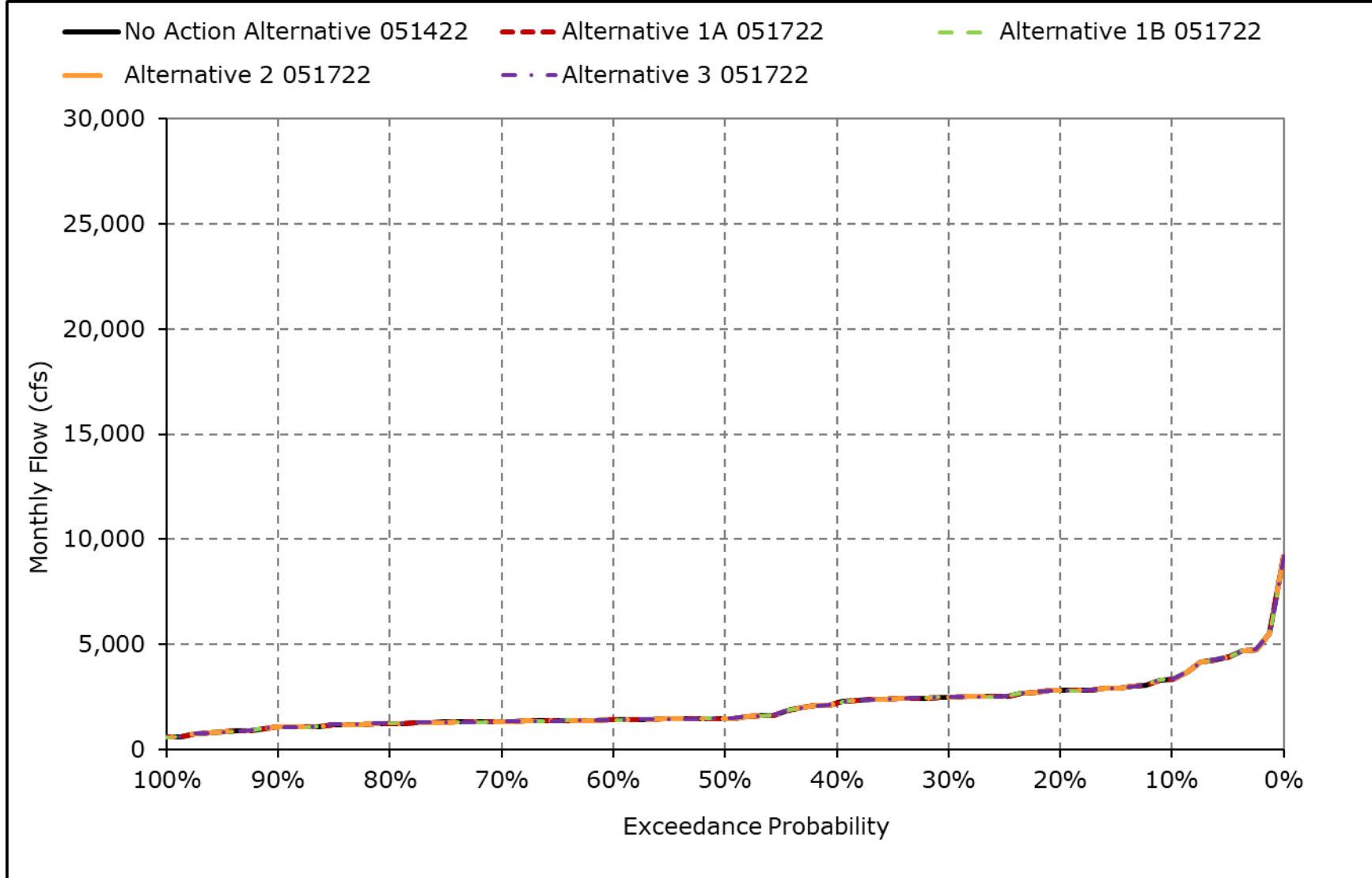
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-16. San Joaquin River at Vernalis, July**



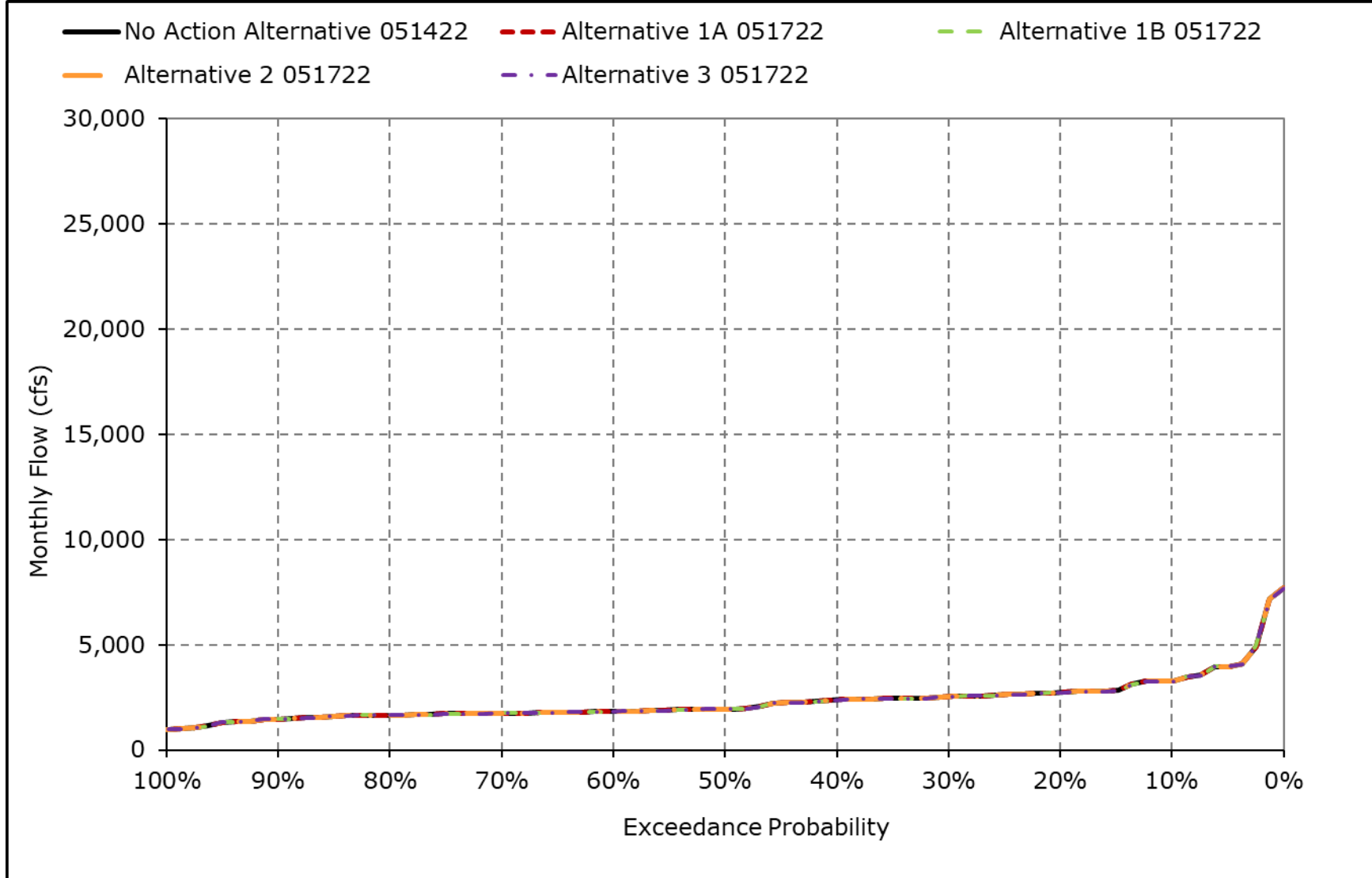
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-17. San Joaquin River at Vernalis, August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-7-18. San Joaquin River at Vernalis, September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.



**Table 5B3-8-1a. San Joaquin River at Vernalis (60-20-20), No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
20% Exceedance	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
30% Exceedance	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
40% Exceedance	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
50% Exceedance	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
60% Exceedance	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
70% Exceedance	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
80% Exceedance	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
90% Exceedance	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	<b>2,523</b>	<b>2,333</b>	<b>3,089</b>	<b>4,732</b>	<b>6,350</b>	<b>6,636</b>	<b>7,142</b>	<b>5,620</b>	<b>4,501</b>	<b>3,245</b>	<b>2,088</b>	<b>2,323</b>
<b>Wet Water Years (29%)</b>	<b>3,200</b>	<b>3,525</b>	<b>5,005</b>	<b>9,319</b>	<b>13,057</b>	<b>14,636</b>	<b>13,555</b>	<b>11,627</b>	<b>11,276</b>	<b>7,744</b>	<b>3,517</b>	<b>3,393</b>
<b>Above Normal Water Years (20%)</b>	<b>2,858</b>	<b>2,184</b>	<b>2,590</b>	<b>5,309</b>	<b>6,930</b>	<b>5,914</b>	<b>7,823</b>	<b>4,981</b>	<b>2,494</b>	<b>2,054</b>	<b>2,232</b>	<b>2,481</b>
<b>Below Normal Water Years (16%)</b>	<b>2,349</b>	<b>2,124</b>	<b>2,917</b>	<b>2,269</b>	<b>2,772</b>	<b>3,235</b>	<b>5,357</b>	<b>3,777</b>	<b>1,913</b>	<b>1,406</b>	<b>1,405</b>	<b>1,824</b>
<b>Dry Water Years (16%)</b>	<b>2,064</b>	<b>1,670</b>	<b>2,452</b>	<b>2,122</b>	<b>2,472</b>	<b>2,474</b>	<b>3,213</b>	<b>2,288</b>	<b>1,395</b>	<b>1,196</b>	<b>1,329</b>	<b>1,775</b>
<b>Critical Water Years (20%)</b>	<b>1,654</b>	<b>1,398</b>	<b>1,394</b>	<b>1,397</b>	<b>1,766</b>	<b>1,505</b>	<b>1,487</b>	<b>1,452</b>	<b>970</b>	<b>849</b>	<b>971</b>	<b>1,411</b>

**Table 5B3-8-1b. San Joaquin River at Vernalis (60-20-20), Alternative 1A 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
20% Exceedance	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
30% Exceedance	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
40% Exceedance	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
50% Exceedance	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
60% Exceedance	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
70% Exceedance	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,194	1,334	1,747
80% Exceedance	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
90% Exceedance	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	<b>2,523</b>	<b>2,333</b>	<b>3,089</b>	<b>4,732</b>	<b>6,350</b>	<b>6,636</b>	<b>7,142</b>	<b>5,620</b>	<b>4,501</b>	<b>3,245</b>	<b>2,088</b>	<b>2,323</b>
<b>Wet Water Years (29%)</b>	<b>3,200</b>	<b>3,525</b>	<b>5,005</b>	<b>9,319</b>	<b>13,057</b>	<b>14,636</b>	<b>13,555</b>	<b>11,627</b>	<b>11,276</b>	<b>7,744</b>	<b>3,517</b>	<b>3,393</b>
<b>Above Normal Water Years (20%)</b>	<b>2,858</b>	<b>2,184</b>	<b>2,590</b>	<b>5,309</b>	<b>6,930</b>	<b>5,914</b>	<b>7,824</b>	<b>4,981</b>	<b>2,494</b>	<b>2,054</b>	<b>2,232</b>	<b>2,481</b>
<b>Below Normal Water Years (16%)</b>	<b>2,349</b>	<b>2,124</b>	<b>2,917</b>	<b>2,269</b>	<b>2,772</b>	<b>3,235</b>	<b>5,357</b>	<b>3,777</b>	<b>1,913</b>	<b>1,406</b>	<b>1,406</b>	<b>1,824</b>
<b>Dry Water Years (16%)</b>	<b>2,064</b>	<b>1,670</b>	<b>2,452</b>	<b>2,122</b>	<b>2,472</b>	<b>2,474</b>	<b>3,213</b>	<b>2,288</b>	<b>1,395</b>	<b>1,196</b>	<b>1,329</b>	<b>1,775</b>
<b>Critical Water Years (20%)</b>	<b>1,654</b>	<b>1,398</b>	<b>1,394</b>	<b>1,397</b>	<b>1,766</b>	<b>1,505</b>	<b>1,487</b>	<b>1,452</b>	<b>970</b>	<b>849</b>	<b>971</b>	<b>1,411</b>

**Table 5B3-8-1c. San Joaquin River at Vernalis (60-20-20), Alternative 1A 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
20% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
30% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
40% Exceedance	0	0	0	0	0	0	0	0	0	1	0	0
50% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
60% Exceedance	0	0	0	0	0	0	0	1	0	0	0	0
70% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
80% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
90% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Wet Water Years (29%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Above Normal Water Years (20%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Below Normal Water Years (16%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Dry Water Years (16%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Critical Water Years (20%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

\* Water Year Types defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-8-2a. San Joaquin River at Vernalis (60-20-20), No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
20% Exceedance	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
30% Exceedance	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
40% Exceedance	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
50% Exceedance	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
60% Exceedance	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
70% Exceedance	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
80% Exceedance	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
90% Exceedance	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	<b>2,523</b>	<b>2,333</b>	<b>3,089</b>	<b>4,732</b>	<b>6,350</b>	<b>6,636</b>	<b>7,142</b>	<b>5,620</b>	<b>4,501</b>	<b>3,245</b>	<b>2,088</b>	<b>2,323</b>
<b>Wet Water Years (29%)</b>	<b>3,200</b>	<b>3,525</b>	<b>5,005</b>	<b>9,319</b>	<b>13,057</b>	<b>14,636</b>	<b>13,555</b>	<b>11,627</b>	<b>11,276</b>	<b>7,744</b>	<b>3,517</b>	<b>3,393</b>
<b>Above Normal Water Years (20%)</b>	<b>2,858</b>	<b>2,184</b>	<b>2,590</b>	<b>5,309</b>	<b>6,930</b>	<b>5,914</b>	<b>7,823</b>	<b>4,981</b>	<b>2,494</b>	<b>2,054</b>	<b>2,232</b>	<b>2,481</b>
<b>Below Normal Water Years (16%)</b>	<b>2,349</b>	<b>2,124</b>	<b>2,917</b>	<b>2,269</b>	<b>2,772</b>	<b>3,235</b>	<b>5,357</b>	<b>3,777</b>	<b>1,913</b>	<b>1,406</b>	<b>1,405</b>	<b>1,824</b>
<b>Dry Water Years (16%)</b>	<b>2,064</b>	<b>1,670</b>	<b>2,452</b>	<b>2,122</b>	<b>2,472</b>	<b>2,474</b>	<b>3,213</b>	<b>2,288</b>	<b>1,395</b>	<b>1,196</b>	<b>1,329</b>	<b>1,775</b>
<b>Critical Water Years (20%)</b>	<b>1,654</b>	<b>1,398</b>	<b>1,394</b>	<b>1,397</b>	<b>1,766</b>	<b>1,505</b>	<b>1,487</b>	<b>1,452</b>	<b>970</b>	<b>849</b>	<b>971</b>	<b>1,411</b>

**Table 5B3-8-2b. San Joaquin River at Vernalis (60-20-20), Alternative 1B 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
20% Exceedance	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
30% Exceedance	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,663	3,179	2,643	2,484	2,532
40% Exceedance	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
50% Exceedance	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
60% Exceedance	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
70% Exceedance	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
80% Exceedance	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
90% Exceedance	1,684	1,377	1,339	1,348	1,583	1,536	1,575	1,419	991	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	<b>2,523</b>	<b>2,333</b>	<b>3,089</b>	<b>4,732</b>	<b>6,350</b>	<b>6,636</b>	<b>7,142</b>	<b>5,620</b>	<b>4,501</b>	<b>3,245</b>	<b>2,088</b>	<b>2,323</b>
<b>Wet Water Years (29%)</b>	<b>3,200</b>	<b>3,525</b>	<b>5,005</b>	<b>9,319</b>	<b>13,057</b>	<b>14,636</b>	<b>13,555</b>	<b>11,627</b>	<b>11,276</b>	<b>7,744</b>	<b>3,517</b>	<b>3,393</b>
<b>Above Normal Water Years (20%)</b>	<b>2,858</b>	<b>2,184</b>	<b>2,590</b>	<b>5,309</b>	<b>6,930</b>	<b>5,914</b>	<b>7,824</b>	<b>4,981</b>	<b>2,494</b>	<b>2,054</b>	<b>2,232</b>	<b>2,481</b>
<b>Below Normal Water Years (16%)</b>	<b>2,349</b>	<b>2,124</b>	<b>2,917</b>	<b>2,269</b>	<b>2,772</b>	<b>3,236</b>	<b>5,357</b>	<b>3,777</b>	<b>1,913</b>	<b>1,407</b>	<b>1,406</b>	<b>1,824</b>
<b>Dry Water Years (16%)</b>	<b>2,064</b>	<b>1,670</b>	<b>2,452</b>	<b>2,122</b>	<b>2,472</b>	<b>2,474</b>	<b>3,213</b>	<b>2,288</b>	<b>1,395</b>	<b>1,196</b>	<b>1,329</b>	<b>1,775</b>
<b>Critical Water Years (20%)</b>	<b>1,654</b>	<b>1,398</b>	<b>1,394</b>	<b>1,397</b>	<b>1,766</b>	<b>1,505</b>	<b>1,487</b>	<b>1,452</b>	<b>970</b>	<b>849</b>	<b>972</b>	<b>1,411</b>

**Table 5B3-8-2c. San Joaquin River at Vernalis (60-20-20), Alternative 1B 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
20% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
30% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
40% Exceedance	0	0	0	0	0	0	0	0	0	1	0	0
50% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
60% Exceedance	0	0	0	0	0	0	0	1	0	0	0	0
70% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
80% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
90% Exceedance	0	0	0	0	0	0	2	3	-2	1	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Wet Water Years (29%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Above Normal Water Years (20%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Below Normal Water Years (16%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Dry Water Years (16%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Critical Water Years (20%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

\* Water Year Types defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-8-3a. San Joaquin River at Vernalis (60-20-20), No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (29%)</b>	3,200	3,525	5,005	9,319	13,057	14,636	13,555	11,627	11,276	7,744	3,517	3,393
<b>Above Normal Water Years (20%)</b>	2,858	2,184	2,590	5,309	6,930	5,914	7,823	4,981	2,494	2,054	2,232	2,481
<b>Below Normal Water Years (16%)</b>	2,349	2,124	2,917	2,269	2,772	3,235	5,357	3,777	1,913	1,406	1,405	1,824
<b>Dry Water Years (16%)</b>	2,064	1,670	2,452	2,122	2,472	2,474	3,213	2,288	1,395	1,196	1,329	1,775
<b>Critical Water Years (20%)</b>	1,654	1,398	1,394	1,397	1,766	1,505	1,487	1,452	970	849	971	1,411

**Table 5B3-8-3b. San Joaquin River at Vernalis (60-20-20), Alternative 2 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
<b>20% Exceedance</b>	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
<b>30% Exceedance</b>	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
<b>40% Exceedance</b>	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
<b>50% Exceedance</b>	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
<b>60% Exceedance</b>	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
<b>70% Exceedance</b>	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,194	1,334	1,747
<b>80% Exceedance</b>	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
<b>90% Exceedance</b>	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	2,523	2,333	3,089	4,732	6,350	6,636	7,142	5,620	4,501	3,245	2,088	2,323
<b>Wet Water Years (29%)</b>	3,200	3,525	5,005	9,319	13,057	14,636	13,555	11,627	11,276	7,744	3,517	3,393
<b>Above Normal Water Years (20%)</b>	2,858	2,184	2,590	5,309	6,930	5,914	7,823	4,981	2,495	2,054	2,232	2,481
<b>Below Normal Water Years (16%)</b>	2,349	2,124	2,917	2,269	2,772	3,235	5,357	3,777	1,913	1,406	1,406	1,824
<b>Dry Water Years (16%)</b>	2,064	1,670	2,452	2,122	2,472	2,474	3,213	2,288	1,395	1,196	1,329	1,775
<b>Critical Water Years (20%)</b>	1,654	1,398	1,394	1,397	1,766	1,505	1,487	1,452	970	849	971	1,411

**Table 5B3-8-3c. San Joaquin River at Vernalis (60-20-20), Alternative 2 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>10% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>20% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>30% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>40% Exceedance</b>	0	0	0	0	0	0	0	0	0	1	0	0
<b>50% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>60% Exceedance</b>	0	0	0	0	0	0	0	1	0	0	0	0
<b>70% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>80% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>90% Exceedance</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Wet Water Years (29%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Above Normal Water Years (20%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Below Normal Water Years (16%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Dry Water Years (16%)</b>	0	0	0	0	0	0	0	0	0	0	0	0
<b>Critical Water Years (20%)</b>	0	0	0	0	0	0	0	0	0	0	0	0

<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

\* Water Year Types defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\* Water Year Types results are displayed with calendar year - year type sorting.

**Table 5B3-8-4a. San Joaquin River at Vernalis (60-20-20), No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
20% Exceedance	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
30% Exceedance	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,662	3,179	2,643	2,484	2,532
40% Exceedance	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,508	2,421	1,737	2,198	2,383
50% Exceedance	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,017	2,110	1,546	1,476	1,935
60% Exceedance	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,350	1,782	1,402	1,400	1,825
70% Exceedance	2,128	1,634	1,628	1,758	2,247	2,215	3,204	2,285	1,445	1,195	1,334	1,747
80% Exceedance	1,961	1,513	1,500	1,538	1,852	1,720	2,567	2,054	1,315	1,099	1,236	1,658
90% Exceedance	1,684	1,377	1,339	1,348	1,583	1,536	1,574	1,416	993	930	1,059	1,463
<b>Full Simulation Period Average<sup>a</sup></b>	<b>2,523</b>	<b>2,333</b>	<b>3,089</b>	<b>4,732</b>	<b>6,350</b>	<b>6,636</b>	<b>7,142</b>	<b>5,620</b>	<b>4,501</b>	<b>3,245</b>	<b>2,088</b>	<b>2,323</b>
<b>Wet Water Years (29%)</b>	<b>3,200</b>	<b>3,525</b>	<b>5,005</b>	<b>9,319</b>	<b>13,057</b>	<b>14,636</b>	<b>13,555</b>	<b>11,627</b>	<b>11,276</b>	<b>7,744</b>	<b>3,517</b>	<b>3,393</b>
<b>Above Normal Water Years (20%)</b>	<b>2,858</b>	<b>2,184</b>	<b>2,590</b>	<b>5,309</b>	<b>6,930</b>	<b>5,914</b>	<b>7,823</b>	<b>4,981</b>	<b>2,494</b>	<b>2,054</b>	<b>2,232</b>	<b>2,481</b>
<b>Below Normal Water Years (16%)</b>	<b>2,349</b>	<b>2,124</b>	<b>2,917</b>	<b>2,269</b>	<b>2,772</b>	<b>3,235</b>	<b>5,357</b>	<b>3,777</b>	<b>1,913</b>	<b>1,406</b>	<b>1,405</b>	<b>1,824</b>
<b>Dry Water Years (16%)</b>	<b>2,064</b>	<b>1,670</b>	<b>2,452</b>	<b>2,122</b>	<b>2,472</b>	<b>2,474</b>	<b>3,213</b>	<b>2,288</b>	<b>1,395</b>	<b>1,196</b>	<b>1,329</b>	<b>1,775</b>
<b>Critical Water Years (20%)</b>	<b>1,654</b>	<b>1,398</b>	<b>1,394</b>	<b>1,397</b>	<b>1,766</b>	<b>1,505</b>	<b>1,487</b>	<b>1,452</b>	<b>970</b>	<b>849</b>	<b>971</b>	<b>1,411</b>

**Table 5B3-8-4b. San Joaquin River at Vernalis (60-20-20), Alternative 3 051722, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,290	2,898	4,217	10,826	13,951	14,996	13,638	12,723	12,058	7,285	3,349	3,276
20% Exceedance	2,913	2,582	2,710	5,216	9,726	9,482	10,138	7,705	7,680	3,691	2,800	2,724
30% Exceedance	2,760	2,230	2,375	3,444	6,922	7,983	8,505	5,663	3,179	2,643	2,484	2,532
40% Exceedance	2,622	2,006	2,029	2,657	4,429	4,840	7,319	4,507	2,419	1,737	2,197	2,383
50% Exceedance	2,457	1,855	1,871	2,278	3,500	3,622	6,235	4,016	2,109	1,546	1,476	1,935
60% Exceedance	2,275	1,739	1,760	2,070	2,705	3,000	4,666	3,351	1,781	1,402	1,400	1,825
70% Exceedance	2,129	1,634	1,628	1,759	2,247	2,215	3,205	2,285	1,445	1,195	1,334	1,747
80% Exceedance	1,961	1,513	1,500	1,537	1,853	1,720	2,567	2,058	1,315	1,103	1,236	1,659
90% Exceedance	1,684	1,377	1,339	1,348	1,584	1,536	1,576	1,419	993	930	1,059	1,464
<b>Full Simulation Period Average<sup>a</sup></b>	<b>2,523</b>	<b>2,333</b>	<b>3,089</b>	<b>4,732</b>	<b>6,350</b>	<b>6,636</b>	<b>7,143</b>	<b>5,620</b>	<b>4,501</b>	<b>3,246</b>	<b>2,088</b>	<b>2,323</b>
<b>Wet Water Years (29%)</b>	<b>3,200</b>	<b>3,526</b>	<b>5,005</b>	<b>9,319</b>	<b>13,057</b>	<b>14,636</b>	<b>13,555</b>	<b>11,627</b>	<b>11,276</b>	<b>7,744</b>	<b>3,517</b>	<b>3,393</b>
<b>Above Normal Water Years (20%)</b>	<b>2,858</b>	<b>2,184</b>	<b>2,590</b>	<b>5,309</b>	<b>6,930</b>	<b>5,914</b>	<b>7,823</b>	<b>4,981</b>	<b>2,494</b>	<b>2,053</b>	<b>2,231</b>	<b>2,481</b>
<b>Below Normal Water Years (16%)</b>	<b>2,349</b>	<b>2,124</b>	<b>2,917</b>	<b>2,269</b>	<b>2,772</b>	<b>3,236</b>	<b>5,357</b>	<b>3,777</b>	<b>1,913</b>	<b>1,407</b>	<b>1,406</b>	<b>1,824</b>
<b>Dry Water Years (16%)</b>	<b>2,064</b>	<b>1,670</b>	<b>2,453</b>	<b>2,122</b>	<b>2,472</b>	<b>2,474</b>	<b>3,213</b>	<b>2,288</b>	<b>1,396</b>	<b>1,197</b>	<b>1,330</b>	<b>1,776</b>
<b>Critical Water Years (20%)</b>	<b>1,655</b>	<b>1,398</b>	<b>1,394</b>	<b>1,397</b>	<b>1,766</b>	<b>1,505</b>	<b>1,487</b>	<b>1,452</b>	<b>971</b>	<b>850</b>	<b>972</b>	<b>1,412</b>

**Table 5B3-8-4c. San Joaquin River at Vernalis (60-20-20), Alternative 3 051722 minus No Action Alternative 051422, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
20% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
30% Exceedance	0	0	0	0	0	0	0	1	0	0	0	0
40% Exceedance	0	0	0	0	1	0	0	0	-2	0	-1	0
50% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
60% Exceedance	1	0	0	0	0	0	0	0	0	0	0	0
70% Exceedance	1	0	0	0	0	0	1	0	0	0	0	0
80% Exceedance	0	0	0	0	0	0	0	4	0	4	0	0
90% Exceedance	0	0	0	0	0	0	2	3	0	1	0	0
<b>Full Simulation Period Average<sup>a</sup></b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Wet Water Years (29%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Above Normal Water Years (20%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Below Normal Water Years (16%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Dry Water Years (16%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Critical Water Years (20%)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>

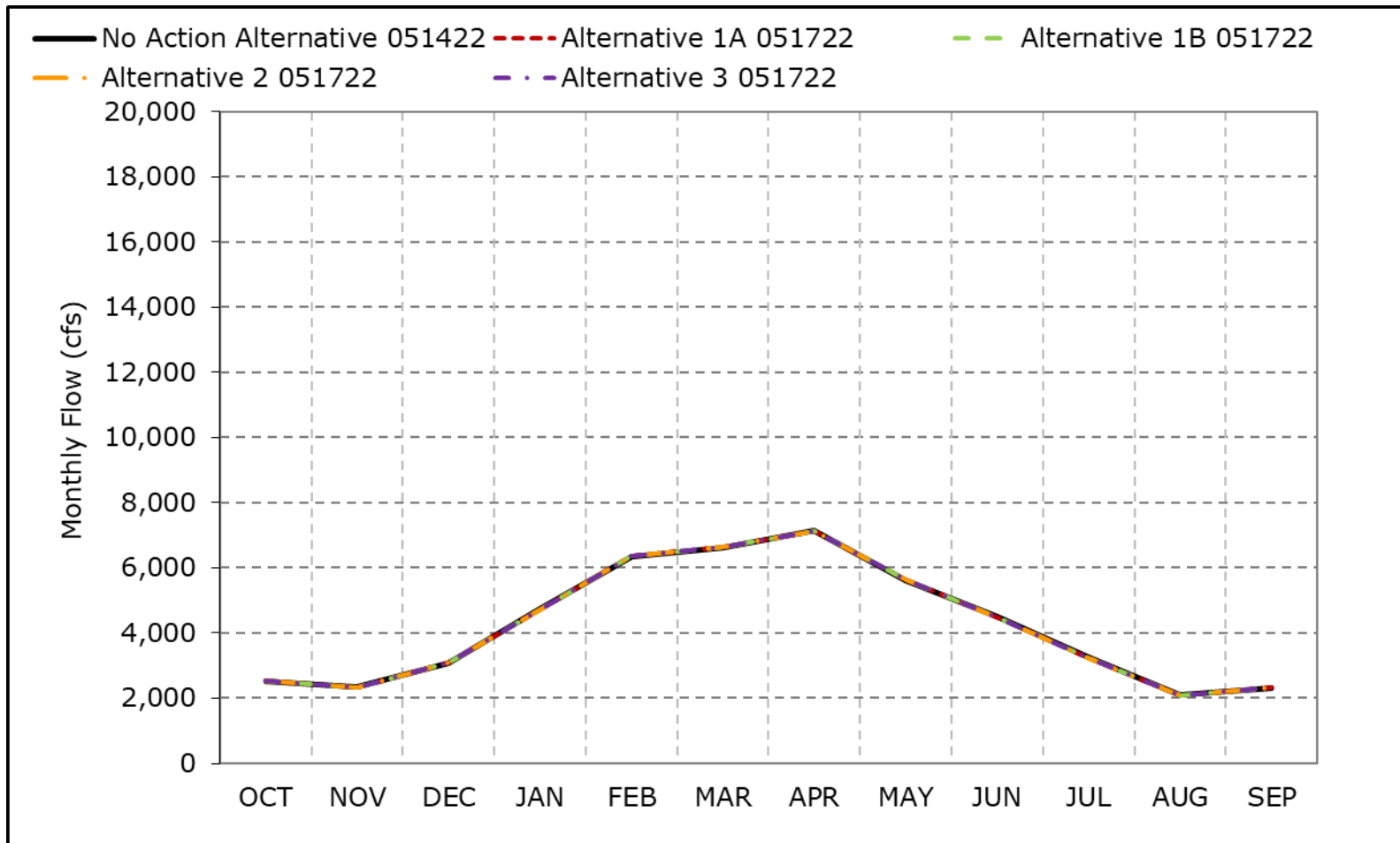
<sup>a</sup> Based on the 82-year simulation period.

\* All scenarios are simulated at current climate condition and 0 cm sea level rise.

\* Water Year Types defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\* Water Year Types results are displayed with calendar year - year type sorting.

**Figure 5B3-8-1. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow**

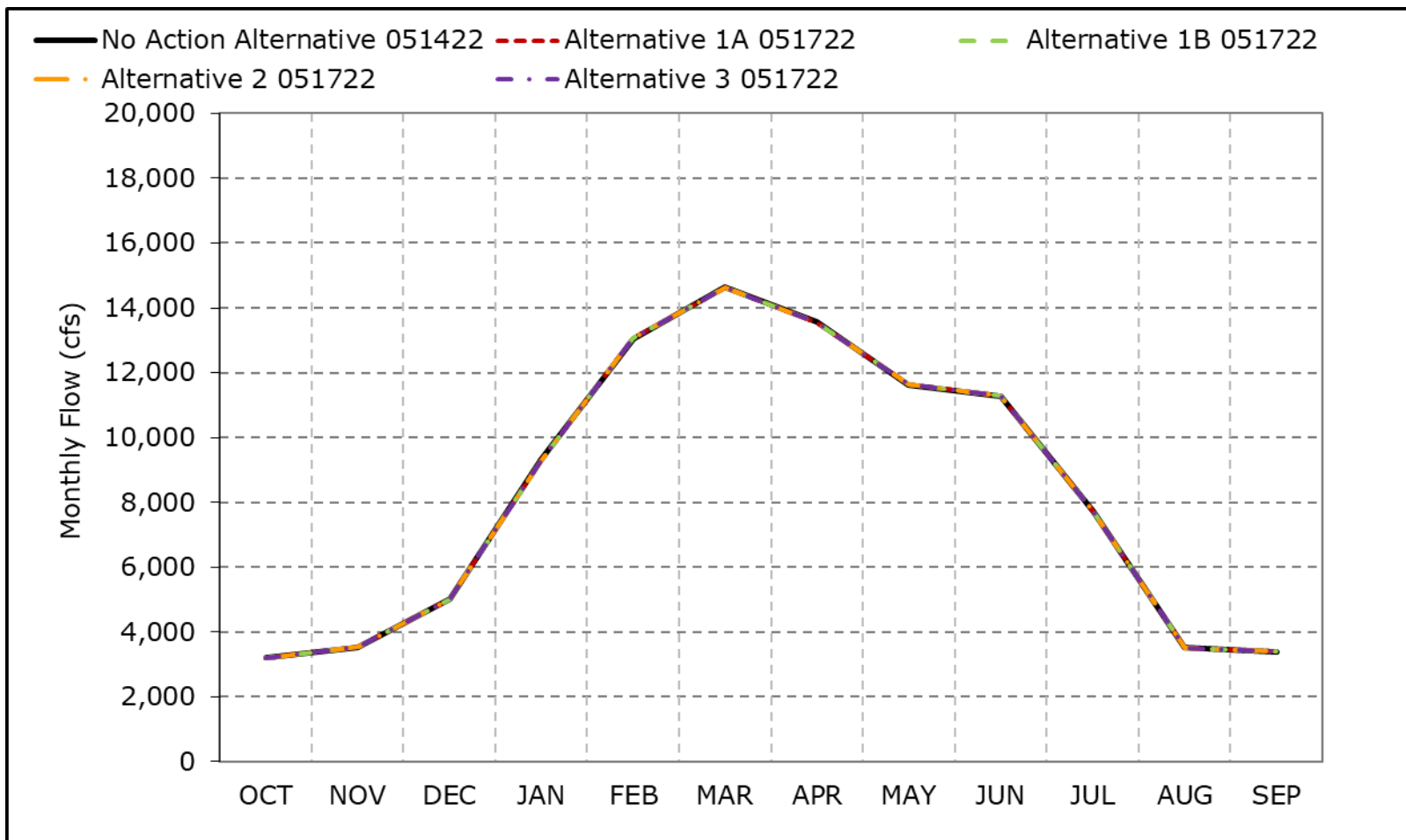


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-2. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow**

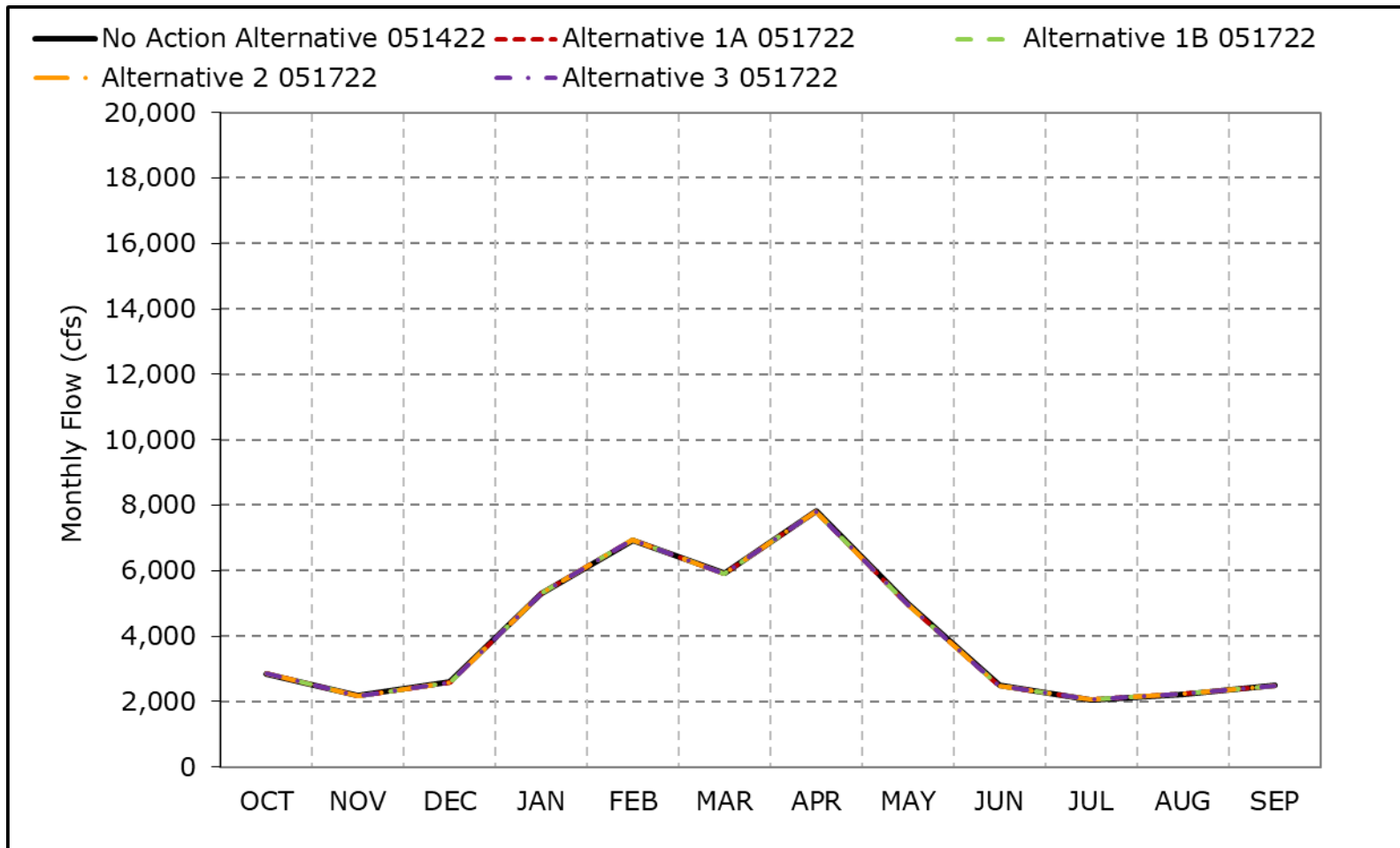


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

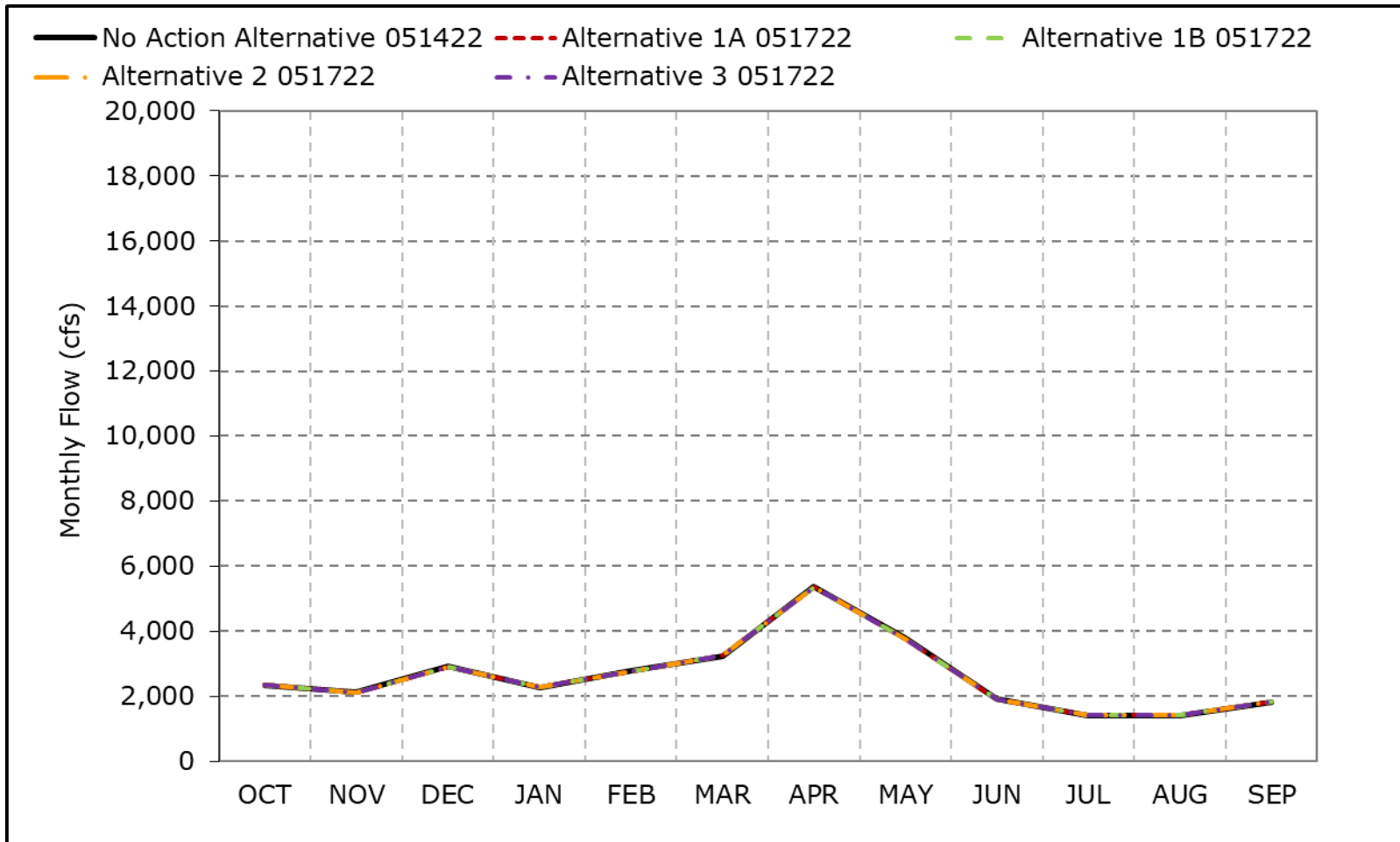
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-3. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow**



\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).  
 \*These results are displayed with calendar year - year type sorting.  
 \*All scenarios are simulated at current climate condition and 0 cm sea level rise.

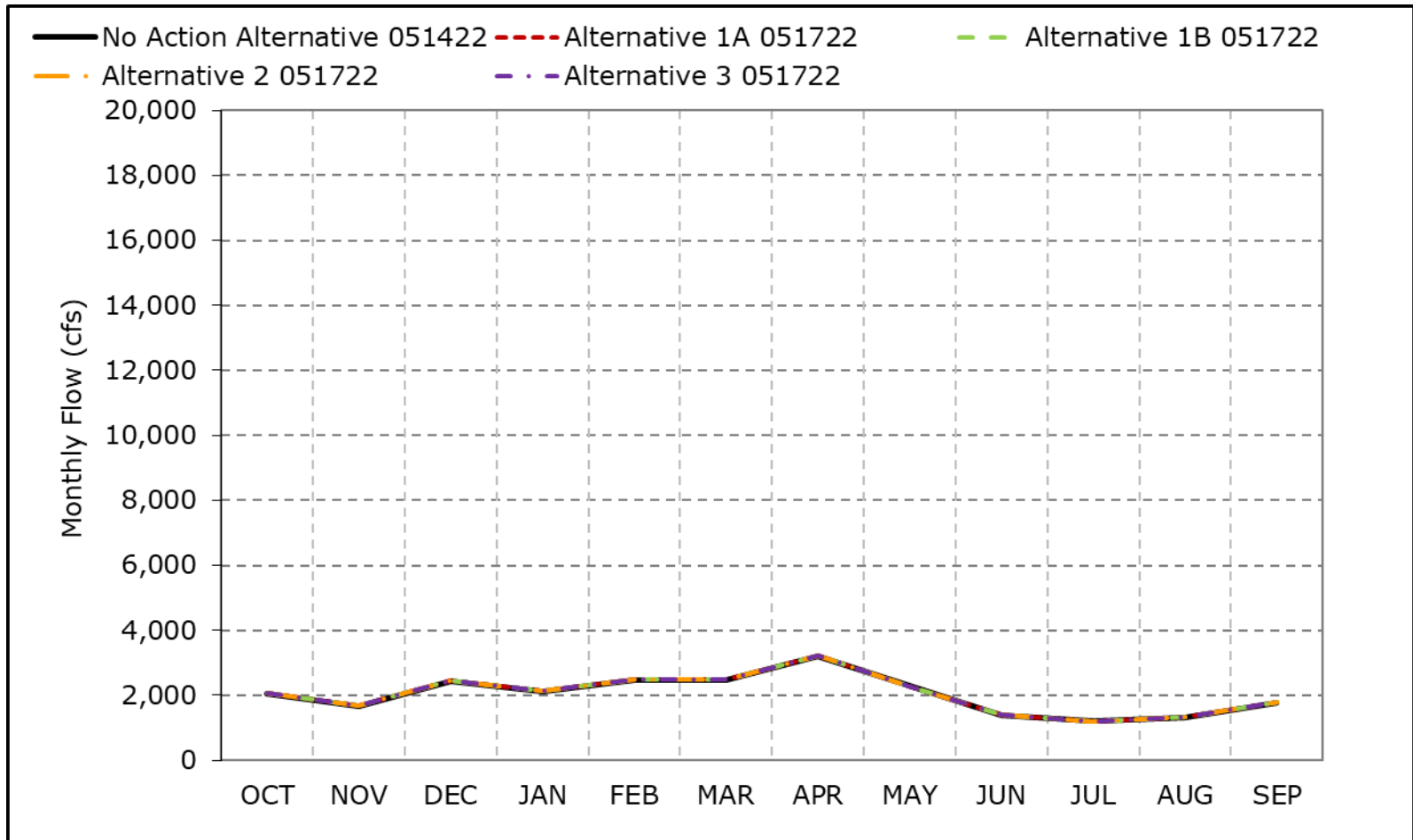
**Figure 5B3-8-4. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow**



\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).  
 \*These results are displayed with calendar year - year type sorting.  
 \*All scenarios are simulated at current climate condition and 0 cm sea level rise.



**Figure 5B3-8-5. San Joaquin River at Vernalis (60-20-20), Dry Year Average Flow**

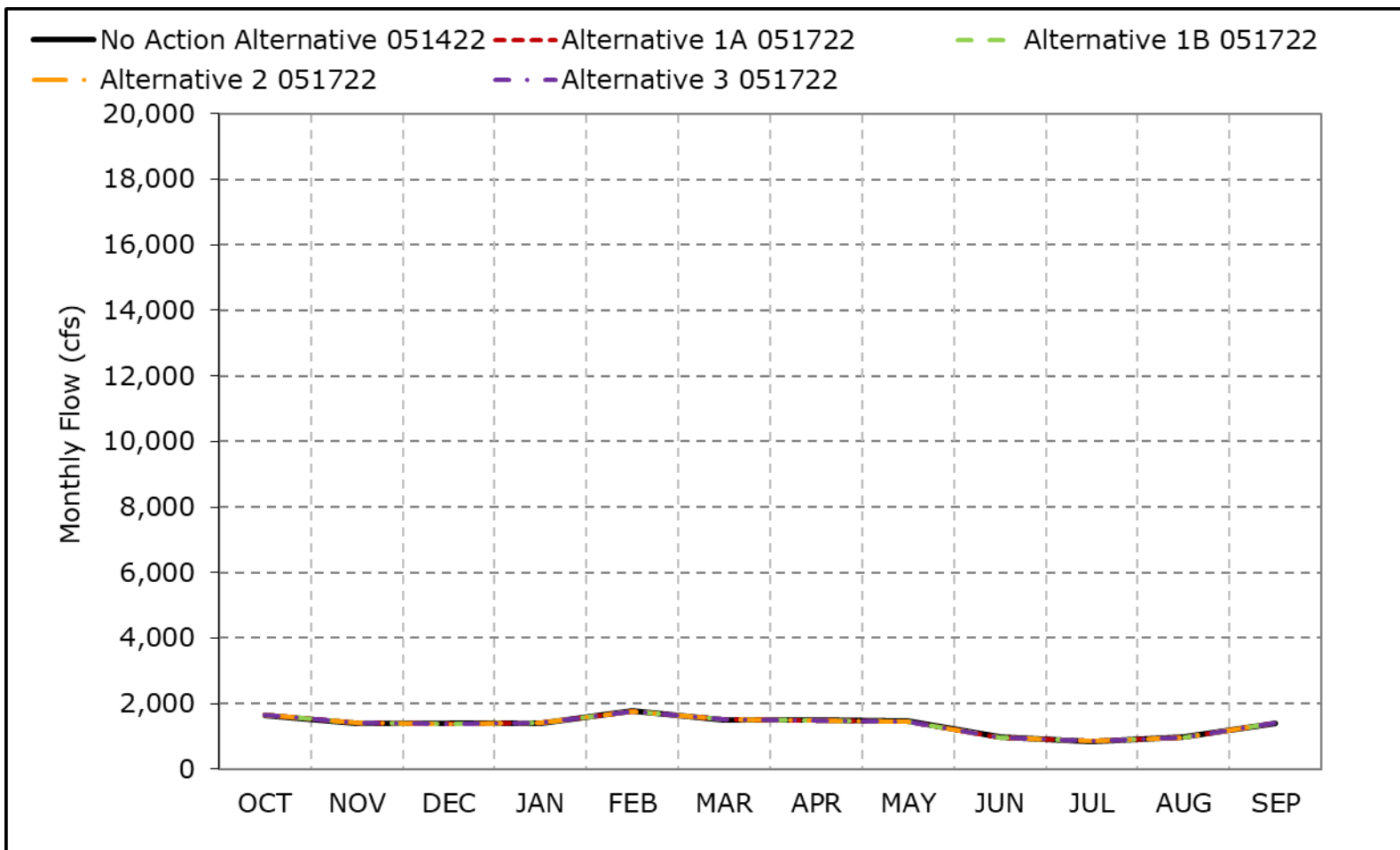


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-6. San Joaquin River at Vernalis (60-20-20), Critical Year Average Flow**

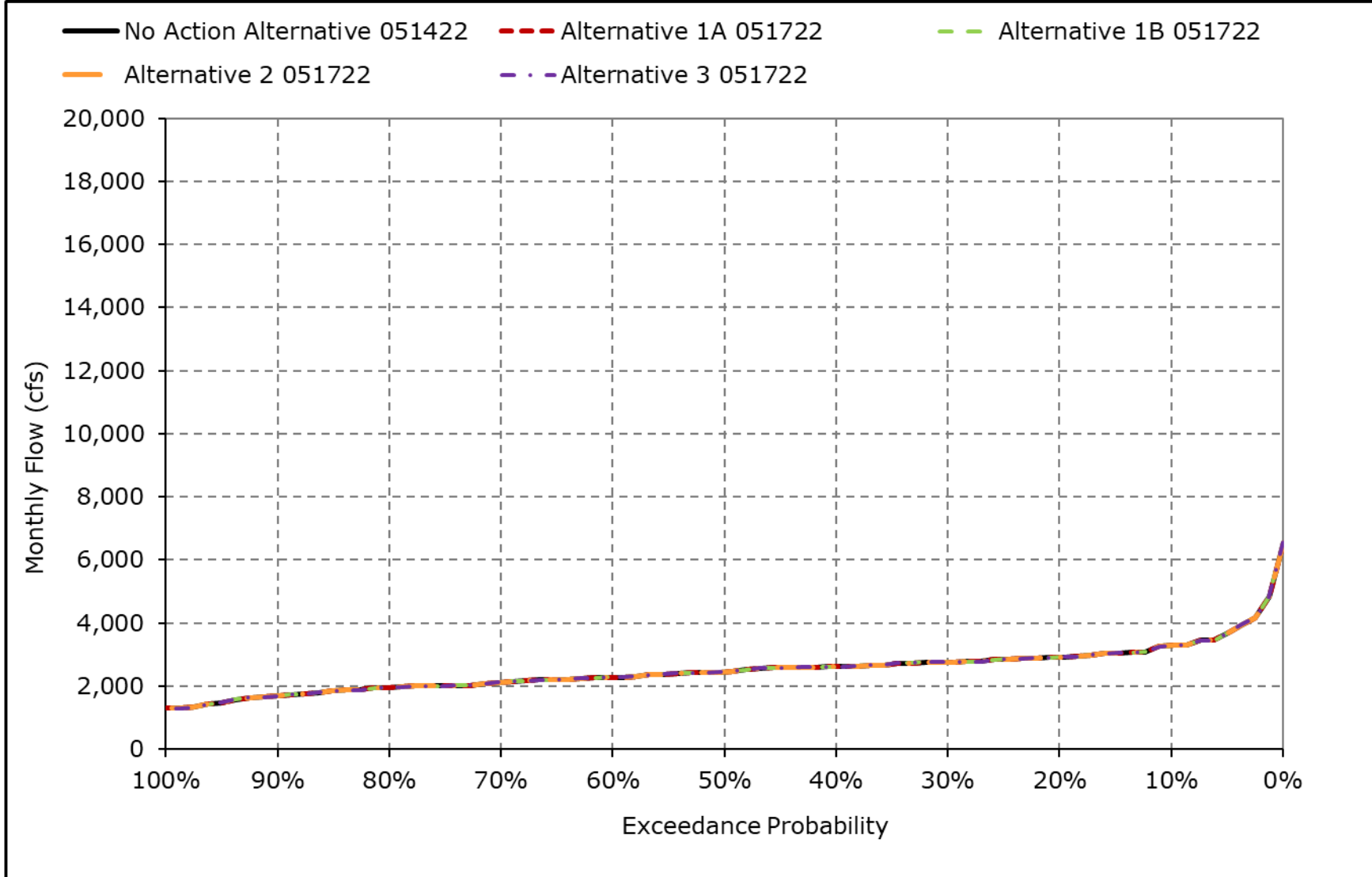


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*These results are displayed with calendar year - year type sorting.

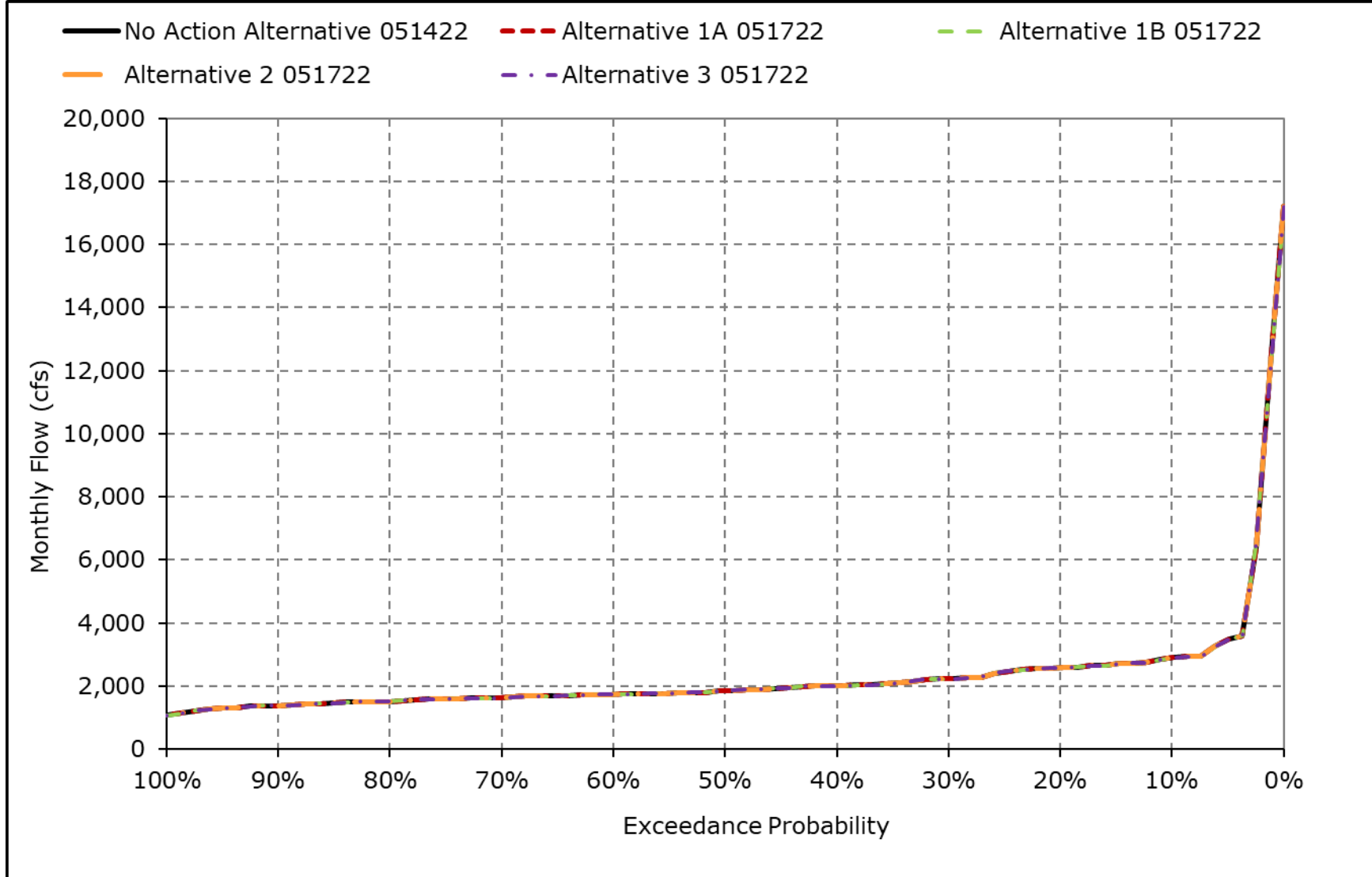
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-7. San Joaquin River at Vernalis (60-20-20), October**



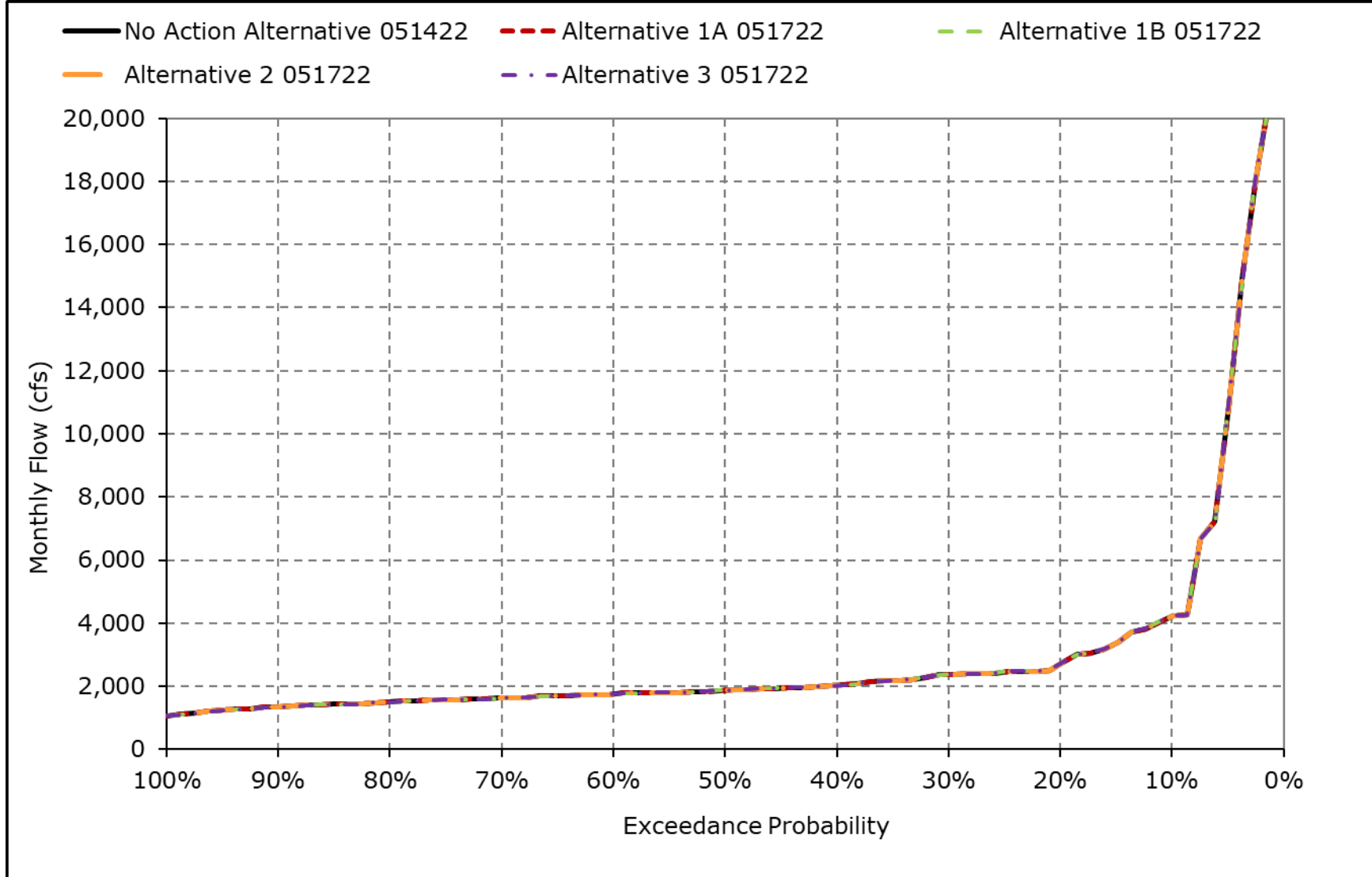
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-8. San Joaquin River at Vernalis (60-20-20), November**



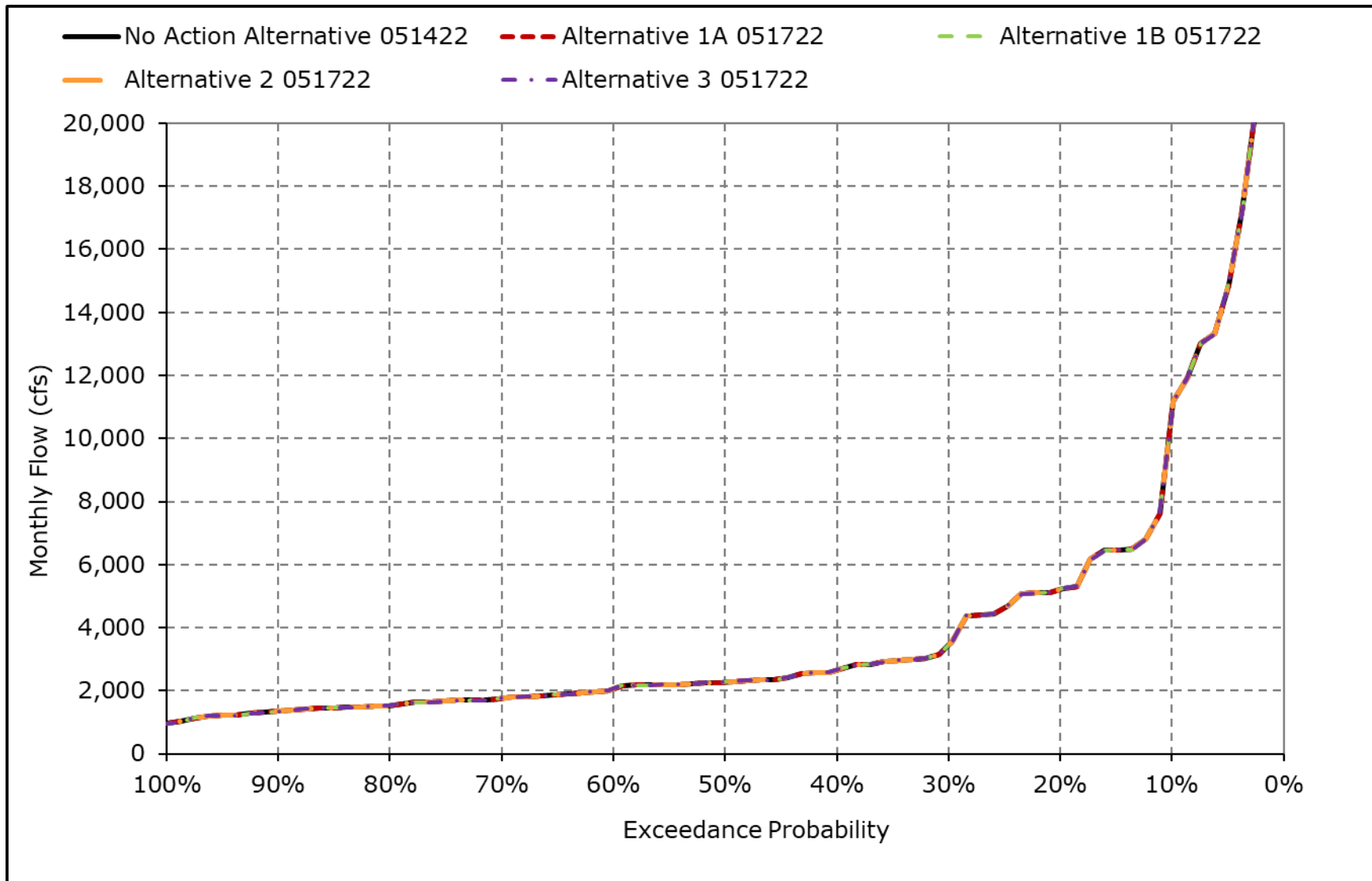
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-9. San Joaquin River at Vernalis (60-20-20), December**



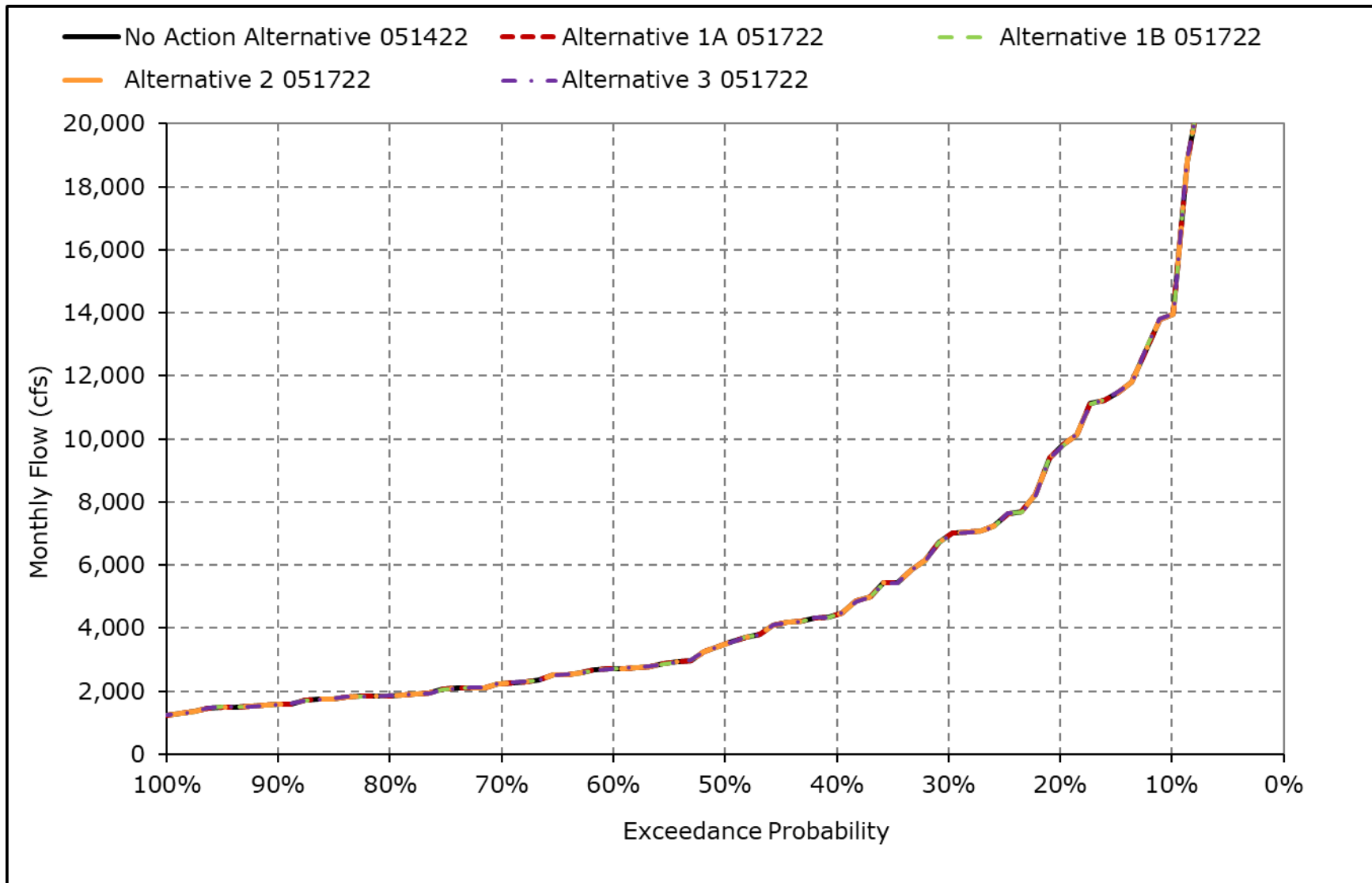
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-10. San Joaquin River at Vernalis (60-20-20), January**



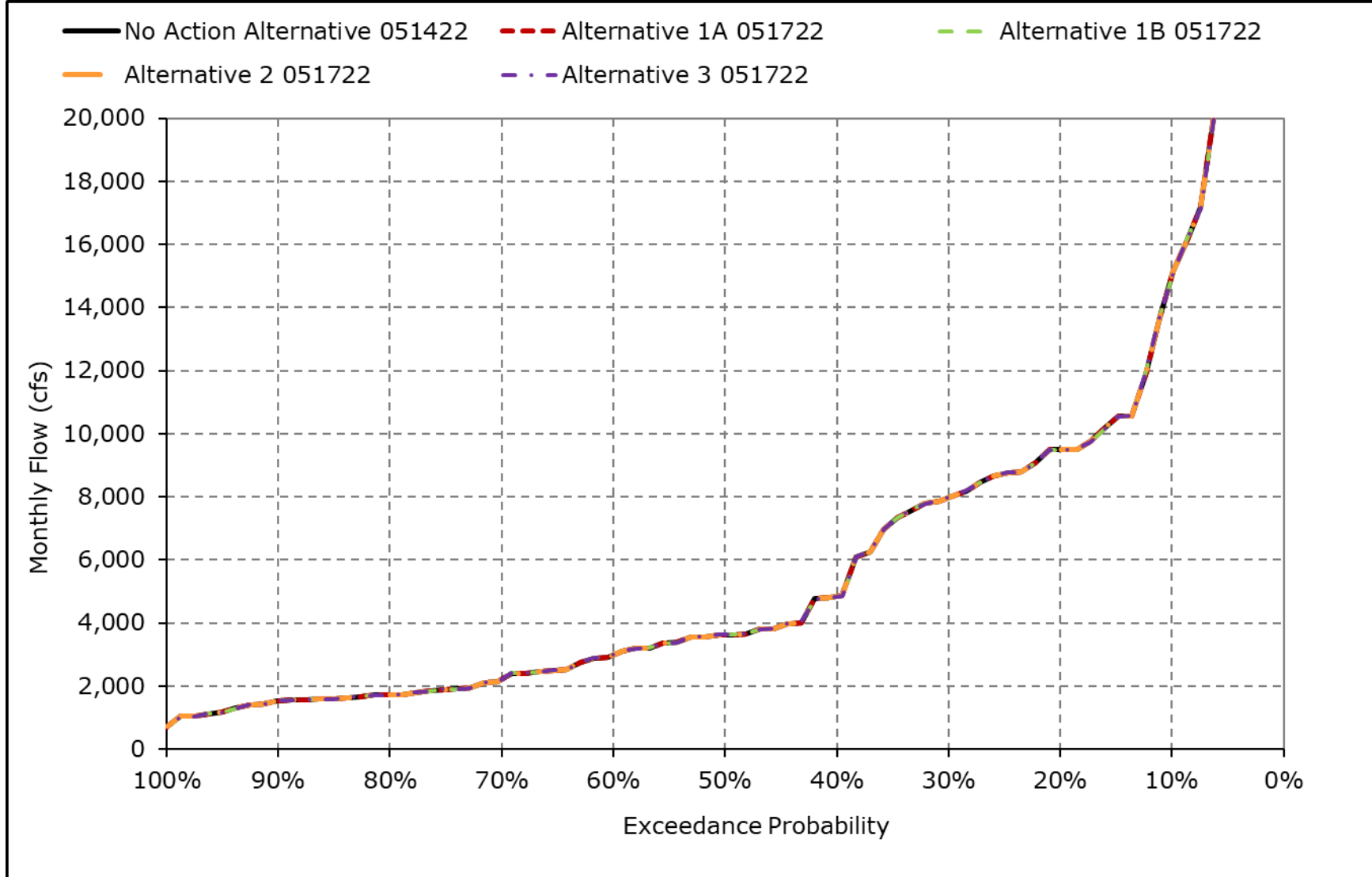
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-11. San Joaquin River at Vernalis (60-20-20), February**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

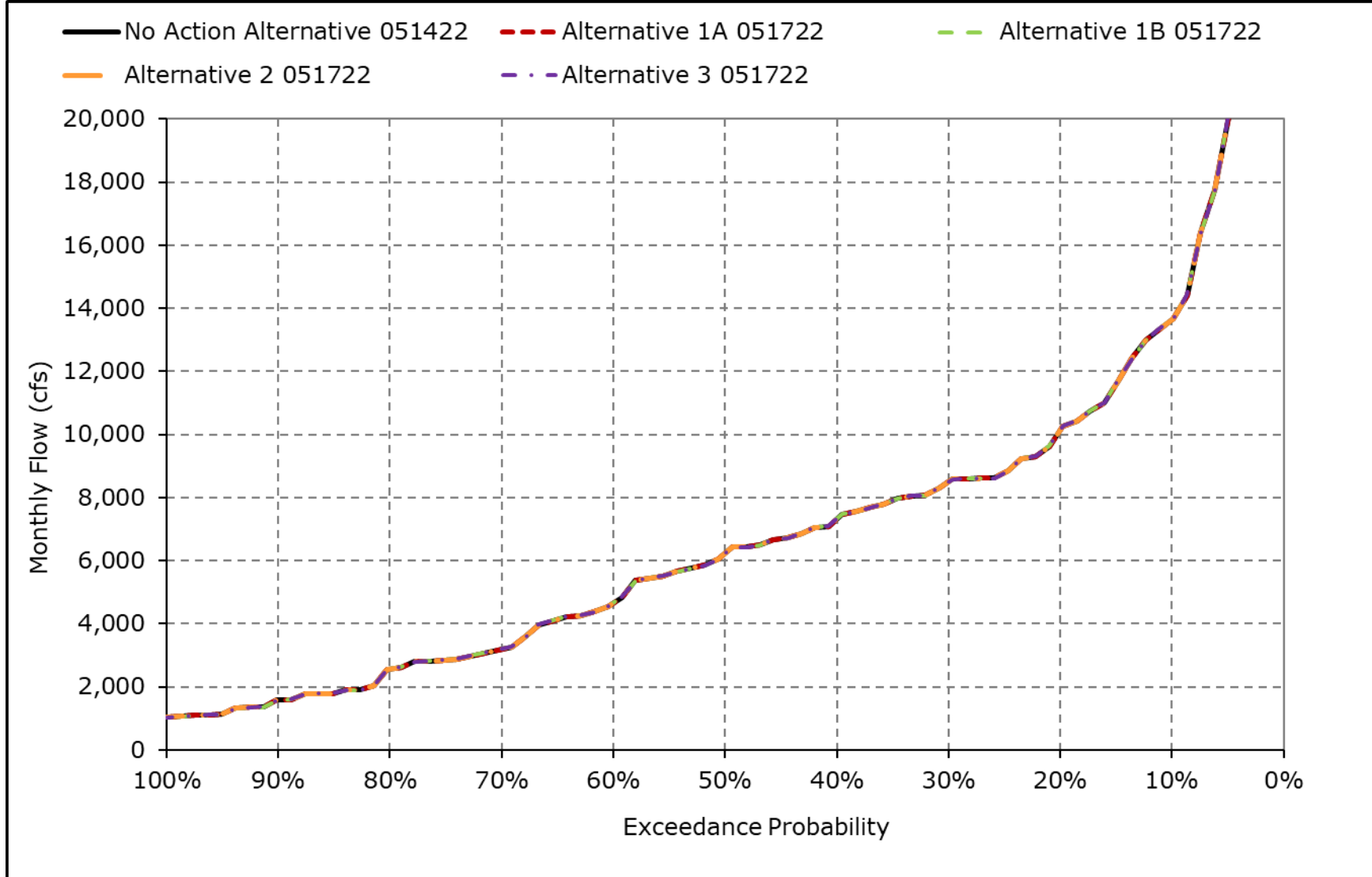
**Figure 5B3-8-12. San Joaquin River at Vernalis (60-20-20), March**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

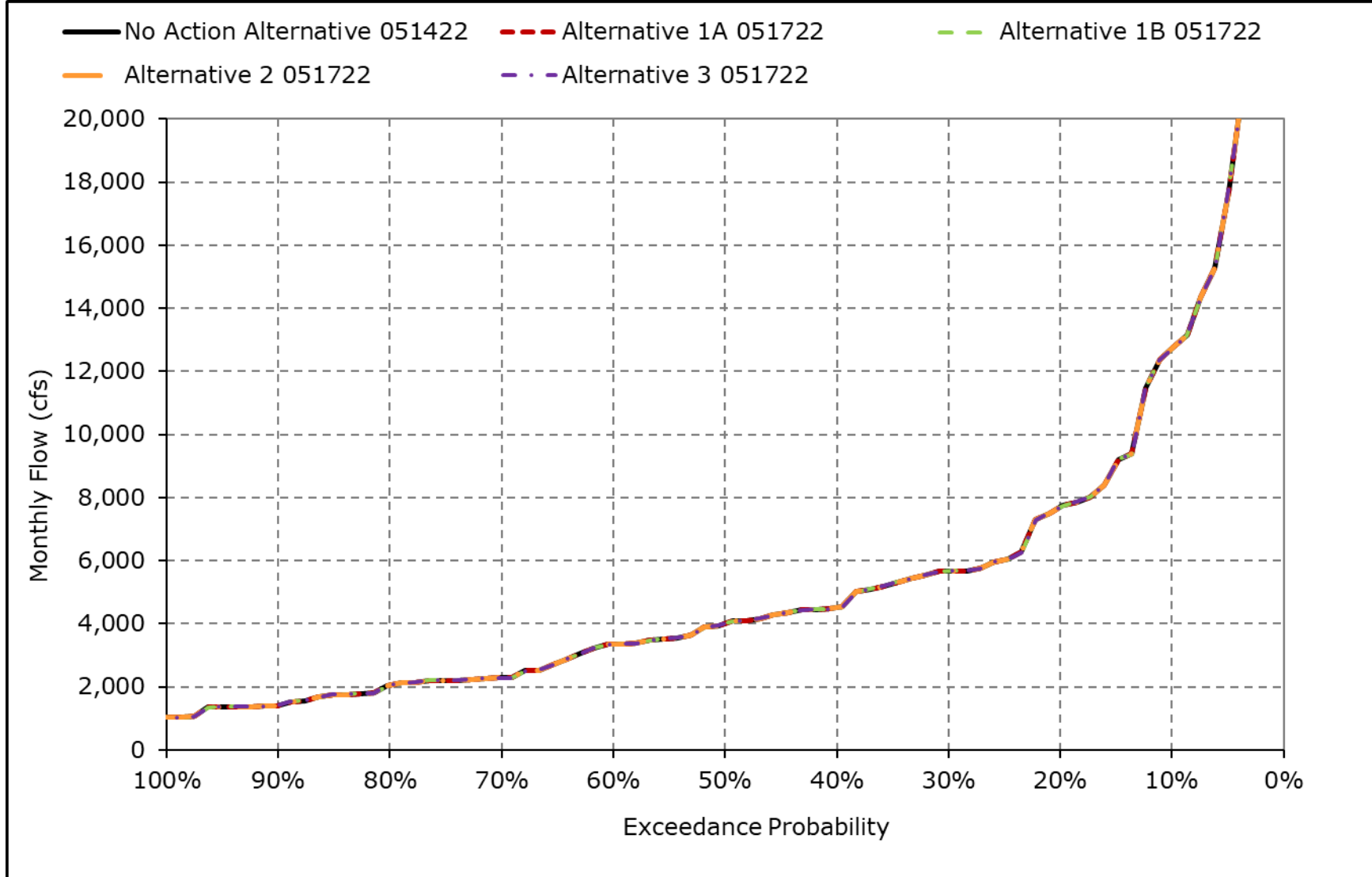


**Figure 5B3-8-13. San Joaquin River at Vernalis (60-20-20), April**



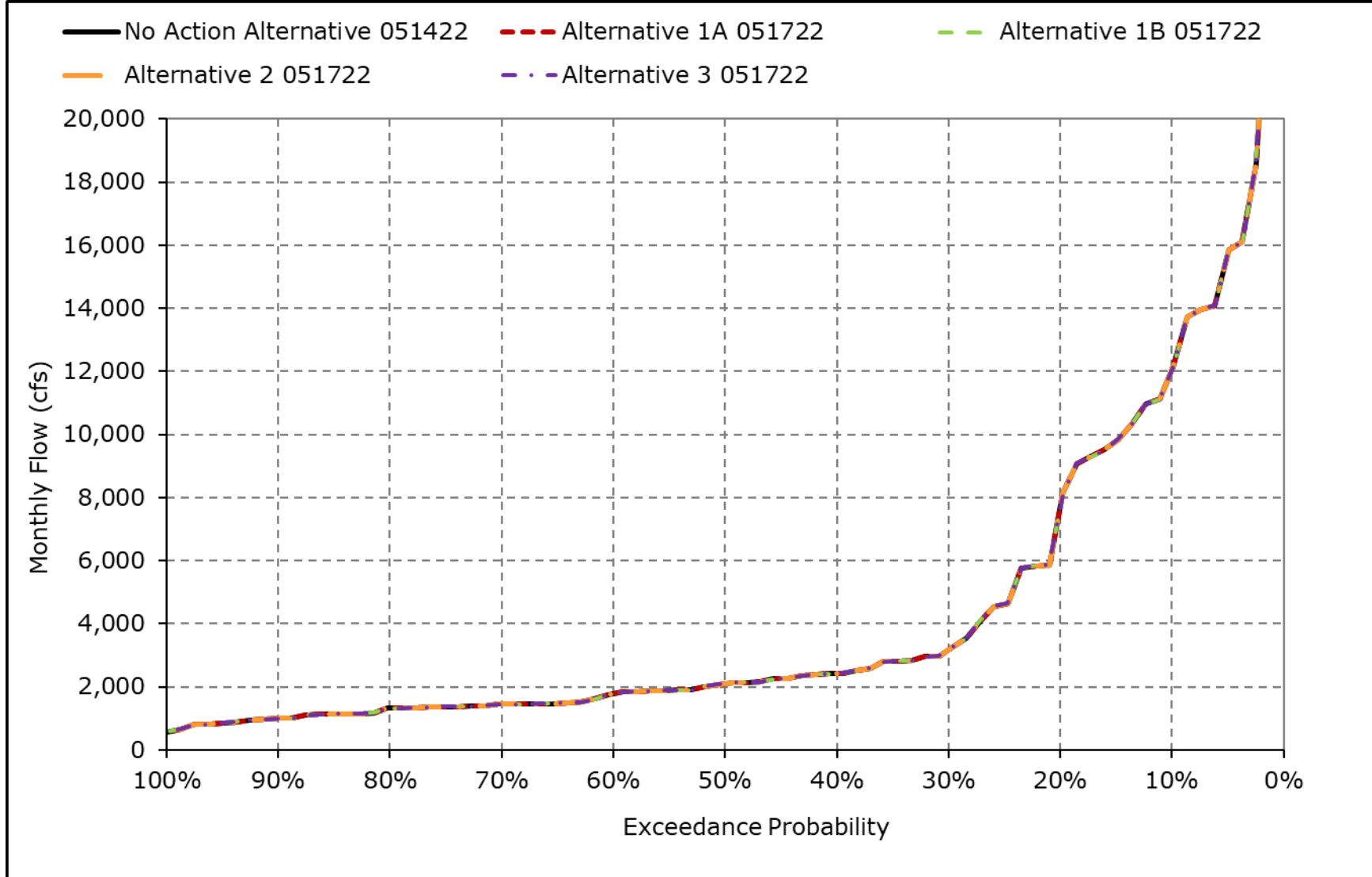
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-14. San Joaquin River at Vernalis (60-20-20), May**



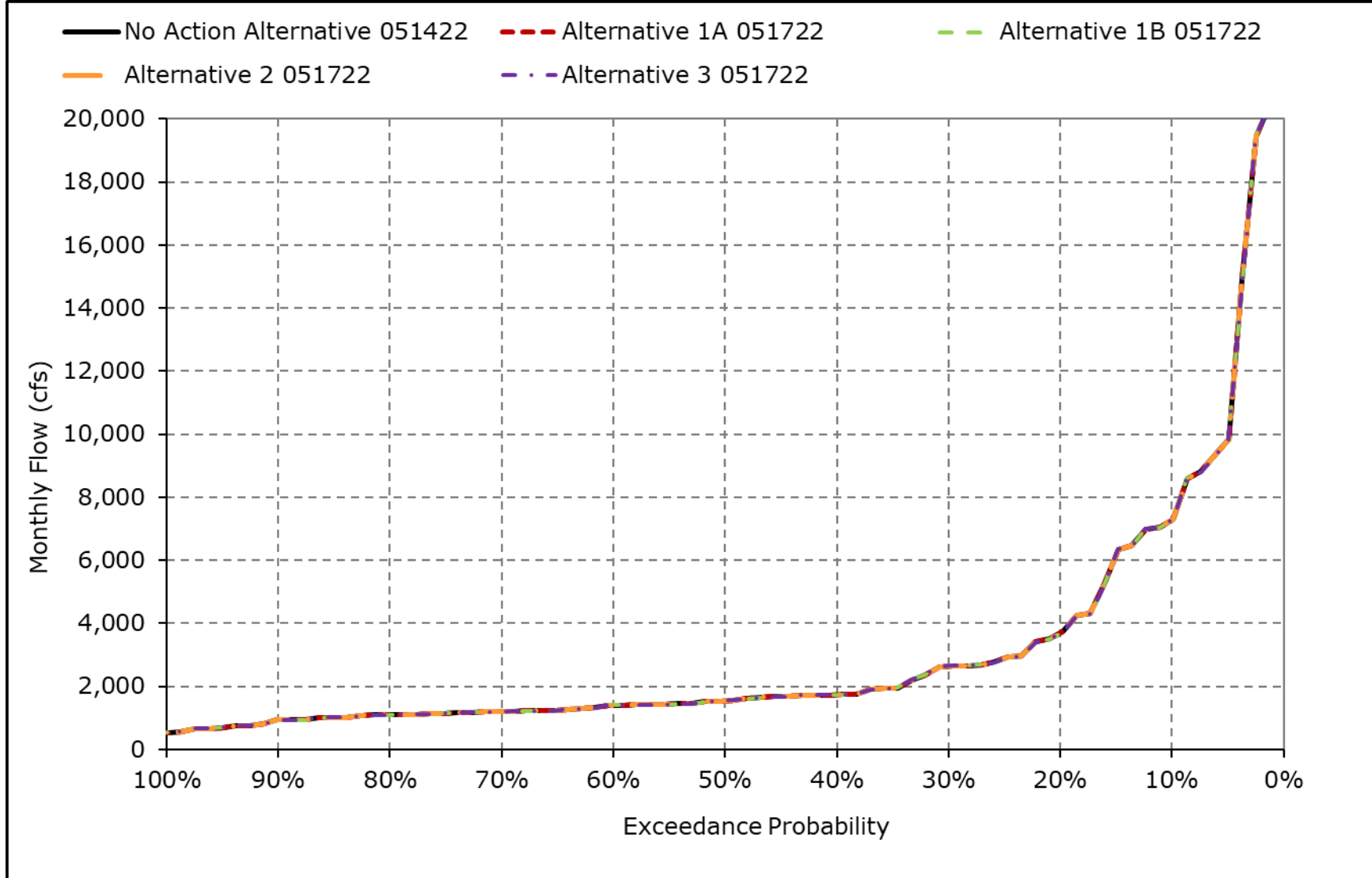
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-15. San Joaquin River at Vernalis (60-20-20), June**



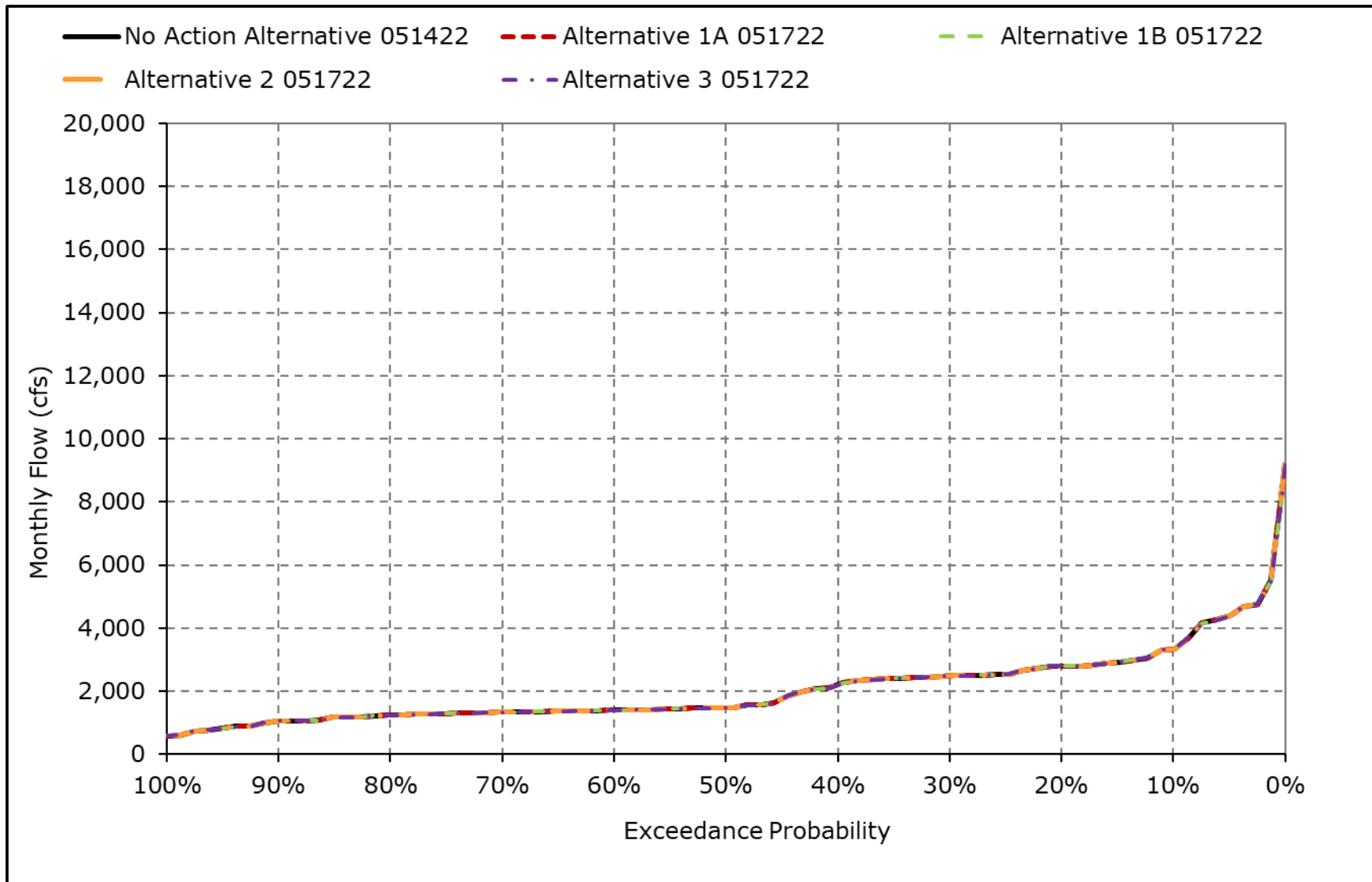
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-16. San Joaquin River at Vernalis (60-20-20), July**



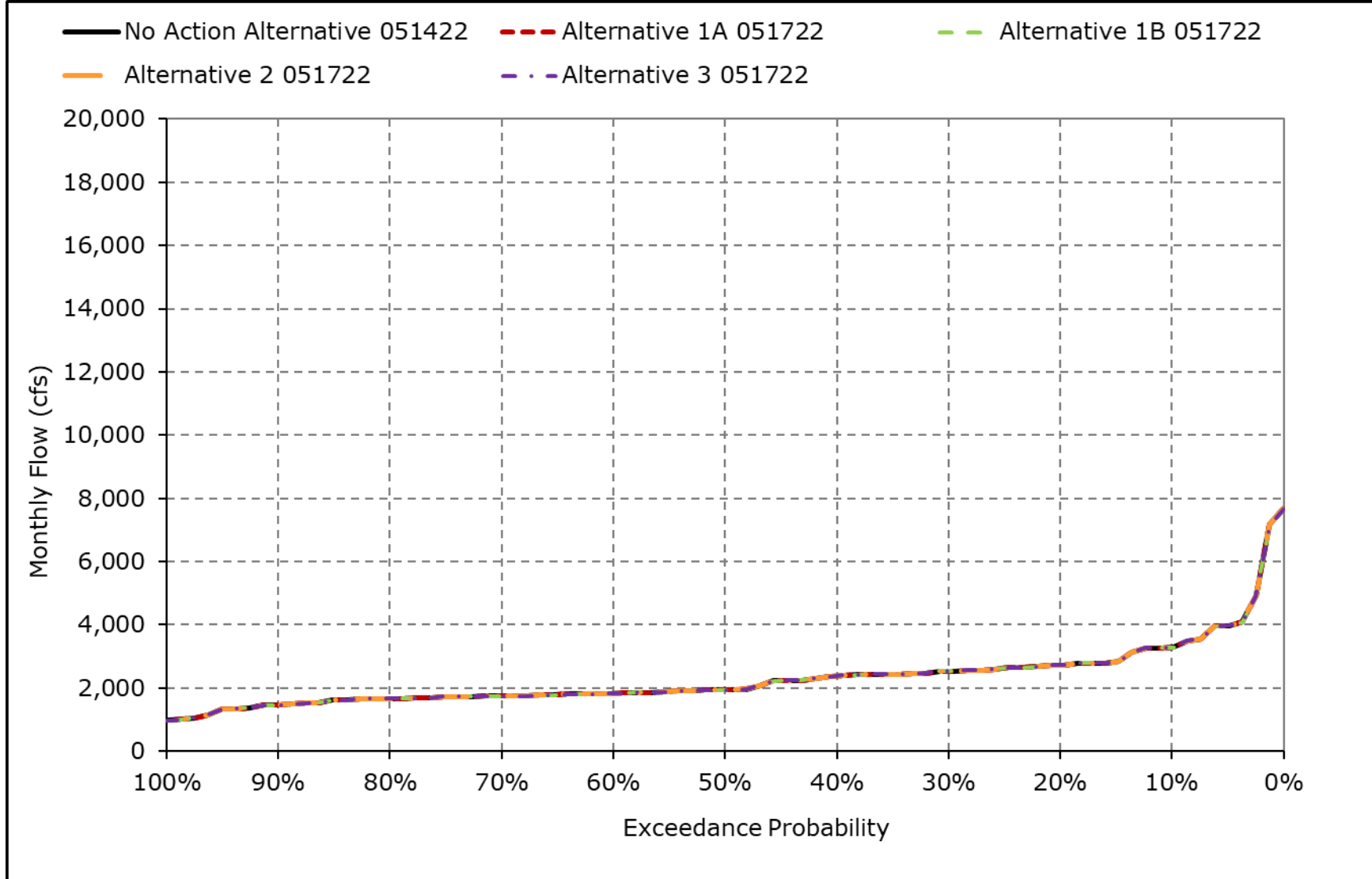
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-17. San Joaquin River at Vernalis (60-20-20), August**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 5B3-8-18. San Joaquin River at Vernalis (60-20-20), September**



\*All scenarios are simulated at current climate condition and 0 cm sea level rise.