

Attachment 2a: Flow Results (CalSim 3)

Appendix 4H

Attachment 2a: Flow Results (CalSim 3)

The following results of the CalSim 3 model are included for river flow conditions for the following scenarios:

- Baseline Conditions – 2022 Hydrology and 15 centimeters (cm) Sea Level Rise (092023)
- Alternative 1 plus CVP Proposed Action, Sacramento and Feather River VAs – 2022 Hydrology and 15 cm Sea Level Rise (110923)
- Alternative 1 plus Cumulative Projects – 2022 Hydrology and 15 cm Sea Level Rise (110923)

Title	Model Parameter	Table Numbers	Figure Numbers
Sacramento River Flow at Freeport	C_SAC048 ¹	4H-2-1-1a to 4H-2-1-2c	4H-2-1a to 4H-2-1r
Yolo Bypass Flow	C_YBP020 ¹	4H-2-2-1a to 4H-2-2-2c	4H-2-2a to 4H-2-2r
San Joaquin River at Vernalis	C_SJR070 ¹	4H-2-3-1a to 4H-2-3-2c	4H-2-3a to 4H-2-3r
San Joaquin River at Vernalis (60-20-20)	C_SJR070 ¹	4H-2-4-1a to 4H-2-4-2c	4H-2-4a to 4H-2-4f
Mokelumne River below Cosumnes	C_MOK019	4H-2-5-1a to 4H-2-5-2c	4H-2-5a to 4H-2-5r
Old and Middle River Flow	C_OMR014 ¹	4H-2-6-1a to 4H-2-6-2c	4H-2-6a to 4H-2-6r
Qwest	QWESTFLOW ¹	4H-2-7-1a to 4H-2-7-2c	4H-2-7a to 4H-2-7r
Delta Outflow	NDOI ¹	4H-2-8-1a to 4H-2-8-2c	4H-2-8a to 4H-2-8r

Note:

¹. Parameter has been post-processed for the Alternative 1 plus Cumulative Projects – 2022 Hydrology and 15 cm Sea Level Rise scenario.

Report formats:

- Monthly tables comparing two scenarios (exceedance values, long-term average, and average by water year type).
- Monthly pattern charts (long-term average and average by water year type) including all scenarios.
- Monthly exceedance charts (all months) including all scenarios.

Table 4H-2-1-1a. Sacramento River Flow at Freeport, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	14,909	18,976	54,609	66,327	73,200	67,990	47,022	28,969	16,135	23,714	18,830	20,771
20% Exceedance	13,657	14,309	36,839	54,707	64,881	57,329	34,771	22,552	14,313	22,838	18,219	19,390
30% Exceedance	13,223	13,580	25,970	37,527	51,309	42,711	25,127	16,974	13,719	21,742	17,468	16,400
40% Exceedance	11,873	13,268	19,584	28,603	42,879	31,278	19,688	14,440	13,461	19,806	16,714	15,374
50% Exceedance	11,062	12,478	16,186	24,210	29,341	24,645	15,445	12,484	13,103	18,464	15,678	12,156
60% Exceedance	9,241	11,385	14,903	19,902	22,909	21,693	13,342	11,773	12,549	17,038	12,638	10,461
70% Exceedance	7,706	9,832	12,837	14,084	19,348	18,887	11,881	11,174	11,834	15,063	11,116	9,776
80% Exceedance	6,662	8,051	10,862	12,760	15,435	15,409	11,380	10,556	10,975	13,433	9,701	9,239
90% Exceedance	6,109	7,232	8,529	10,897	13,089	11,941	10,232	9,013	9,682	11,154	7,673	8,167
Full Simulation Period Average ^a	10,935	13,400	23,941	31,618	37,952	33,464	23,040	16,525	13,384	17,979	14,103	13,678
Wet Water Years (28%)	13,425	18,351	40,978	54,670	62,784	54,976	41,255	24,971	15,486	19,944	17,357	19,105
Above Normal Water Years (14%)	10,692	13,435	24,168	41,721	50,652	45,471	24,110	17,597	14,181	22,405	18,705	17,916
Below Normal Water Years (18%)	11,392	12,764	19,188	25,380	26,222	25,216	17,256	15,551	12,785	20,629	15,183	11,608
Dry Water Years (24%)	9,735	11,033	14,964	15,910	25,420	20,850	14,261	12,246	13,293	16,257	11,391	10,194
Critical Water Years (16%)	8,079	8,969	12,738	13,017	15,380	13,509	9,904	8,320	9,817	10,269	7,235	8,026

Table 4H-2-1-1b. Sacramento River Flow at Freeport, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,161	19,062	55,442	67,522	73,466	68,065	46,999	29,462	15,499	23,457	18,758	21,305
20% Exceedance	13,906	14,628	37,042	56,540	64,411	57,455	35,966	23,177	14,227	21,954	17,968	19,263
30% Exceedance	13,283	13,840	25,785	37,196	51,110	42,855	26,002	17,528	13,641	20,766	17,445	16,973
40% Exceedance	12,236	13,316	19,338	29,255	44,097	30,955	20,413	14,955	13,154	19,458	16,598	15,602
50% Exceedance	10,920	12,634	16,735	24,337	31,334	24,432	16,802	13,402	12,907	18,191	15,480	11,925
60% Exceedance	9,299	11,245	15,000	19,685	23,597	21,762	14,454	12,684	12,525	16,834	13,732	10,756
70% Exceedance	8,068	9,855	13,091	14,002	19,628	18,963	12,869	12,232	11,983	15,111	10,015	9,971
80% Exceedance	6,804	8,579	10,960	12,860	16,710	14,879	11,744	10,834	11,252	12,514	9,006	9,273
90% Exceedance	6,070	7,252	8,822	10,893	13,359	11,753	10,587	9,372	9,864	9,672	7,579	8,385
Full Simulation Period Average ^a	11,045	13,581	24,261	31,835	38,402	33,389	23,744	17,138	13,284	17,447	13,945	13,845
Wet Water Years (28%)	13,629	18,305	41,619	54,997	62,944	54,742	41,503	25,150	15,705	19,815	17,457	19,408
Above Normal Water Years (14%)	10,757	14,079	24,622	42,242	50,754	45,240	25,608	18,778	13,857	22,020	18,486	18,489
Below Normal Water Years (18%)	11,326	12,741	19,255	25,627	27,006	25,366	18,914	16,287	12,979	19,681	14,952	11,672
Dry Water Years (24%)	9,944	11,225	15,147	15,816	25,912	20,907	14,782	13,265	13,049	15,551	10,752	10,095
Critical Water Years (16%)	8,114	9,357	12,869	13,209	16,198	13,401	9,915	8,451	9,241	9,632	7,485	8,113

Table 4H-2-1-1c. Sacramento River Flow at Freeport, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	253	86	833	1,195	266	75	-23	492	-636	-256	-72	534
20% Exceedance	249	319	203	1,833	-471	126	1,196	624	-86	-884	-251	-128
30% Exceedance	59	260	-184	-330	-199	144	875	554	-78	-976	-23	573
40% Exceedance	363	48	-246	652	1,218	-323	725	514	-307	-348	-116	229
50% Exceedance	-142	156	549	128	1,993	-213	1,356	919	-196	-273	-198	-232
60% Exceedance	58	-140	96	-217	688	69	1,112	911	-25	-204	1,095	294
70% Exceedance	362	23	255	-82	280	76	988	1,058	148	49	-1,101	194
80% Exceedance	142	529	98	100	1,275	-531	364	279	277	-919	-695	34
90% Exceedance	-39	20	294	-4	270	-188	355	359	182	-1,482	-94	219
Full Simulation Period Average ^a	110	181	320	217	449	-75	704	613	-100	-532	-158	167
Wet Water Years (28%)	204	-46	641	327	160	-234	247	179	219	-129	100	303
Above Normal Water Years (14%)	64	644	454	521	102	-231	1,498	1,182	-324	-385	-220	572
Below Normal Water Years (18%)	-66	-23	67	247	783	150	1,658	735	194	-948	-231	64
Dry Water Years (24%)	209	191	183	-94	492	57	521	1,019	-244	-706	-639	-99
Critical Water Years (16%)	35	388	131	192	819	-108	11	131	-575	-636	250	87

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-1-2a. Sacramento River Flow at Freeport, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	14,909	18,976	54,609	66,327	73,200	67,990	47,022	28,969	16,135	23,714	18,830	20,771
20% Exceedance	13,657	14,309	36,839	54,707	64,881	57,329	34,771	22,552	14,313	22,838	18,219	19,390
30% Exceedance	13,223	13,580	25,970	37,527	51,309	42,711	25,127	16,974	13,719	21,742	17,468	16,400
40% Exceedance	11,873	13,268	19,584	28,603	42,879	31,278	19,688	14,440	13,461	19,806	16,714	15,374
50% Exceedance	11,062	12,478	16,186	24,210	29,341	24,645	15,445	12,484	13,103	18,464	15,678	12,156
60% Exceedance	9,241	11,385	14,903	19,902	22,909	21,693	13,342	11,773	12,549	17,038	12,638	10,461
70% Exceedance	7,706	9,832	12,837	14,084	19,348	18,887	11,881	11,174	11,834	15,063	11,116	9,776
80% Exceedance	6,662	8,051	10,862	12,760	15,435	15,409	11,380	10,556	10,975	13,433	9,701	9,239
90% Exceedance	6,109	7,232	8,529	10,897	13,089	11,941	10,232	9,013	9,682	11,154	7,673	8,167
Full Simulation Period Average ^a	10,935	13,400	23,941	31,618	37,952	33,464	23,040	16,525	13,384	17,979	14,103	13,678
Wet Water Years (28%)	13,425	18,351	40,978	54,670	62,784	54,976	41,255	24,971	15,486	19,944	17,357	19,105
Above Normal Water Years (14%)	10,692	13,435	24,168	41,721	50,652	45,471	24,110	17,597	14,181	22,405	18,705	17,916
Below Normal Water Years (18%)	11,392	12,764	19,188	25,380	26,222	25,216	17,256	15,551	12,785	20,629	15,183	11,608
Dry Water Years (24%)	9,735	11,033	14,964	15,910	25,420	20,850	14,261	12,246	13,293	16,257	11,391	10,194
Critical Water Years (16%)	8,079	8,969	12,738	13,017	15,380	13,509	9,904	8,320	9,817	10,269	7,235	8,026

Table 4H-2-1-2b. Sacramento River Flow at Freeport, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,162	19,068	55,659	67,624	73,477	68,069	48,055	30,482	15,344	23,435	18,774	21,143
20% Exceedance	13,898	14,780	37,044	56,544	64,290	57,466	37,414	24,092	14,162	21,862	17,905	19,172
30% Exceedance	13,216	13,756	25,752	37,197	51,110	42,973	27,403	18,306	13,527	20,937	17,421	17,013
40% Exceedance	12,195	13,283	19,336	29,265	44,078	30,973	21,533	16,334	13,256	19,590	16,597	15,527
50% Exceedance	10,903	12,656	16,696	24,382	31,343	24,558	18,679	14,881	12,875	18,079	15,593	11,669
60% Exceedance	9,168	11,256	14,831	19,700	23,596	21,976	15,907	13,804	12,505	16,835	13,890	10,761
70% Exceedance	8,072	10,002	13,083	14,015	19,619	18,995	14,653	13,095	11,956	15,064	10,100	9,931
80% Exceedance	6,804	8,611	10,958	12,857	16,699	14,918	12,572	12,212	11,369	12,422	8,937	9,284
90% Exceedance	6,074	7,220	8,690	10,779	13,184	11,952	11,654	10,146	9,728	9,699	7,522	8,348
Full Simulation Period Average ^a	11,021	13,615	24,265	31,842	38,389	33,476	25,115	18,208	13,268	17,403	13,965	13,847
Wet Water Years (28%)	13,605	18,392	41,639	54,989	62,942	54,758	42,497	26,126	15,719	19,837	17,473	19,384
Above Normal Water Years (14%)	10,719	14,213	24,635	42,289	50,755	45,281	27,083	19,963	13,883	22,031	18,453	18,402
Below Normal Water Years (18%)	11,312	12,746	19,257	25,646	27,022	25,441	20,505	17,141	12,941	19,621	14,941	11,757
Dry Water Years (24%)	9,908	11,216	15,127	15,817	25,837	21,086	16,806	14,701	13,001	15,390	10,824	10,121
Critical Water Years (16%)	8,106	9,311	12,876	13,201	16,215	13,529	10,627	9,275	9,208	9,621	7,511	8,110

Table 4H-2-1-2c. Sacramento River Flow at Freeport, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	253	92	1,051	1,297	277	79	1,033	1,513	-792	-279	-56	373
20% Exceedance	241	471	205	1,837	-592	137	2,643	1,539	-152	-976	-314	-218
30% Exceedance	-7	175	-218	-330	-199	261	2,276	1,332	-192	-806	-48	613
40% Exceedance	322	15	-248	662	1,199	-305	1,845	1,893	-205	-215	-117	153
50% Exceedance	-159	178	510	172	2,001	-87	3,234	2,397	-228	-385	-84	-488
60% Exceedance	-72	-129	-72	-202	687	283	2,565	2,031	-45	-204	1,252	300
70% Exceedance	366	170	247	-68	270	108	2,771	1,921	121	1	-1,015	154
80% Exceedance	142	560	96	97	1,264	-491	1,192	1,656	394	-1,010	-763	45
90% Exceedance	-36	-12	161	-118	95	11	1,422	1,132	46	-1,455	-151	181
Full Simulation Period Average ^a	86	216	324	224	436	13	2,075	1,683	-116	-575	-138	169
Wet Water Years (28%)	180	41	661	319	158	-218	1,242	1,155	233	-107	116	279
Above Normal Water Years (14%)	27	778	467	568	103	-190	2,973	2,366	-298	-374	-252	486
Below Normal Water Years (18%)	-80	-18	69	266	800	225	3,248	1,590	156	-1,008	-242	149
Dry Water Years (24%)	173	183	162	-94	417	236	2,545	2,456	-292	-867	-567	-74
Critical Water Years (16%)	27	342	137	184	835	20	723	955	-609	-647	277	85

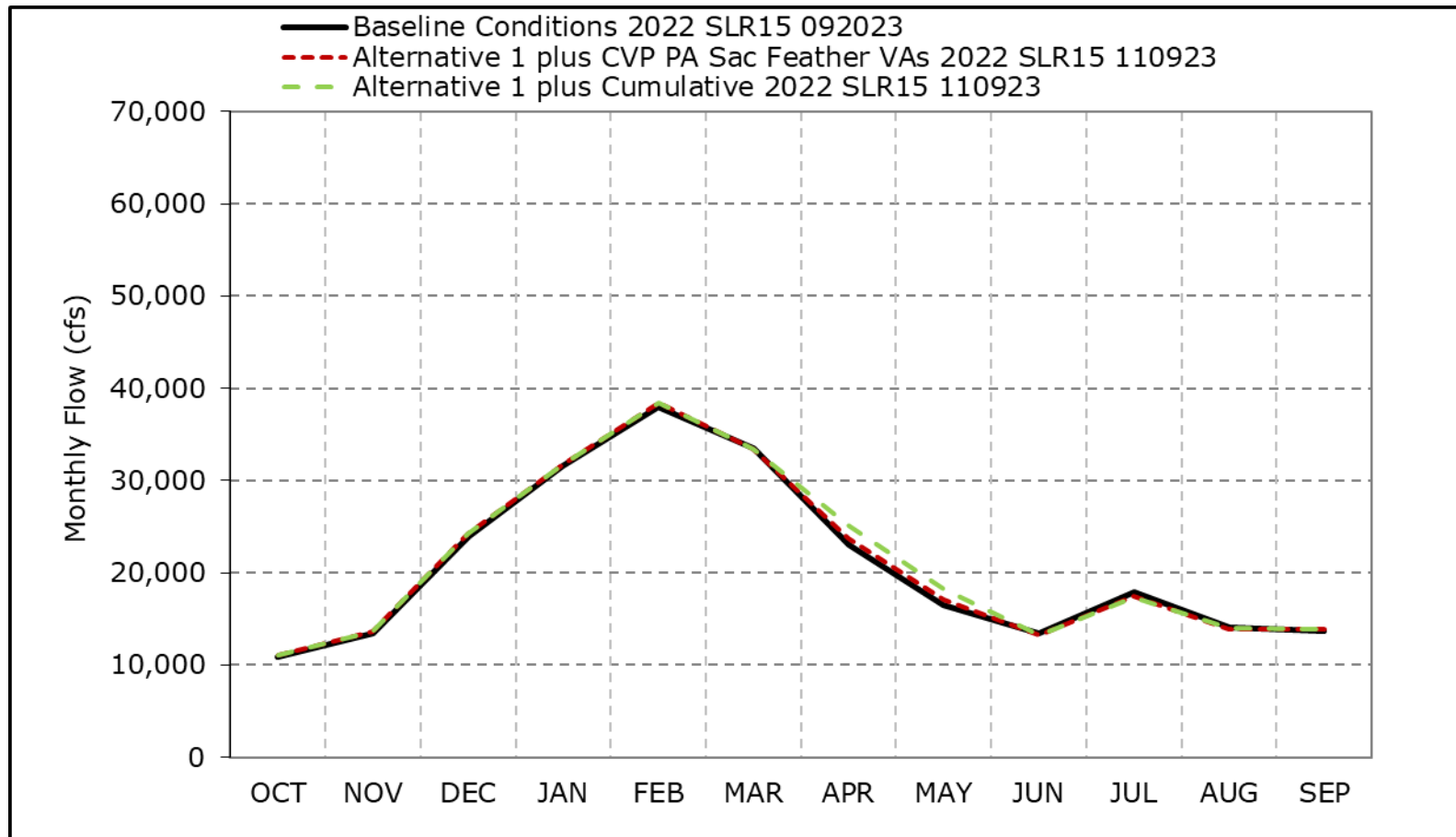
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-1a. Sacramento River Flow at Freeport, Long-Term Average Flow

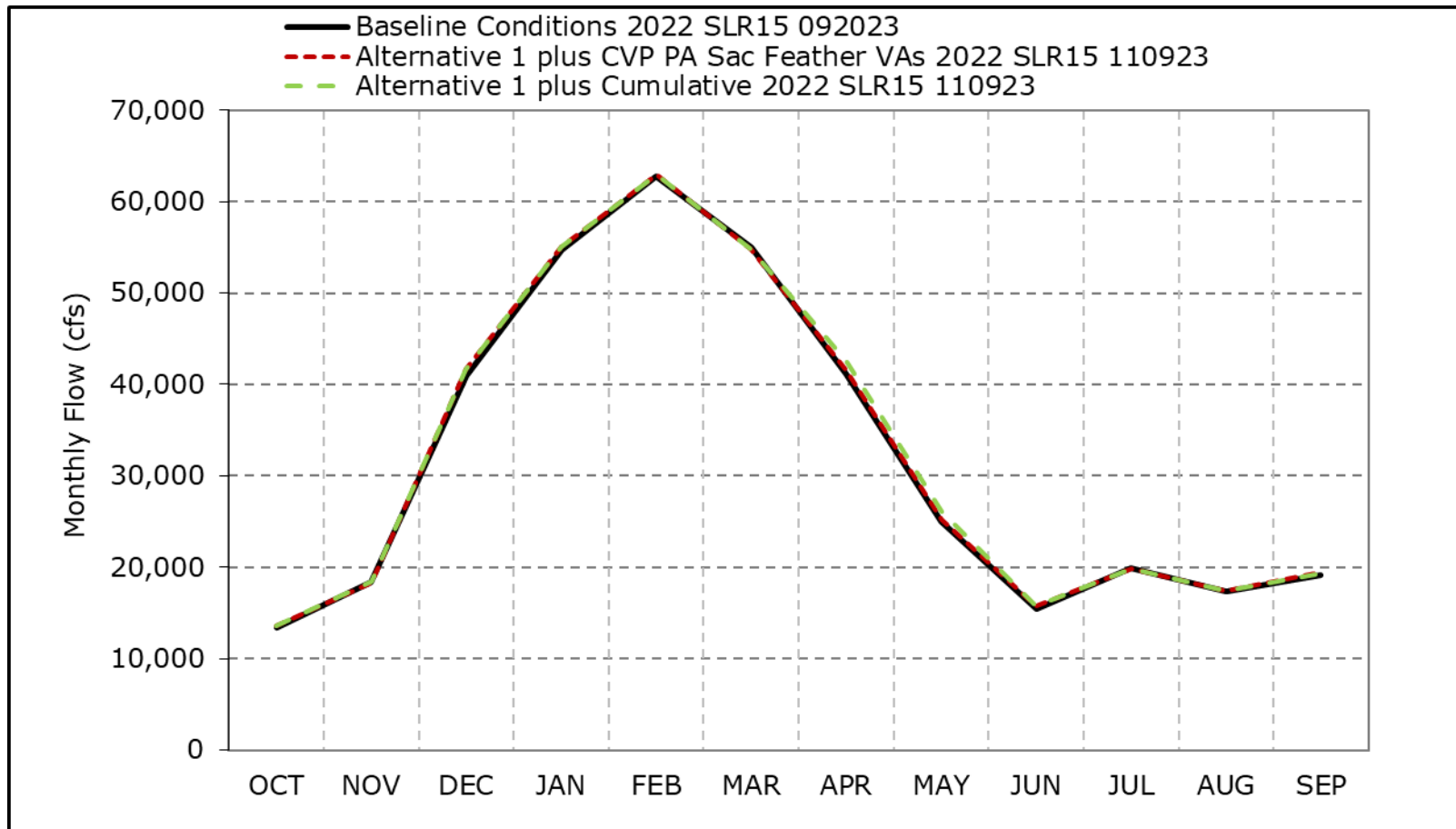


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1b. Sacramento River Flow at Freeport, Wet Year Average Flow

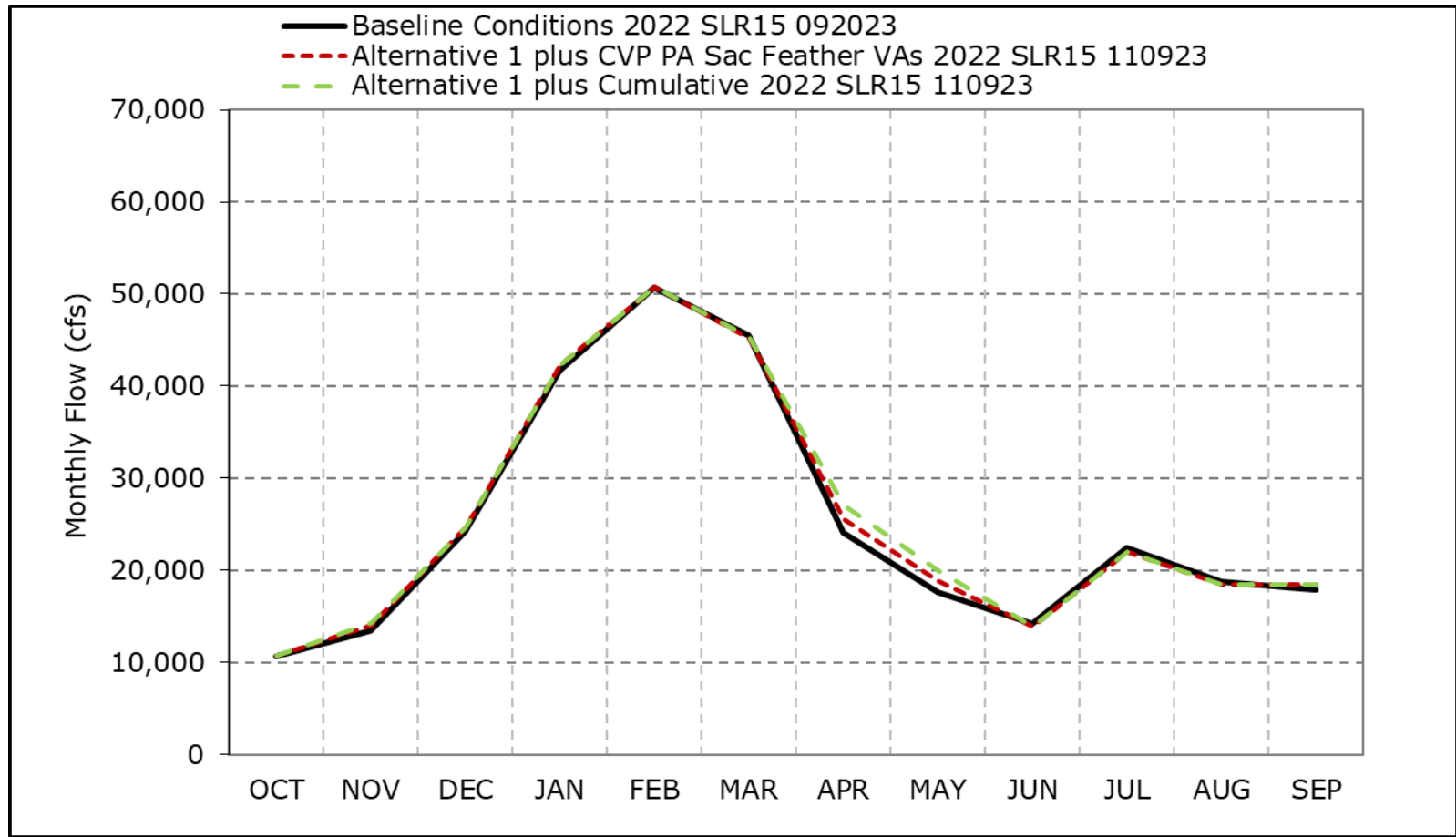


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1c. Sacramento River Flow at Freeport, Above Normal Year Average Flow

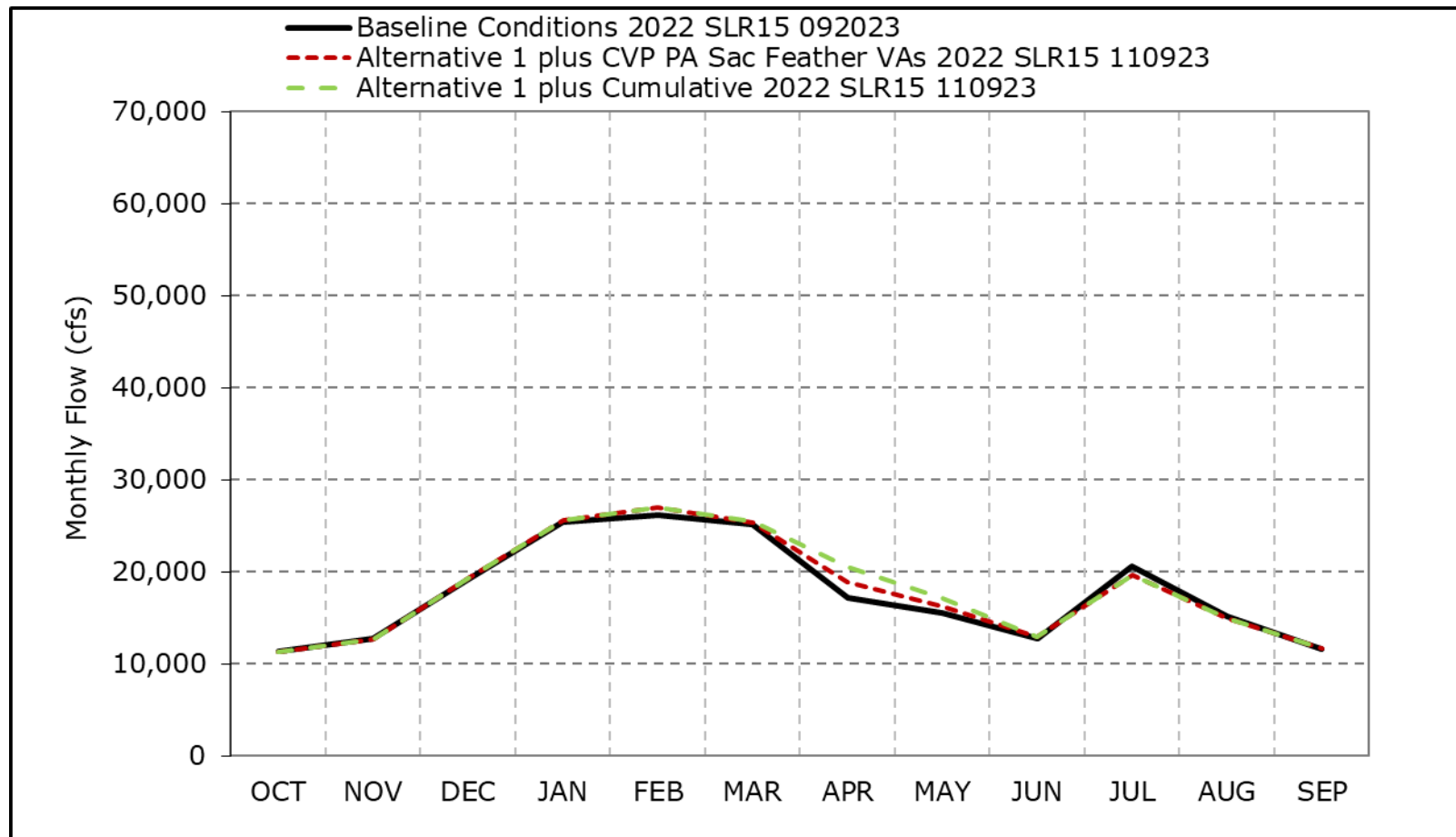


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1d. Sacramento River Flow at Freeport, Below Normal Year Average Flow

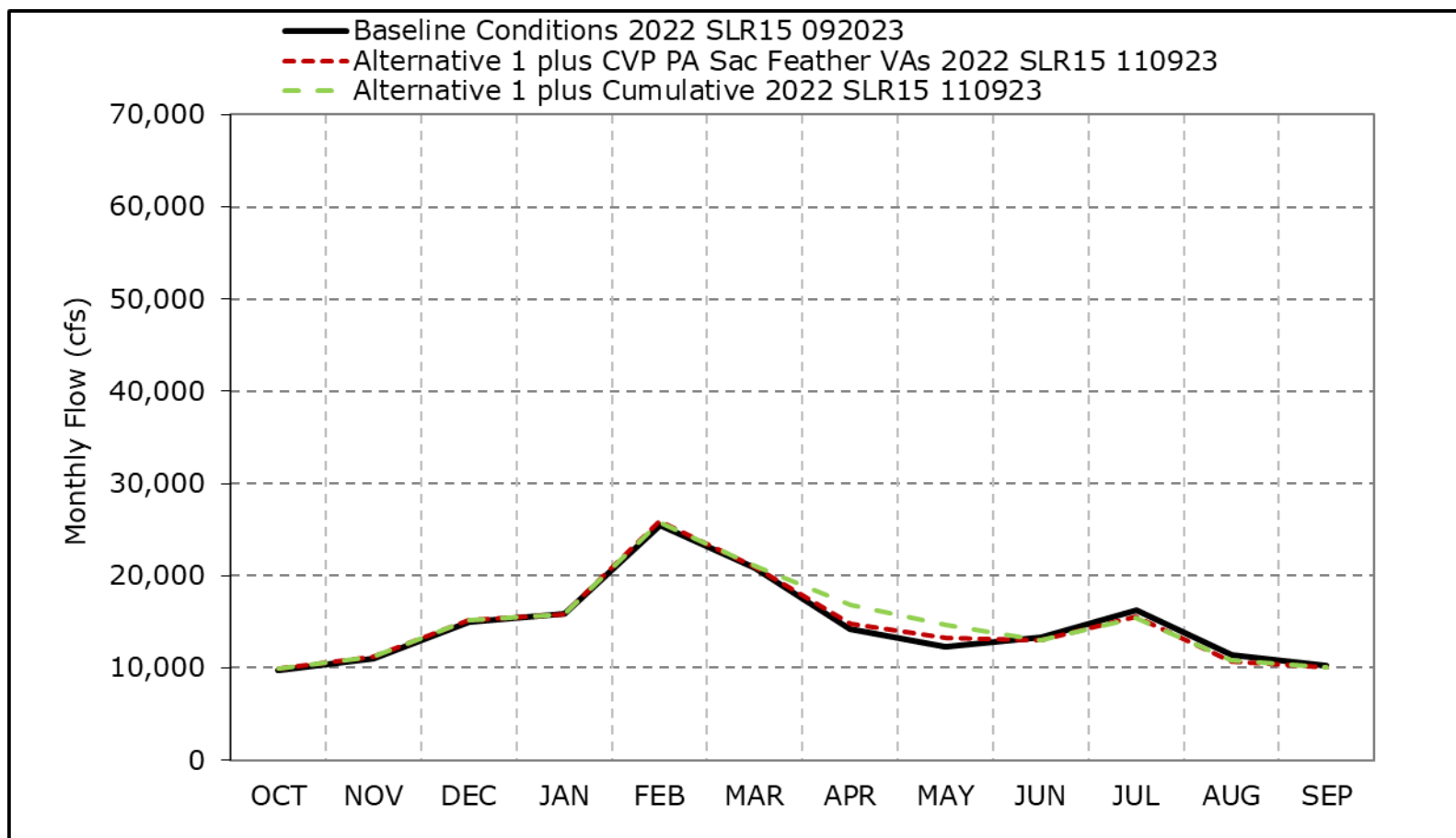


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1e. Sacramento River Flow at Freeport, Dry Year Average Flow

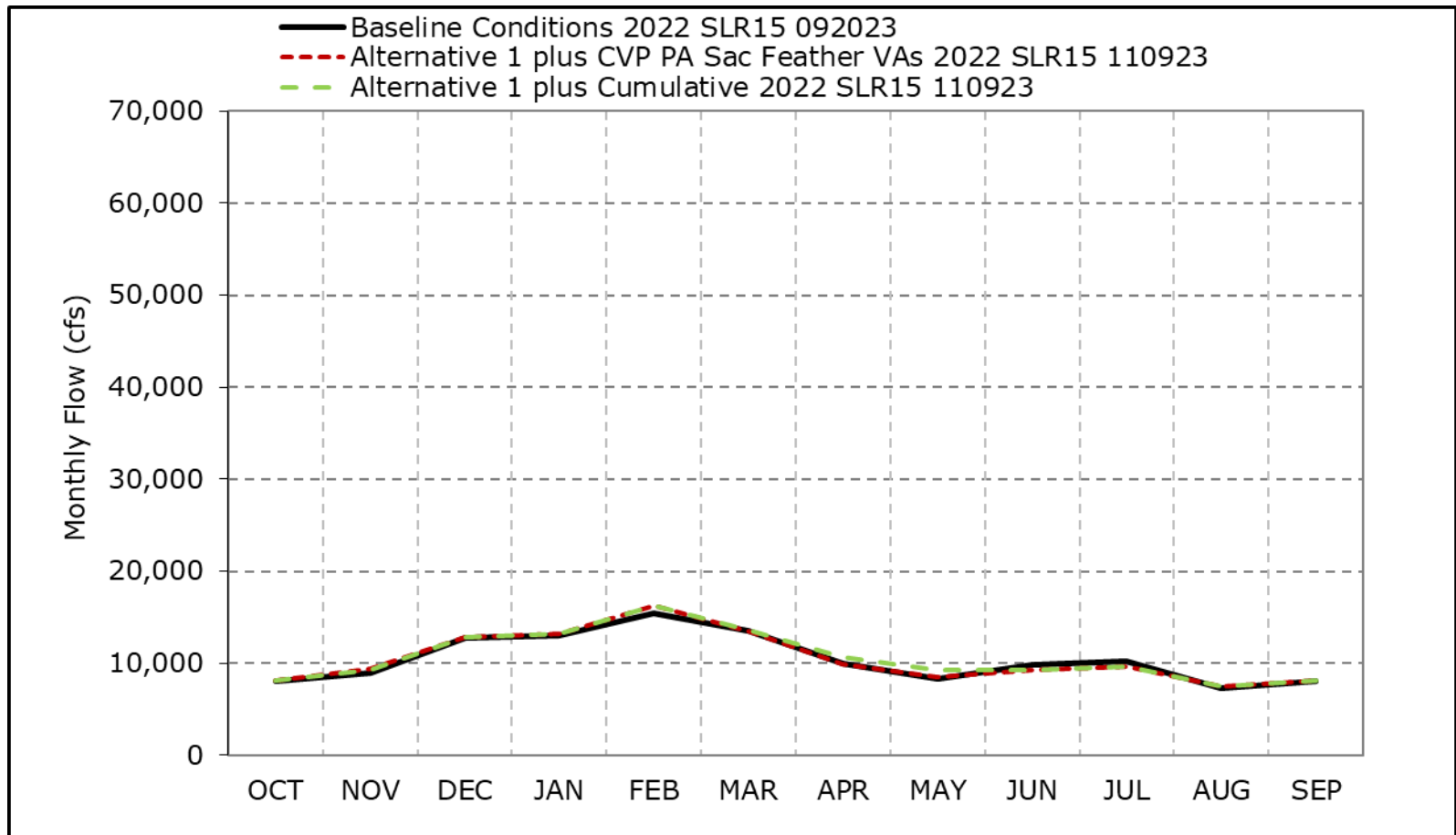


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1f. Sacramento River Flow at Freeport, Critical Year Average Flow

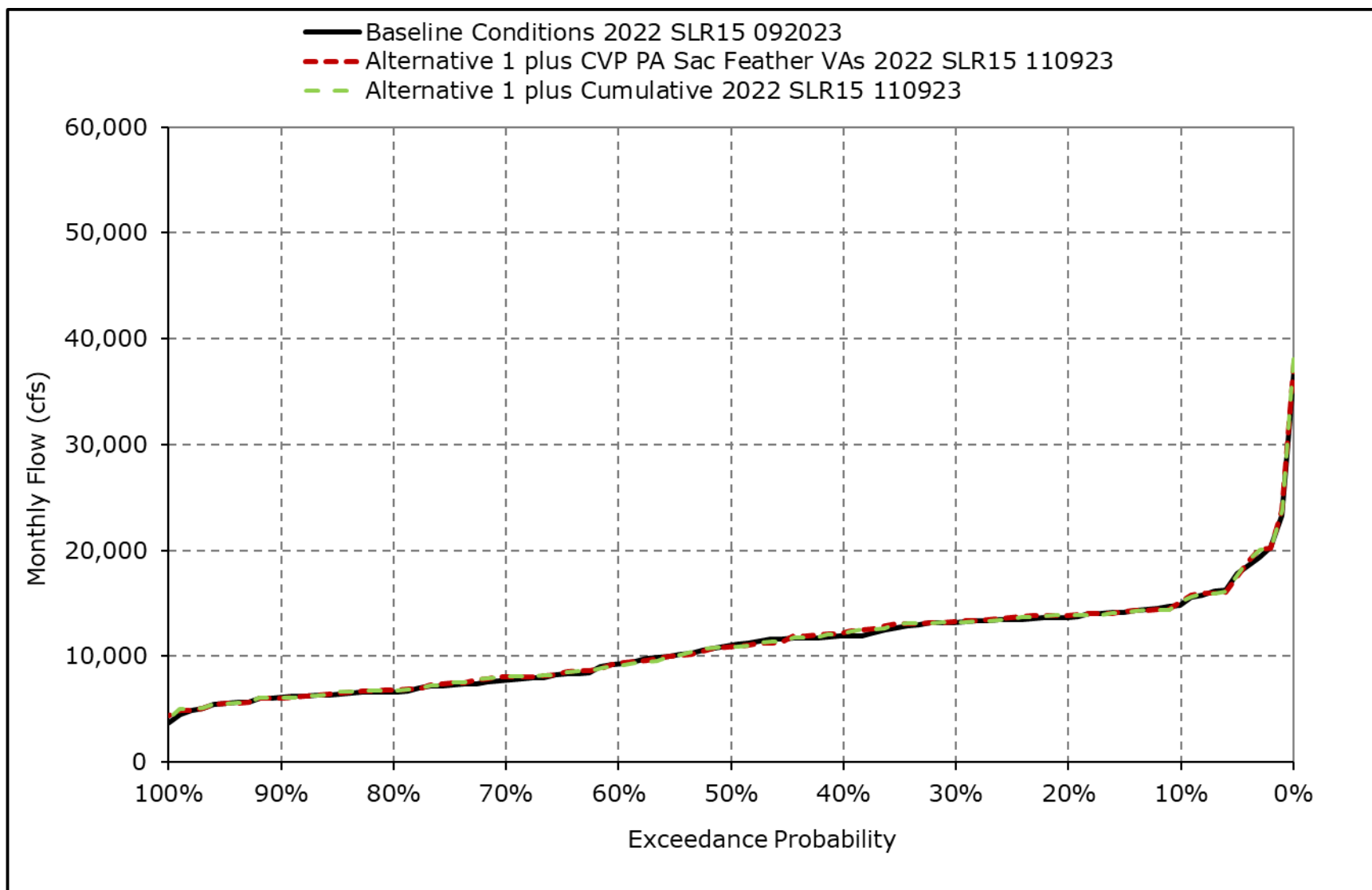


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

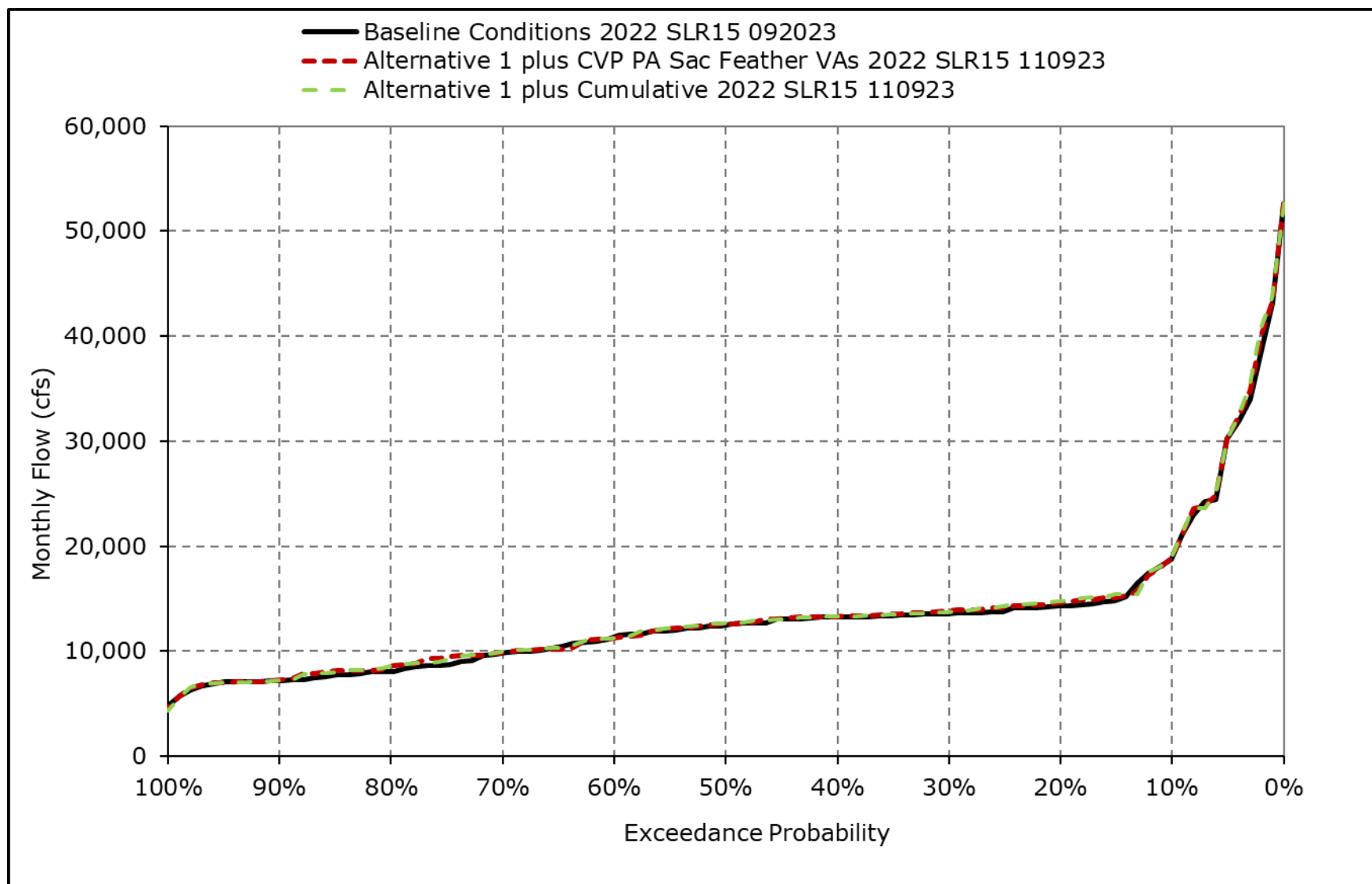
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1g. Sacramento River Flow at Freeport, October



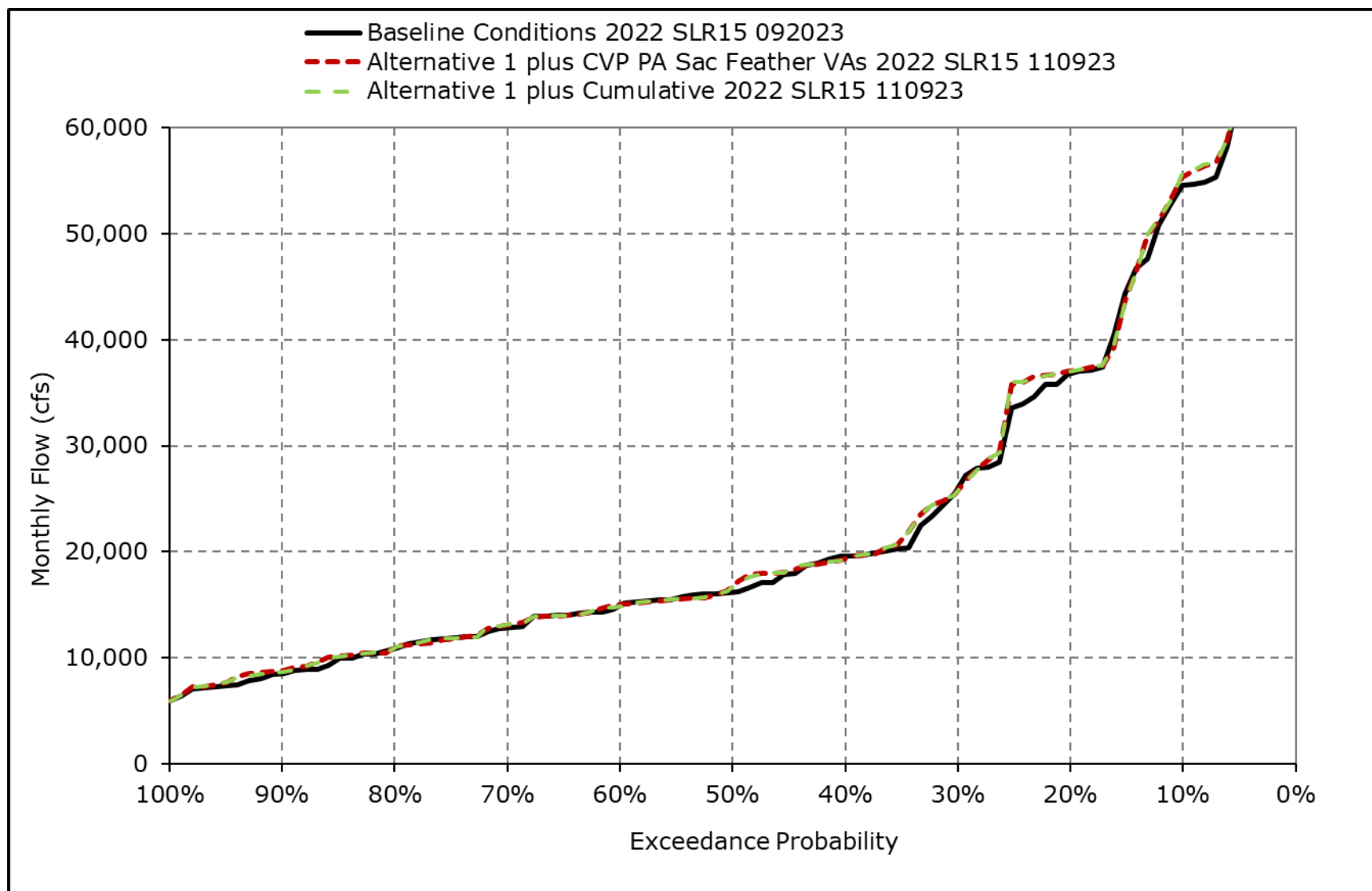
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1h. Sacramento River Flow at Freeport, November



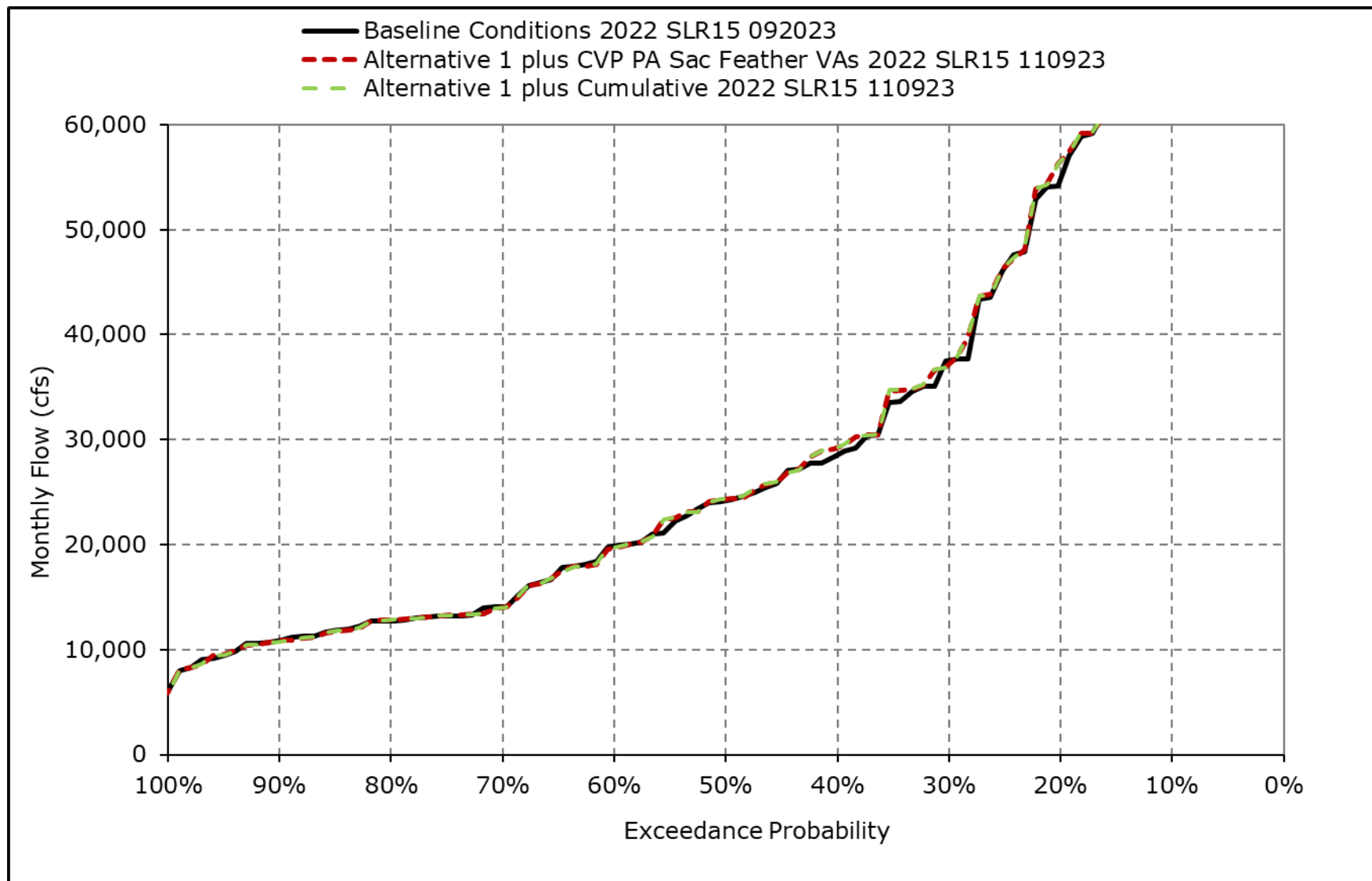
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1i. Sacramento River Flow at Freeport, December



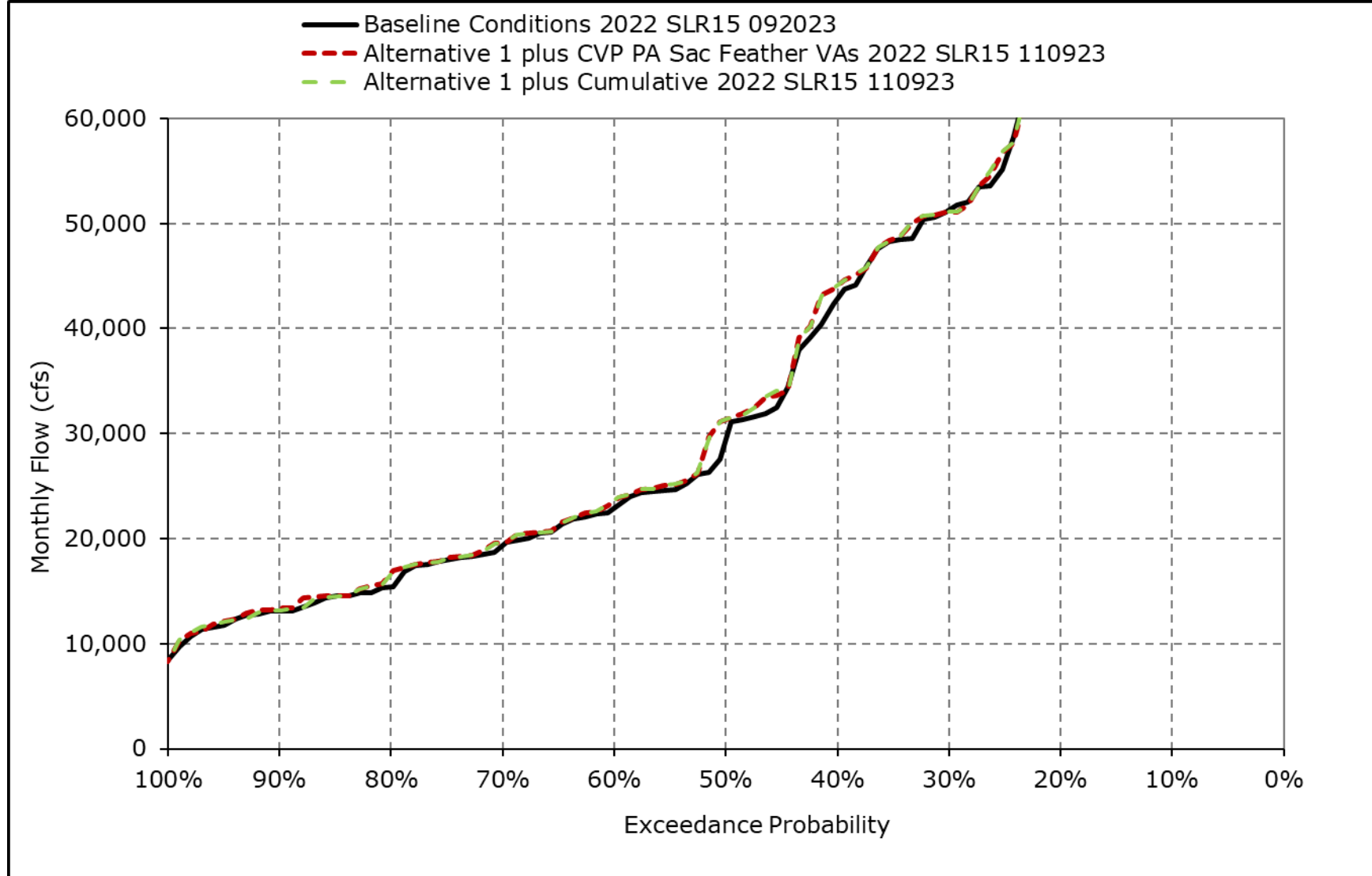
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1j. Sacramento River Flow at Freeport, January



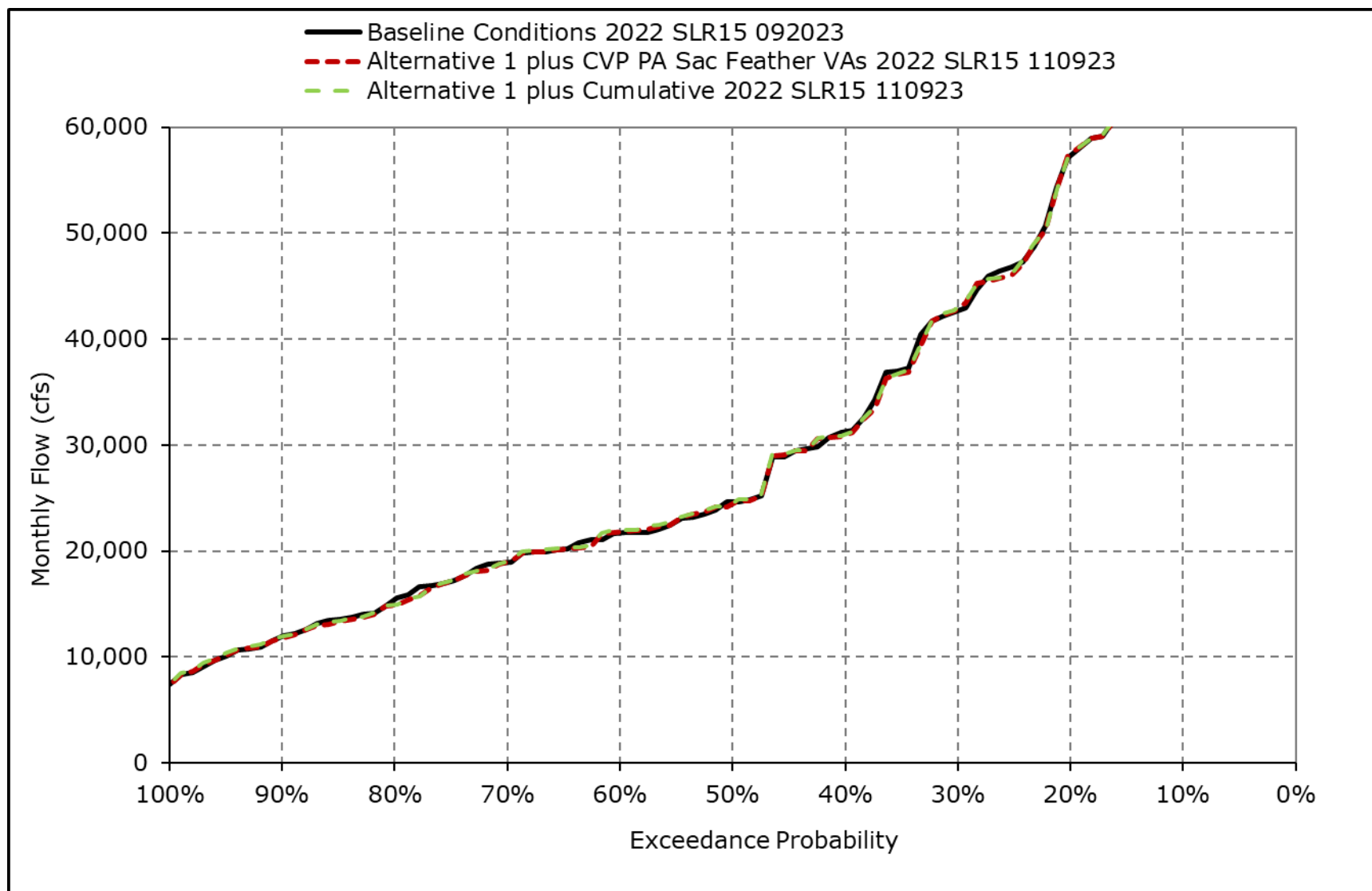
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1k. Sacramento River Flow at Freeport, February



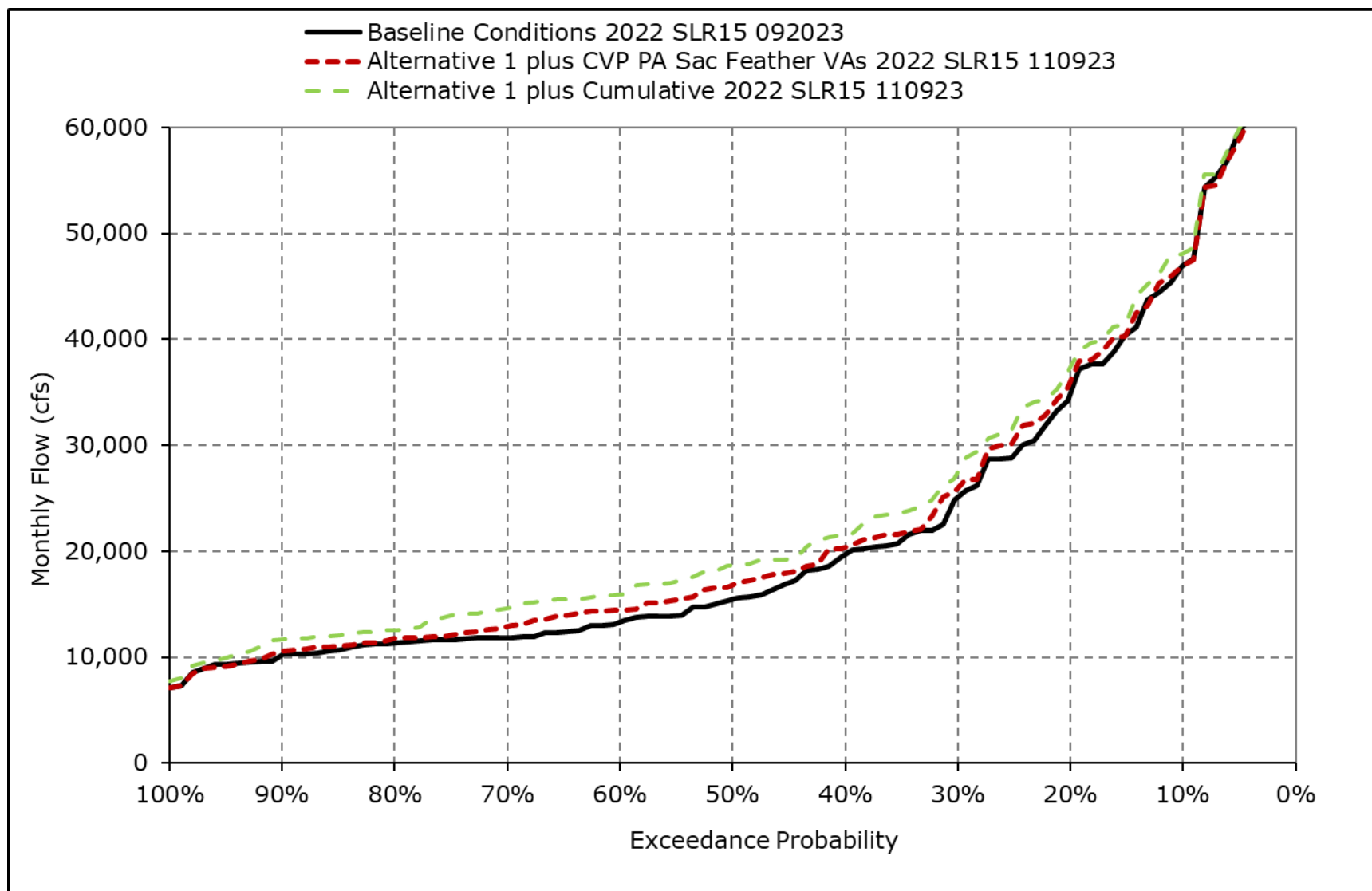
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1I. Sacramento River Flow at Freeport, March



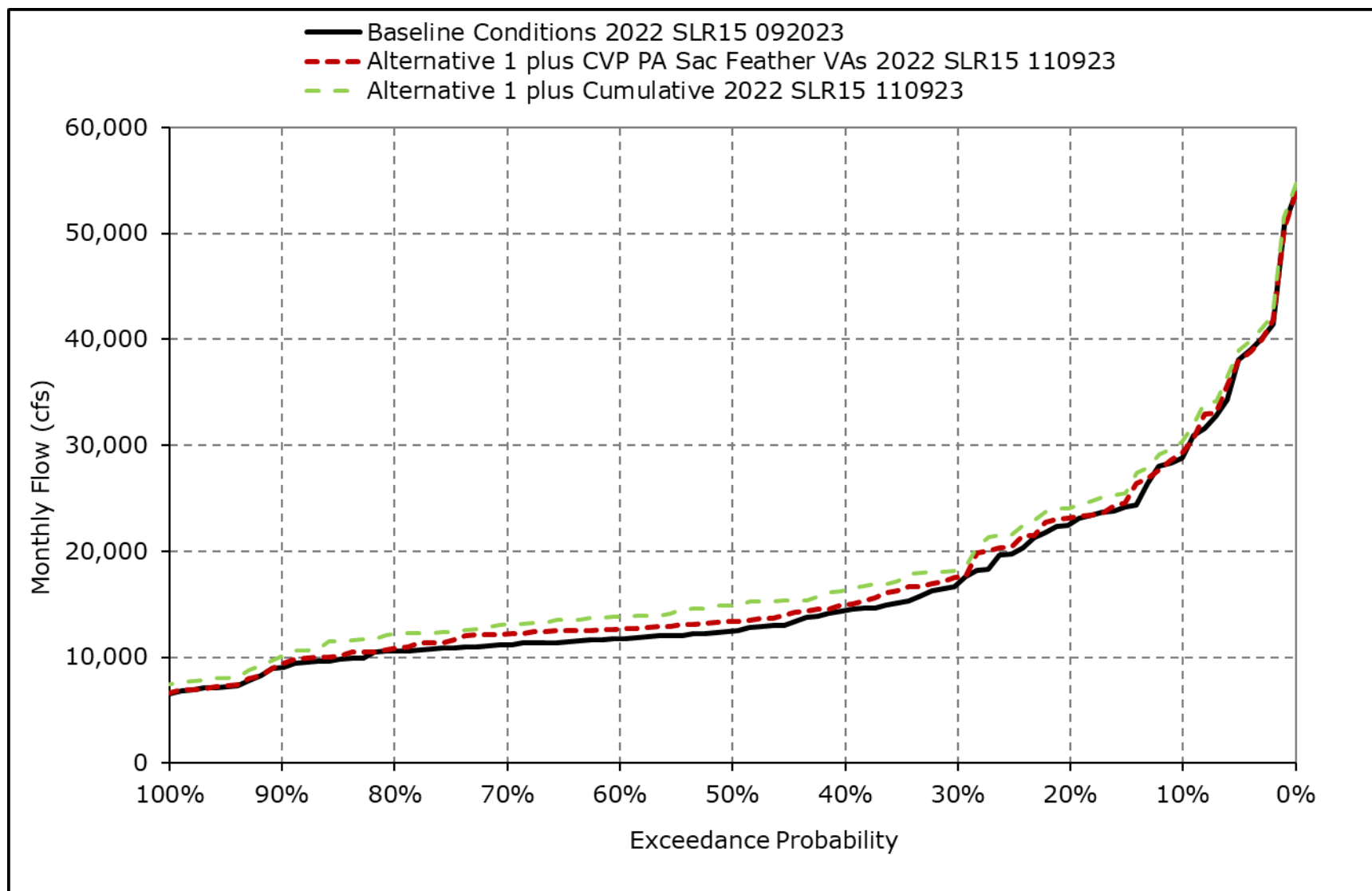
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1m. Sacramento River Flow at Freeport, April



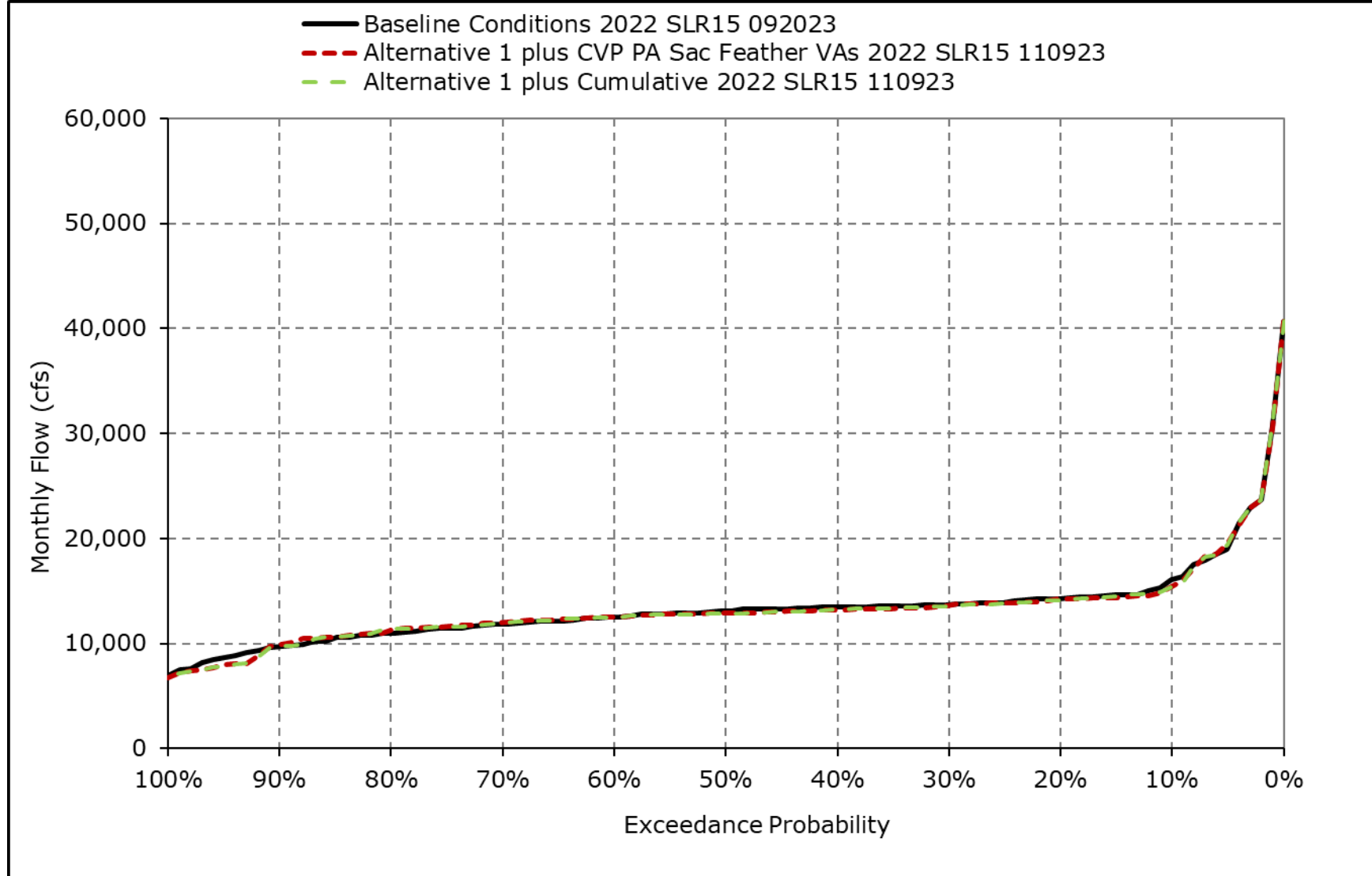
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1n. Sacramento River Flow at Freeport, May



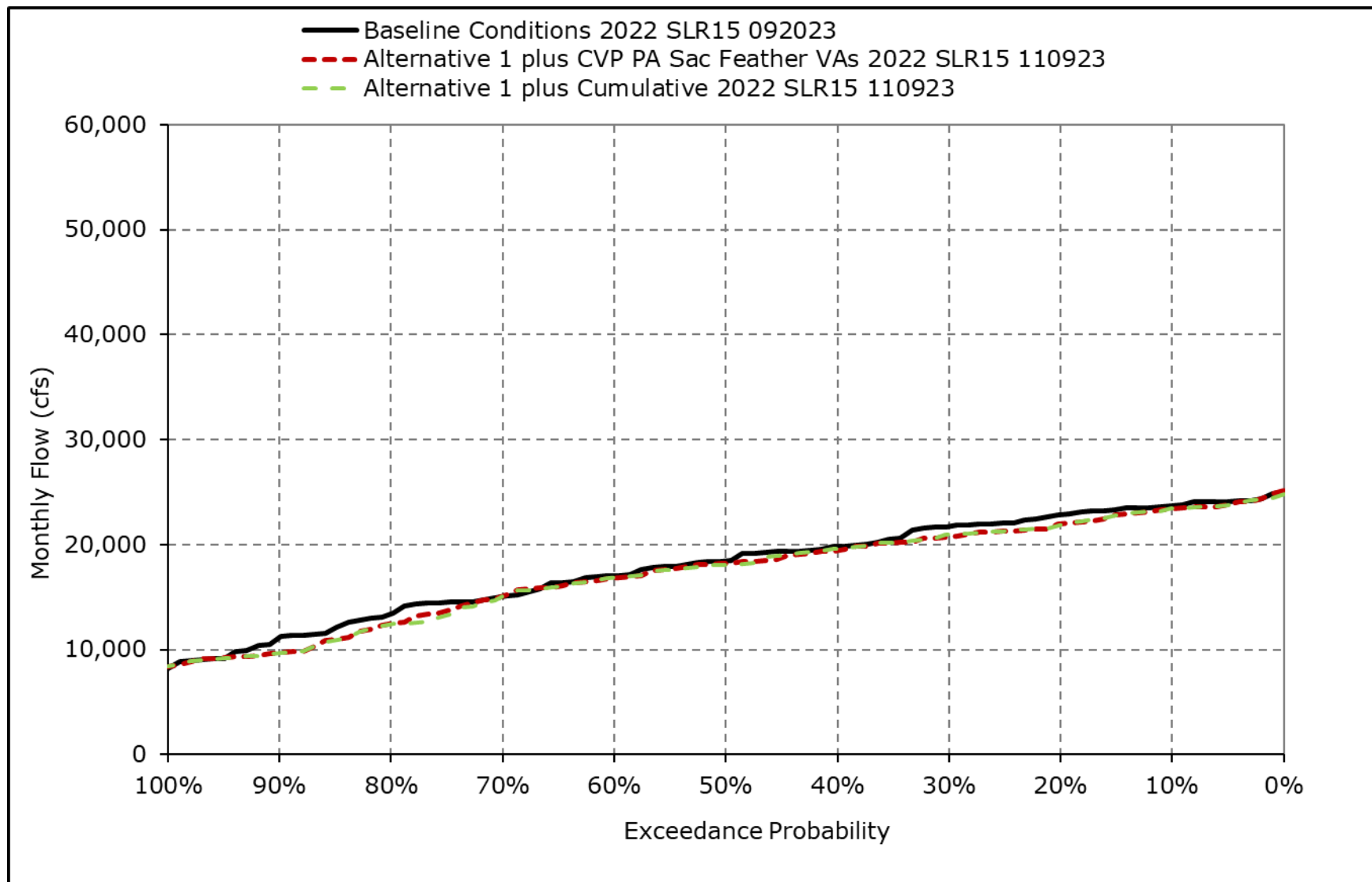
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1o. Sacramento River Flow at Freeport, June



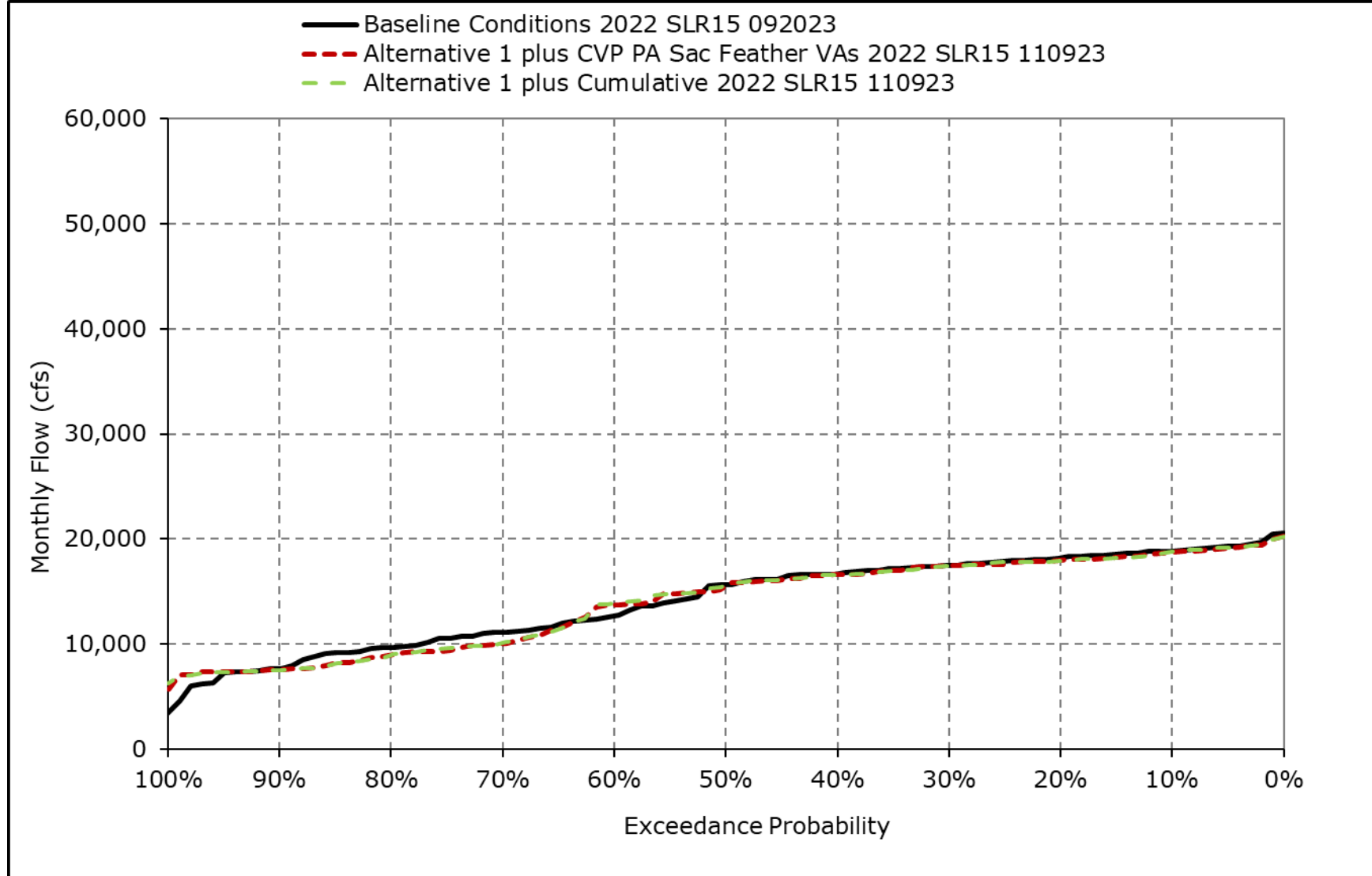
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1p. Sacramento River Flow at Freeport, July



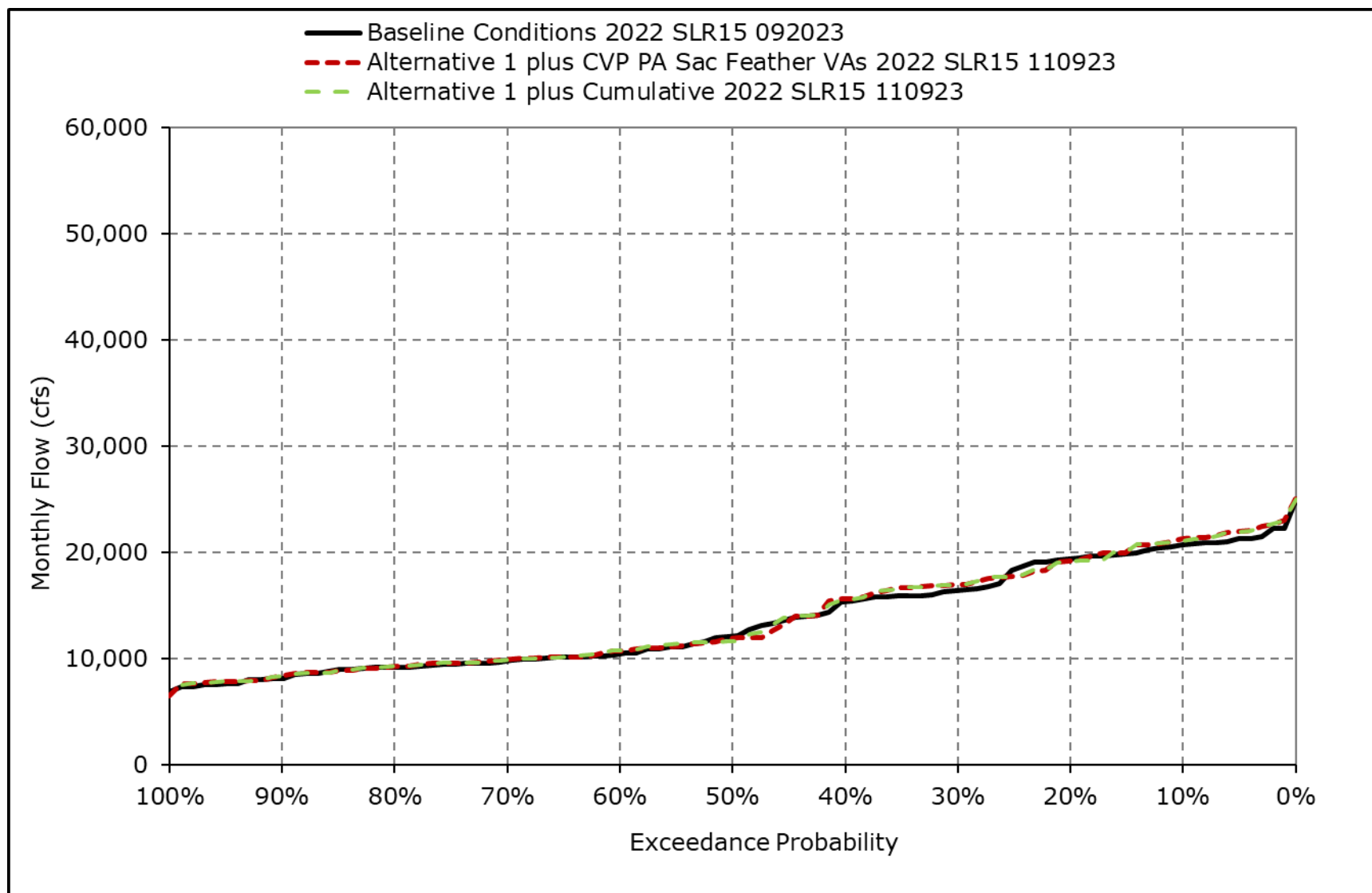
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1q. Sacramento River Flow at Freeport, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-1r. Sacramento River Flow at Freeport, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-2-1a. Yolo Bypass Flow, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	209	1,263	14,874	31,457	63,053	26,004	2,765	1,025	446	278	229	275
20% Exceedance	140	374	8,629	15,778	22,660	9,213	1,508	620	341	269	212	257
30% Exceedance	108	242	2,390	5,681	9,994	4,306	907	469	278	266	207	249
40% Exceedance	99	155	1,055	3,255	7,177	2,589	621	409	259	262	201	241
50% Exceedance	79	132	516	1,698	3,191	1,228	360	304	255	256	198	225
60% Exceedance	72	106	315	1,019	1,652	785	264	260	248	251	194	210
70% Exceedance	65	95	172	436	757	470	247	236	239	247	190	202
80% Exceedance	53	83	115	239	413	278	230	215	230	238	188	181
90% Exceedance	46	73	94	133	181	128	216	194	218	218	179	164
Full Simulation Period Average ^a	208	593	5,541	12,231	18,390	9,480	2,131	538	307	253	313	229
Wet Water Years (28%)	383	1,425	15,138	35,311	50,619	27,244	6,385	992	444	288	220	266
Above Normal Water Years (14%)	230	577	3,853	11,303	18,822	9,368	883	573	272	244	194	217
Below Normal Water Years (18%)	174	296	2,176	2,712	3,167	1,534	484	455	247	219	198	236
Dry Water Years (24%)	88	164	915	752	3,666	874	403	279	260	253	197	211
Critical Water Years (16%)	103	131	951	577	826	335	224	198	235	238	882	191

Table 4H-2-2-1b. Yolo Bypass Flow, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	193	1,419	15,060	32,098	62,711	25,812	2,761	1,079	464	282	220	271
20% Exceedance	136	375	8,406	16,027	22,568	8,926	1,500	616	340	269	211	254
30% Exceedance	105	244	2,001	5,603	9,647	4,332	905	471	278	265	203	247
40% Exceedance	97	151	1,039	3,018	6,649	2,403	619	404	259	259	199	238
50% Exceedance	77	129	502	1,709	2,935	1,109	359	302	254	252	195	224
60% Exceedance	71	104	321	1,018	1,648	746	267	258	246	248	190	208
70% Exceedance	65	94	192	426	759	469	247	235	237	241	188	193
80% Exceedance	51	85	120	248	433	278	229	218	231	231	179	172
90% Exceedance	44	72	94	130	183	120	211	190	219	218	154	146
Full Simulation Period Average ^a	190	660	5,645	12,326	18,354	9,336	2,067	538	308	254	203	224
Wet Water Years (28%)	401	1,513	15,488	35,656	50,802	26,827	6,164	997	449	285	220	265
Above Normal Water Years (14%)	112	648	3,780	11,506	18,588	9,231	877	566	272	239	193	215
Below Normal Water Years (18%)	170	480	2,222	2,583	3,128	1,492	480	456	246	218	197	236
Dry Water Years (24%)	86	164	956	751	3,541	873	402	281	263	259	186	209
Critical Water Years (16%)	66	125	936	538	715	335	223	190	234	248	215	170

Table 4H-2-2-1c. Yolo Bypass Flow, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-15	156	187	641	-343	-191	-4	53	18	5	-9	-4
20% Exceedance	-4	2	-223	248	-93	-286	-8	-4	-1	0	-1	-3
30% Exceedance	-3	2	-389	-78	-347	26	-1	2	0	-1	-4	-2
40% Exceedance	-2	-4	-16	-237	-528	-186	-3	-5	-1	-3	-3	-3
50% Exceedance	-2	-3	-14	11	-256	-119	-1	-2	0	-4	-3	-1
60% Exceedance	-1	-2	6	-1	-4	-39	2	-2	-2	-3	-4	-2
70% Exceedance	0	-1	20	-10	3	0	0	-1	-2	-6	-3	-9
80% Exceedance	-2	2	5	9	20	0	-1	3	1	-7	-9	-9
90% Exceedance	-2	-1	0	-4	3	-8	-5	-4	2	0	-25	-18
Full Simulation Period Average ^a	-18	67	104	95	-36	-144	-64	0	2	1	-110	-4
Wet Water Years (28%)	19	87	351	345	183	-418	-221	5	4	-3	0	-1
Above Normal Water Years (14%)	-118	71	-73	203	-234	-137	-6	-8	0	-6	-1	-2
Below Normal Water Years (18%)	-4	184	46	-128	-39	-42	-4	1	-1	-1	-1	0
Dry Water Years (24%)	-2	0	42	-1	-125	-1	-2	3	3	5	-11	-2
Critical Water Years (16%)	-37	-6	-15	-39	-111	0	-1	-8	-1	11	-668	-21

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-2-2a. Yolo Bypass Flow, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	209	1,263	14,874	31,457	63,053	26,004	2,765	1,025	446	278	229	275
20% Exceedance	140	374	8,629	15,778	22,660	9,213	1,508	620	341	269	212	257
30% Exceedance	108	242	2,390	5,681	9,994	4,306	907	469	278	266	207	249
40% Exceedance	99	155	1,055	3,255	7,177	2,589	621	409	259	262	201	241
50% Exceedance	79	132	516	1,698	3,191	1,228	360	304	255	256	198	225
60% Exceedance	72	106	315	1,019	1,652	785	264	260	248	251	194	210
70% Exceedance	65	95	172	436	757	470	247	236	239	247	190	202
80% Exceedance	53	83	115	239	413	278	230	215	230	238	188	181
90% Exceedance	46	73	94	133	181	128	216	194	218	218	179	164
Full Simulation Period Average ^a	208	593	5,541	12,231	18,390	9,480	2,131	538	307	253	313	229
Wet Water Years (28%)	383	1,425	15,138	35,311	50,619	27,244	6,385	992	444	288	220	266
Above Normal Water Years (14%)	230	577	3,853	11,303	18,822	9,368	883	573	272	244	194	217
Below Normal Water Years (18%)	174	296	2,176	2,712	3,167	1,534	484	455	247	219	198	236
Dry Water Years (24%)	88	164	915	752	3,666	874	403	279	260	253	197	211
Critical Water Years (16%)	103	131	951	577	826	335	224	198	235	238	882	191

Table 4H-2-2-2b. Yolo Bypass Flow, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	195	1,628	15,088	32,094	62,743	25,751	2,740	1,056	447	284	220	273
20% Exceedance	136	399	8,429	16,100	22,632	8,932	1,511	622	343	269	211	255
30% Exceedance	105	264	2,021	5,659	9,654	4,369	905	473	279	265	204	248
40% Exceedance	97	175	1,040	3,028	6,698	2,406	621	406	259	260	199	240
50% Exceedance	78	139	525	1,718	2,948	1,117	384	309	255	252	195	225
60% Exceedance	71	126	333	1,032	1,660	775	273	265	247	249	190	212
70% Exceedance	65	115	208	439	774	470	246	246	238	243	188	194
80% Exceedance	51	104	130	252	434	290	231	223	232	231	179	169
90% Exceedance	43	87	109	137	191	131	212	193	219	219	160	157
Full Simulation Period Average ^a	197	692	5,675	12,344	18,385	9,329	2,077	544	310	255	196	225
Wet Water Years (28%)	406	1,541	15,534	35,665	50,863	26,799	6,183	996	450	285	220	266
Above Normal Water Years (14%)	153	723	3,804	11,574	18,599	9,205	881	570	273	242	193	216
Below Normal Water Years (18%)	167	503	2,239	2,593	3,146	1,498	490	465	246	220	197	238
Dry Water Years (24%)	87	187	985	763	3,573	884	407	293	267	259	187	211
Critical Water Years (16%)	67	149	958	550	726	346	224	194	235	248	167	171

Table 4H-2-2-2c. Yolo Bypass Flow, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-13	365	214	638	-310	-253	-25	30	2	6	-9	-2
20% Exceedance	-4	25	-200	321	-28	-281	3	2	1	0	-1	-3
30% Exceedance	-3	22	-369	-22	-340	63	-1	4	1	0	-3	-1
40% Exceedance	-2	20	-15	-227	-479	-182	0	-3	0	-3	-2	-1
50% Exceedance	-1	7	9	20	-243	-111	24	5	0	-4	-3	0
60% Exceedance	-2	19	18	14	8	-10	9	5	-1	-2	-4	2
70% Exceedance	0	20	37	3	18	0	0	10	-1	-4	-3	-9
80% Exceedance	-2	20	15	14	21	12	1	8	2	-7	-9	-11
90% Exceedance	-3	14	15	4	11	3	-4	-1	2	1	-19	-6
Full Simulation Period Average ^a	-12	99	134	114	-5	-150	-55	5	3	2	-117	-3
Wet Water Years (28%)	23	116	397	354	244	-446	-202	5	5	-2	0	0
Above Normal Water Years (14%)	-77	147	-49	271	-223	-163	-2	-3	1	-3	-1	-1
Below Normal Water Years (18%)	-8	207	62	-119	-21	-36	7	10	0	0	-1	2
Dry Water Years (24%)	-1	23	71	11	-93	9	4	14	7	5	-10	0
Critical Water Years (16%)	-36	18	7	-27	-100	10	0	-3	0	11	-715	-21

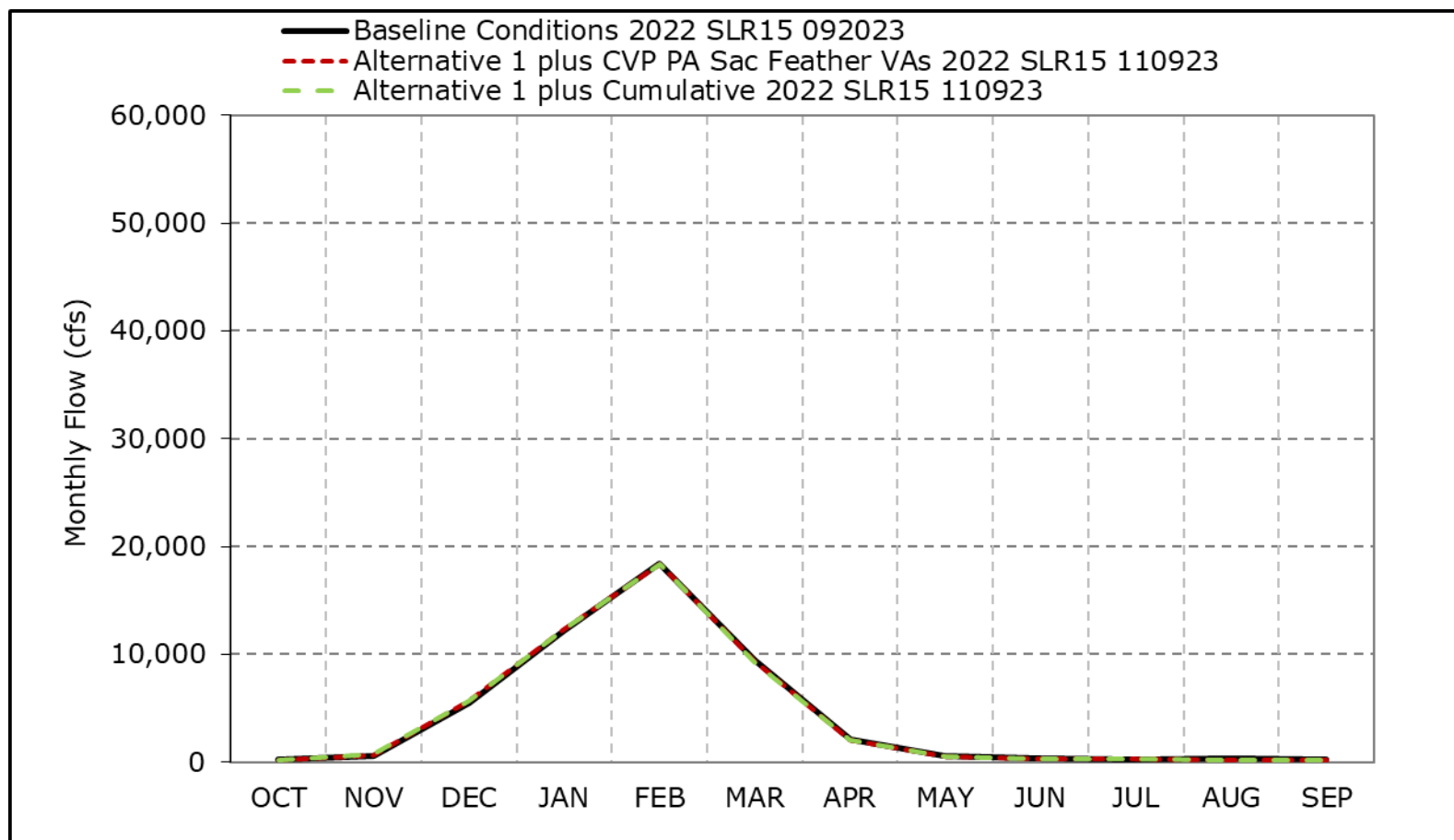
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-2a. Yolo Bypass Flow, Long-Term Average Flow

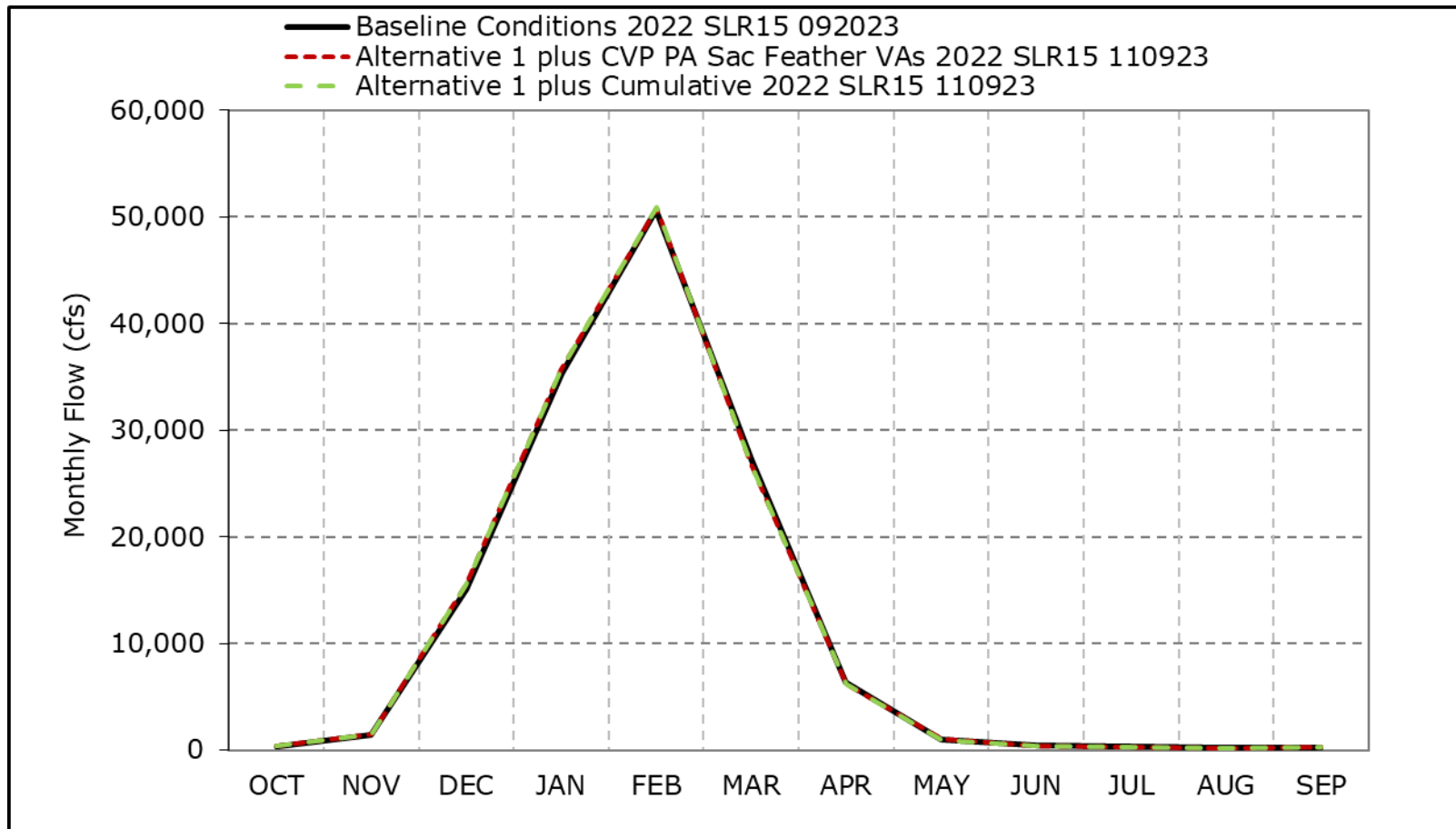


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2b. Yolo Bypass Flow, Wet Year Average Flow

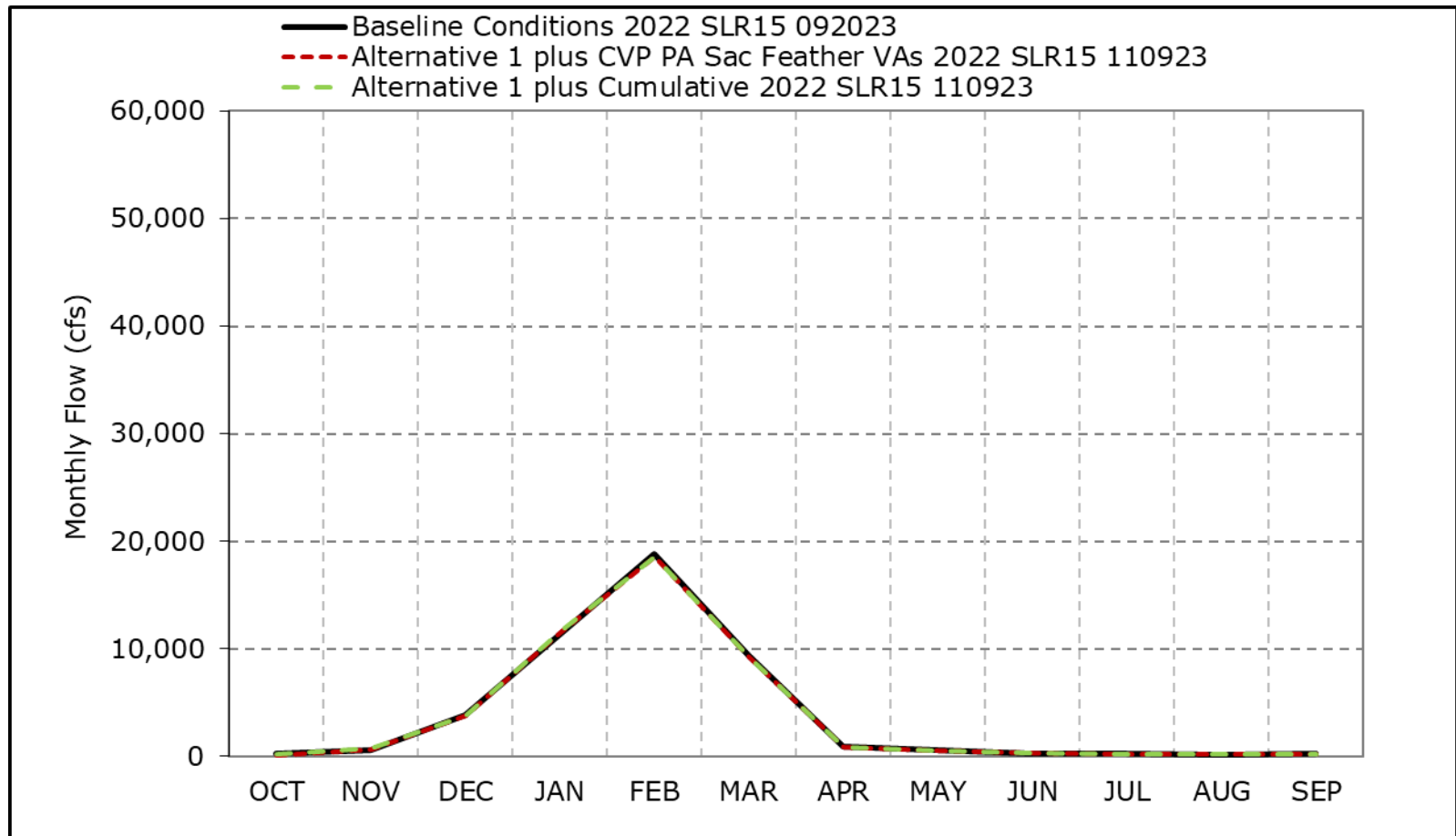


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2c. Yolo Bypass Flow, Above Normal Year Average Flow

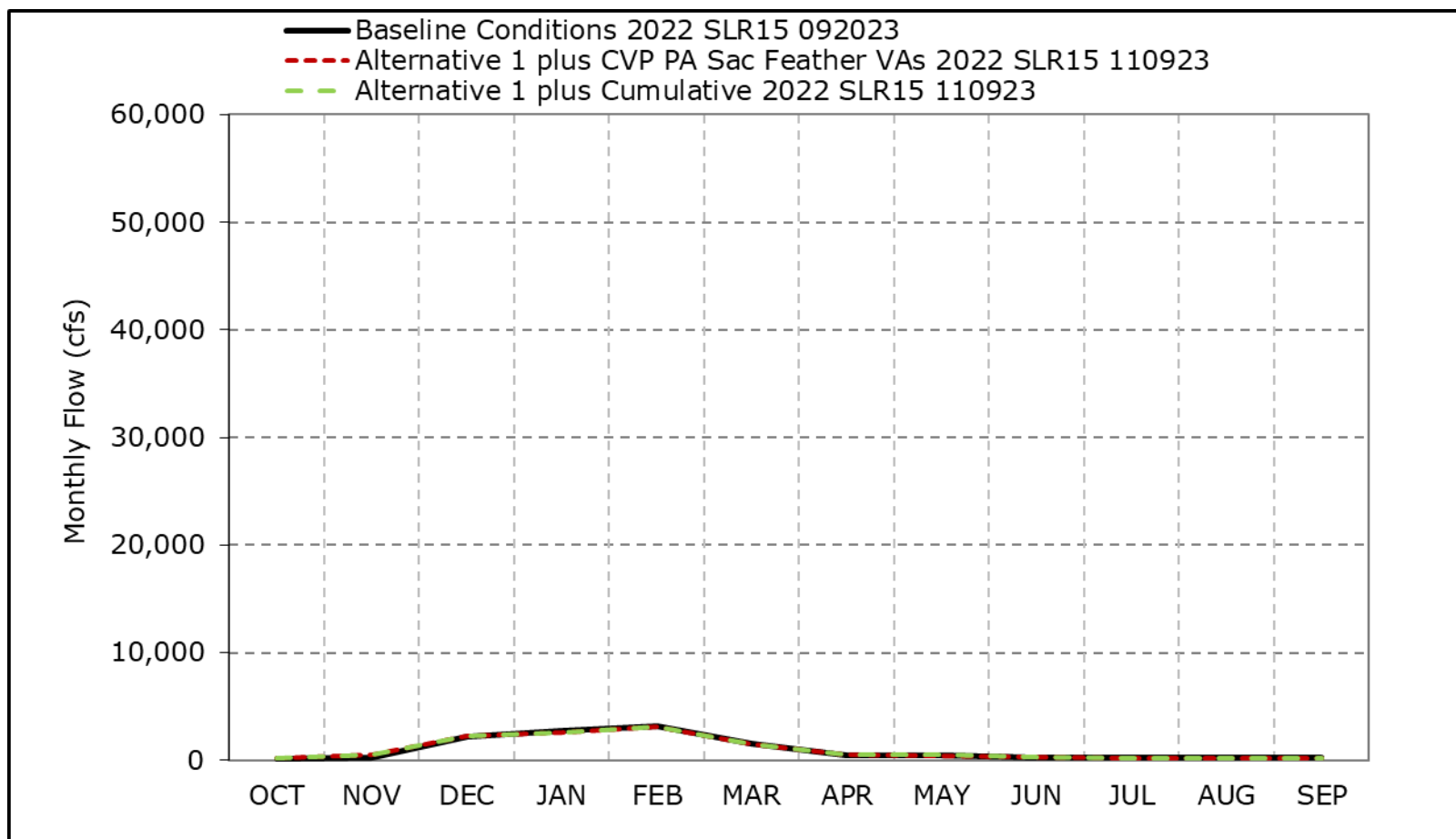


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2d. Yolo Bypass Flow, Below Normal Year Average Flow

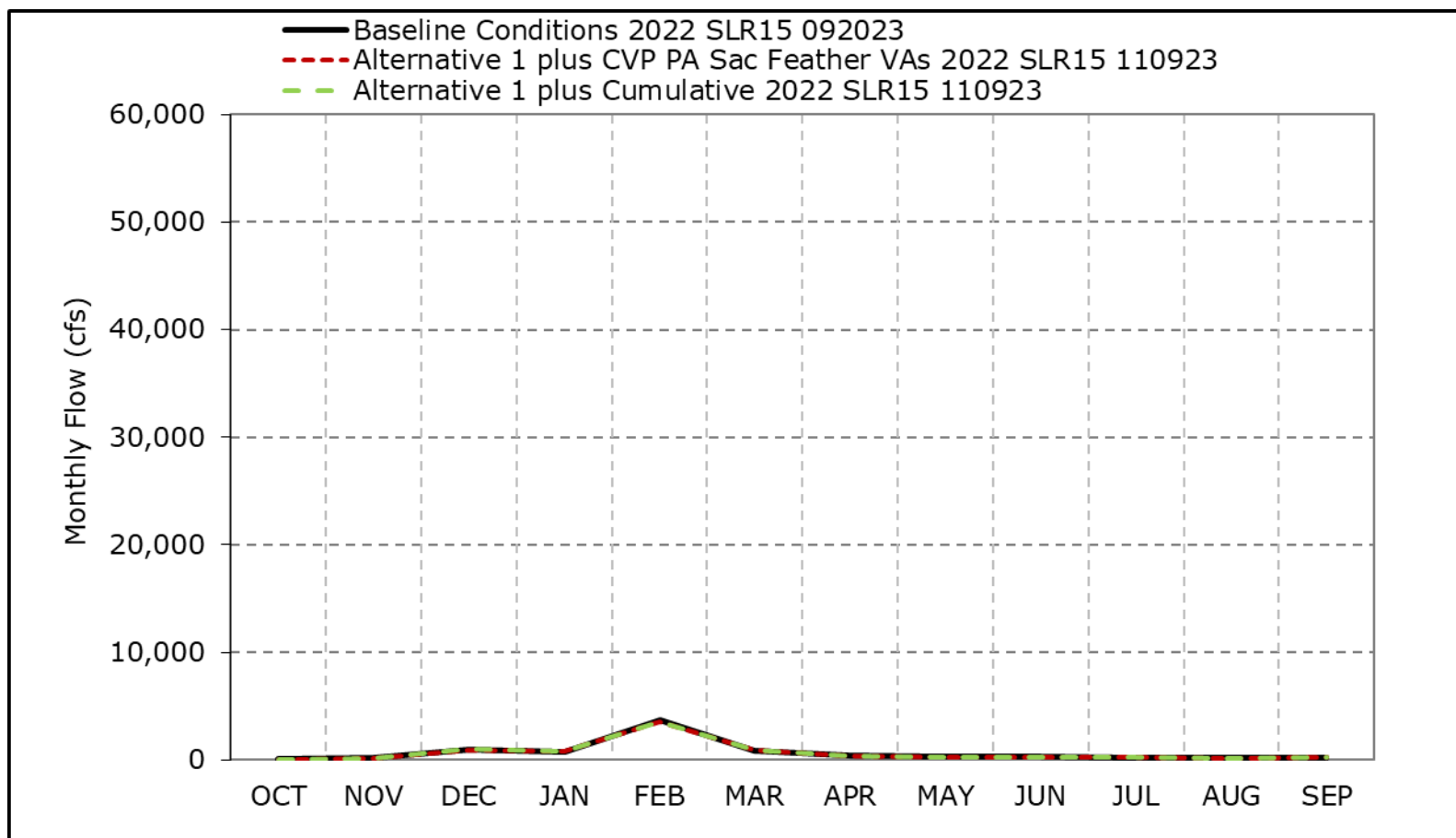


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2e. Yolo Bypass Flow, Dry Year Average Flow

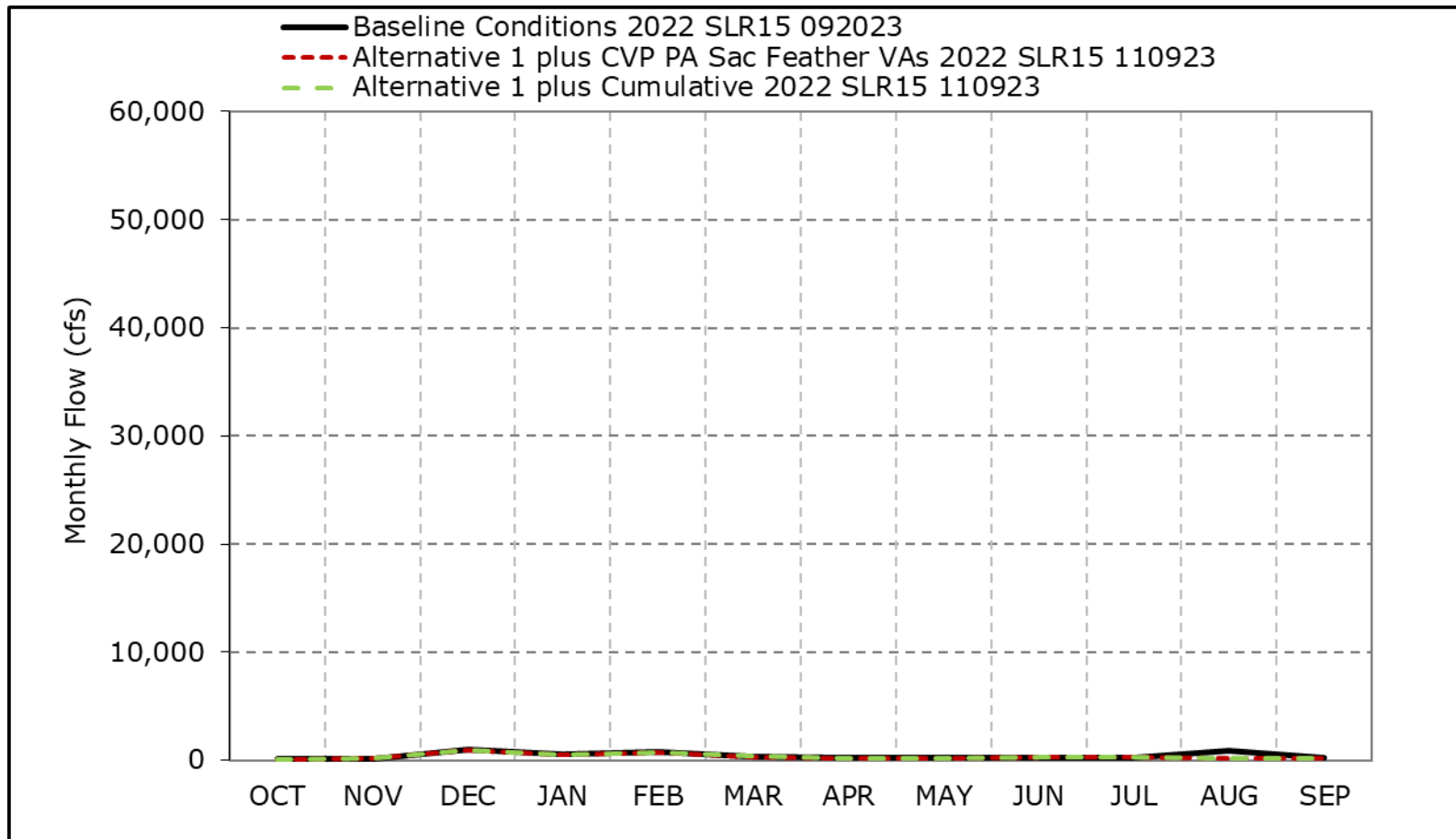


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2f. Yolo Bypass Flow, Critical Year Average Flow

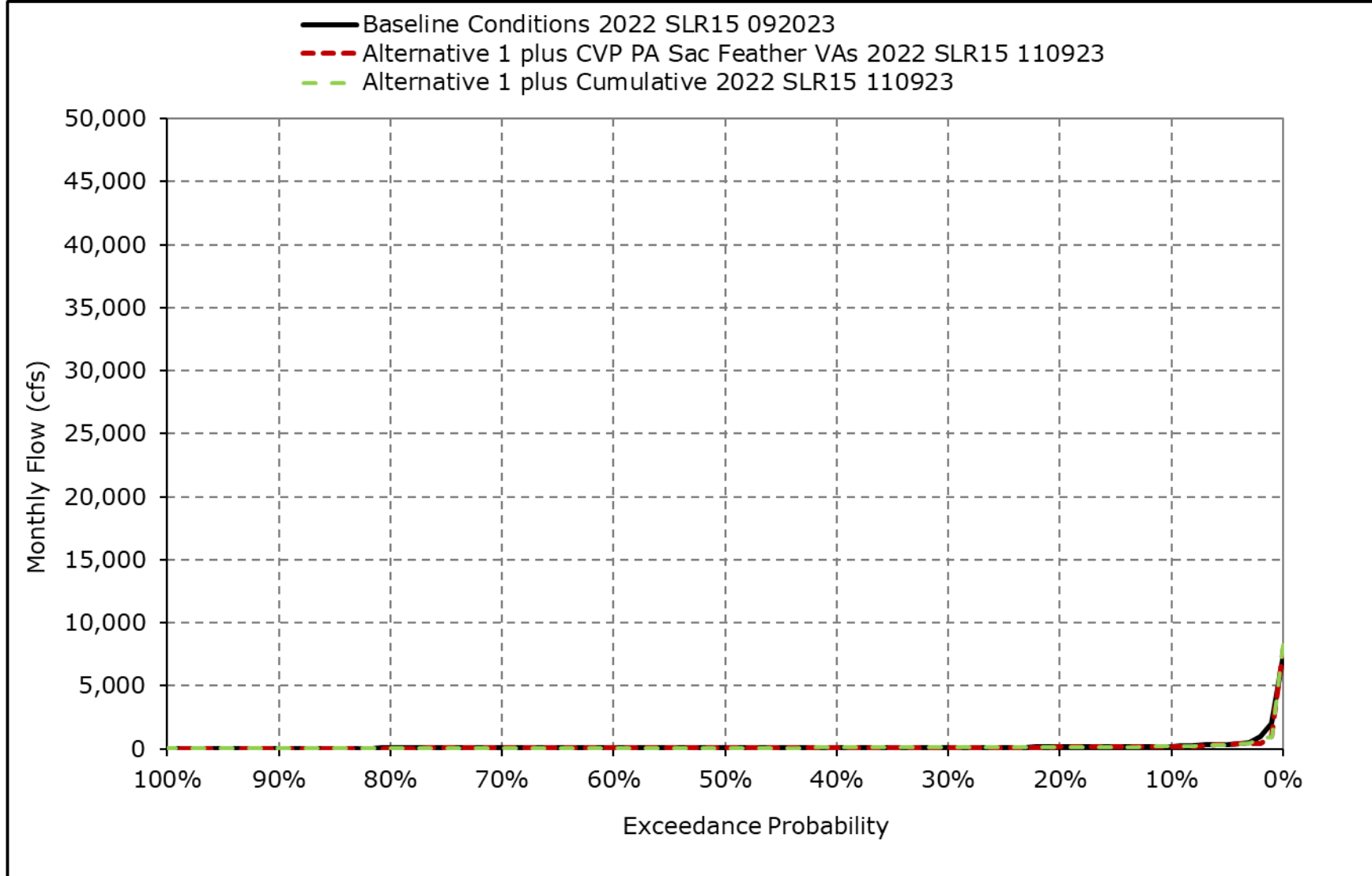


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

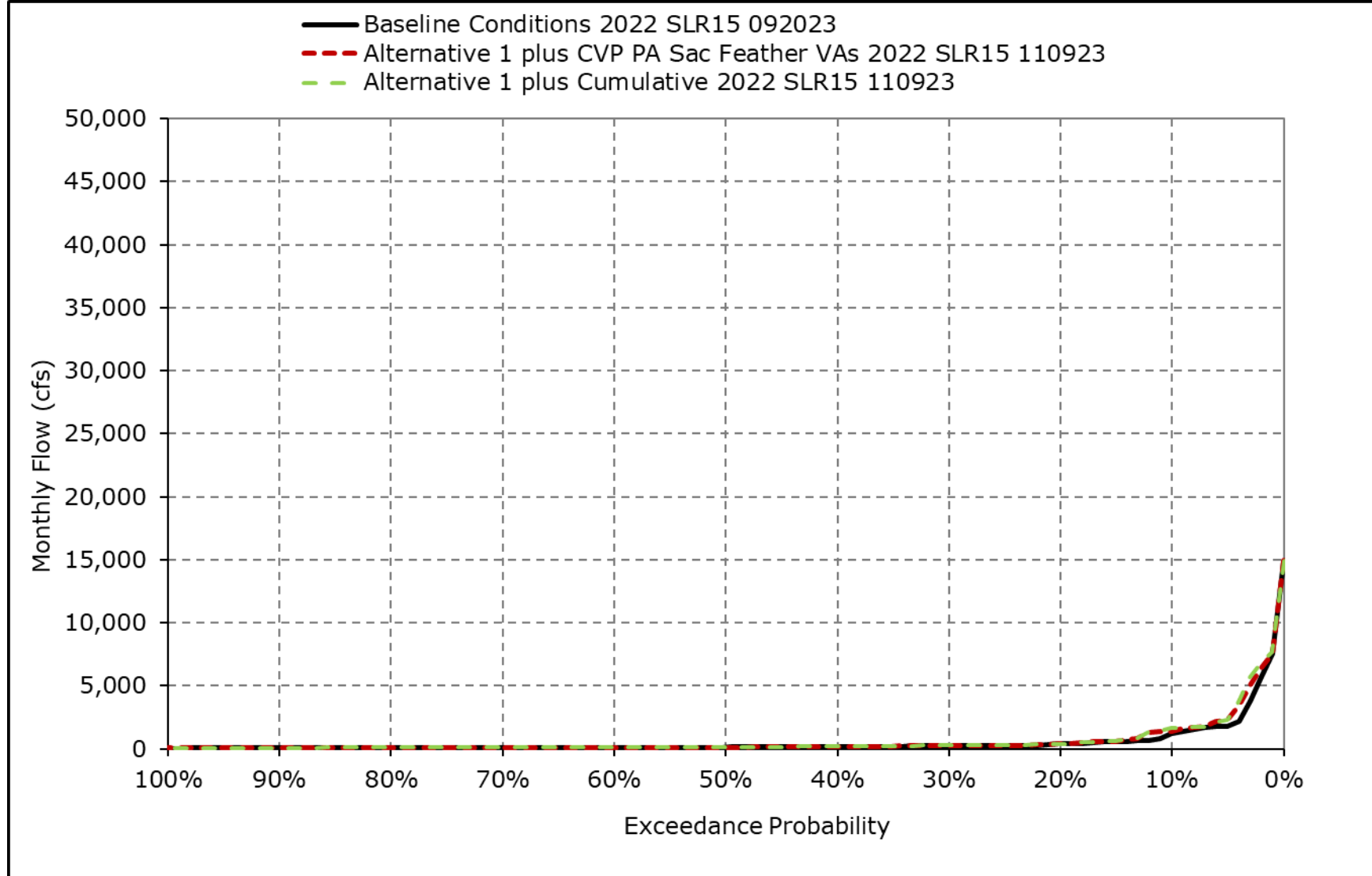
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2g. Yolo Bypass Flow, October



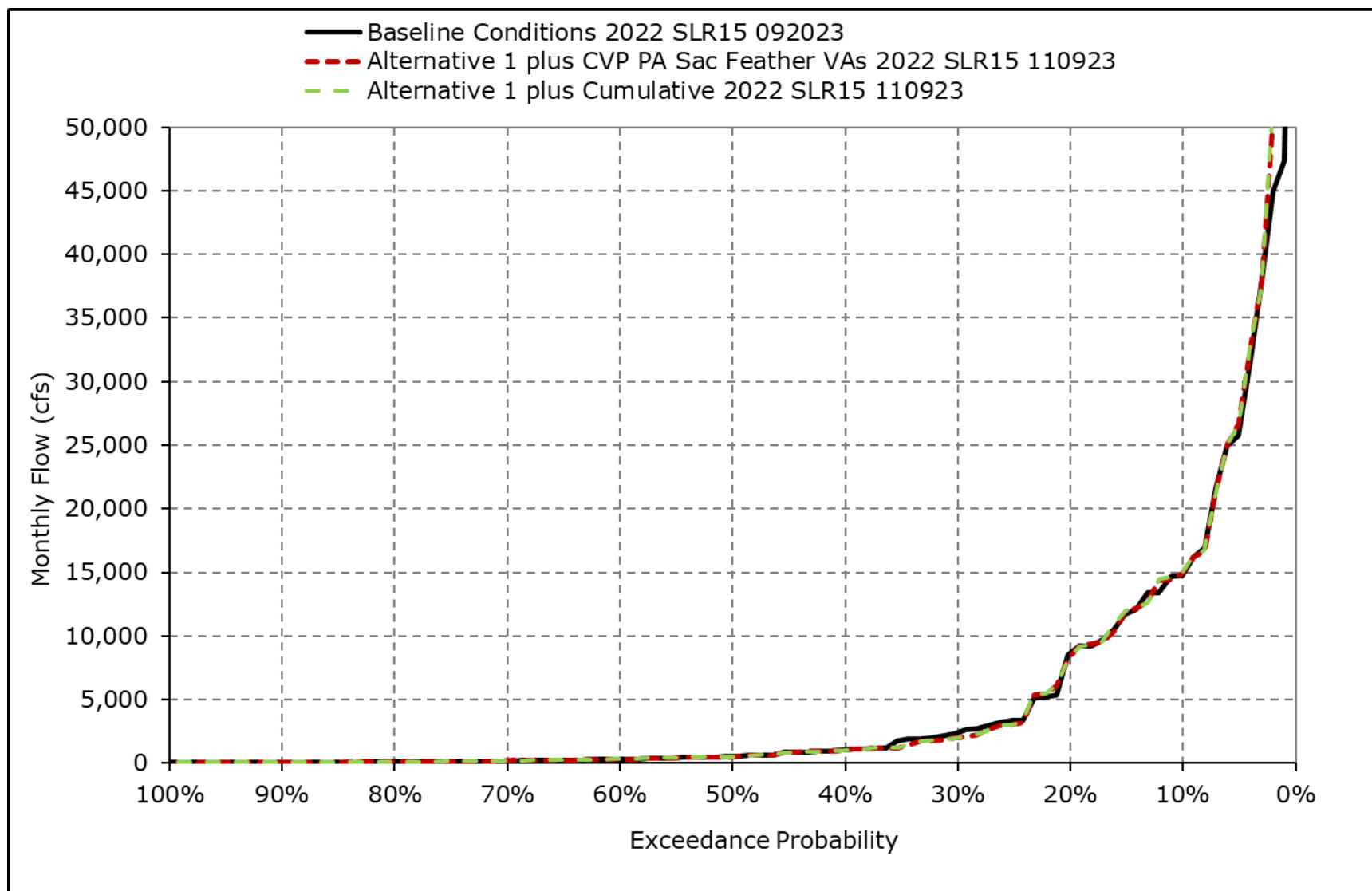
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2h. Yolo Bypass Flow, November



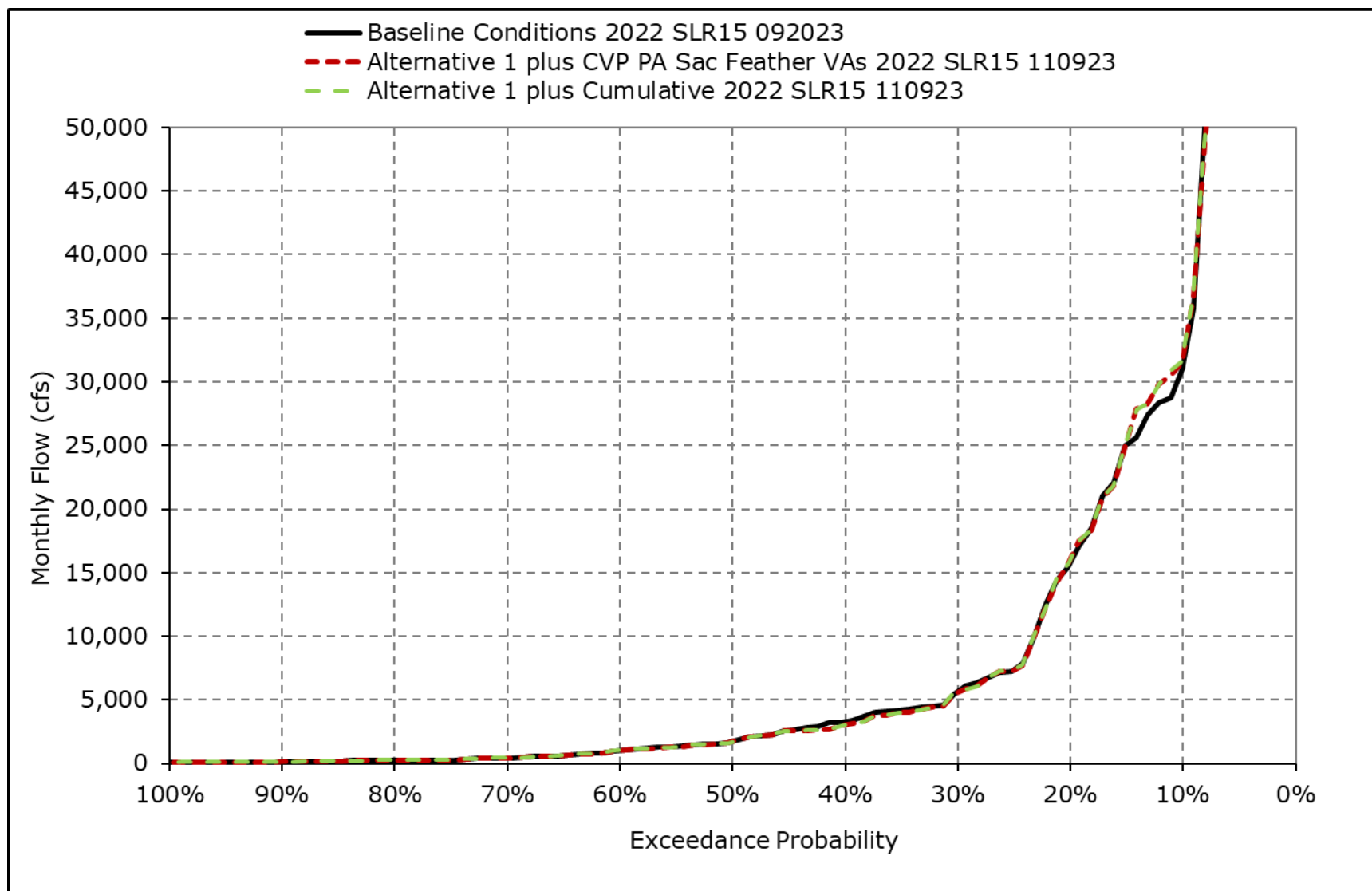
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2i. Yolo Bypass Flow, December



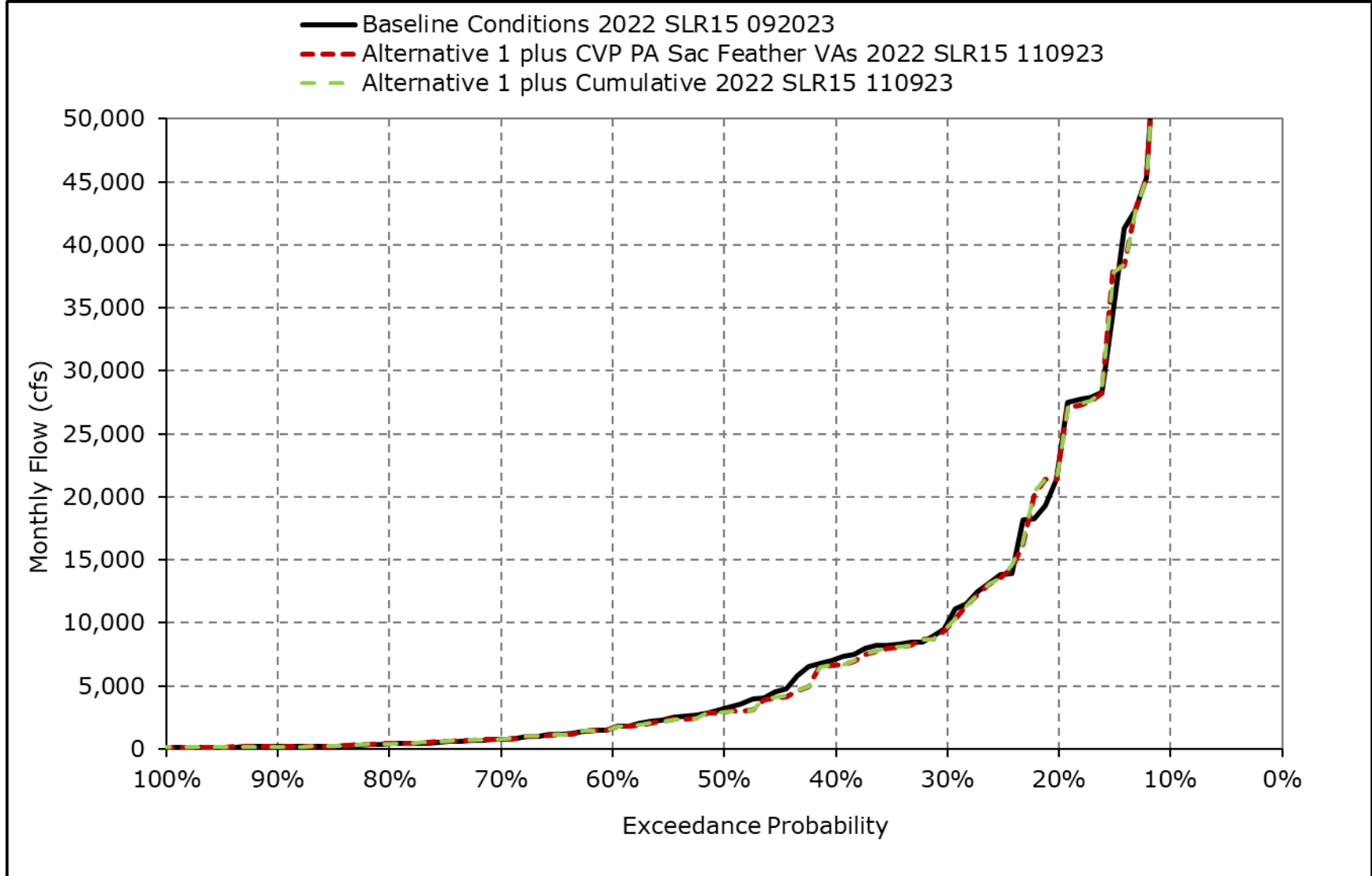
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2j. Yolo Bypass Flow, January



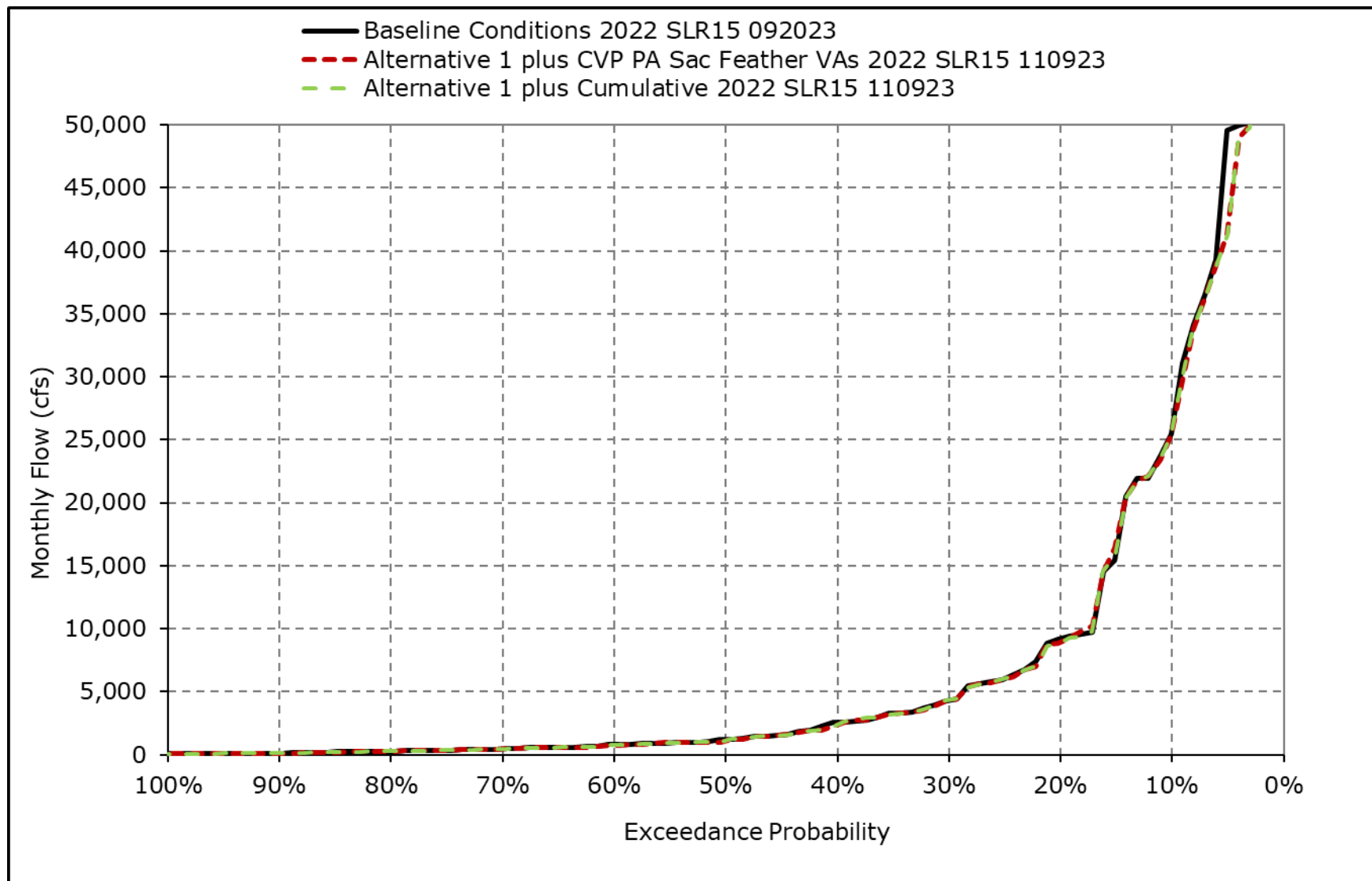
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2k. Yolo Bypass Flow, February



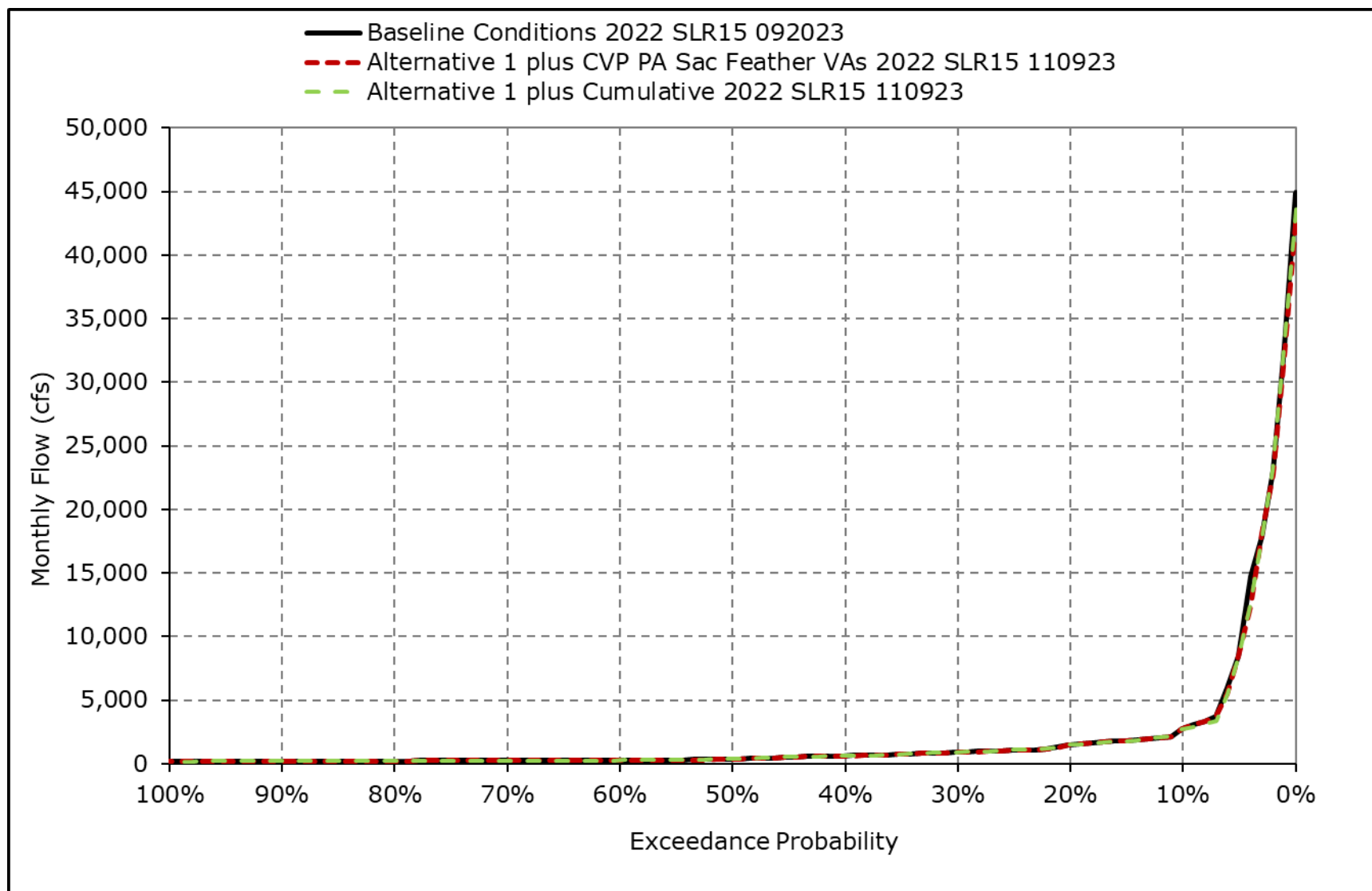
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2I. Yolo Bypass Flow, March



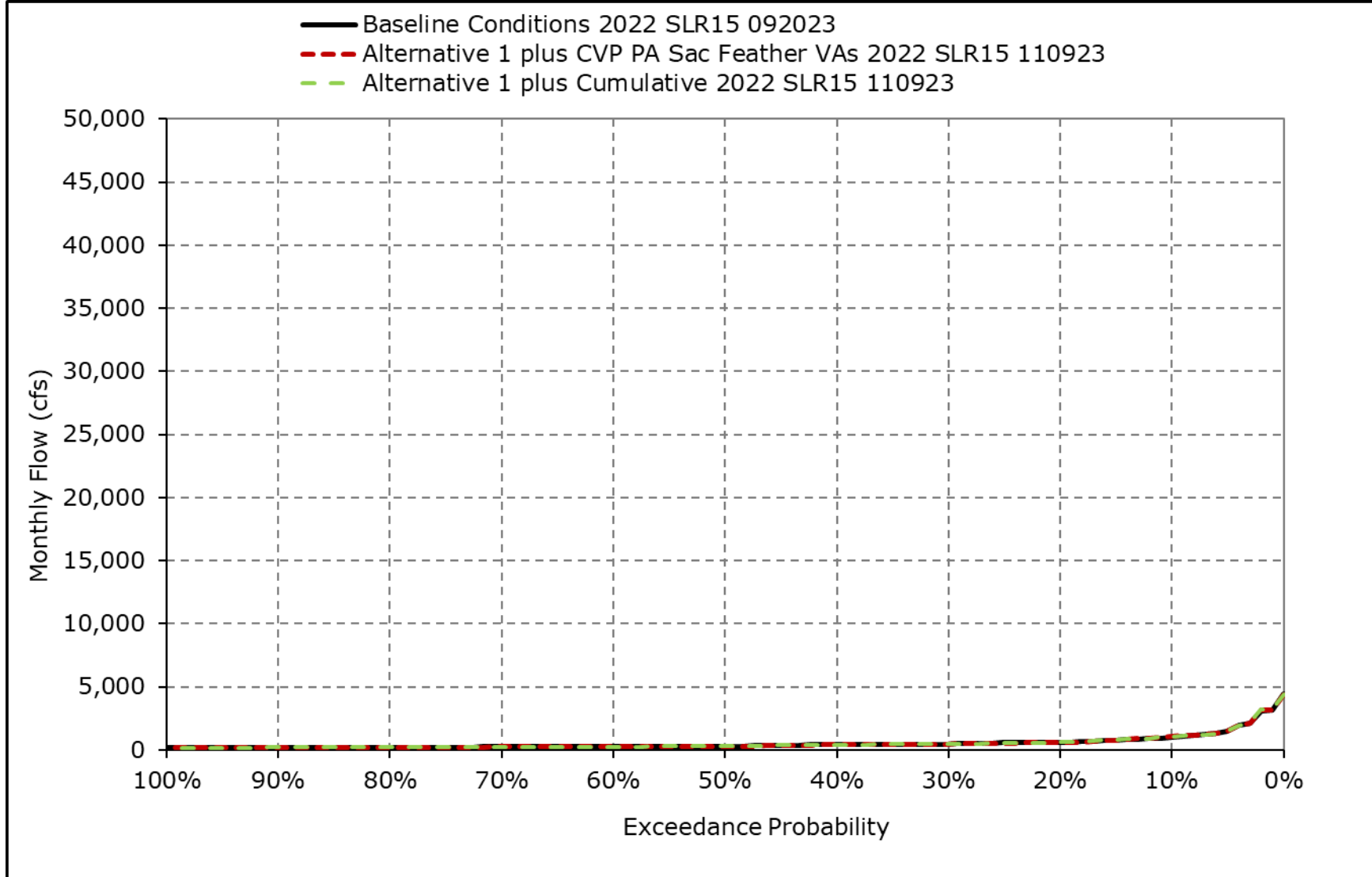
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2m. Yolo Bypass Flow, April



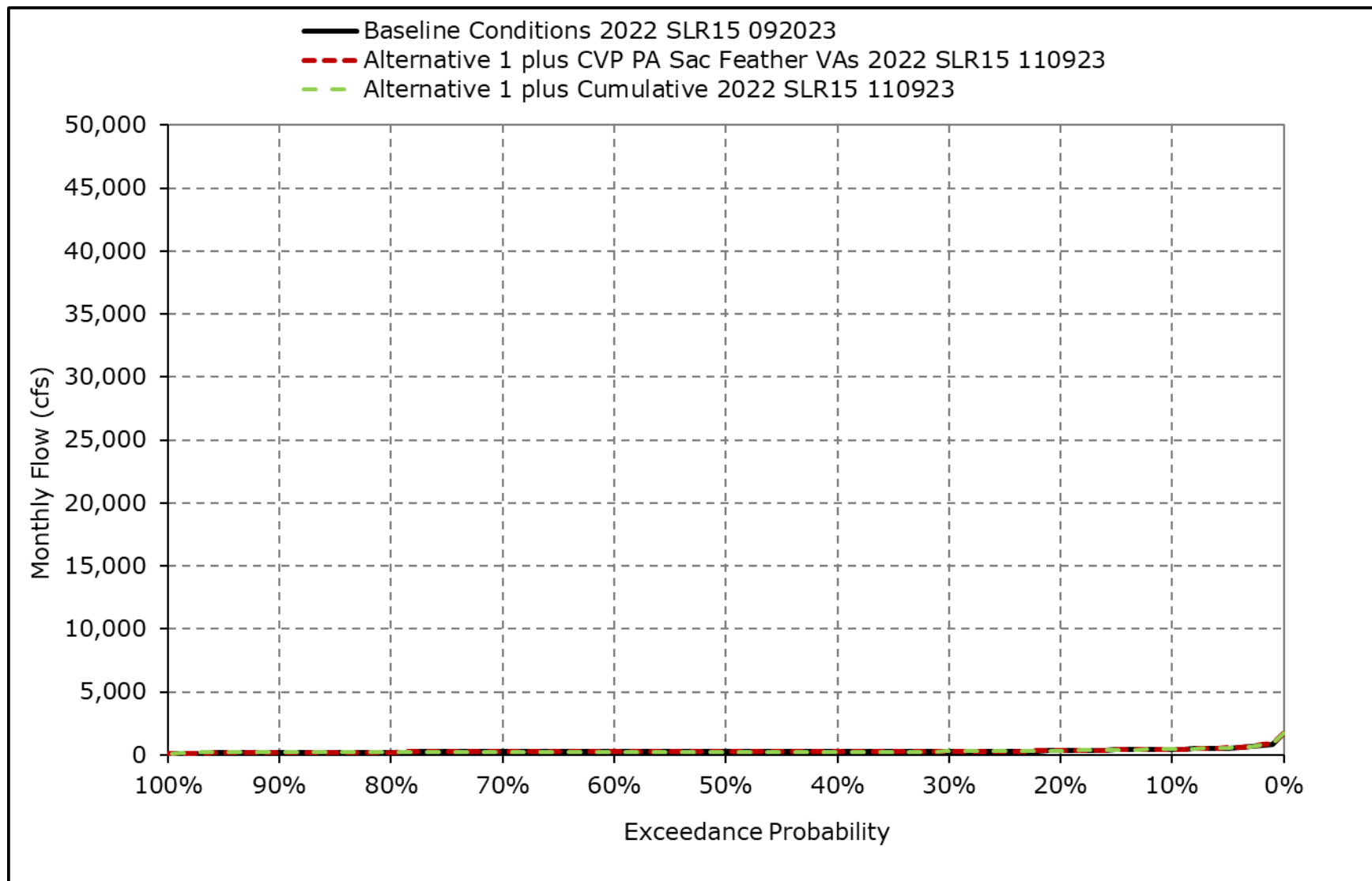
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2n. Yolo Bypass Flow, May



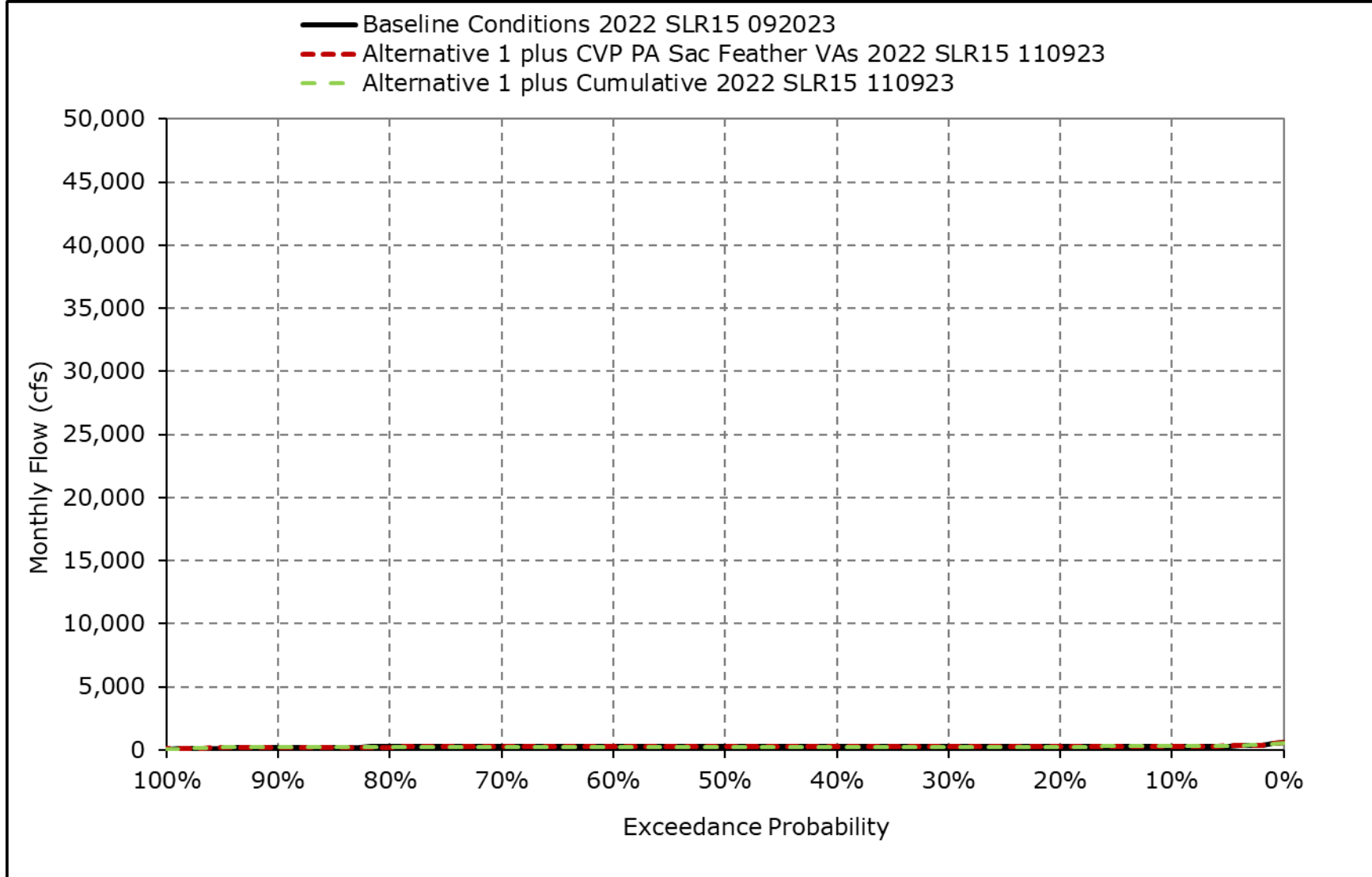
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2o. Yolo Bypass Flow, June



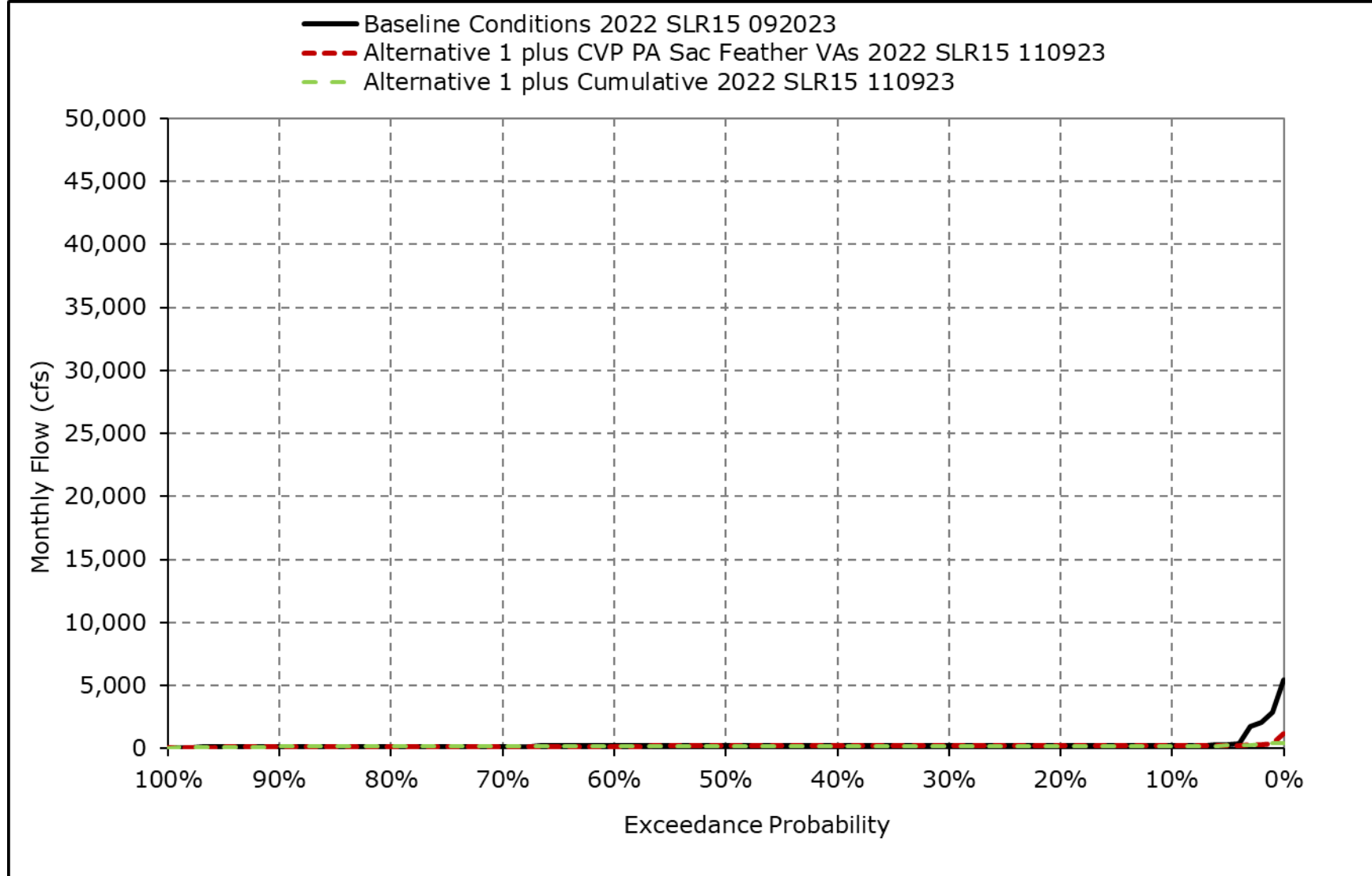
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2p. Yolo Bypass Flow, July



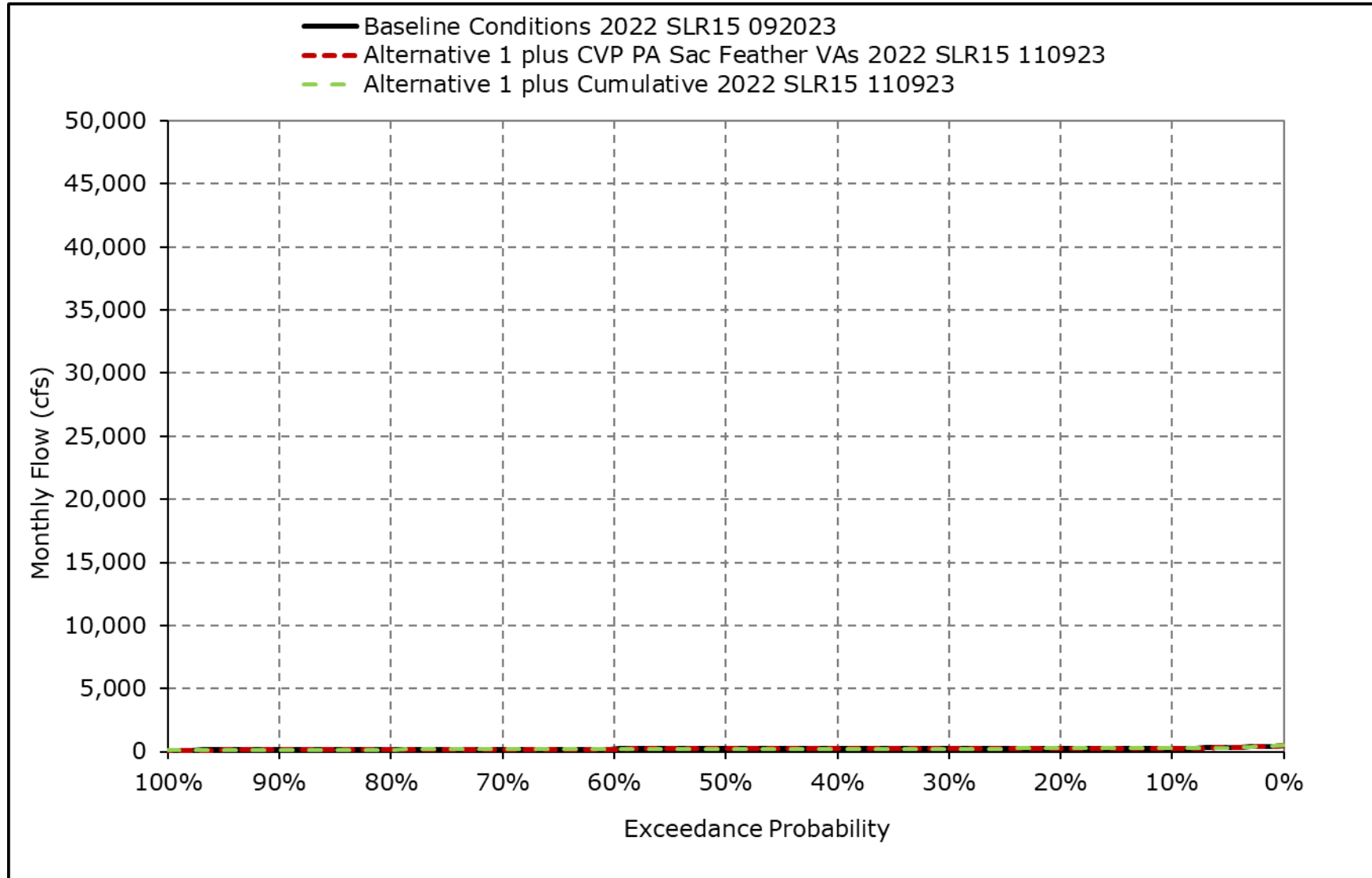
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2q. Yolo Bypass Flow, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-2r. Yolo Bypass Flow, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-3-1a. San Joaquin River at Vernalis, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,234	2,667	4,912	9,691	15,493	14,595	13,465	12,878	8,746	4,082	2,492	2,686
20% Exceedance	2,576	2,253	2,791	5,069	9,115	8,591	9,486	7,649	4,253	2,657	1,702	1,615
30% Exceedance	2,102	1,998	2,066	3,566	5,790	6,959	7,920	5,099	2,952	1,711	1,446	1,400
40% Exceedance	1,876	1,829	1,781	2,753	3,975	4,512	6,264	4,164	2,373	1,620	1,308	1,320
50% Exceedance	1,680	1,623	1,644	2,179	2,996	2,825	3,703	3,046	1,871	1,273	1,094	1,137
60% Exceedance	1,588	1,476	1,536	1,923	2,382	2,486	2,916	2,388	1,568	1,123	993	1,048
70% Exceedance	1,520	1,357	1,402	1,779	2,116	2,211	2,601	2,088	1,350	936	901	955
80% Exceedance	1,378	1,309	1,322	1,710	1,970	2,064	2,332	1,833	1,248	720	786	866
90% Exceedance	1,282	1,243	1,197	1,589	1,823	1,942	2,092	1,572	1,091	594	665	756
Full Simulation Period Average ^a	2,054	1,972	2,855	4,593	6,378	6,022	6,368	5,397	3,483	1,847	1,392	1,397
Wet Water Years (28%)	2,409	2,680	5,129	9,816	12,941	12,416	12,445	11,431	7,360	3,558	2,355	2,239
Above Normal Water Years (14%)	1,747	1,794	2,974	4,171	7,003	6,225	6,543	4,697	3,192	1,897	1,430	1,380
Below Normal Water Years (18%)	2,356	1,999	2,114	2,723	4,276	4,079	4,889	3,847	2,430	1,451	1,172	1,213
Dry Water Years (24%)	1,902	1,599	1,575	1,997	2,740	2,554	2,999	2,410	1,487	952	911	989
Critical Water Years (16%)	1,587	1,417	1,521	1,820	2,167	2,044	2,299	1,676	1,134	595	642	754

Table 4H-2-3-1b. San Joaquin River at Vernalis, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,241	2,670	4,909	9,684	15,612	14,350	13,619	12,896	8,751	4,087	2,493	2,686
20% Exceedance	2,580	2,258	2,801	5,042	9,113	8,636	9,432	7,657	4,269	2,682	1,696	1,618
30% Exceedance	2,103	2,010	2,067	3,563	5,804	7,047	7,922	5,180	2,952	1,712	1,488	1,399
40% Exceedance	1,870	1,832	1,789	2,748	4,015	4,502	6,320	4,171	2,382	1,624	1,346	1,323
50% Exceedance	1,685	1,620	1,641	2,173	3,044	2,911	3,815	3,041	1,873	1,345	1,115	1,151
60% Exceedance	1,600	1,443	1,545	1,913	2,442	2,582	3,025	2,388	1,568	1,133	996	1,058
70% Exceedance	1,518	1,366	1,397	1,767	2,182	2,352	2,676	2,076	1,411	990	925	987
80% Exceedance	1,382	1,312	1,292	1,705	2,029	2,156	2,322	1,820	1,275	739	819	872
90% Exceedance	1,305	1,233	1,195	1,580	1,853	2,027	2,178	1,588	1,139	639	689	782
Full Simulation Period Average ^a	2,058	1,972	2,851	4,564	6,367	6,072	6,431	5,404	3,498	1,868	1,418	1,409
Wet Water Years (28%)	2,418	2,687	5,127	9,802	12,828	12,385	12,443	11,423	7,360	3,561	2,355	2,235
Above Normal Water Years (14%)	1,755	1,789	2,954	4,032	6,930	6,225	6,624	4,698	3,195	1,903	1,438	1,376
Below Normal Water Years (18%)	2,357	2,000	2,118	2,709	4,318	4,157	5,005	3,874	2,432	1,456	1,181	1,214
Dry Water Years (24%)	1,903	1,594	1,576	1,990	2,805	2,672	3,102	2,420	1,494	954	917	1,001
Critical Water Years (16%)	1,592	1,415	1,517	1,811	2,219	2,144	2,337	1,689	1,209	710	779	823

Table 4H-2-3-1c. San Joaquin River at Vernalis, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	7	3	-3	-6	119	-245	154	18	5	5	1	0
20% Exceedance	4	5	10	-27	-2	45	-54	8	16	25	-6	4
30% Exceedance	1	12	1	-4	14	88	2	81	0	1	42	0
40% Exceedance	-6	3	8	-5	40	-10	56	7	9	4	38	3
50% Exceedance	5	-3	-3	-6	48	86	112	-5	2	72	21	14
60% Exceedance	12	-33	9	-9	60	96	109	0	0	9	3	10
70% Exceedance	-2	10	-5	-12	66	141	76	-11	61	54	24	32
80% Exceedance	4	4	-30	-5	59	92	-9	-13	27	19	33	6
90% Exceedance	23	-10	-2	-9	30	85	85	16	49	45	24	26
Full Simulation Period Average ^a	5	0	-3	-29	-11	50	62	7	15	22	26	12
Wet Water Years (28%)	8	7	-2	-14	-114	-31	-2	-8	-1	3	0	-4
Above Normal Water Years (14%)	9	-5	-21	-139	-73	-1	80	0	4	6	8	-4
Below Normal Water Years (18%)	1	1	4	-14	42	78	116	27	2	5	9	1
Dry Water Years (24%)	1	-4	1	-7	65	119	104	10	7	2	6	12
Critical Water Years (16%)	5	-1	-4	-9	52	100	38	13	76	116	138	68

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-3-2a. San Joaquin River at Vernalis, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,234	2,667	4,912	9,691	15,493	14,595	13,465	12,878	8,746	4,082	2,492	2,686
20% Exceedance	2,576	2,253	2,791	5,069	9,115	8,591	9,486	7,649	4,253	2,657	1,702	1,615
30% Exceedance	2,102	1,998	2,066	3,566	5,790	6,959	7,920	5,099	2,952	1,711	1,446	1,400
40% Exceedance	1,876	1,829	1,781	2,753	3,975	4,512	6,264	4,164	2,373	1,620	1,308	1,320
50% Exceedance	1,680	1,623	1,644	2,179	2,996	2,825	3,703	3,046	1,871	1,273	1,094	1,137
60% Exceedance	1,588	1,476	1,536	1,923	2,382	2,486	2,916	2,388	1,568	1,123	993	1,048
70% Exceedance	1,520	1,357	1,402	1,779	2,116	2,211	2,601	2,088	1,350	936	901	955
80% Exceedance	1,378	1,309	1,322	1,710	1,970	2,064	2,332	1,833	1,248	720	786	866
90% Exceedance	1,282	1,243	1,197	1,589	1,823	1,942	2,092	1,572	1,091	594	665	756
Full Simulation Period Average ^a	2,054	1,972	2,855	4,593	6,378	6,022	6,368	5,397	3,483	1,847	1,392	1,397
Wet Water Years (28%)	2,409	2,680	5,129	9,816	12,941	12,416	12,445	11,431	7,360	3,558	2,355	2,239
Above Normal Water Years (14%)	1,747	1,794	2,974	4,171	7,003	6,225	6,543	4,697	3,192	1,897	1,430	1,380
Below Normal Water Years (18%)	2,356	1,999	2,114	2,723	4,276	4,079	4,889	3,847	2,430	1,451	1,172	1,213
Dry Water Years (24%)	1,902	1,599	1,575	1,997	2,740	2,554	2,999	2,410	1,487	952	911	989
Critical Water Years (16%)	1,587	1,417	1,521	1,820	2,167	2,044	2,299	1,676	1,134	595	642	754

Table 4H-2-3-2b. San Joaquin River at Vernalis, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,242	2,674	4,910	9,683	15,575	14,344	13,696	13,440	8,752	4,088	2,493	2,686
20% Exceedance	2,587	2,258	2,806	5,048	9,114	8,638	10,573	8,215	4,272	2,719	1,700	1,634
30% Exceedance	2,103	2,010	2,069	3,563	5,774	7,049	8,456	6,567	2,953	1,880	1,506	1,416
40% Exceedance	1,884	1,831	1,792	2,752	4,014	4,490	7,634	5,454	2,383	1,680	1,371	1,348
50% Exceedance	1,701	1,620	1,640	2,175	3,047	2,912	5,038	4,196	1,874	1,375	1,124	1,163
60% Exceedance	1,607	1,461	1,549	1,914	2,439	2,582	3,460	2,778	1,569	1,215	1,017	1,076
70% Exceedance	1,528	1,361	1,397	1,773	2,183	2,350	3,079	2,467	1,411	1,086	937	996
80% Exceedance	1,398	1,292	1,296	1,707	2,001	2,157	2,736	2,221	1,275	816	843	889
90% Exceedance	1,309	1,220	1,203	1,567	1,863	2,040	2,582	1,979	1,141	636	680	796
Full Simulation Period Average ^a	2,065	1,973	2,851	4,567	6,369	6,074	7,114	6,068	3,499	1,928	1,429	1,420
Wet Water Years (28%)	2,408	2,678	5,117	9,799	12,829	12,386	13,077	12,035	7,363	3,592	2,373	2,253
Above Normal Water Years (14%)	1,755	1,789	2,956	4,034	6,940	6,225	7,515	5,560	3,197	2,025	1,455	1,385
Below Normal Water Years (18%)	2,351	1,994	2,109	2,714	4,320	4,157	5,854	4,709	2,432	1,551	1,194	1,223
Dry Water Years (24%)	1,938	1,609	1,584	1,994	2,797	2,679	3,736	3,035	1,493	1,018	920	1,015
Critical Water Years (16%)	1,607	1,421	1,530	1,819	2,225	2,145	2,811	2,147	1,209	719	783	825

Table 4H-2-3-2c. San Joaquin River at Vernalis, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8	6	-1	-8	82	-251	231	561	6	6	2	0
20% Exceedance	11	5	16	-20	-1	47	1,087	566	18	62	-2	19
30% Exceedance	1	12	3	-3	-16	90	536	1,468	0	170	60	16
40% Exceedance	8	2	11	-1	39	-22	1,371	1,291	10	60	63	28
50% Exceedance	21	-3	-4	-4	51	87	1,335	1,151	3	102	30	26
60% Exceedance	20	-15	12	-9	57	96	544	390	1	92	24	28
70% Exceedance	8	4	-5	-7	67	139	479	379	61	150	36	41
80% Exceedance	20	-17	-26	-3	31	93	404	388	27	96	57	24
90% Exceedance	27	-23	6	-22	40	98	490	407	50	42	15	40
Full Simulation Period Average ^a	12	1	-4	-27	-9	52	746	670	16	81	37	24
Wet Water Years (28%)	-1	-2	-12	-16	-112	-29	632	604	2	34	19	14
Above Normal Water Years (14%)	9	-6	-19	-137	-63	0	971	863	5	127	25	5
Below Normal Water Years (18%)	-5	-5	-6	-9	45	78	966	862	3	100	22	10
Dry Water Years (24%)	36	10	8	-3	57	126	738	625	6	66	9	25
Critical Water Years (16%)	20	4	9	-1	58	101	512	471	76	124	141	71

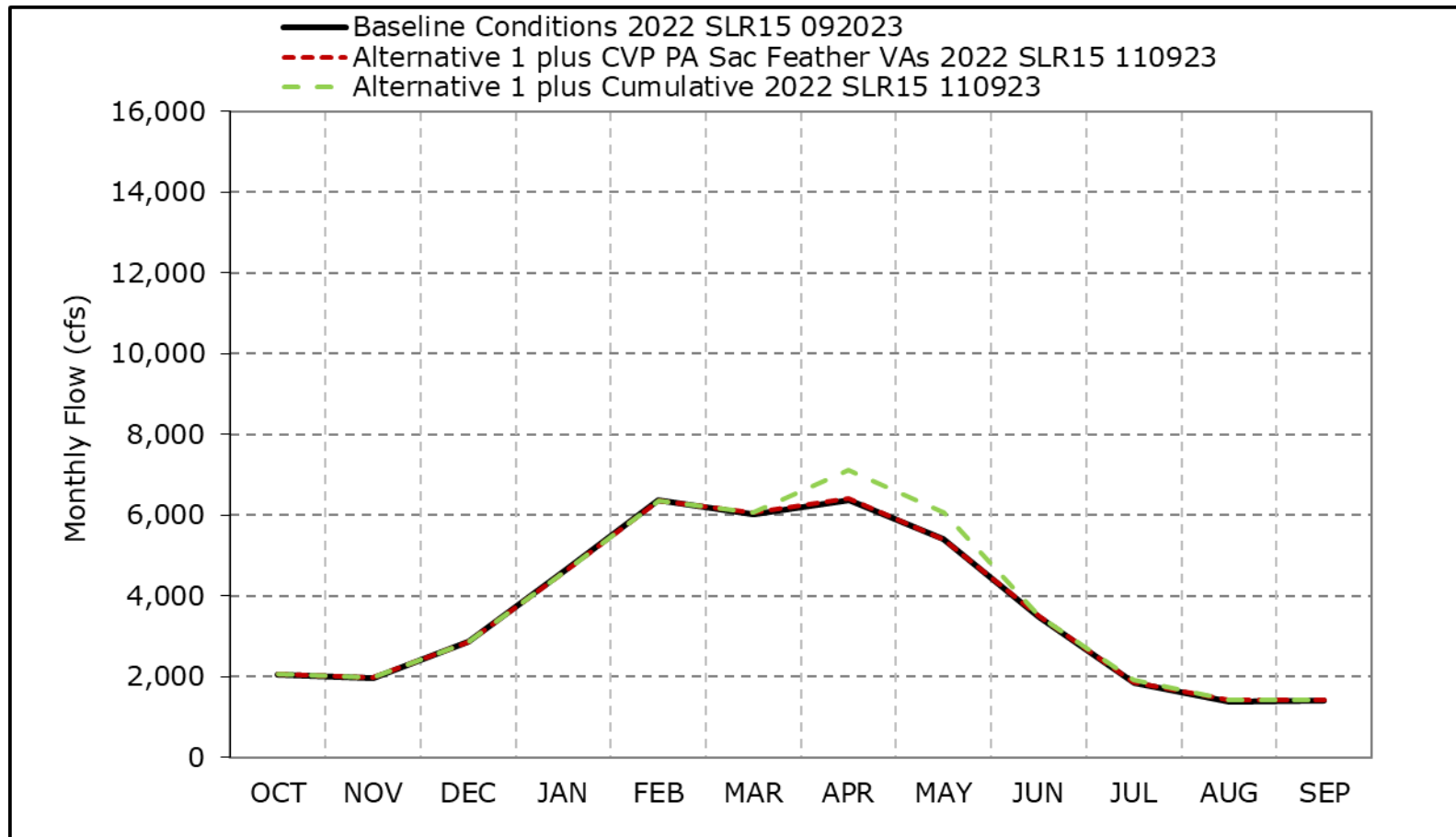
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-3a. San Joaquin River at Vernalis, Long-Term Average Flow

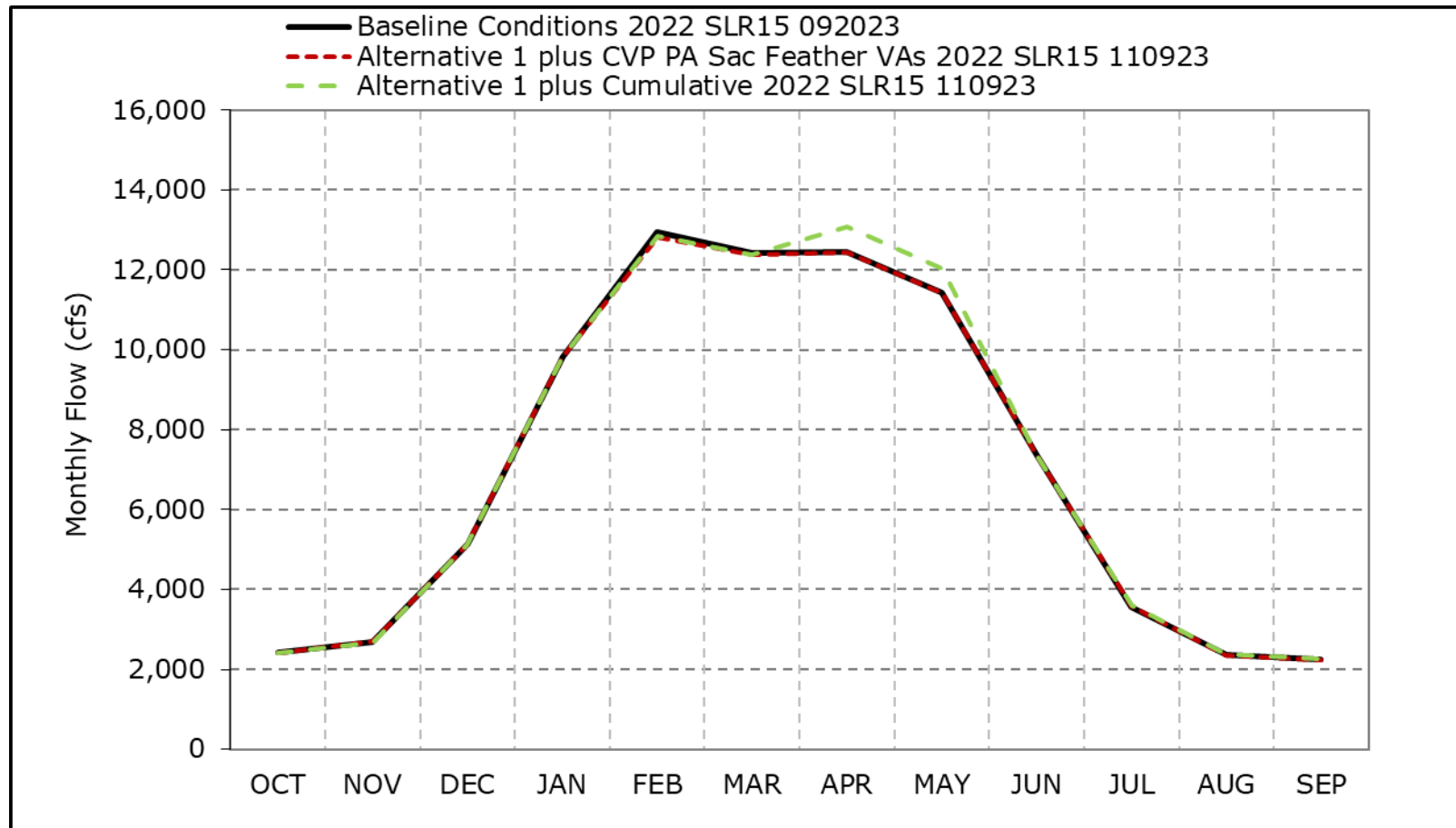


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3b. San Joaquin River at Vernalis, Wet Year Average Flow

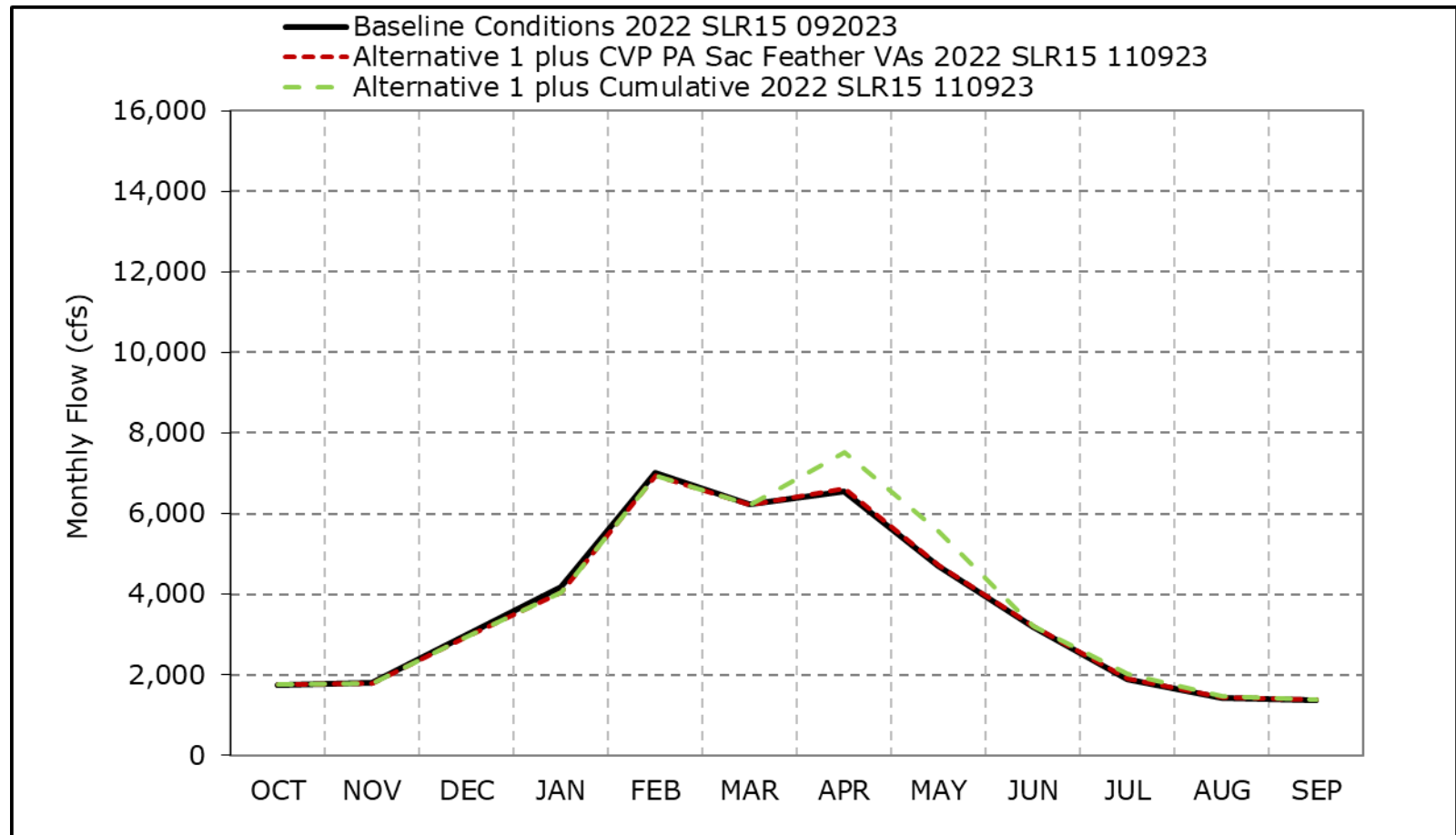


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3c. San Joaquin River at Vernalis, Above Normal Year Average Flow

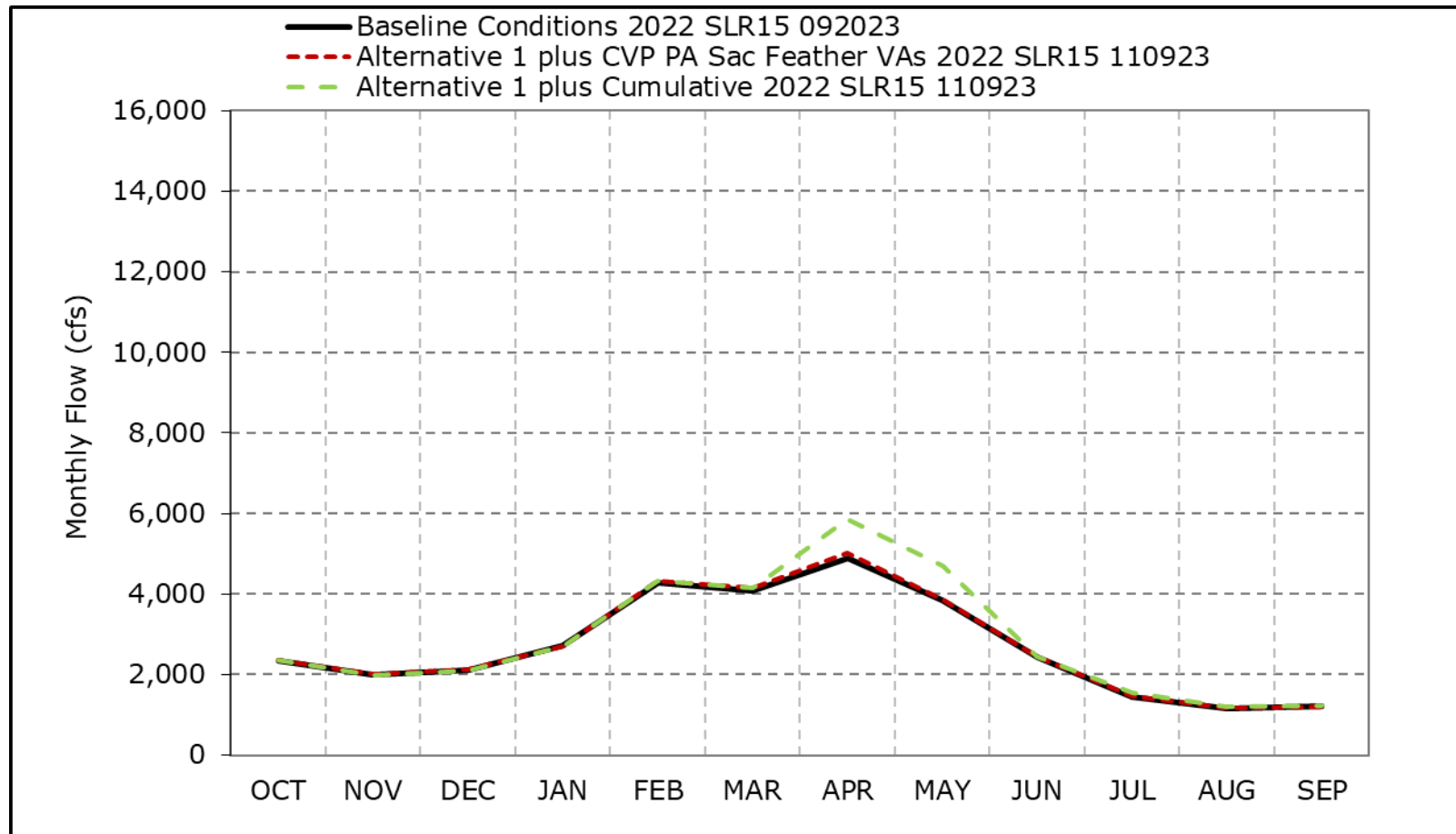


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3d. San Joaquin River at Vernalis, Below Normal Year Average Flow

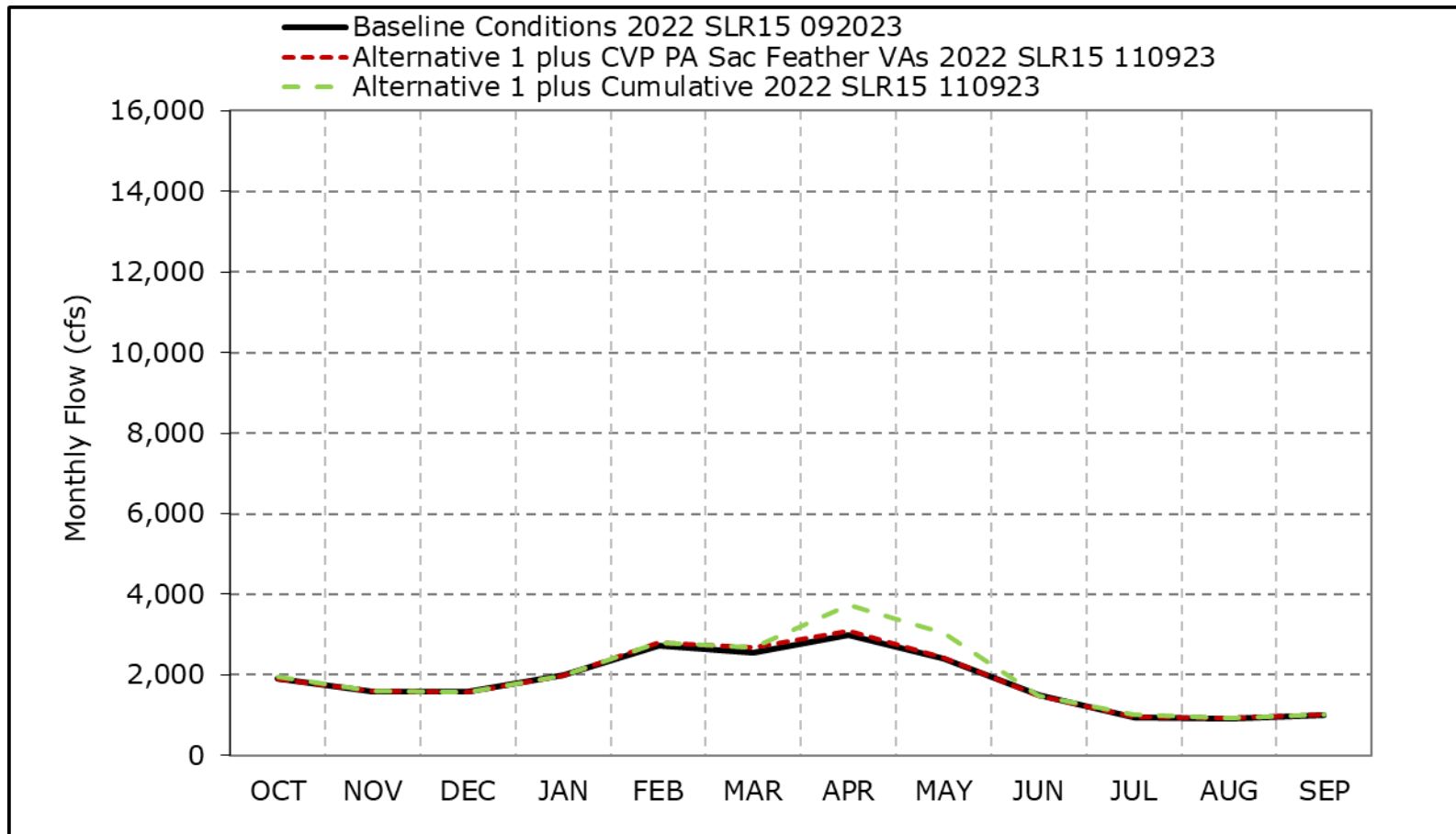


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3e. San Joaquin River at Vernalis, Dry Year Average Flow

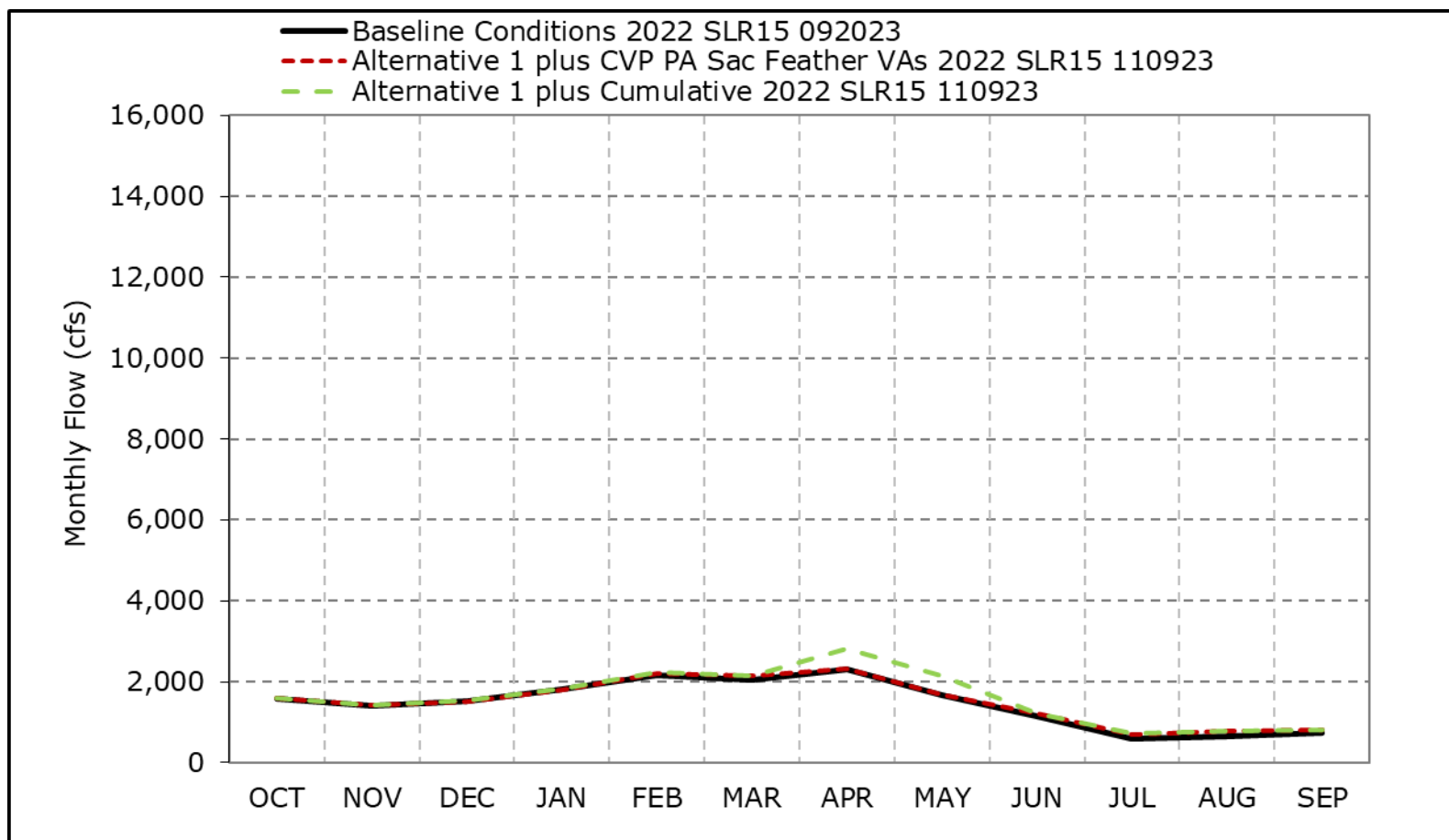


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3f. San Joaquin River at Vernalis, Critical Year Average Flow

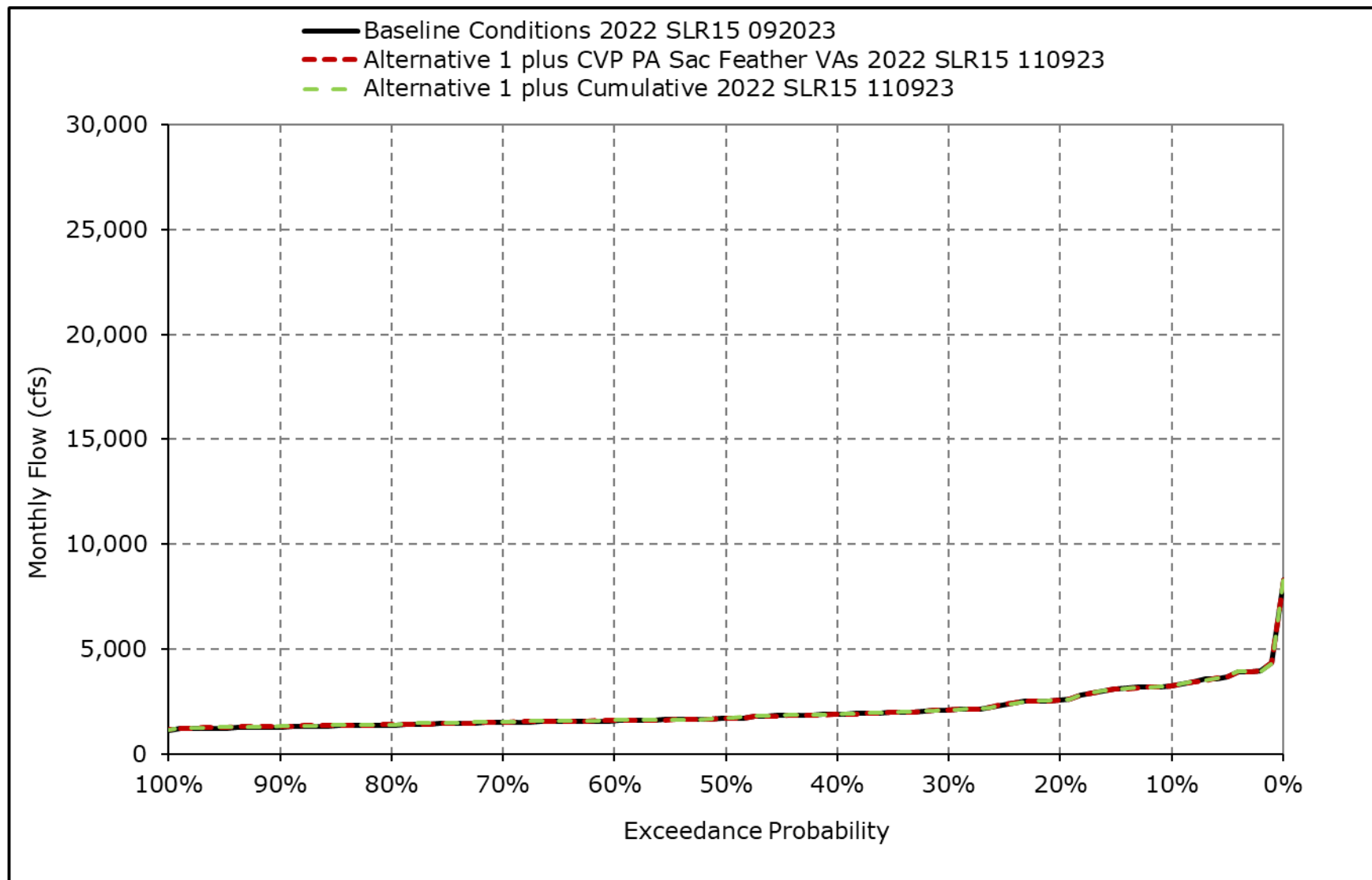


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

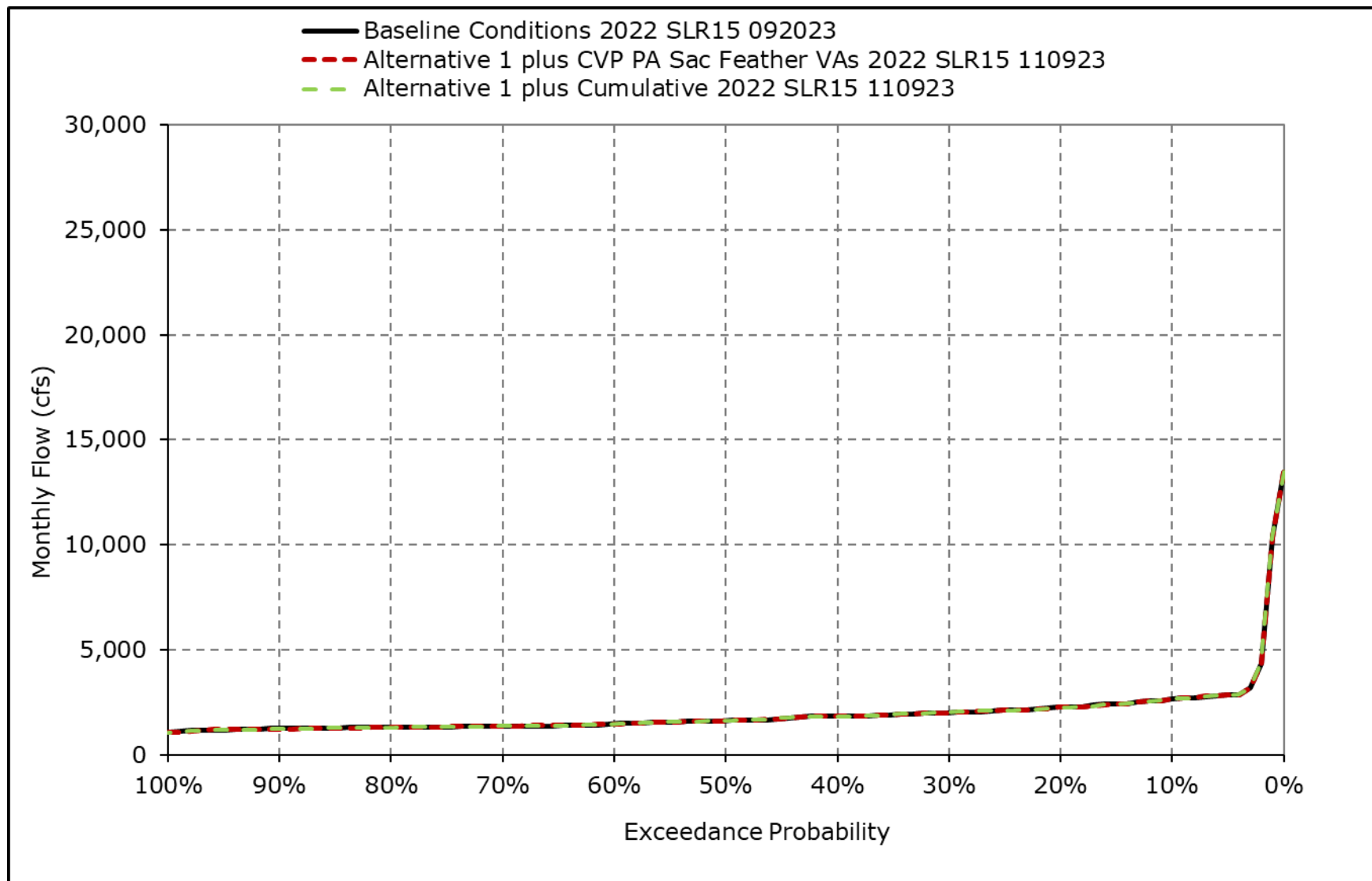
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3g. San Joaquin River at Vernalis, October



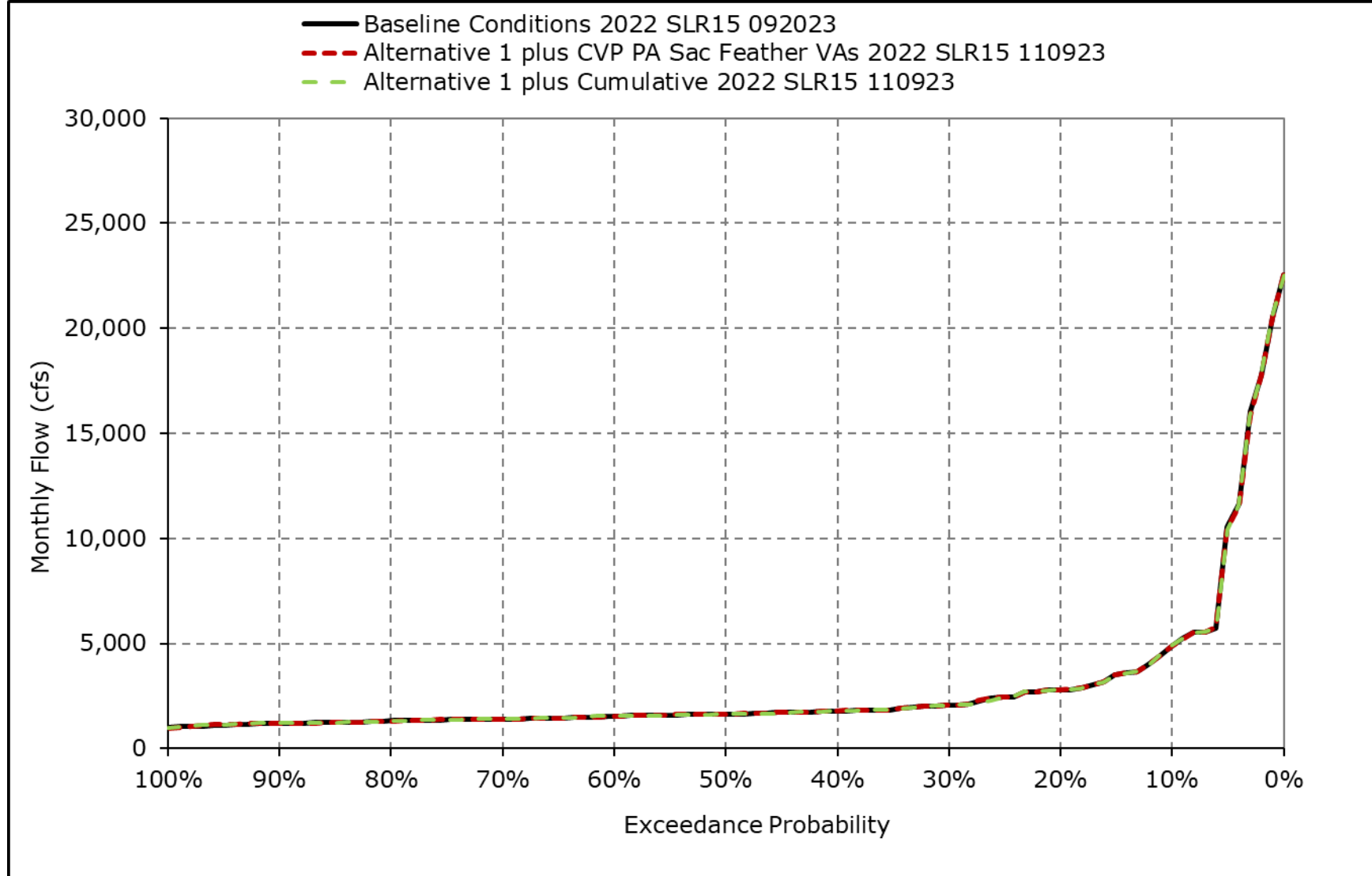
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3h. San Joaquin River at Vernalis, November



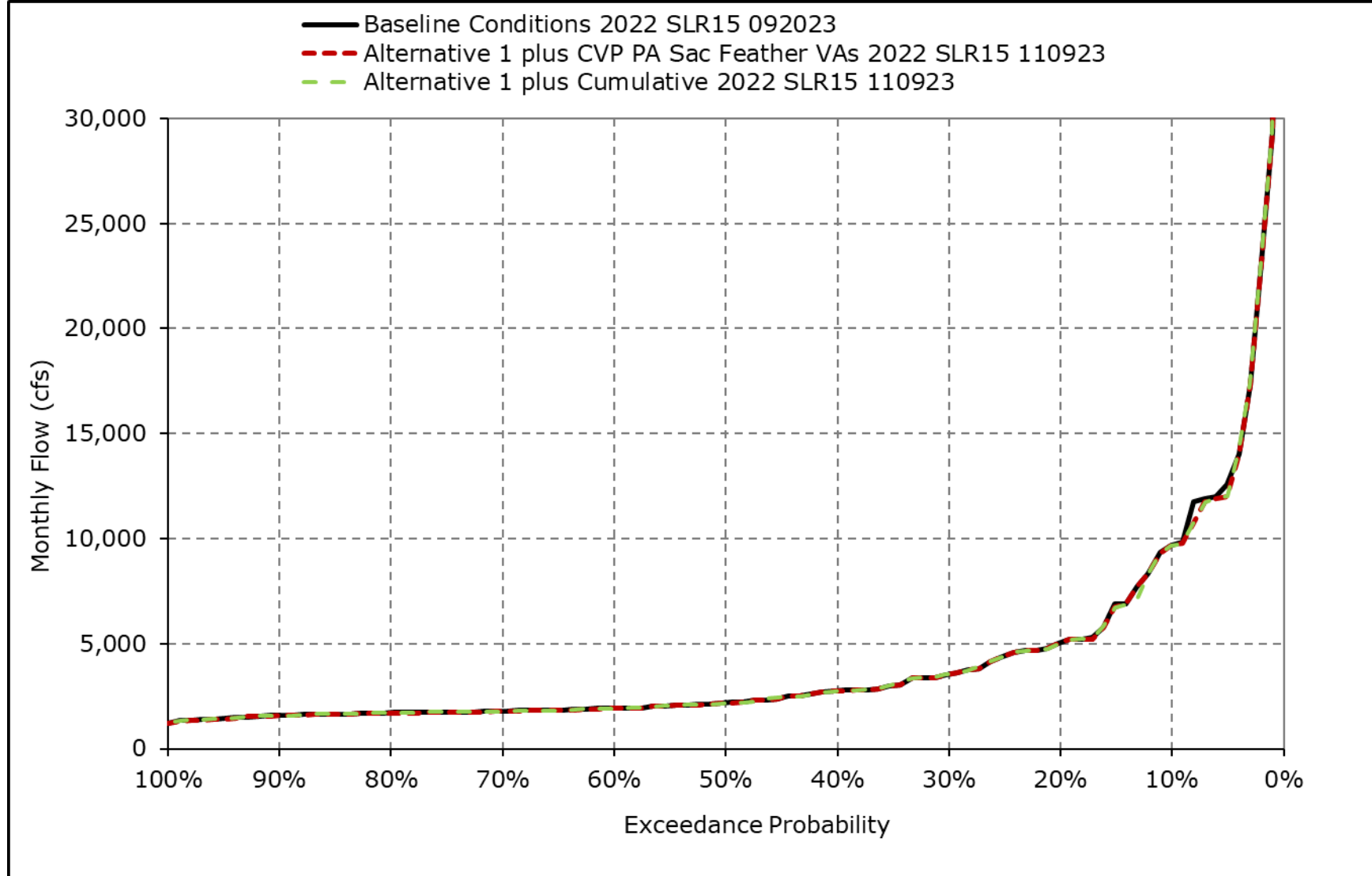
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3i. San Joaquin River at Vernalis, December



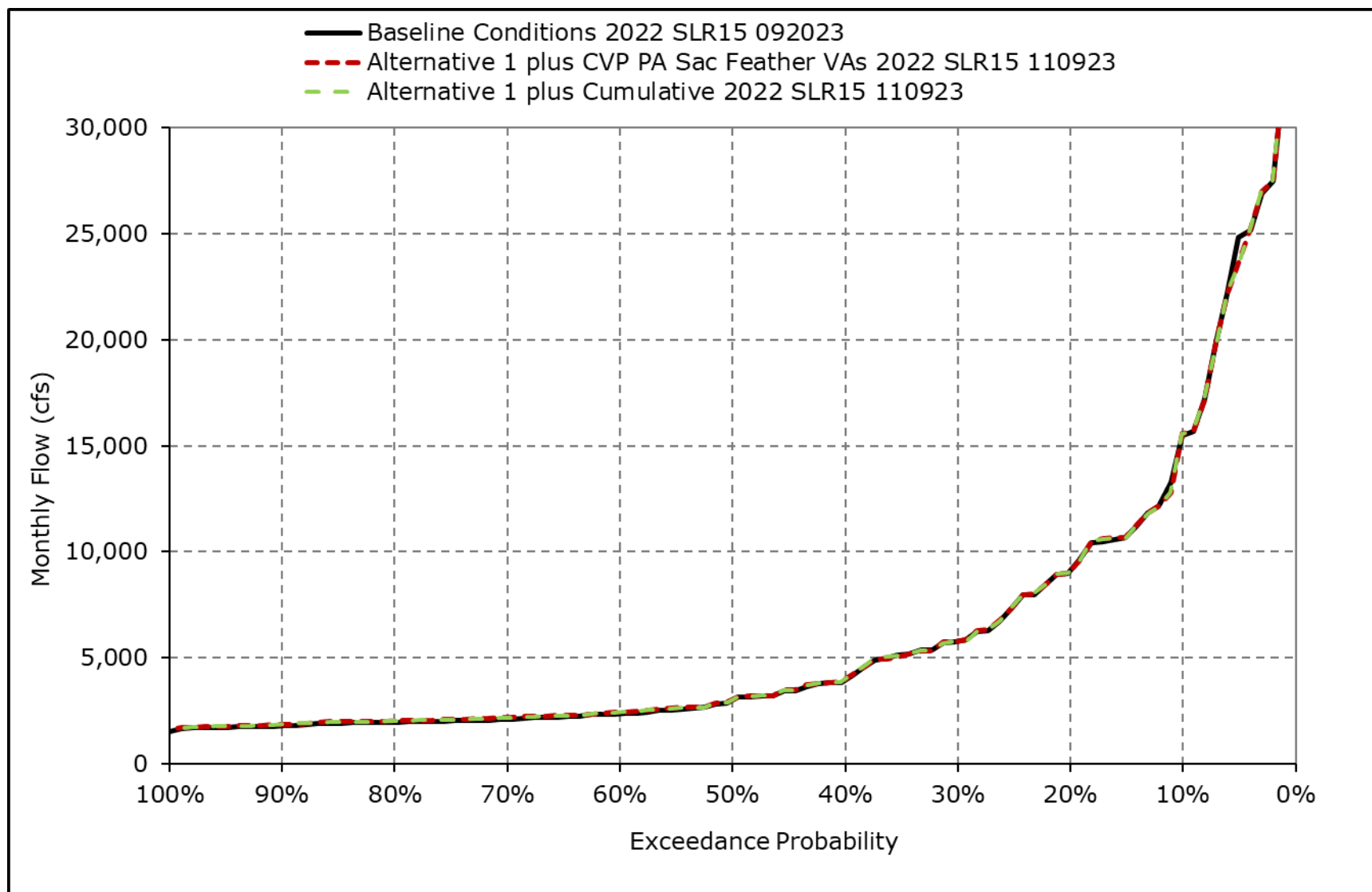
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3j. San Joaquin River at Vernalis, January



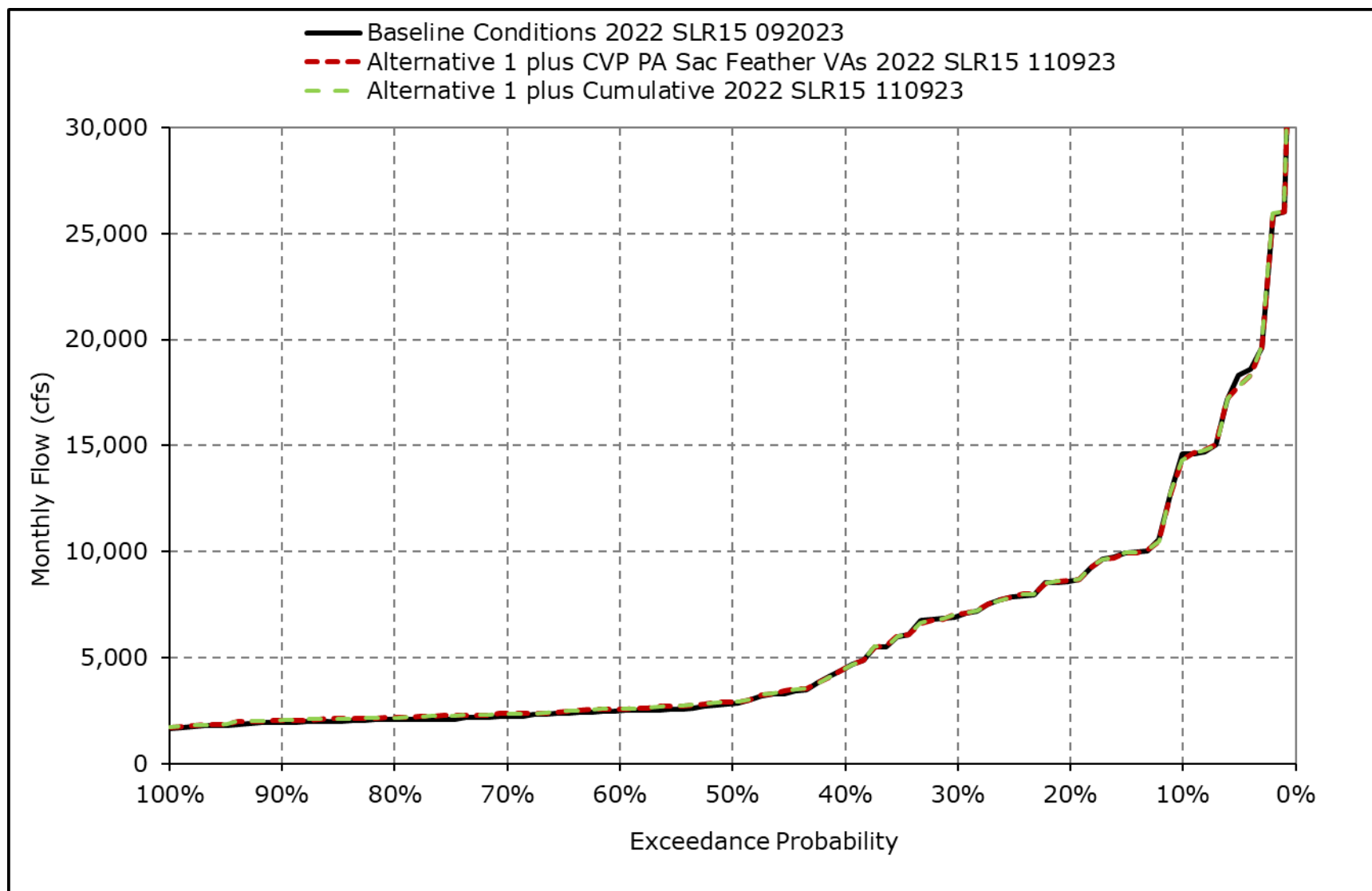
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3k. San Joaquin River at Vernalis, February



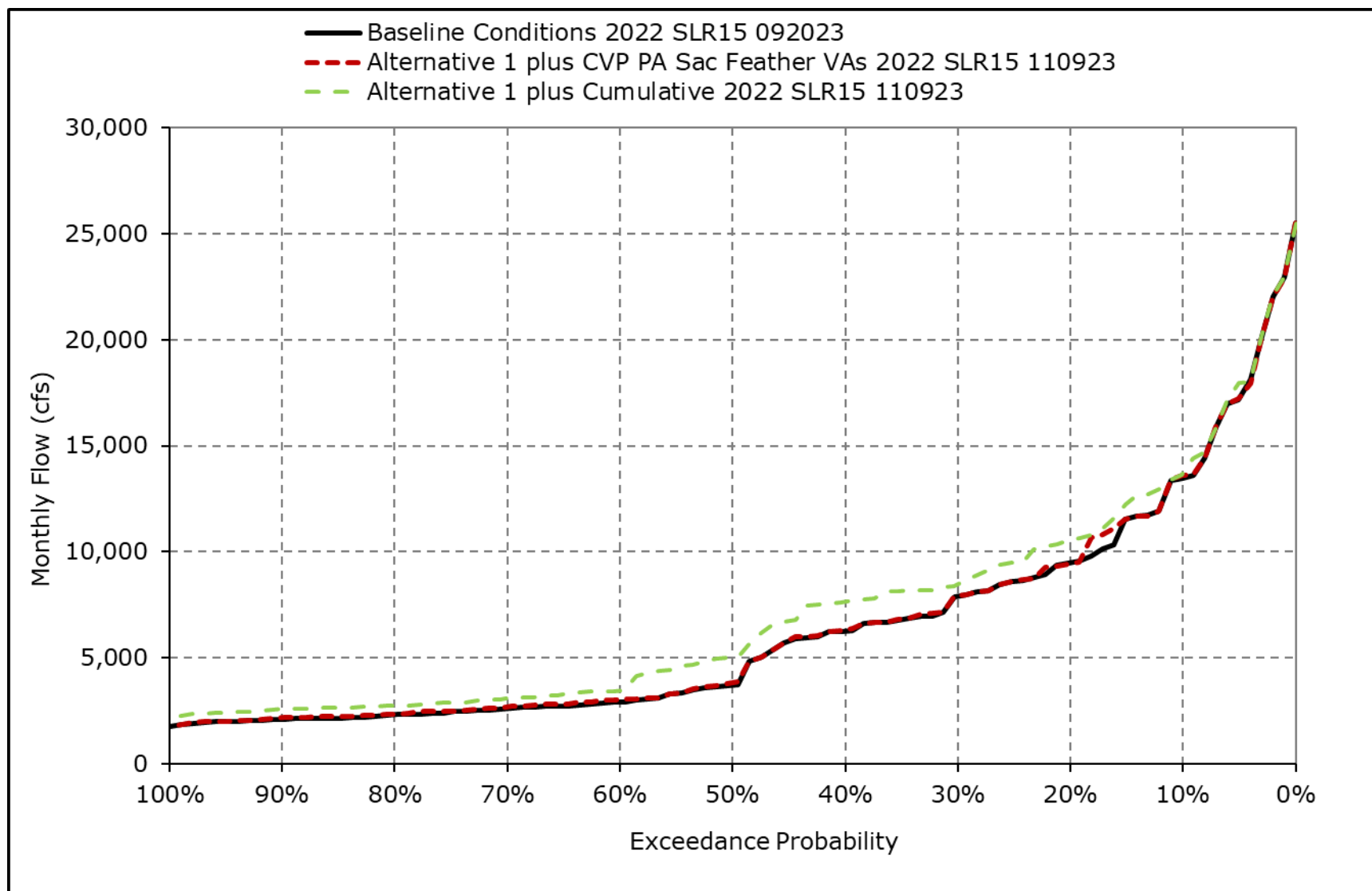
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3I. San Joaquin River at Vernalis, March



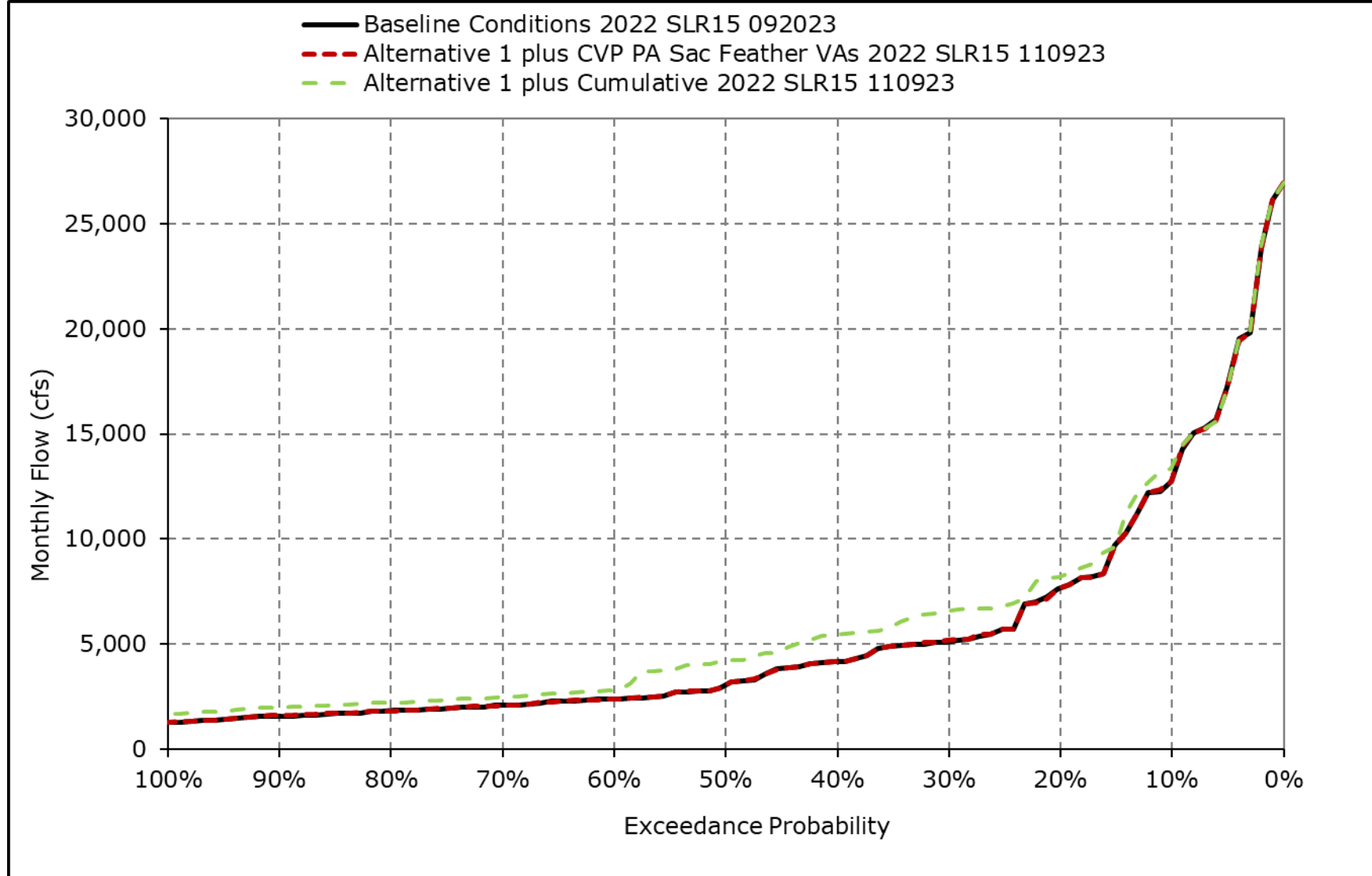
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3m. San Joaquin River at Vernalis, April



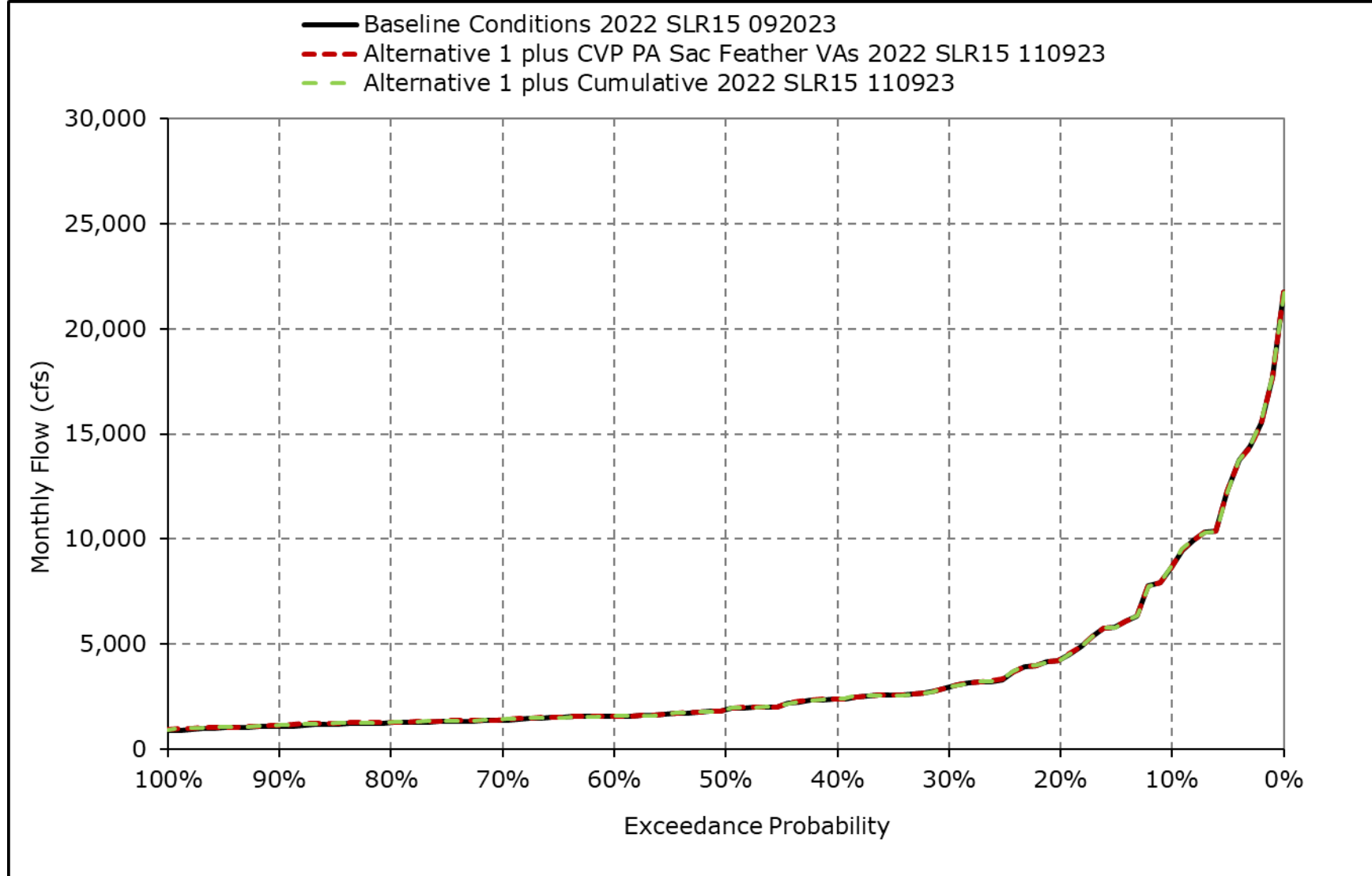
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3n. San Joaquin River at Vernalis, May



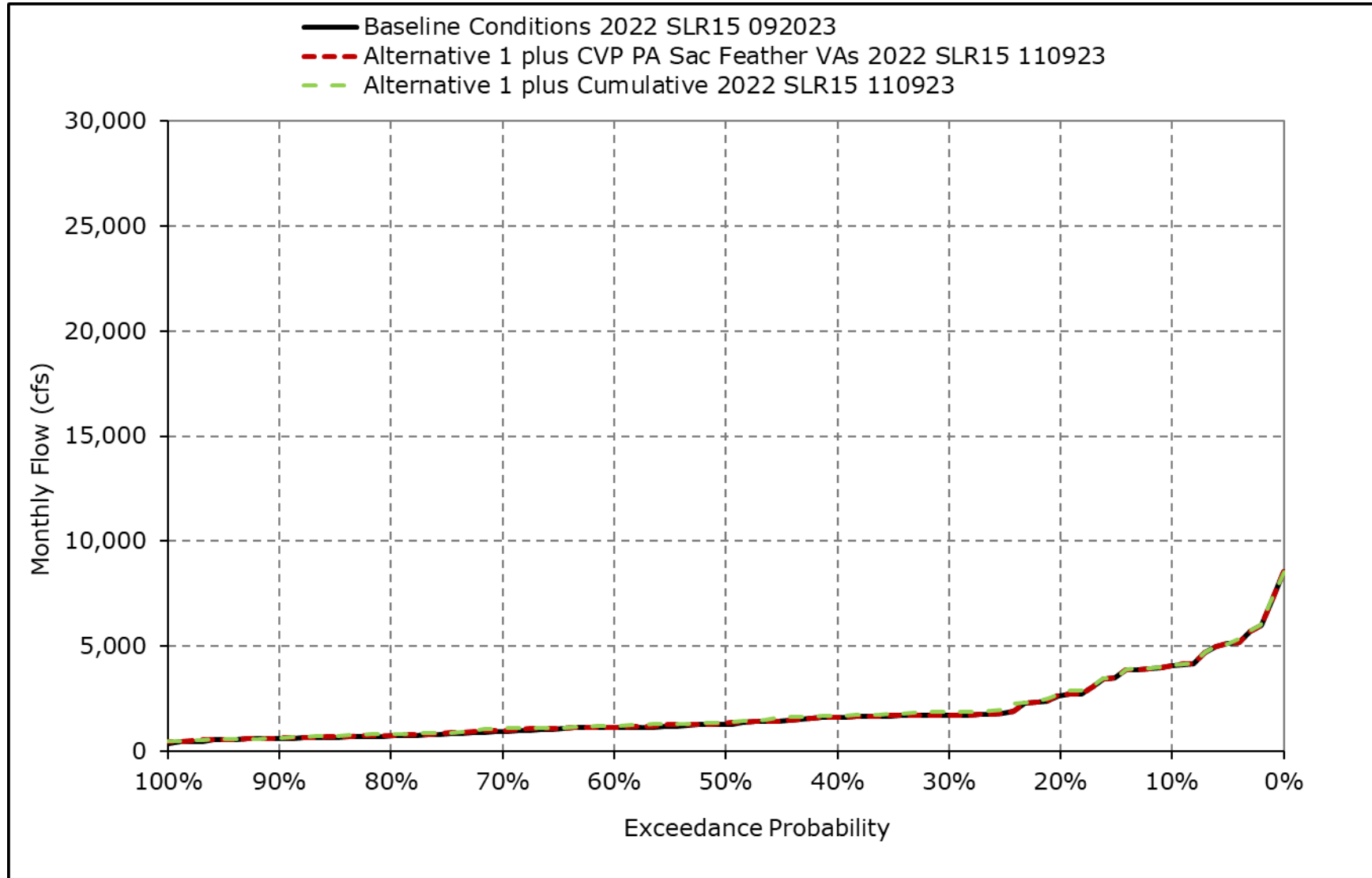
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3o. San Joaquin River at Vernalis, June



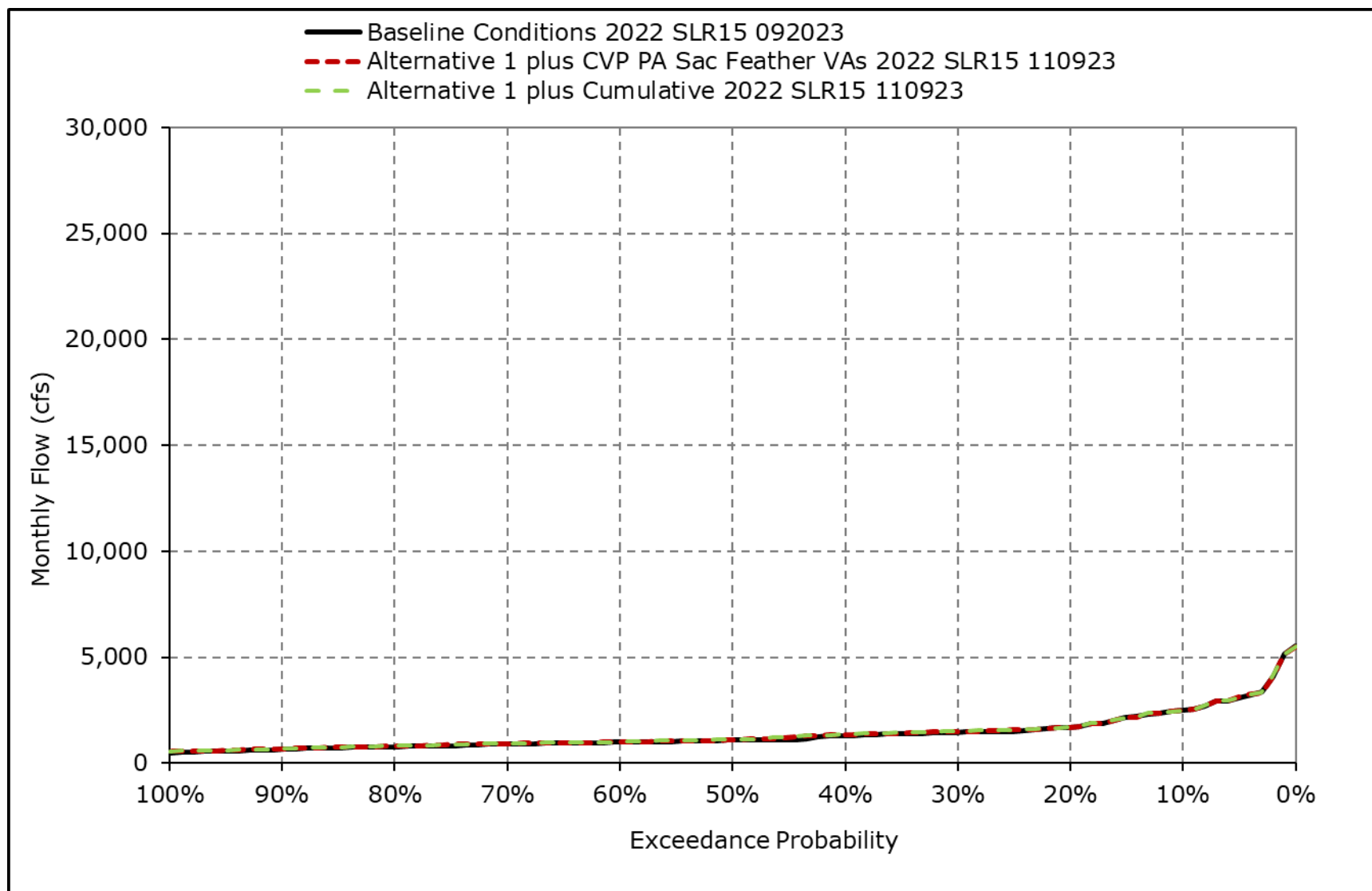
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3p. San Joaquin River at Vernalis, July



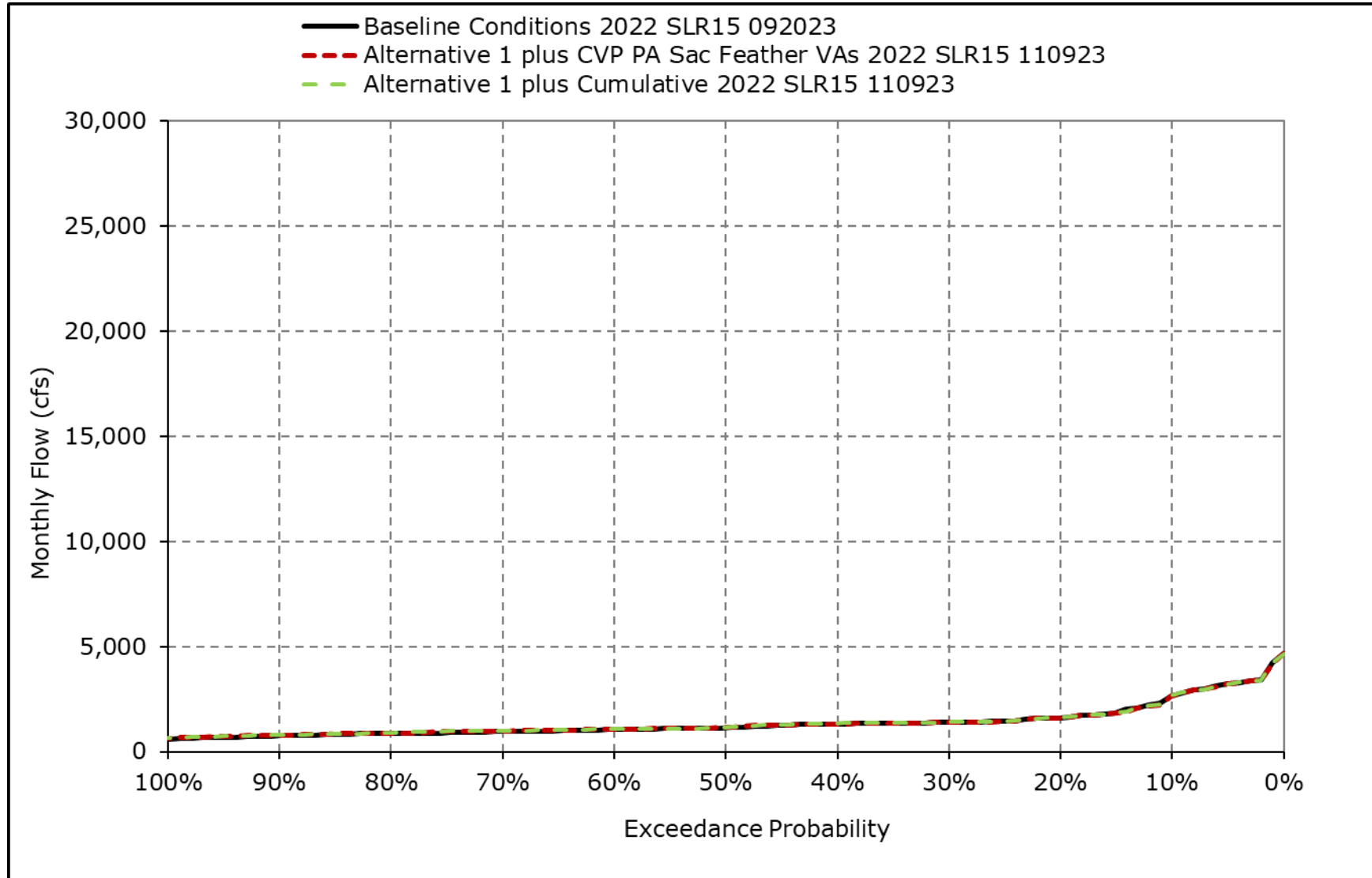
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3q. San Joaquin River at Vernalis, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-3r. San Joaquin River at Vernalis, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-4-1a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,234	2,667	4,912	9,691	15,493	14,595	13,465	12,878	8,746	4,082	2,492	2,686
20% Exceedance	2,576	2,253	2,791	5,069	9,115	8,591	9,486	7,649	4,253	2,657	1,702	1,615
30% Exceedance	2,102	1,998	2,066	3,566	5,790	6,959	7,920	5,099	2,952	1,711	1,446	1,400
40% Exceedance	1,876	1,829	1,781	2,753	3,975	4,512	6,264	4,164	2,373	1,620	1,308	1,320
50% Exceedance	1,680	1,623	1,644	2,179	2,996	2,825	3,703	3,046	1,871	1,273	1,094	1,137
60% Exceedance	1,588	1,476	1,536	1,923	2,382	2,486	2,916	2,388	1,568	1,123	993	1,048
70% Exceedance	1,520	1,357	1,402	1,779	2,116	2,211	2,601	2,088	1,350	936	901	955
80% Exceedance	1,378	1,309	1,322	1,710	1,970	2,064	2,332	1,833	1,248	720	786	866
90% Exceedance	1,282	1,243	1,197	1,589	1,823	1,942	2,092	1,572	1,091	594	665	756
Full Simulation Period Average ^a	2,054	1,972	2,855	4,593	6,378	6,022	6,368	5,397	3,483	1,847	1,392	1,397
Wet Water Years (22%)	2,101	2,091	4,701	10,514	14,770	14,269	14,052	13,690	9,277	4,338	2,724	2,578
Above Normal Water Years (12%)	2,384	2,996	5,245	5,716	8,248	7,438	8,023	5,686	3,029	1,699	1,312	1,323
Below Normal Water Years (15%)	2,199	2,065	2,506	4,088	6,619	5,330	6,649	4,545	2,630	1,627	1,347	1,247
Dry Water Years (17%)	2,020	1,874	1,722	2,075	2,317	2,735	3,197	2,548	1,634	1,180	1,006	1,045
Critical Water Years (34%)	1,859	1,541	1,537	1,848	2,211	2,135	2,273	1,730	1,196	717	771	900

Table 4H-2-4-1b. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,241	2,670	4,909	9,684	15,612	14,350	13,619	12,896	8,751	4,087	2,493	2,686
20% Exceedance	2,580	2,258	2,801	5,042	9,113	8,636	9,432	7,657	4,269	2,682	1,696	1,618
30% Exceedance	2,103	2,010	2,067	3,563	5,804	7,047	7,922	5,180	2,952	1,712	1,488	1,399
40% Exceedance	1,870	1,832	1,789	2,748	4,015	4,502	6,320	4,171	2,382	1,624	1,346	1,323
50% Exceedance	1,685	1,620	1,641	2,173	3,044	2,911	3,815	3,041	1,873	1,345	1,115	1,151
60% Exceedance	1,600	1,443	1,545	1,913	2,442	2,582	3,025	2,388	1,568	1,133	996	1,058
70% Exceedance	1,518	1,366	1,397	1,767	2,182	2,352	2,676	2,076	1,411	990	925	987
80% Exceedance	1,382	1,312	1,292	1,705	2,029	2,156	2,322	1,820	1,275	739	819	872
90% Exceedance	1,305	1,233	1,195	1,580	1,853	2,027	2,178	1,588	1,139	639	689	782
Full Simulation Period Average ^a	2,058	1,972	2,851	4,564	6,367	6,072	6,431	5,404	3,498	1,868	1,418	1,409
Wet Water Years (22%)	2,116	2,102	4,698	10,413	14,593	14,226	14,111	13,685	9,278	4,344	2,727	2,568
Above Normal Water Years (12%)	2,386	2,995	5,225	5,705	8,244	7,448	8,141	5,715	3,034	1,703	1,314	1,327
Below Normal Water Years (15%)	2,207	2,067	2,508	4,079	6,627	5,329	6,675	4,550	2,633	1,632	1,359	1,259
Dry Water Years (17%)	2,025	1,872	1,721	2,065	2,363	2,809	3,267	2,551	1,637	1,185	1,013	1,053
Critical Water Years (34%)	1,857	1,535	1,535	1,840	2,270	2,269	2,331	1,741	1,233	770	836	932

Table 4H-2-4-1c. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	7	3	-3	-6	119	-245	154	18	5	5	1	0
20% Exceedance	4	5	10	-27	-2	45	-54	8	16	25	-6	4
30% Exceedance	1	12	1	-4	14	88	2	81	0	1	42	0
40% Exceedance	-6	3	8	-5	40	-10	56	7	9	4	38	3
50% Exceedance	5	-3	-3	-6	48	86	112	-5	2	72	21	14
60% Exceedance	12	-33	9	-9	60	96	109	0	0	9	3	10
70% Exceedance	-2	10	-5	-12	66	141	76	-11	61	54	24	32
80% Exceedance	4	4	-30	-5	59	92	-9	-13	27	19	33	6
90% Exceedance	23	-10	-2	-9	30	85	85	16	49	45	24	26
Full Simulation Period Average ^a	5	0	-3	-29	-11	50	62	7	15	22	26	12
Wet Water Years (22%)	15	11	-3	-101	-178	-43	59	-5	1	6	3	-10
Above Normal Water Years (12%)	2	-1	-20	-11	-4	10	118	29	5	4	2	3
Below Normal Water Years (15%)	8	2	2	-9	8	-2	26	5	3	5	12	11
Dry Water Years (17%)	5	-2	-1	-10	45	74	69	3	3	5	7	9
Critical Water Years (34%)	-2	-6	-2	-7	59	135	58	11	37	54	65	32

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-4-2a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,234	2,667	4,912	9,691	15,493	14,595	13,465	12,878	8,746	4,082	2,492	2,686
20% Exceedance	2,576	2,253	2,791	5,069	9,115	8,591	9,486	7,649	4,253	2,657	1,702	1,615
30% Exceedance	2,102	1,998	2,066	3,566	5,790	6,959	7,920	5,099	2,952	1,711	1,446	1,400
40% Exceedance	1,876	1,829	1,781	2,753	3,975	4,512	6,264	4,164	2,373	1,620	1,308	1,320
50% Exceedance	1,680	1,623	1,644	2,179	2,996	2,825	3,703	3,046	1,871	1,273	1,094	1,137
60% Exceedance	1,588	1,476	1,536	1,923	2,382	2,486	2,916	2,388	1,568	1,123	993	1,048
70% Exceedance	1,520	1,357	1,402	1,779	2,116	2,211	2,601	2,088	1,350	936	901	955
80% Exceedance	1,378	1,309	1,322	1,710	1,970	2,064	2,332	1,833	1,248	720	786	866
90% Exceedance	1,282	1,243	1,197	1,589	1,823	1,942	2,092	1,572	1,091	594	665	756
Full Simulation Period Average ^a	2,054	1,972	2,855	4,593	6,378	6,022	6,368	5,397	3,483	1,847	1,392	1,397
Wet Water Years (22%)	2,101	2,091	4,701	10,514	14,770	14,269	14,052	13,690	9,277	4,338	2,724	2,578
Above Normal Water Years (12%)	2,384	2,996	5,245	5,716	8,248	7,438	8,023	5,686	3,029	1,699	1,312	1,323
Below Normal Water Years (15%)	2,199	2,065	2,506	4,088	6,619	5,330	6,649	4,545	2,630	1,627	1,347	1,247
Dry Water Years (17%)	2,020	1,874	1,722	2,075	2,317	2,735	3,197	2,548	1,634	1,180	1,006	1,045
Critical Water Years (34%)	1,859	1,541	1,537	1,848	2,211	2,135	2,273	1,730	1,196	717	771	900

Table 4H-2-4-2b. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,242	2,674	4,910	9,683	15,575	14,344	13,696	13,440	8,752	4,088	2,493	2,686
20% Exceedance	2,587	2,258	2,806	5,048	9,114	8,638	10,573	8,215	4,272	2,719	1,700	1,634
30% Exceedance	2,103	2,010	2,069	3,563	5,774	7,049	8,456	6,567	2,953	1,880	1,506	1,416
40% Exceedance	1,884	1,831	1,792	2,752	4,014	4,490	7,634	5,454	2,383	1,680	1,371	1,348
50% Exceedance	1,701	1,620	1,640	2,175	3,047	2,912	5,038	4,196	1,874	1,375	1,124	1,163
60% Exceedance	1,607	1,461	1,549	1,914	2,439	2,582	3,460	2,778	1,569	1,215	1,017	1,076
70% Exceedance	1,528	1,361	1,397	1,773	2,183	2,350	3,079	2,467	1,411	1,086	937	996
80% Exceedance	1,398	1,292	1,296	1,707	2,001	2,157	2,736	2,221	1,275	816	843	889
90% Exceedance	1,309	1,220	1,203	1,567	1,863	2,040	2,582	1,979	1,141	636	680	796
Full Simulation Period Average ^a	2,065	1,973	2,851	4,567	6,369	6,074	7,114	6,068	3,499	1,928	1,429	1,420
Wet Water Years (22%)	2,111	2,095	4,687	10,410	14,593	14,227	14,345	13,912	9,280	4,375	2,732	2,571
Above Normal Water Years (12%)	2,386	2,992	5,221	5,703	8,240	7,447	9,307	6,859	3,034	1,804	1,320	1,327
Below Normal Water Years (15%)	2,194	2,060	2,507	4,078	6,639	5,335	8,039	5,869	2,637	1,768	1,400	1,295
Dry Water Years (17%)	2,027	1,871	1,717	2,074	2,368	2,818	4,150	3,406	1,637	1,263	1,023	1,058
Critical Water Years (34%)	1,885	1,545	1,546	1,846	2,268	2,269	2,735	2,131	1,233	791	841	945

Table 4H-2-4-2c. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8	6	-1	-8	82	-251	231	561	6	6	2	0
20% Exceedance	11	5	16	-20	-1	47	1,087	566	18	62	-2	19
30% Exceedance	1	12	3	-3	-16	90	536	1,468	0	170	60	16
40% Exceedance	8	2	11	-1	39	-22	1,371	1,291	10	60	63	28
50% Exceedance	21	-3	-4	-4	51	87	1,335	1,151	3	102	30	26
60% Exceedance	20	-15	12	-9	57	96	544	390	1	92	24	28
70% Exceedance	8	4	-5	-7	67	139	479	379	61	150	36	41
80% Exceedance	20	-17	-26	-3	31	93	404	388	27	96	57	24
90% Exceedance	27	-23	6	-22	40	98	490	407	50	42	15	40
Full Simulation Period Average ^a	12	1	-4	-27	-9	52	746	670	16	81	37	24
Wet Water Years (22%)	10	4	-14	-104	-177	-42	293	222	3	37	7	-7
Above Normal Water Years (12%)	2	-3	-24	-13	-8	9	1,283	1,173	5	105	7	4
Below Normal Water Years (15%)	-4	-5	1	-10	20	5	1,390	1,323	7	141	54	48
Dry Water Years (17%)	7	-3	-4	0	51	82	952	858	3	82	17	13
Critical Water Years (34%)	26	5	9	-2	57	134	461	402	37	74	70	45

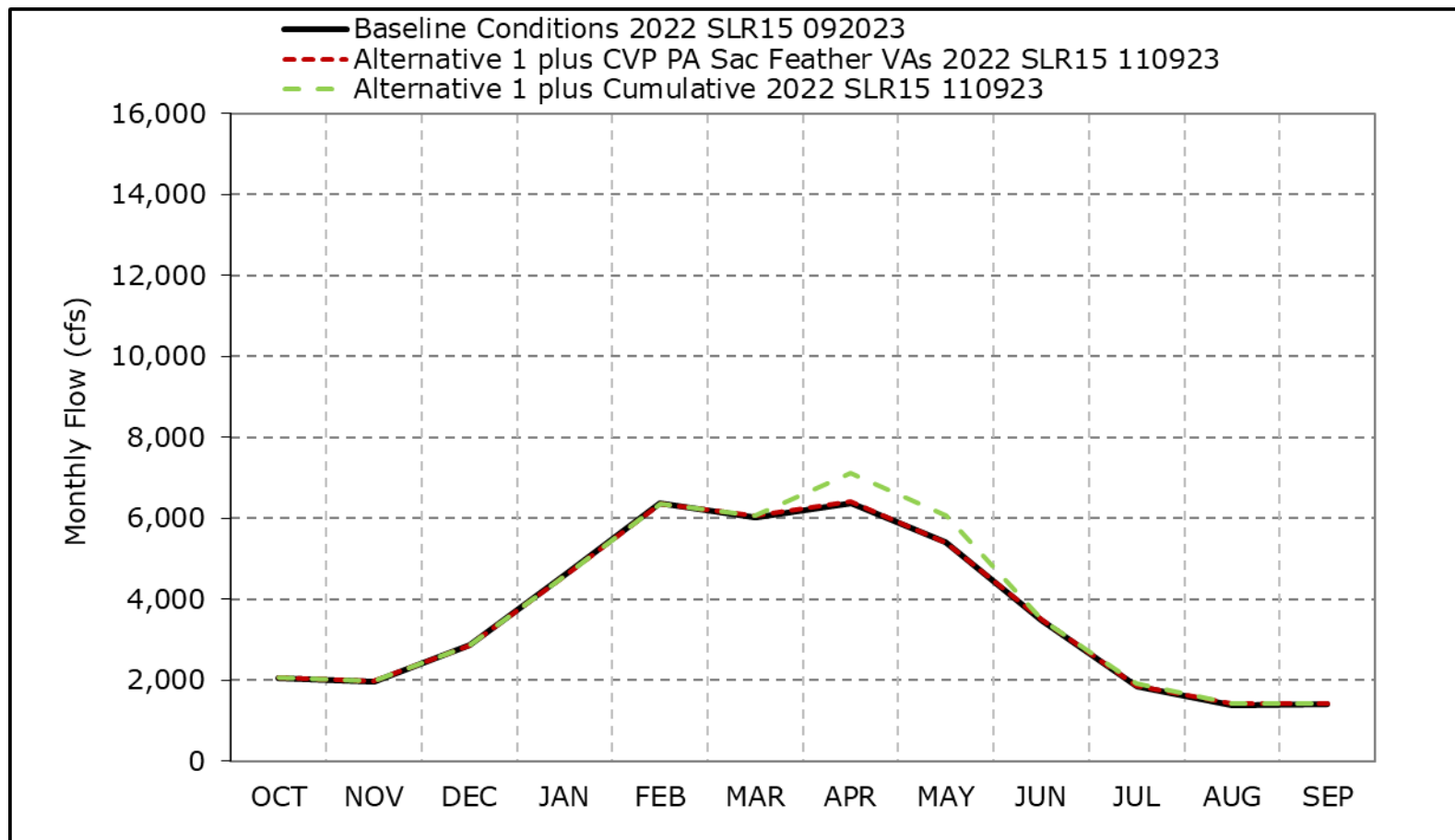
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-4a. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow

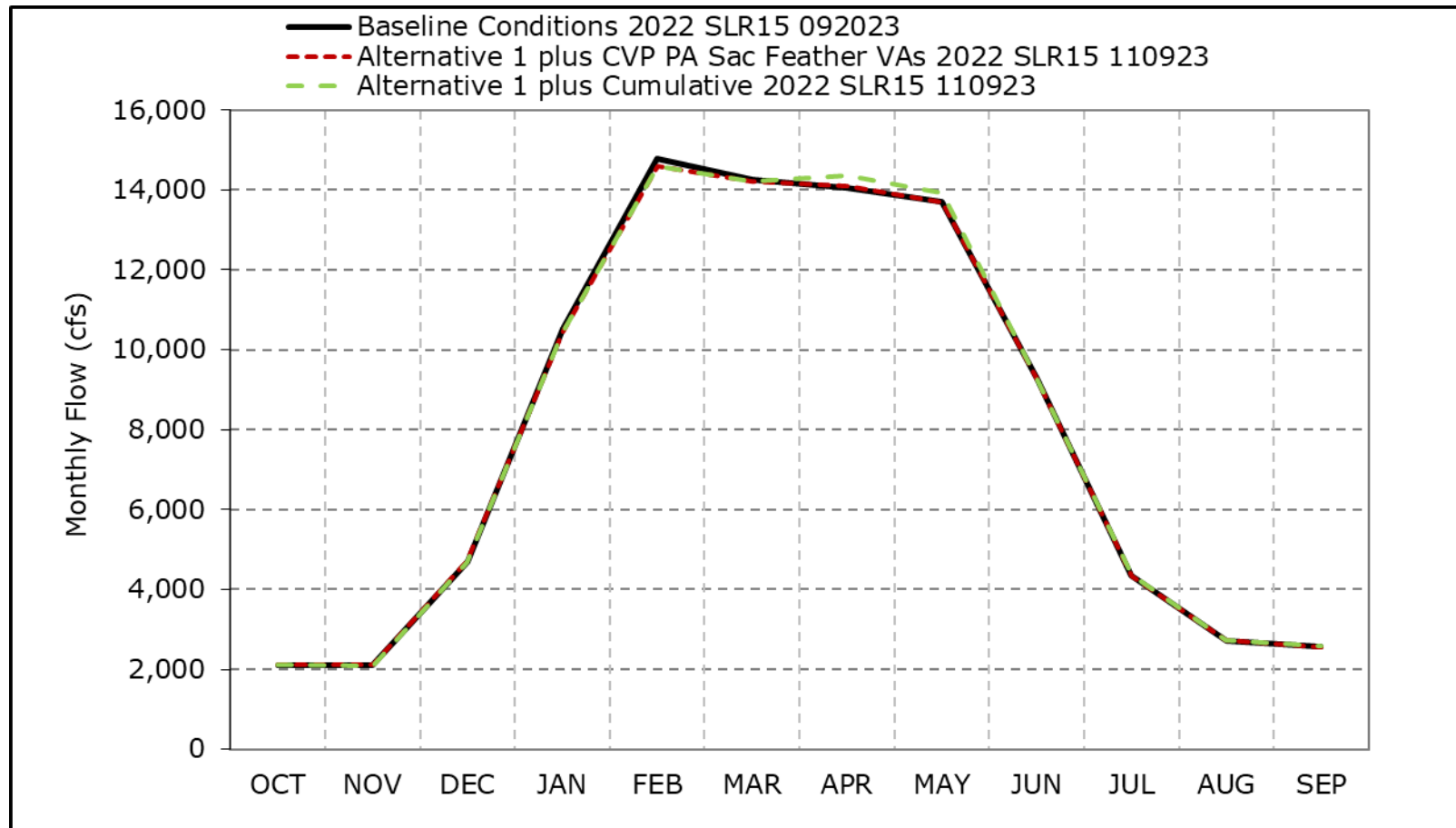


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-4b. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow

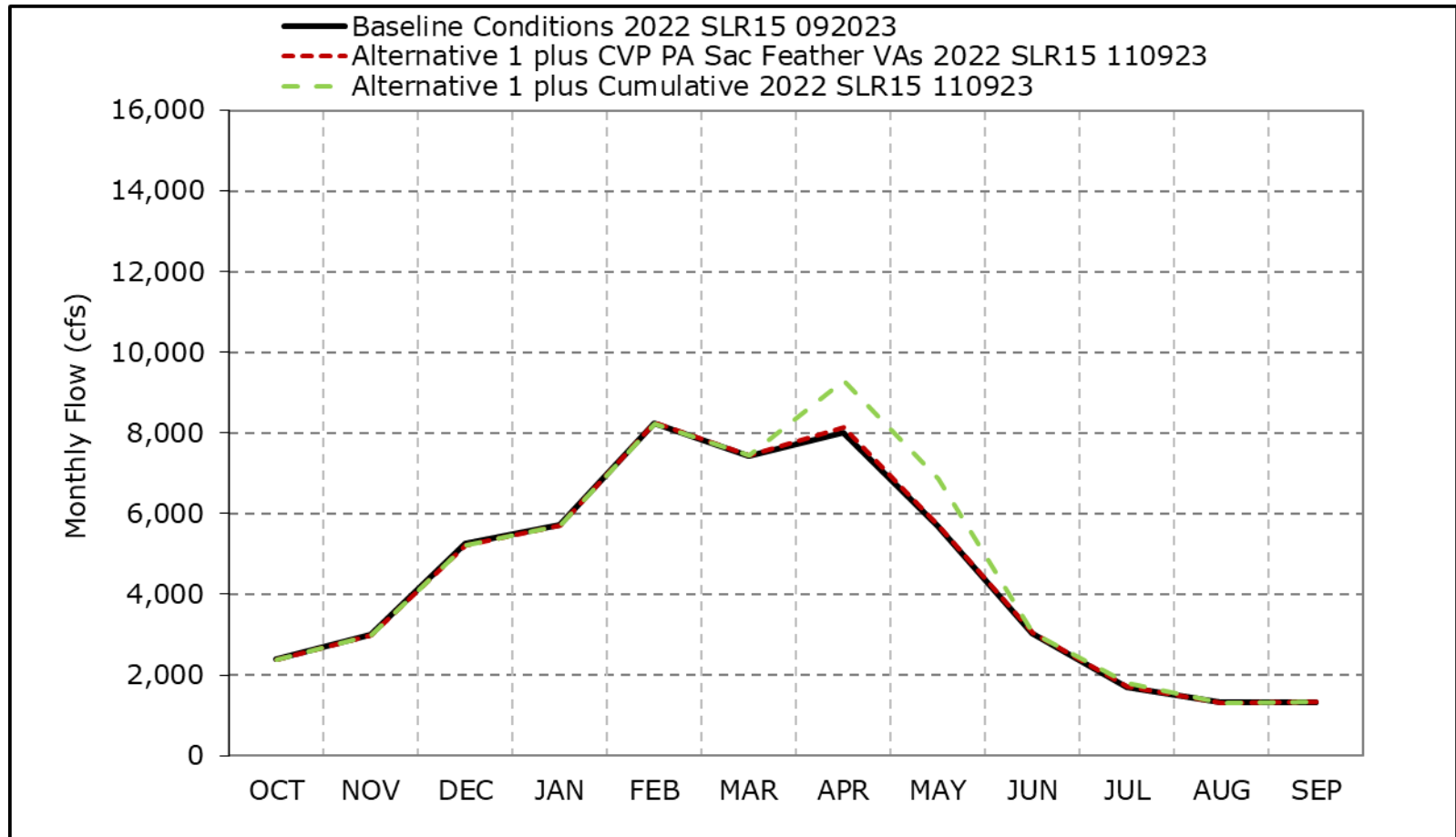


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-4c. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow

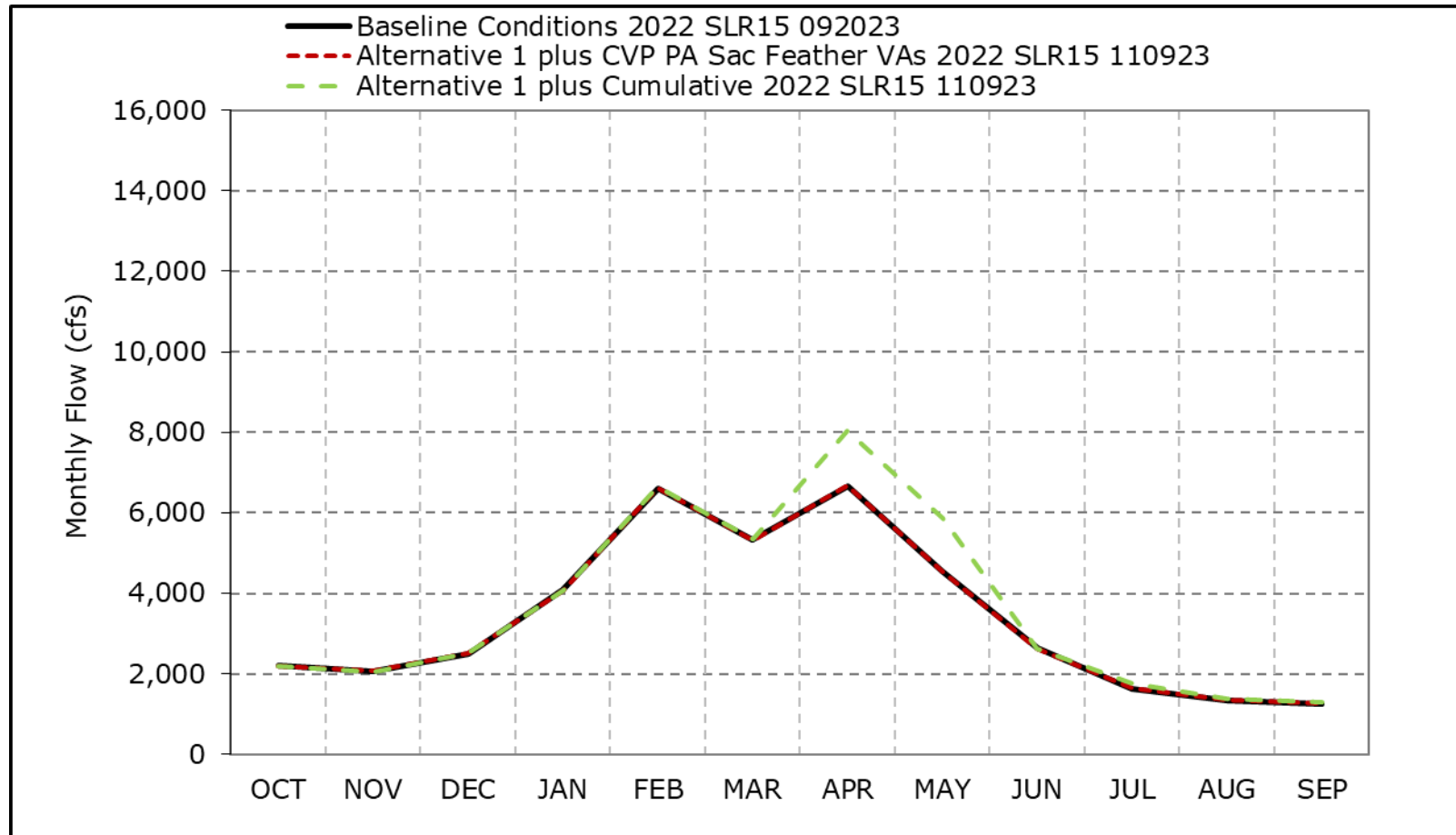


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-4d. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow

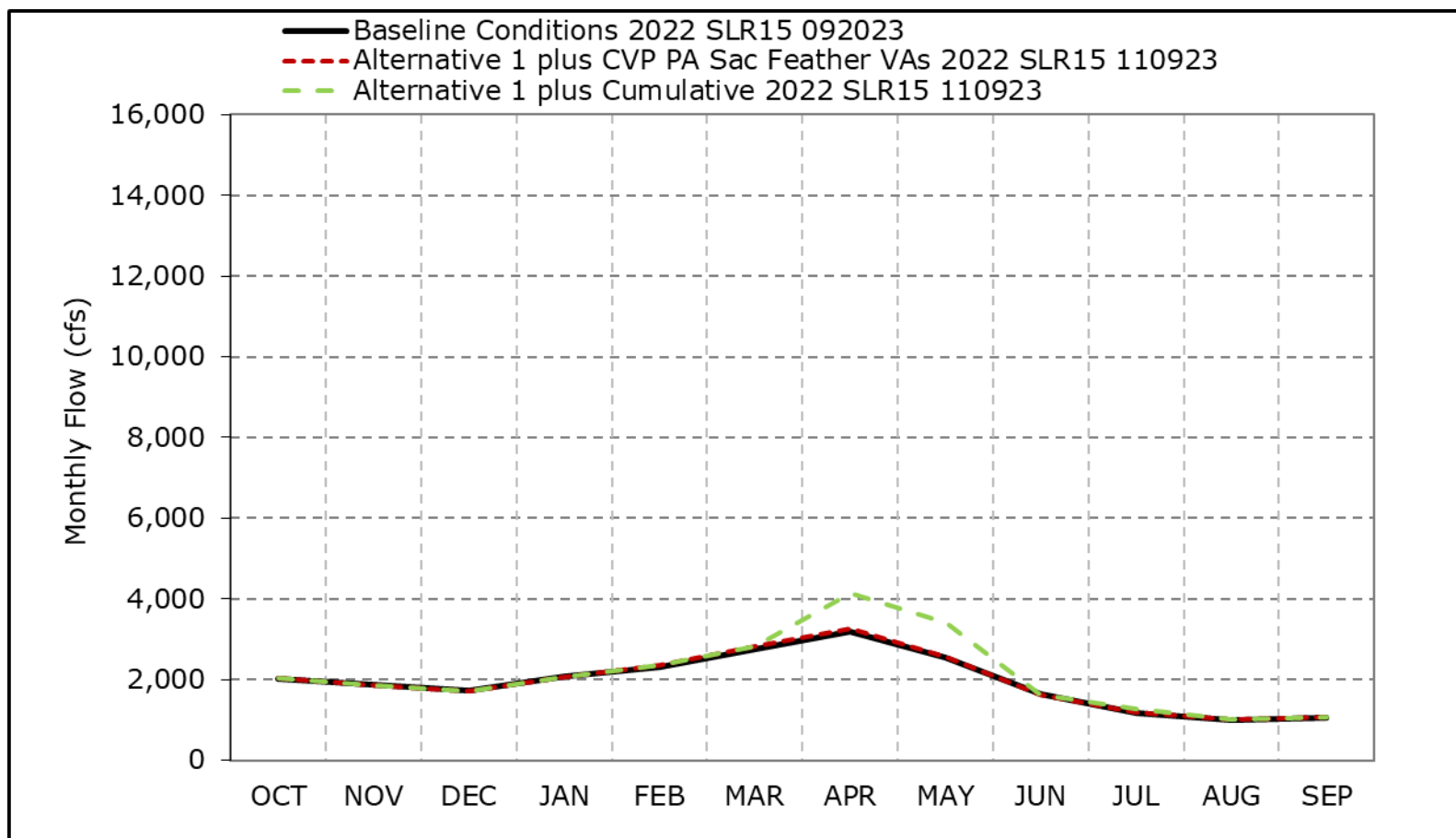


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-4e. San Joaquin River at Vernalis (60-20-20), Dry Year Average Flow

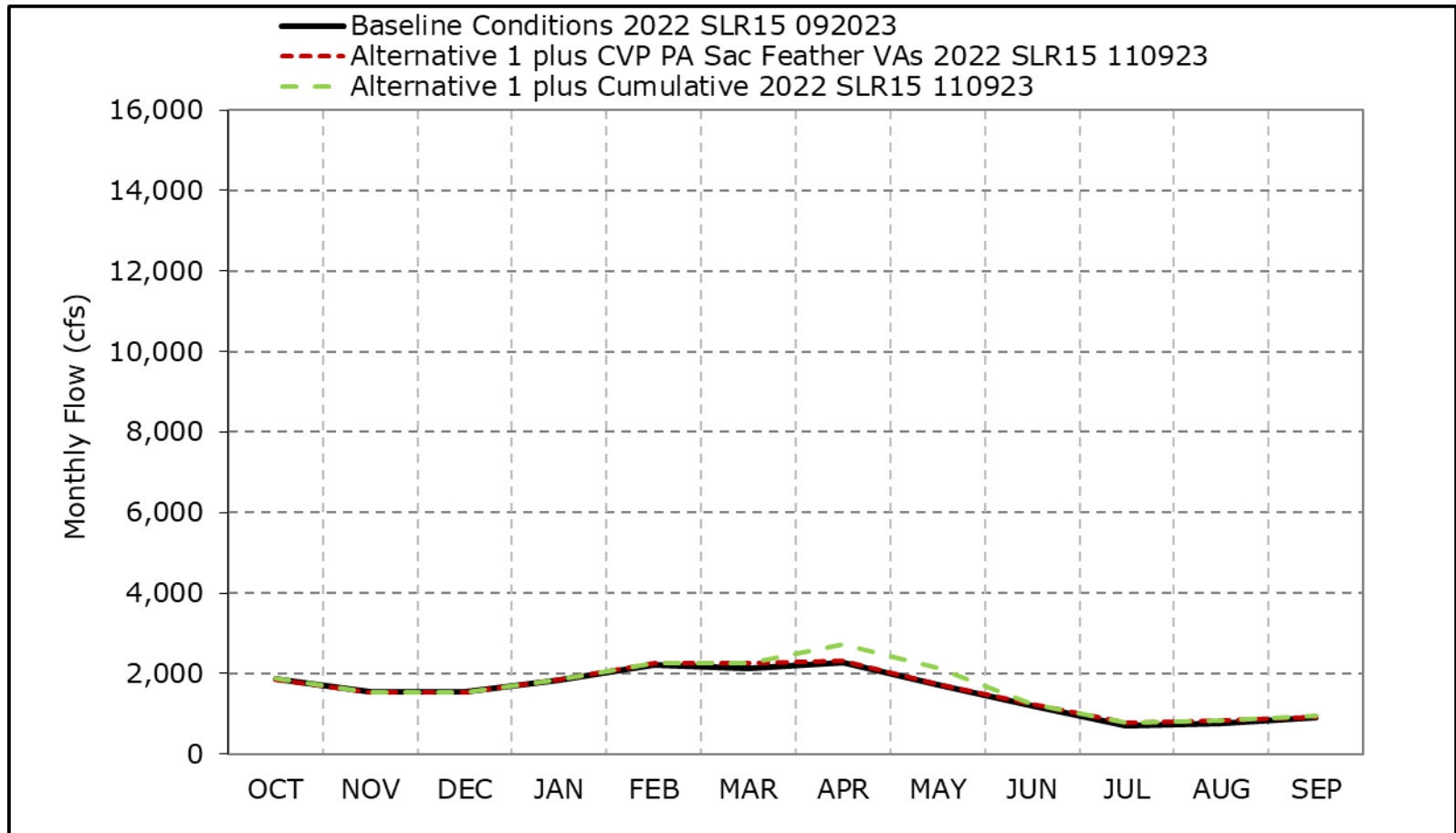


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-4f. 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 water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-5-1a. Mokelumne River below Cosumnes, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	453	890	3,632	7,098	7,019	5,602	4,060	3,309	1,226	671	689	816
20% Exceedance	377	587	1,909	3,945	4,961	3,515	2,794	1,822	808	601	589	738
30% Exceedance	351	444	964	2,294	3,171	2,708	2,173	1,048	558	369	544	682
40% Exceedance	333	400	739	1,472	2,274	2,139	1,482	795	453	106	110	618
50% Exceedance	314	379	577	1,082	1,586	1,545	1,135	617	337	83	72	151
60% Exceedance	304	357	493	777	1,109	1,299	872	528	273	76	61	68
70% Exceedance	244	327	425	562	873	963	706	421	140	69	54	57
80% Exceedance	219	268	388	446	646	761	478	327	94	55	42	47
90% Exceedance	207	226	286	383	456	507	302	174	71	44	34	39
Full Simulation Period Average ^a	346	637	1,523	2,413	2,992	2,387	1,842	1,186	532	266	267	375
Wet Water Years (28%)	470	966	3,205	5,344	6,040	4,595	3,694	2,630	1,096	599	568	731
Above Normal Water Years (14%)	309	1,012	1,490	2,978	3,423	2,724	1,695	1,049	621	318	350	490
Below Normal Water Years (18%)	346	503	1,099	1,388	1,960	1,849	1,525	789	414	151	172	285
Dry Water Years (24%)	281	375	546	720	1,418	1,211	994	514	201	81	92	167
Critical Water Years (16%)	259	276	548	483	807	596	359	236	95	44	37	65

Table 4H-2-5-1b. Mokelumne River below Cosumnes, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	453	890	3,635	7,096	7,007	5,601	4,059	3,308	1,224	669	689	815
20% Exceedance	376	573	1,909	3,953	4,960	3,510	2,793	1,821	794	600	589	738
30% Exceedance	351	444	964	2,293	3,170	2,707	2,172	1,048	557	368	543	681
40% Exceedance	333	400	739	1,471	2,274	2,138	1,482	795	453	105	113	617
50% Exceedance	314	379	577	1,082	1,586	1,545	1,135	617	336	83	70	105
60% Exceedance	304	357	493	777	1,109	1,275	856	528	273	76	61	65
70% Exceedance	235	327	425	562	873	962	706	421	140	69	54	55
80% Exceedance	218	268	388	446	646	761	477	327	94	54	42	47
90% Exceedance	203	226	286	383	456	507	302	174	71	44	34	38
Full Simulation Period Average ^a	345	636	1,521	2,413	2,992	2,383	1,841	1,186	529	265	266	370
Wet Water Years (28%)	470	963	3,198	5,345	6,037	4,594	3,693	2,629	1,095	598	567	730
Above Normal Water Years (14%)	308	1,011	1,490	2,977	3,422	2,725	1,695	1,049	600	319	350	489
Below Normal Water Years (18%)	346	502	1,099	1,388	1,958	1,849	1,522	789	414	149	170	278
Dry Water Years (24%)	276	374	546	720	1,418	1,197	993	514	201	81	92	167
Critical Water Years (16%)	258	276	548	483	807	596	359	236	94	44	37	40

Table 4H-2-5-1c. Mokelumne River below Cosumnes, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	0	0	3	-2	-12	0	0	0	-3	-2	0	0
20% Exceedance	-1	-14	0	8	0	-5	0	-1	-14	-1	0	-1
30% Exceedance	0	0	0	-1	0	0	-1	0	0	-1	-1	-2
40% Exceedance	0	0	0	0	0	-2	-1	0	0	0	3	-1
50% Exceedance	0	0	0	0	0	-1	-1	0	0	0	-2	-46
60% Exceedance	0	0	0	0	-1	-24	-16	0	0	0	0	-4
70% Exceedance	-9	0	0	0	0	-1	0	0	0	0	0	-2
80% Exceedance	-1	0	0	0	0	0	0	0	0	0	0	0
90% Exceedance	-3	0	0	0	0	0	0	0	0	0	0	-1
Full Simulation Period Average ^a	-1	-1	-2	0	-1	-3	-1	0	-3	-1	-1	-6
Wet Water Years (28%)	0	-4	-7	1	-2	-1	-1	-1	-1	-2	-1	-1
Above Normal Water Years (14%)	0	0	0	-1	-1	1	-1	0	-21	1	0	-1
Below Normal Water Years (18%)	0	0	0	0	-1	-1	-3	0	-1	-2	-2	-7
Dry Water Years (24%)	-5	0	0	0	1	-14	0	0	0	0	0	0
Critical Water Years (16%)	0	0	0	0	0	0	0	0	0	0	0	-25

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-5-2a. Mokelumne River below Cosumnes, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	453	890	3,632	7,098	7,019	5,602	4,060	3,309	1,226	671	689	816
20% Exceedance	377	587	1,909	3,945	4,961	3,515	2,794	1,822	808	601	589	738
30% Exceedance	351	444	964	2,294	3,171	2,708	2,173	1,048	558	369	544	682
40% Exceedance	333	400	739	1,472	2,274	2,139	1,482	795	453	106	110	618
50% Exceedance	314	379	577	1,082	1,586	1,545	1,135	617	337	83	72	151
60% Exceedance	304	357	493	777	1,109	1,299	872	528	273	76	61	68
70% Exceedance	244	327	425	562	873	963	706	421	140	69	54	57
80% Exceedance	219	268	388	446	646	761	478	327	94	55	42	47
90% Exceedance	207	226	286	383	456	507	302	174	71	44	34	39
Full Simulation Period Average ^a	346	637	1,523	2,413	2,992	2,387	1,842	1,186	532	266	267	375
Wet Water Years (28%)	470	966	3,205	5,344	6,040	4,595	3,694	2,630	1,096	599	568	731
Above Normal Water Years (14%)	309	1,012	1,490	2,978	3,423	2,724	1,695	1,049	621	318	350	490
Below Normal Water Years (18%)	346	503	1,099	1,388	1,960	1,849	1,525	789	414	151	172	285
Dry Water Years (24%)	281	375	546	720	1,418	1,211	994	514	201	81	92	167
Critical Water Years (16%)	259	276	548	483	807	596	359	236	95	44	37	65

Table 4H-2-5-2b. Mokelumne River below Cosumnes, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	557	887	3,456	6,964	6,786	5,598	4,179	3,305	1,213	667	687	813
20% Exceedance	511	568	1,873	3,748	4,927	3,509	2,800	1,818	782	581	580	734
30% Exceedance	485	427	944	2,235	3,142	2,706	2,186	1,194	542	170	510	680
40% Exceedance	470	399	723	1,443	2,274	2,099	1,562	885	453	100	87	511
50% Exceedance	455	376	577	1,082	1,586	1,553	1,391	724	330	83	69	81
60% Exceedance	348	352	493	767	1,122	1,298	1,027	601	273	76	60	63
70% Exceedance	259	324	428	562	873	973	770	483	140	68	52	54
80% Exceedance	237	267	387	445	613	770	538	373	94	54	42	46
90% Exceedance	206	230	286	374	456	507	302	174	71	44	34	36
Full Simulation Period Average ^a	422	620	1,498	2,395	2,955	2,391	1,898	1,234	517	253	254	356
Wet Water Years (28%)	545	942	3,132	5,312	5,990	4,597	3,748	2,666	1,089	574	546	713
Above Normal Water Years (14%)	401	991	1,481	2,941	3,365	2,736	1,798	1,100	583	295	330	481
Below Normal Water Years (18%)	450	476	1,091	1,374	1,910	1,857	1,584	867	378	142	156	251
Dry Water Years (24%)	352	369	545	717	1,395	1,211	1,043	569	198	76	88	155
Critical Water Years (16%)	298	272	543	478	802	599	382	253	94	44	37	40

Table 4H-2-5-2c. Mokelumne River below Cosumnes, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	104	-3	-176	-134	-234	-4	120	-4	-13	-3	-2	-2
20% Exceedance	134	-19	-36	-197	-34	-6	6	-4	-26	-20	-9	-4
30% Exceedance	134	-17	-20	-59	-28	-2	13	145	-15	-199	-34	-2
40% Exceedance	137	-2	-16	-28	0	-40	80	89	0	-6	-23	-107
50% Exceedance	140	-3	0	0	0	8	256	106	-6	0	-3	-70
60% Exceedance	44	-5	0	-11	13	-1	154	73	0	0	-1	-5
70% Exceedance	15	-2	4	-1	-1	10	63	62	0	0	-1	-3
80% Exceedance	18	-1	0	0	-33	9	61	46	0	0	0	-1
90% Exceedance	-1	4	0	-9	0	0	0	0	0	0	0	-3
Full Simulation Period Average ^a	76	-17	-24	-18	-37	4	55	47	-14	-13	-13	-19
Wet Water Years (28%)	74	-24	-73	-33	-49	2	54	36	-7	-25	-21	-18
Above Normal Water Years (14%)	92	-21	-9	-37	-59	11	103	51	-37	-23	-20	-9
Below Normal Water Years (18%)	103	-27	-8	-14	-50	8	58	78	-37	-9	-16	-34
Dry Water Years (24%)	71	-5	-1	-2	-23	0	49	56	-3	-5	-4	-12
Critical Water Years (16%)	39	-5	-5	-5	-5	3	23	17	0	0	0	-25

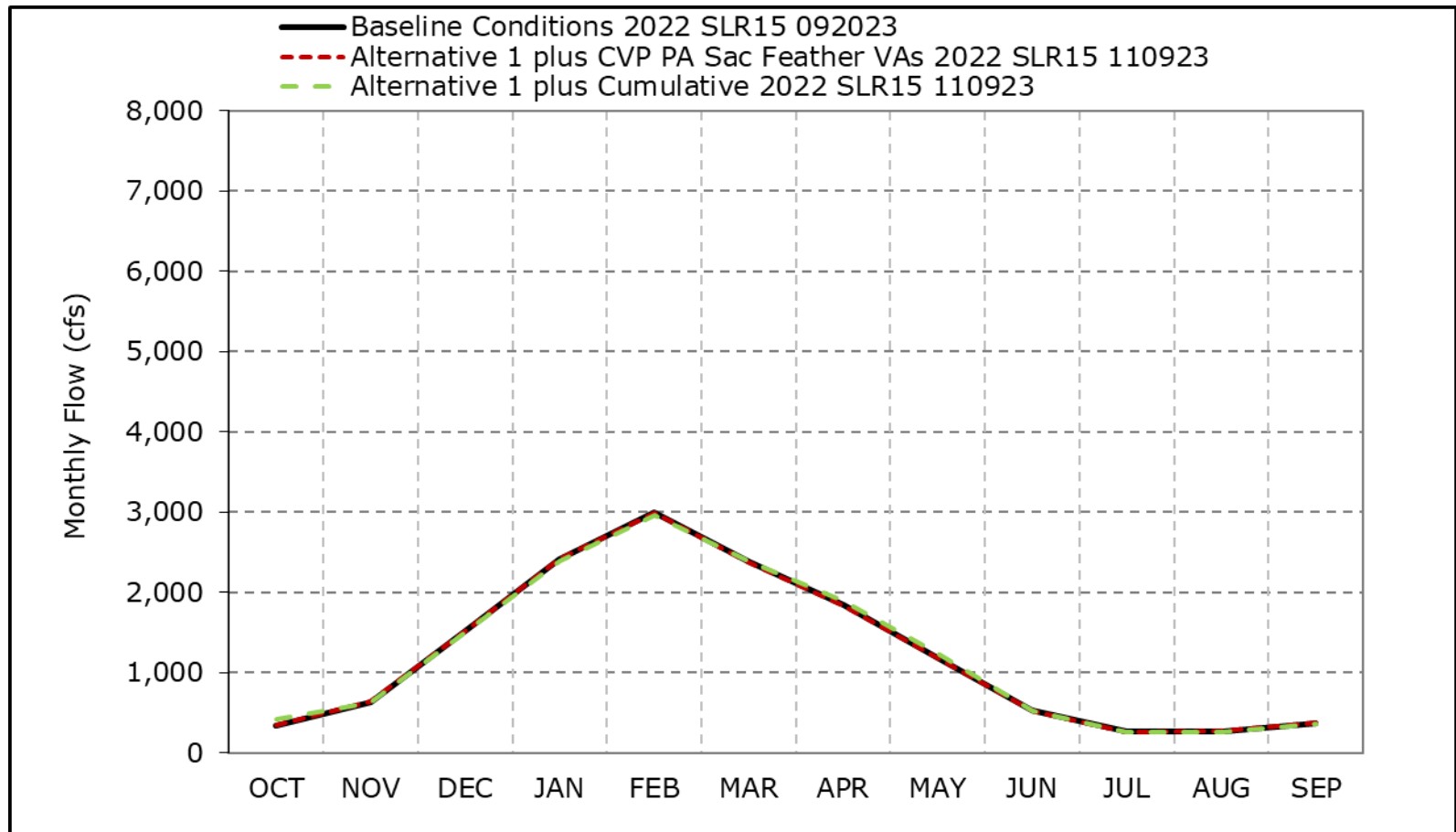
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-5a. Mokelumne River below Cosumnes, Long-Term Average Flow

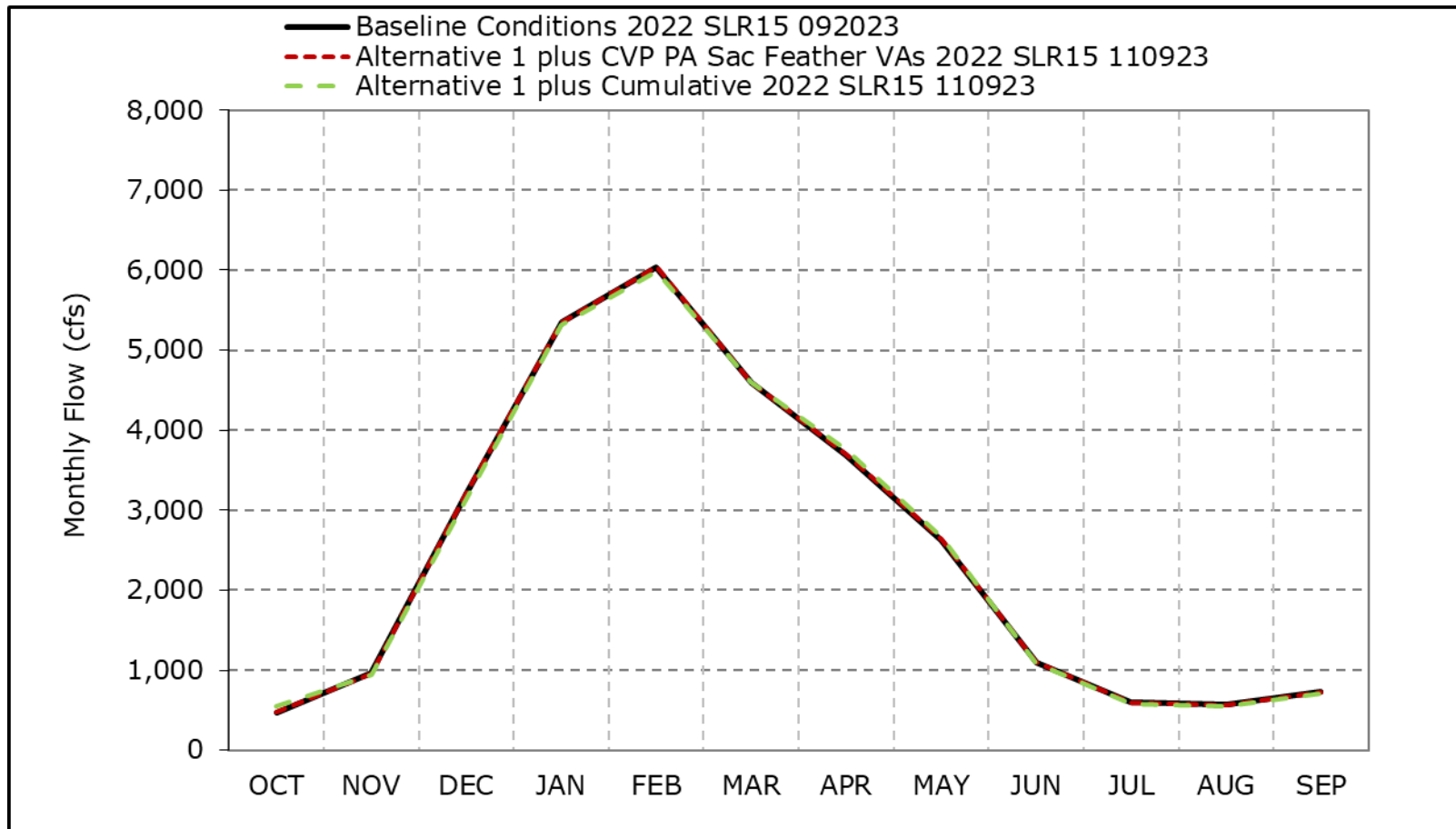


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5b. Mokelumne River below Cosumnes, Wet Year Average Flow

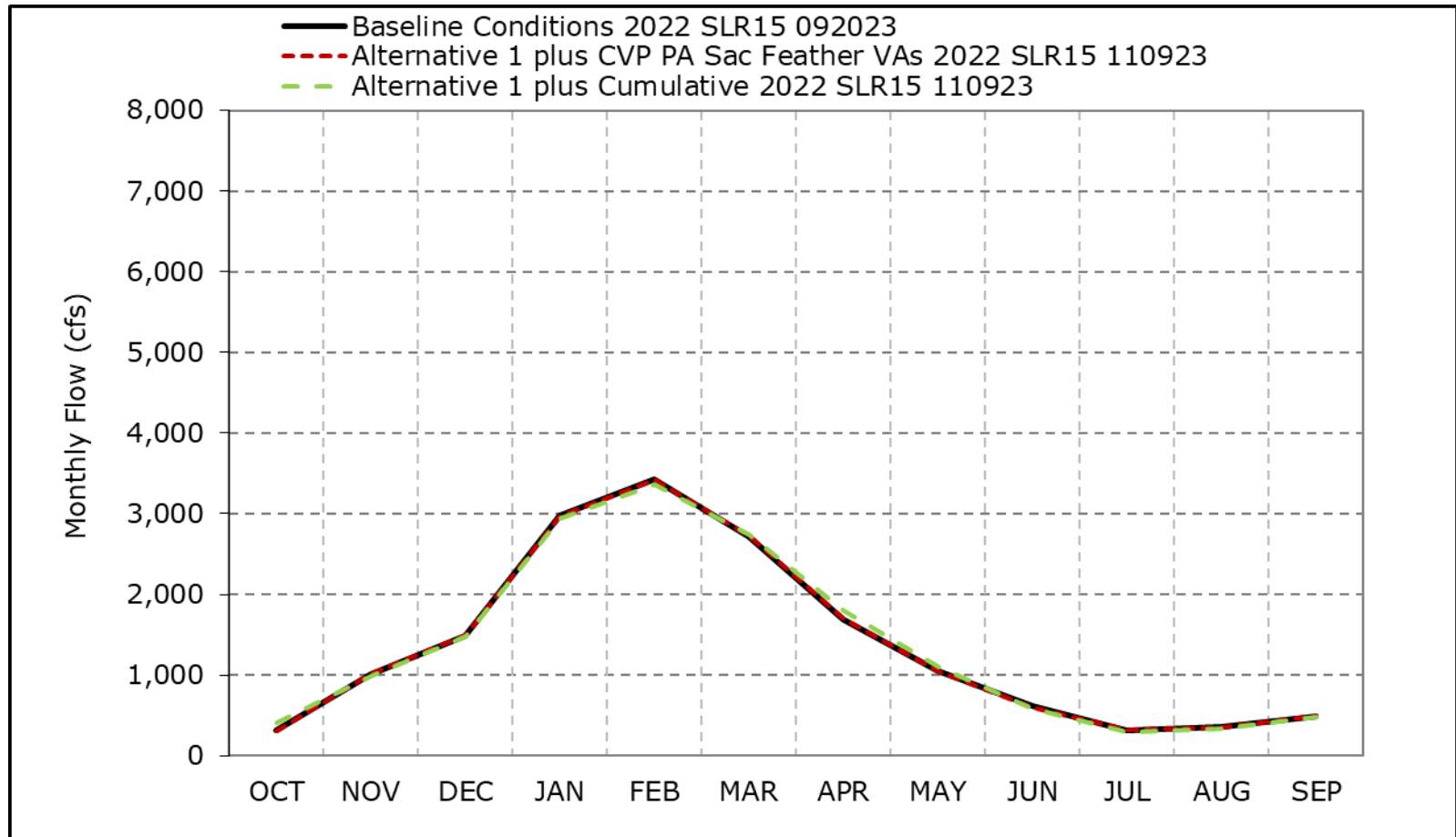


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5c. Mokelumne River below Cosumnes, Above Normal Year Average Flow

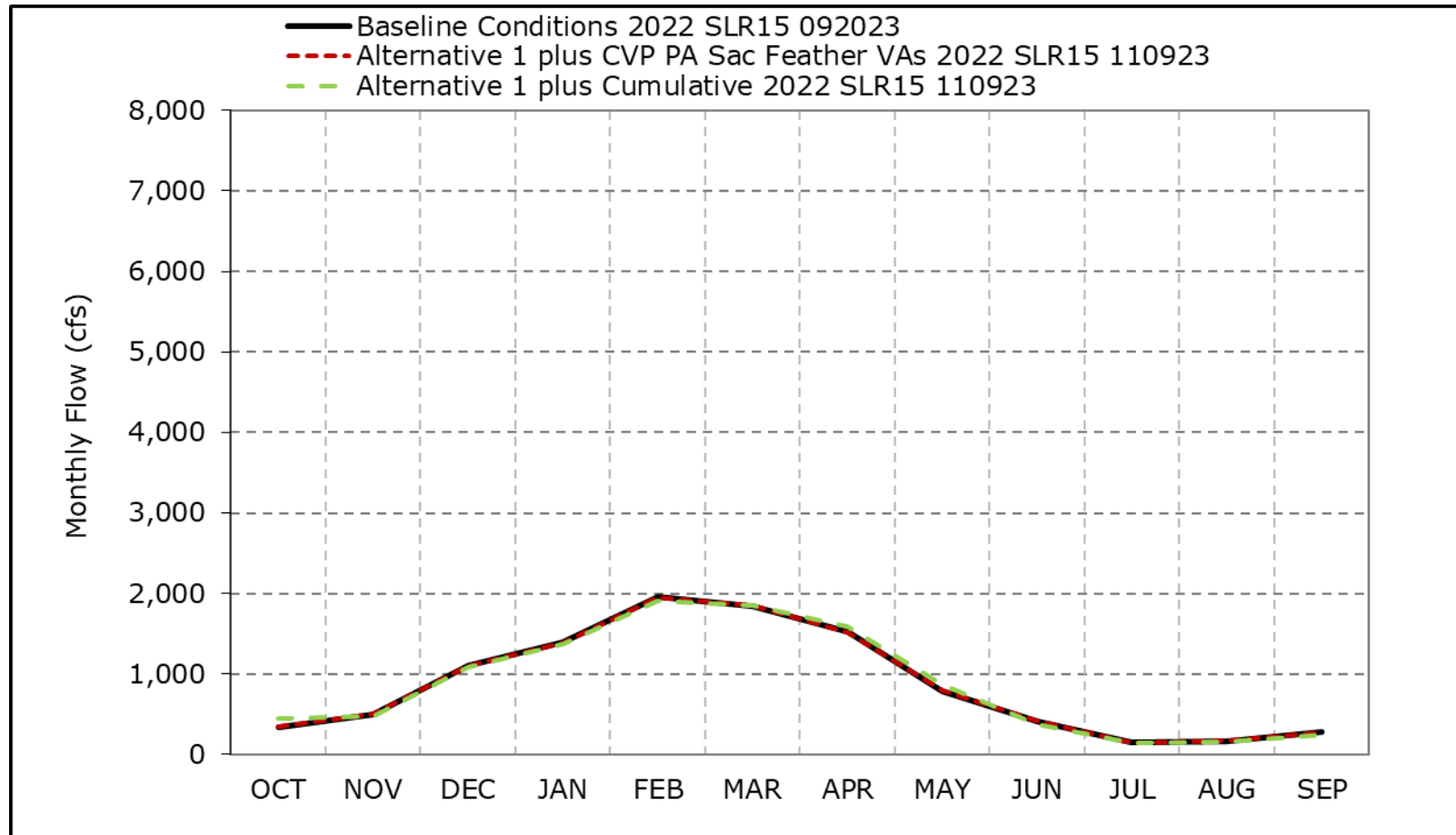


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5d. Mokelumne River below Cosumnes, Below Normal Year Average Flow

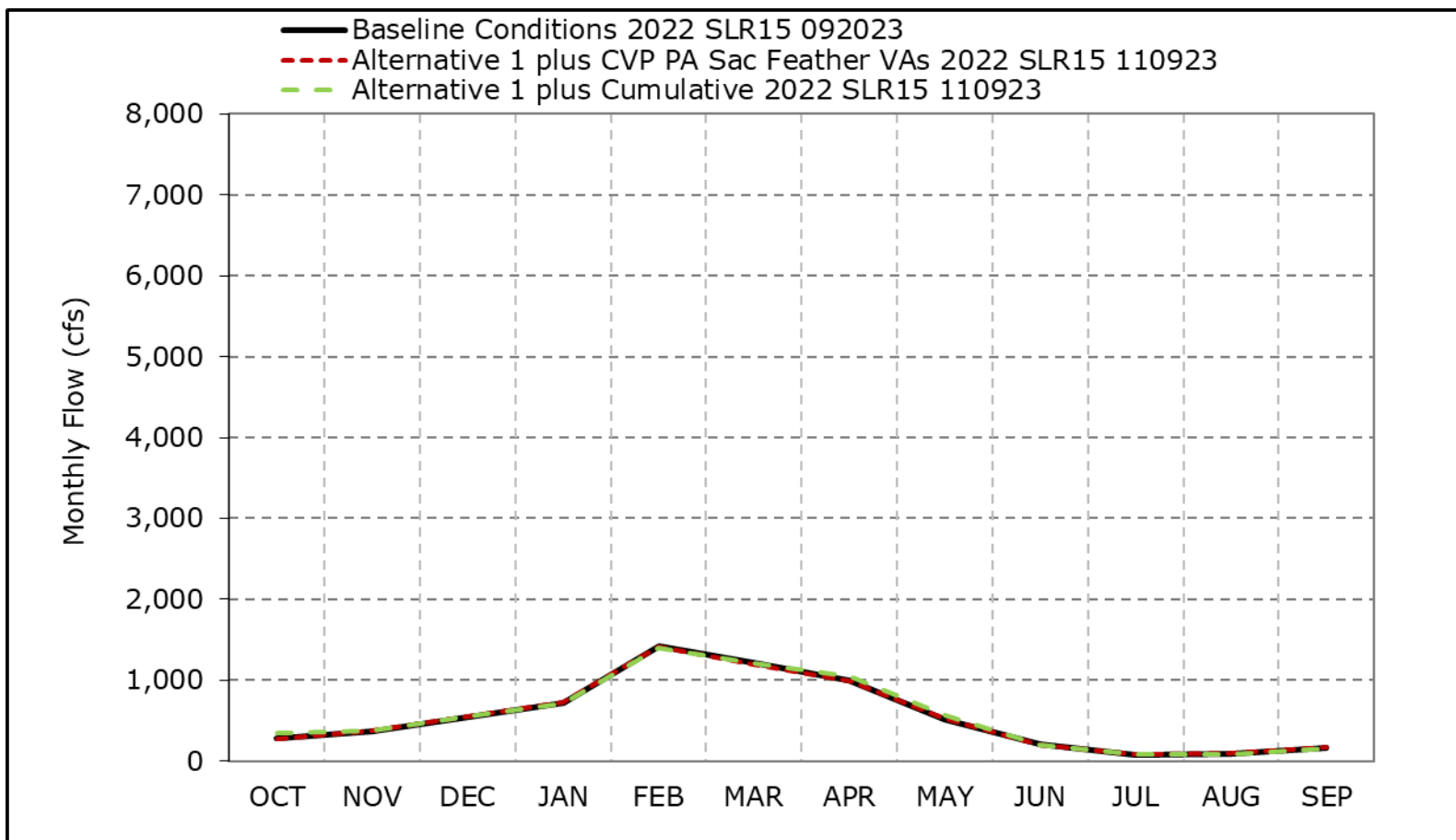


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5e. Mokelumne River below Cosumnes, Dry Year Average Flow

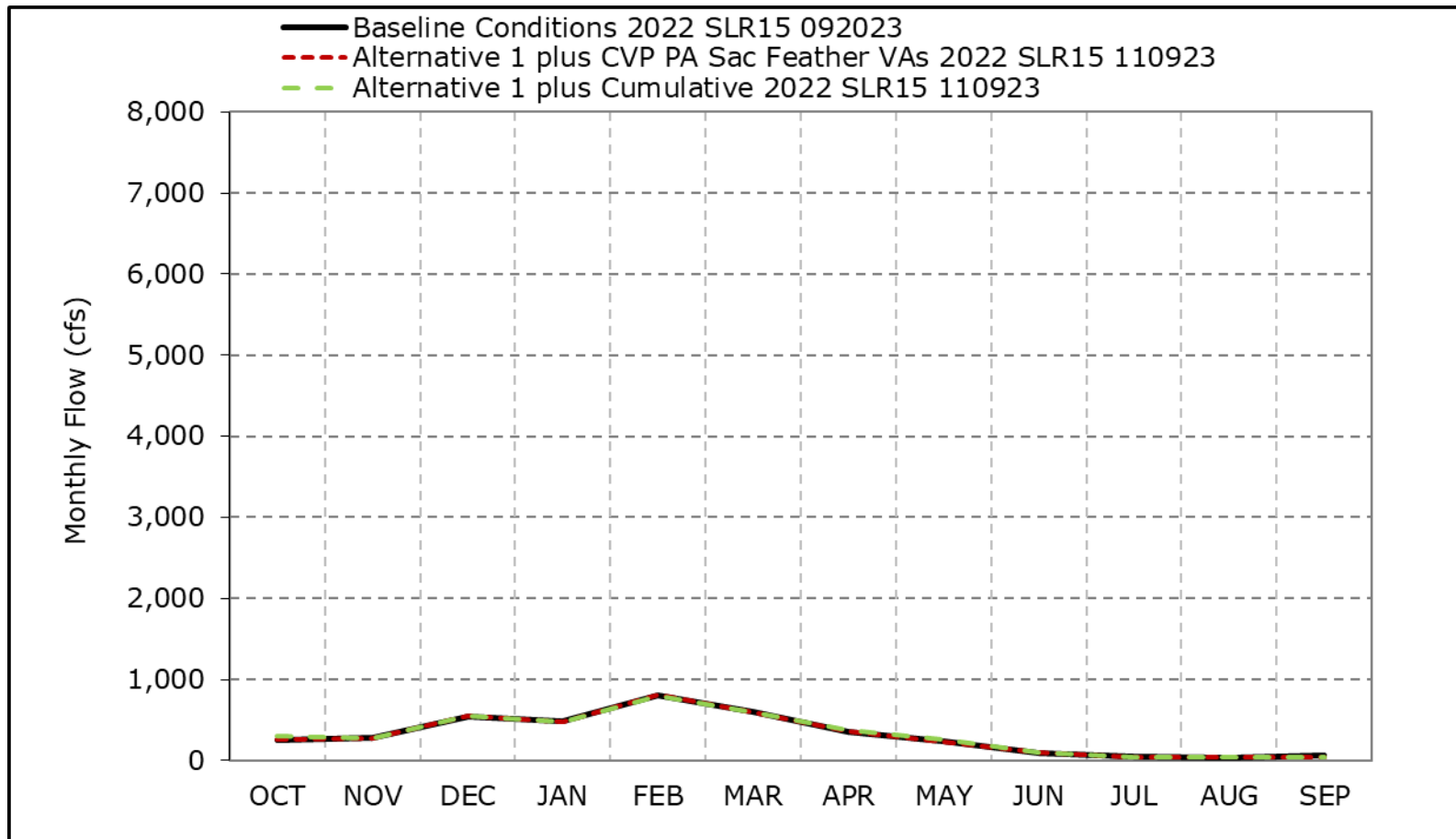


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5f. Mokelumne River below Cosumnes, Critical Year Average Flow

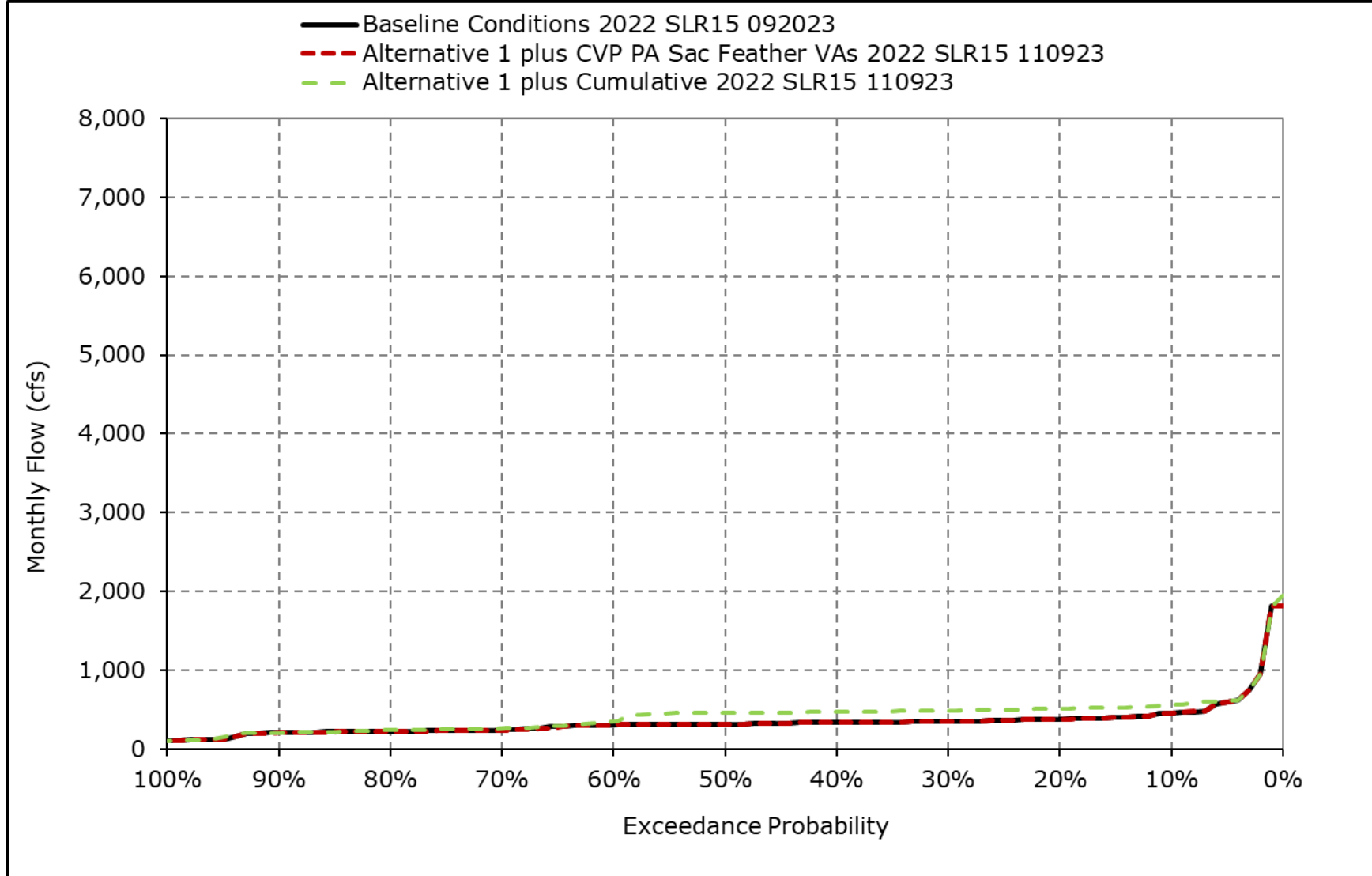


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

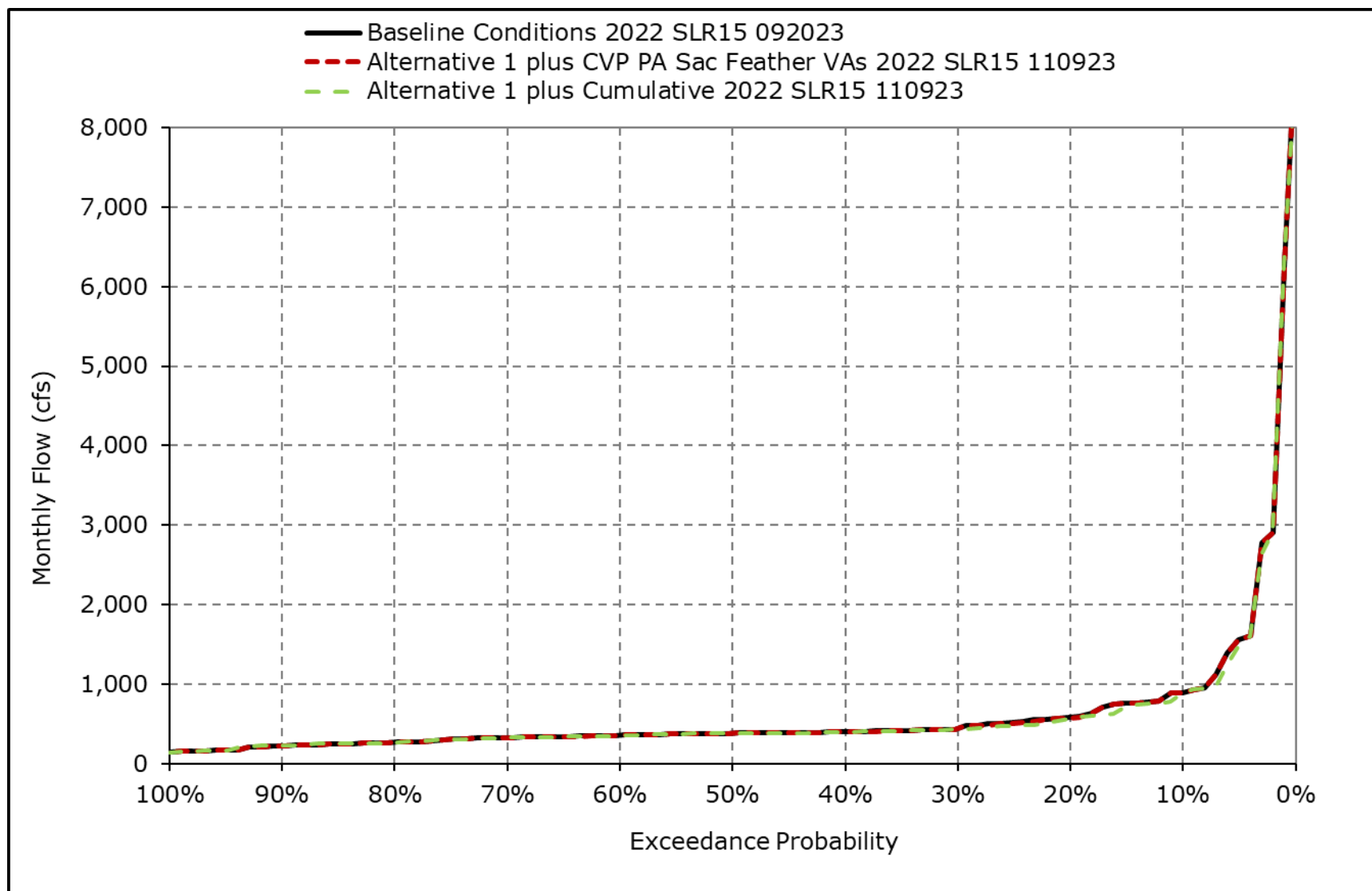
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5g. Mokelumne River below Cosumnes, October



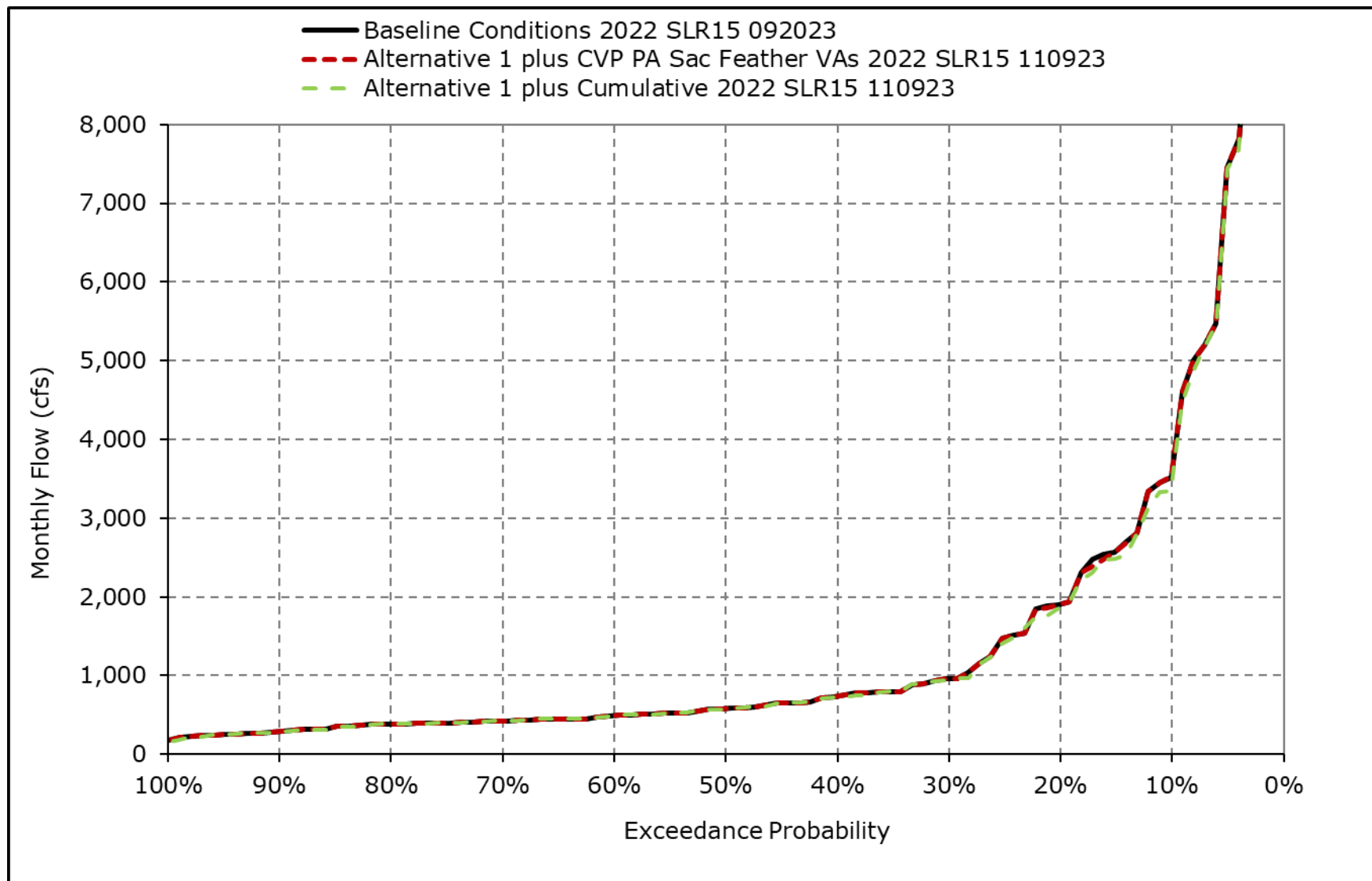
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5h. Mokelumne River below Cosumnes, November



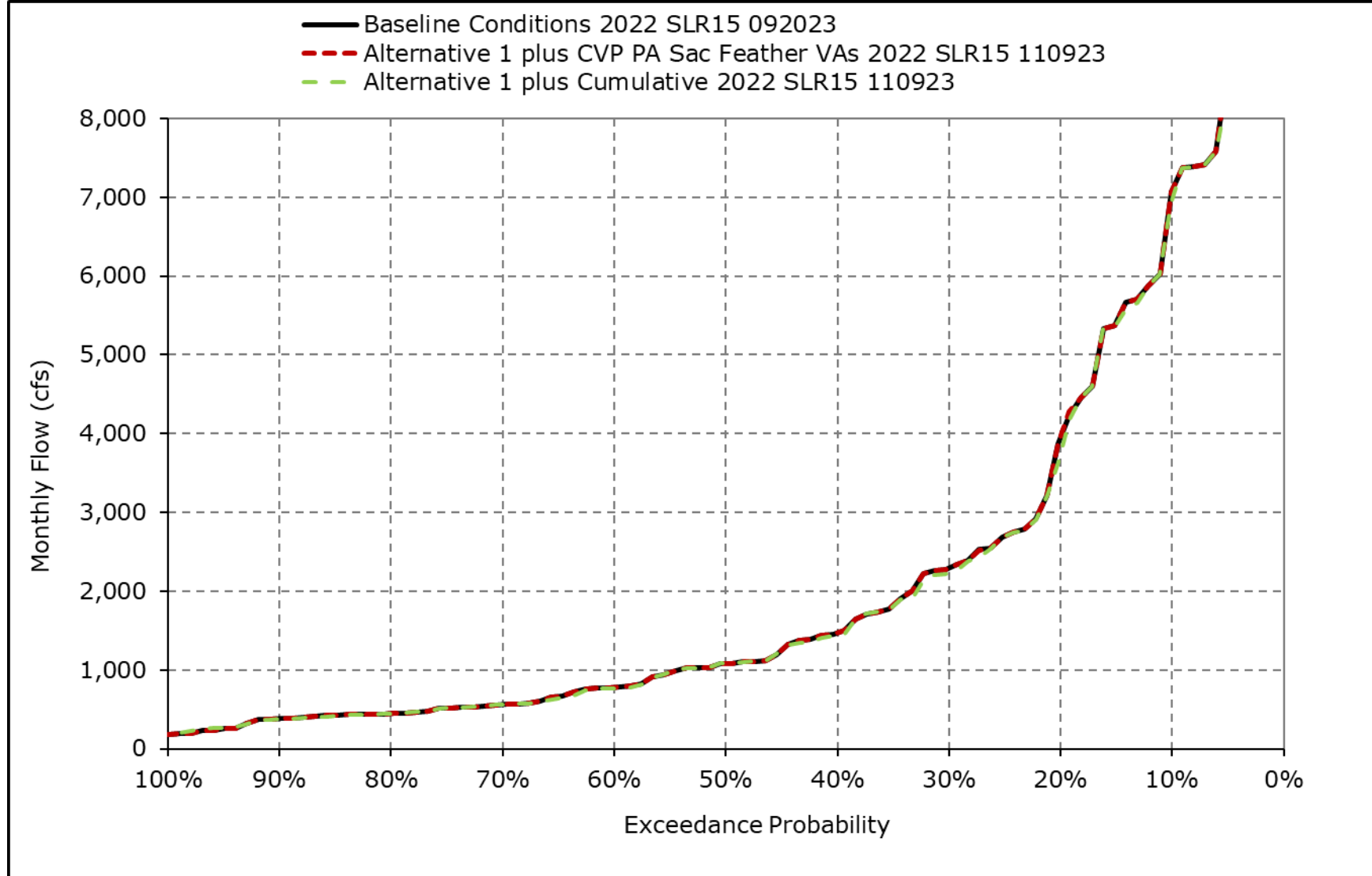
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5i. Mokelumne River below Cosumnes, December



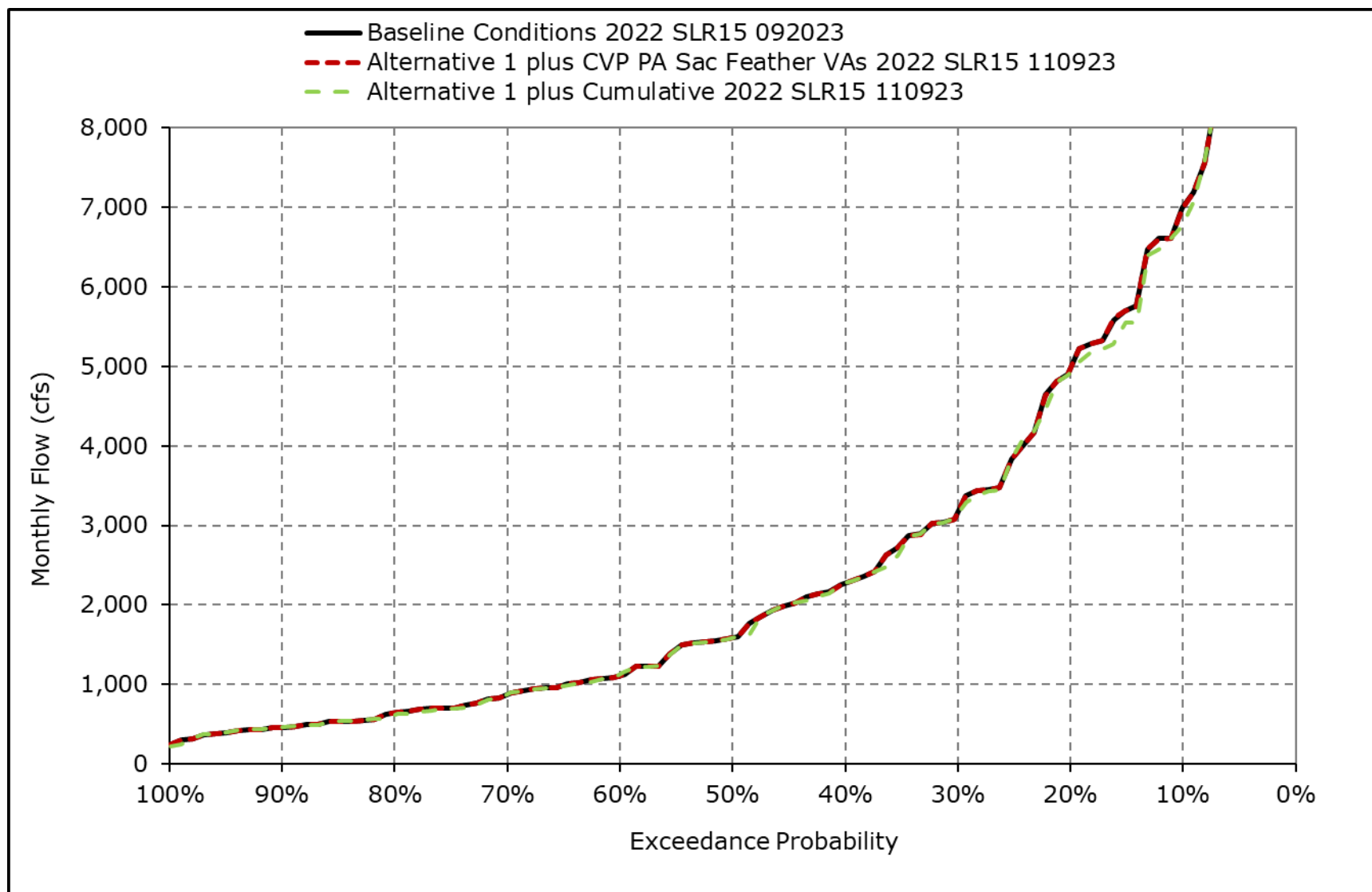
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5j. Mokelumne River below Cosumnes, January



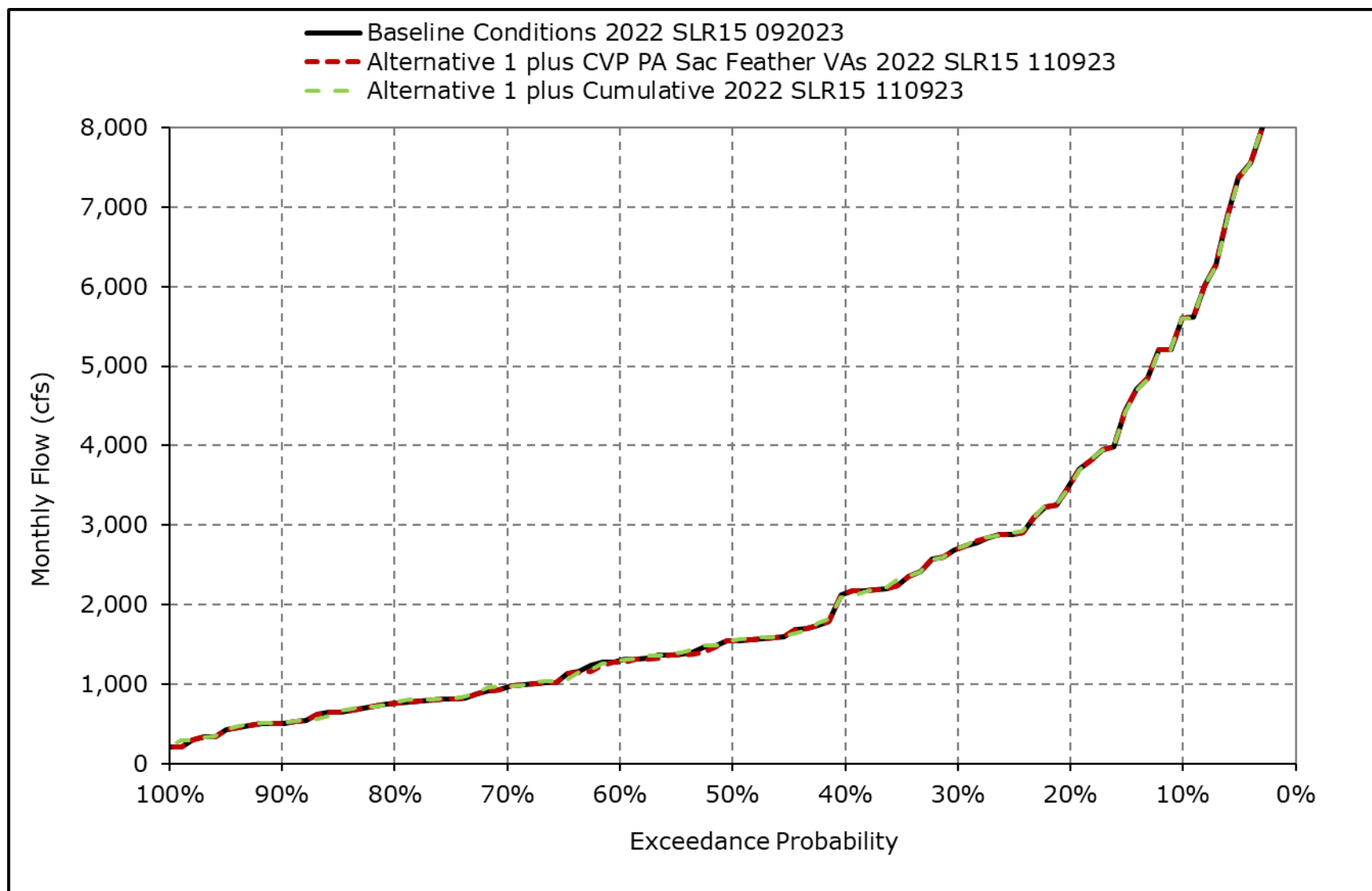
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5k. Mokelumne River below Cosumnes, February



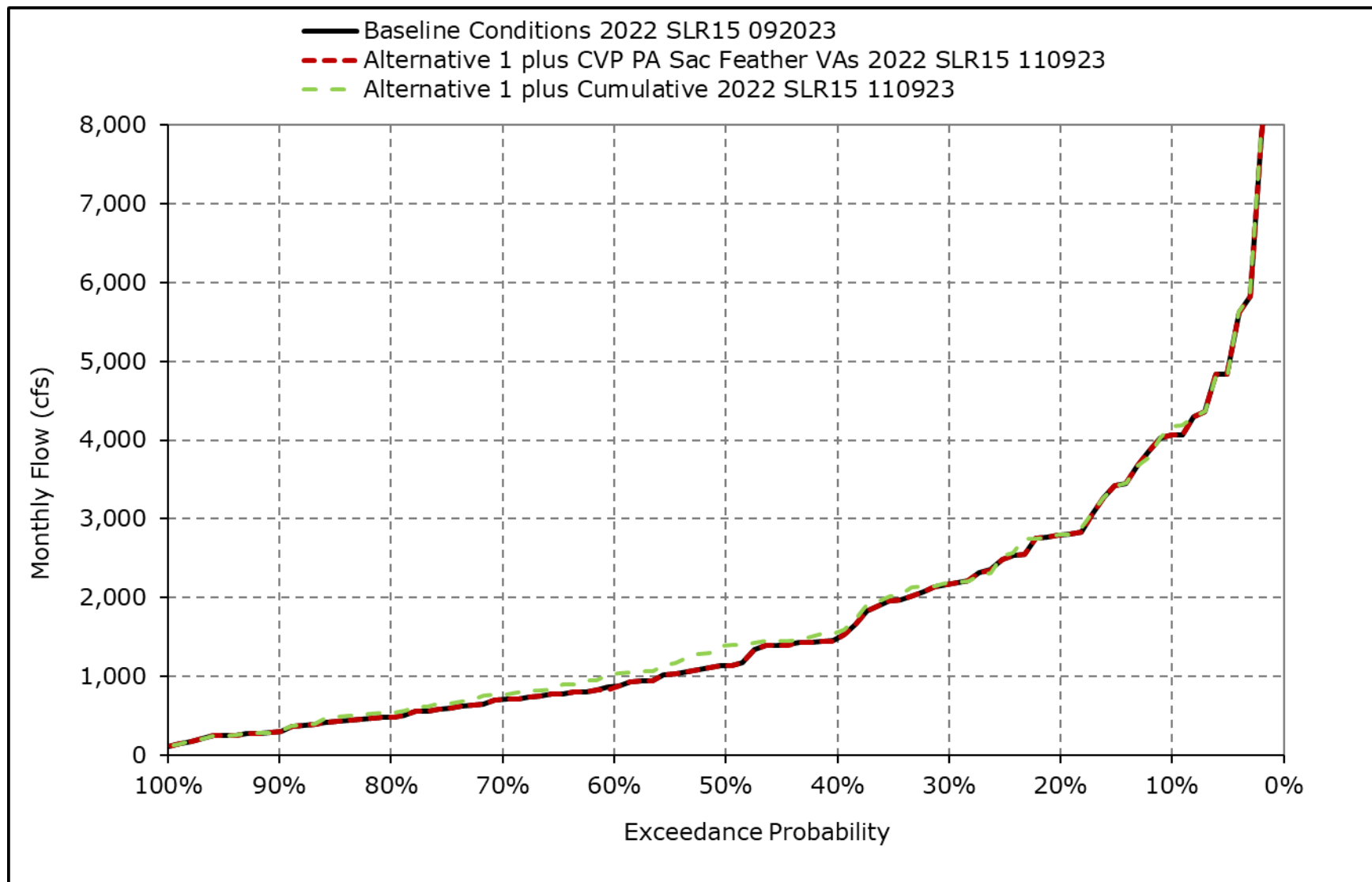
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5I. Mokelumne River below Cosumnes, March



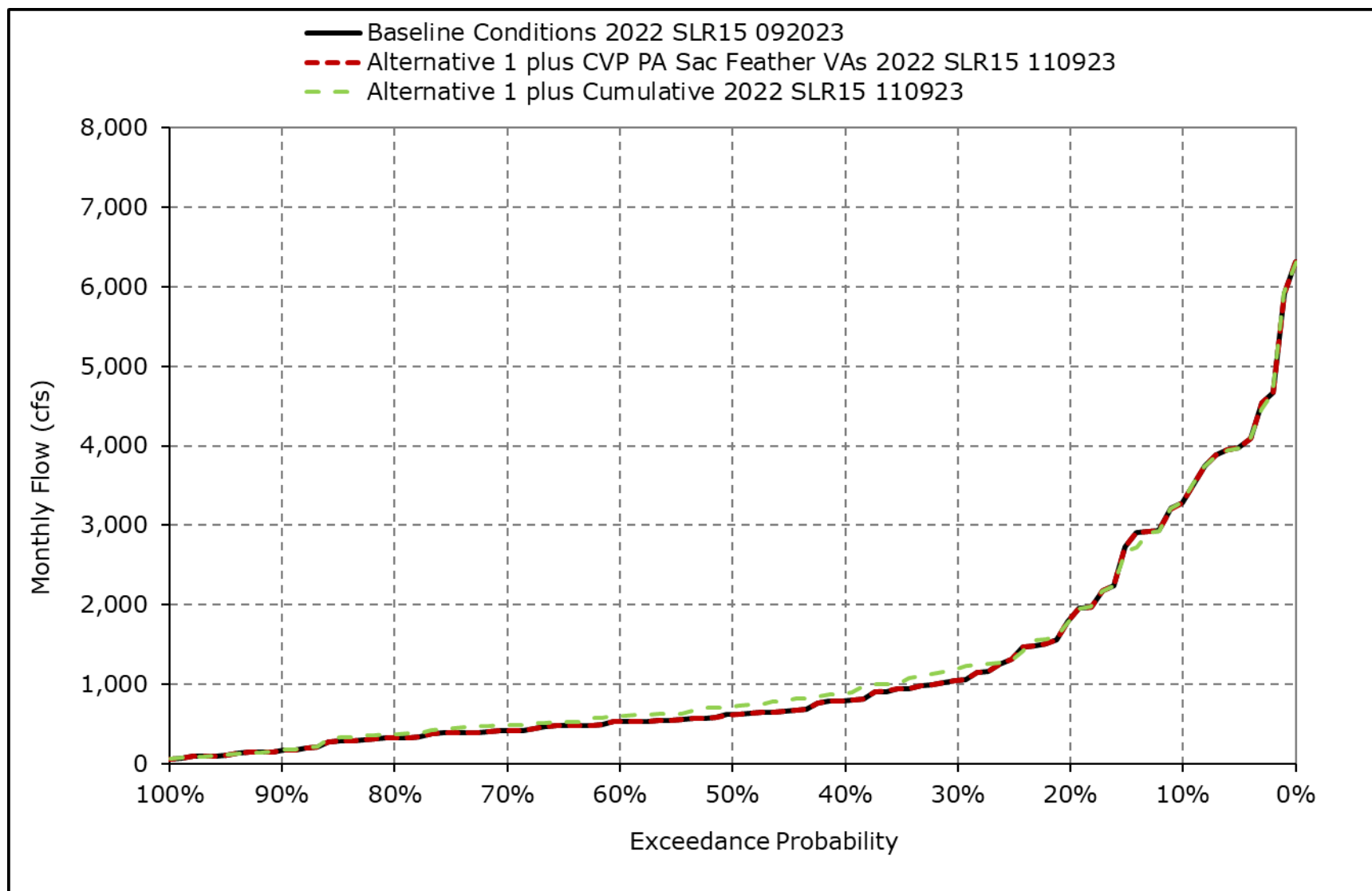
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5m. Mokelumne River below Cosumnes, April



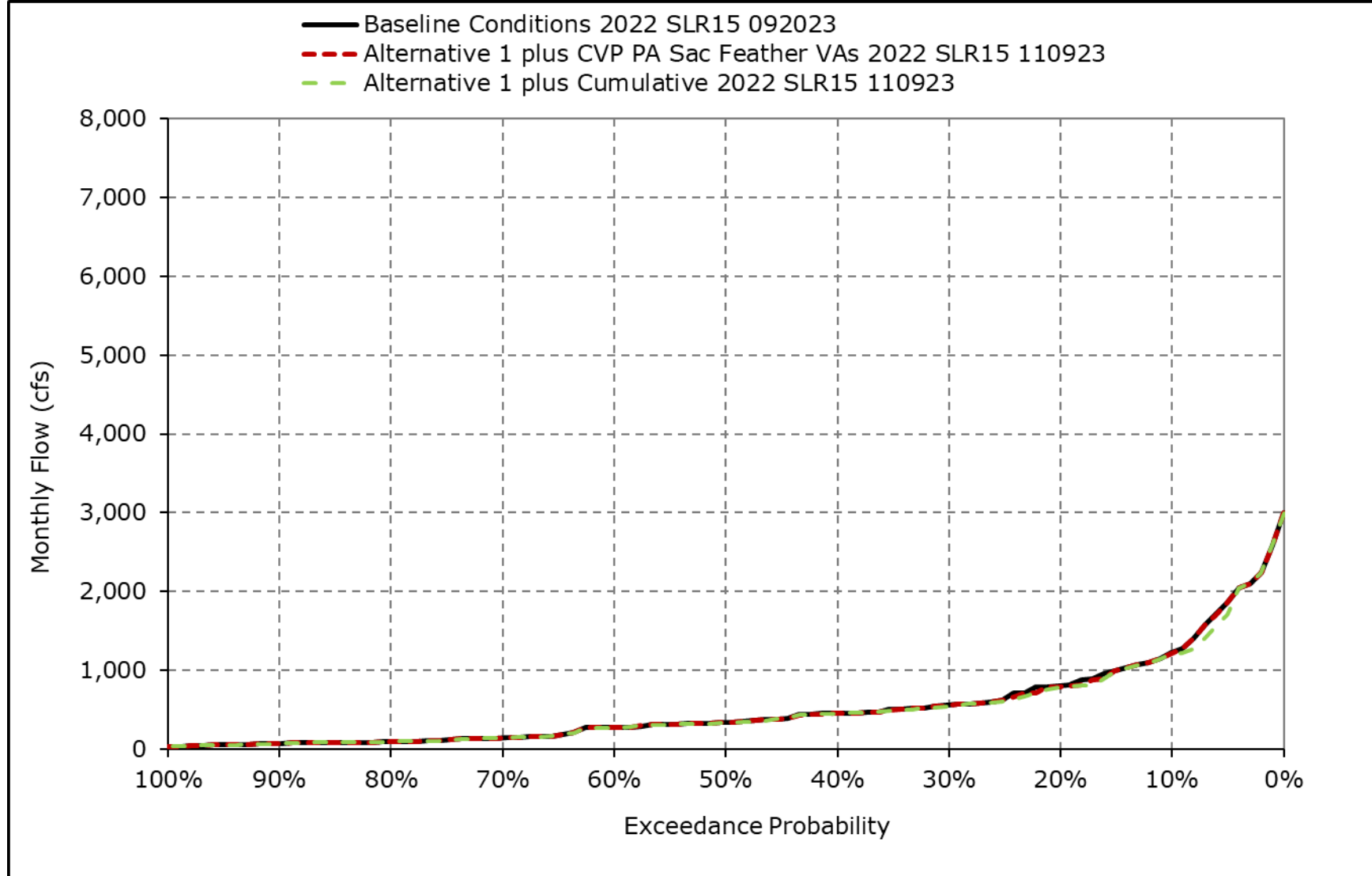
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5n. Mokelumne River below Cosumnes, May



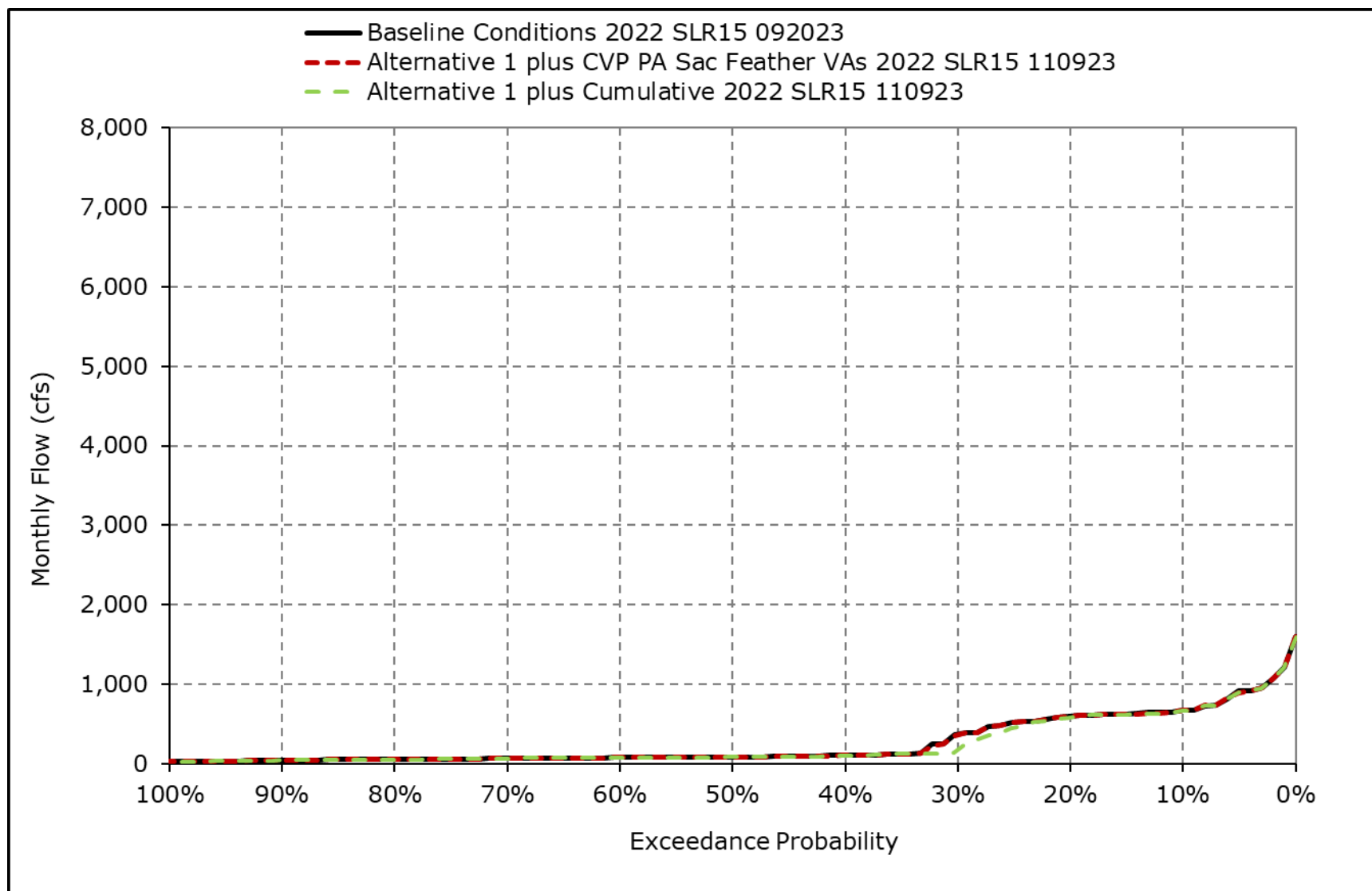
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5o. Mokelumne River below Cosumnes, June



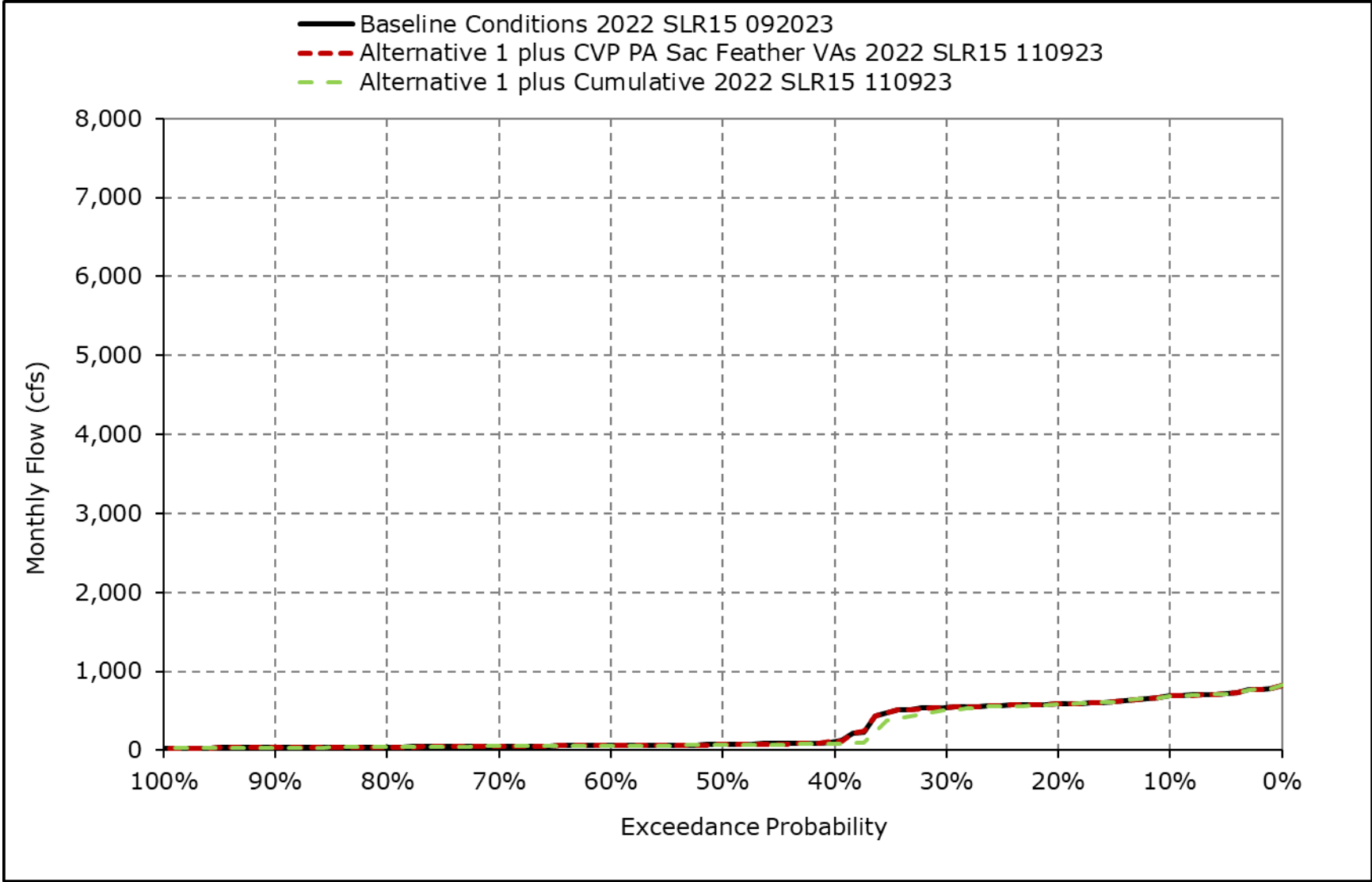
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5p. Mokelumne River below Cosumnes, July



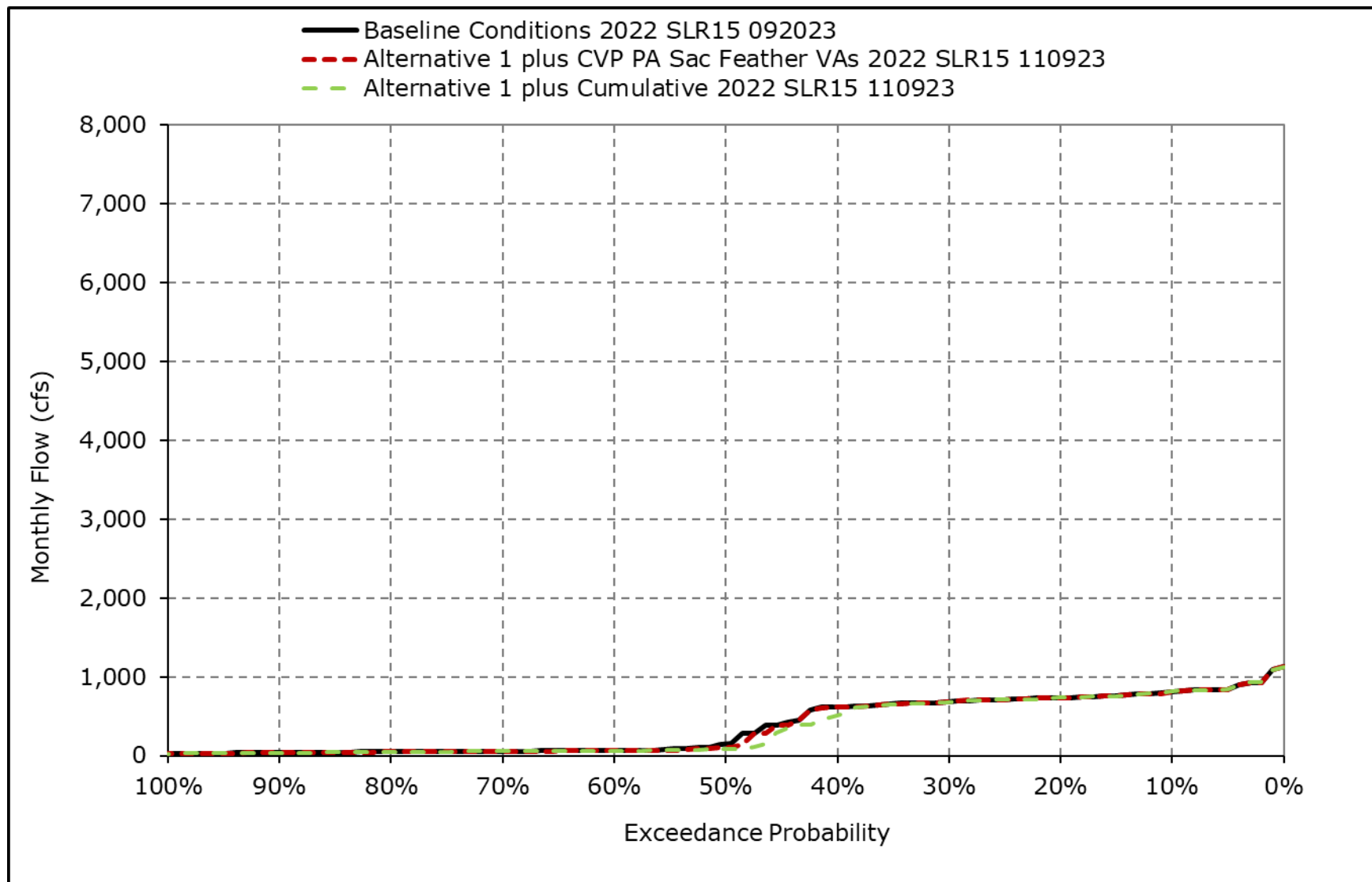
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5q. Mokelumne River below Cosumnes, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-5r. Mokelumne River below Cosumnes, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-6-1a. Old and Middle River Flow, Baseline Conditions 2022 SLR15 092023, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-1,976	-1,353	-2,753	-3,044	-1,631	-1,253	1,377	235	-2,257	-3,821	-2,704	-3,342
20% Exceedance	-2,593	-2,360	-4,152	-3,645	-3,926	-2,986	-44	-533	-3,333	-5,671	-3,858	-4,198
30% Exceedance	-3,113	-3,539	-5,290	-3,645	-4,021	-3,355	-335	-1,023	-4,192	-6,747	-4,897	-4,474
40% Exceedance	-3,894	-5,327	-5,290	-4,516	-4,144	-3,403	-664	-1,134	-4,533	-8,283	-6,635	-4,953
50% Exceedance	-4,548	-7,042	-5,290	-4,516	-4,160	-3,416	-754	-1,312	-4,695	-9,034	-8,762	-5,603
60% Exceedance	-5,265	-8,173	-5,290	-4,516	-4,316	-3,420	-1,056	-1,480	-5,000	-9,918	-9,721	-6,428
70% Exceedance	-5,771	-8,614	-5,371	-4,516	-4,334	-3,439	-1,225	-1,689	-5,000	-10,421	-10,273	-7,486
80% Exceedance	-6,240	-8,943	-6,620	-4,695	-4,464	-3,986	-1,372	-1,997	-5,000	-10,883	-10,657	-8,653
90% Exceedance	-7,198	-9,358	-8,904	-5,000	-4,464	-3,994	-2,008	-2,383	-5,000	-11,287	-11,176	-8,941
Full Simulation Period Average ^a	-4,650	-6,017	-5,432	-3,786	-3,321	-2,720	-519	-1,113	-4,172	-8,299	-7,525	-6,062
Wet Water Years (28%)	-5,707	-7,294	-5,097	-2,789	-1,828	-1,168	-392	-904	-3,926	-9,387	-10,039	-7,620
Above Normal Water Years (14%)	-4,257	-6,603	-5,703	-4,302	-3,609	-3,057	-779	-2,233	-4,677	-9,872	-10,430	-5,962
Below Normal Water Years (18%)	-5,124	-6,893	-6,037	-4,312	-4,143	-3,567	-206	-644	-4,651	-9,911	-8,792	-6,852
Dry Water Years (24%)	-4,138	-5,437	-5,642	-4,347	-4,048	-3,864	-620	-1,091	-4,838	-8,186	-5,234	-5,507
Critical Water Years (16%)	-3,381	-3,151	-4,783	-3,644	-3,666	-2,472	-717	-1,059	-2,623	-3,373	-2,595	-3,370

Table 4H-2-6-1b. Old and Middle River Flow, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,082	-1,742	-2,832	-3,006	-1,537	-995	810	-1,629	-1,928	-2,731	-2,143	-3,576
20% Exceedance	-2,663	-2,688	-4,793	-3,505	-3,562	-1,197	-343	-1,943	-2,933	-4,797	-2,925	-4,377
30% Exceedance	-3,163	-3,892	-5,290	-3,645	-3,741	-1,340	-922	-2,384	-4,038	-7,032	-4,217	-4,624
40% Exceedance	-3,982	-5,135	-5,290	-3,980	-3,974	-1,504	-1,221	-2,842	-4,339	-8,138	-7,484	-5,166
50% Exceedance	-4,687	-7,236	-5,290	-4,262	-4,030	-1,949	-1,418	-3,069	-4,400	-8,978	-8,821	-5,835
60% Exceedance	-5,240	-8,310	-5,290	-4,343	-4,055	-2,881	-1,716	-3,239	-4,440	-9,850	-9,841	-6,469
70% Exceedance	-5,602	-8,572	-5,290	-4,516	-4,223	-3,492	-1,792	-3,420	-4,475	-10,280	-10,318	-7,198
80% Exceedance	-6,079	-9,084	-6,948	-4,533	-4,464	-3,718	-1,960	-3,773	-4,490	-10,798	-10,683	-8,661
90% Exceedance	-7,424	-9,329	-8,530	-5,000	-4,487	-4,115	-2,249	-4,008	-4,505	-11,260	-11,145	-9,695
Full Simulation Period Average ^a	-4,664	-6,096	-5,451	-3,572	-3,199	-1,893	-987	-2,696	-3,807	-8,026	-7,377	-6,225
Wet Water Years (28%)	-5,972	-7,247	-5,064	-2,640	-1,906	-1,166	-110	-2,609	-3,911	-9,434	-10,319	-7,951
Above Normal Water Years (14%)	-4,056	-6,778	-5,857	-4,209	-3,581	-1,833	-466	-3,252	-4,334	-10,010	-10,513	-6,327
Below Normal Water Years (18%)	-4,999	-6,923	-6,080	-4,148	-3,823	-1,721	-1,631	-3,051	-4,288	-9,685	-8,600	-6,882
Dry Water Years (24%)	-4,148	-5,569	-5,629	-4,068	-3,729	-2,694	-1,519	-2,663	-4,137	-7,428	-4,676	-5,513
Critical Water Years (16%)	-3,304	-3,347	-4,800	-3,251	-3,632	-2,209	-1,452	-2,012	-2,125	-2,854	-2,159	-3,444

Table 4H-2-6-1c. Old and Middle River Flow, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-106	-389	-79	38	94	258	-567	-1,864	329	1,090	562	-235
20% Exceedance	-70	-327	-641	140	364	1,789	-299	-1,410	400	873	934	-179
30% Exceedance	-51	-354	0	0	280	2,015	-587	-1,361	153	-285	681	-150
40% Exceedance	-88	192	0	536	170	1,898	-557	-1,708	194	146	-850	-214
50% Exceedance	-139	-195	0	254	130	1,467	-664	-1,757	295	56	-59	-232
60% Exceedance	24	-136	0	173	262	538	-659	-1,759	560	68	-120	-41
70% Exceedance	169	42	80	0	111	-53	-567	-1,730	525	141	-45	288
80% Exceedance	161	-141	-328	163	0	269	-587	-1,776	510	85	-26	-8
90% Exceedance	-227	29	374	0	-22	-122	-242	-1,626	495	27	31	-755
Full Simulation Period Average ^a	-14	-80	-20	214	122	827	-467	-1,583	365	273	148	-163
Wet Water Years (28%)	-265	47	33	149	-78	2	281	-1,705	15	-47	-280	-331
Above Normal Water Years (14%)	201	-176	-154	93	27	1,224	313	-1,019	342	-138	-83	-365
Below Normal Water Years (18%)	125	-31	-43	164	320	1,847	-1,425	-2,407	363	227	192	-31
Dry Water Years (24%)	-10	-132	13	278	319	1,170	-899	-1,572	701	758	558	-7
Critical Water Years (16%)	77	-195	-18	393	34	263	-735	-953	498	519	435	-74

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-6-2a. Old and Middle River Flow, Baseline Conditions 2022 SLR15 092023, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-1,976	-1,353	-2,753	-3,044	-1,631	-1,253	1,377	235	-2,257	-3,821	-2,704	-3,342
20% Exceedance	-2,593	-2,360	-4,152	-3,645	-3,926	-2,986	-44	-533	-3,333	-5,671	-3,858	-4,198
30% Exceedance	-3,113	-3,539	-5,290	-3,645	-4,021	-3,355	-335	-1,023	-4,192	-6,747	-4,897	-4,474
40% Exceedance	-3,894	-5,327	-5,290	-4,516	-4,144	-3,403	-664	-1,134	-4,533	-8,283	-6,635	-4,953
50% Exceedance	-4,548	-7,042	-5,290	-4,516	-4,160	-3,416	-754	-1,312	-4,695	-9,034	-8,762	-5,603
60% Exceedance	-5,265	-8,173	-5,290	-4,516	-4,316	-3,420	-1,056	-1,480	-5,000	-9,918	-9,721	-6,428
70% Exceedance	-5,771	-8,614	-5,371	-4,516	-4,334	-3,439	-1,225	-1,689	-5,000	-10,421	-10,273	-7,486
80% Exceedance	-6,240	-8,943	-6,620	-4,695	-4,464	-3,986	-1,372	-1,997	-5,000	-10,883	-10,657	-8,653
90% Exceedance	-7,198	-9,358	-8,904	-5,000	-4,464	-3,994	-2,008	-2,383	-5,000	-11,287	-11,176	-8,941
Full Simulation Period Average ^a	-4,650	-6,017	-5,432	-3,786	-3,321	-2,720	-519	-1,113	-4,172	-8,299	-7,525	-6,062
Wet Water Years (28%)	-5,707	-7,294	-5,097	-2,789	-1,828	-1,168	-392	-904	-3,926	-9,387	-10,039	-7,620
Above Normal Water Years (14%)	-4,257	-6,603	-5,703	-4,302	-3,609	-3,057	-779	-2,233	-4,677	-9,872	-10,430	-5,962
Below Normal Water Years (18%)	-5,124	-6,893	-6,037	-4,312	-4,143	-3,567	-206	-644	-4,651	-9,911	-8,792	-6,852
Dry Water Years (24%)	-4,138	-5,437	-5,642	-4,347	-4,048	-3,864	-620	-1,091	-4,838	-8,186	-5,234	-5,507
Critical Water Years (16%)	-3,381	-3,151	-4,783	-3,644	-3,666	-2,472	-717	-1,059	-2,623	-3,373	-2,595	-3,370

Table 4H-2-6-2b. Old and Middle River Flow, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,107	-1,735	-2,787	-2,988	-1,539	-997	1,414	-1,437	-1,905	-2,855	-2,079	-3,514
20% Exceedance	-2,724	-2,637	-4,769	-3,505	-3,556	-1,186	-6	-1,761	-2,851	-4,331	-3,023	-4,396
30% Exceedance	-3,194	-4,065	-5,290	-3,645	-3,741	-1,347	-559	-2,024	-4,041	-6,735	-4,217	-4,607
40% Exceedance	-4,045	-5,089	-5,290	-4,033	-3,902	-1,579	-940	-2,463	-4,386	-7,999	-7,636	-5,177
50% Exceedance	-4,807	-7,587	-5,290	-4,262	-4,010	-1,918	-1,152	-2,705	-4,400	-8,866	-8,915	-5,875
60% Exceedance	-5,225	-8,307	-5,290	-4,343	-4,041	-2,881	-1,371	-2,872	-4,467	-9,914	-9,718	-6,563
70% Exceedance	-5,635	-8,602	-5,290	-4,516	-4,223	-3,492	-1,538	-3,096	-4,475	-10,323	-10,276	-7,208
80% Exceedance	-6,124	-9,101	-6,933	-4,535	-4,464	-3,718	-1,636	-3,359	-4,490	-10,900	-10,665	-8,843
90% Exceedance	-7,549	-9,329	-8,505	-5,000	-4,487	-4,115	-1,994	-3,568	-4,505	-11,177	-11,145	-9,613
Full Simulation Period Average ^a	-4,711	-6,109	-5,455	-3,573	-3,156	-1,895	-672	-2,399	-3,815	-8,008	-7,380	-6,223
Wet Water Years (28%)	-5,998	-7,282	-5,062	-2,640	-1,912	-1,148	184	-2,334	-3,911	-9,439	-10,313	-7,937
Above Normal Water Years (14%)	-4,131	-6,837	-5,858	-4,209	-3,451	-1,864	-57	-2,835	-4,344	-9,995	-10,465	-6,258
Below Normal Water Years (18%)	-5,055	-6,924	-6,088	-4,148	-3,825	-1,723	-1,236	-2,685	-4,292	-9,664	-8,578	-6,924
Dry Water Years (24%)	-4,205	-5,553	-5,640	-4,072	-3,639	-2,698	-1,227	-2,386	-4,173	-7,374	-4,751	-5,531
Critical Water Years (16%)	-3,340	-3,340	-4,800	-3,251	-3,599	-2,215	-1,240	-1,828	-2,112	-2,852	-2,144	-3,446

Table 4H-2-6-2c. Old and Middle River Flow, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-131	-382	-34	56	93	256	37	-1,672	352	966	625	-172
20% Exceedance	-131	-277	-617	140	370	1,800	38	-1,228	483	1,340	836	-198
30% Exceedance	-81	-526	0	0	280	2,008	-224	-1,001	151	12	680	-133
40% Exceedance	-151	237	0	483	242	1,824	-276	-1,328	147	285	-1,001	-225
50% Exceedance	-260	-545	0	254	150	1,498	-398	-1,393	295	168	-153	-272
60% Exceedance	39	-134	0	173	276	538	-315	-1,392	533	3	4	-135
70% Exceedance	135	12	80	0	111	-53	-312	-1,406	525	98	-3	278
80% Exceedance	115	-158	-313	160	0	269	-264	-1,362	510	-17	-8	-190
90% Exceedance	-351	29	399	0	-23	-122	13	-1,186	495	110	30	-672
Full Simulation Period Average ^a	-61	-93	-24	213	165	825	-152	-1,286	357	291	145	-161
Wet Water Years (28%)	-291	12	35	149	-84	19	576	-1,430	15	-52	-274	-317
Above Normal Water Years (14%)	125	-234	-155	93	158	1,193	722	-601	333	-122	-35	-296
Below Normal Water Years (18%)	69	-31	-51	164	318	1,845	-1,030	-2,041	359	248	214	-72
Dry Water Years (24%)	-67	-116	2	275	409	1,166	-607	-1,294	665	812	483	-24
Critical Water Years (16%)	40	-189	-17	393	67	257	-524	-768	511	521	451	-76

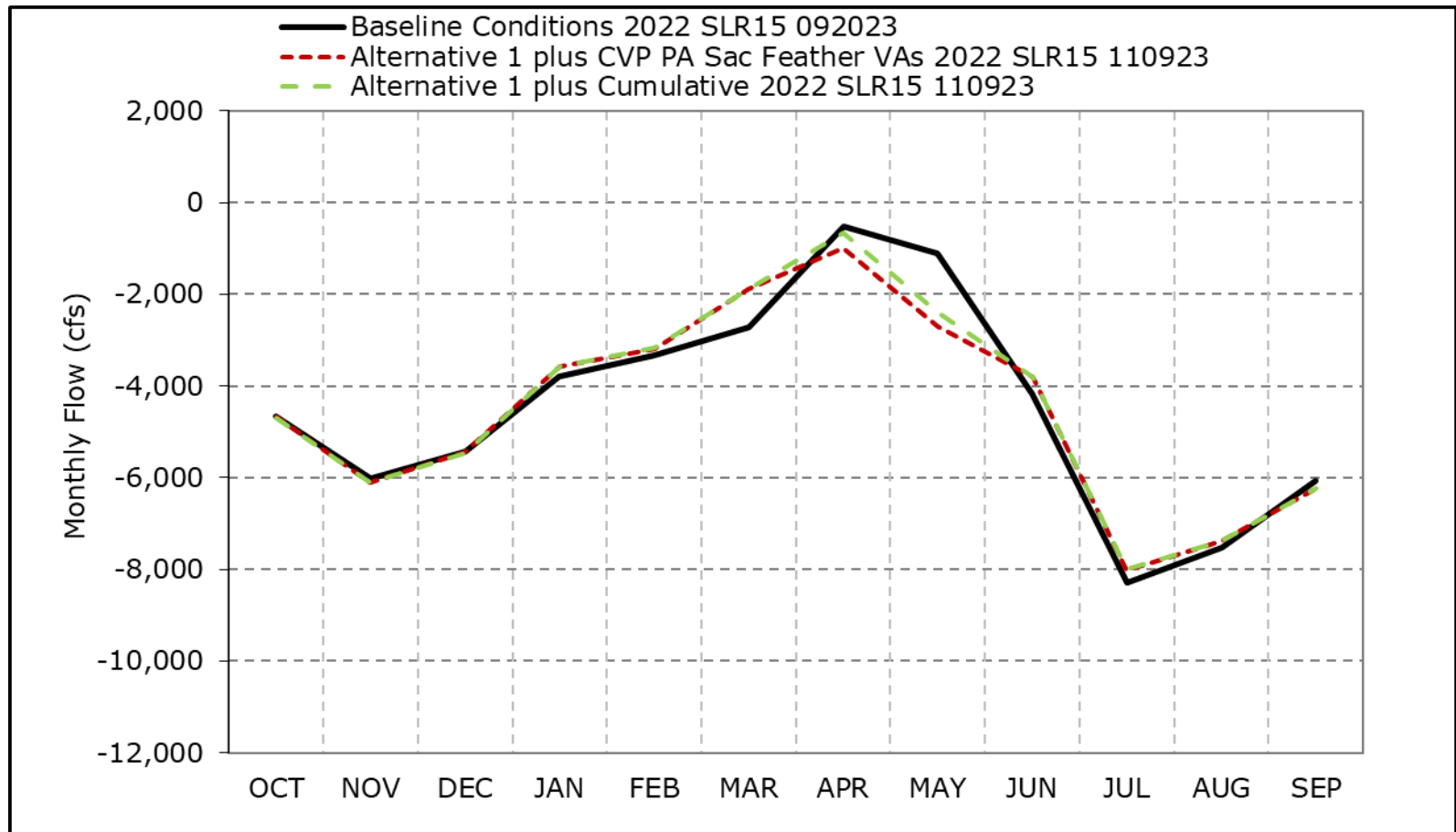
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-6a. Old and Middle River Flow, Long-Term Average Flow

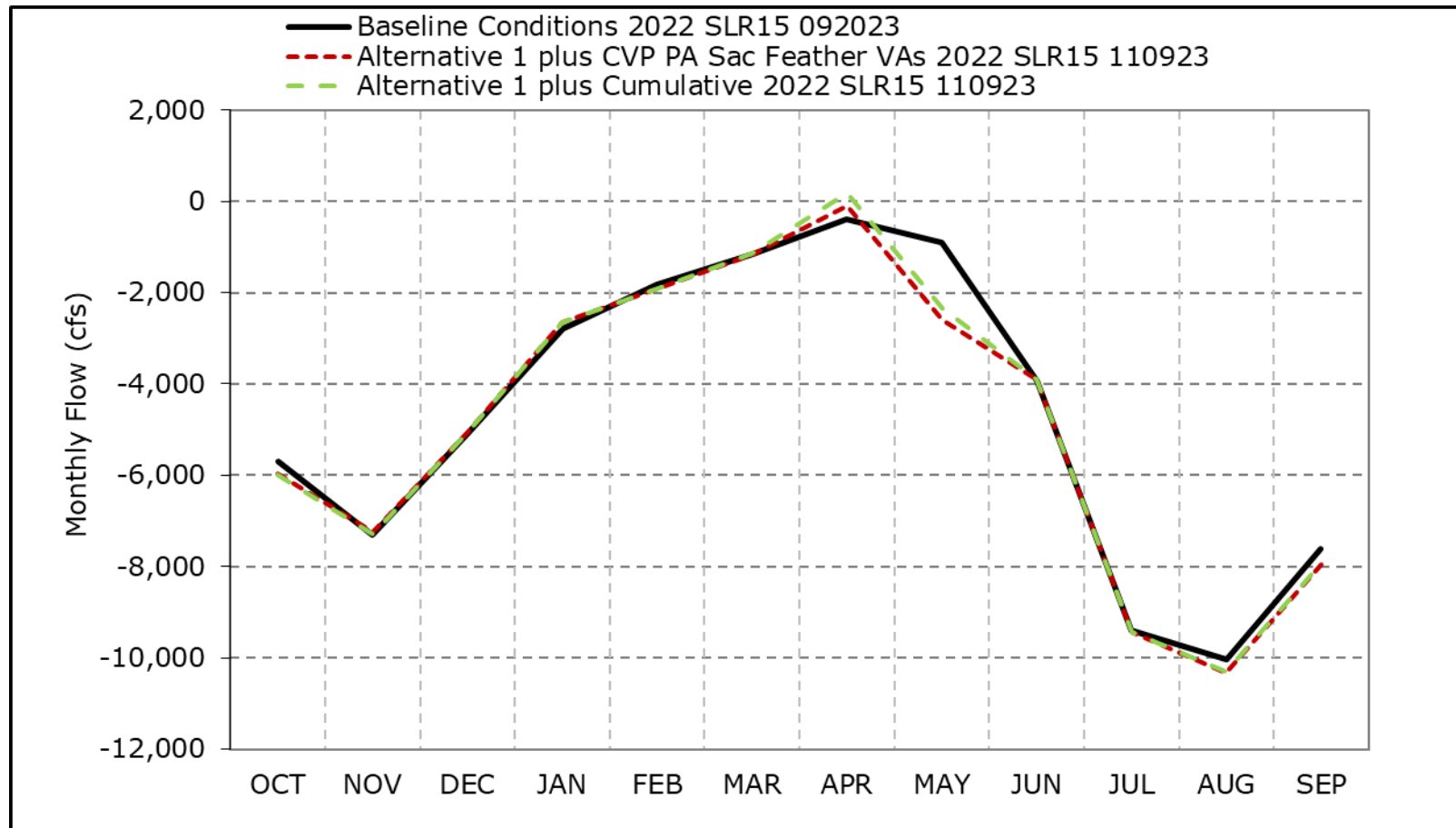


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6b. Old and Middle River Flow, Wet Year Average Flow

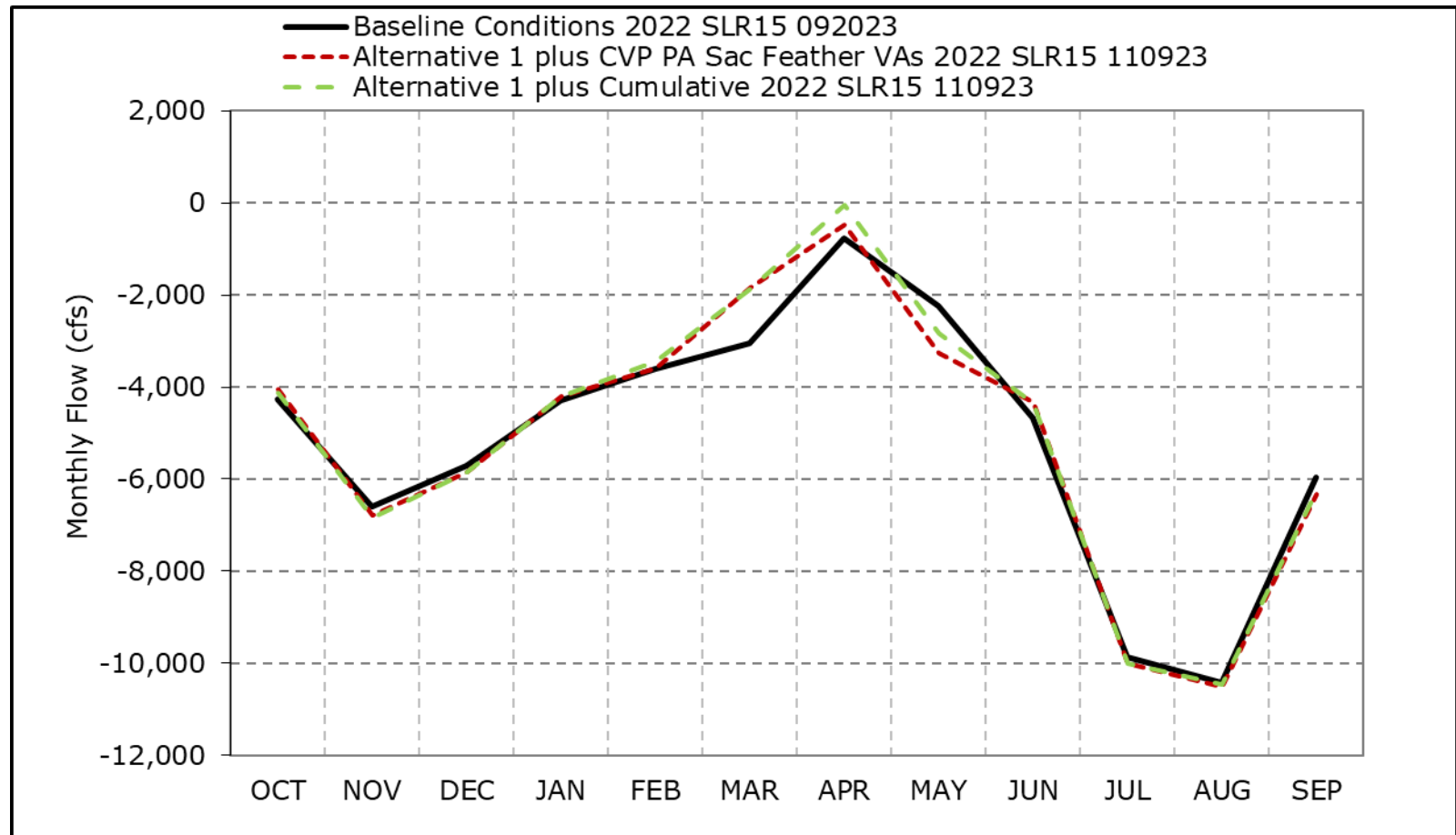


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6c. Old and Middle River Flow, Above Normal Year Average Flow

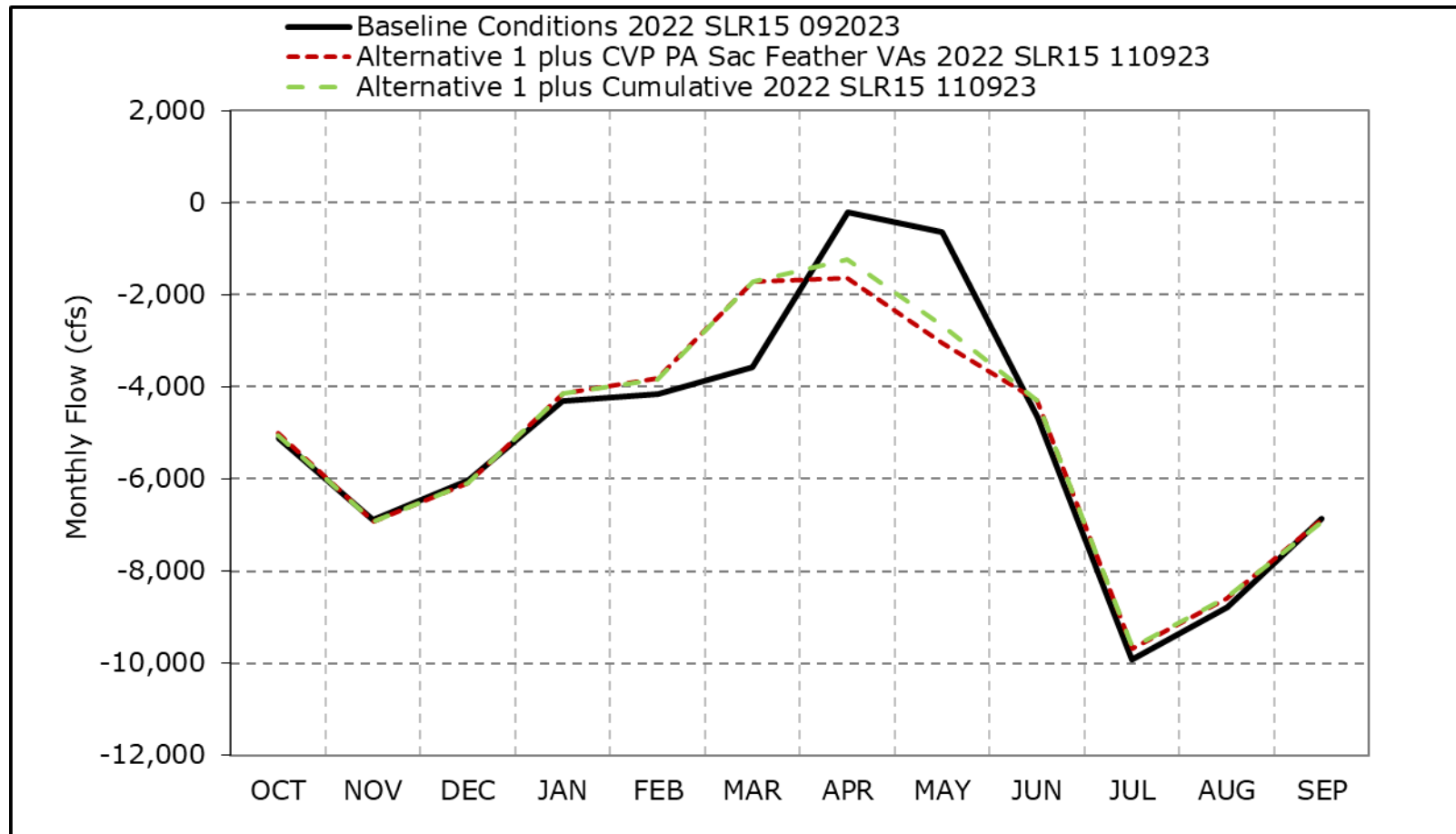


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6d. Old and Middle River Flow, Below Normal Year Average Flow

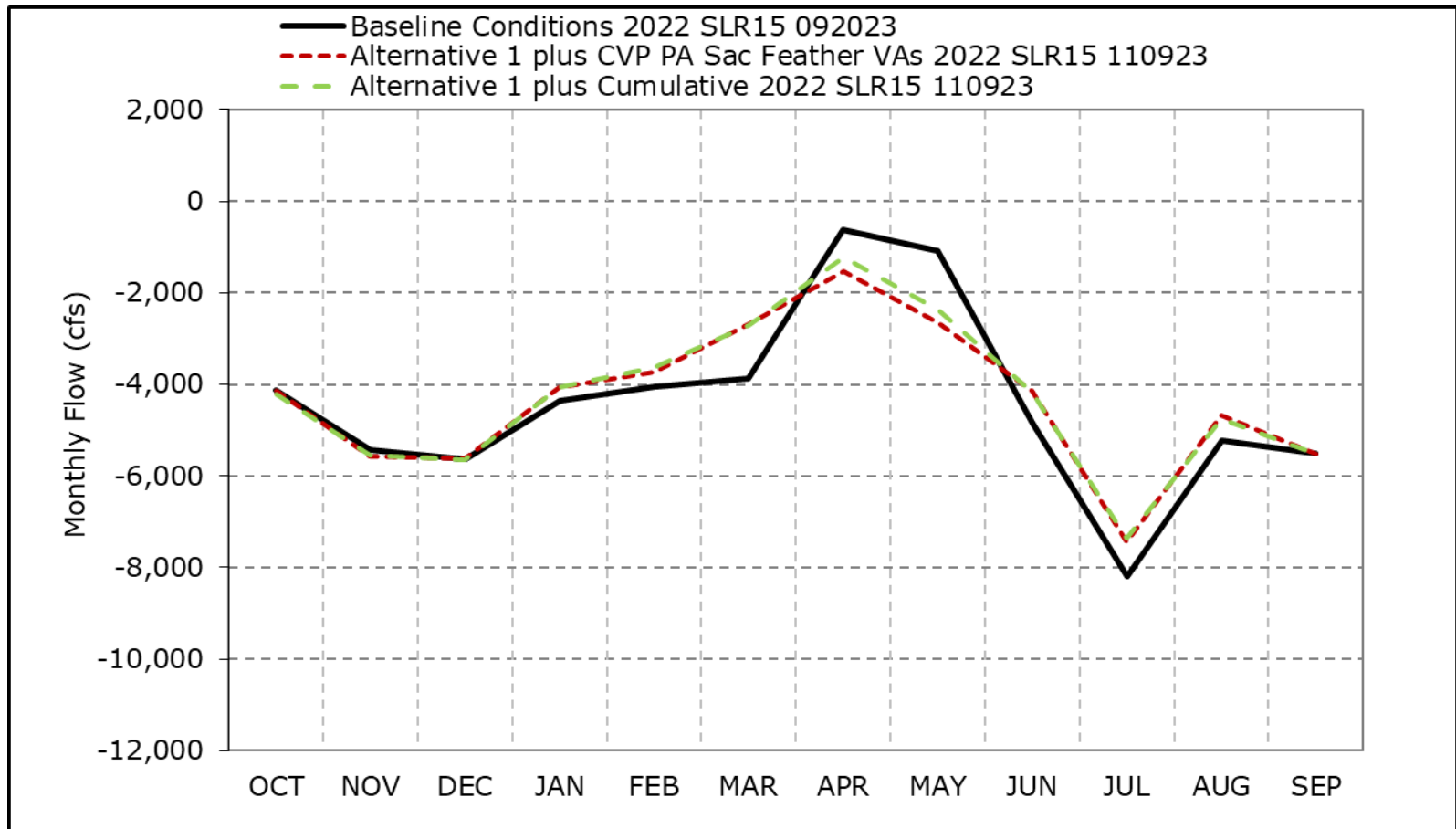


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6e. Old and Middle River Flow, Dry Year Average Flow

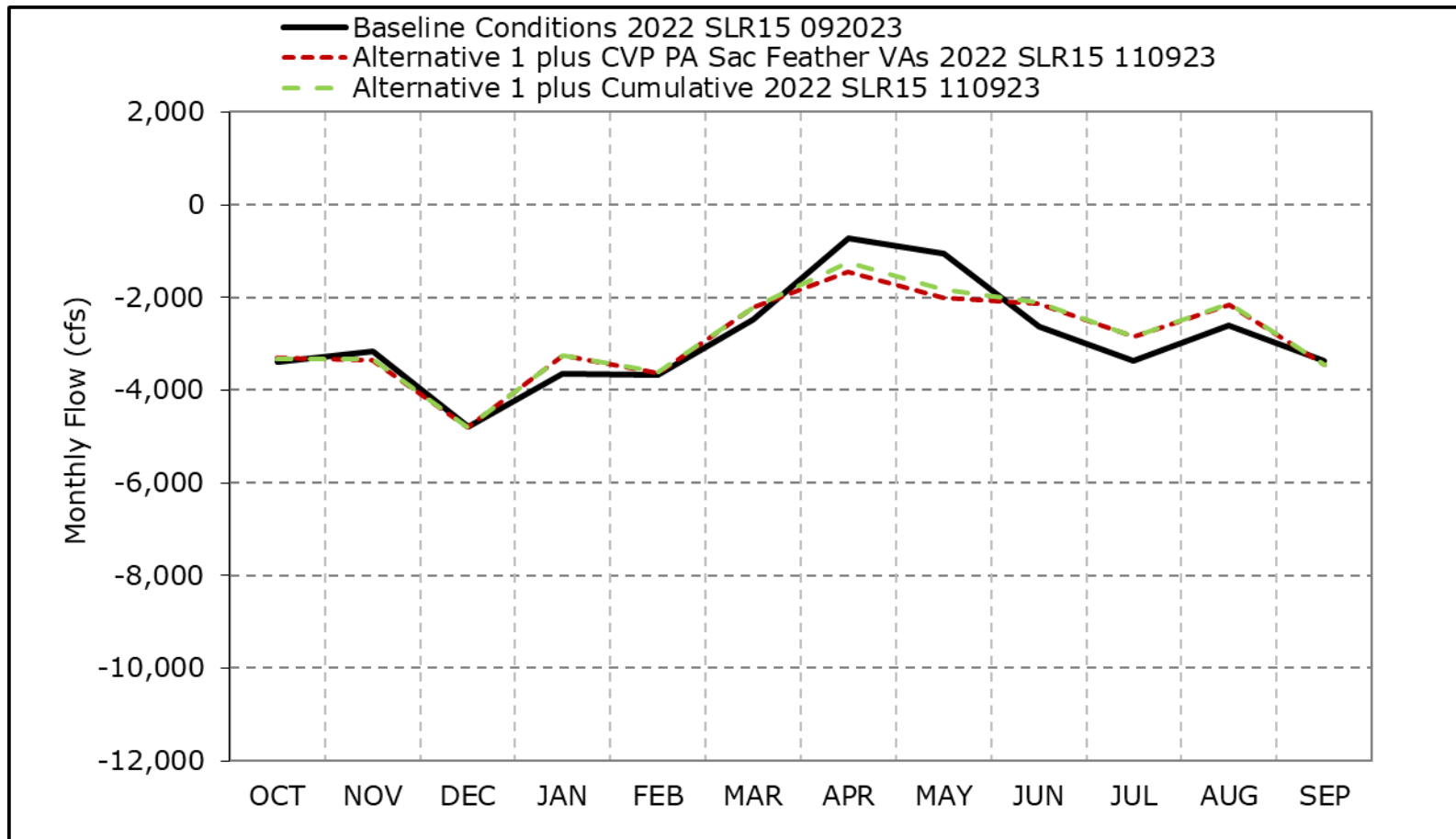


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6f. Old and Middle River Flow, Critical Year Average Flow

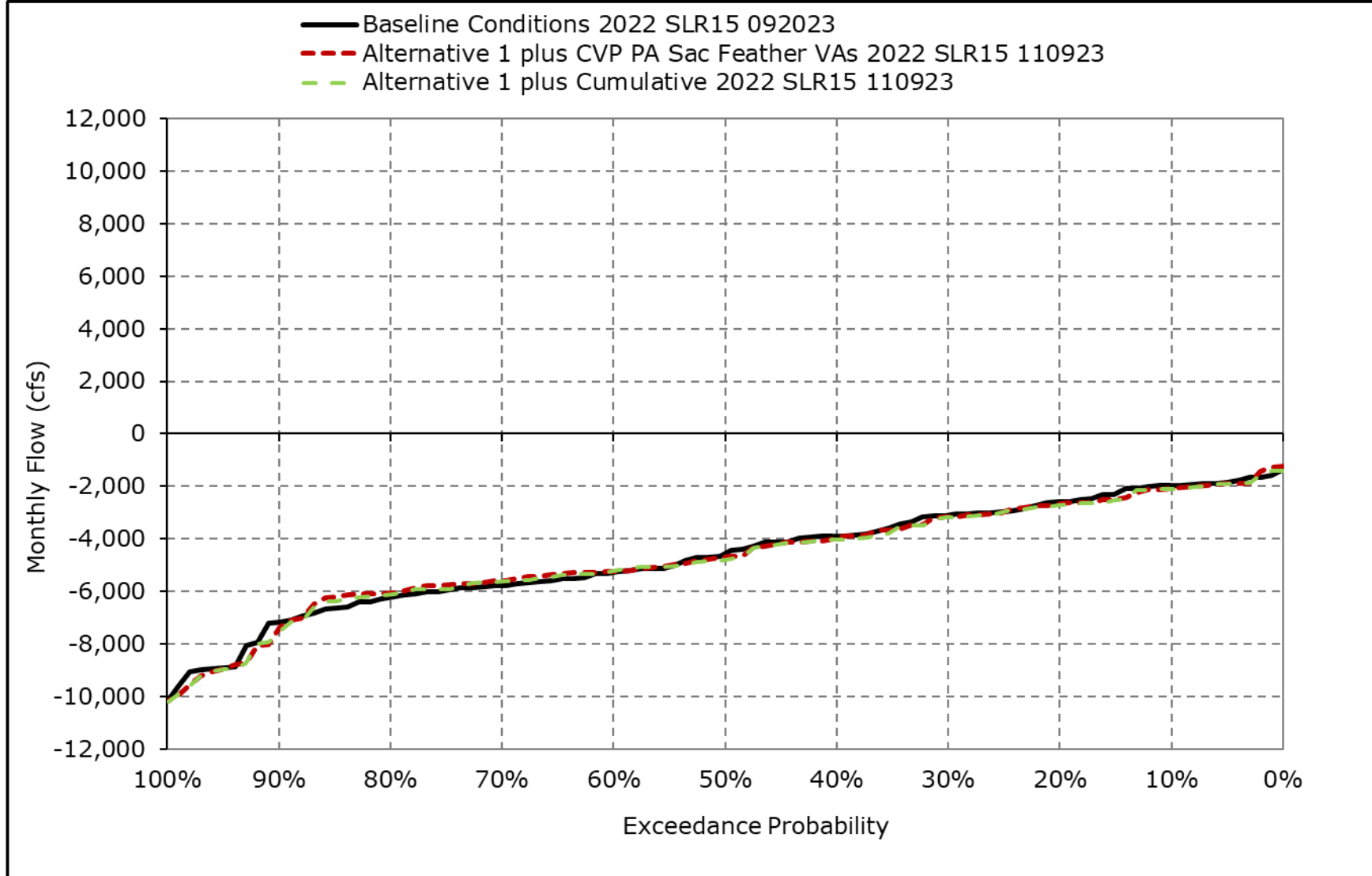


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

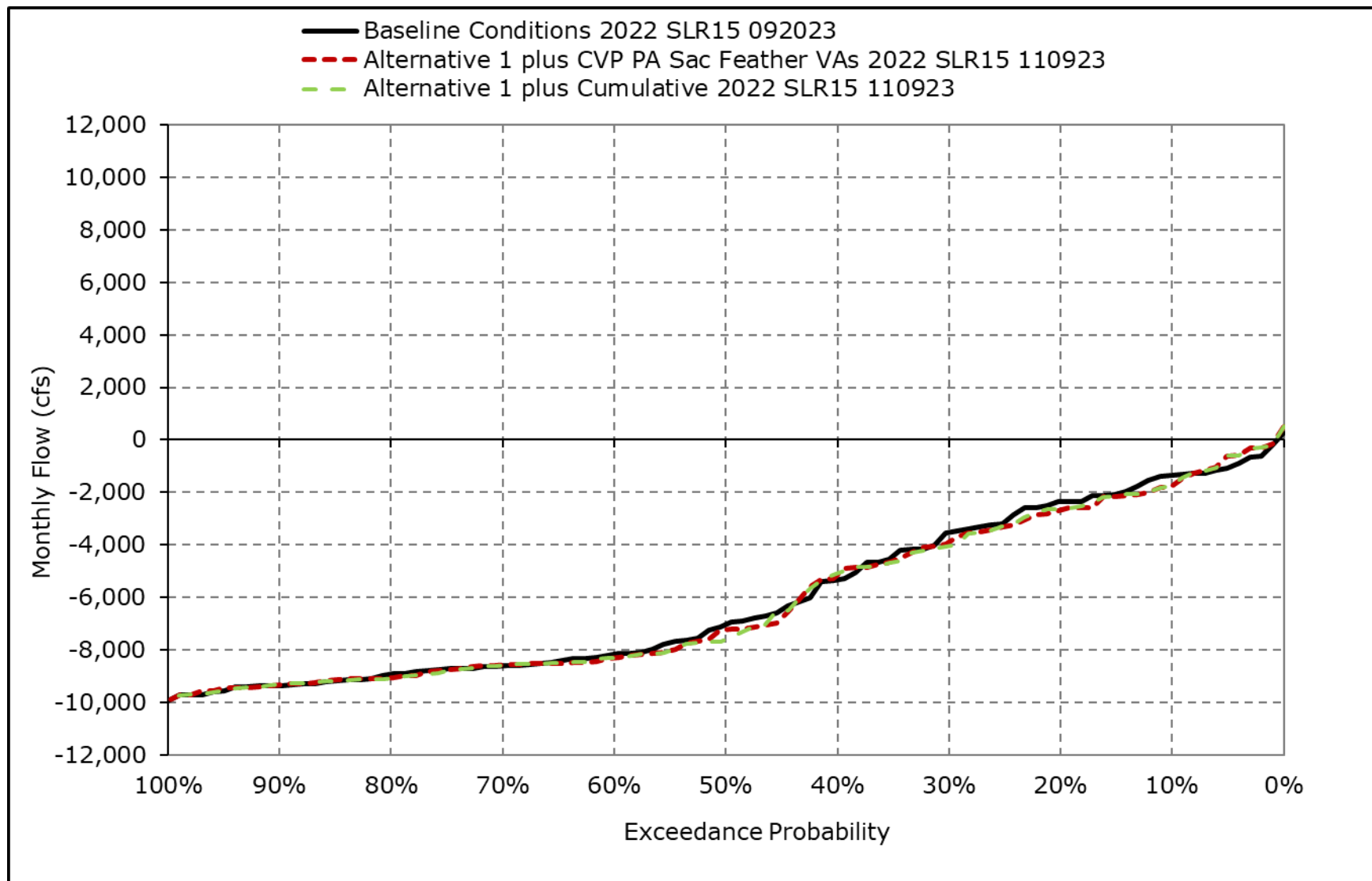
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6g. Old and Middle River Flow, October



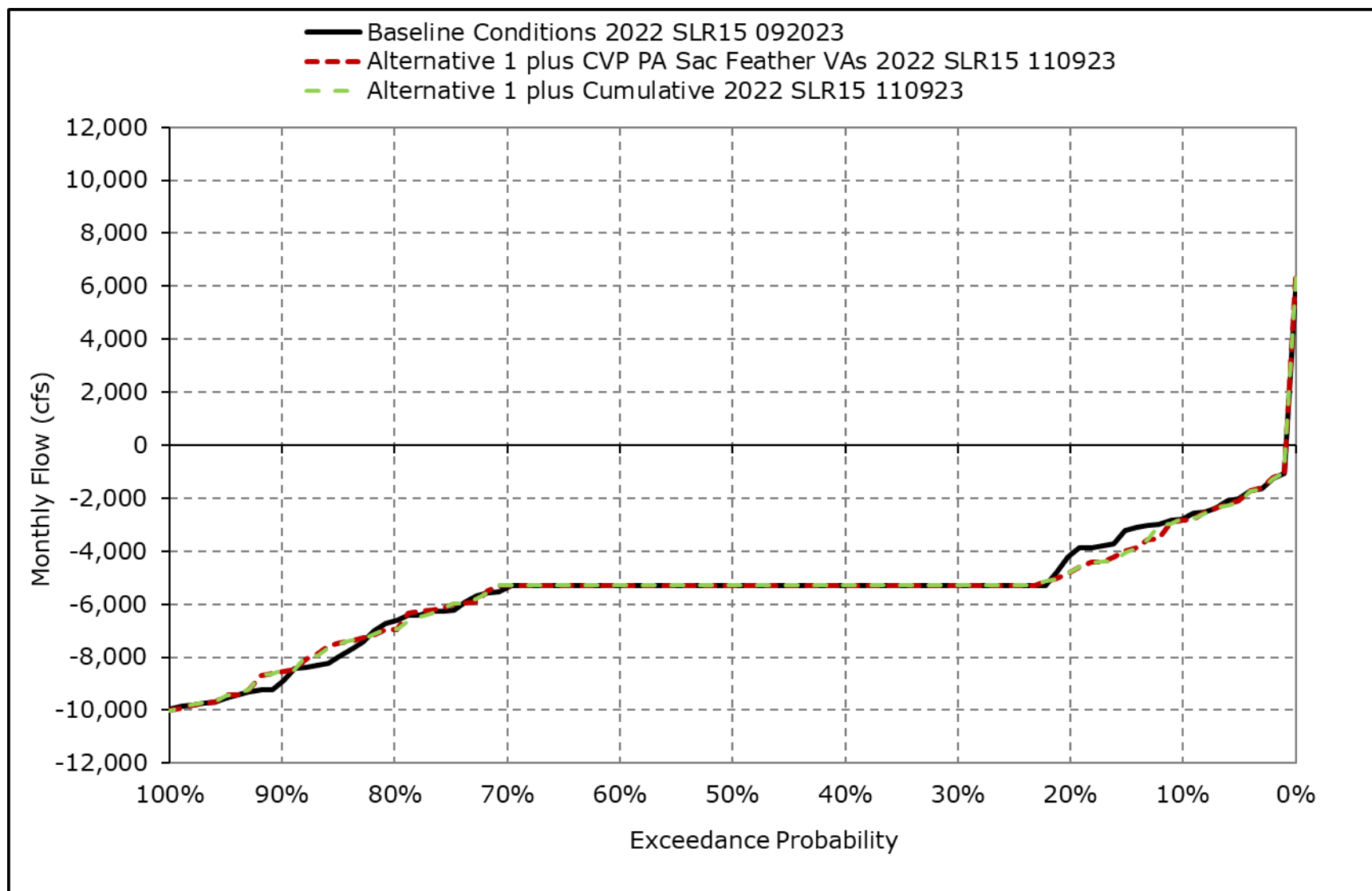
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6h. Old and Middle River Flow, November



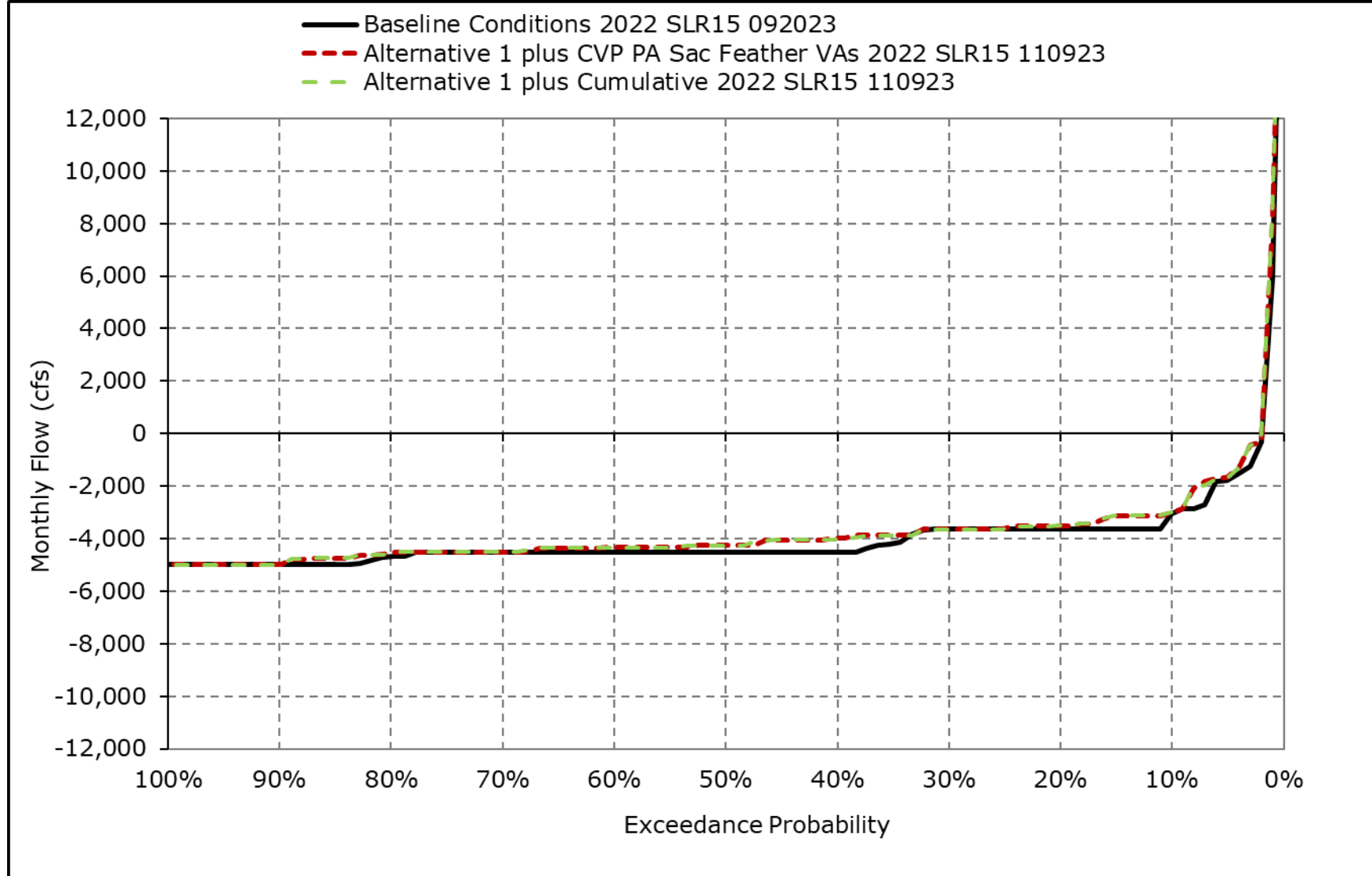
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6i. Old and Middle River Flow, December



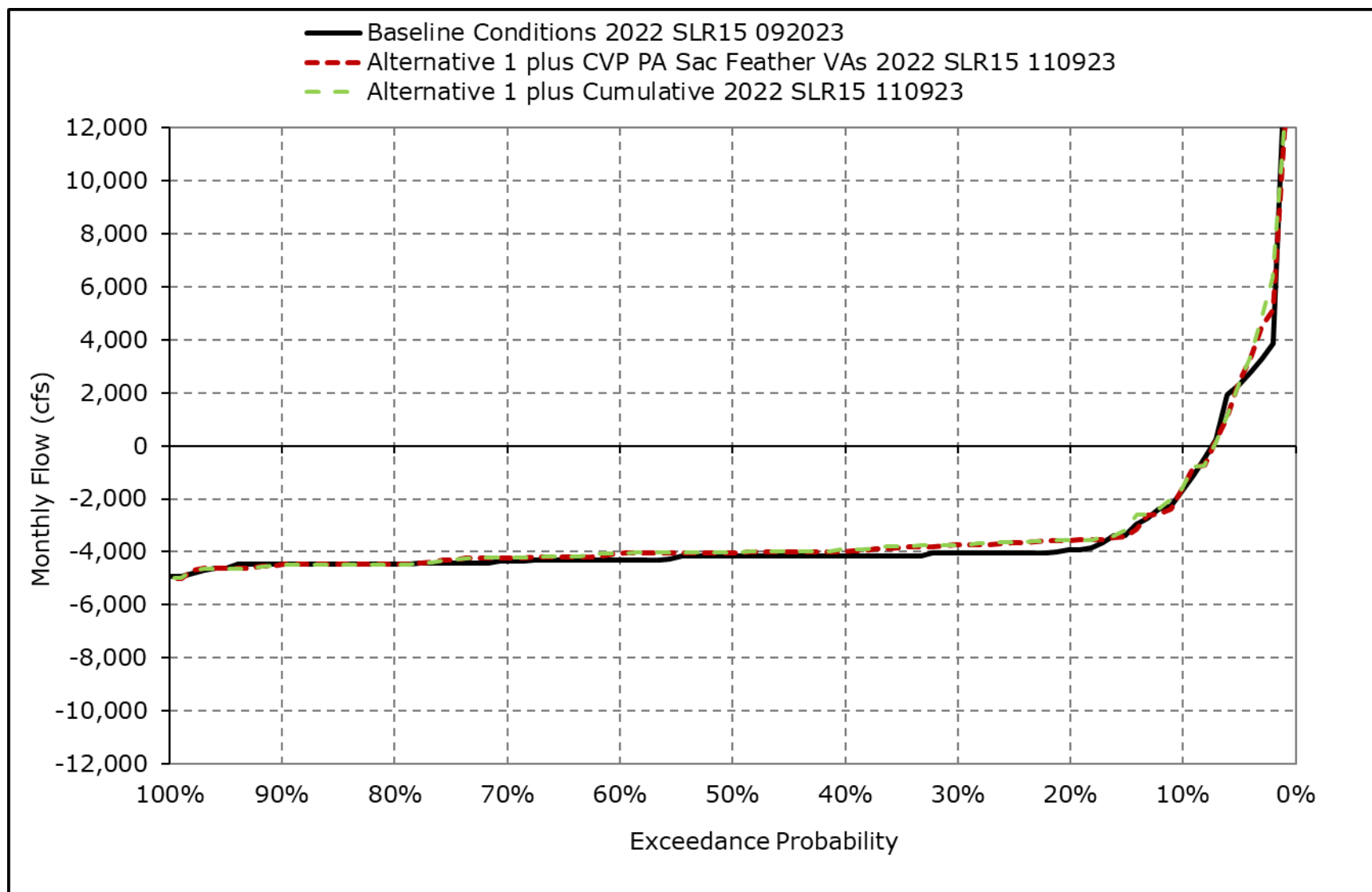
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6j. Old and Middle River Flow, January



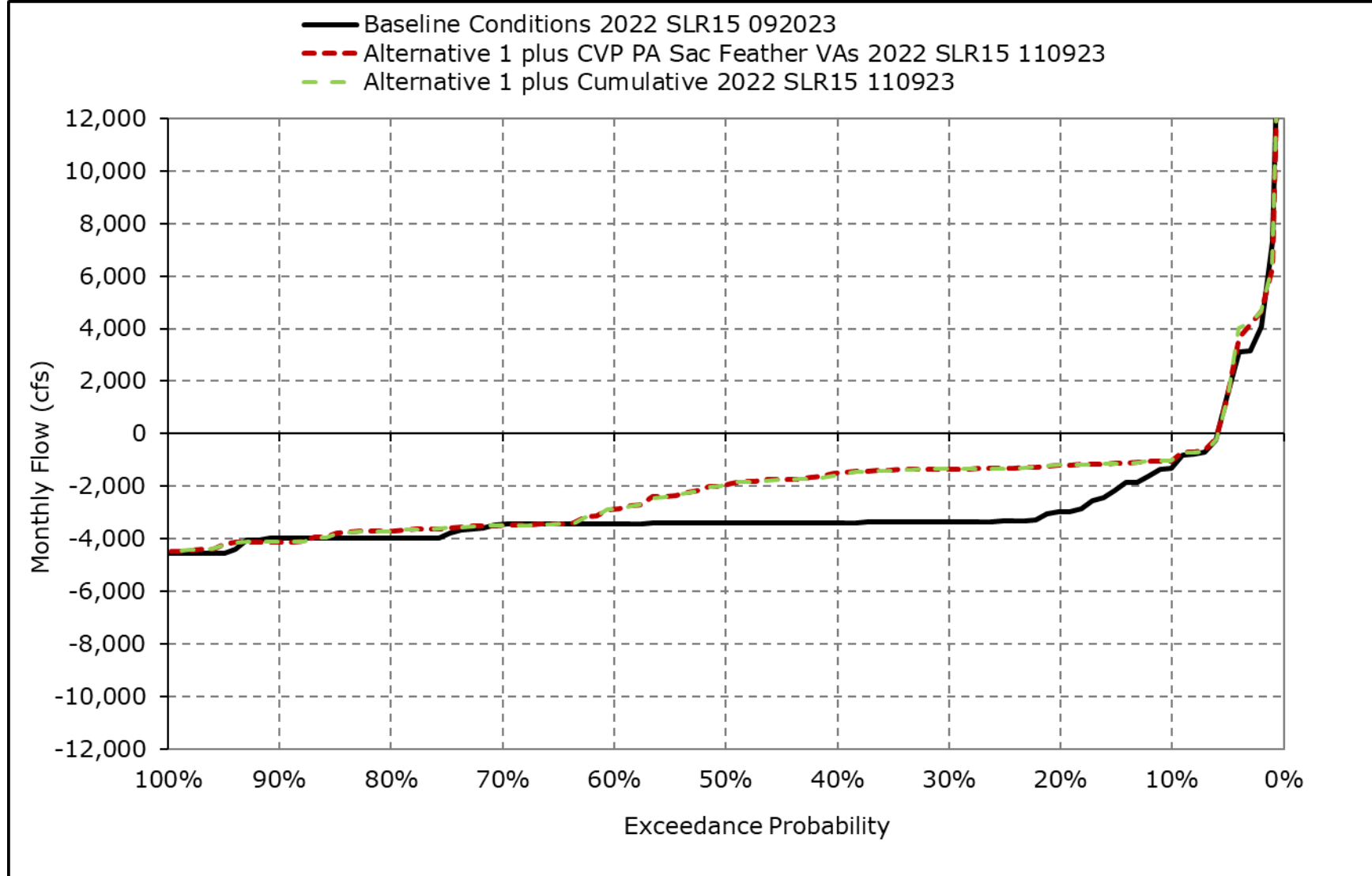
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6k. Old and Middle River Flow, February



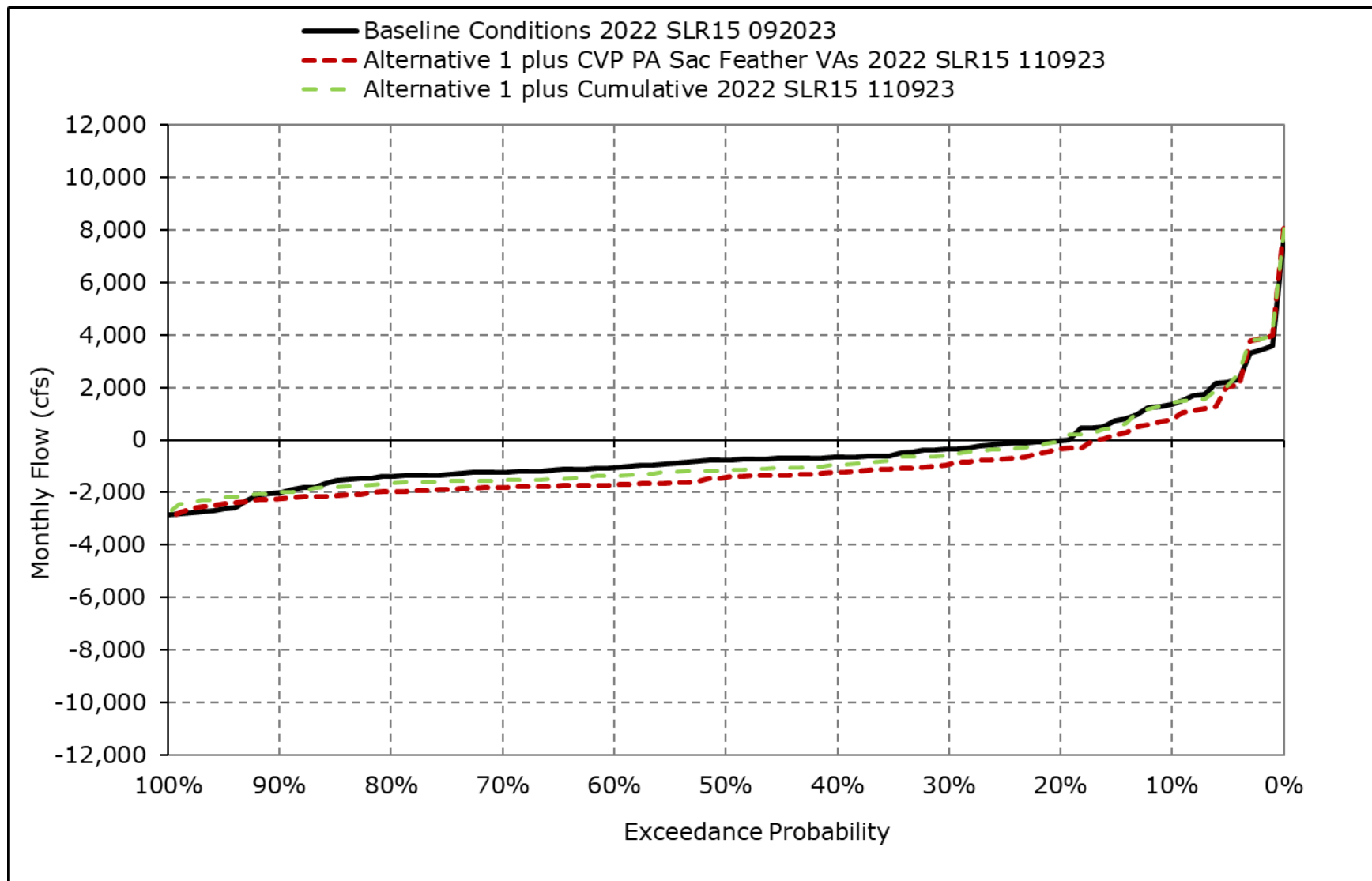
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6I. Old and Middle River Flow, March



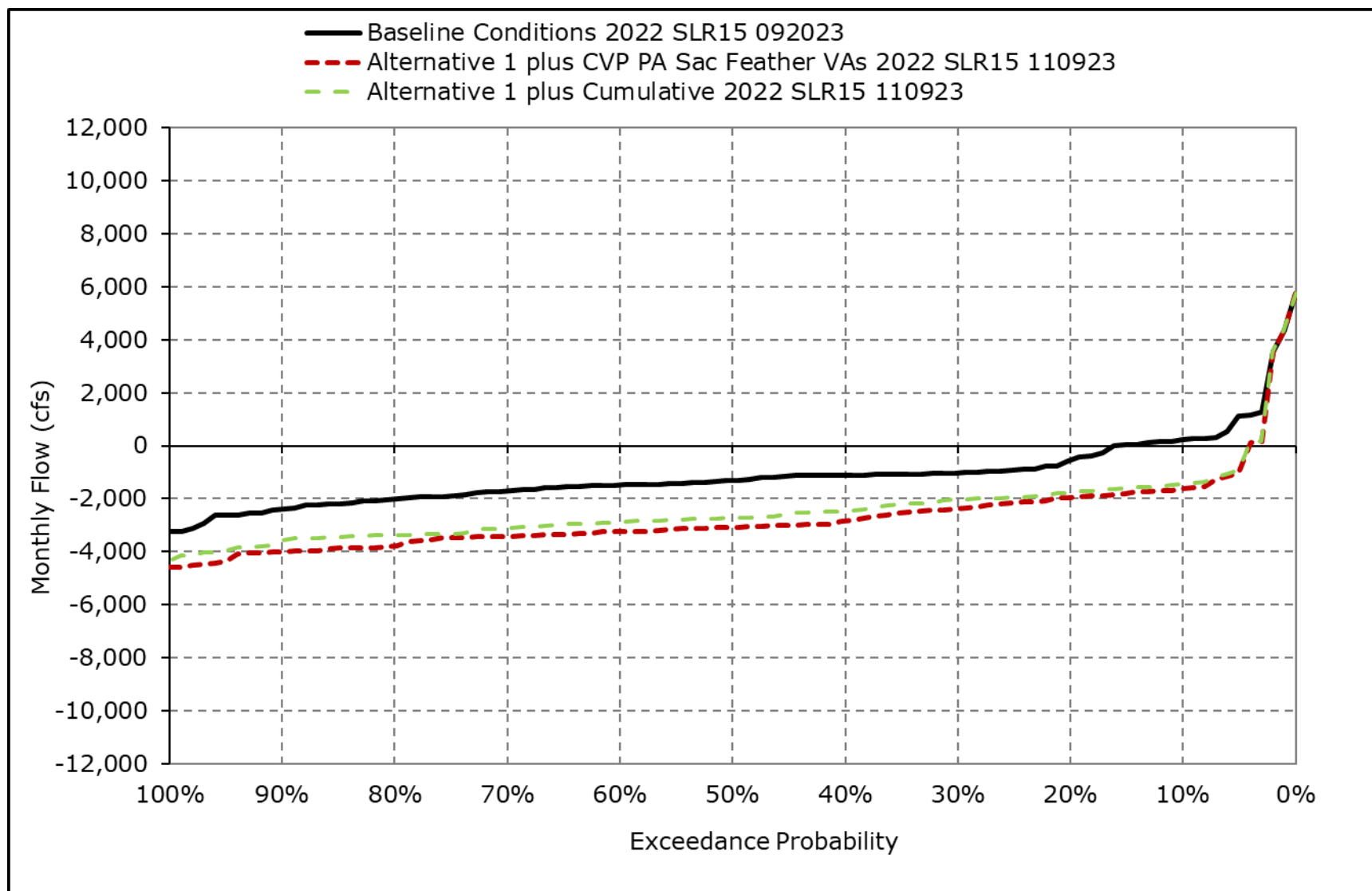
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6m. Old and Middle River Flow, April



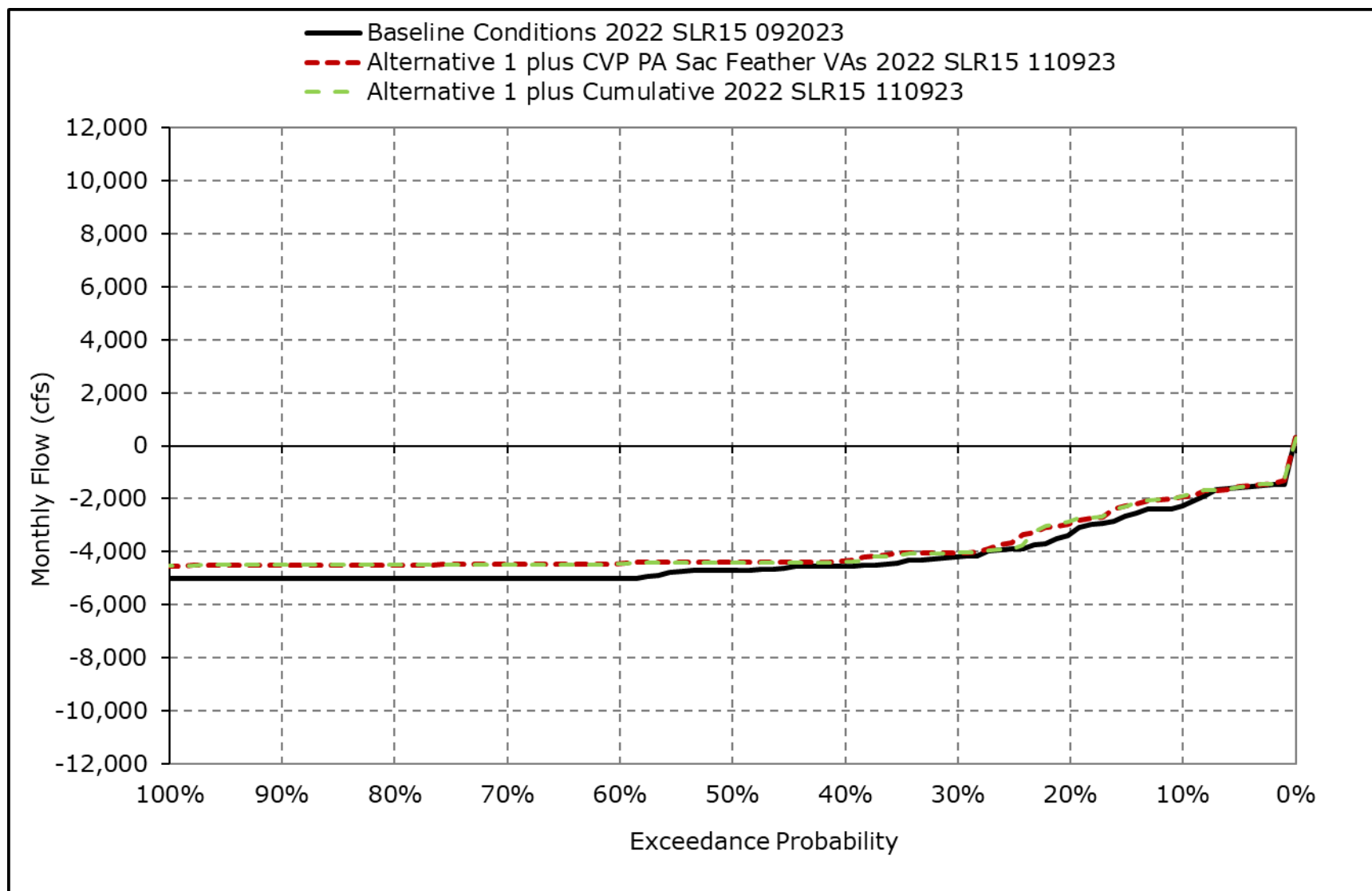
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6n. Old and Middle River Flow, May



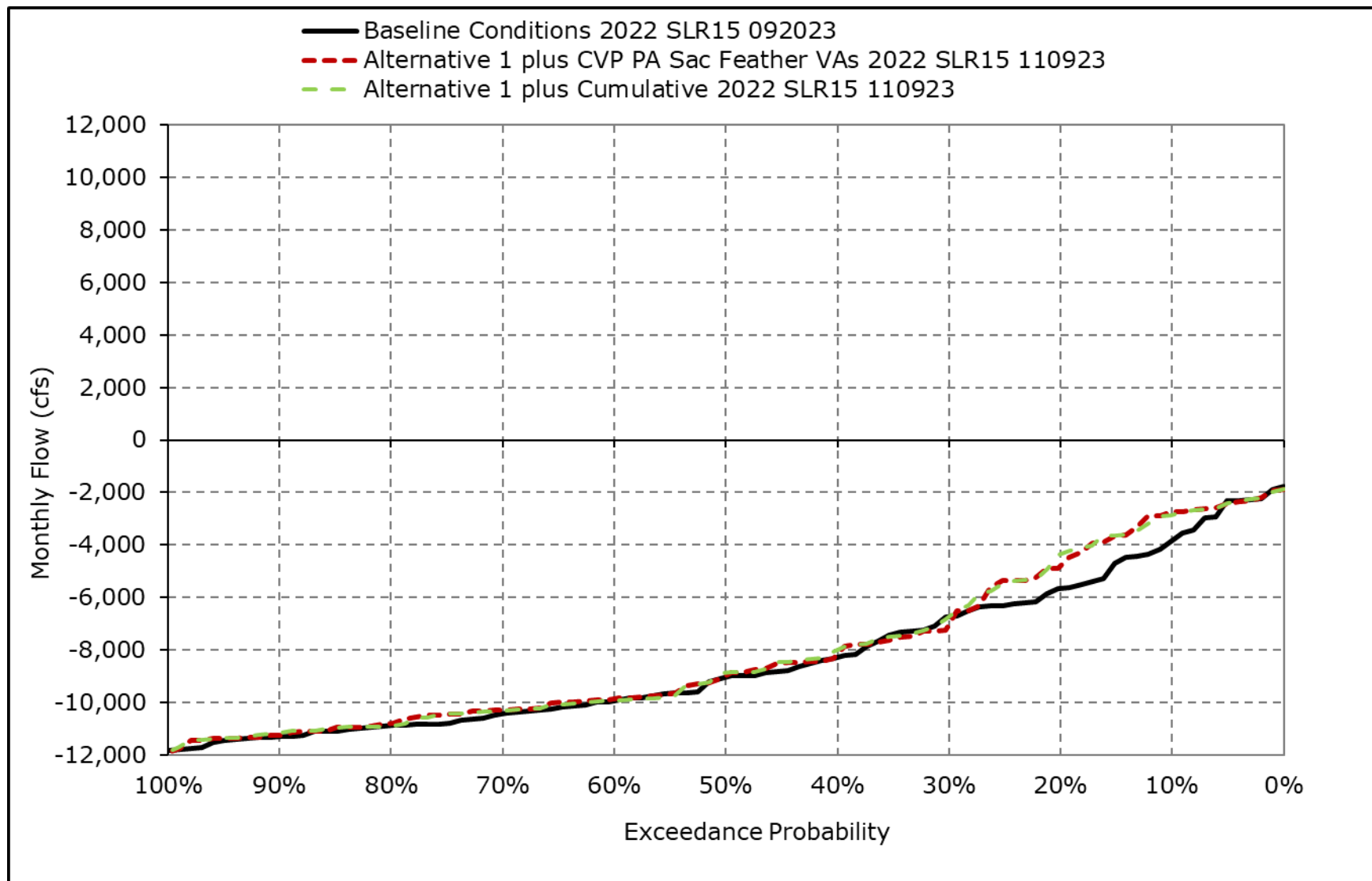
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6o. Old and Middle River Flow, June



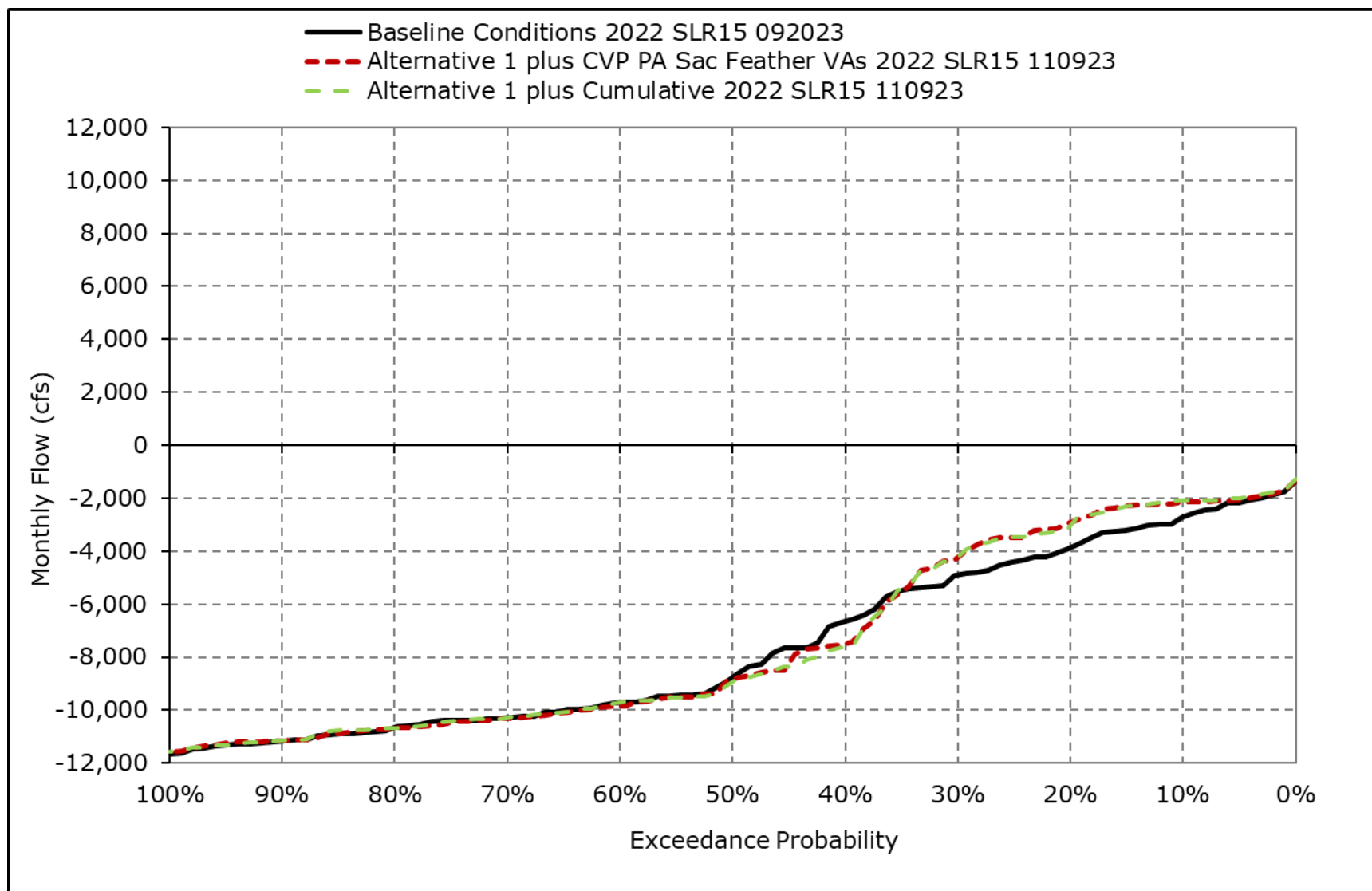
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6p. Old and Middle River Flow, July



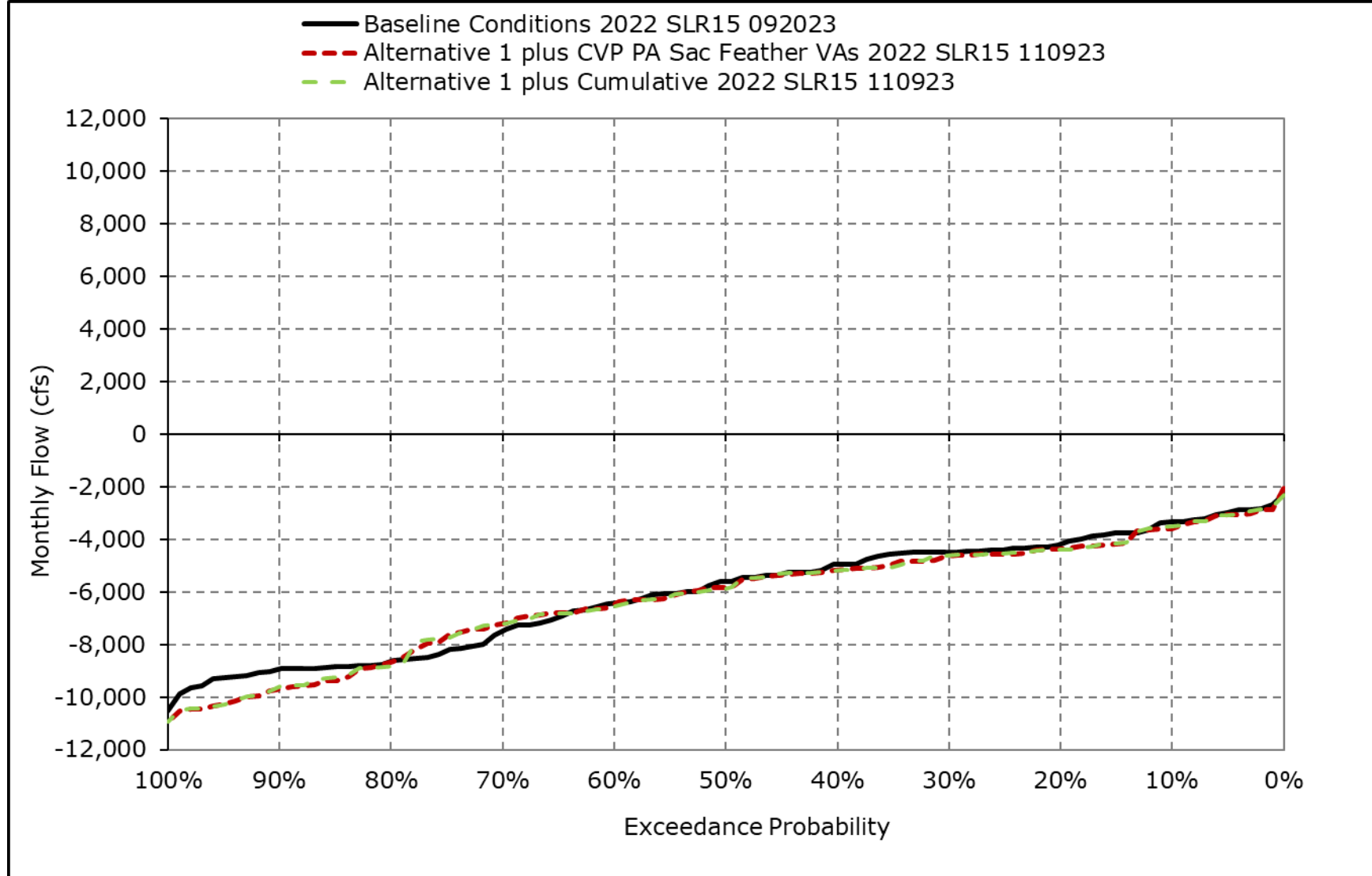
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6q. Old and Middle River Flow, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-6r. Old and Middle River Flow, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-7-1a. Qwest, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,724	1,530	9,661	19,421	23,508	20,004	15,499	13,347	6,317	1,746	1,145	3,019
20% Exceedance	1,116	138	4,804	11,745	15,331	13,824	12,706	7,240	3,631	586	411	1,239
30% Exceedance	766	-314	1,092	5,829	11,526	8,393	9,818	5,214	2,343	-41	-168	679
40% Exceedance	634	-782	114	3,550	7,414	6,347	7,468	3,968	1,644	-522	-906	263
50% Exceedance	403	-1,692	-665	2,462	5,162	4,220	5,999	3,341	1,215	-1,026	-1,863	1
60% Exceedance	140	-2,266	-1,230	990	2,678	2,599	4,415	2,825	780	-1,416	-2,355	-220
70% Exceedance	-110	-3,198	-2,411	-360	1,622	2,119	3,222	2,180	529	-1,892	-2,731	-584
80% Exceedance	-377	-3,624	-3,993	-1,367	750	1,650	2,672	1,924	348	-2,699	-3,317	-800
90% Exceedance	-1,194	-3,964	-5,557	-2,128	171	542	2,274	1,698	255	-3,436	-3,870	-1,392
Full Simulation Period Average ^a	331	-1,180	1,479	6,079	9,710	8,231	8,227	5,489	2,371	-978	-1,488	318
Wet Water Years (28%)	-2	-821	7,677	16,806	21,727	18,534	15,808	11,012	5,246	-273	-2,370	1,267
Above Normal Water Years (14%)	698	-1,410	1,353	7,690	12,274	10,053	8,034	3,916	2,047	-1,164	-3,000	1,971
Below Normal Water Years (18%)	318	-1,989	-831	2,481	4,960	4,701	6,703	4,790	1,169	-2,198	-2,660	-1,323
Dry Water Years (24%)	580	-1,596	-2,077	-301	3,435	2,139	4,374	2,943	520	-2,100	-335	-676
Critical Water Years (16%)	234	-74	-1,327	-487	1,190	1,714	2,625	1,809	1,755	1,005	964	548

Table 4H-2-7-1b. Qwest, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,777	1,891	9,877	19,155	22,883	20,528	17,287	9,900	6,363	1,770	1,699	2,639
20% Exceedance	1,059	210	4,711	11,780	15,969	14,084	12,155	5,187	3,382	1,161	1,162	1,373
30% Exceedance	933	-325	1,126	6,097	12,122	10,430	9,210	3,014	2,636	319	551	779
40% Exceedance	651	-834	71	4,047	7,490	6,890	7,031	2,080	2,107	-355	-1,079	28
50% Exceedance	360	-1,730	-797	2,641	5,658	5,331	5,432	1,582	1,823	-1,160	-2,086	-228
60% Exceedance	154	-2,428	-1,605	1,360	3,285	4,466	3,884	1,197	1,301	-1,547	-2,643	-508
70% Exceedance	-64	-3,235	-2,443	-1	1,995	3,361	2,891	934	1,164	-1,926	-2,878	-786
80% Exceedance	-353	-3,543	-4,226	-942	1,082	2,360	1,983	777	920	-2,771	-3,343	-965
90% Exceedance	-1,160	-3,947	-5,056	-1,907	82	1,628	1,499	560	780	-3,248	-3,836	-1,416
Full Simulation Period Average ^a	300	-1,181	1,493	6,328	9,905	9,148	7,868	3,852	2,741	-899	-1,369	150
Wet Water Years (28%)	-242	-798	7,794	17,007	21,626	18,491	16,156	9,166	5,329	-367	-2,639	828
Above Normal Water Years (14%)	846	-1,491	1,208	7,791	12,298	11,365	8,671	2,969	2,302	-1,797	-3,159	1,764
Below Normal Water Years (18%)	400	-1,982	-867	2,680	5,433	6,784	5,478	2,286	1,620	-2,267	-2,542	-1,342
Dry Water Years (24%)	550	-1,603	-2,037	-10	3,883	3,474	3,544	1,382	1,207	-1,514	62	-709
Critical Water Years (16%)	281	-45	-1,333	-31	1,367	2,028	1,834	794	2,159	1,417	1,593	515

Table 4H-2-7-1c. Qwest, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	53	361	215	-266	-624	524	1,788	-3,447	45	24	554	-381
20% Exceedance	-56	72	-93	35	638	261	-551	-2,054	-249	575	751	134
30% Exceedance	166	-12	34	268	595	2,037	-608	-2,200	292	360	719	100
40% Exceedance	17	-51	-43	497	77	543	-437	-1,887	463	167	-173	-236
50% Exceedance	-43	-39	-132	179	497	1,112	-567	-1,758	608	-134	-223	-228
60% Exceedance	14	-161	-375	370	607	1,867	-530	-1,628	521	-131	-288	-288
70% Exceedance	46	-37	-32	359	373	1,242	-331	-1,246	635	-34	-147	-202
80% Exceedance	24	81	-233	425	333	710	-689	-1,147	572	-72	-25	-165
90% Exceedance	35	18	501	221	-89	1,086	-776	-1,138	525	188	34	-24
Full Simulation Period Average ^a	-32	-1	15	249	196	917	-360	-1,637	370	79	120	-169
Wet Water Years (28%)	-241	23	118	202	-102	-44	347	-1,846	83	-94	-269	-439
Above Normal Water Years (14%)	148	-81	-144	101	24	1,312	637	-947	255	-632	-158	-207
Below Normal Water Years (18%)	82	7	-36	199	472	2,084	-1,225	-2,504	451	-69	118	-19
Dry Water Years (24%)	-30	-8	40	290	448	1,335	-830	-1,560	687	586	397	-33
Critical Water Years (16%)	47	29	-6	456	177	314	-791	-1,016	404	412	630	-33

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-7-2a. Qwest, Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,724	1,530	9,661	19,421	23,508	20,004	15,499	13,347	6,317	1,746	1,145	3,019
20% Exceedance	1,116	138	4,804	11,745	15,331	13,824	12,706	7,240	3,631	586	411	1,239
30% Exceedance	766	-314	1,092	5,829	11,526	8,393	9,818	5,214	2,343	-41	-168	679
40% Exceedance	634	-782	114	3,550	7,414	6,347	7,468	3,968	1,644	-522	-906	263
50% Exceedance	403	-1,692	-665	2,462	5,162	4,220	5,999	3,341	1,215	-1,026	-1,863	1
60% Exceedance	140	-2,266	-1,230	990	2,678	2,599	4,415	2,825	780	-1,416	-2,355	-220
70% Exceedance	-110	-3,198	-2,411	-360	1,622	2,119	3,222	2,180	529	-1,892	-2,731	-584
80% Exceedance	-377	-3,624	-3,993	-1,367	750	1,650	2,672	1,924	348	-2,699	-3,317	-800
90% Exceedance	-1,194	-3,964	-5,557	-2,128	171	542	2,274	1,698	255	-3,436	-3,870	-1,392
Full Simulation Period Average ^a	331	-1,180	1,479	6,079	9,710	8,231	8,227	5,489	2,371	-978	-1,488	318
Wet Water Years (28%)	-2	-821	7,677	16,806	21,727	18,534	15,808	11,012	5,246	-273	-2,370	1,267
Above Normal Water Years (14%)	698	-1,410	1,353	7,690	12,274	10,053	8,034	3,916	2,047	-1,164	-3,000	1,971
Below Normal Water Years (18%)	318	-1,989	-831	2,481	4,960	4,701	6,703	4,790	1,169	-2,198	-2,660	-1,323
Dry Water Years (24%)	580	-1,596	-2,077	-301	3,435	2,139	4,374	2,943	520	-2,100	-335	-676
Critical Water Years (16%)	234	-74	-1,327	-487	1,190	1,714	2,625	1,809	1,755	1,005	964	548

Table 4H-2-7-2b. Qwest, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,751	1,785	9,622	19,167	22,866	20,511	18,345	10,205	6,360	1,800	1,710	2,580
20% Exceedance	1,087	154	4,635	11,778	15,789	14,109	13,343	5,738	3,248	1,271	1,160	1,375
30% Exceedance	948	-394	1,114	6,113	12,116	10,449	10,472	4,337	2,620	535	539	804
40% Exceedance	660	-904	48	4,059	7,452	6,900	8,390	3,491	2,054	-198	-1,186	12
50% Exceedance	382	-1,843	-779	2,631	5,653	5,432	6,548	2,734	1,733	-1,098	-2,114	-226
60% Exceedance	175	-2,557	-1,557	1,373	3,295	4,514	5,254	2,263	1,276	-1,447	-2,642	-501
70% Exceedance	-92	-3,273	-2,429	152	1,995	3,494	3,921	1,756	1,108	-1,878	-2,837	-796
80% Exceedance	-332	-3,664	-4,237	-973	1,155	2,480	2,566	1,426	919	-2,541	-3,236	-996
90% Exceedance	-1,087	-3,970	-5,068	-1,913	229	1,641	2,001	1,143	764	-3,147	-3,963	-1,527
Full Simulation Period Average ^a	334	-1,219	1,469	6,314	9,917	9,168	8,793	4,710	2,713	-796	-1,372	145
Wet Water Years (28%)	-201	-841	7,730	16,982	21,575	18,516	16,980	9,936	5,317	-359	-2,636	827
Above Normal Water Years (14%)	887	-1,566	1,201	7,762	12,391	11,347	9,865	4,067	2,283	-1,319	-3,121	1,810
Below Normal Water Years (18%)	438	-2,017	-888	2,675	5,388	6,801	6,609	3,310	1,568	-2,178	-2,541	-1,379
Dry Water Years (24%)	590	-1,637	-2,049	-14	3,944	3,518	4,503	2,263	1,150	-1,440	4	-722
Critical Water Years (16%)	288	-51	-1,327	-33	1,405	2,039	2,418	1,373	2,163	1,421	1,620	511

Table 4H-2-7-2c. Qwest, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	27	255	-39	-254	-642	507	2,846	-3,143	43	53	565	-440
20% Exceedance	-28	16	-169	33	458	285	637	-1,503	-383	685	749	136
30% Exceedance	181	-80	22	283	590	2,056	654	-877	277	576	707	125
40% Exceedance	26	-122	-65	508	39	553	922	-476	411	325	-280	-251
50% Exceedance	-21	-152	-114	169	491	1,213	549	-606	519	-72	-252	-227
60% Exceedance	35	-291	-327	384	617	1,915	839	-562	496	-31	-287	-281
70% Exceedance	18	-74	-17	512	373	1,375	698	-425	579	14	-106	-212
80% Exceedance	45	-40	-244	394	405	829	-106	-498	571	158	81	-196
90% Exceedance	108	-5	489	215	58	1,099	-273	-555	509	289	-93	-134
Full Simulation Period Average ^a	3	-39	-10	236	208	937	566	-779	341	183	116	-173
Wet Water Years (28%)	-199	-20	53	176	-152	-19	1,172	-1,076	71	-86	-266	-440
Above Normal Water Years (14%)	188	-156	-152	72	117	1,294	1,831	151	236	-155	-121	-161
Below Normal Water Years (18%)	120	-28	-57	194	428	2,100	-93	-1,480	399	20	119	-56
Dry Water Years (24%)	10	-41	28	286	509	1,379	129	-679	630	660	339	-46
Critical Water Years (16%)	54	23	0	455	216	325	-206	-436	408	416	657	-38

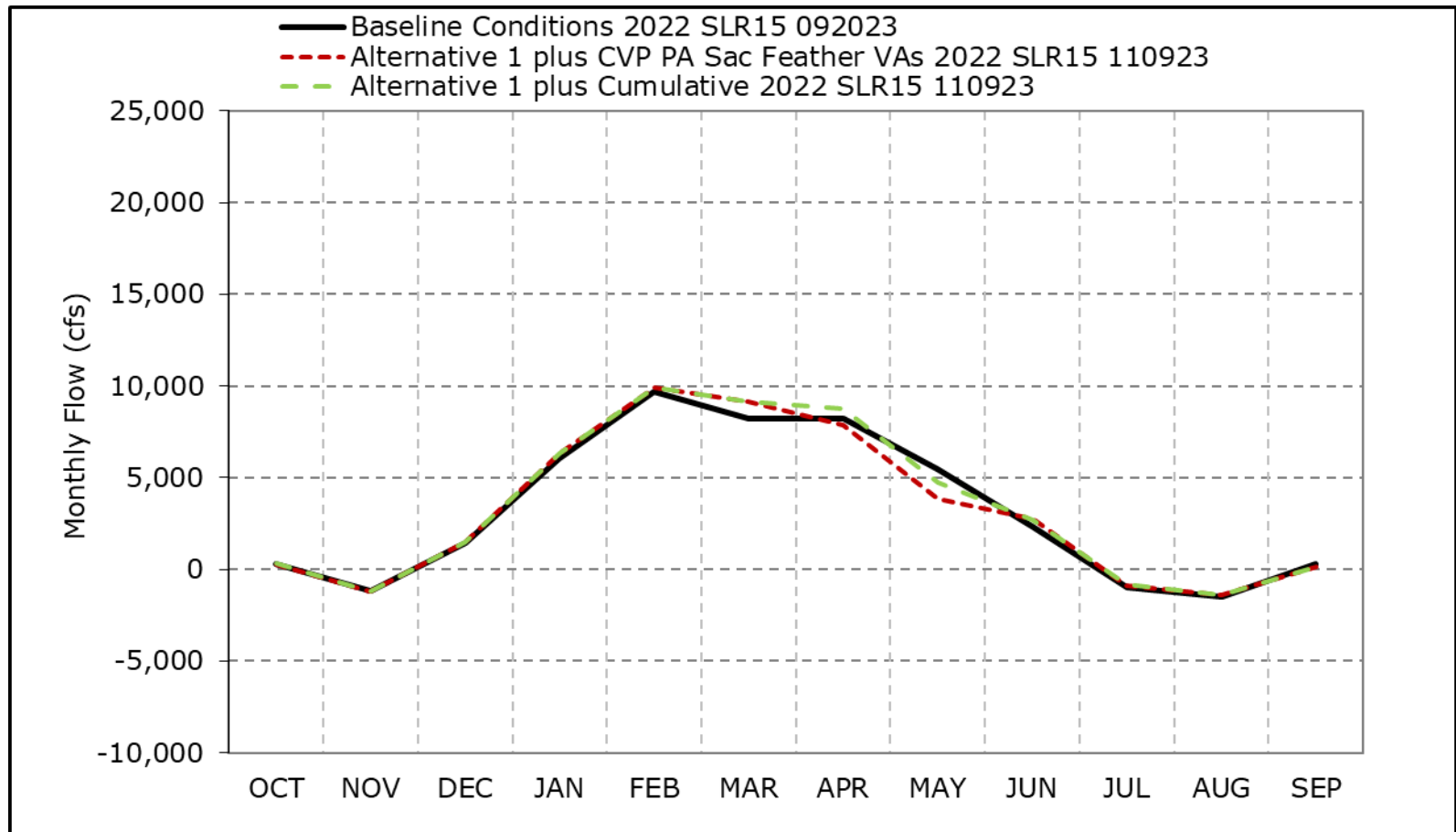
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-7a. Qwest, Long-Term Average Flow

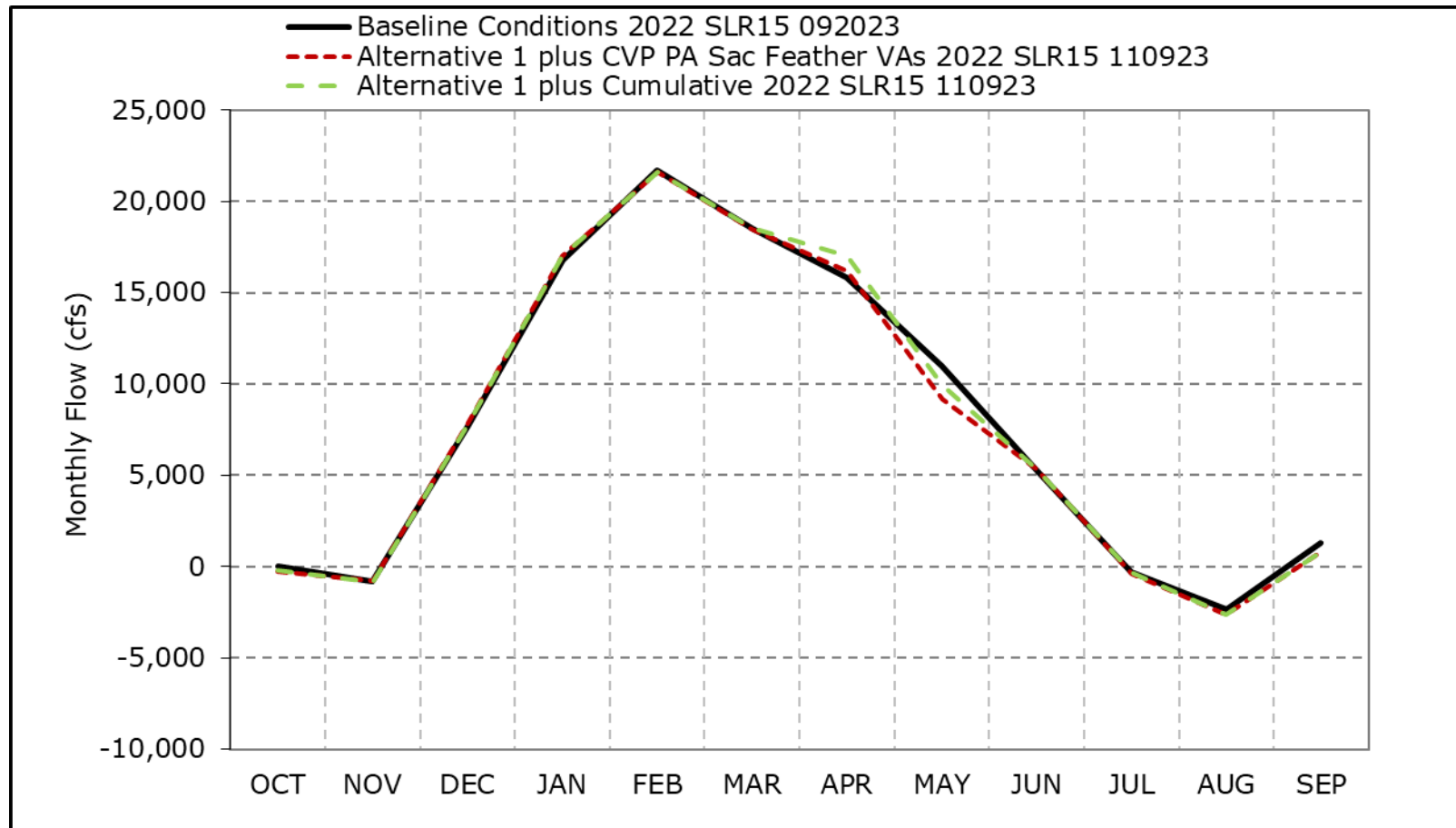


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7b. Qwest, Wet Year Average Flow

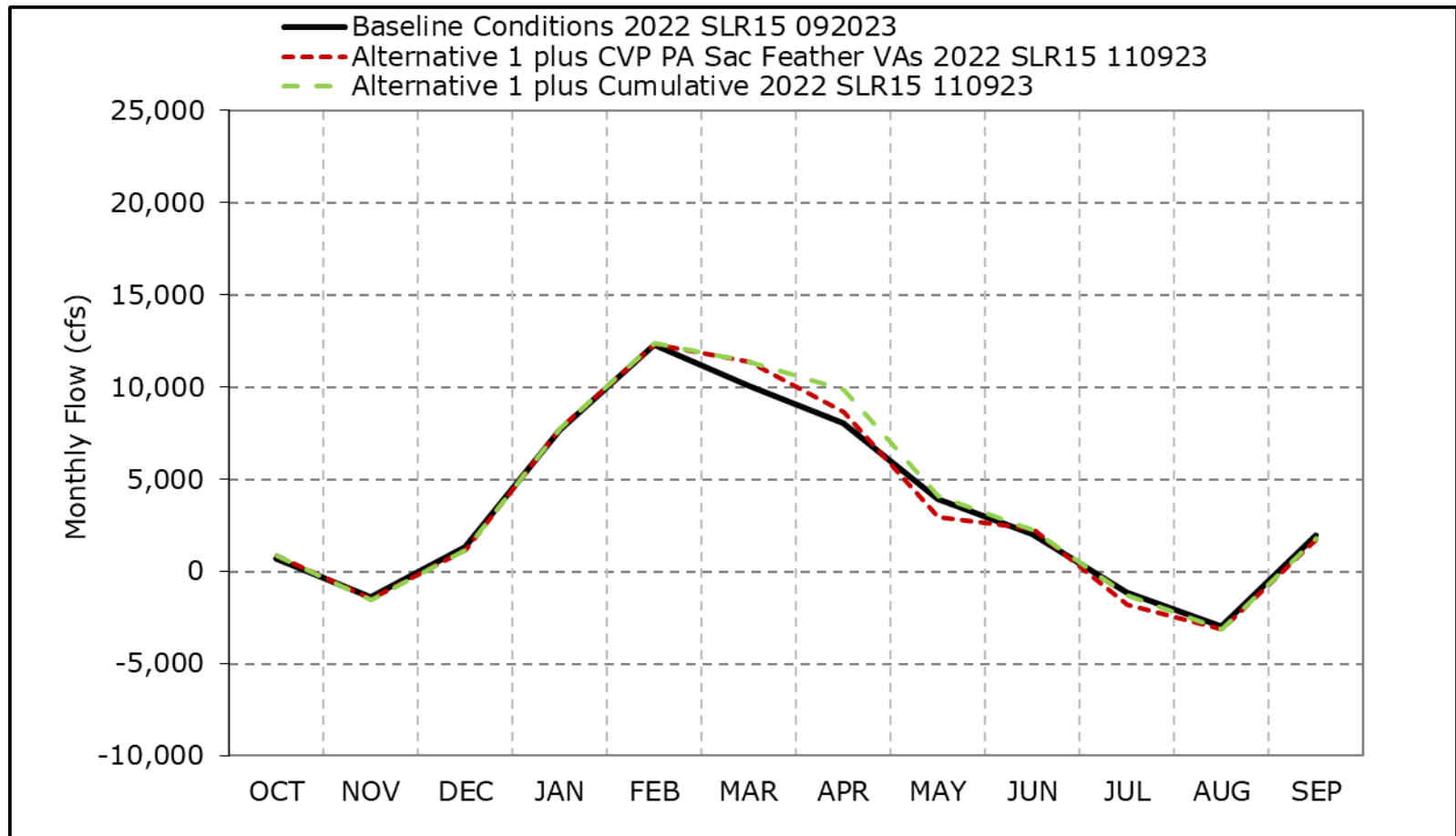


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7c. Qwest, Above Normal Year Average Flow

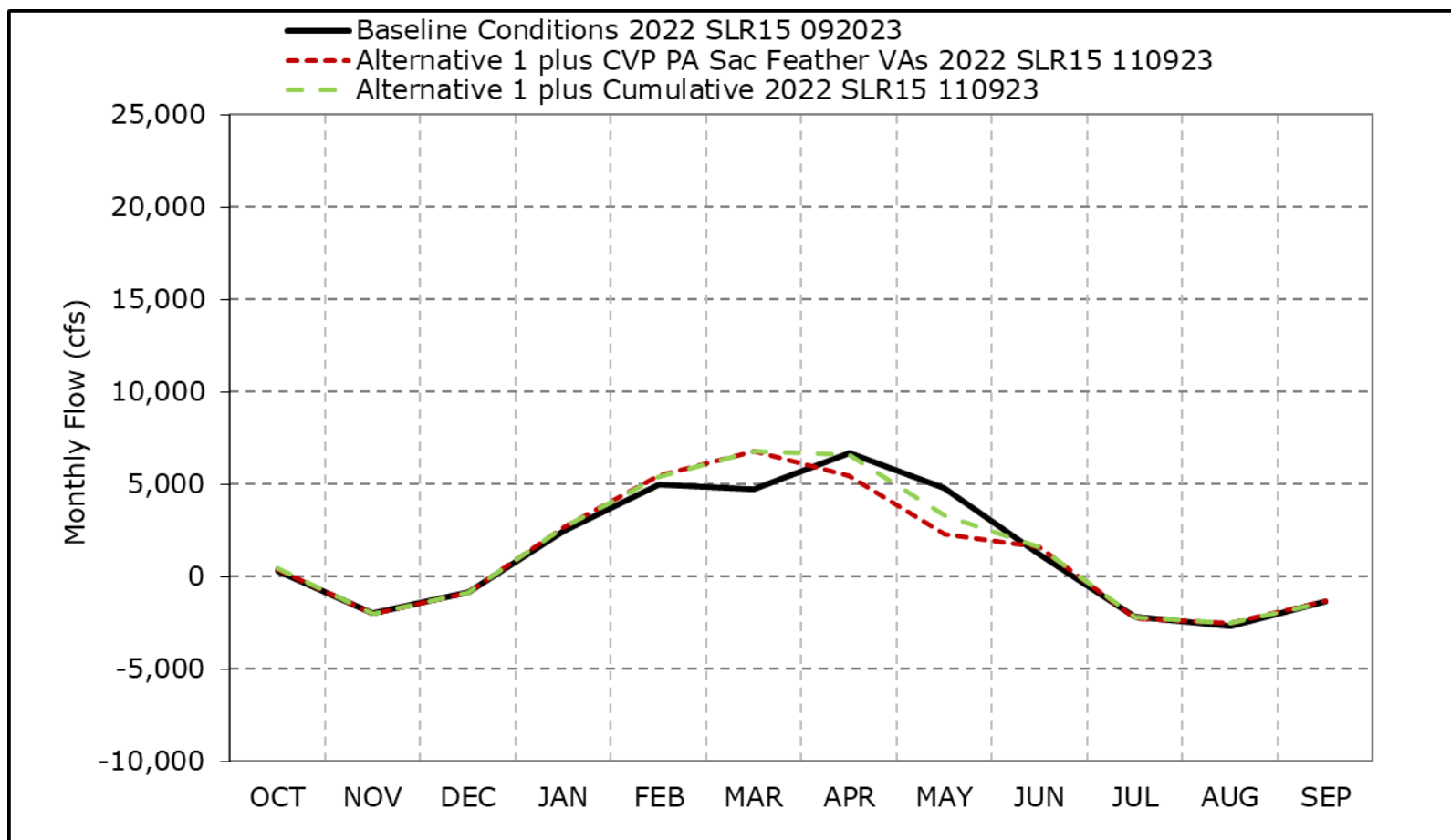


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7d. Qwest, Below Normal Year Average Flow

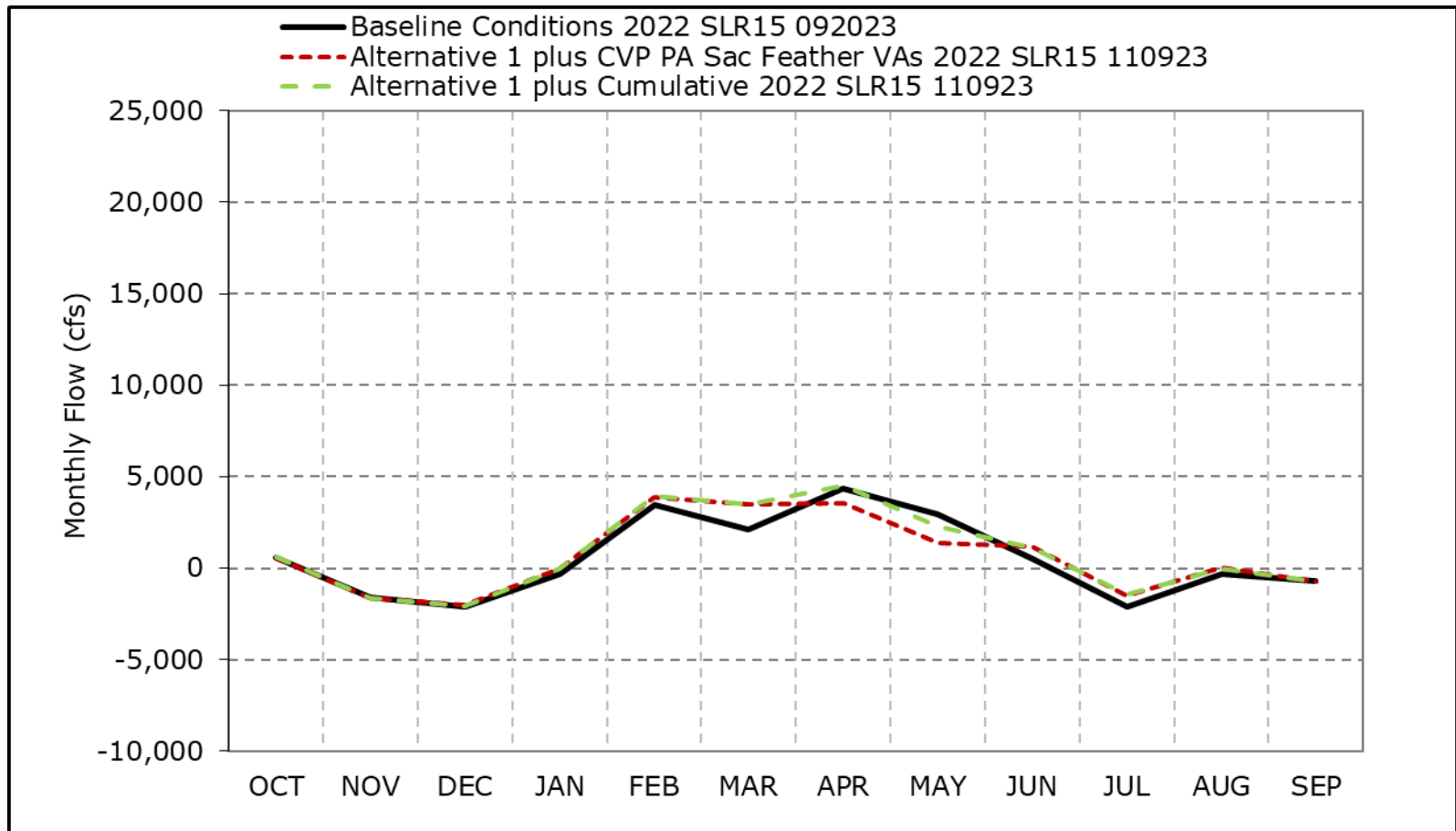


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7e. Qwest, Dry Year Average Flow

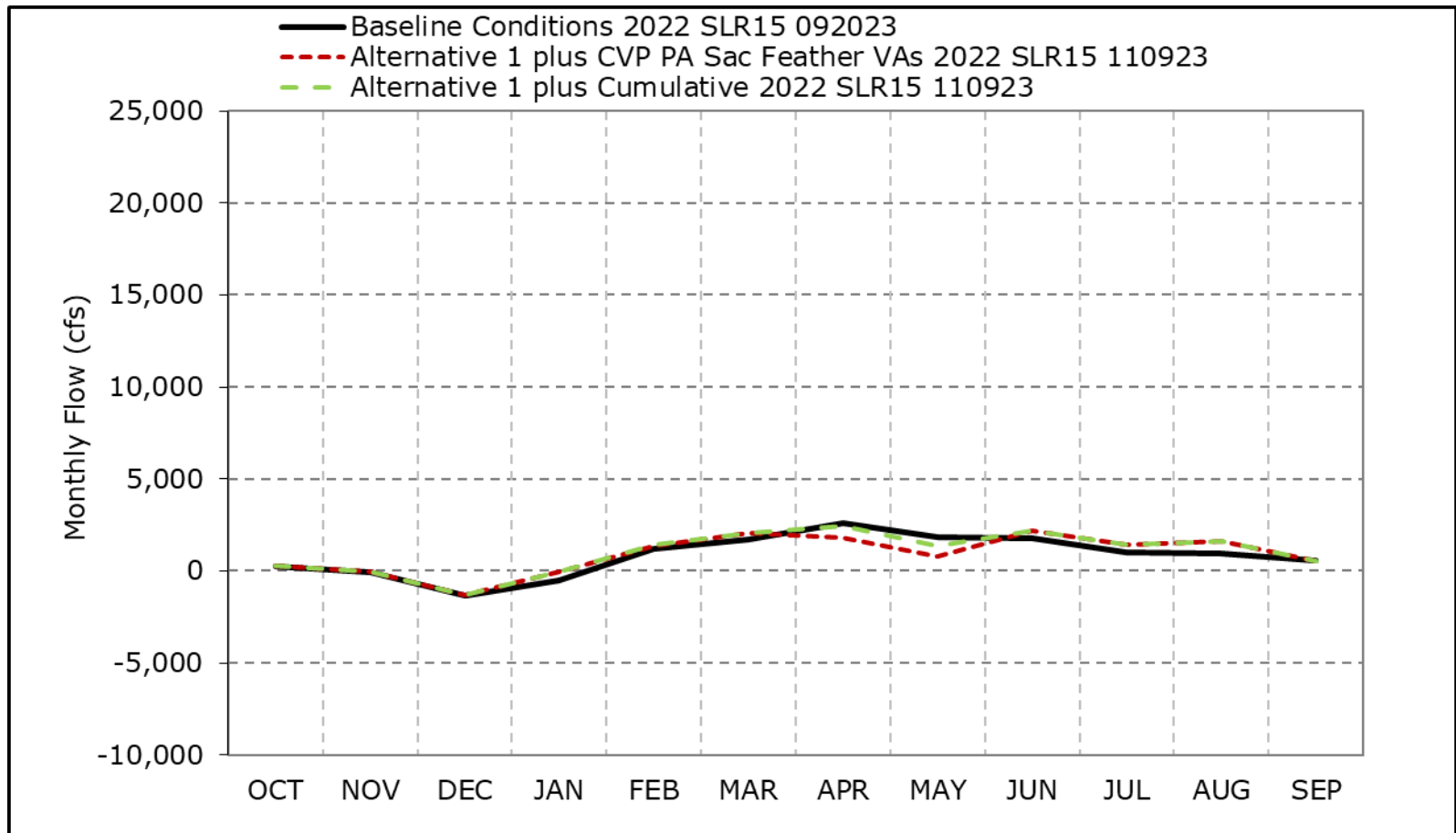


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7f. Qwest, Critical Year Average Flow

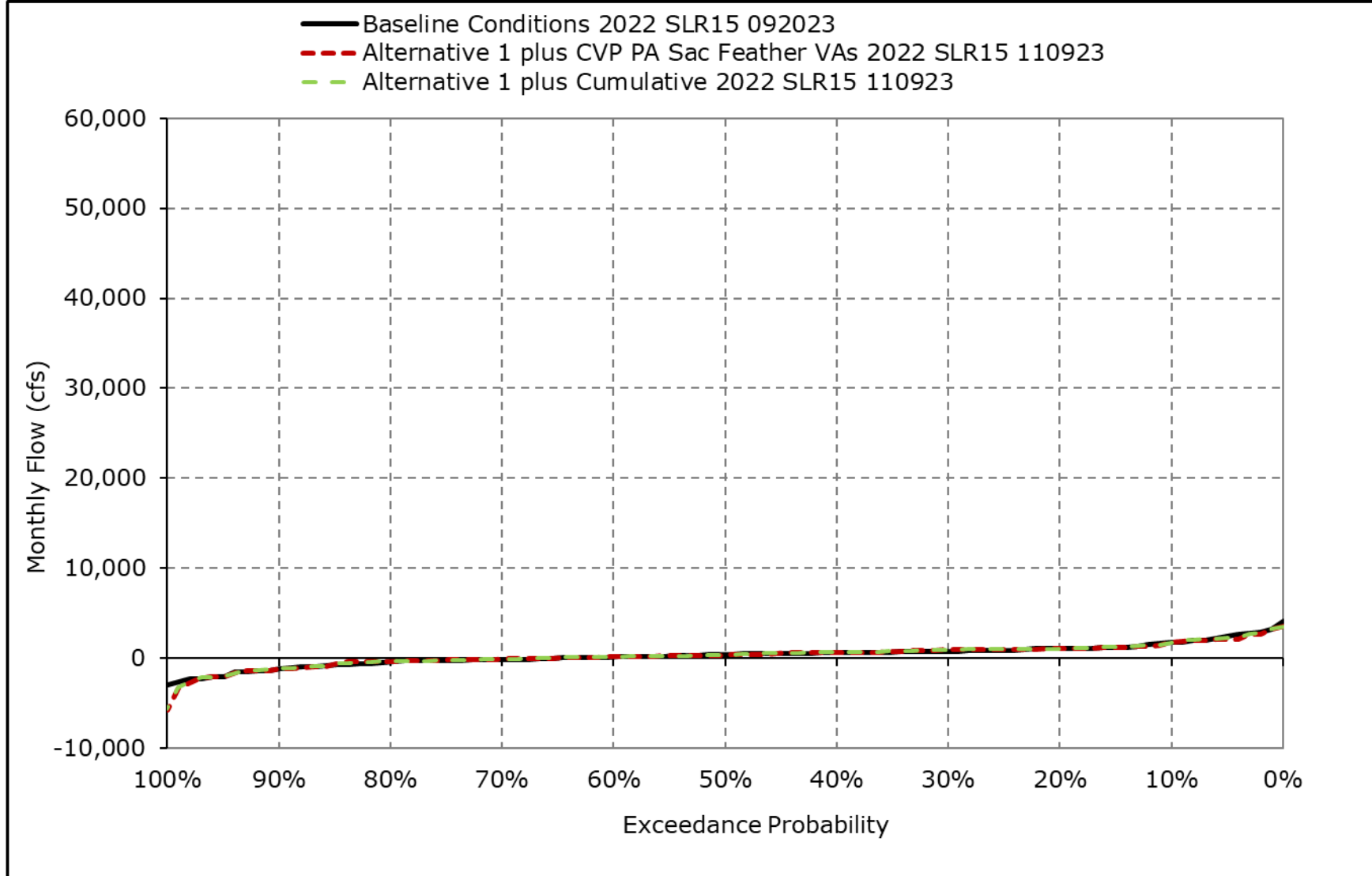


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

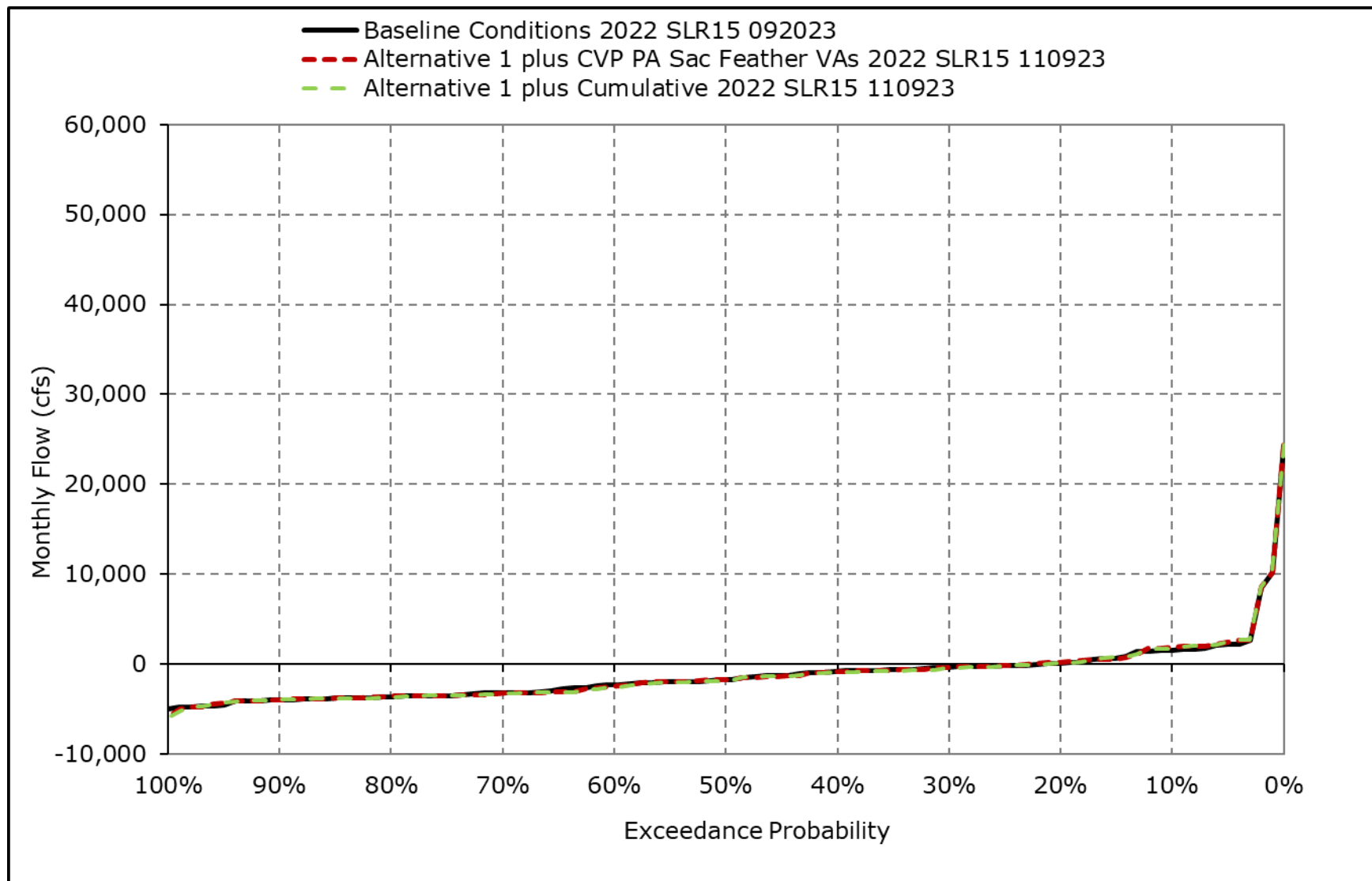
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7g. Qwest, October



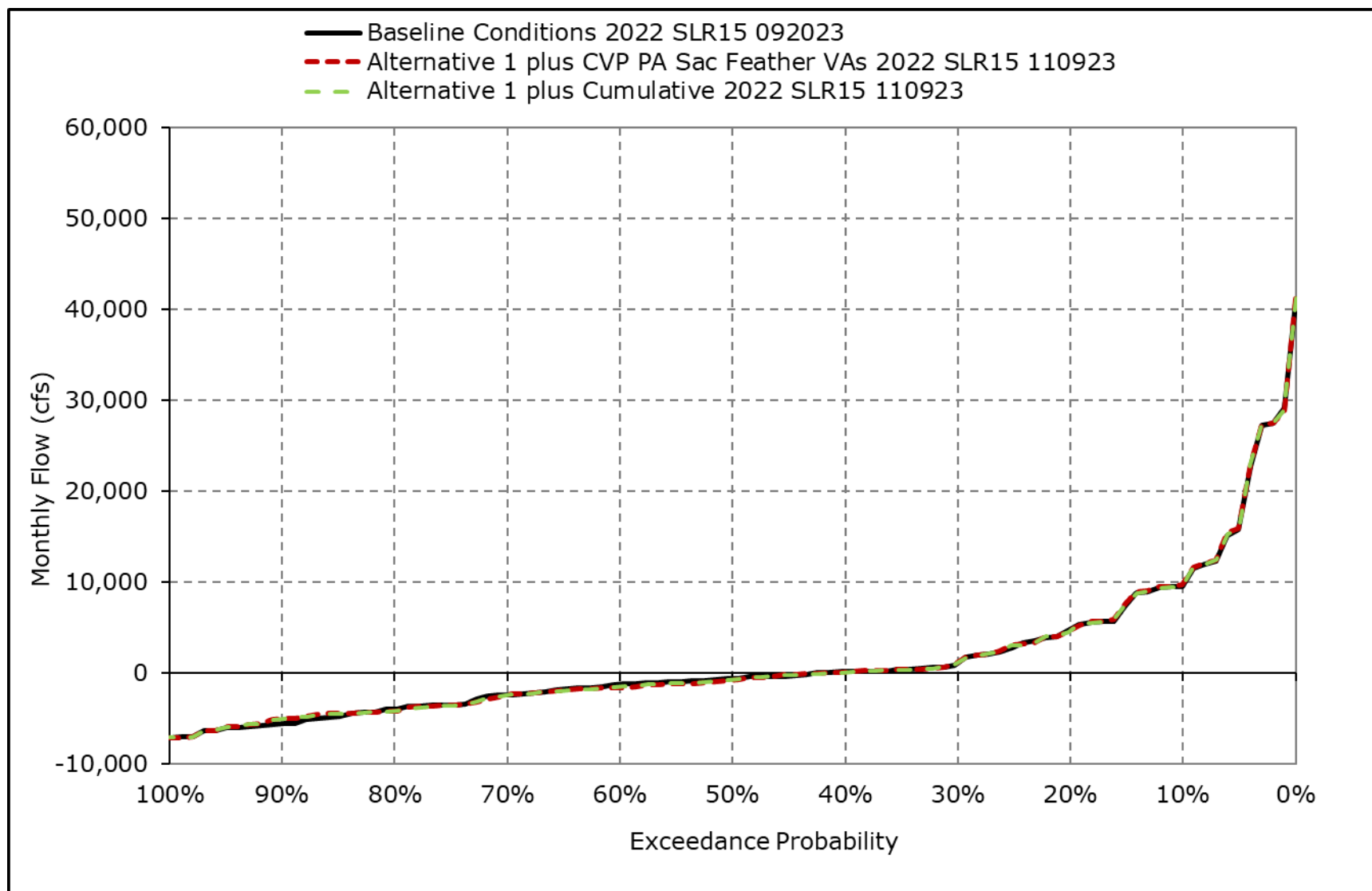
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7h. Qwest, November



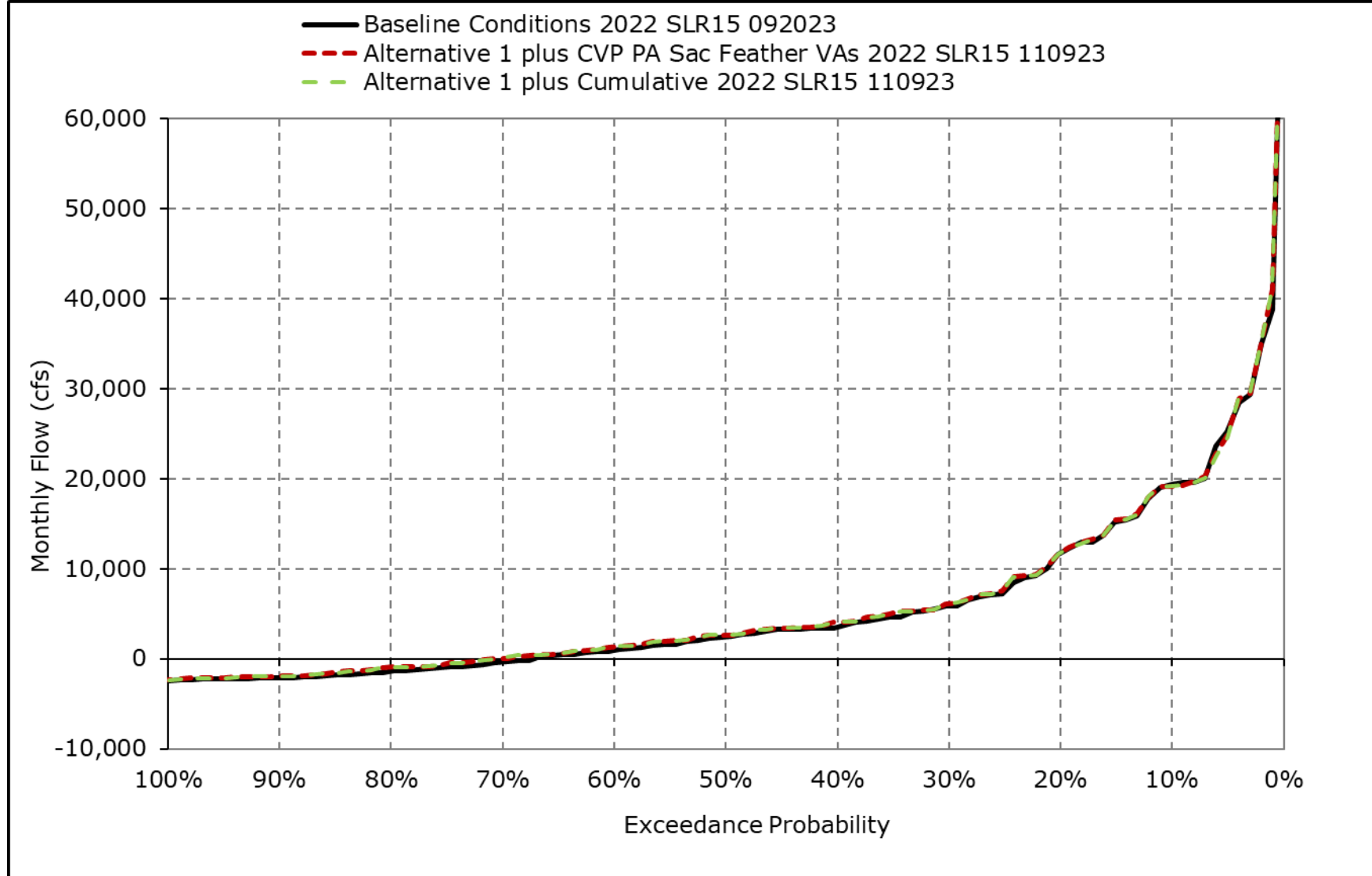
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7i. Qwest, December



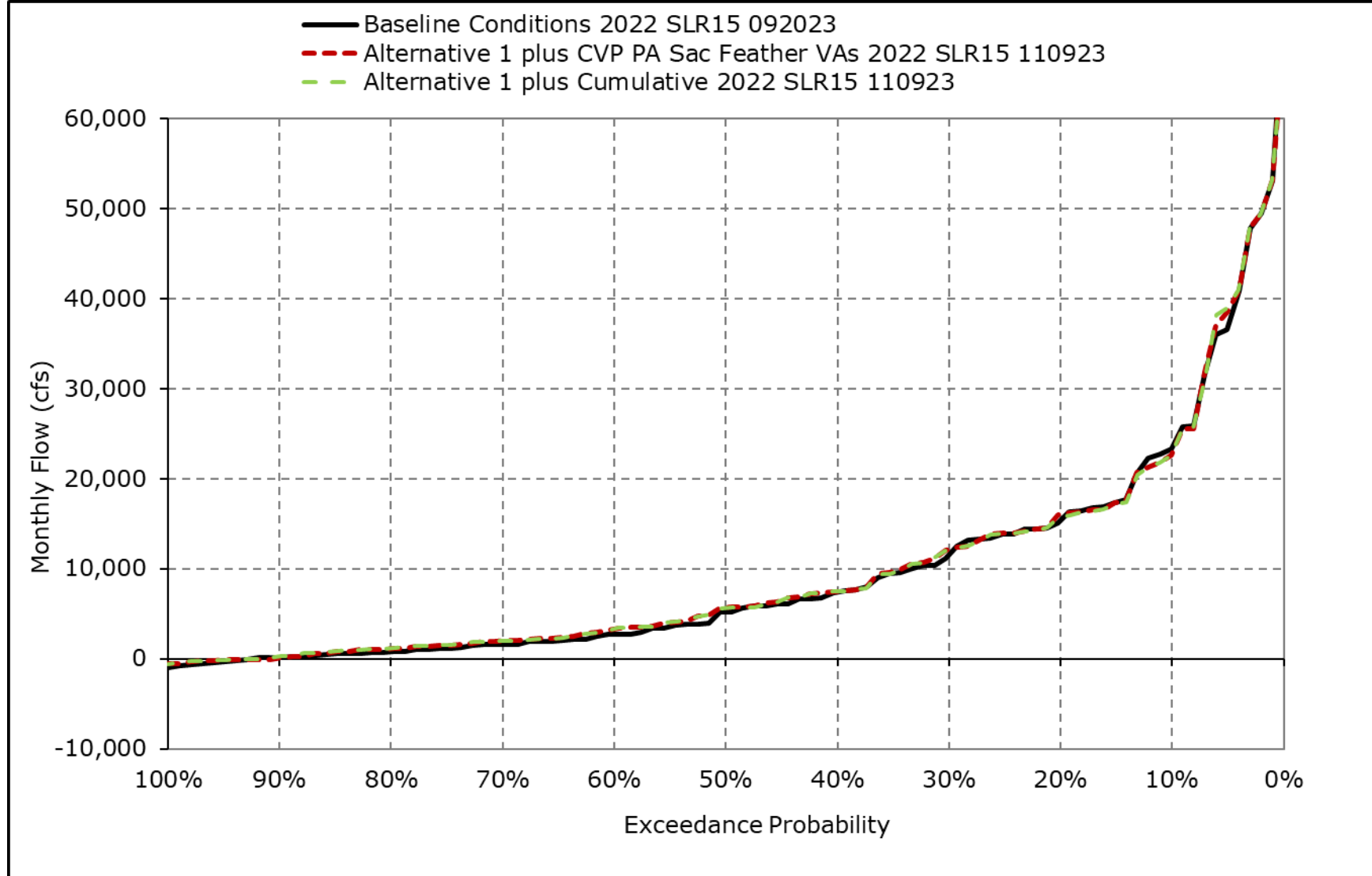
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7j. Qwest, January



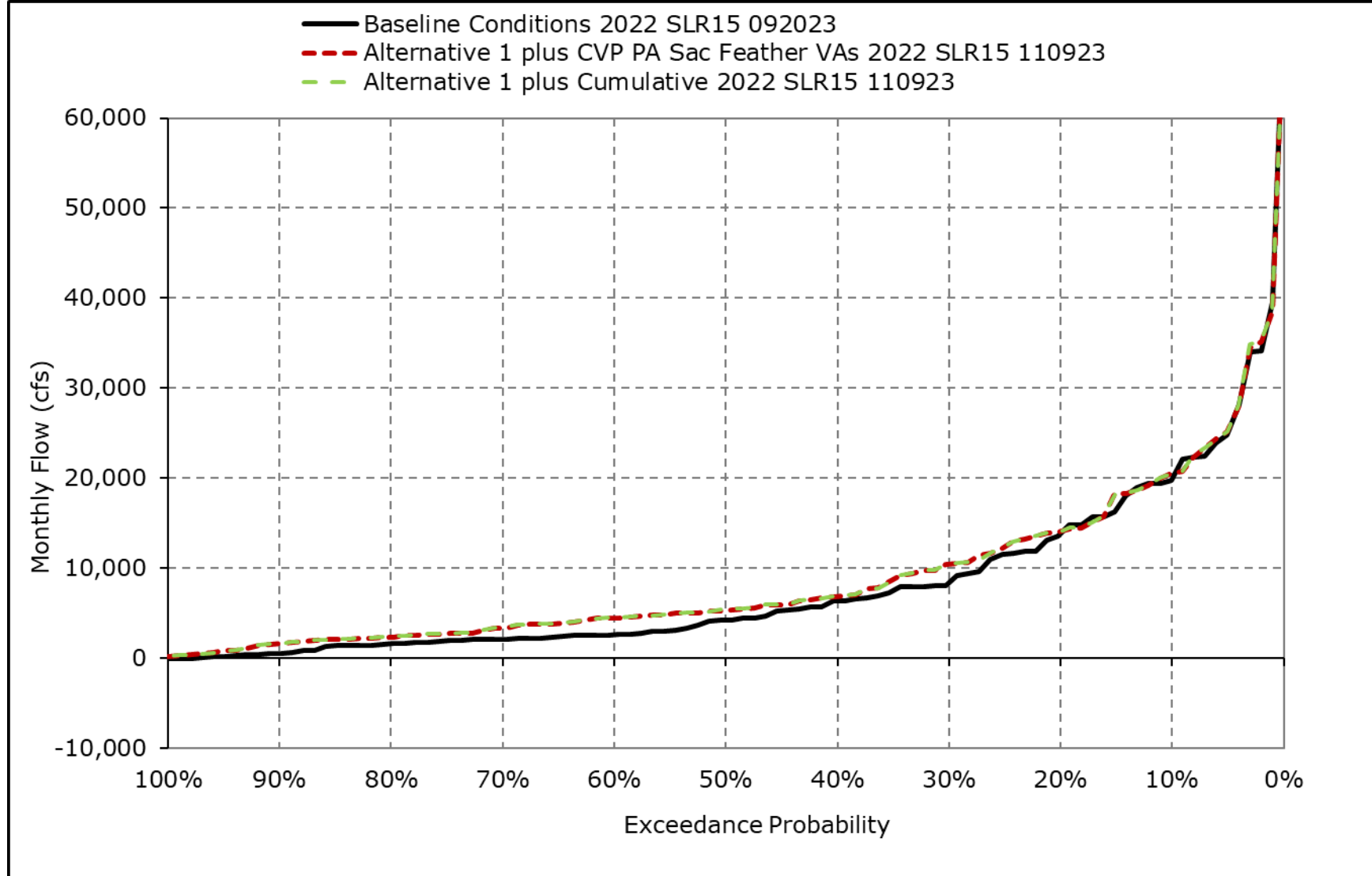
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7k. Qwest, February



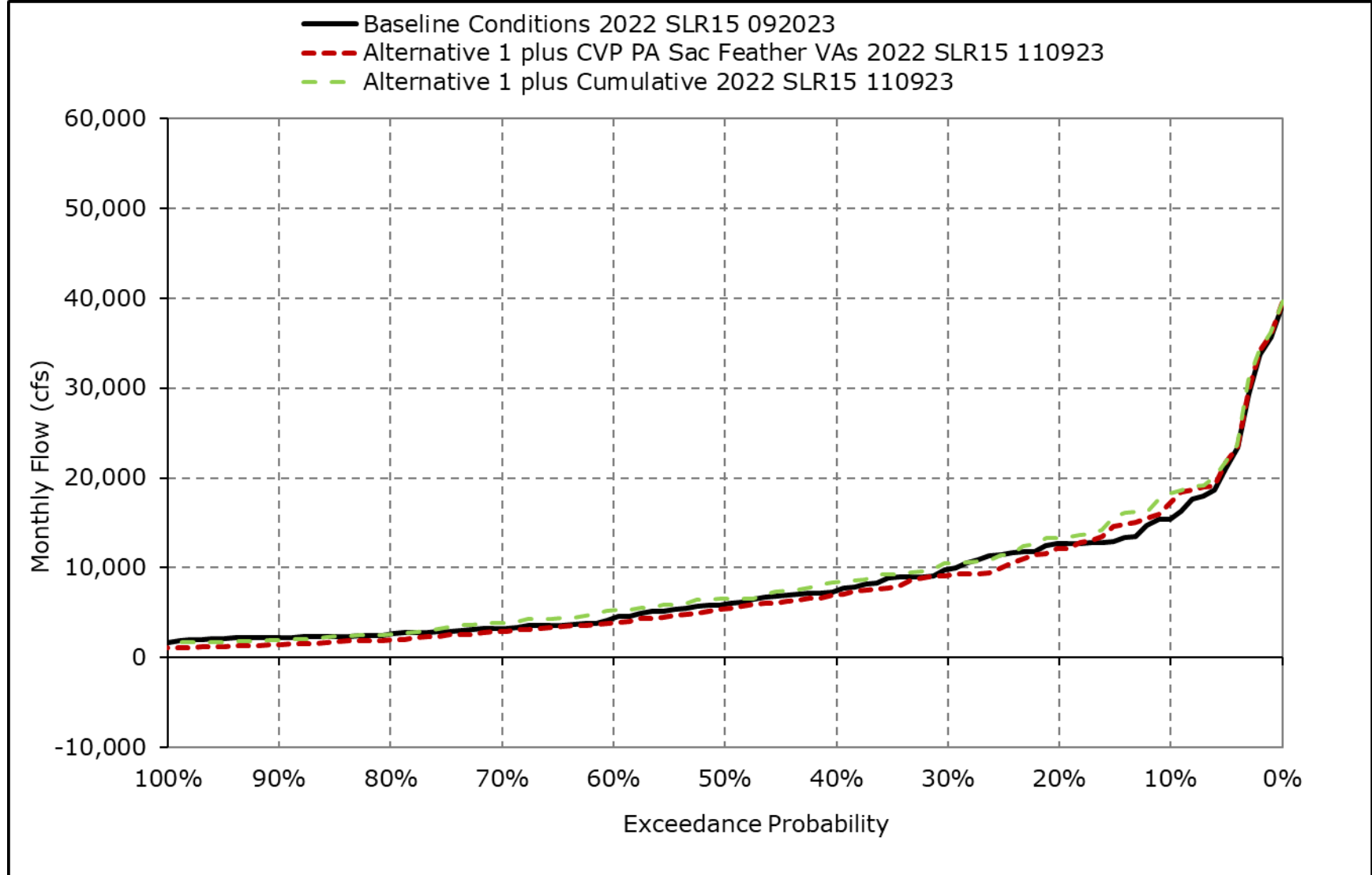
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7I. Qwest, March



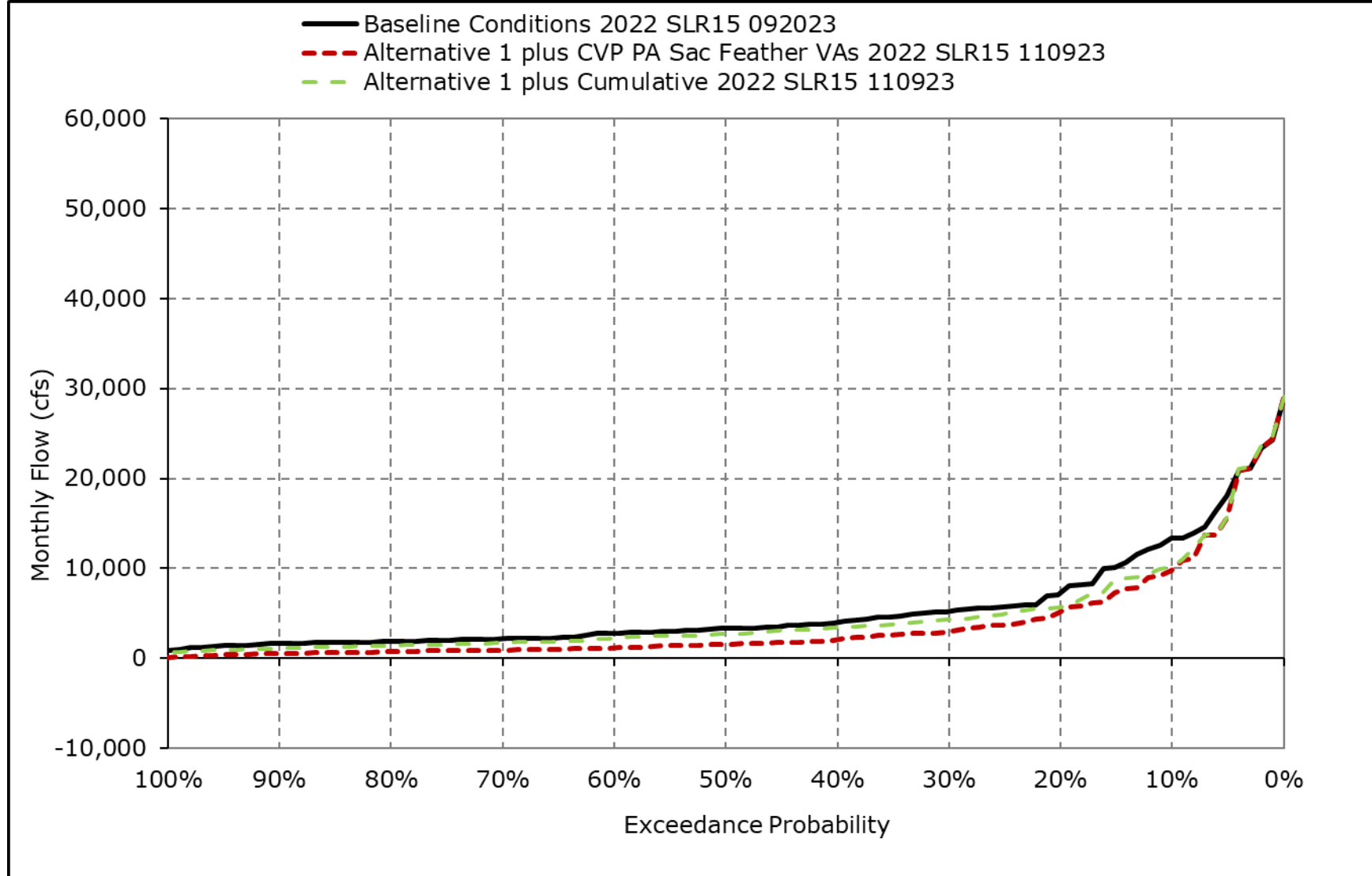
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7m. Qwest, April



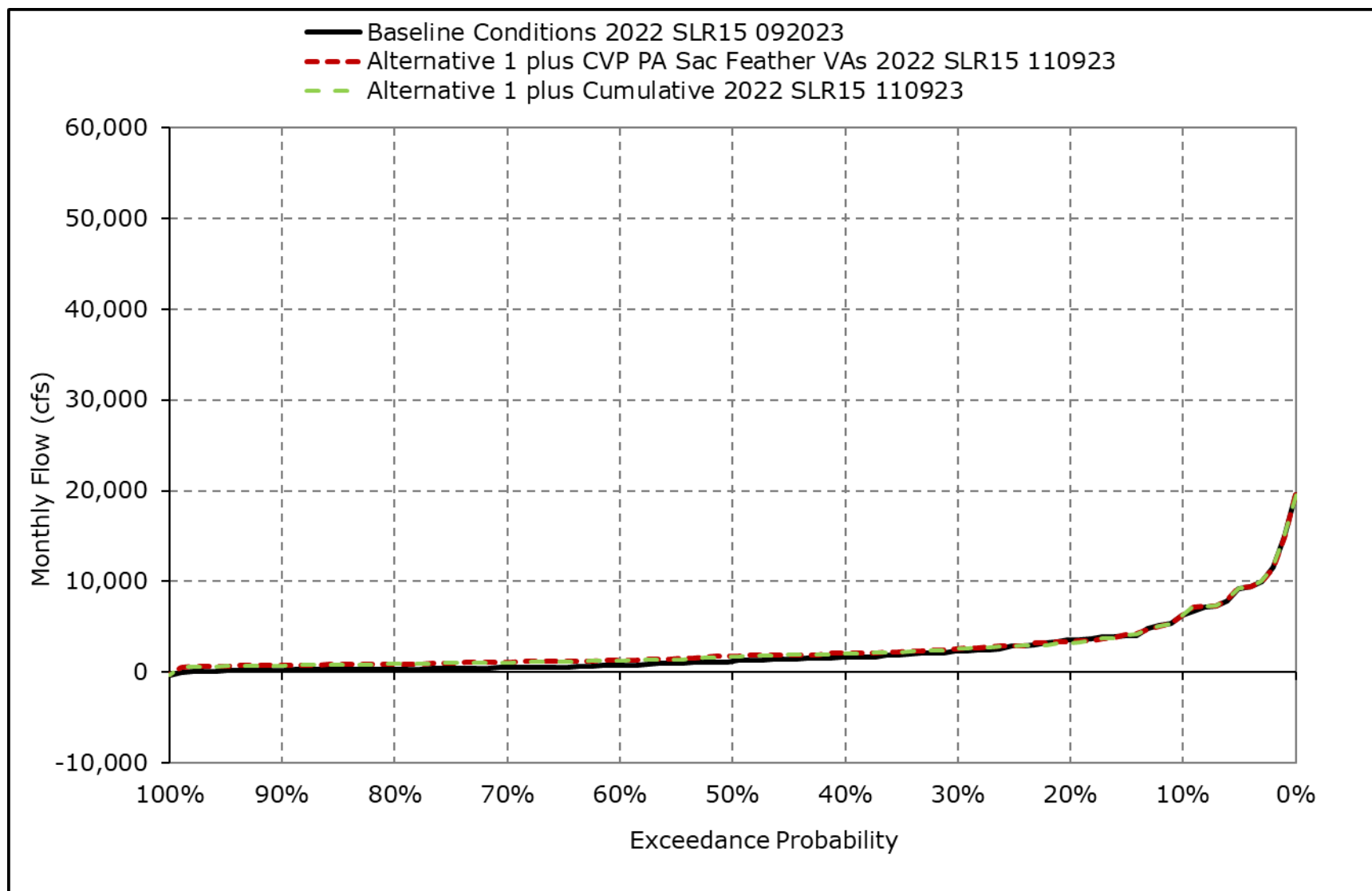
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7n. Qwest, May



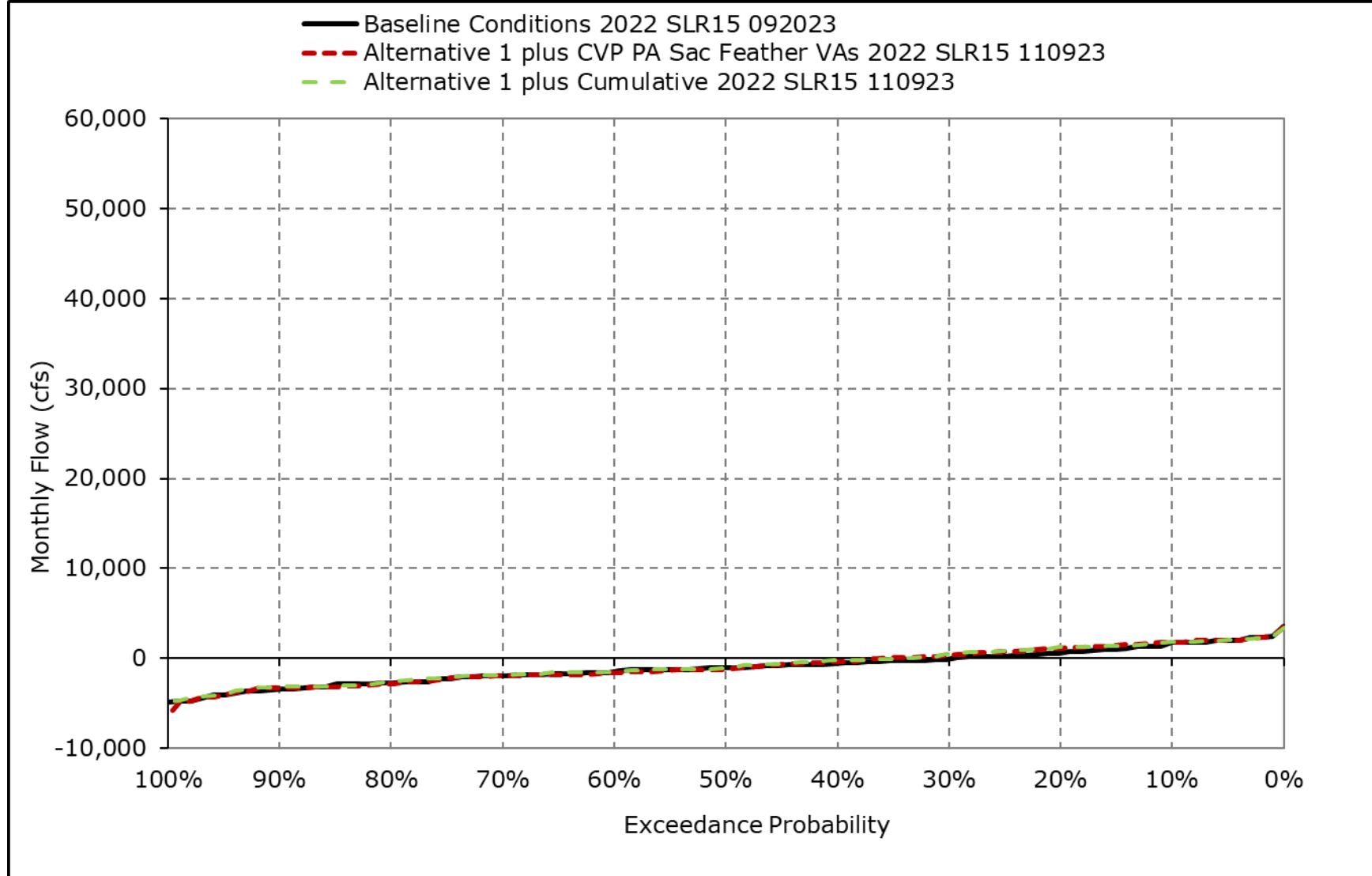
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7o. Qwest, June



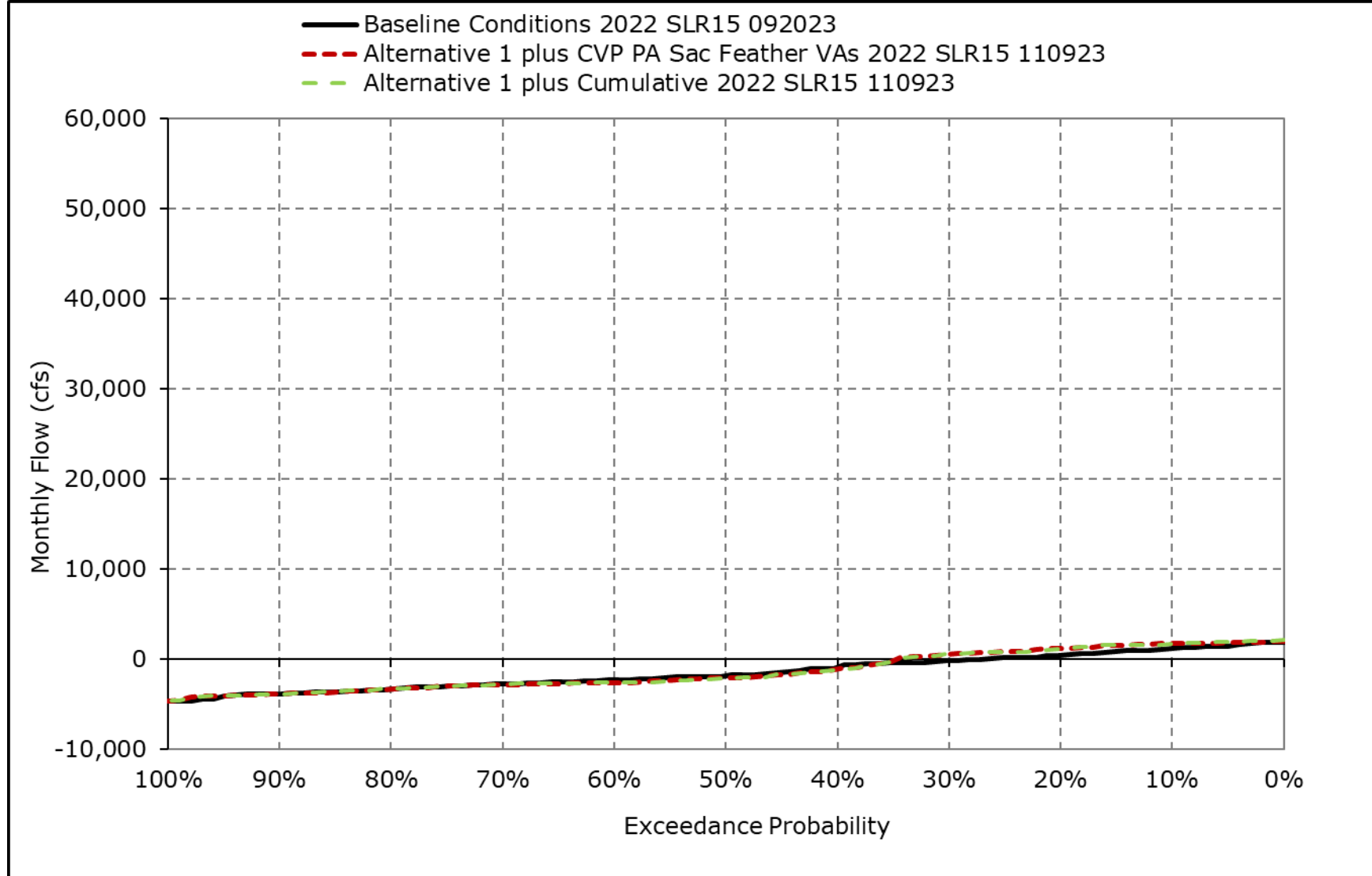
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7p. Qwest, July



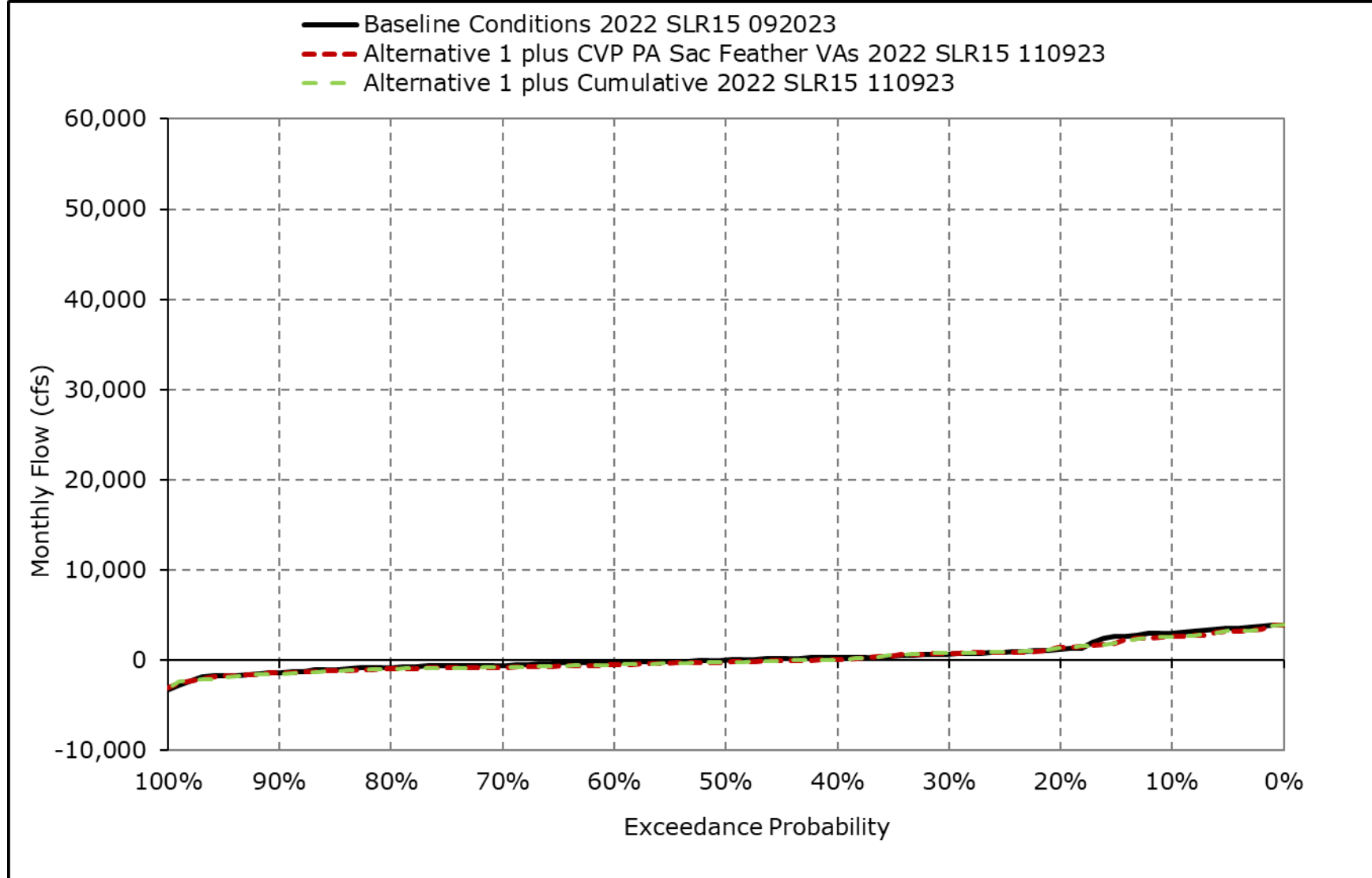
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7q. Qwest, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-7r. Qwest, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Table 4H-2-8-1a. Delta Outflow, Baseline Conditions 2022 SLR15 092023, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,438	13,962	71,110	108,795	144,876	102,993	58,405	38,749	14,147	11,159	6,266	11,094
20% Exceedance	8,156	8,356	38,471	73,128	95,953	70,291	44,098	24,633	9,601	9,972	5,977	10,938
30% Exceedance	8,125	7,236	23,793	41,078	61,707	46,055	30,827	17,547	8,805	9,328	5,765	10,681
40% Exceedance	7,969	6,240	16,072	30,099	50,828	35,092	23,331	14,770	7,623	9,042	5,527	10,313
50% Exceedance	4,953	5,630	10,350	24,713	31,633	24,222	18,508	12,830	7,122	8,594	4,300	3,807
60% Exceedance	4,144	5,314	6,868	18,649	22,699	20,226	15,251	11,394	7,100	6,218	4,000	3,150
70% Exceedance	4,000	4,951	5,966	11,554	18,096	17,692	12,771	10,565	7,021	5,250	3,690	3,000
80% Exceedance	4,000	4,549	5,277	9,329	13,201	13,867	11,508	9,392	6,387	5,004	3,500	3,000
90% Exceedance	3,000	4,500	4,964	7,190	11,119	10,264	10,442	7,812	4,692	4,000	3,000	3,000
Full Simulation Period Average ^a	6,482	8,831	25,466	43,799	58,097	44,980	28,773	18,156	8,939	7,653	4,689	6,588
Wet Water Years (28%)	8,384	14,242	55,071	96,173	122,346	91,221	56,083	31,242	13,603	9,868	5,964	11,238
Above Normal Water Years (14%)	6,446	8,465	23,424	52,461	70,819	57,007	28,157	17,576	9,171	10,676	6,273	10,969
Below Normal Water Years (18%)	6,624	6,925	16,467	25,237	28,668	26,267	20,935	16,699	7,465	8,332	4,169	3,573
Dry Water Years (24%)	5,491	6,120	10,097	13,655	27,078	19,833	15,748	11,749	6,932	5,230	3,841	3,261
Critical Water Years (16%)	4,510	5,894	8,622	10,665	14,167	12,305	9,871	7,010	5,246	4,001	2,930	3,000

Table 4H-2-8-1b. Delta Outflow, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	9,063	13,968	71,854	110,278	143,732	101,275	60,452	35,097	14,515	10,520	5,984	11,134
20% Exceedance	8,500	8,302	39,782	73,597	93,945	69,882	45,767	24,817	9,675	9,530	5,722	10,938
30% Exceedance	8,125	7,263	23,883	41,176	62,140	46,781	30,580	16,345	8,913	9,042	5,553	10,781
40% Exceedance	7,813	6,441	16,161	31,204	52,249	35,888	24,011	13,198	7,921	8,708	5,369	10,567
50% Exceedance	5,139	5,718	10,523	24,860	35,201	26,066	18,972	11,751	7,498	7,451	4,136	3,563
60% Exceedance	4,186	5,399	6,915	18,402	22,771	22,926	15,751	10,577	7,423	6,098	4,000	3,127
70% Exceedance	4,080	5,029	6,009	11,531	18,500	18,075	13,260	9,674	7,121	5,437	3,794	3,027
80% Exceedance	4,061	4,648	5,468	9,630	14,052	14,696	11,162	8,864	6,882	5,315	3,758	3,002
90% Exceedance	3,000	4,500	4,949	7,707	11,190	11,205	9,590	7,100	5,407	4,000	3,000	3,000
Full Simulation Period Average ^a	6,563	8,975	25,915	44,394	58,790	45,708	28,932	17,049	9,249	7,425	4,596	6,578
Wet Water Years (28%)	8,324	14,279	56,238	97,054	122,607	90,567	56,412	29,557	13,842	9,662	5,773	11,181
Above Normal Water Years (14%)	6,624	8,981	23,677	53,288	70,749	58,038	30,044	17,642	9,200	10,121	5,971	11,144
Below Normal Water Years (18%)	6,694	7,053	16,535	25,695	29,976	28,484	21,096	14,825	8,056	7,629	4,139	3,600
Dry Water Years (24%)	5,687	6,165	10,338	13,862	28,102	21,220	15,328	11,074	7,464	5,365	3,793	3,163
Critical Water Years (16%)	4,597	6,067	8,726	11,292	15,094	12,525	9,089	6,106	5,274	4,010	3,050	3,003

Table 4H-2-8-1c. Delta Outflow, Alternative 1 plus CVP PA Sac Feather VAs 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	625	6	743	1,483	-1,144	-1,717	2,047	-3,652	368	-639	-282	40
20% Exceedance	344	-54	1,310	469	-2,008	-409	1,668	185	74	-443	-255	0
30% Exceedance	0	28	90	97	434	727	-247	-1,202	108	-287	-213	101
40% Exceedance	-156	201	89	1,105	1,421	796	680	-1,573	298	-334	-158	254
50% Exceedance	186	88	174	147	3,568	1,844	464	-1,079	376	-1,143	-163	-244
60% Exceedance	42	84	47	-247	73	2,700	499	-817	323	-120	0	-22
70% Exceedance	80	78	43	-23	403	383	489	-891	100	187	103	27
80% Exceedance	61	99	191	300	852	829	-347	-528	494	311	258	2
90% Exceedance	0	0	-15	517	71	941	-852	-712	715	0	0	0
Full Simulation Period Average ^a	82	144	449	595	692	729	159	-1,107	310	-228	-93	-10
Wet Water Years (28%)	-60	37	1,168	881	261	-654	329	-1,686	239	-206	-191	-56
Above Normal Water Years (14%)	178	517	252	827	-71	1,031	1,887	66	29	-555	-302	175
Below Normal Water Years (18%)	70	128	69	458	1,308	2,217	161	-1,874	592	-703	-30	27
Dry Water Years (24%)	196	46	241	208	1,023	1,388	-420	-674	533	135	-47	-99
Critical Water Years (16%)	87	173	104	627	927	220	-782	-904	28	9	120	3

^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Table 4H-2-8-2a. Delta Outflow, Baseline Conditions 2022 SLR15 092023, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,438	13,962	71,110	108,795	144,876	102,993	58,405	38,749	14,147	11,159	6,266	11,094
20% Exceedance	8,156	8,356	38,471	73,128	95,953	70,291	44,098	24,633	9,601	9,972	5,977	10,938
30% Exceedance	8,125	7,236	23,793	41,078	61,707	46,055	30,827	17,547	8,805	9,328	5,765	10,681
40% Exceedance	7,969	6,240	16,072	30,099	50,828	35,092	23,331	14,770	7,623	9,042	5,527	10,313
50% Exceedance	4,953	5,630	10,350	24,713	31,633	24,222	18,508	12,830	7,122	8,594	4,300	3,807
60% Exceedance	4,144	5,314	6,868	18,649	22,699	20,226	15,251	11,394	7,100	6,218	4,000	3,150
70% Exceedance	4,000	4,951	5,966	11,554	18,096	17,692	12,771	10,565	7,021	5,250	3,690	3,000
80% Exceedance	4,000	4,549	5,277	9,329	13,201	13,867	11,508	9,392	6,387	5,004	3,500	3,000
90% Exceedance	3,000	4,500	4,964	7,190	11,119	10,264	10,442	7,812	4,692	4,000	3,000	3,000
Full Simulation Period Average ^a	6,482	8,831	25,466	43,799	58,097	44,980	28,773	18,156	8,939	7,653	4,689	6,588
Wet Water Years (28%)	8,384	14,242	55,071	96,173	122,346	91,221	56,083	31,242	13,603	9,868	5,964	11,238
Above Normal Water Years (14%)	6,446	8,465	23,424	52,461	70,819	57,007	28,157	17,576	9,171	10,676	6,273	10,969
Below Normal Water Years (18%)	6,624	6,925	16,467	25,237	28,668	26,267	20,935	16,699	7,465	8,332	4,169	3,573
Dry Water Years (24%)	5,491	6,120	10,097	13,655	27,078	19,833	15,748	11,749	6,932	5,230	3,841	3,261
Critical Water Years (16%)	4,510	5,894	8,622	10,665	14,167	12,305	9,871	7,010	5,246	4,001	2,930	3,000

Table 4H-2-8-2b. Delta Outflow, Alternative 1 plus Cumulative 2022 SLR15 110923, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	9,063	13,907	71,956	110,259	143,964	101,313	62,546	36,640	14,507	10,698	5,975	11,109
20% Exceedance	8,500	8,379	39,686	73,689	93,563	70,006	48,190	27,030	9,666	9,638	5,722	10,938
30% Exceedance	8,125	7,265	23,851	41,104	62,089	46,868	33,609	18,235	8,727	9,085	5,522	10,781
40% Exceedance	7,875	6,561	16,099	31,165	52,260	35,934	26,250	15,638	7,900	8,707	5,369	10,572
50% Exceedance	5,097	5,708	10,577	24,955	35,336	26,243	21,648	14,207	7,507	7,616	4,100	3,641
60% Exceedance	4,211	5,457	6,920	18,408	22,781	22,904	18,525	12,480	7,399	6,100	4,000	3,106
70% Exceedance	4,080	5,055	5,994	11,535	18,500	18,220	15,519	11,168	7,115	5,437	3,794	3,028
80% Exceedance	4,045	4,655	5,371	9,640	14,050	14,711	13,105	10,434	6,868	5,315	3,753	3,000
90% Exceedance	3,000	4,500	4,892	7,721	11,190	11,326	10,976	8,238	5,288	4,000	3,000	3,000
Full Simulation Period Average ^a	6,577	9,012	25,922	44,403	58,820	45,786	31,035	18,824	9,219	7,459	4,598	6,577
Wet Water Years (28%)	8,347	14,333	56,235	97,027	122,612	90,574	58,107	31,173	13,838	9,683	5,785	11,164
Above Normal Water Years (14%)	6,644	9,106	23,702	53,367	70,850	58,029	32,515	19,769	9,198	10,253	5,982	11,132
Below Normal Water Years (18%)	6,718	7,045	16,530	25,715	29,964	28,562	23,596	16,586	7,982	7,686	4,132	3,621
Dry Water Years (24%)	5,688	6,198	10,336	13,869	28,130	21,409	18,008	13,172	7,398	5,365	3,788	3,169
Critical Water Years (16%)	4,599	6,050	8,759	11,295	15,157	12,636	10,273	7,384	5,274	4,010	3,050	3,003

Table 4H-2-8-2c. Delta Outflow, Alternative 1 plus Cumulative 2022 SLR15 110923 minus Baseline Conditions 2022 SLR15 092023, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	625	-55	846	1,463	-912	-1,679	4,142	-2,109	360	-461	-291	16
20% Exceedance	344	23	1,215	561	-2,390	-285	4,091	2,397	65	-334	-255	0
30% Exceedance	0	29	58	26	382	814	2,782	688	-77	-244	-243	101
40% Exceedance	-94	321	27	1,066	1,432	842	2,919	867	277	-335	-158	260
50% Exceedance	144	78	228	242	3,703	2,021	3,140	1,377	385	-978	-200	-166
60% Exceedance	67	143	52	-241	82	2,678	3,274	1,086	299	-118	0	-44
70% Exceedance	80	104	29	-20	403	528	2,748	603	95	187	103	28
80% Exceedance	45	106	94	310	849	844	1,597	1,041	481	311	253	0
90% Exceedance	0	0	-72	531	71	1,062	534	426	595	0	0	0
Full Simulation Period Average ^a	96	180	455	604	723	806	2,263	669	279	-193	-91	-11
Wet Water Years (28%)	-37	90	1,164	854	266	-647	2,024	-70	236	-185	-180	-74
Above Normal Water Years (14%)	198	642	278	906	31	1,022	4,358	2,192	27	-423	-291	163
Below Normal Water Years (18%)	93	121	63	477	1,296	2,296	2,661	-113	517	-646	-37	49
Dry Water Years (24%)	197	78	239	214	1,052	1,576	2,260	1,423	467	135	-52	-93
Critical Water Years (16%)	89	156	136	630	990	331	403	374	28	9	120	3

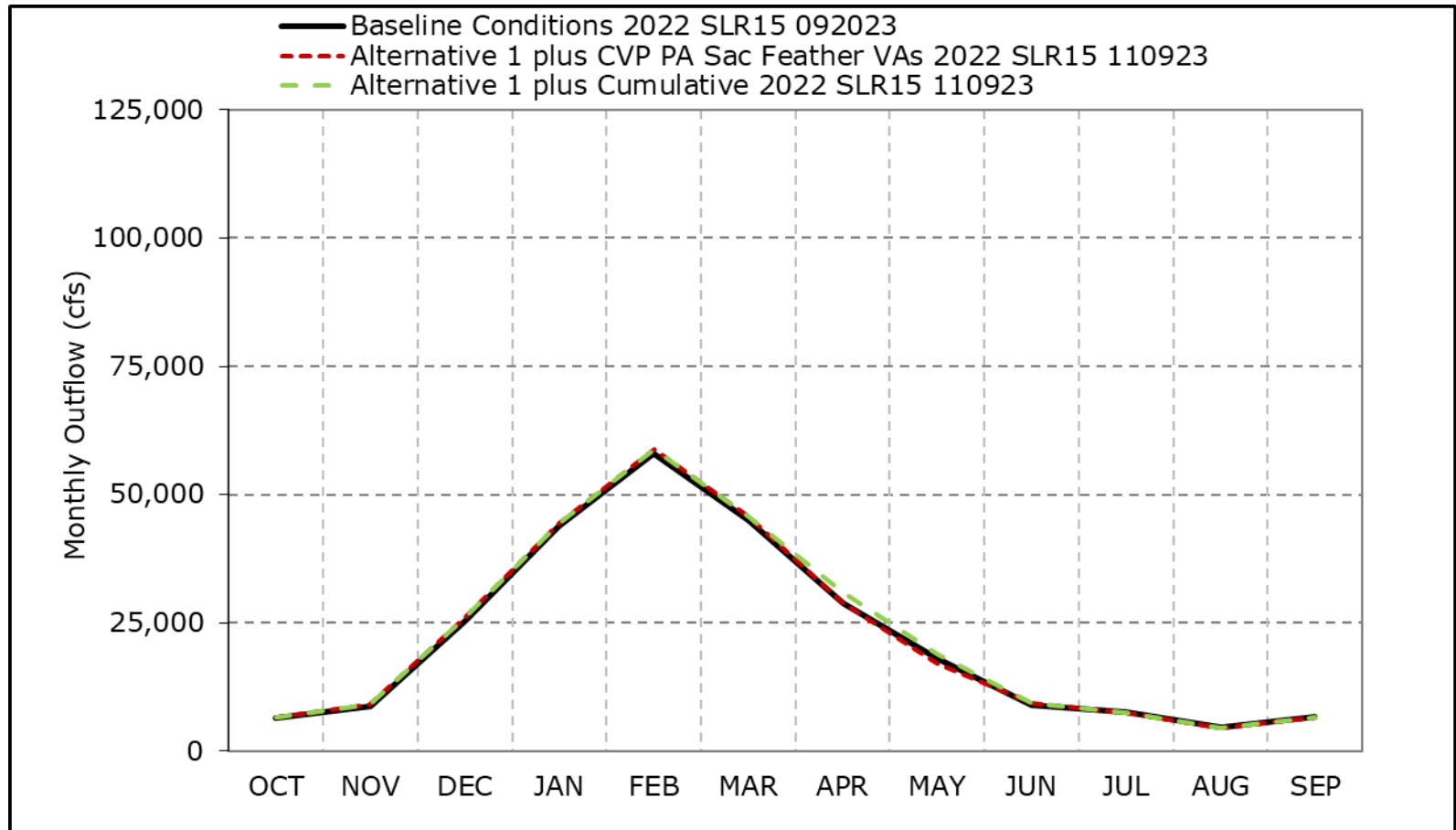
^a Based on the 100-year simulation period.

* All scenarios are simulated at 2022 Median climate condition and 15 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 water year - year type sorting.

Figure 4H-2-8a. Delta Outflow, Long-Term Average Outflow

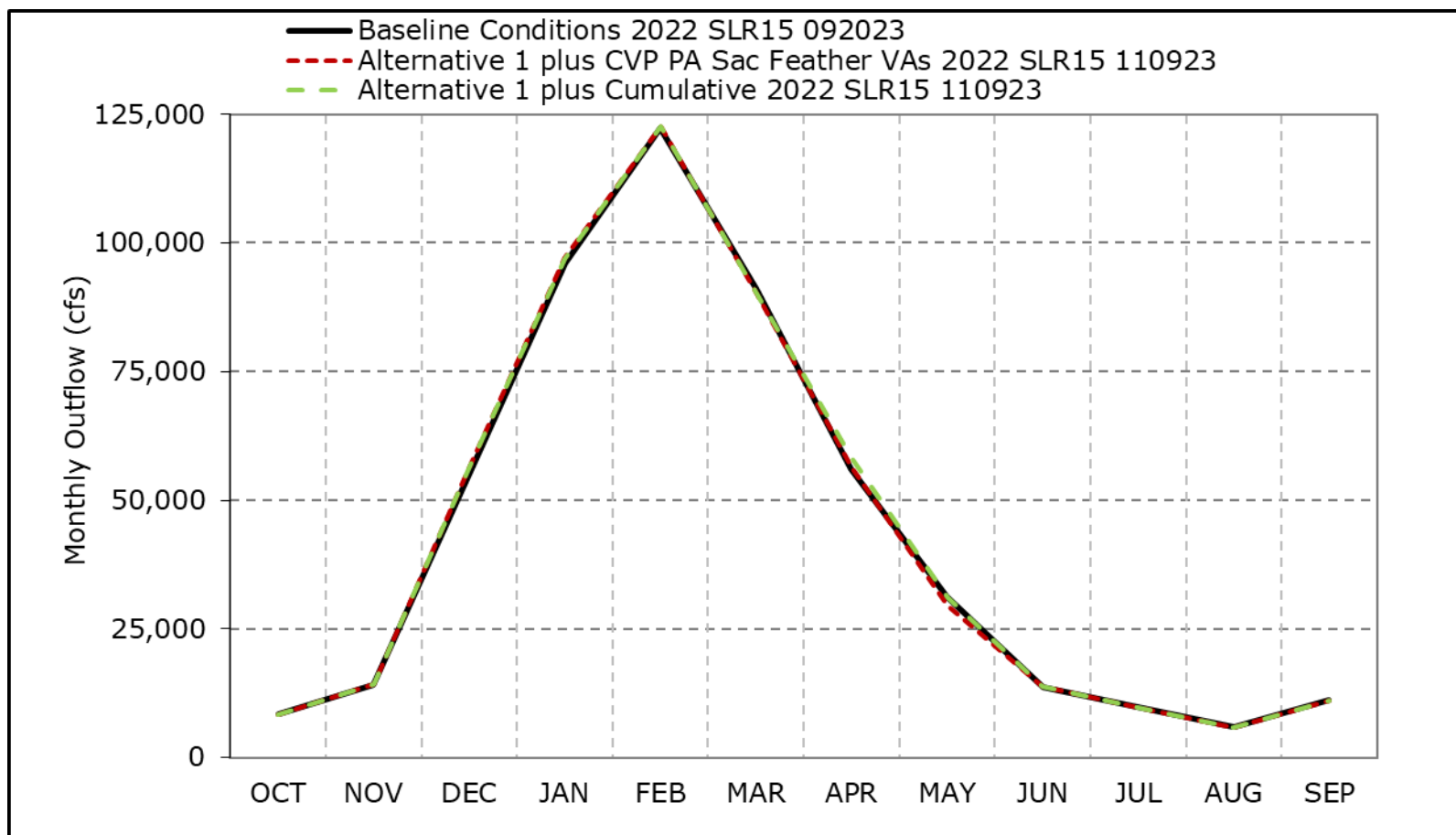


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8b. Delta Outflow, Wet Year Average Outflow

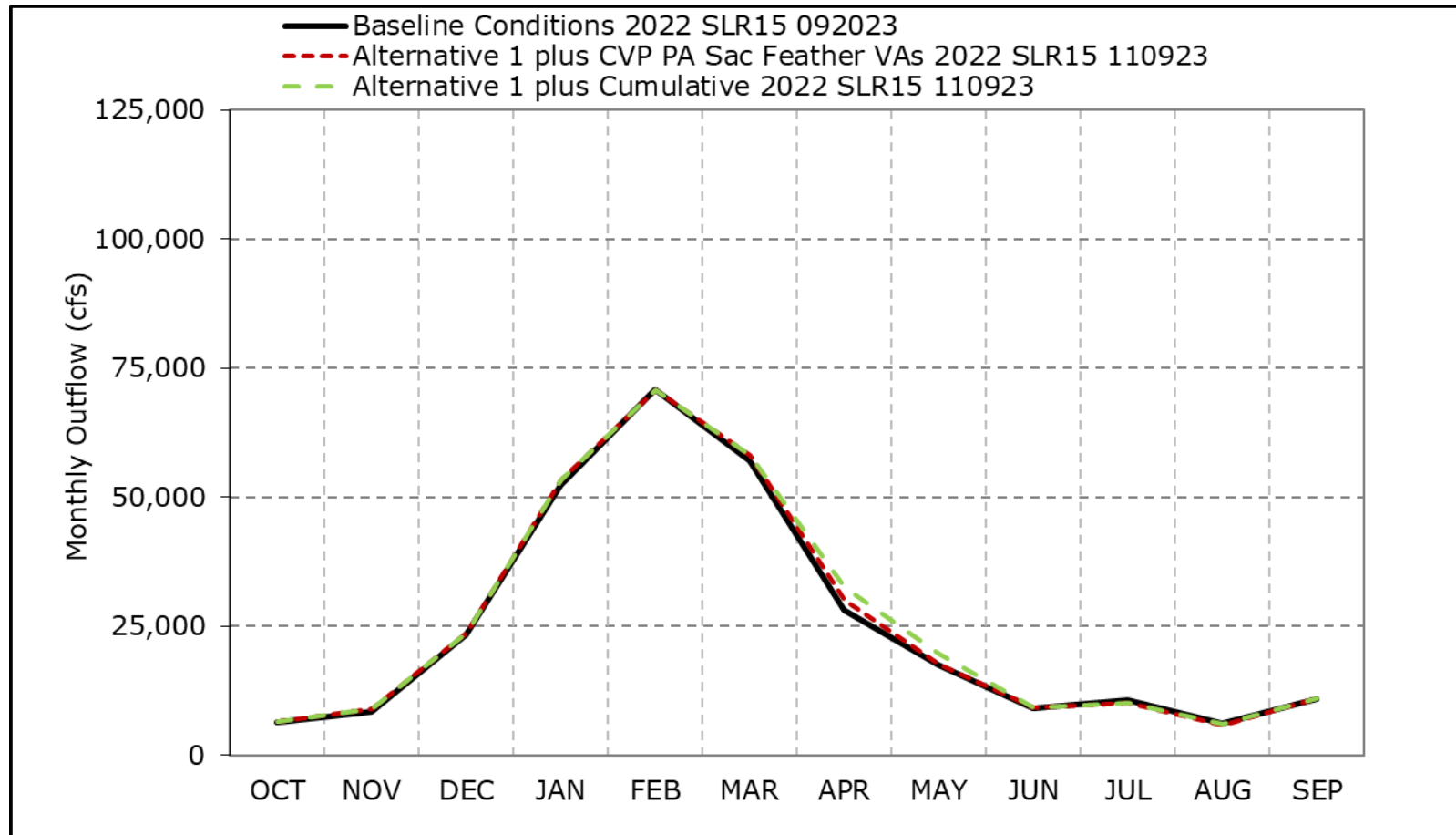


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8c. Delta Outflow, Above Normal Year Average Outflow

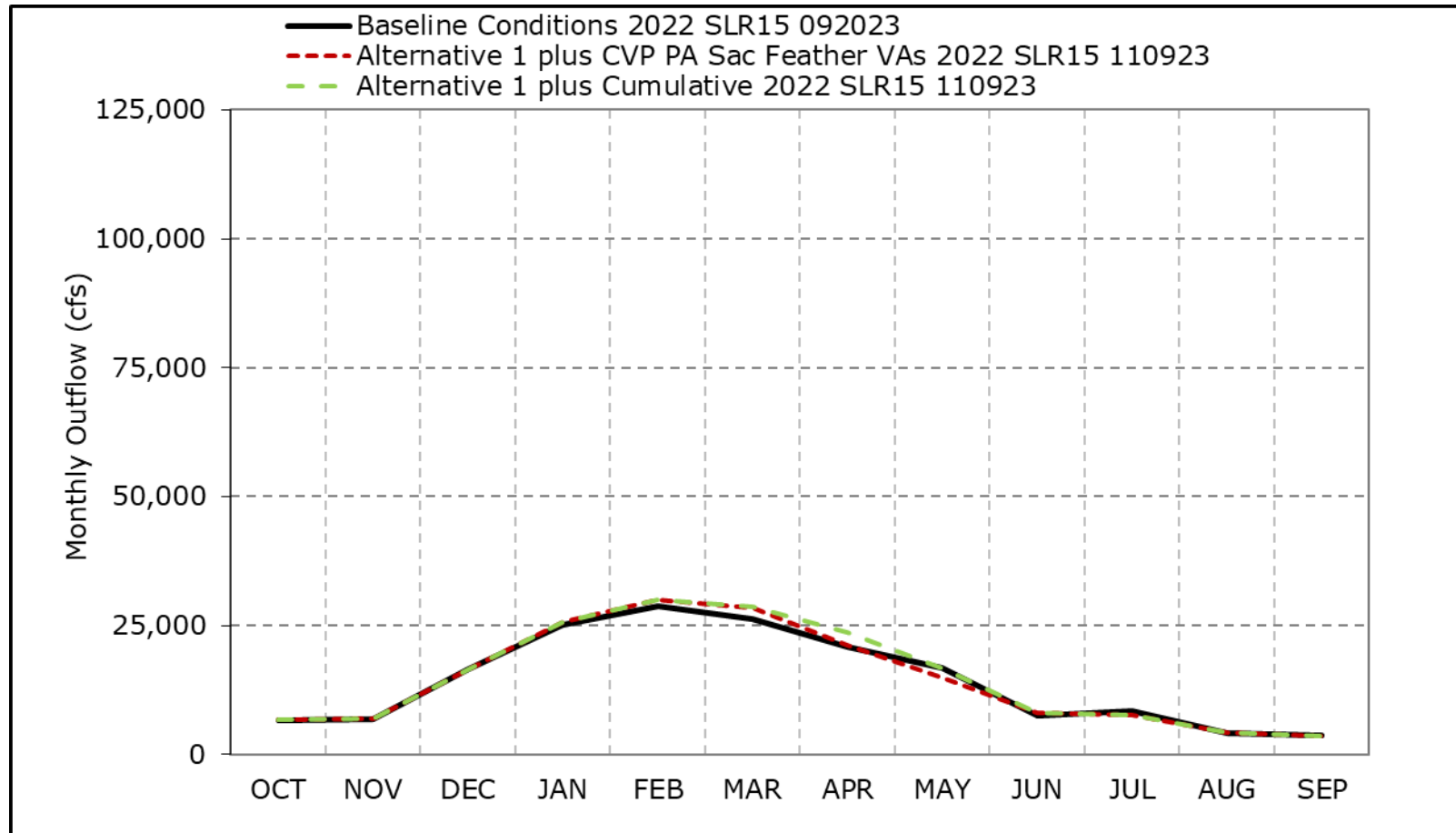


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8d. Delta Outflow, Below Normal Year Average Outflow

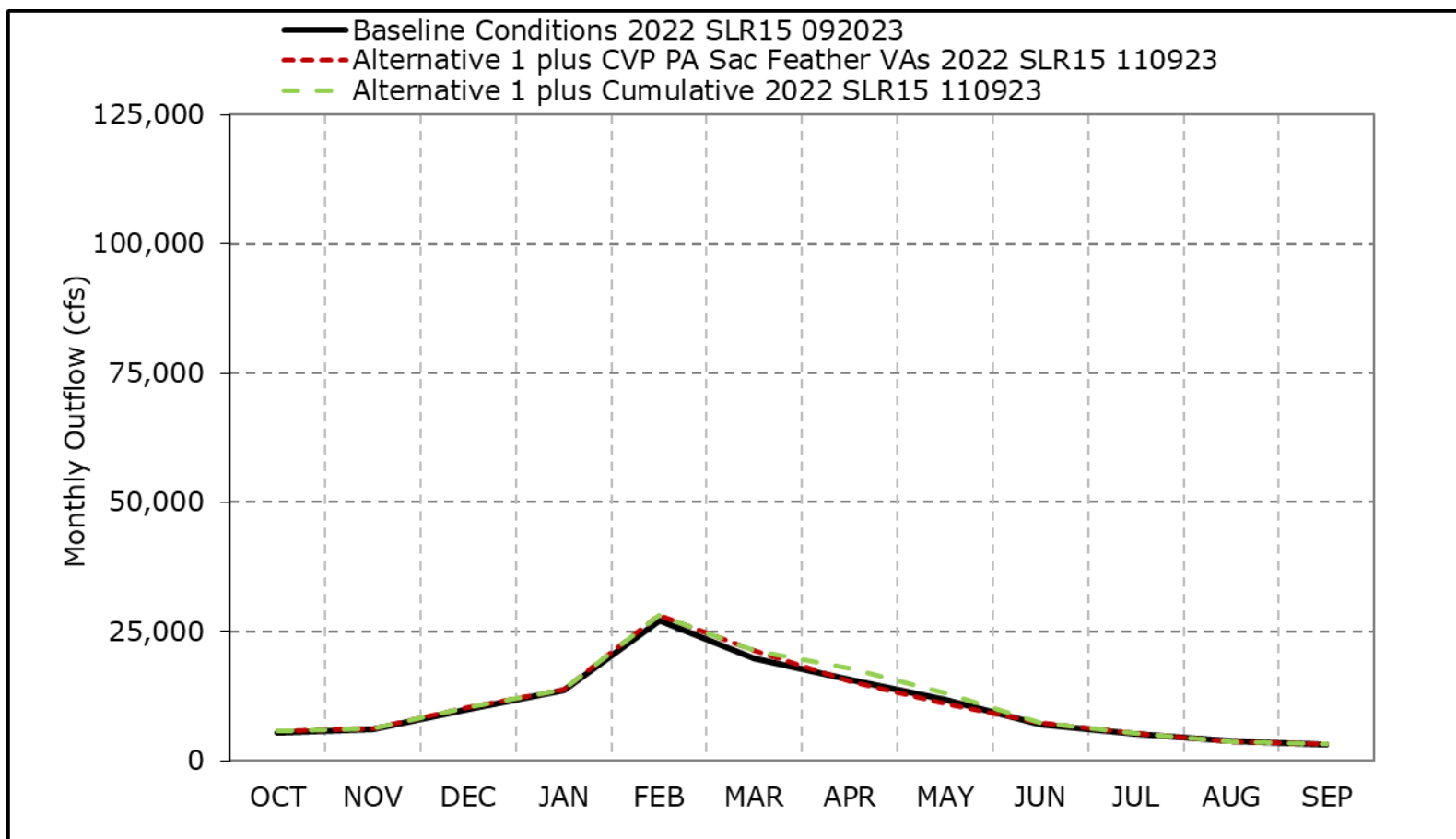


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8e. Delta Outflow, Dry Year Average Outflow

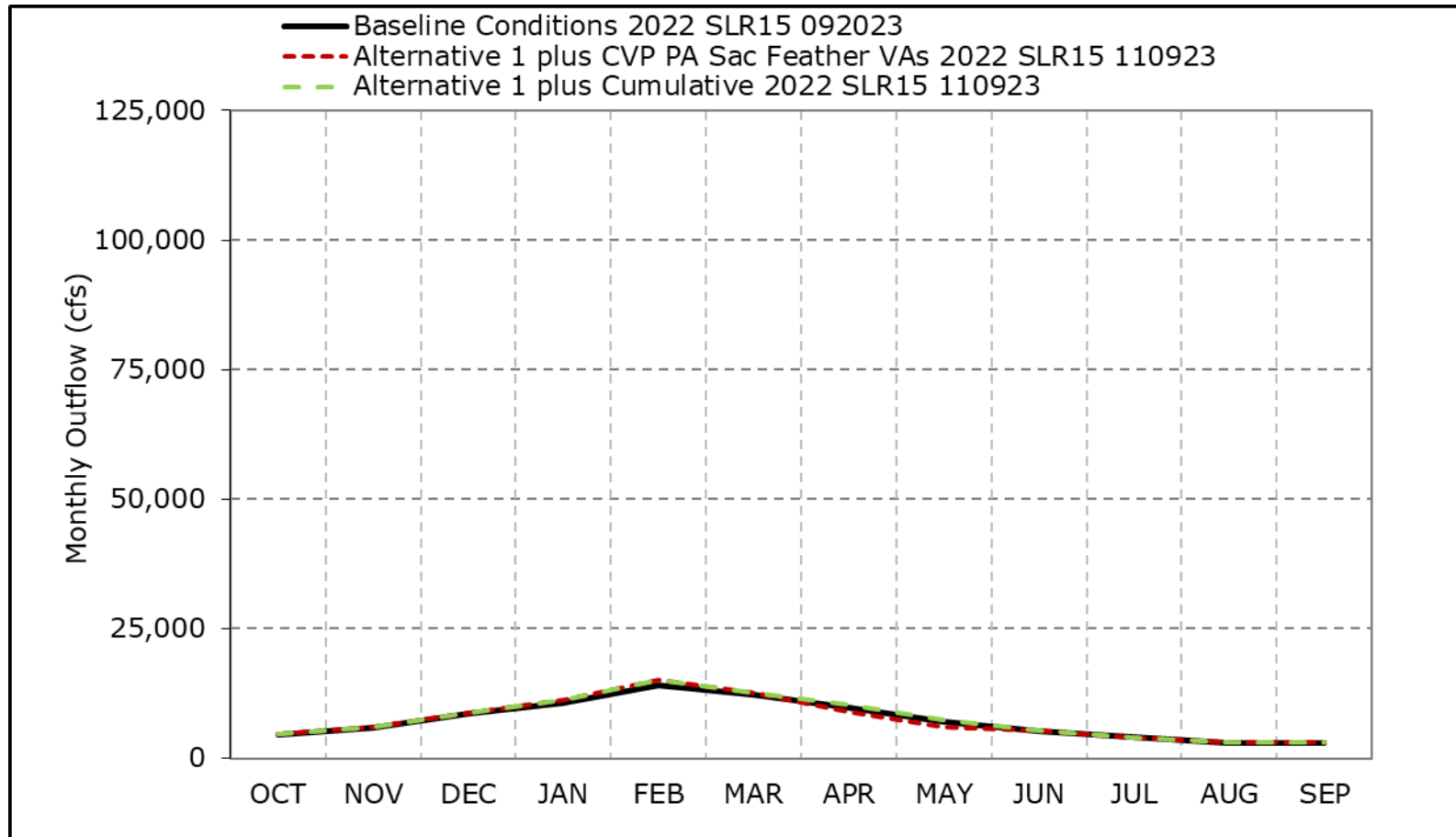


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8f. Delta Outflow, Critical Year Average Outflow

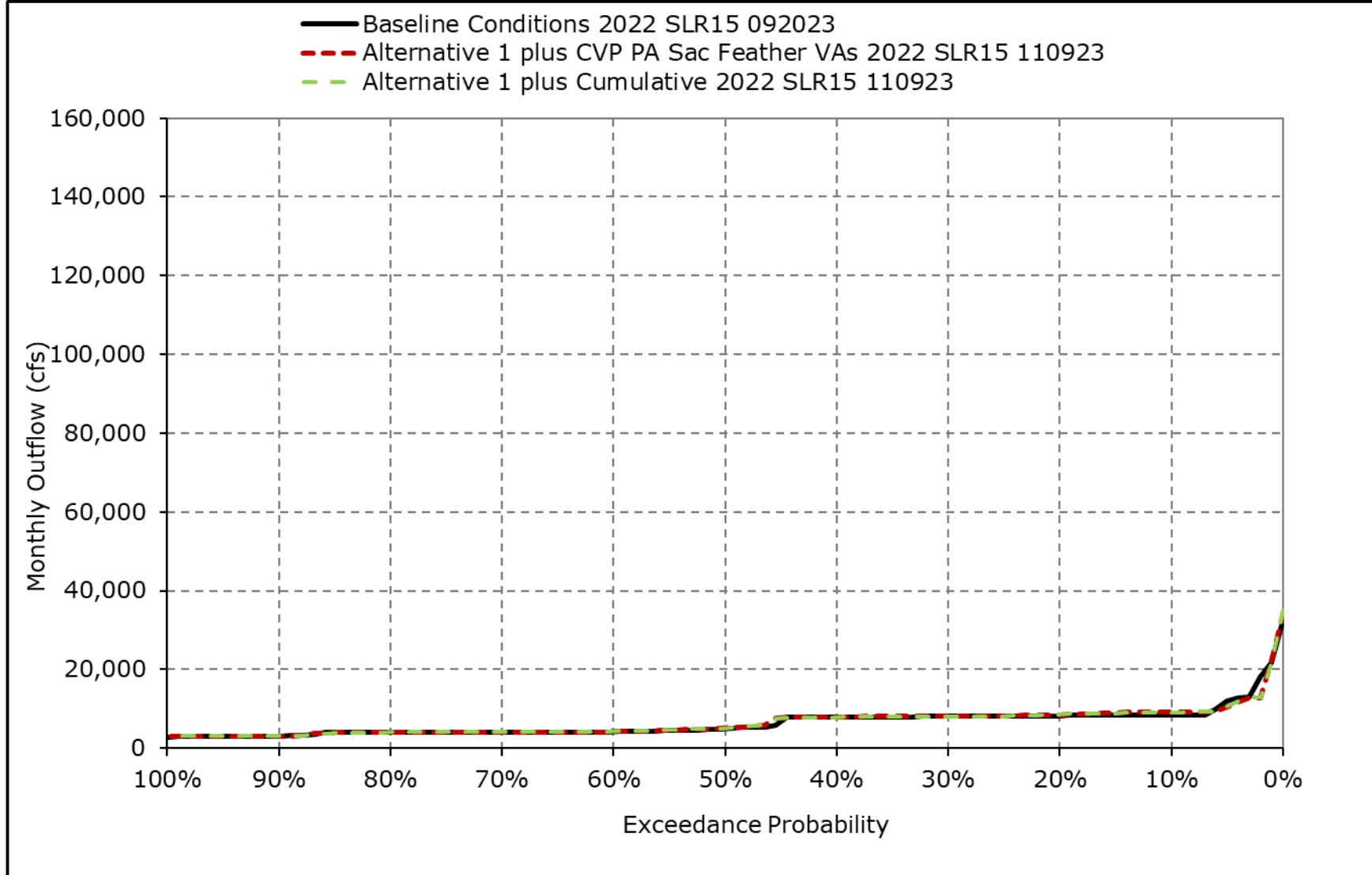


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

*These results are displayed with water year - year type sorting.

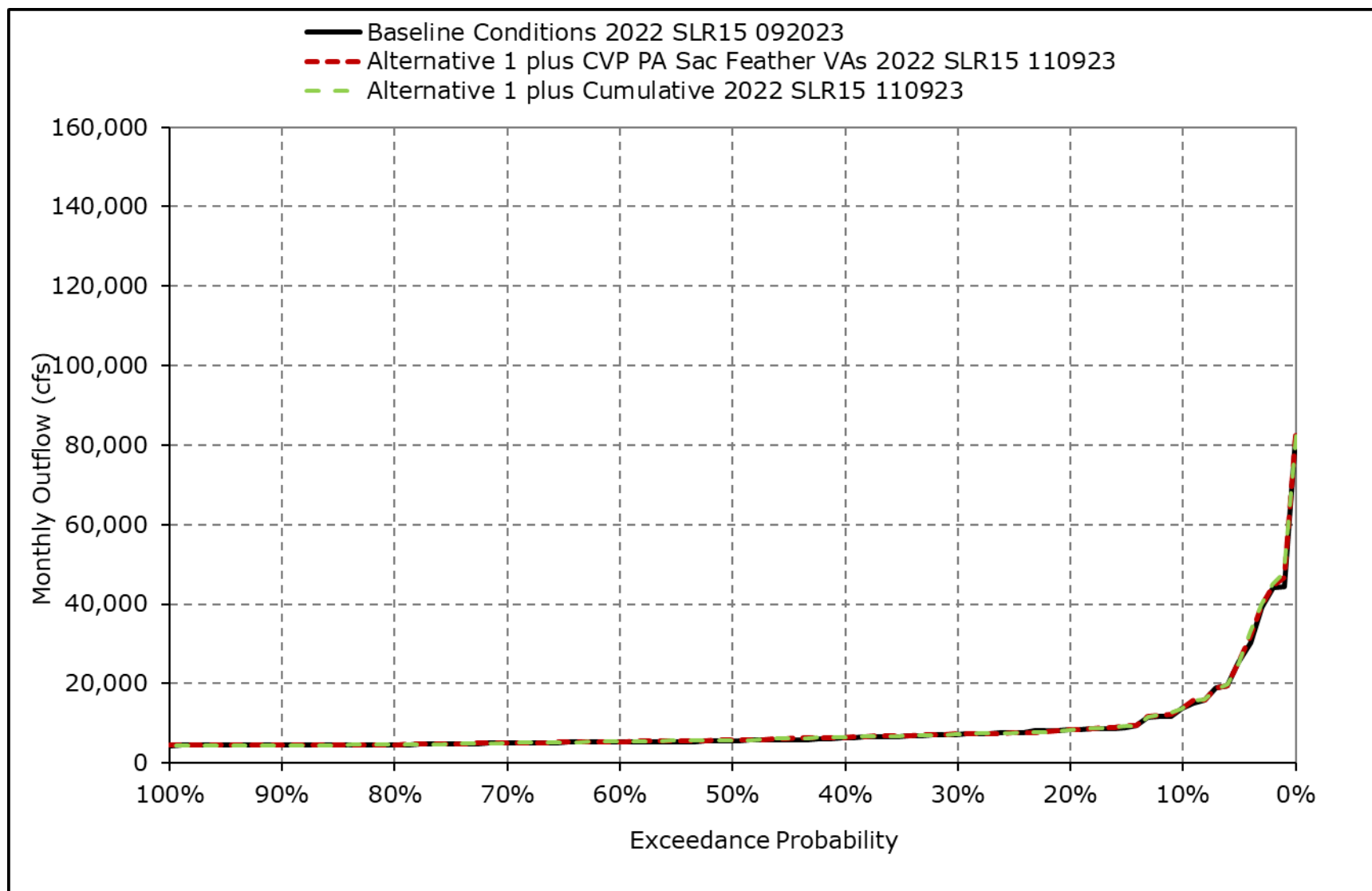
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8g. Delta Outflow, October



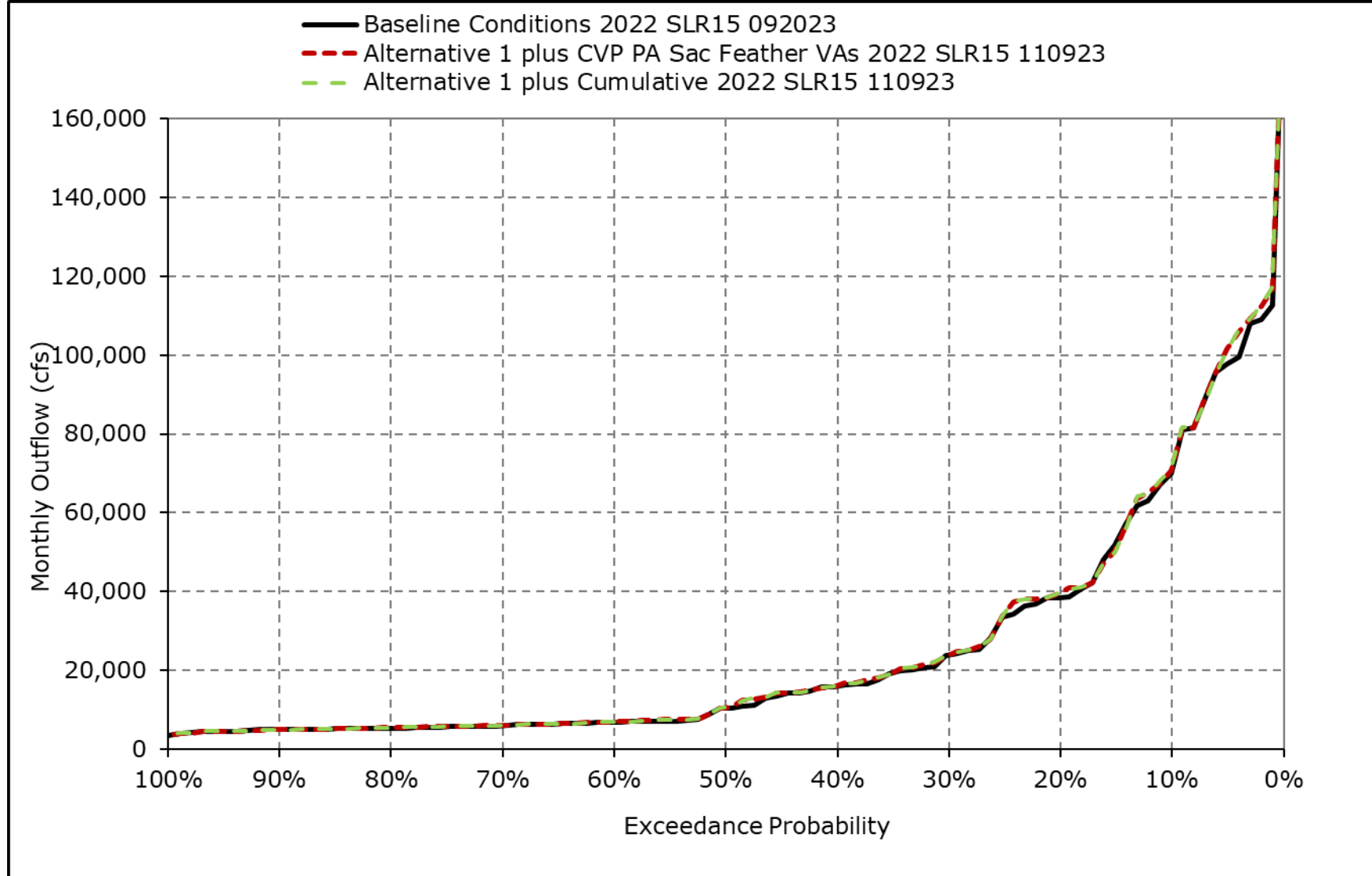
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8h. Delta Outflow, November



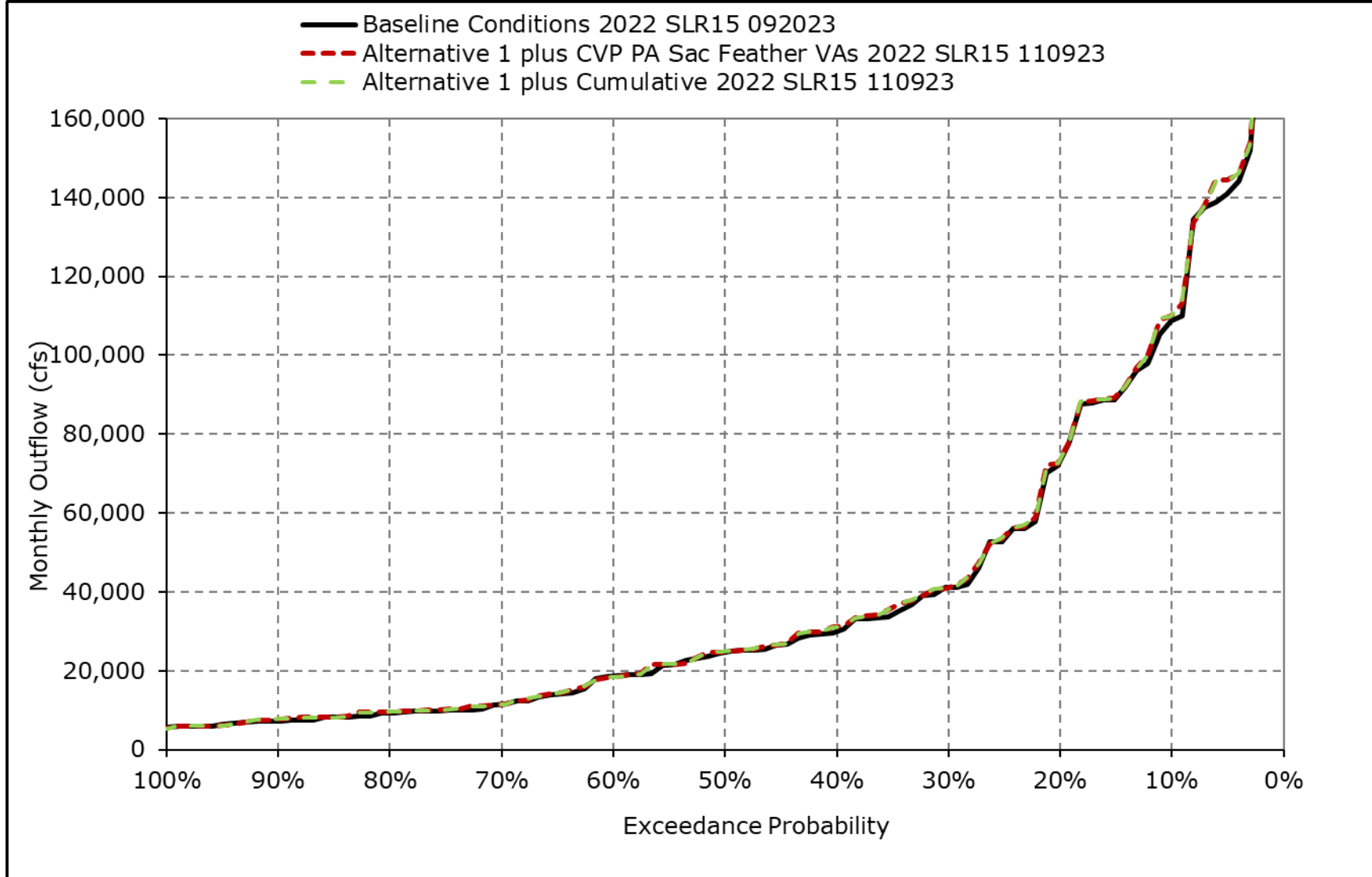
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8i. Delta Outflow, December



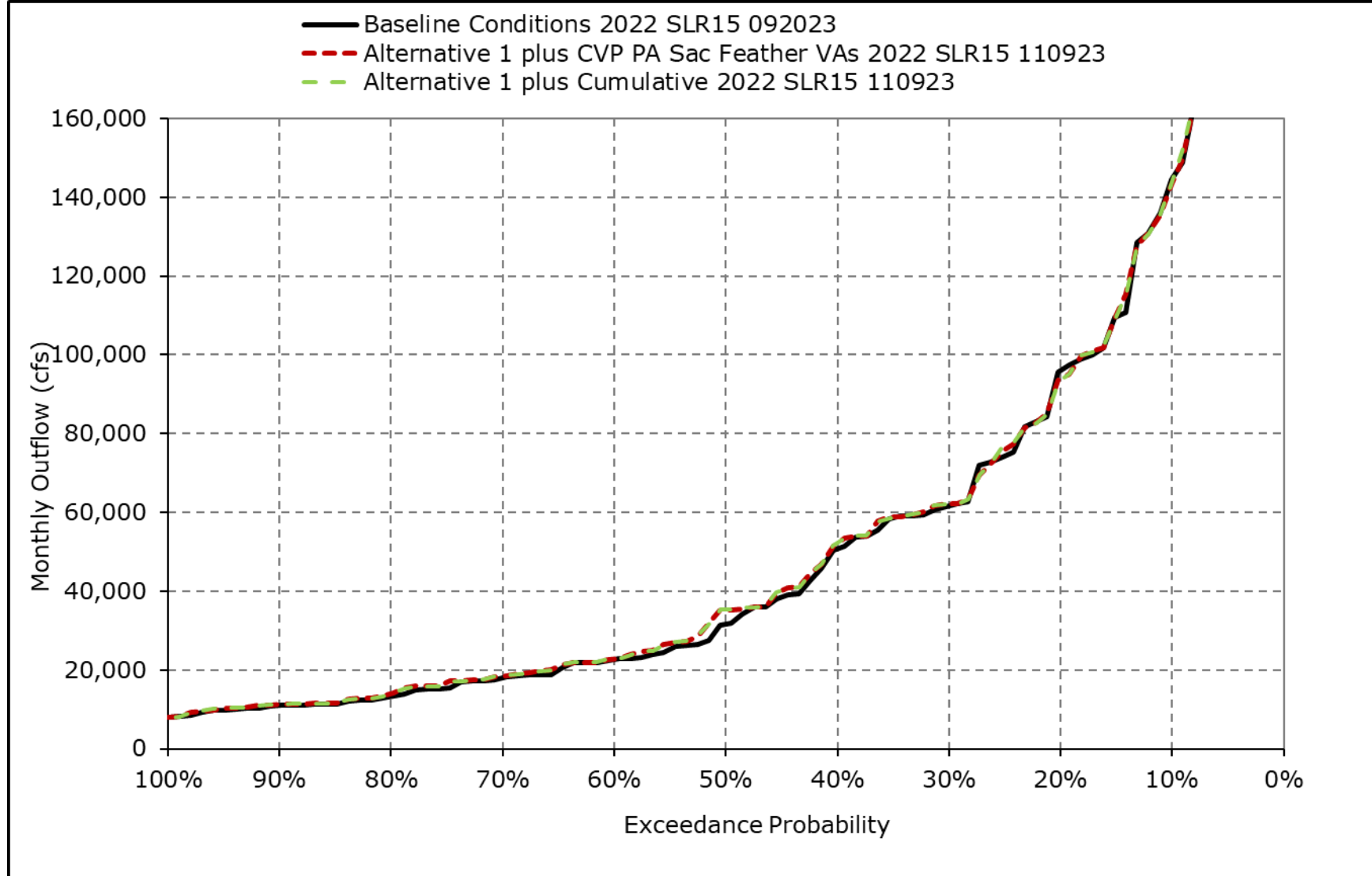
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8j. Delta Outflow, January



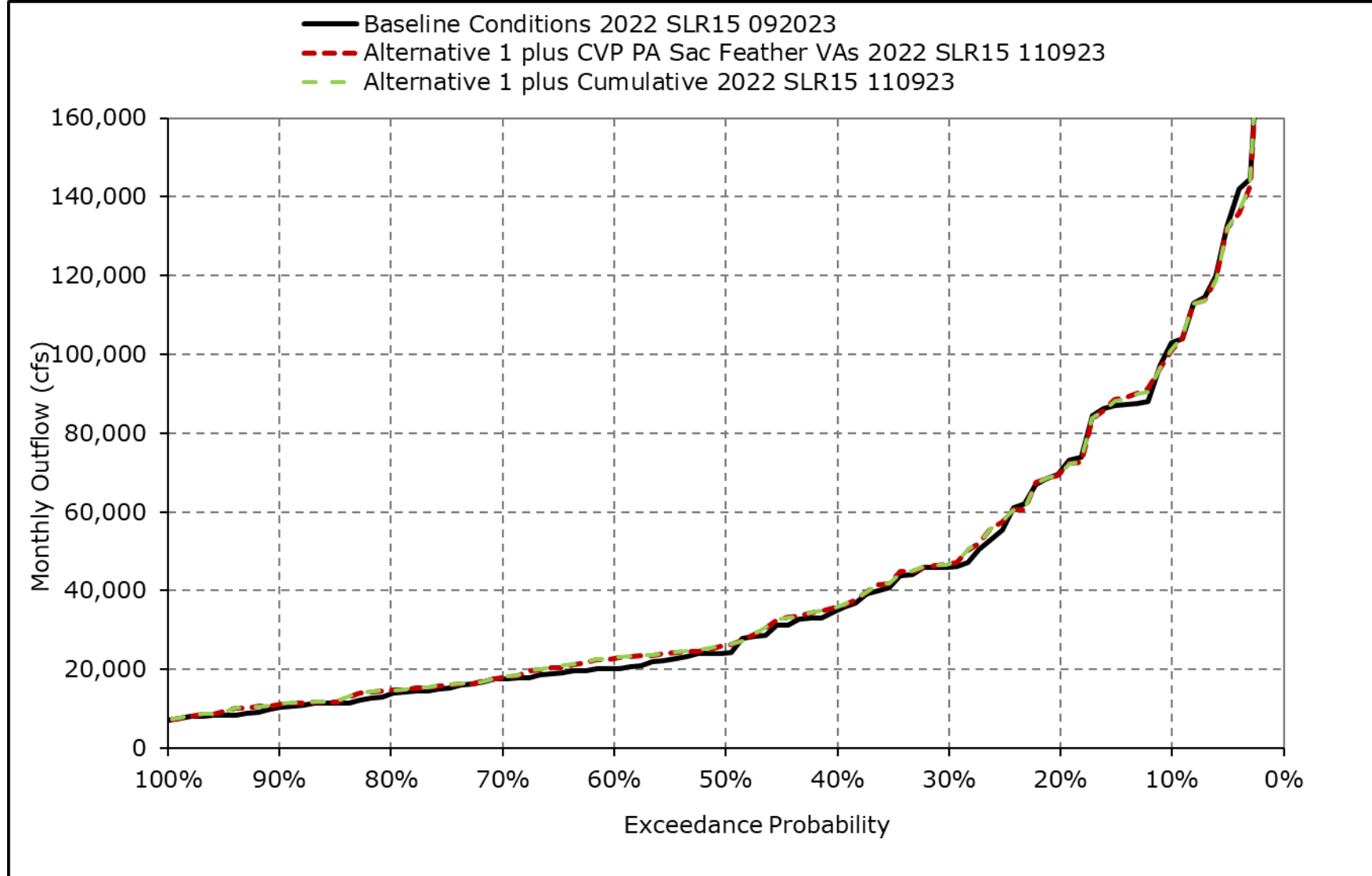
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8k. Delta Outflow, February



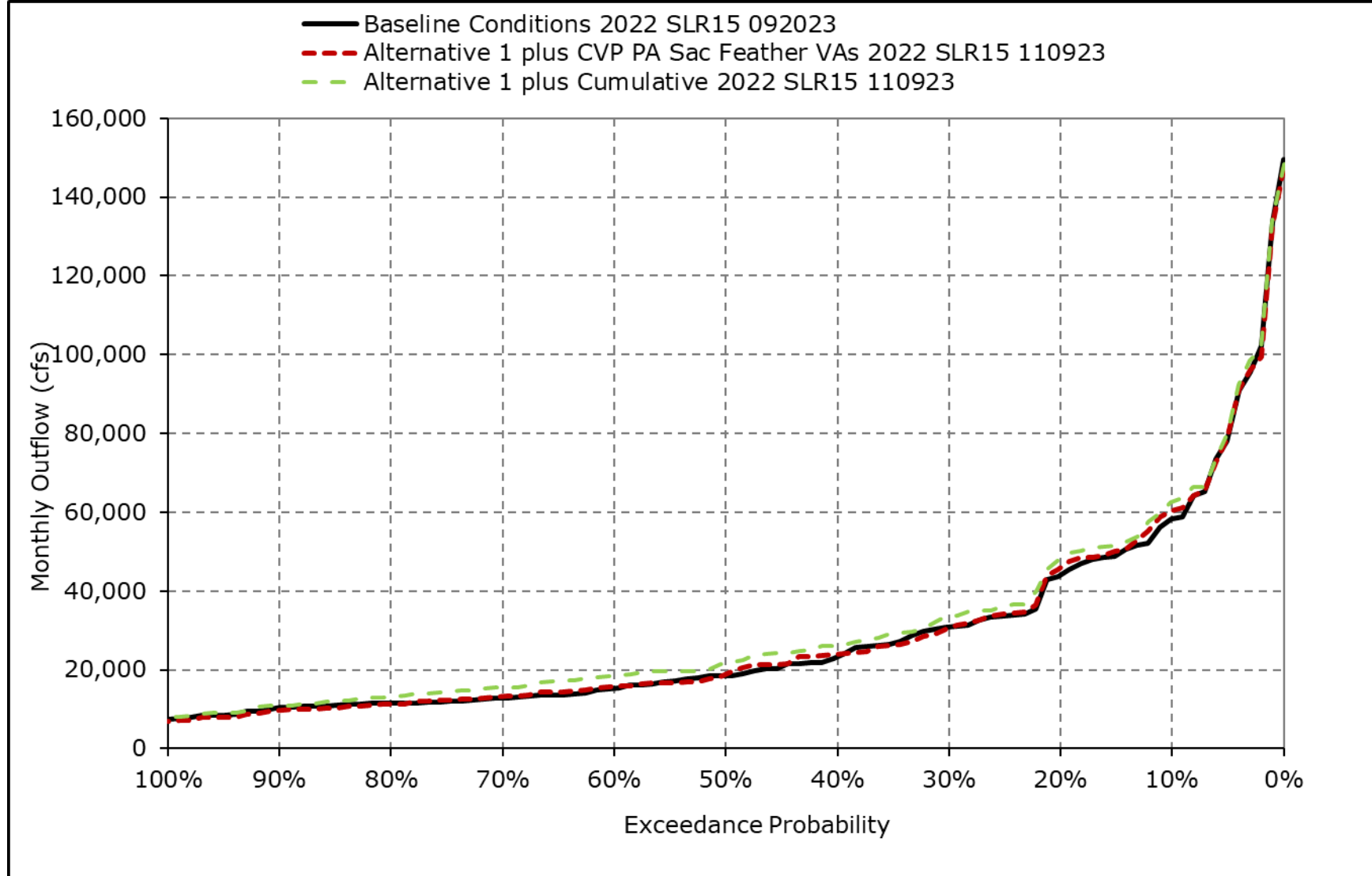
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8I. Delta Outflow, March



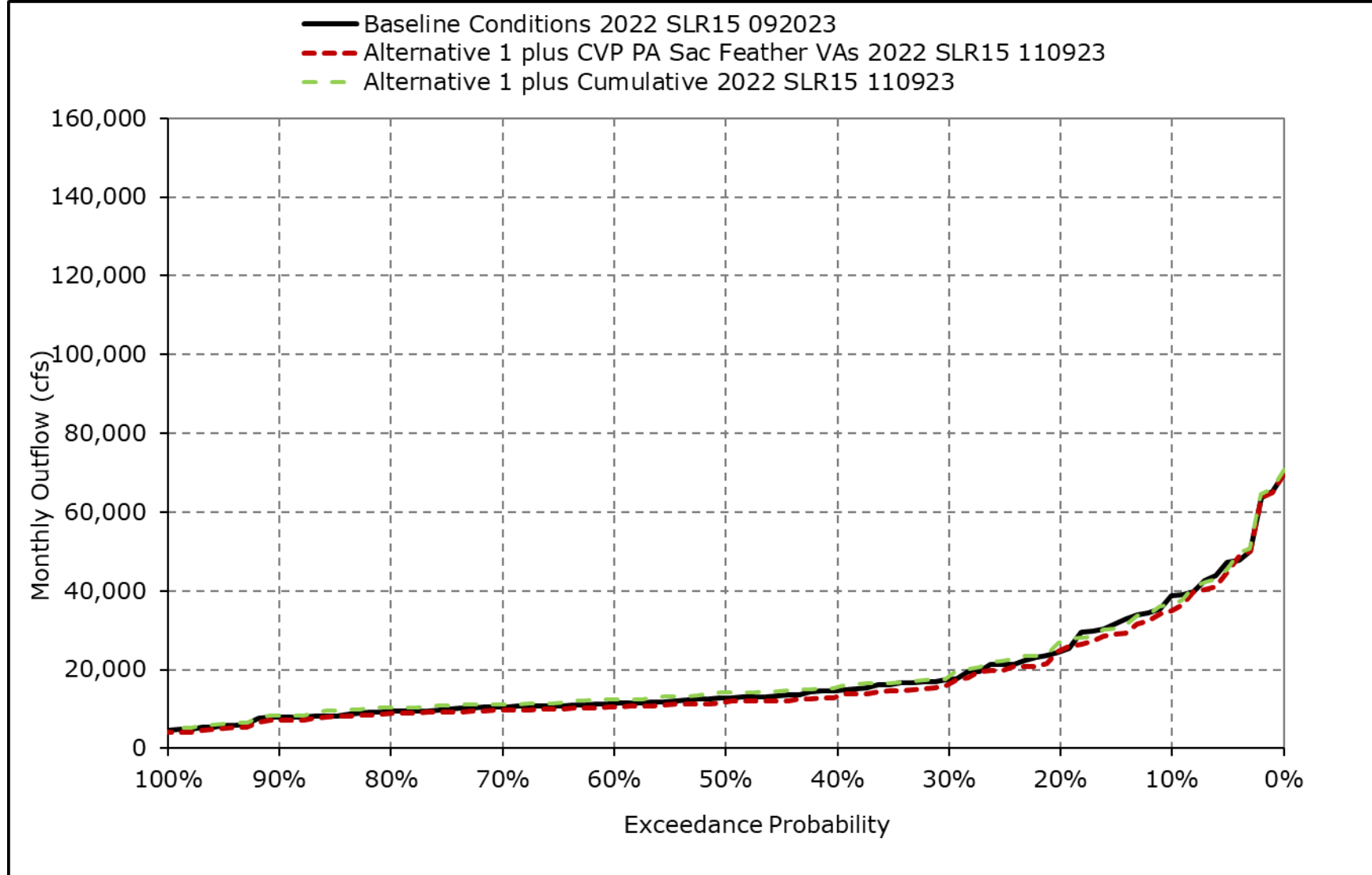
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8m. Delta Outflow, April



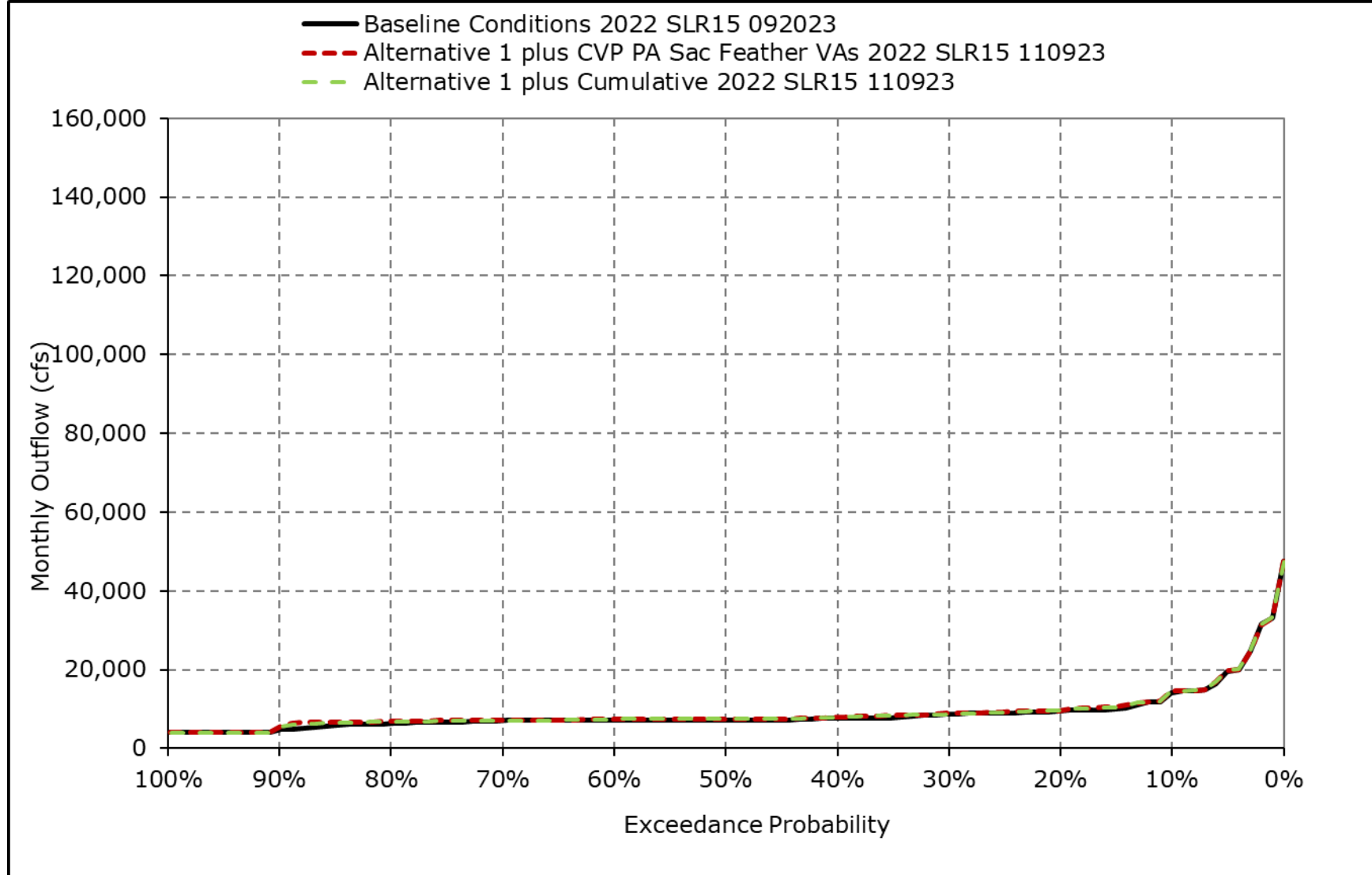
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8n. Delta Outflow, May



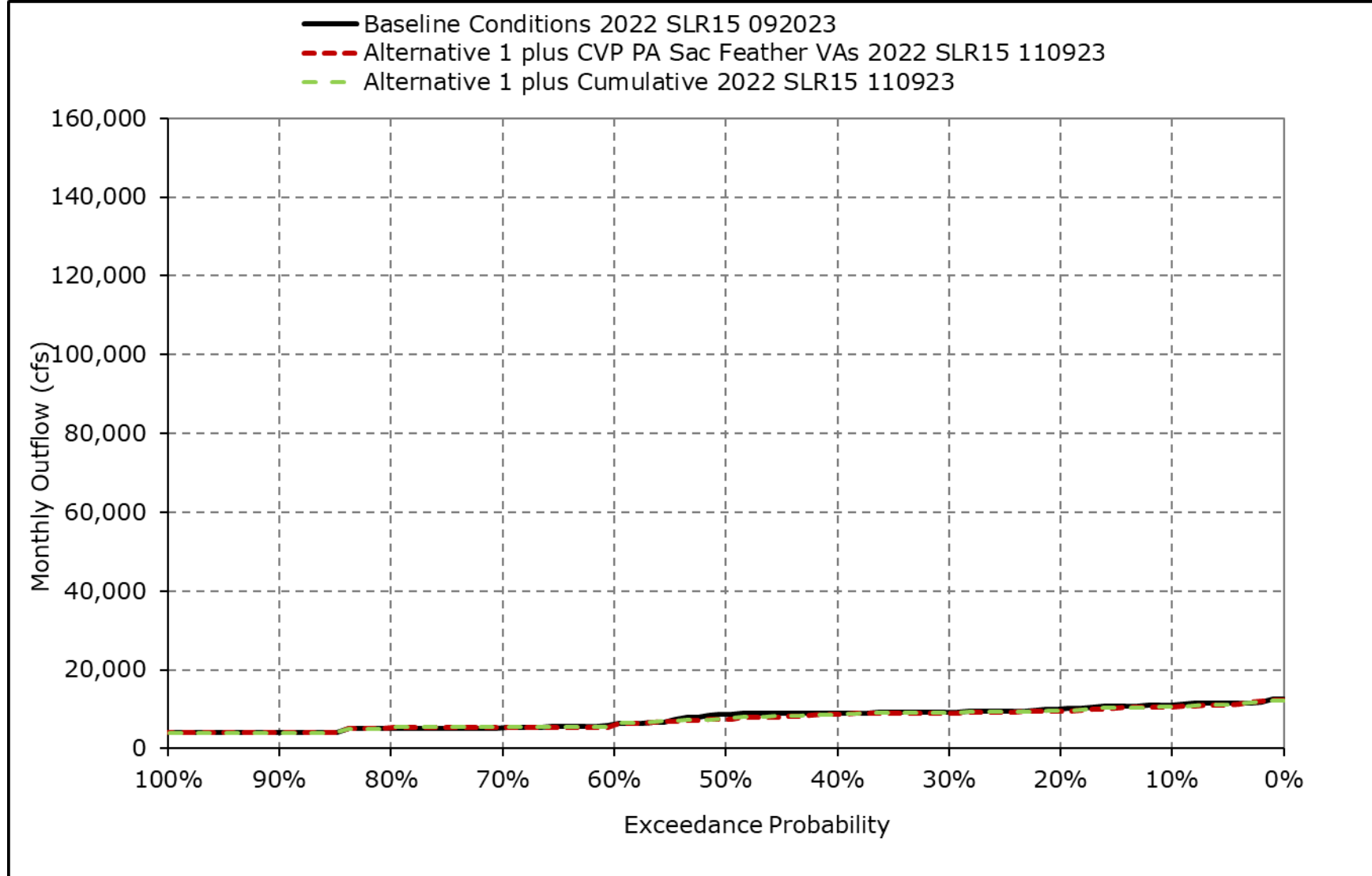
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8o. Delta Outflow, June



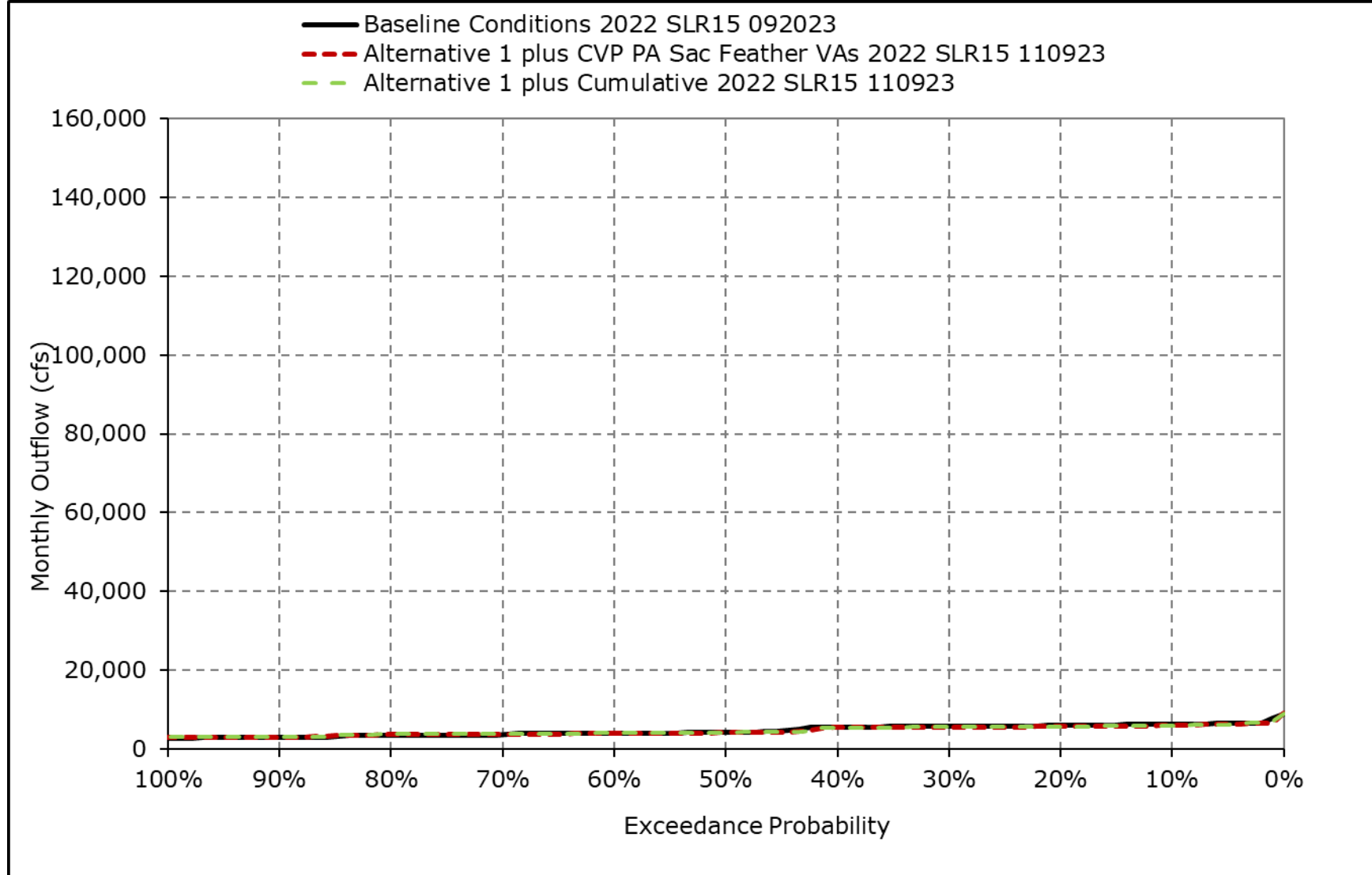
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8p. Delta Outflow, July



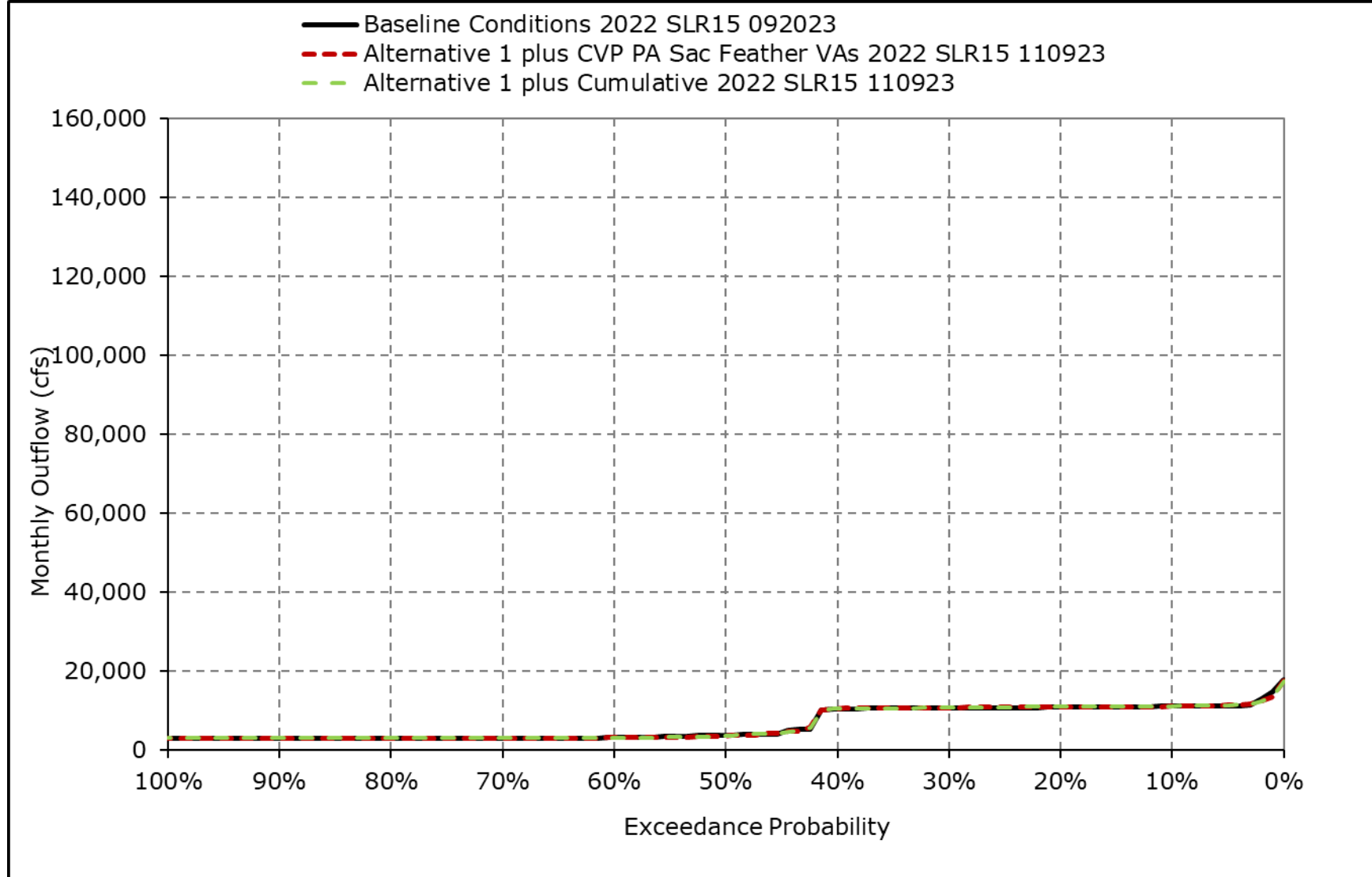
*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8q. Delta Outflow, August



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.

Figure 4H-2-8r. Delta Outflow, September



*All scenarios are simulated at 2022 Median climate condition and 15 cm sea level rise.