

Attachment 3b: Flow Results (CalSim 3)

Appendix 4G

Attachment 3b: Flow Results (CalSim 3)

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

- Baseline Conditions (082624)
- Proposed Project plus Cumulative Projects (091124)

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

Note:

¹. Parameter has been post-processed for the Proposed Project plus Cumulative Projects 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 4G-3-1-1a. Sacramento River Flow at Freeport, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,590	19,596	47,575	66,116	69,548	69,127	57,031	45,980	29,555	23,381	18,592	20,448
20% Exceedance	14,631	14,595	32,648	53,437	62,477	56,765	37,146	34,880	22,685	22,215	18,249	19,160
30% Exceedance	13,468	13,826	22,740	35,691	49,756	46,224	24,889	22,587	17,080	20,814	17,641	17,393
40% Exceedance	12,846	13,231	16,978	27,913	38,005	35,570	19,393	16,922	14,165	19,498	17,207	16,108
50% Exceedance	10,690	12,539	15,335	22,245	28,144	26,215	16,914	13,771	13,568	18,767	16,260	13,219
60% Exceedance	9,373	11,112	14,044	17,765	24,258	22,683	12,320	12,571	13,243	17,753	13,549	10,826
70% Exceedance	8,396	10,024	11,051	14,221	18,511	19,957	11,210	11,287	12,372	16,262	10,871	9,952
80% Exceedance	8,044	8,545	10,204	12,127	15,981	14,898	10,423	10,592	11,515	13,157	9,036	9,058
90% Exceedance	6,187	7,229	8,873	10,574	13,366	11,595	9,263	7,768	9,686	9,978	7,935	8,224
Full Simulation Period Average ^a	11,308	13,023	21,597	30,639	37,011	34,526	23,773	20,917	17,647	17,910	14,281	14,057
Wet Water Years (32%)	13,245	16,201	34,067	52,284	60,733	56,175	43,114	36,030	27,074	20,095	17,683	19,512
Above Normal Water Years (9%)	11,006	12,935	20,839	41,115	43,249	44,036	24,747	23,721	19,219	21,318	18,298	17,693
Below Normal Water Years (20%)	11,460	12,330	16,072	22,837	30,324	29,268	17,217	16,738	13,661	21,214	16,365	13,312
Dry Water Years (21%)	10,780	12,430	16,510	15,725	22,893	20,669	12,247	11,638	13,384	16,583	11,056	10,077
Critical Water Years (18%)	8,464	8,880	11,881	12,986	15,621	13,294	9,633	8,114	9,504	10,201	7,673	8,013

Table 4G-3-1-1b. Sacramento River Flow at Freeport, Proposed Project plus Cumulative 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,755	19,731	47,994	66,370	69,576	69,118	58,086	46,546	29,518	22,659	18,584	21,464
20% Exceedance	14,596	14,616	35,143	53,574	62,943	56,761	38,297	35,914	22,475	21,618	18,066	20,011
30% Exceedance	13,255	13,747	23,451	36,257	50,082	46,058	28,037	24,281	16,656	20,626	17,461	18,810
40% Exceedance	12,601	13,236	17,309	27,996	38,363	35,229	22,533	18,108	13,841	18,755	16,748	16,307
50% Exceedance	10,923	12,879	15,208	22,160	28,452	26,756	18,291	15,717	13,184	18,029	15,792	13,298
60% Exceedance	9,163	11,198	14,094	17,175	24,521	22,450	15,109	14,306	12,762	17,499	13,856	10,785
70% Exceedance	8,413	10,103	11,400	14,534	19,194	19,785	13,188	13,296	12,331	16,187	9,916	10,015
80% Exceedance	8,257	8,689	10,329	12,508	16,221	14,872	12,441	12,372	11,587	12,285	8,552	9,073
90% Exceedance	6,821	7,509	8,851	11,039	13,575	11,803	10,670	8,538	9,068	9,387	7,808	8,036
Full Simulation Period Average ^a	11,379	13,130	21,806	30,829	37,167	34,619	25,762	22,436	17,440	17,405	14,063	14,433
Wet Water Years (32%)	13,289	16,330	34,504	52,409	60,902	56,193	44,175	37,019	27,038	19,964	17,737	20,310
Above Normal Water Years (9%)	10,868	12,781	20,902	41,177	43,441	44,024	27,754	25,436	18,923	21,292	18,263	19,303
Below Normal Water Years (20%)	11,299	12,378	16,164	22,876	30,710	29,288	20,439	18,602	13,634	20,279	15,843	13,052
Dry Water Years (21%)	10,962	12,622	16,538	15,992	22,828	20,917	14,866	13,882	12,947	15,794	10,443	10,165
Critical Water Years (18%)	8,812	9,042	12,101	13,435	15,739	13,469	10,659	9,252	9,103	9,600	7,678	8,067

Table 4G-3-1-1c. Sacramento River Flow at Freeport, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	165	134	419	254	29	-9	1,055	566	-37	-722	-7	1,016
20% Exceedance	-35	21	2,494	137	466	-5	1,151	1,034	-210	-597	-183	851
30% Exceedance	-213	-79	711	566	325	-166	3,148	1,694	-424	-188	-180	1,417
40% Exceedance	-245	4	330	82	358	-341	3,140	1,186	-324	-743	-460	199
50% Exceedance	233	340	-127	-85	308	541	1,377	1,946	-384	-738	-467	78
60% Exceedance	-211	86	50	-591	263	-232	2,789	1,734	-481	-254	306	-40
70% Exceedance	17	79	349	313	683	-172	1,978	2,009	-41	-75	-955	63
80% Exceedance	213	144	125	381	240	-26	2,019	1,780	72	-872	-484	14
90% Exceedance	634	280	-21	464	208	208	1,407	770	-619	-591	-127	-189
Full Simulation Period Average ^a	70	106	210	190	156	93	1,989	1,520	-207	-505	-218	376
Wet Water Years (32%)	44	129	437	125	170	19	1,061	989	-36	-131	54	797
Above Normal Water Years (9%)	-138	-154	64	62	192	-12	3,007	1,715	-297	-26	-35	1,609
Below Normal Water Years (20%)	-161	48	92	39	386	20	3,222	1,864	-27	-935	-522	-260
Dry Water Years (21%)	183	192	29	267	-65	248	2,618	2,244	-437	-789	-613	88
Critical Water Years (18%)	348	162	220	449	118	175	1,026	1,138	-401	-601	6	54

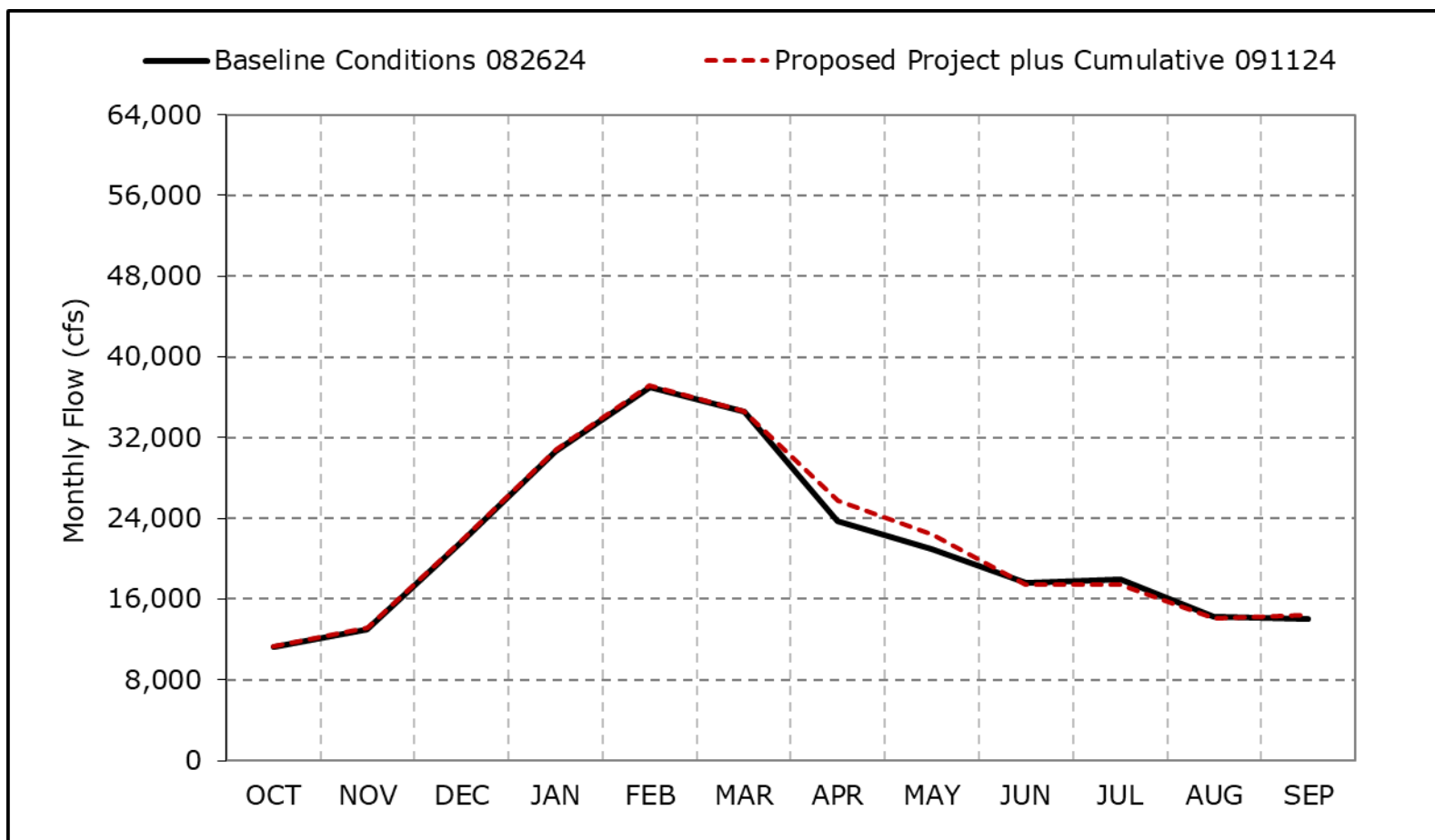
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-1a. Sacramento River Flow at Freeport, Long-Term Average Flow

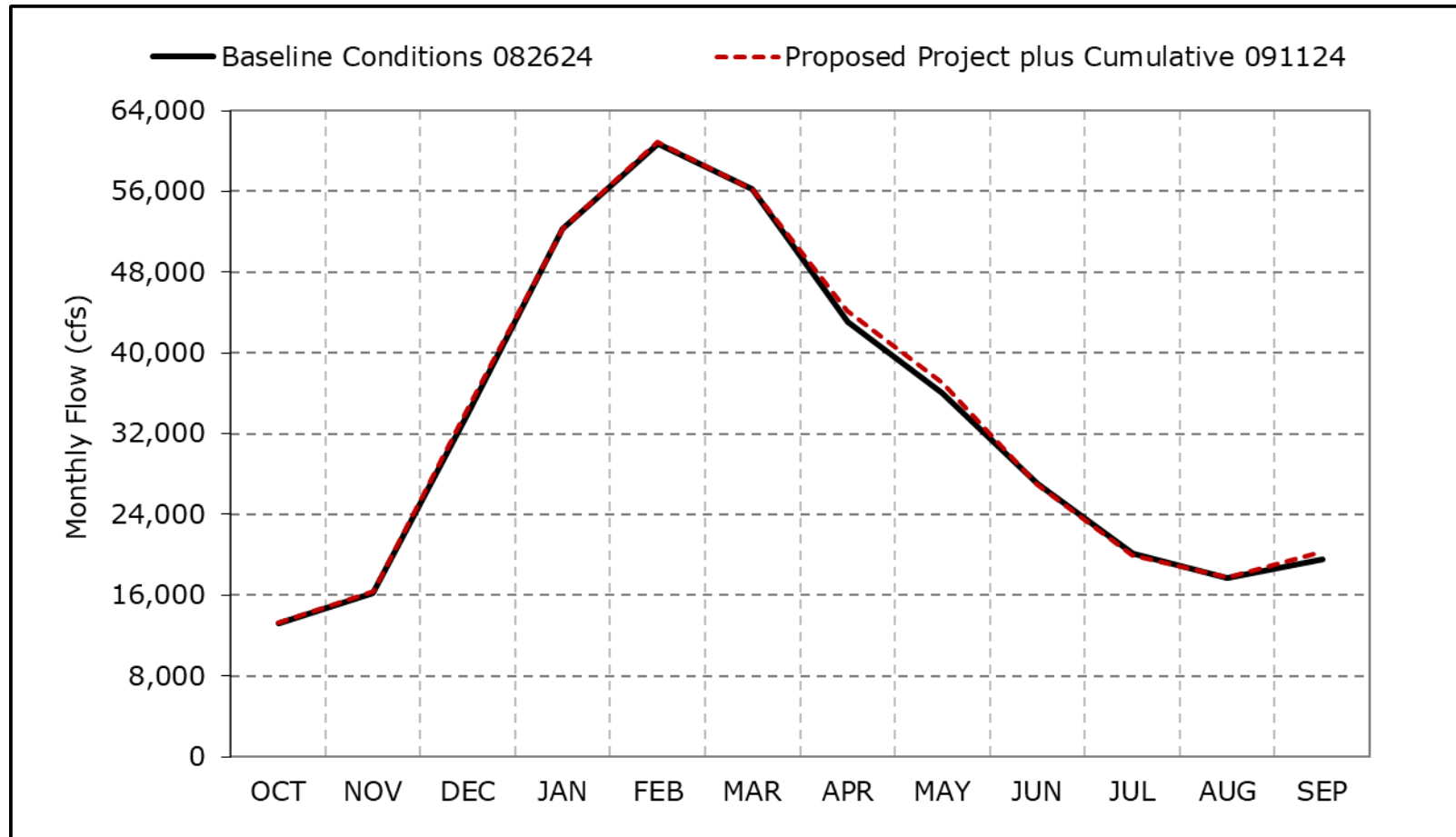


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-1b. Sacramento River Flow at Freeport, Wet Year Average Flow

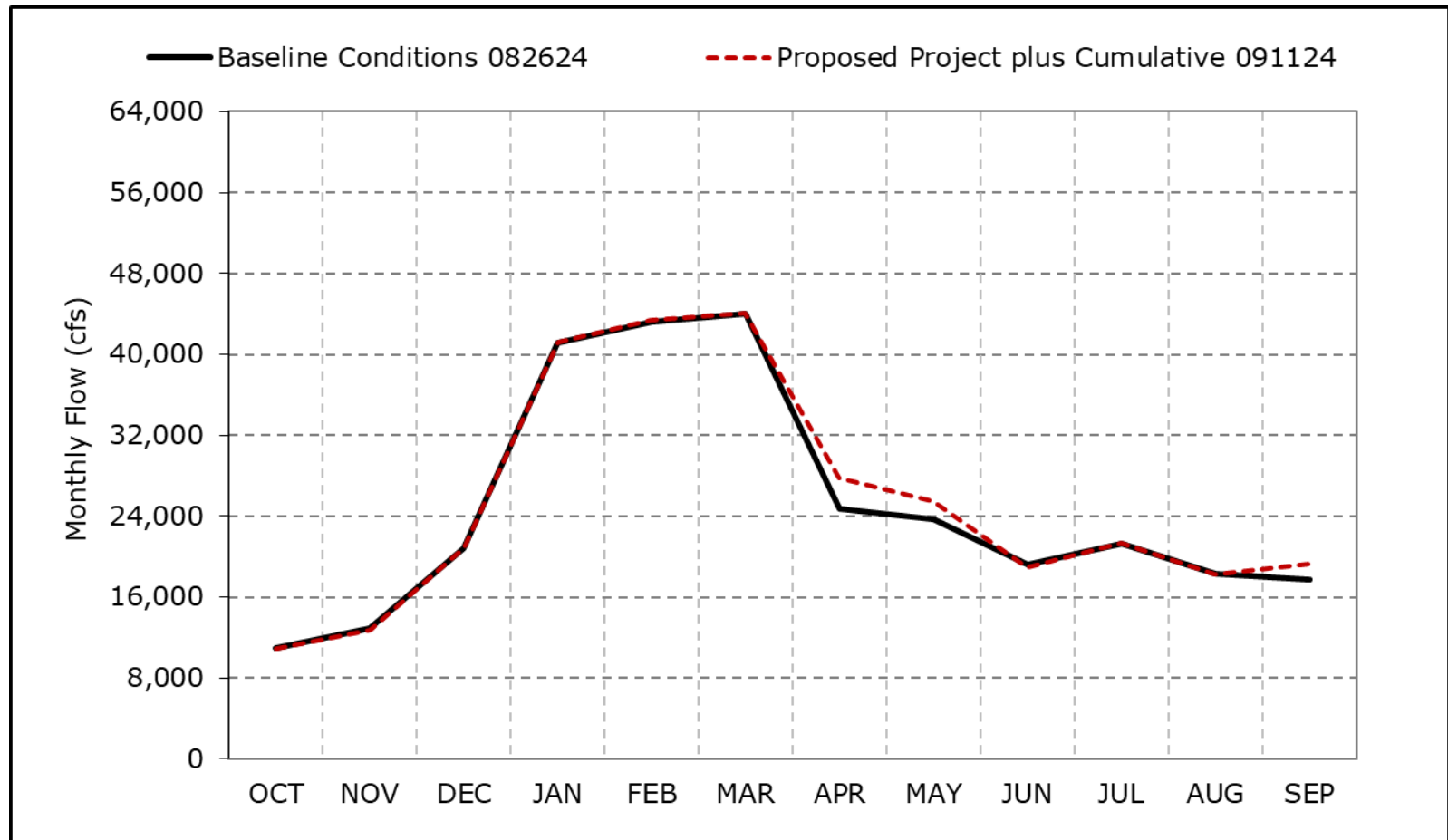


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-1c. Sacramento River Flow at Freeport, Above Normal Year Average Flow

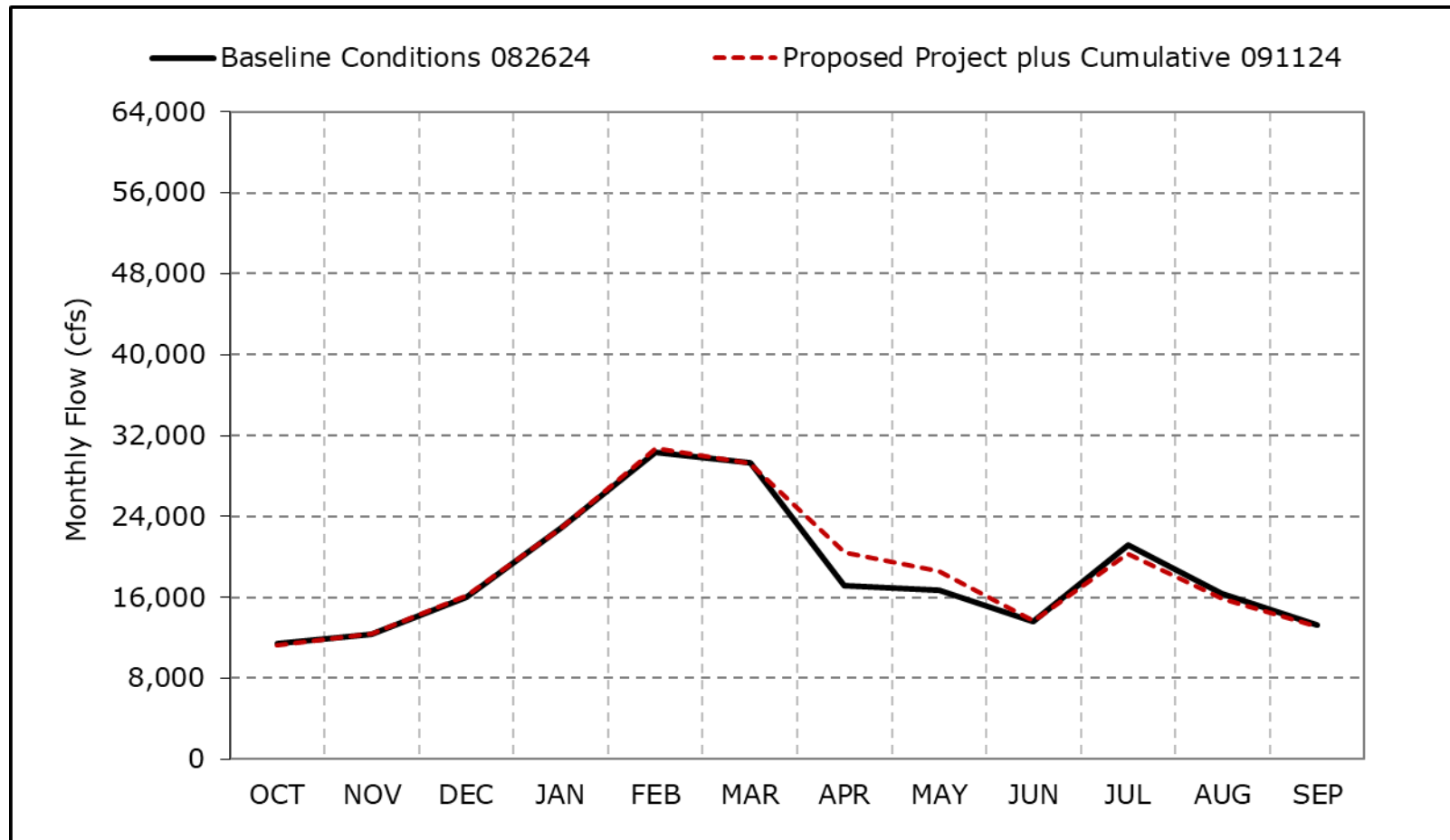


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-1d. Sacramento River Flow at Freeport, Below Normal Year Average Flow

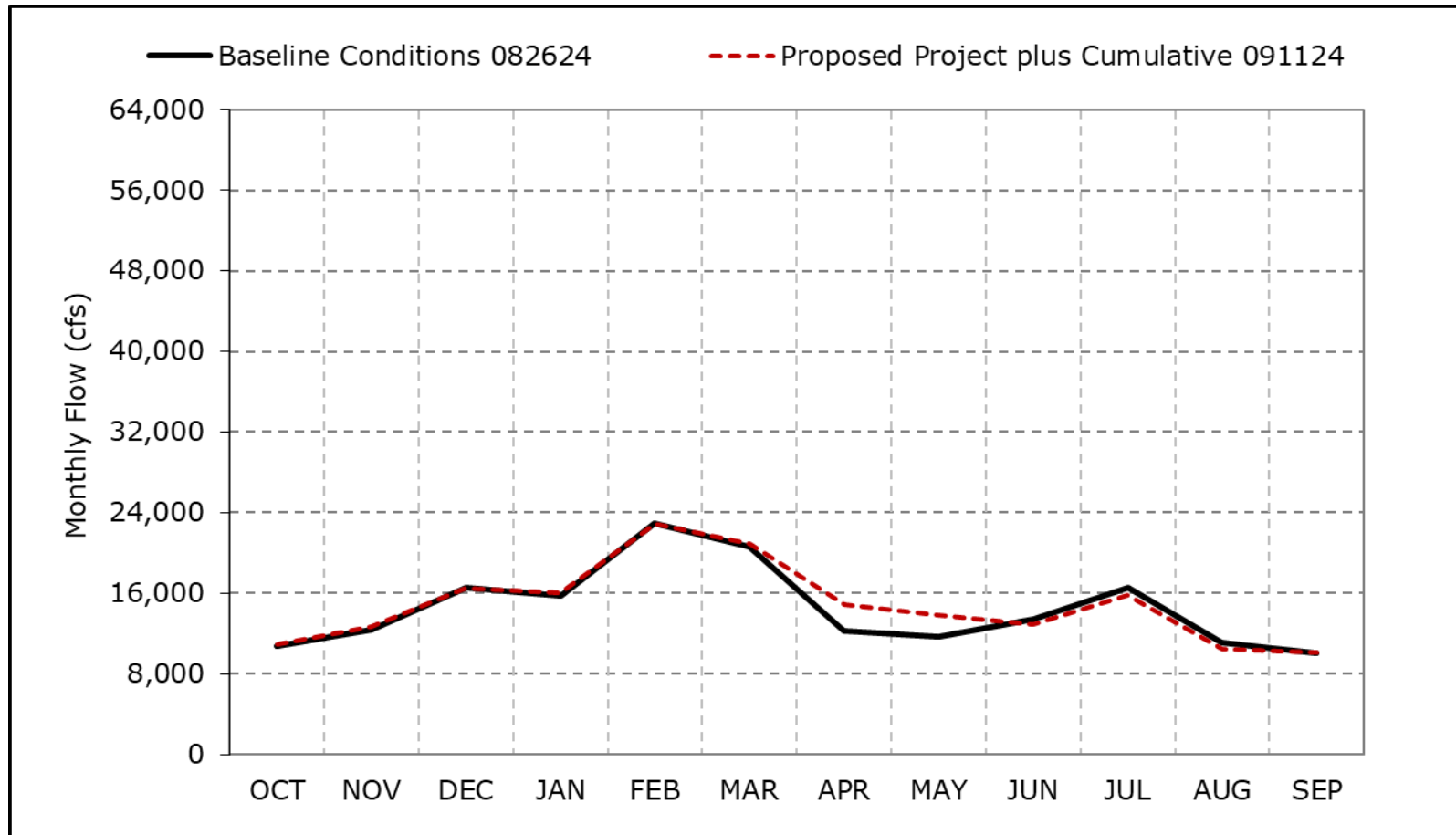


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-1e. Sacramento River Flow at Freeport, Dry Year Average Flow

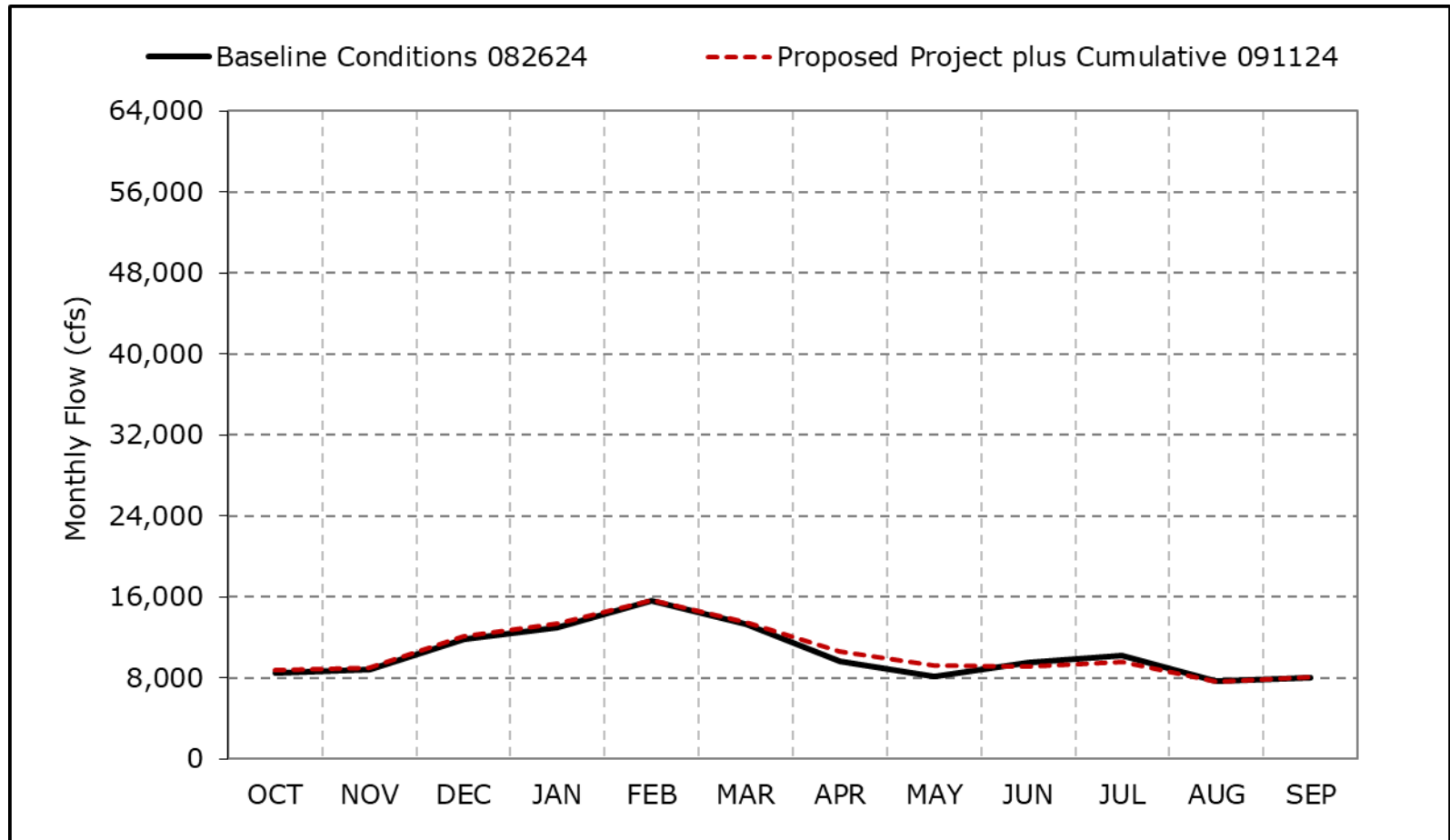


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-1f. Sacramento River Flow at Freeport, Critical Year Average Flow

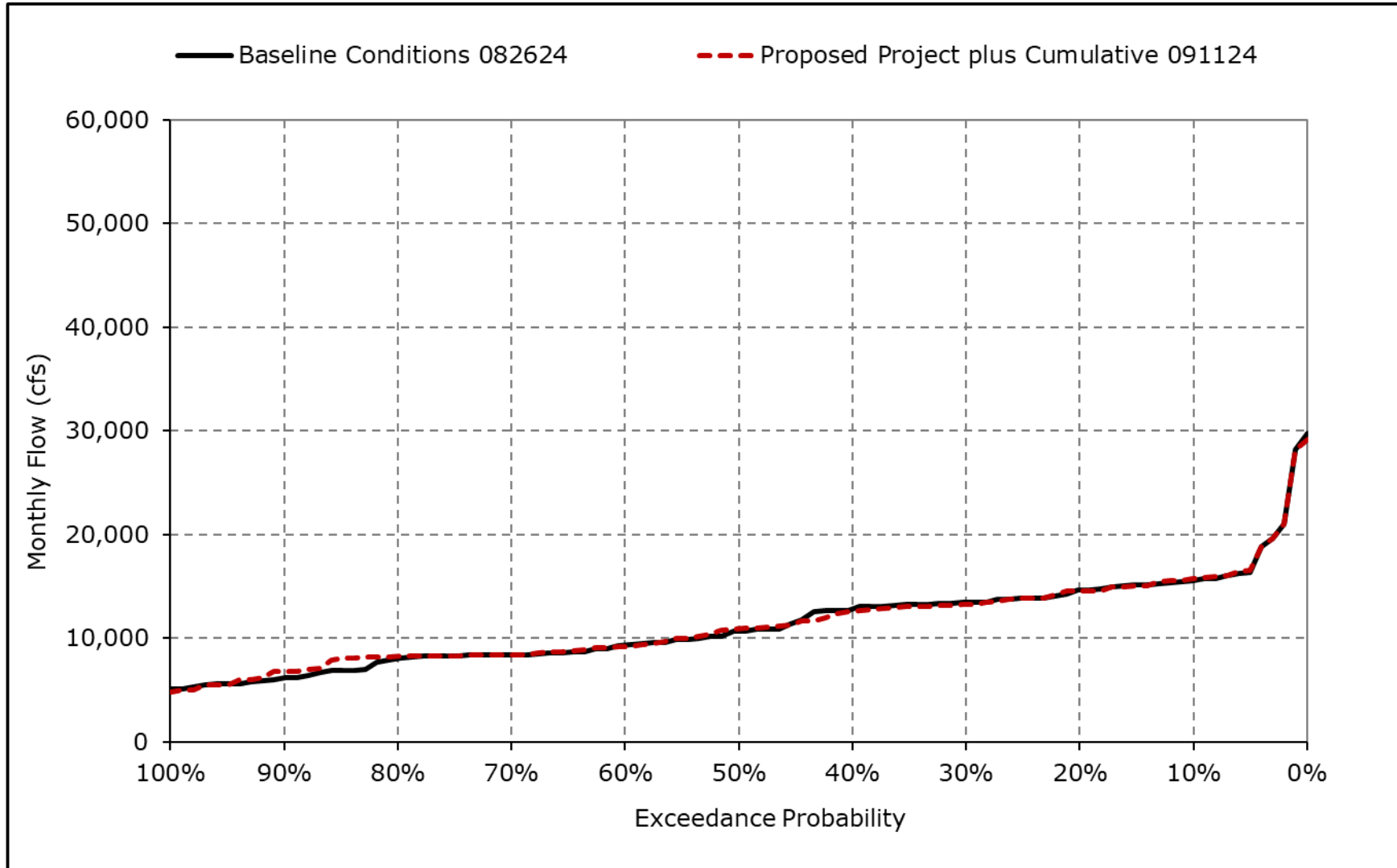


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

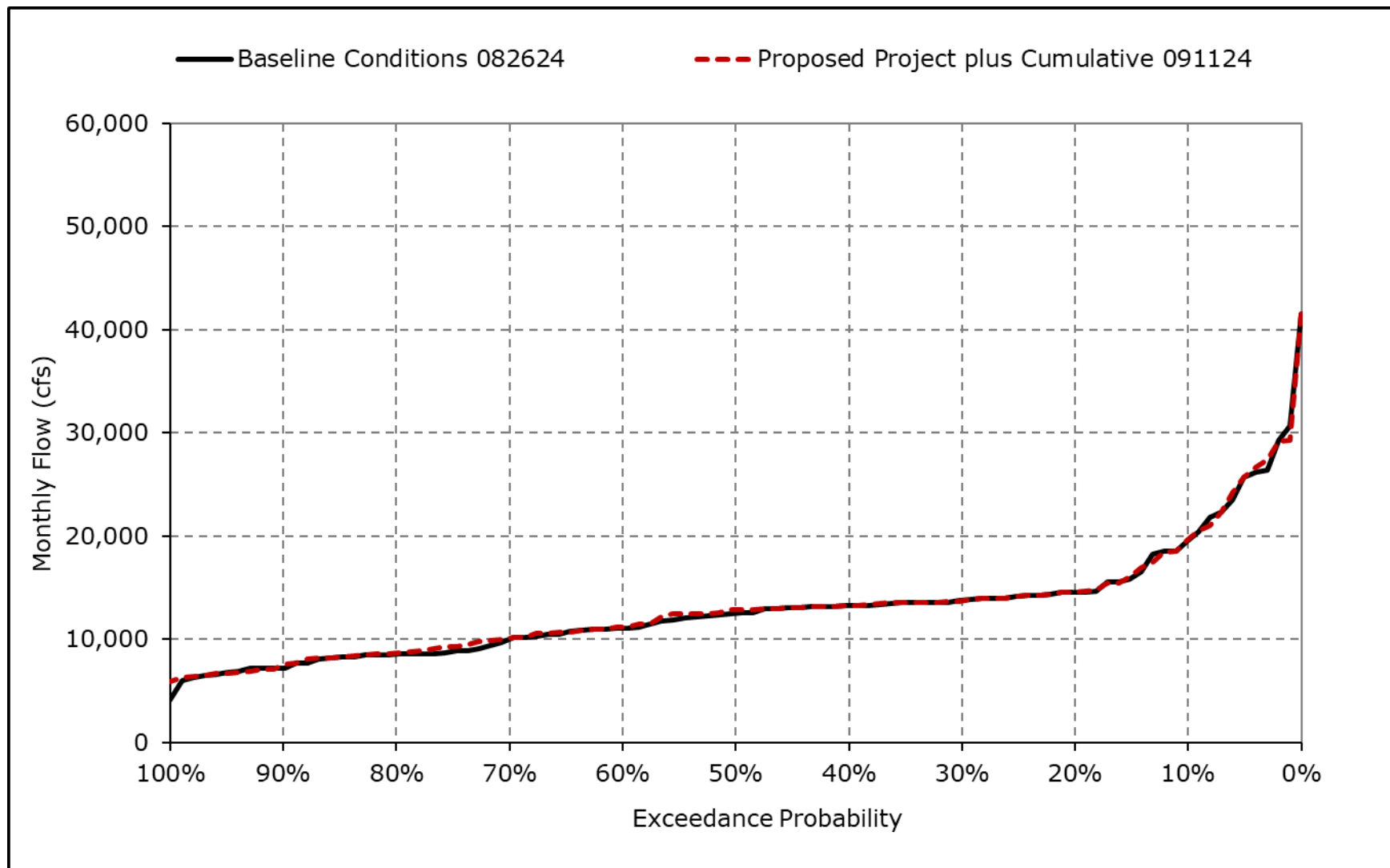
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1g. Sacramento River Flow at Freeport, October



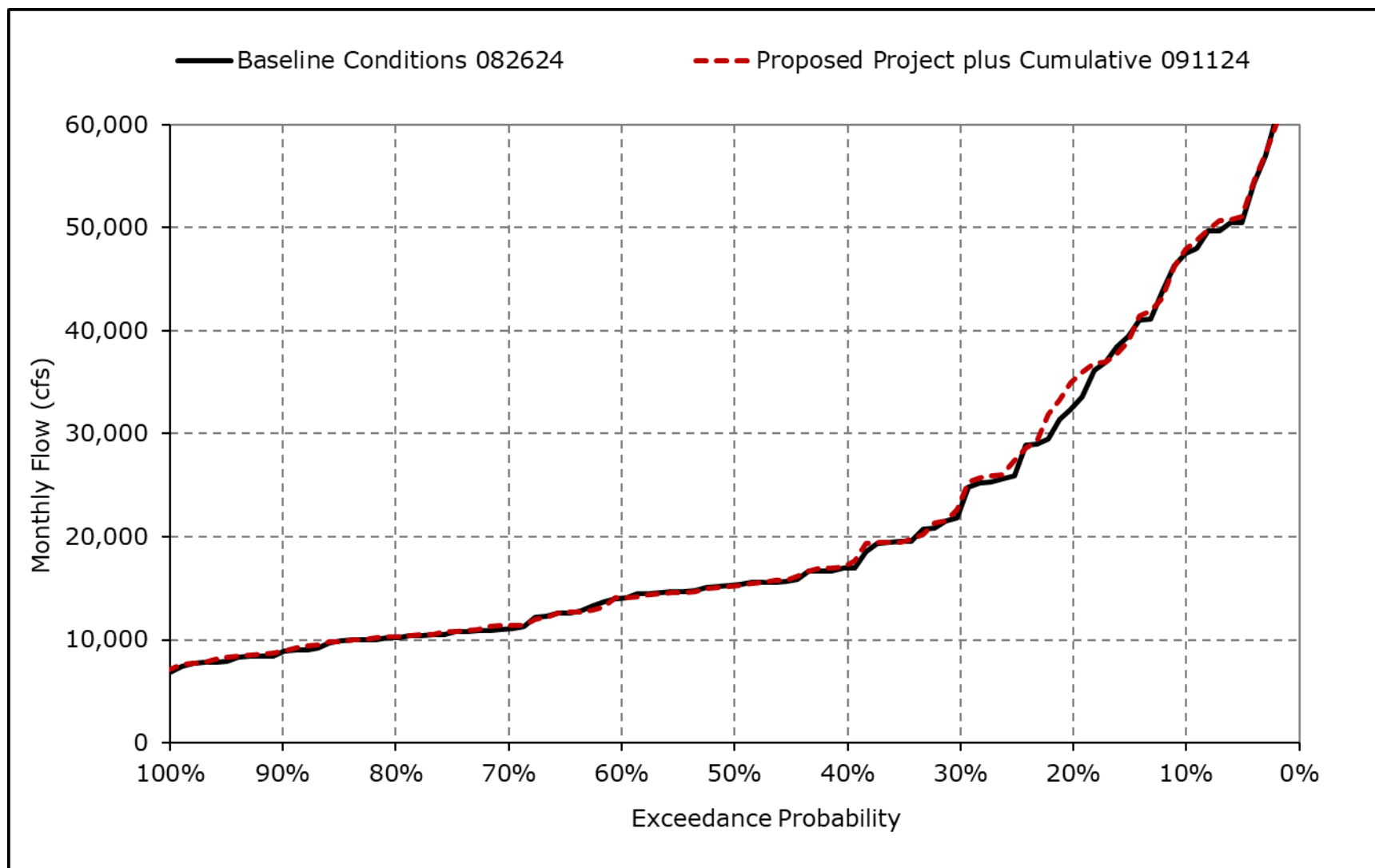
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1h. Sacramento River Flow at Freeport, November



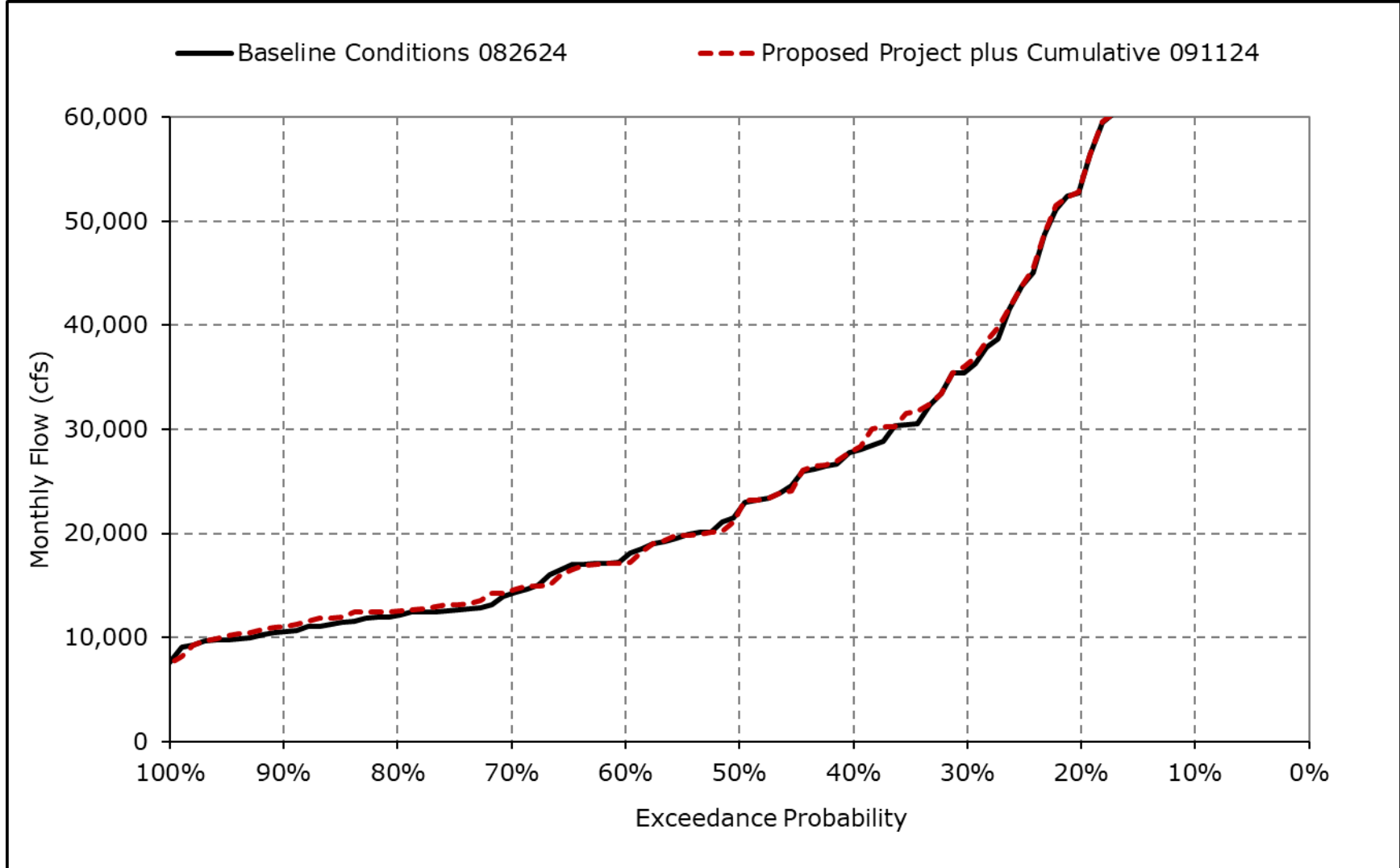
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1i. Sacramento River Flow at Freeport, December



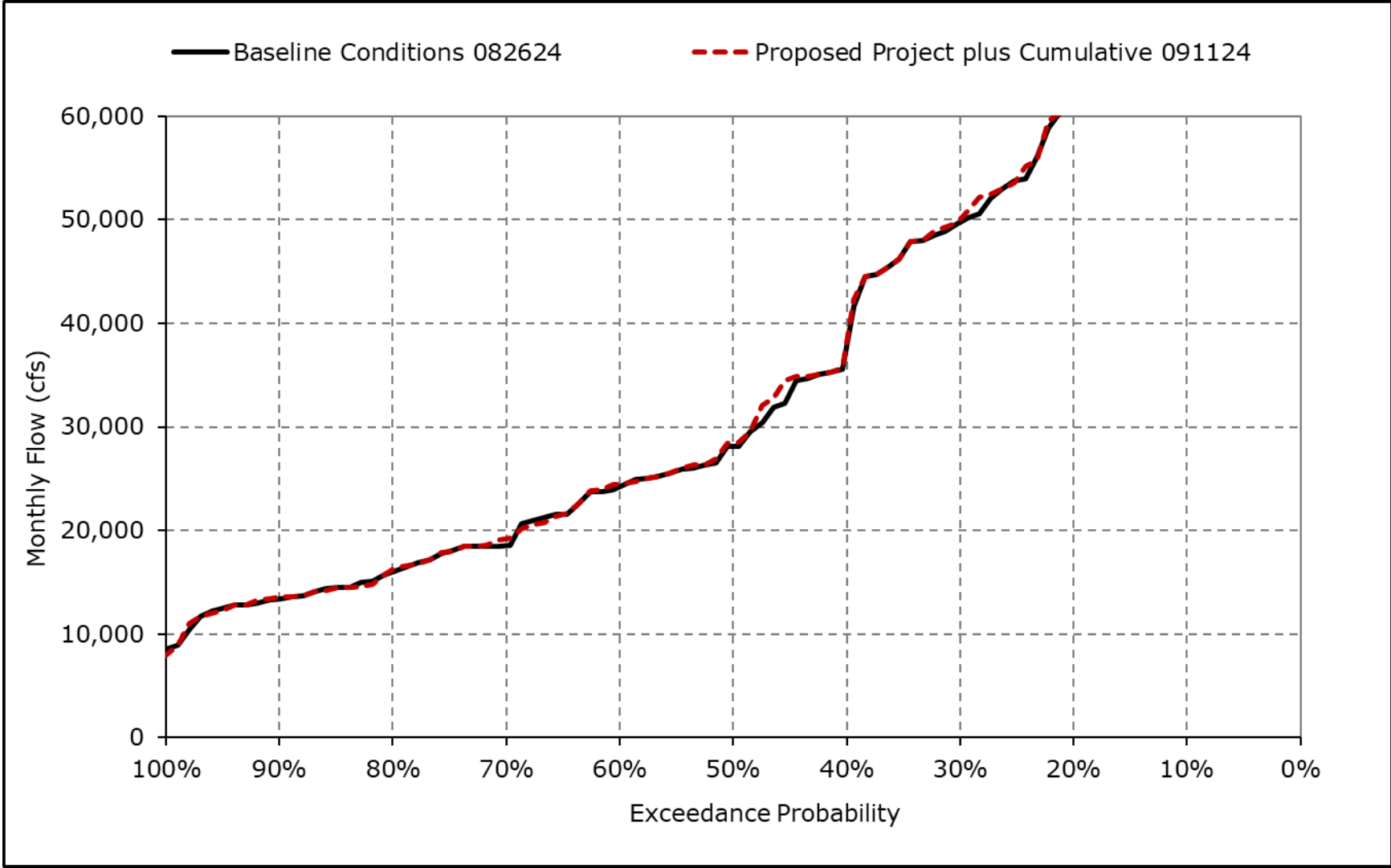
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1j. Sacramento River Flow at Freeport, January



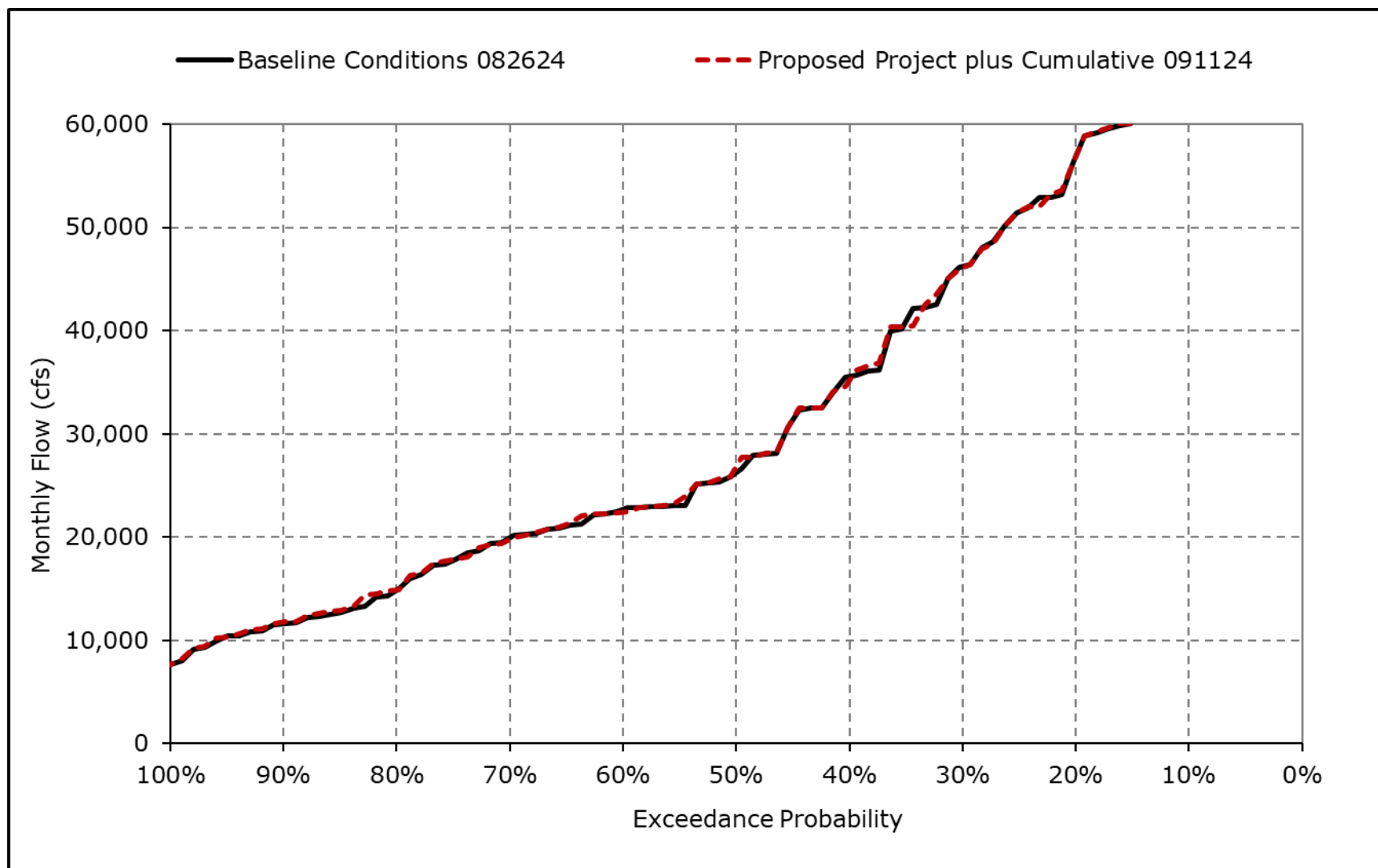
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1k. Sacramento River Flow at Freeport, February



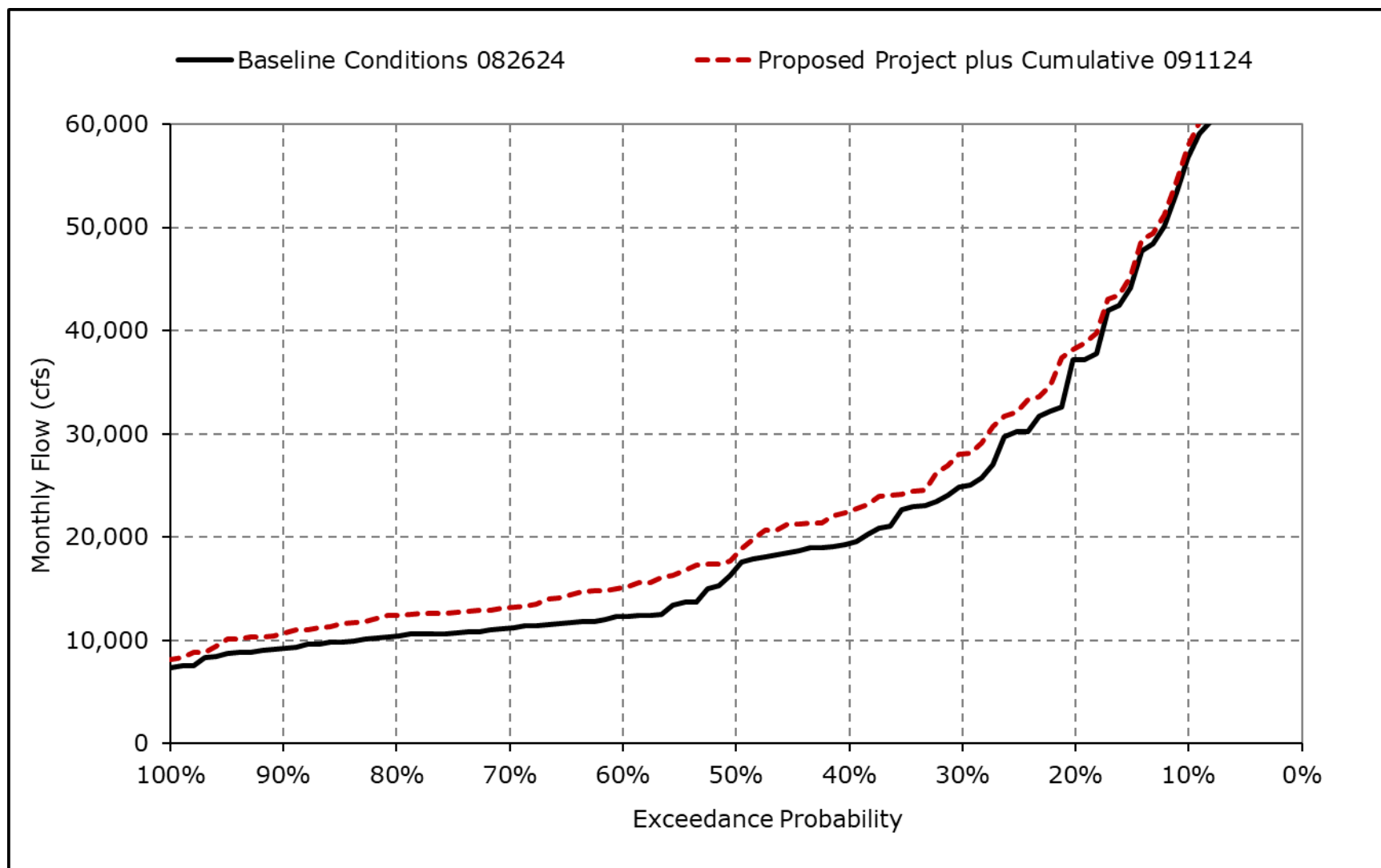
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1I. Sacramento River Flow at Freeport, March



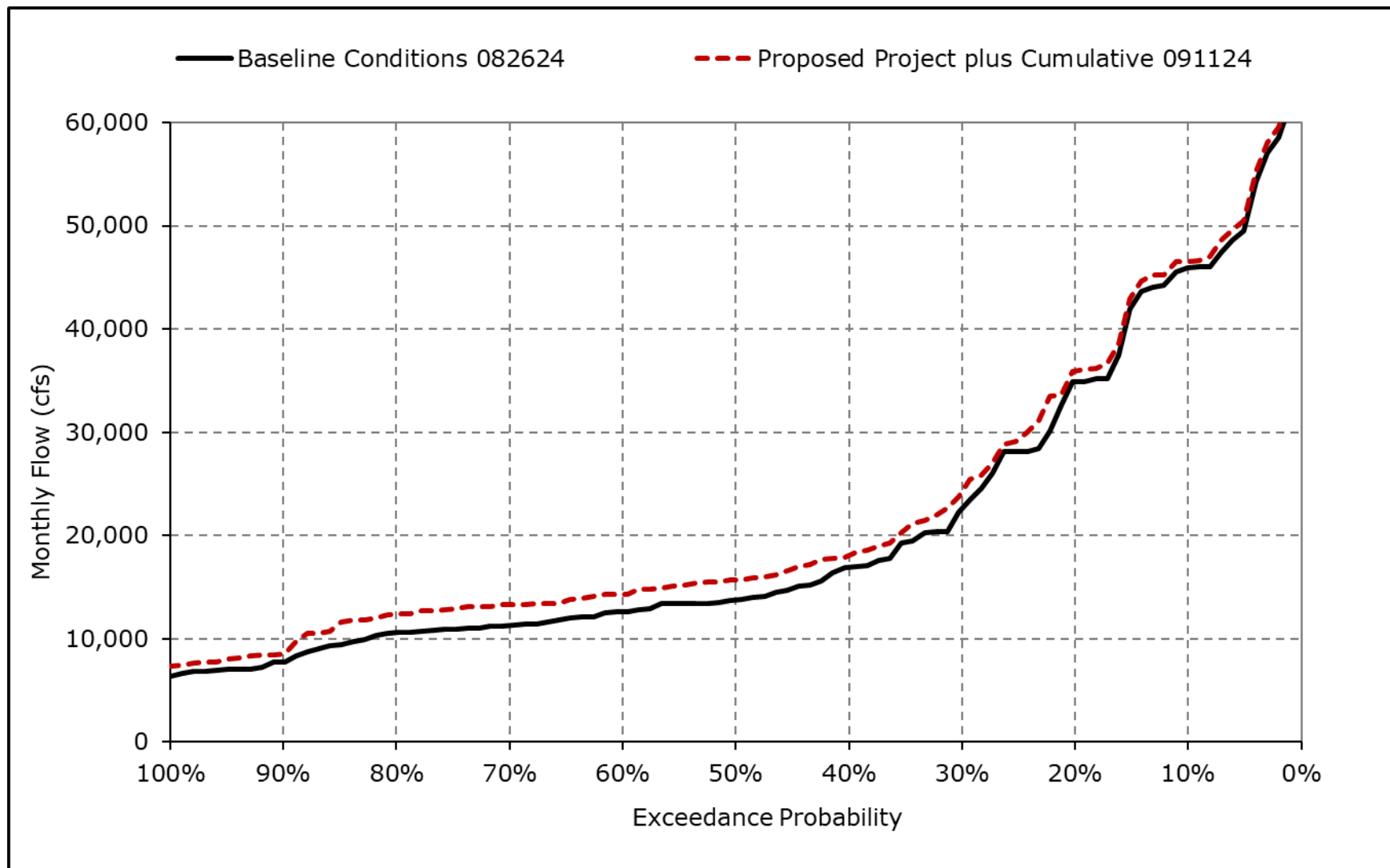
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1m. Sacramento River Flow at Freeport, April



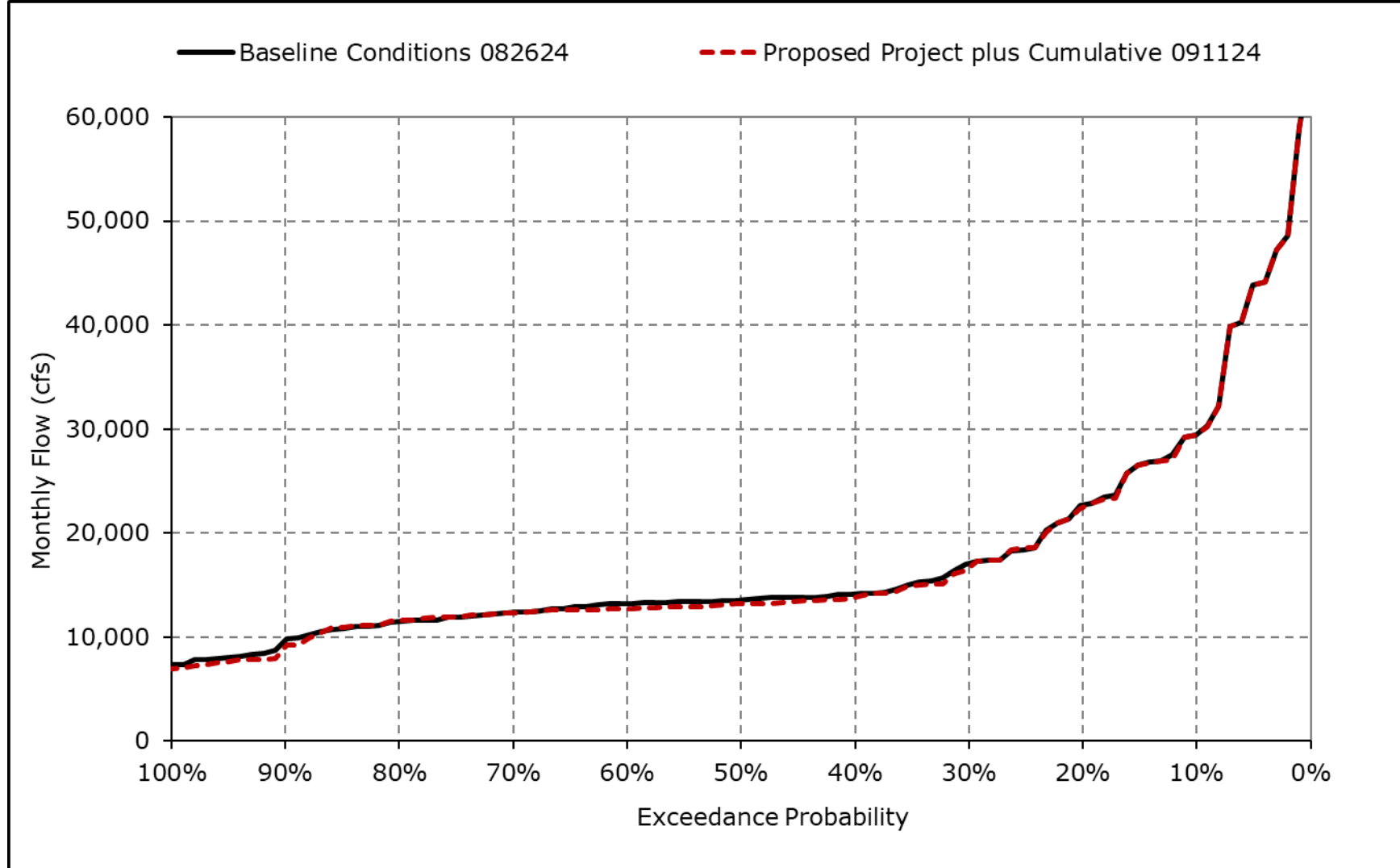
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1n. Sacramento River Flow at Freeport, May



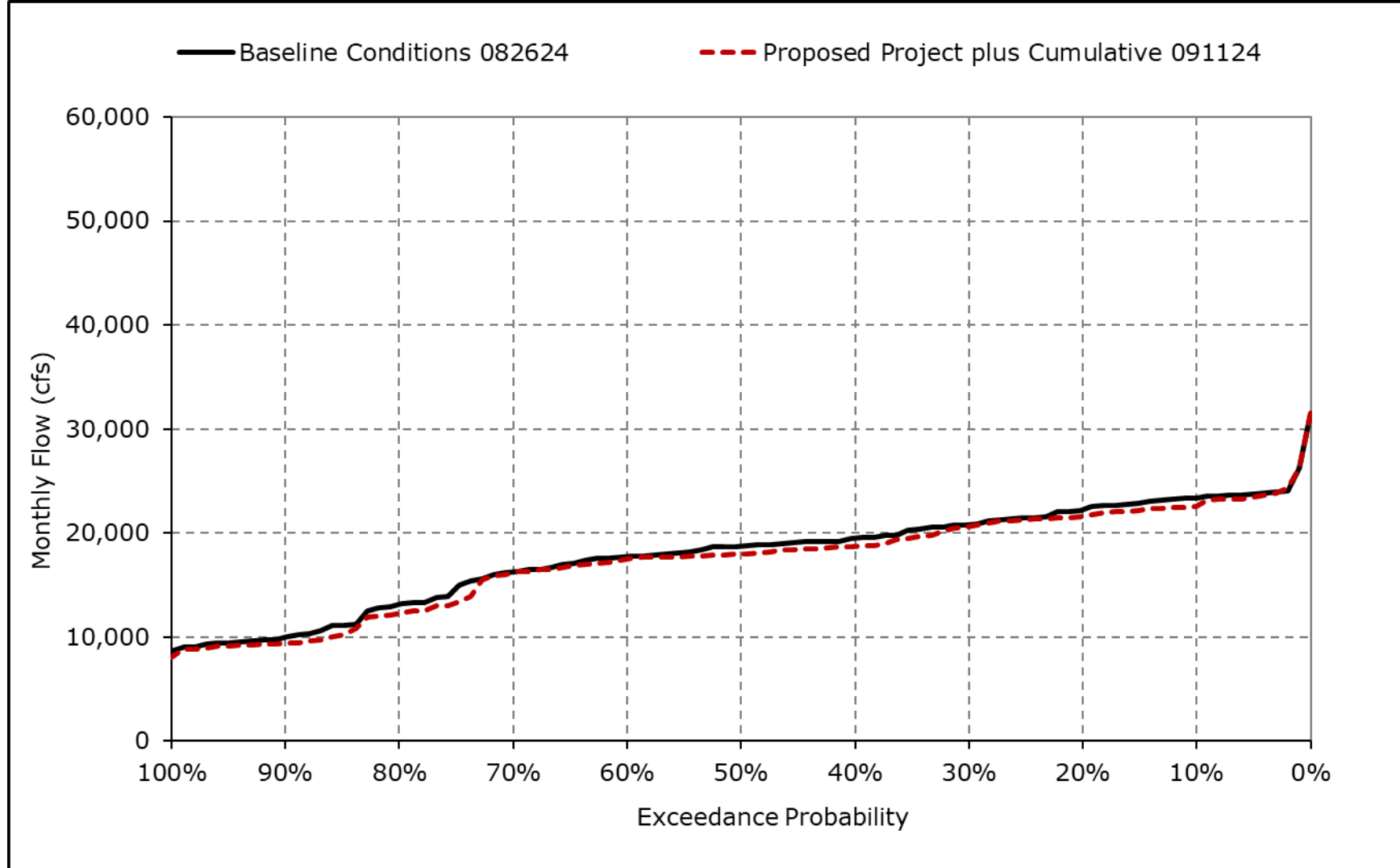
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1o. Sacramento River Flow at Freeport, June



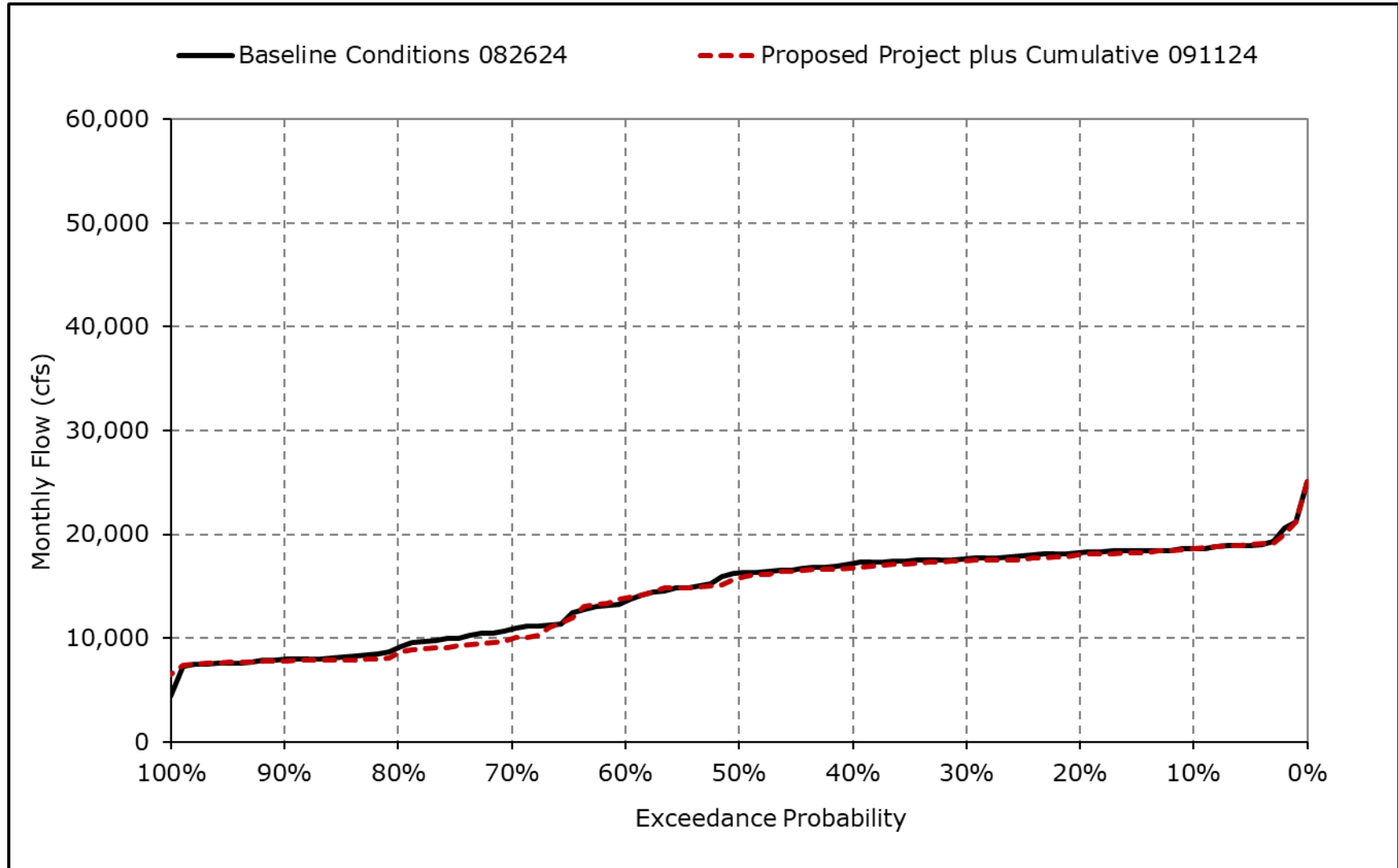
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1p. Sacramento River Flow at Freeport, July



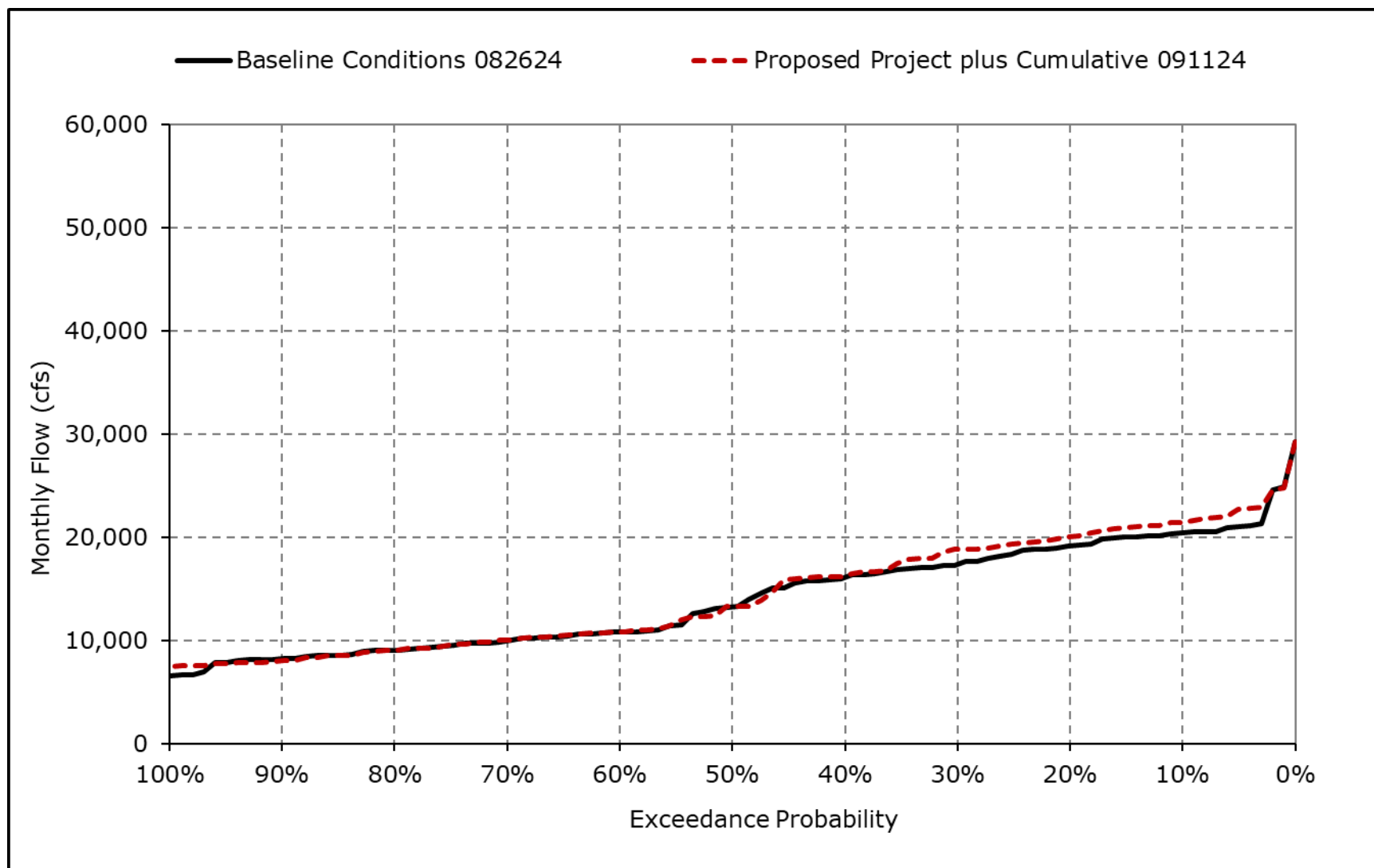
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-1q. Sacramento River Flow at Freeport, August



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

Figure 4G-3-1r. Sacramento River Flow at Freeport, September



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

Table 4G-3-2-1a. Yolo Bypass Flow, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	184	832	11,149	40,630	49,303	36,013	3,604	1,523	542	325	276	309
20% Exceedance	123	372	6,523	13,858	17,563	9,299	1,728	769	380	259	202	279
30% Exceedance	112	256	1,656	5,514	10,585	5,574	860	533	306	251	192	265
40% Exceedance	90	172	843	2,846	6,462	2,811	606	394	244	247	188	254
50% Exceedance	79	139	451	1,466	3,062	1,617	335	292	235	243	183	243
60% Exceedance	67	124	275	784	1,927	879	294	261	226	235	179	234
70% Exceedance	54	102	168	383	735	478	271	245	221	233	175	217
80% Exceedance	49	83	109	222	349	287	242	223	210	224	170	210
90% Exceedance	44	74	88	127	190	105	220	201	202	207	159	184
Full Simulation Period Average ^a	130	452	3,775	11,914	15,183	10,535	2,727	733	354	254	242	249
Wet Water Years (32%)	211	911	8,982	31,397	38,609	28,315	7,523	1,454	615	313	239	292
Above Normal Water Years (9%)	79	341	2,790	13,051	11,372	8,517	956	655	277	240	177	245
Below Normal Water Years (20%)	118	195	1,346	2,098	5,776	2,234	595	546	242	204	174	232
Dry Water Years (21%)	97	317	1,206	776	2,333	968	338	297	225	243	181	236
Critical Water Years (18%)	64	135	703	608	888	322	242	208	201	225	426	210

Table 4G-3-2-1b. Yolo Bypass Flow, Proposed Project plus Cumulative 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	181	857	11,157	40,522	49,422	35,991	3,630	1,614	544	325	248	308
20% Exceedance	123	367	5,979	13,958	17,602	9,160	1,696	873	381	265	199	277
30% Exceedance	111	274	1,605	5,589	10,610	5,780	861	570	314	251	190	262
40% Exceedance	89	193	841	2,671	6,102	2,896	605	404	247	248	185	250
50% Exceedance	80	151	452	1,482	2,843	1,628	341	301	235	243	181	240
60% Exceedance	67	131	272	766	1,919	828	292	266	226	236	177	233
70% Exceedance	56	113	181	380	714	456	271	249	222	233	173	218
80% Exceedance	48	102	119	226	360	309	247	230	209	225	162	205
90% Exceedance	43	87	104	134	221	117	219	196	200	211	148	182
Full Simulation Period Average ^a	128	462	3,762	11,946	15,254	10,557	2,755	743	356	255	191	247
Wet Water Years (32%)	204	924	8,977	31,561	39,024	28,400	7,616	1,460	615	313	239	290
Above Normal Water Years (9%)	79	316	2,670	12,889	11,096	8,623	949	661	278	243	177	235
Below Normal Water Years (20%)	119	204	1,396	2,051	5,693	2,152	596	583	247	210	183	233
Dry Water Years (21%)	96	332	1,240	785	2,319	967	339	297	229	243	178	240
Critical Water Years (18%)	64	153	609	621	791	332	235	205	202	224	135	199

Table 4G-3-2-1c. Yolo Bypass Flow, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2	25	9	-109	118	-22	25	91	1	0	-28	-1
20% Exceedance	0	-6	-544	100	39	-138	-33	104	2	6	-3	-2
30% Exceedance	-2	18	-51	76	25	206	1	37	8	0	-2	-3
40% Exceedance	-1	21	-1	-175	-360	86	-1	10	3	0	-4	-4
50% Exceedance	1	12	1	16	-218	11	6	9	0	0	-2	-2
60% Exceedance	0	7	-4	-19	-8	-51	-3	5	0	2	-2	0
70% Exceedance	2	11	13	-3	-21	-22	0	4	1	1	-1	1
80% Exceedance	-1	18	10	4	10	22	5	6	-1	1	-8	-5
90% Exceedance	-2	13	16	7	31	12	-1	-5	-2	4	-12	-2
Full Simulation Period Average ^a	-3	10	-12	33	71	22	29	10	2	1	-51	-3
Wet Water Years (32%)	-7	13	-5	165	416	85	93	7	1	0	0	-2
Above Normal Water Years (9%)	-1	-25	-120	-162	-276	106	-7	6	1	3	0	-10
Below Normal Water Years (20%)	0	10	50	-47	-83	-82	1	38	4	6	9	1
Dry Water Years (21%)	-2	15	33	9	-14	-1	1	0	3	0	-3	5
Critical Water Years (18%)	0	18	-94	13	-97	11	-6	-3	0	-1	-291	-11

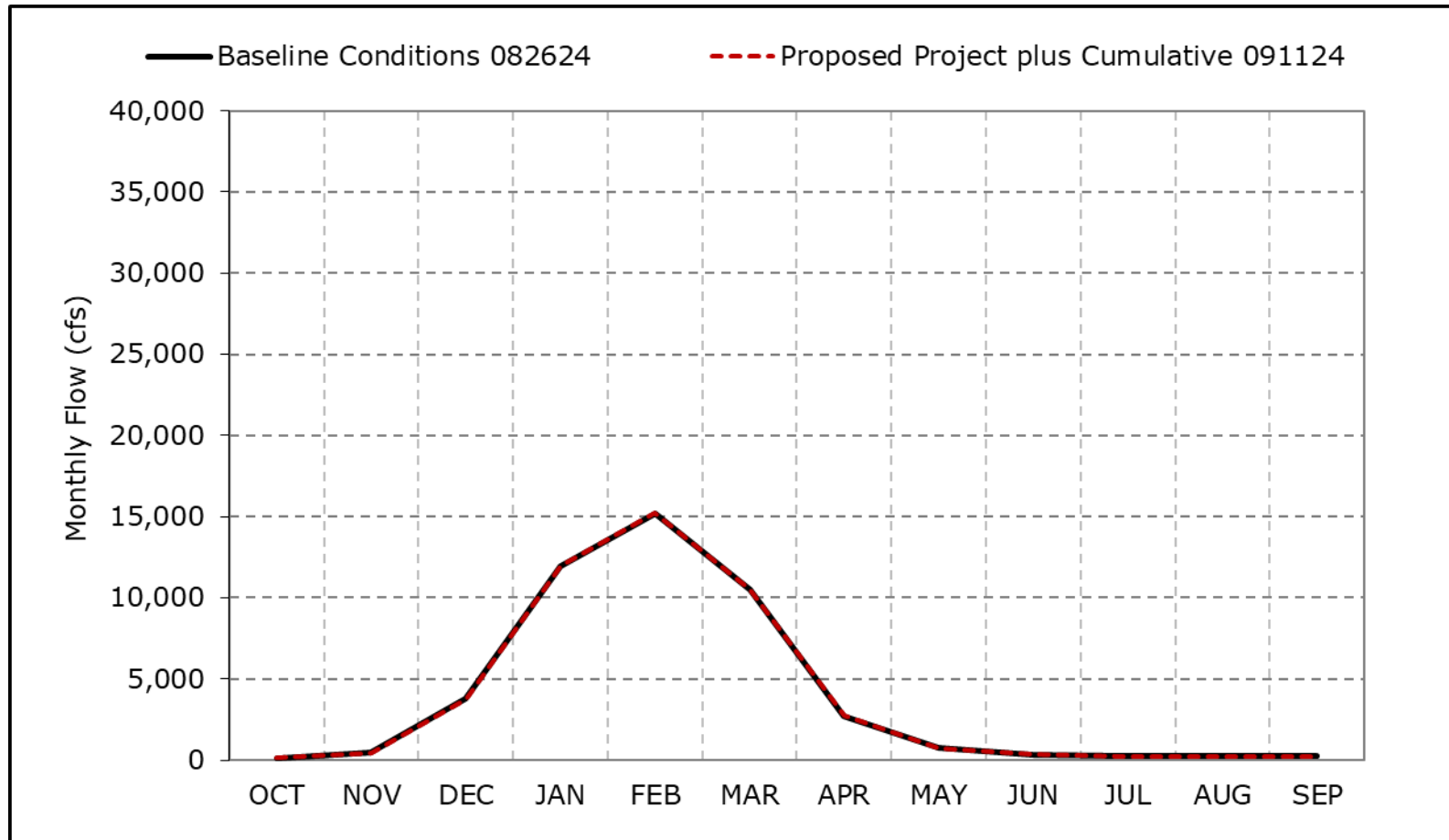
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-2a. Yolo Bypass Flow, Long-Term Average Flow

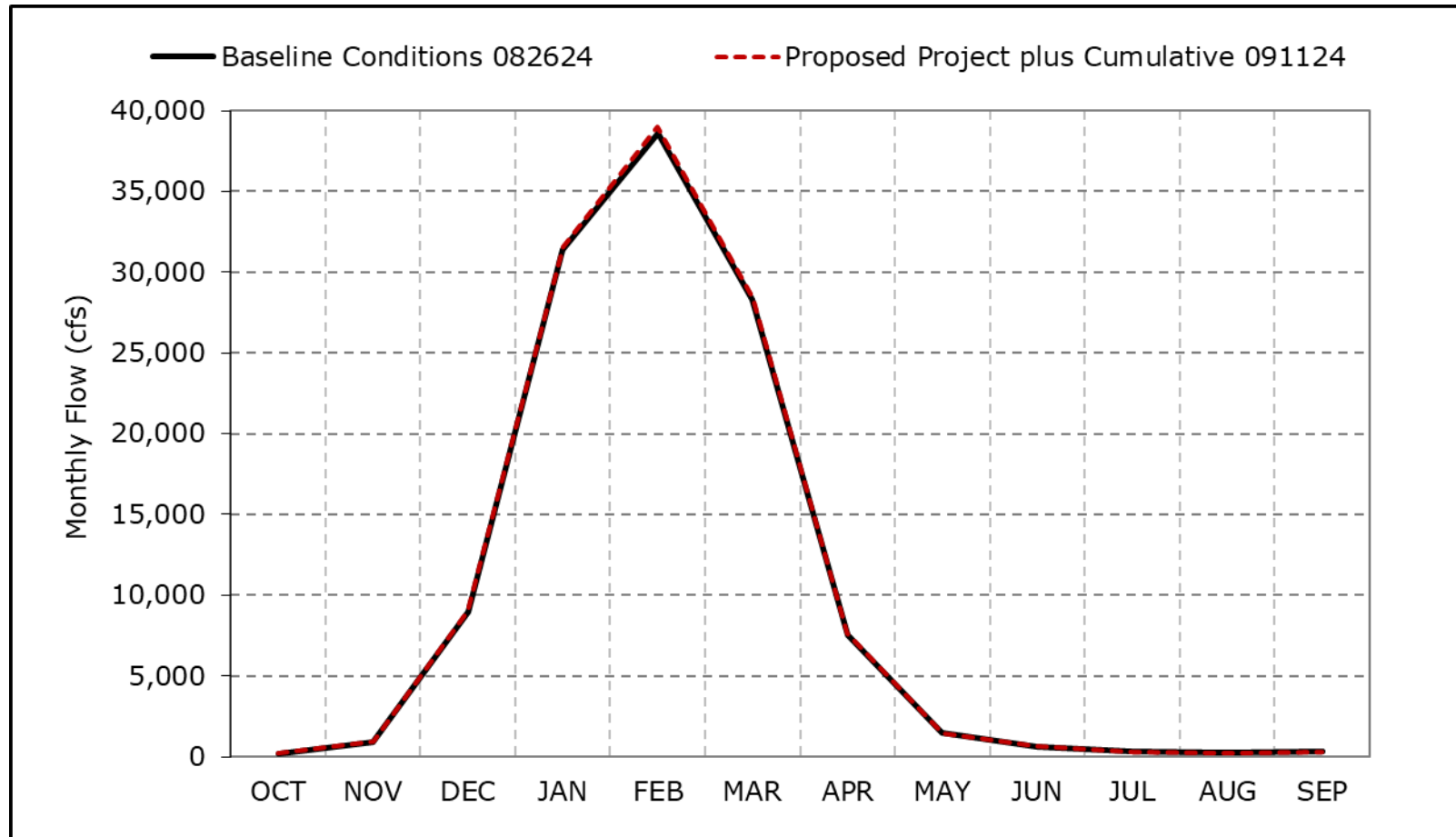


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-2b. Yolo Bypass Flow, Wet Year Average Flow

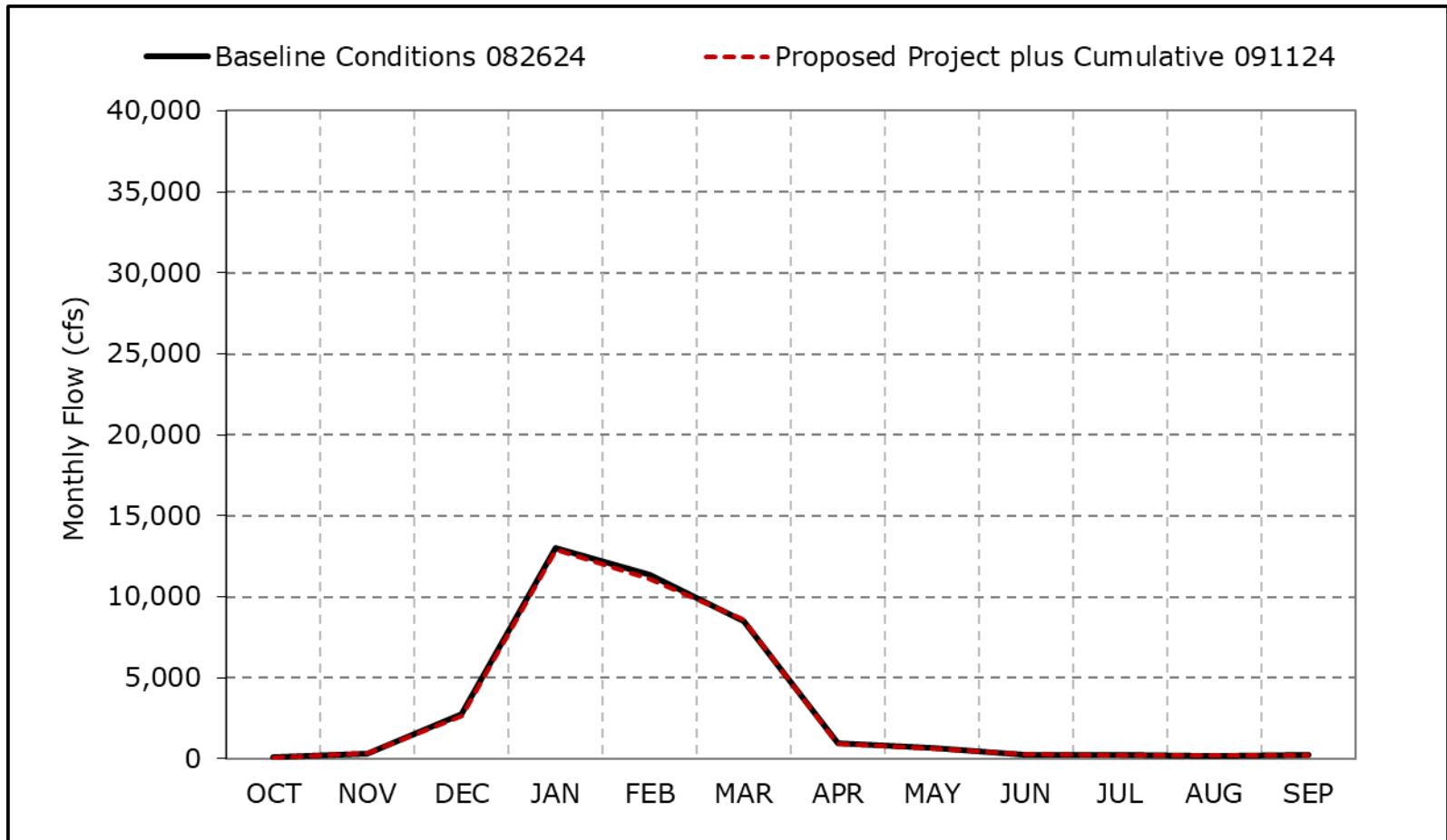


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-2c. Yolo Bypass Flow, Above Normal Year Average Flow

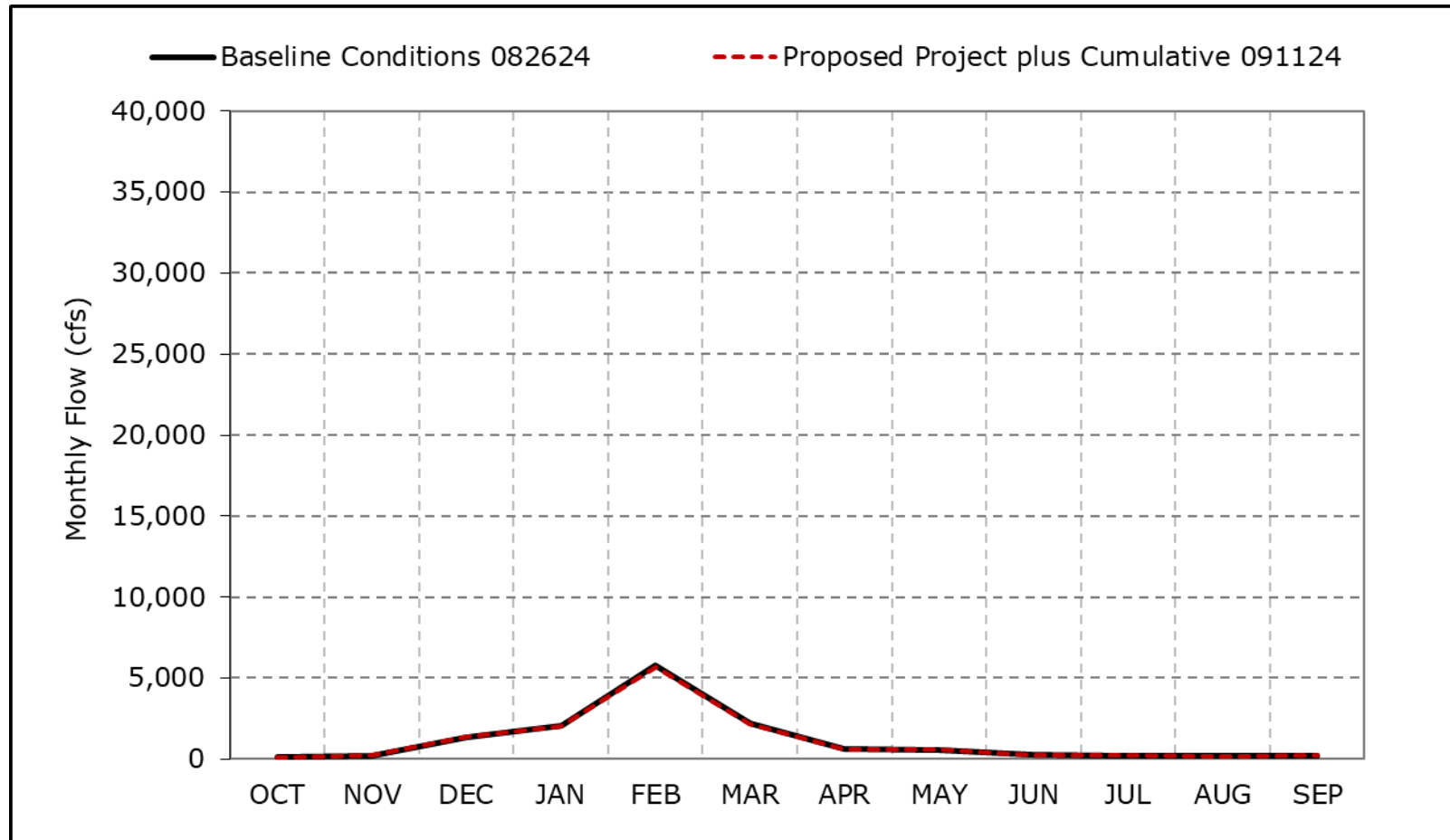


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-2d. Yolo Bypass Flow, Below Normal Year Average Flow

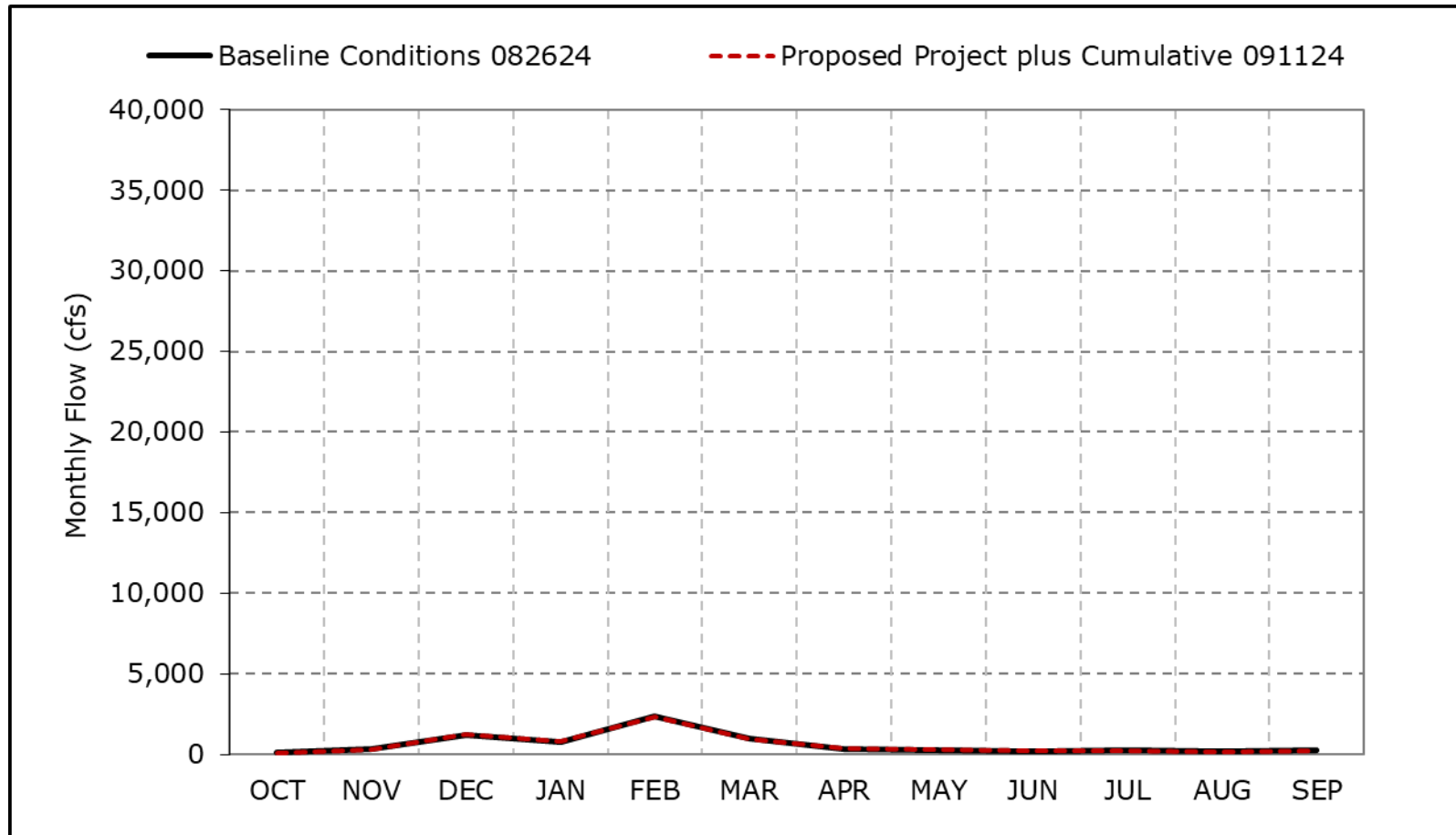


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-2e. Yolo Bypass Flow, Dry Year Average Flow

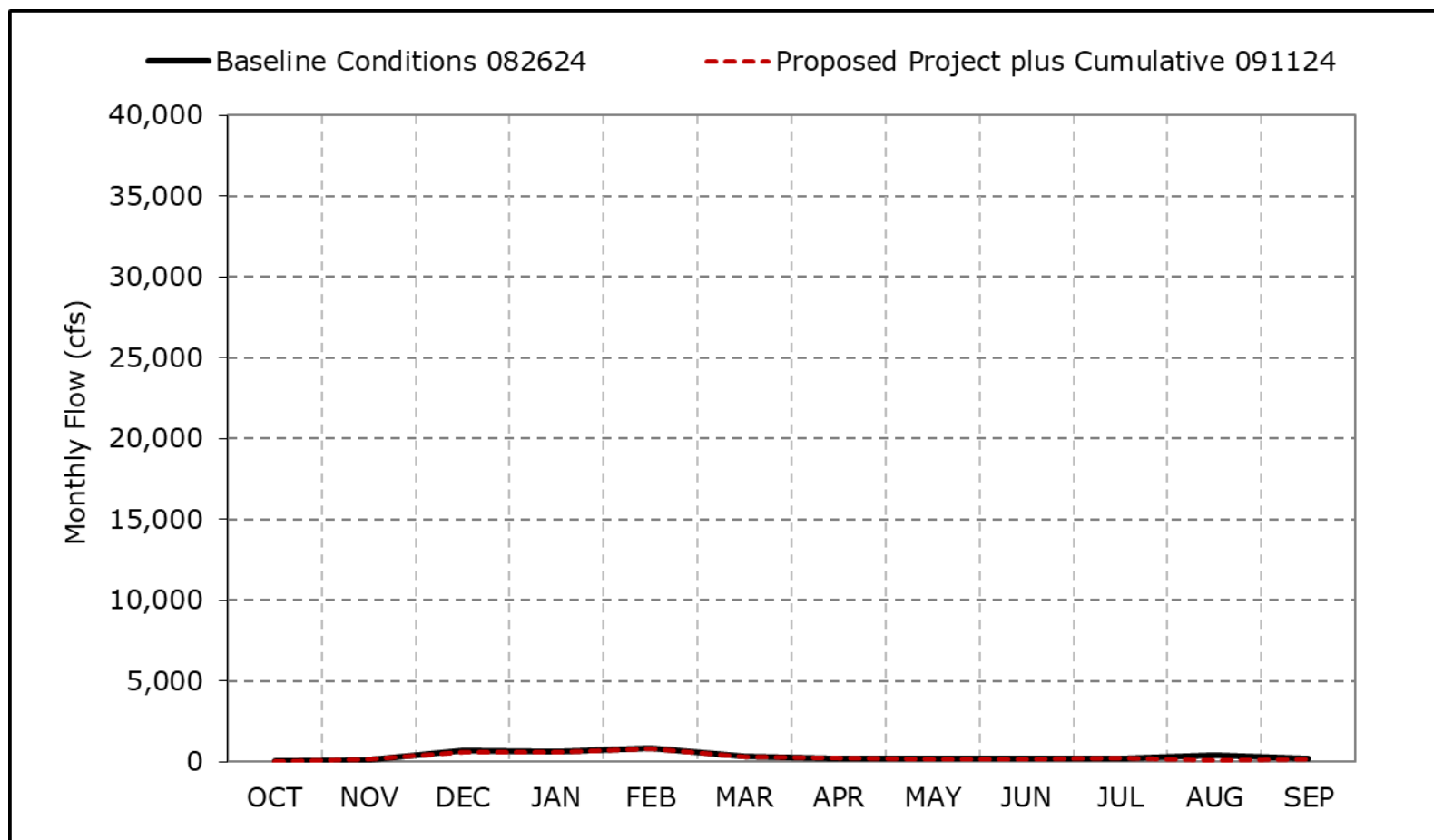


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-2f. Yolo Bypass Flow, Critical Year Average Flow

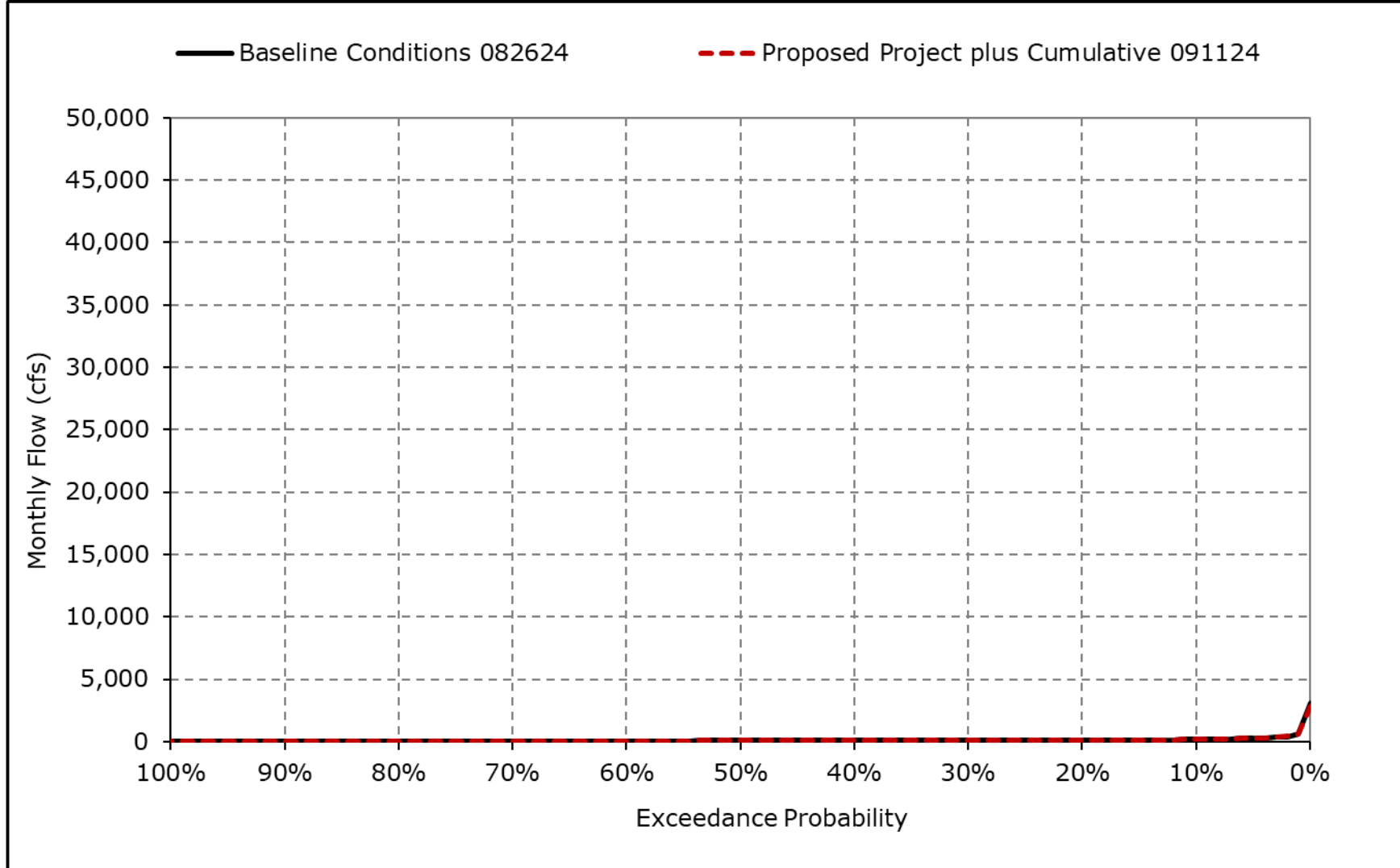


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

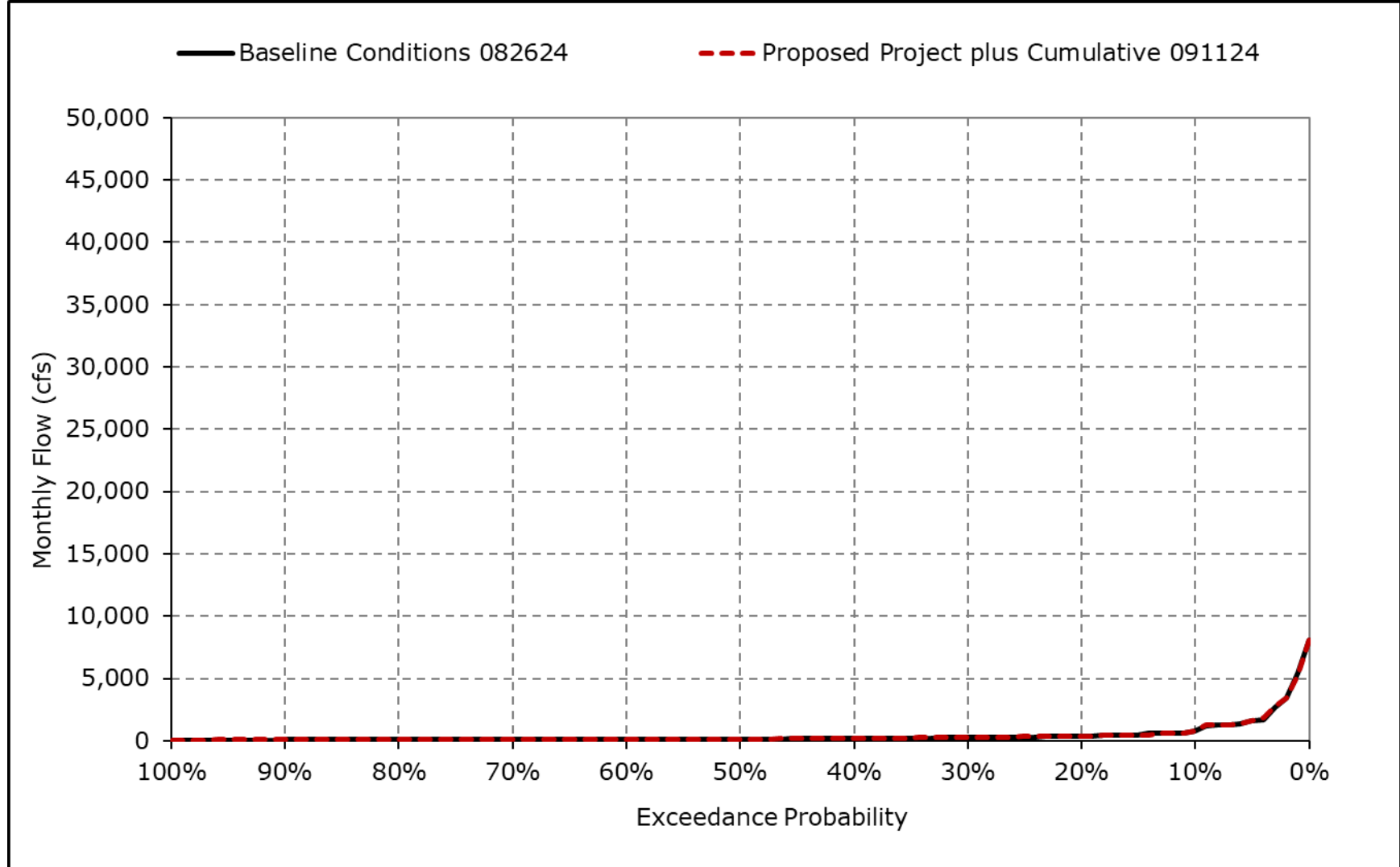
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2g. Yolo Bypass Flow, October



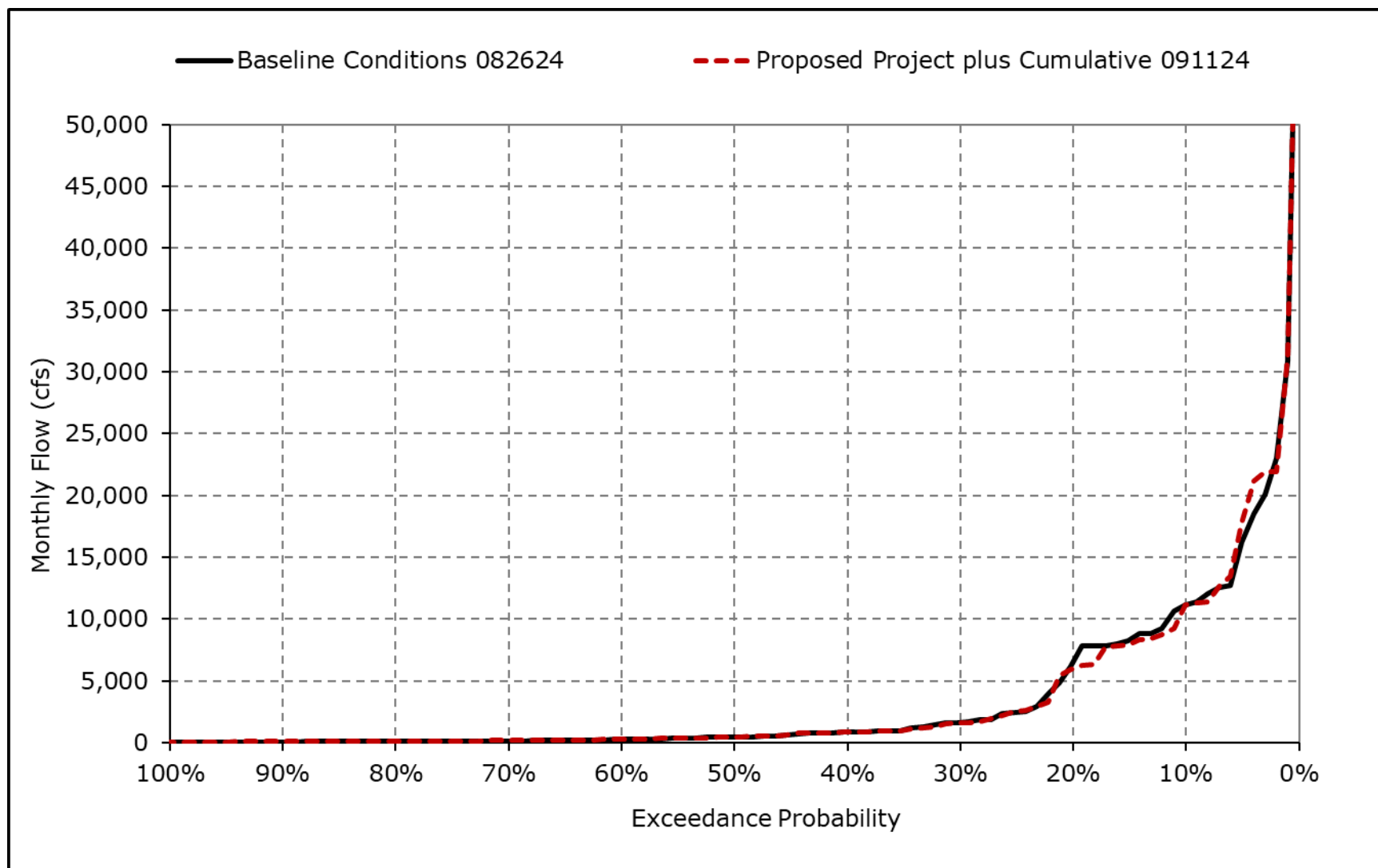
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2h. Yolo Bypass Flow, November



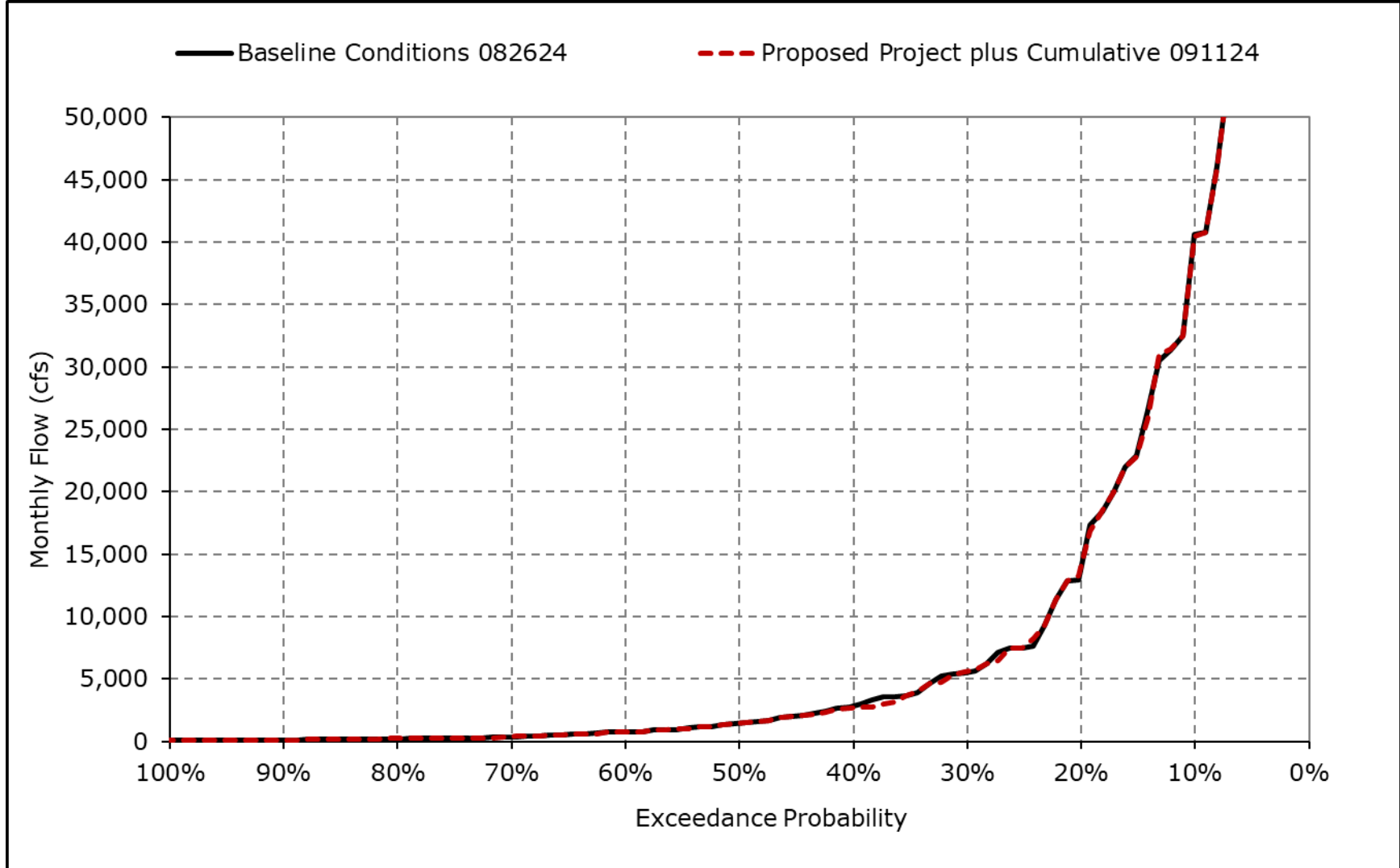
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2i. Yolo Bypass Flow, December



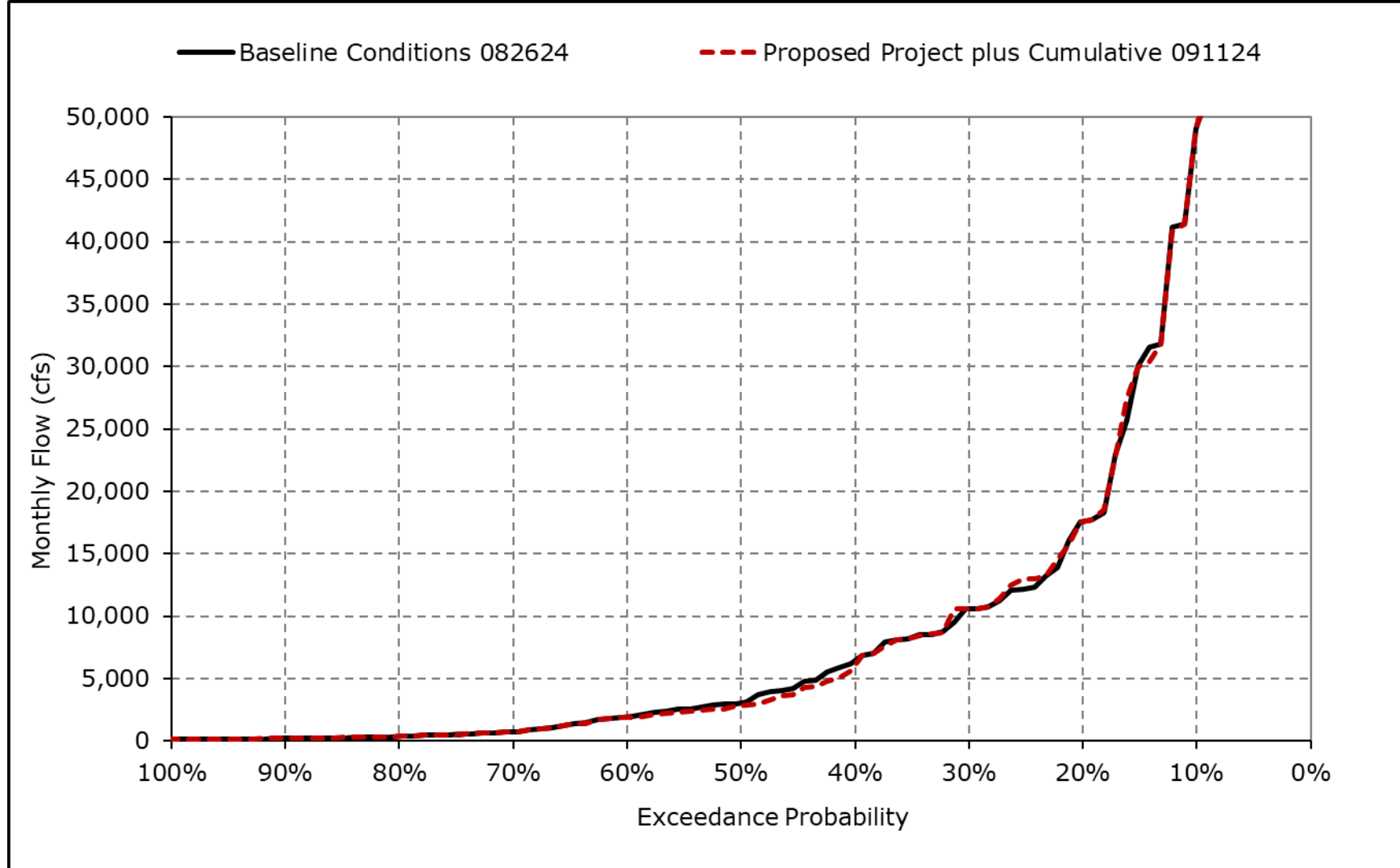
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2j. Yolo Bypass Flow, January



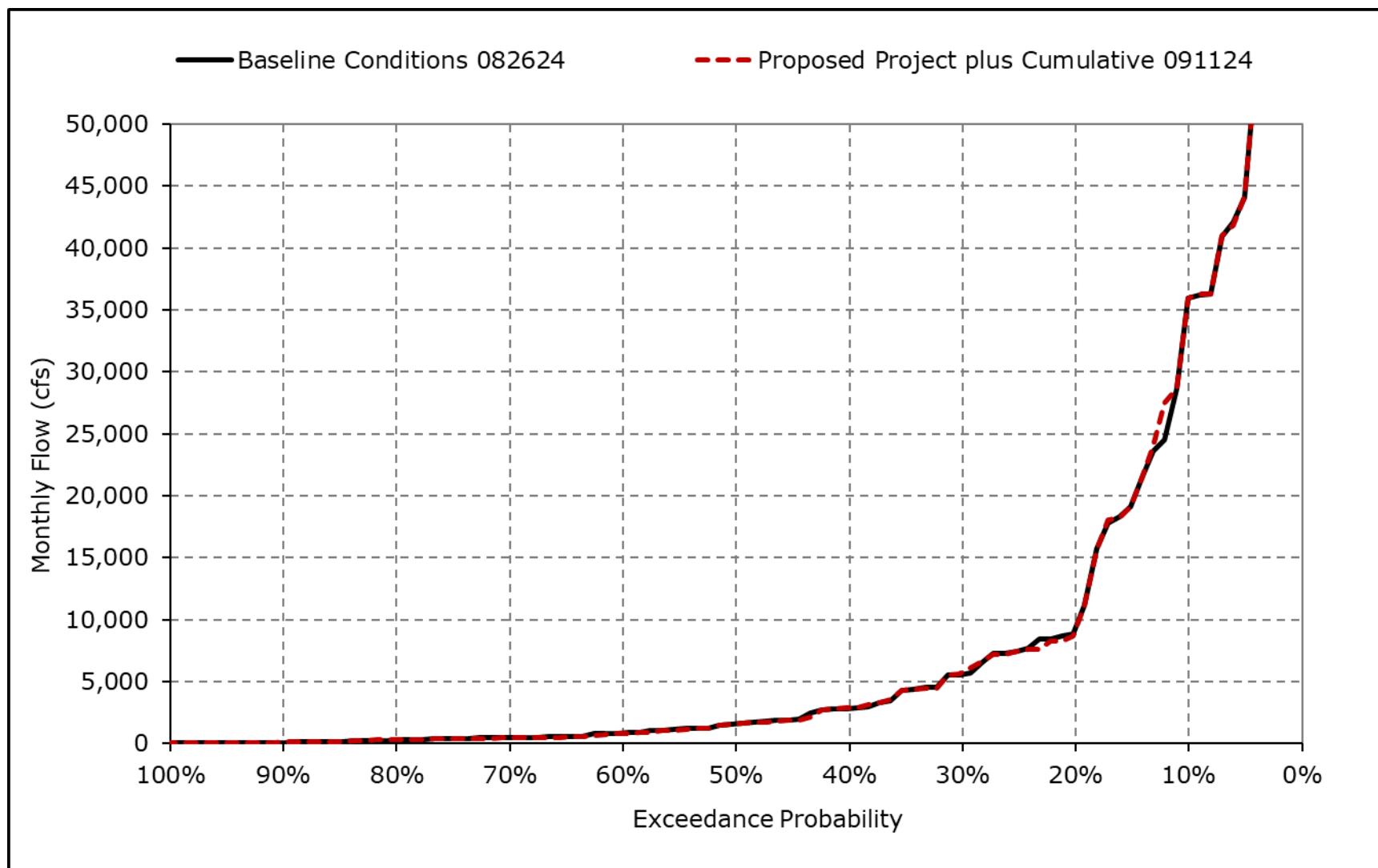
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2k. Yolo Bypass Flow, February



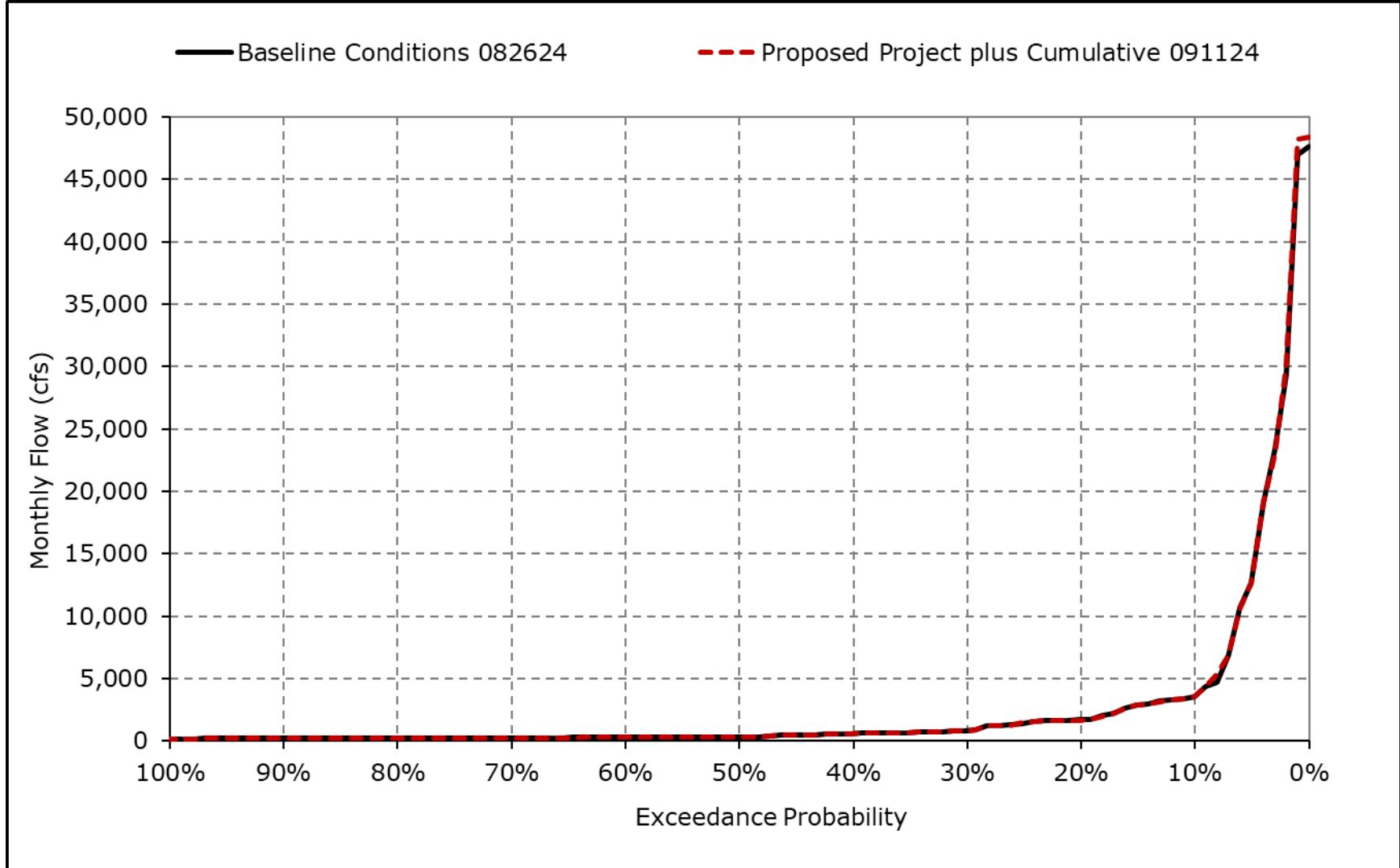
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2I. Yolo Bypass Flow, March



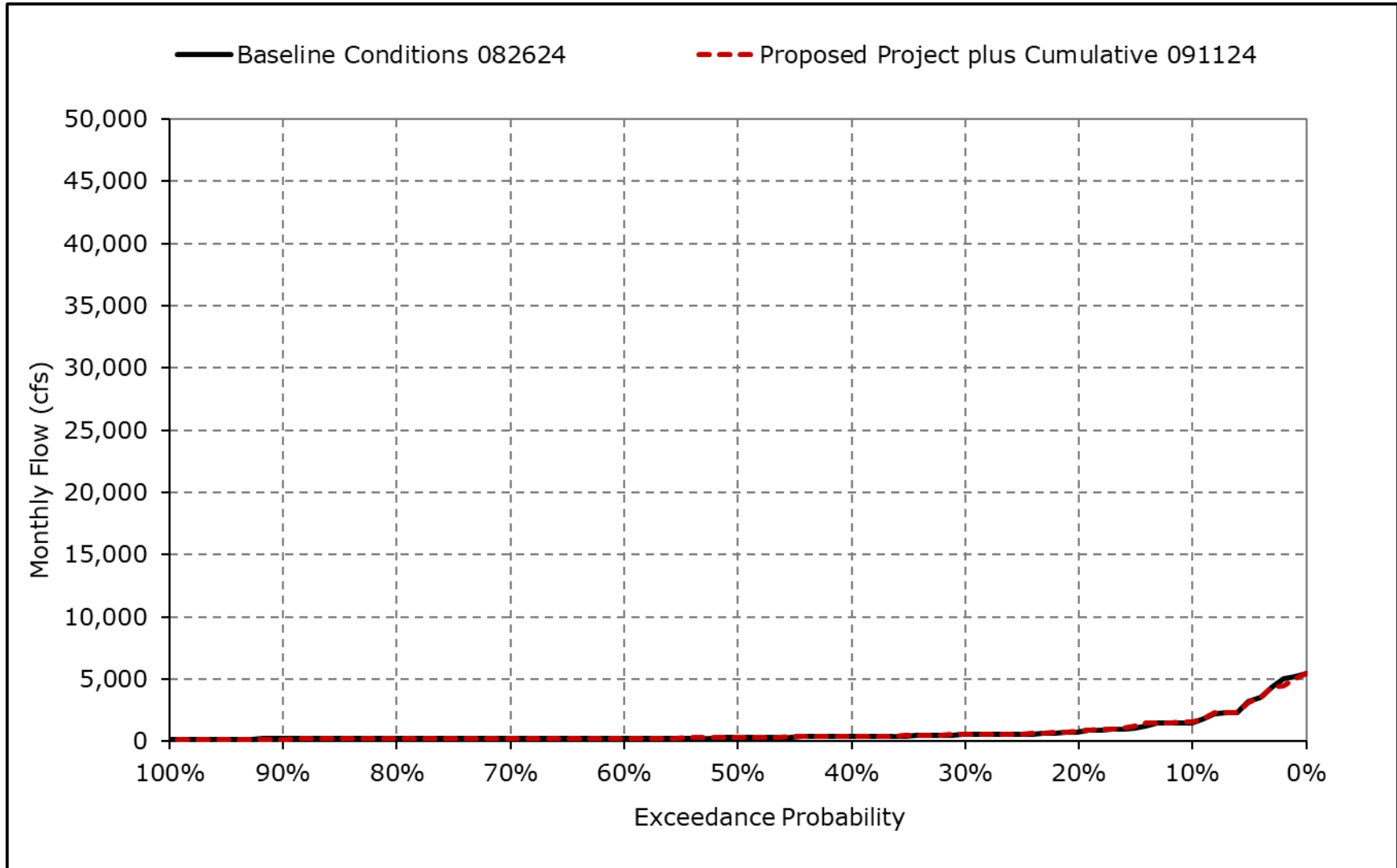
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2m. Yolo Bypass Flow, April



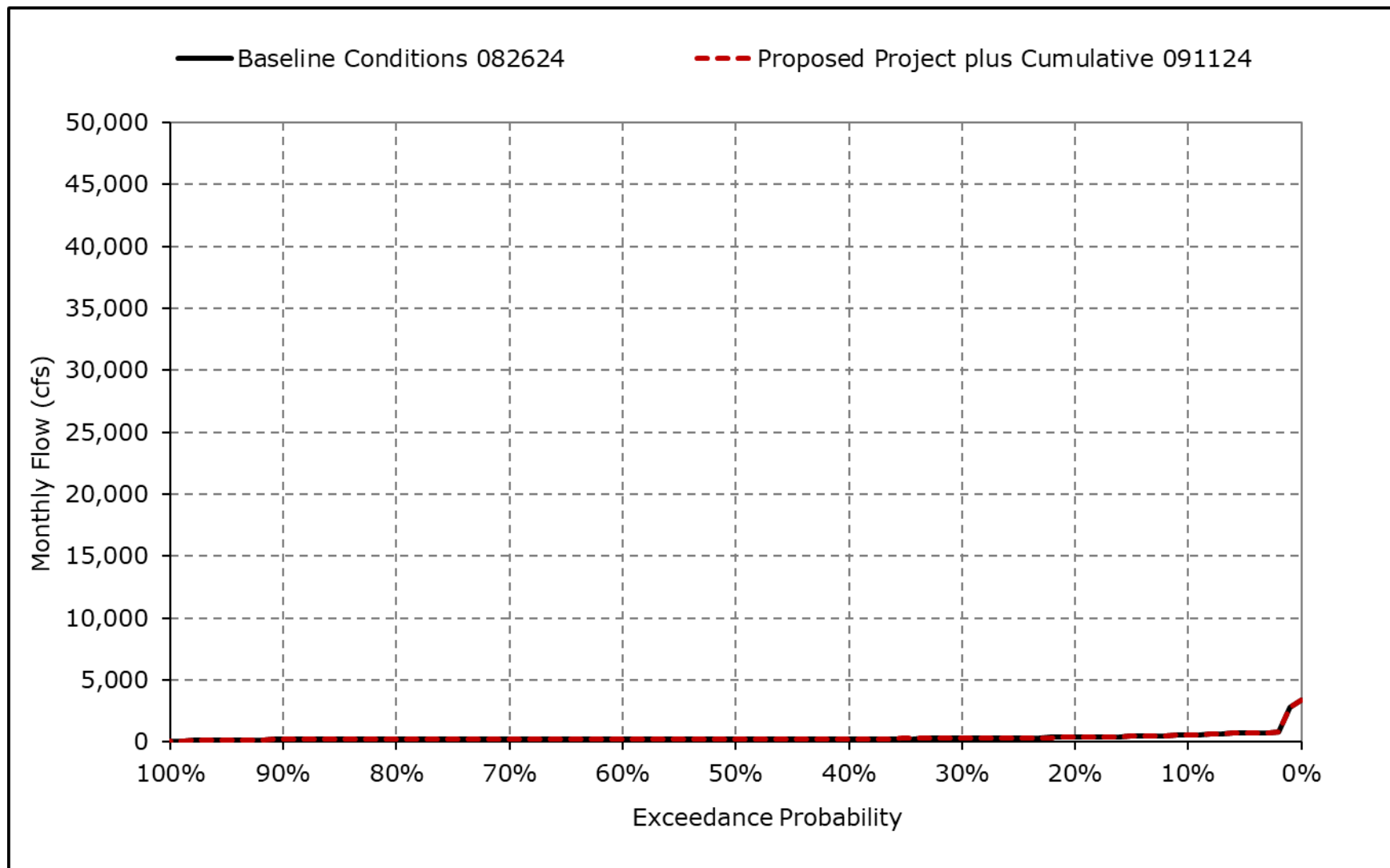
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2n. Yolo Bypass Flow, May



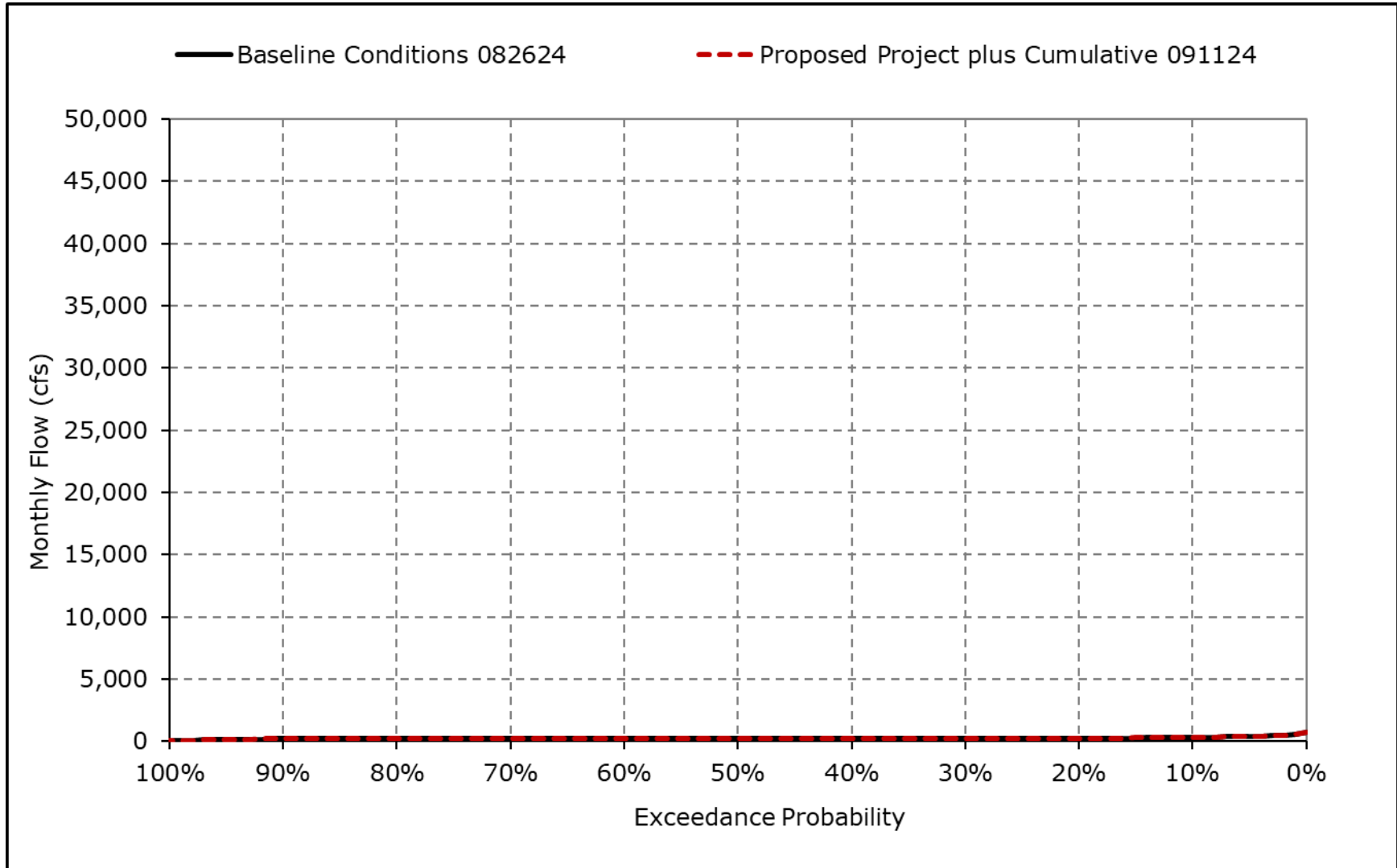
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2o. Yolo Bypass Flow, June



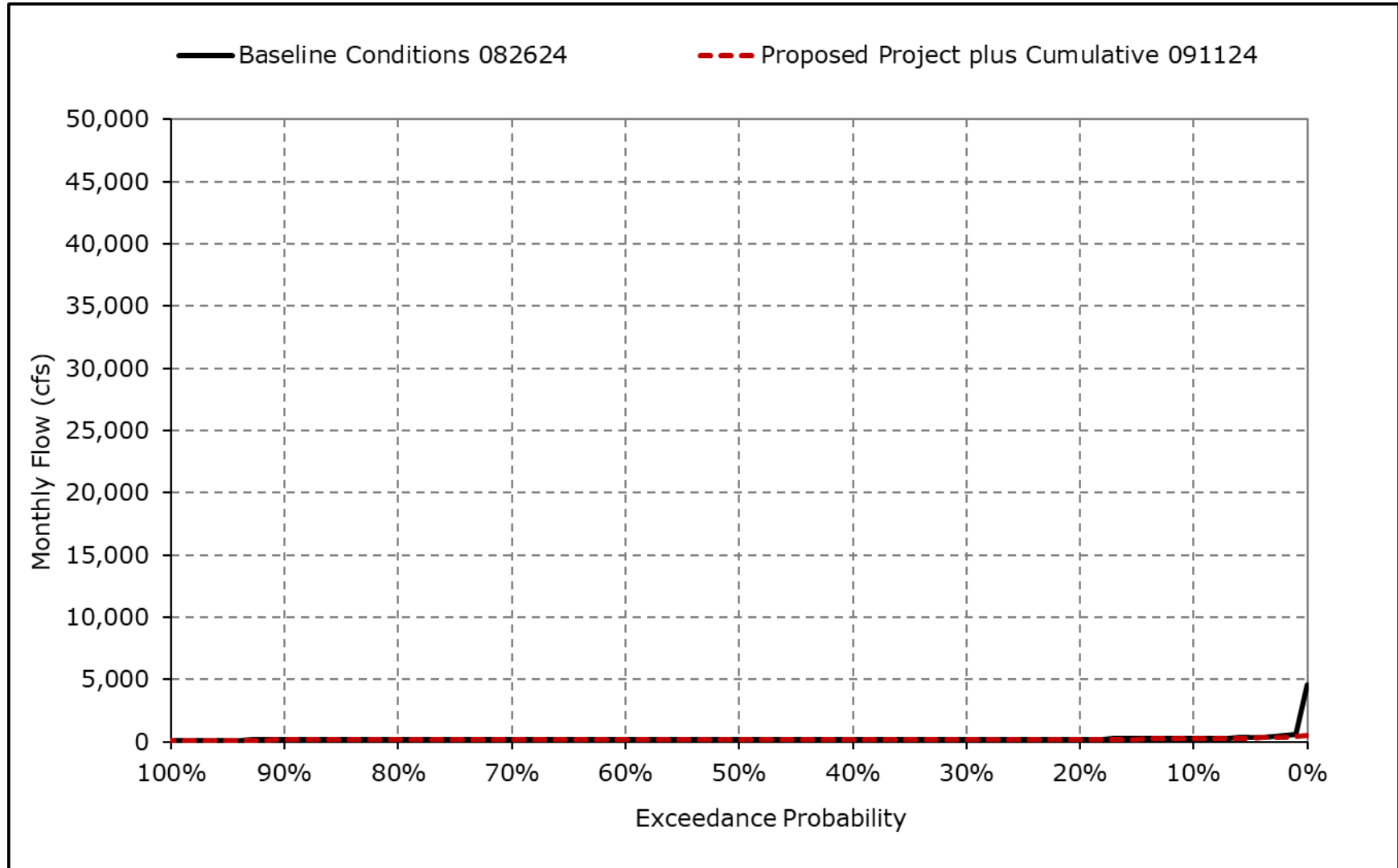
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2p. Yolo Bypass Flow, July



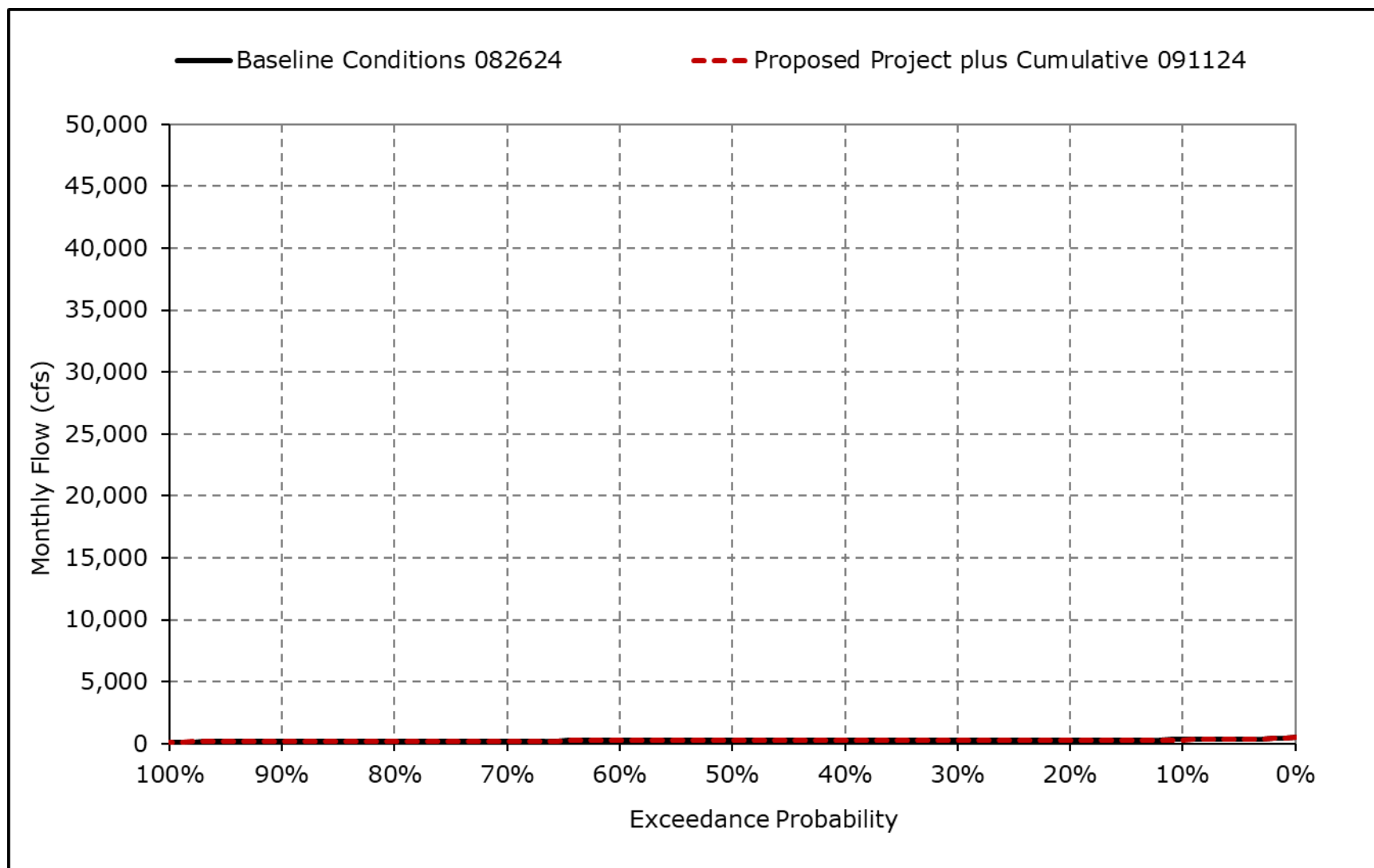
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-2q. Yolo Bypass Flow, August



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

Figure 4G-3-2r. Yolo Bypass Flow, September



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

Table 4G-3-3-1a. San Joaquin River at Vernalis, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,975	2,642	3,876	9,369	11,402	13,581	14,413	12,125	13,329	6,337	4,759	3,781
20% Exceedance	3,678	2,321	2,521	4,272	7,952	8,982	10,005	7,943	6,530	3,765	2,198	2,041
30% Exceedance	3,191	2,055	2,062	3,284	5,398	7,366	8,101	6,118	3,235	1,940	1,332	1,439
40% Exceedance	2,278	1,883	1,772	2,333	3,585	4,248	6,279	5,019	2,493	1,483	1,072	1,267
50% Exceedance	1,843	1,714	1,571	1,963	2,681	2,533	3,922	3,742	1,747	1,152	759	1,044
60% Exceedance	1,747	1,432	1,399	1,591	2,179	2,285	3,172	3,122	1,490	937	689	966
70% Exceedance	1,684	1,371	1,298	1,476	1,832	1,887	2,754	2,762	1,249	807	617	909
80% Exceedance	1,592	1,332	1,158	1,338	1,605	1,713	2,438	2,415	1,141	618	506	827
90% Exceedance	1,466	1,239	1,077	1,202	1,458	1,613	2,146	2,070	929	487	355	657
Full Simulation Period Average ^a	2,537	1,919	2,287	4,074	5,550	5,941	6,711	5,825	4,240	2,498	1,578	1,548
Wet Water Years (32%)	2,934	2,362	3,715	8,706	11,277	12,158	12,523	10,643	9,314	5,542	3,374	2,710
Above Normal Water Years (9%)	2,280	1,829	1,932	2,763	4,920	5,448	6,611	5,518	3,535	1,941	1,220	1,438
Below Normal Water Years (20%)	2,764	1,974	1,783	2,217	3,929	4,287	5,523	4,782	2,485	1,435	936	1,158
Dry Water Years (21%)	2,358	1,650	1,552	1,581	1,871	1,905	2,766	2,723	1,284	818	622	922
Critical Water Years (18%)	1,916	1,430	1,341	1,468	1,779	1,682	2,353	2,189	973	506	394	702

Table 4G-3-3-1b. San Joaquin River at Vernalis, Proposed Project plus Cumulative 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,981	2,645	3,884	9,367	11,406	13,178	14,726	12,419	13,348	6,343	4,784	3,780
20% Exceedance	3,687	2,330	2,527	4,261	7,979	8,983	10,698	8,360	6,536	3,820	2,199	2,047
30% Exceedance	3,199	2,066	2,066	3,289	5,386	7,236	9,183	7,197	3,242	2,116	1,399	1,452
40% Exceedance	2,290	1,887	1,787	2,338	3,625	4,254	7,590	6,062	2,510	1,575	1,144	1,279
50% Exceedance	1,882	1,739	1,590	1,967	2,674	2,688	5,418	5,053	1,760	1,293	845	1,095
60% Exceedance	1,767	1,449	1,408	1,601	2,201	2,372	4,441	4,390	1,525	1,102	716	988
70% Exceedance	1,691	1,400	1,300	1,486	1,843	1,949	3,291	3,196	1,334	885	629	924
80% Exceedance	1,627	1,333	1,160	1,347	1,663	1,821	2,876	2,831	1,164	745	562	860
90% Exceedance	1,502	1,268	1,082	1,205	1,482	1,689	2,631	2,488	987	562	395	703
Full Simulation Period Average ^a	2,554	1,930	2,300	4,066	5,533	5,980	7,445	6,538	4,268	2,587	1,618	1,574
Wet Water Years (32%)	2,945	2,368	3,736	8,666	11,184	12,140	13,068	11,161	9,325	5,563	3,383	2,717
Above Normal Water Years (9%)	2,312	1,847	1,944	2,766	4,917	5,450	7,703	6,650	3,542	2,085	1,238	1,447
Below Normal Water Years (20%)	2,775	1,989	1,791	2,223	3,952	4,332	6,560	5,790	2,513	1,592	979	1,189
Dry Water Years (21%)	2,389	1,661	1,565	1,587	1,899	2,016	3,559	3,490	1,307	903	643	936
Critical Water Years (18%)	1,925	1,438	1,348	1,478	1,791	1,754	2,839	2,650	1,046	615	518	775

Table 4G-3-3-1c. San Joaquin River at Vernalis, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	6	4	8	-3	5	-403	313	294	18	5	24	0
20% Exceedance	9	8	6	-12	27	1	693	417	5	55	1	6
30% Exceedance	8	11	3	5	-12	-130	1,081	1,079	8	176	67	13
40% Exceedance	12	3	15	5	40	6	1,311	1,043	16	92	72	12
50% Exceedance	38	25	19	5	-7	155	1,496	1,311	14	142	86	51
60% Exceedance	20	17	10	10	22	87	1,268	1,268	36	165	27	22
70% Exceedance	6	29	2	10	11	62	538	434	85	77	12	15
80% Exceedance	35	2	2	9	58	108	438	416	22	126	56	32
90% Exceedance	36	29	5	3	24	76	485	418	58	74	39	46
Full Simulation Period Average ^a	17	10	13	-8	-17	39	734	713	28	89	40	25
Wet Water Years (32%)	12	6	21	-40	-93	-19	545	518	11	21	9	6
Above Normal Water Years (9%)	33	18	12	3	-3	2	1,092	1,132	7	144	18	9
Below Normal Water Years (20%)	11	15	9	6	23	45	1,037	1,008	28	157	44	31
Dry Water Years (21%)	30	11	12	6	29	111	793	767	23	85	21	14
Critical Water Years (18%)	9	8	7	11	12	72	485	461	74	109	124	73

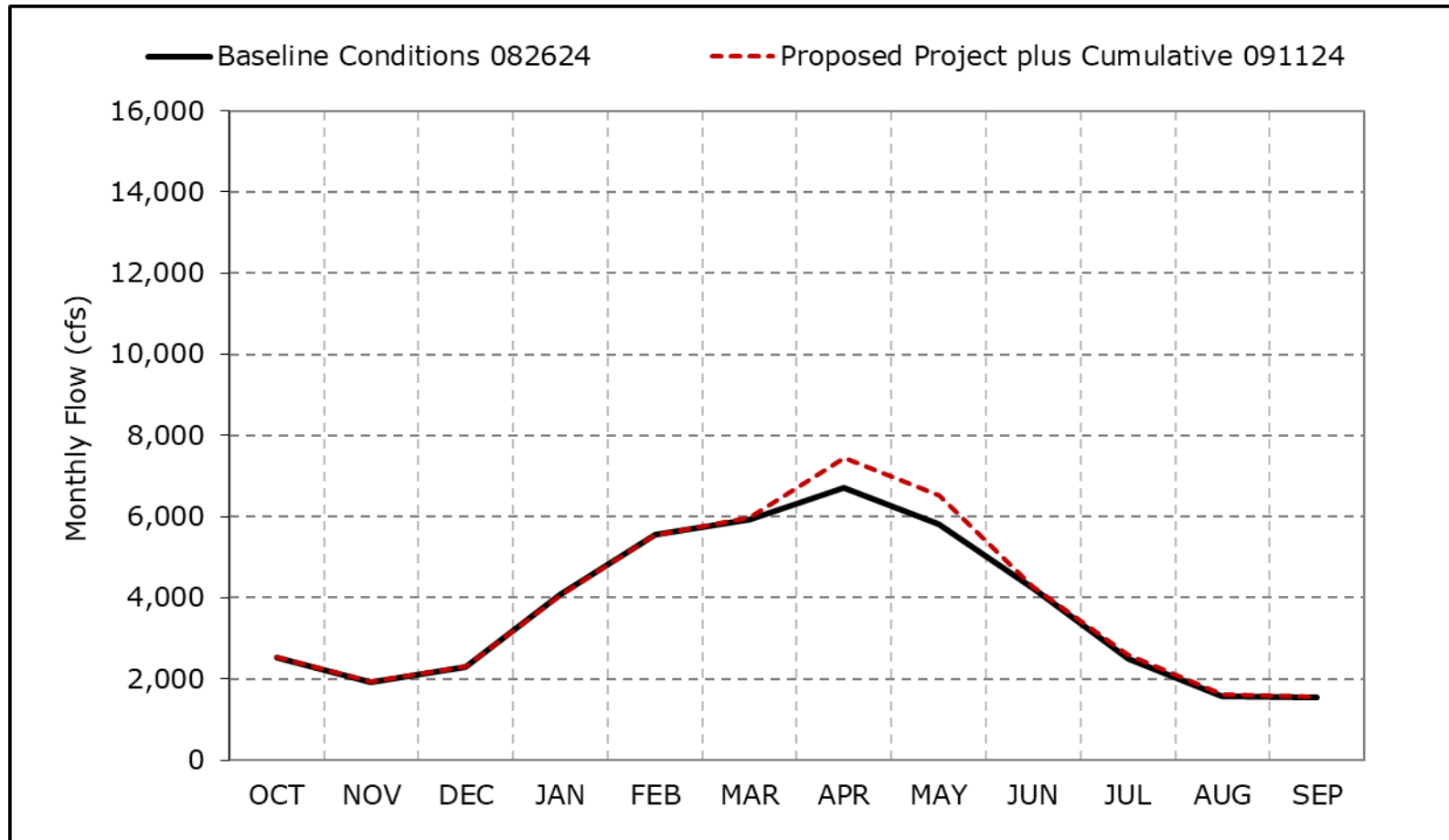
^a Based on the 100-year simulation period.

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

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

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

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

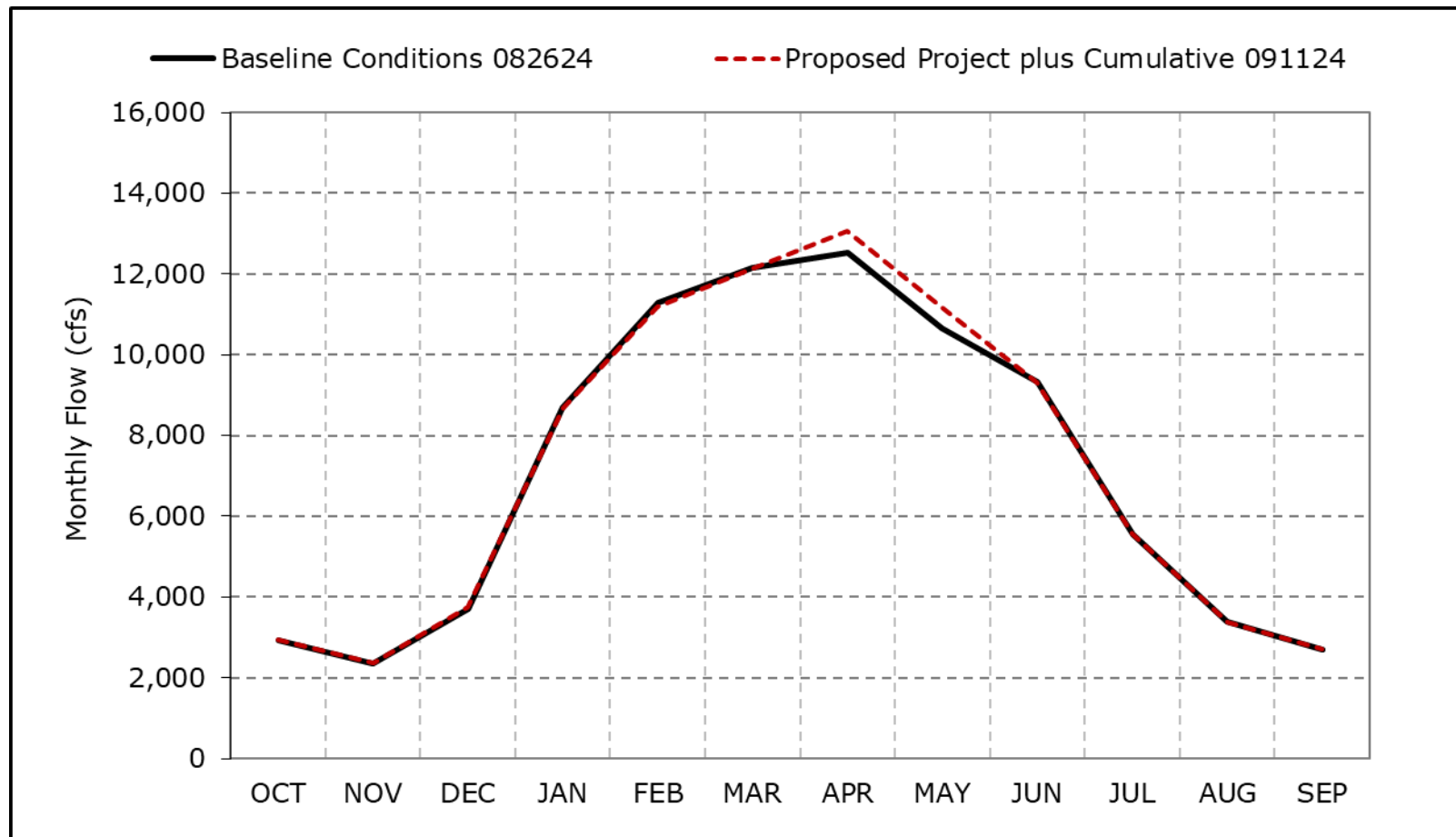


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

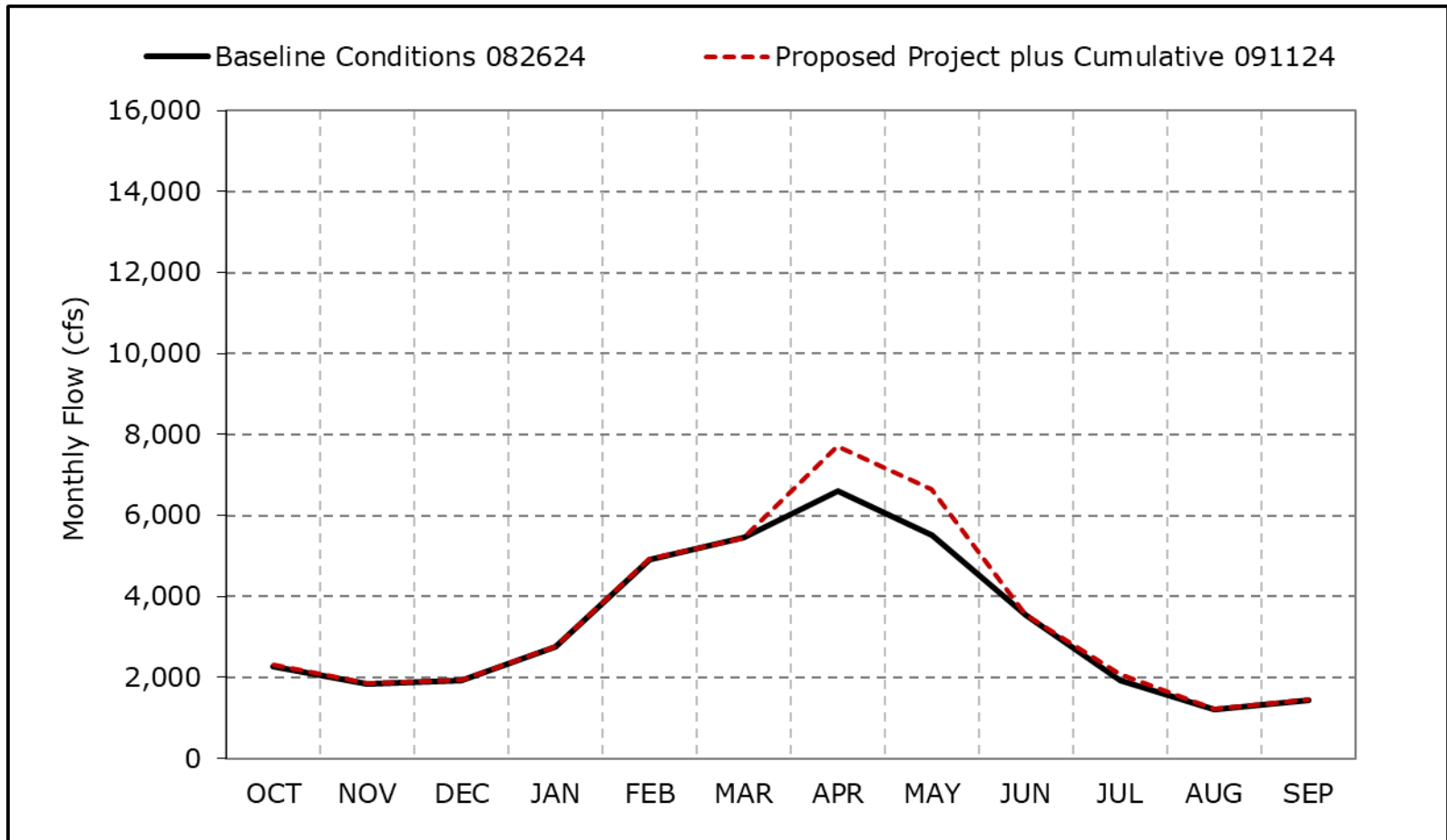


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

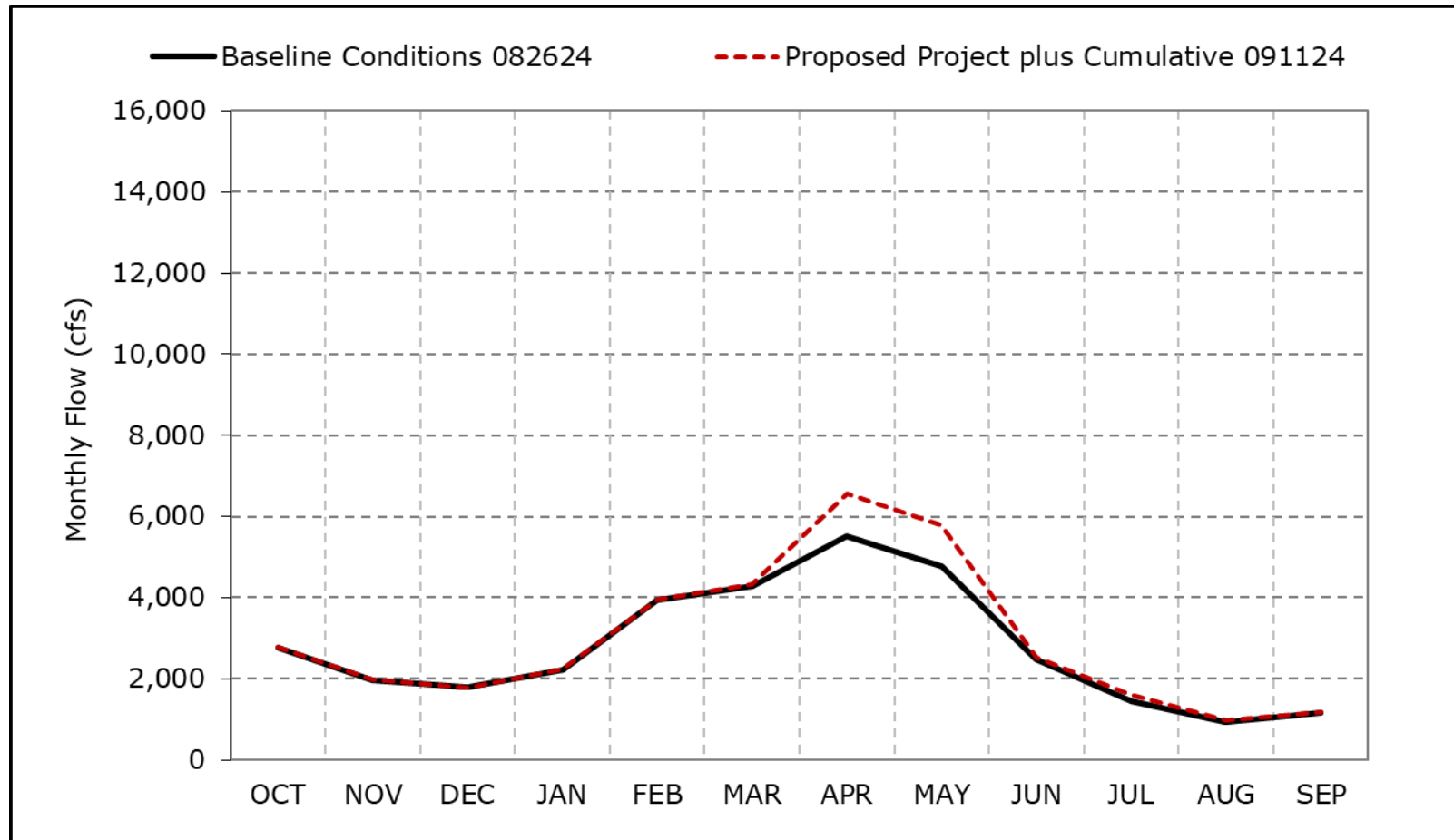


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

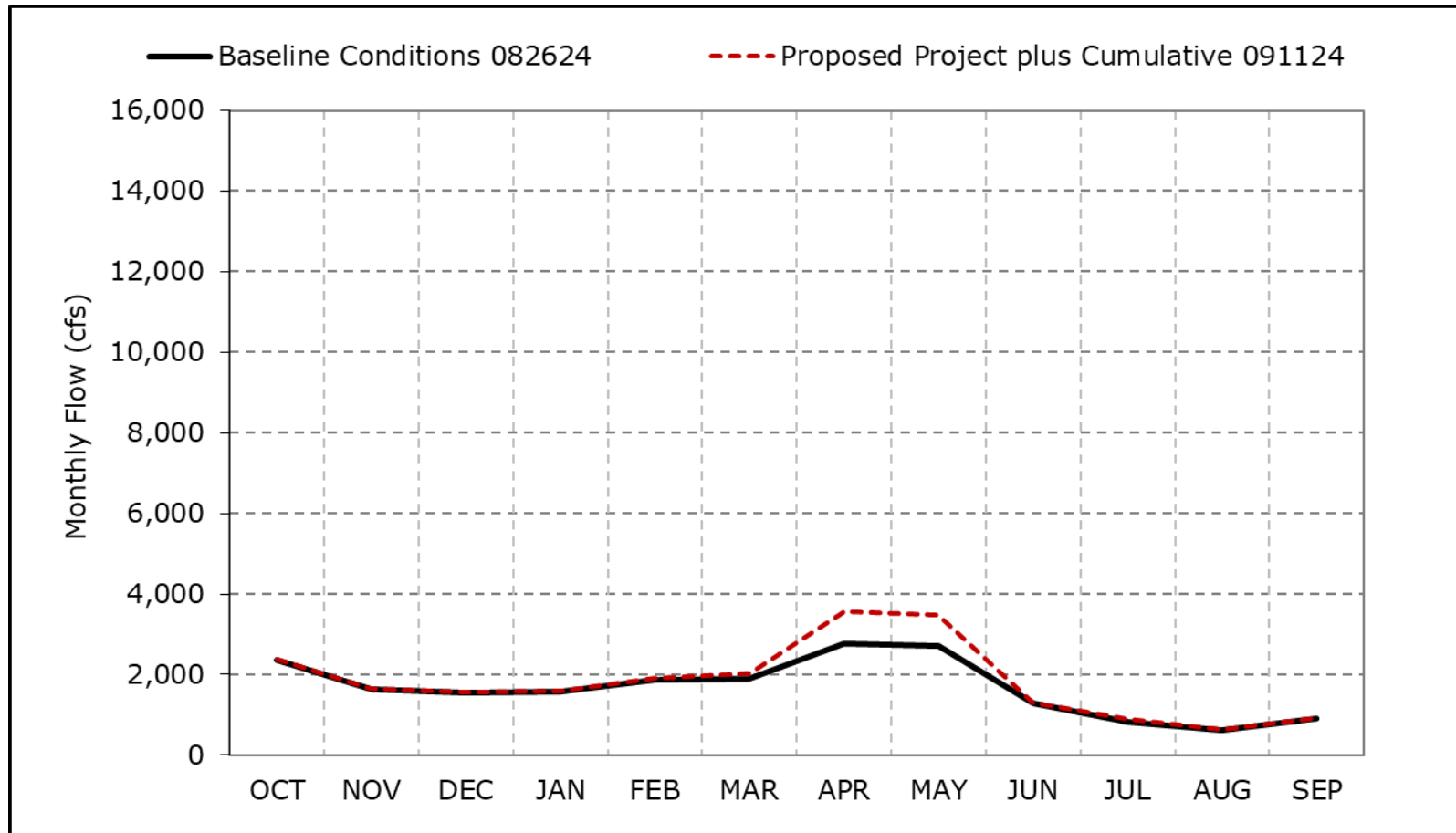


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

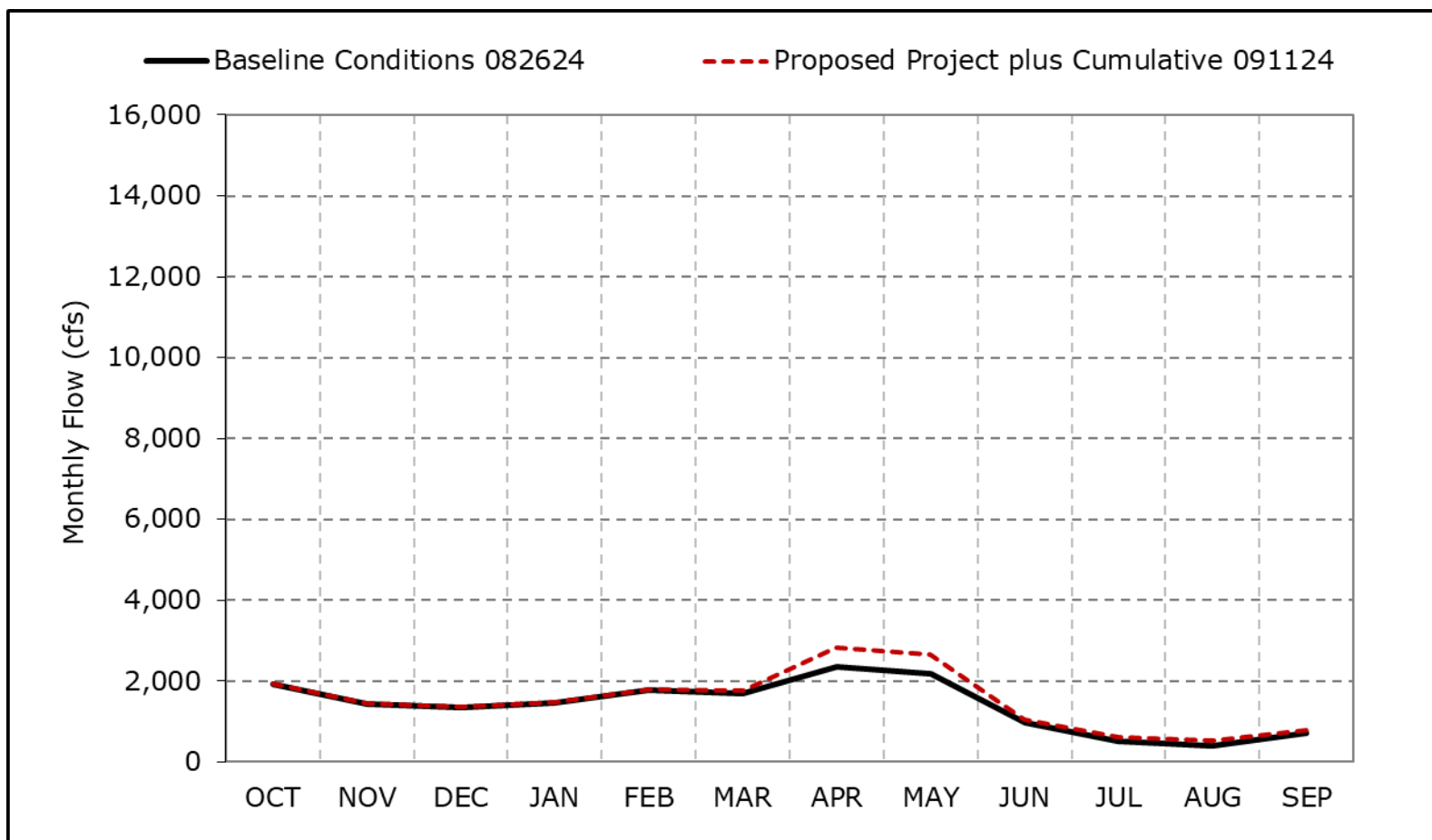


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

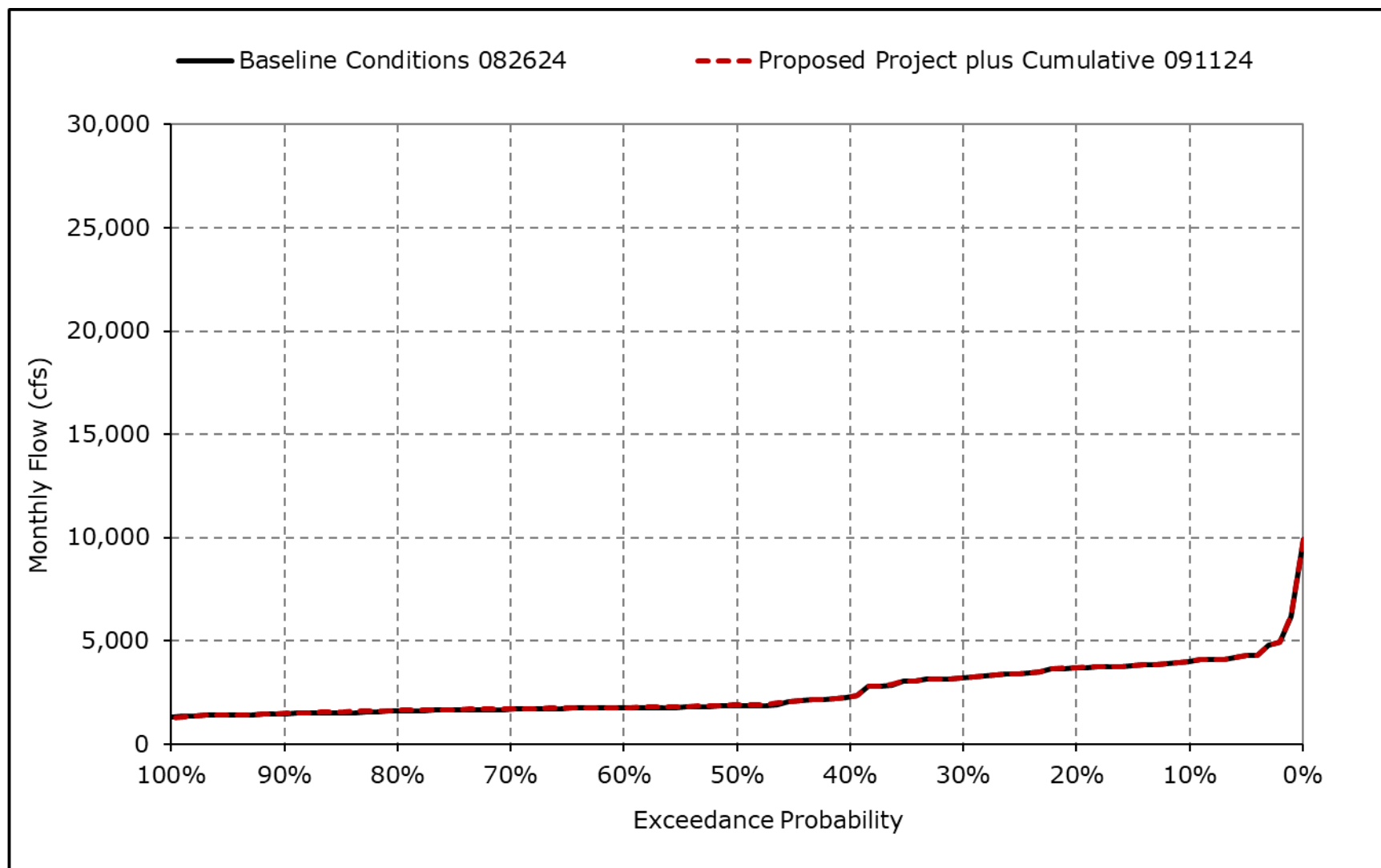


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

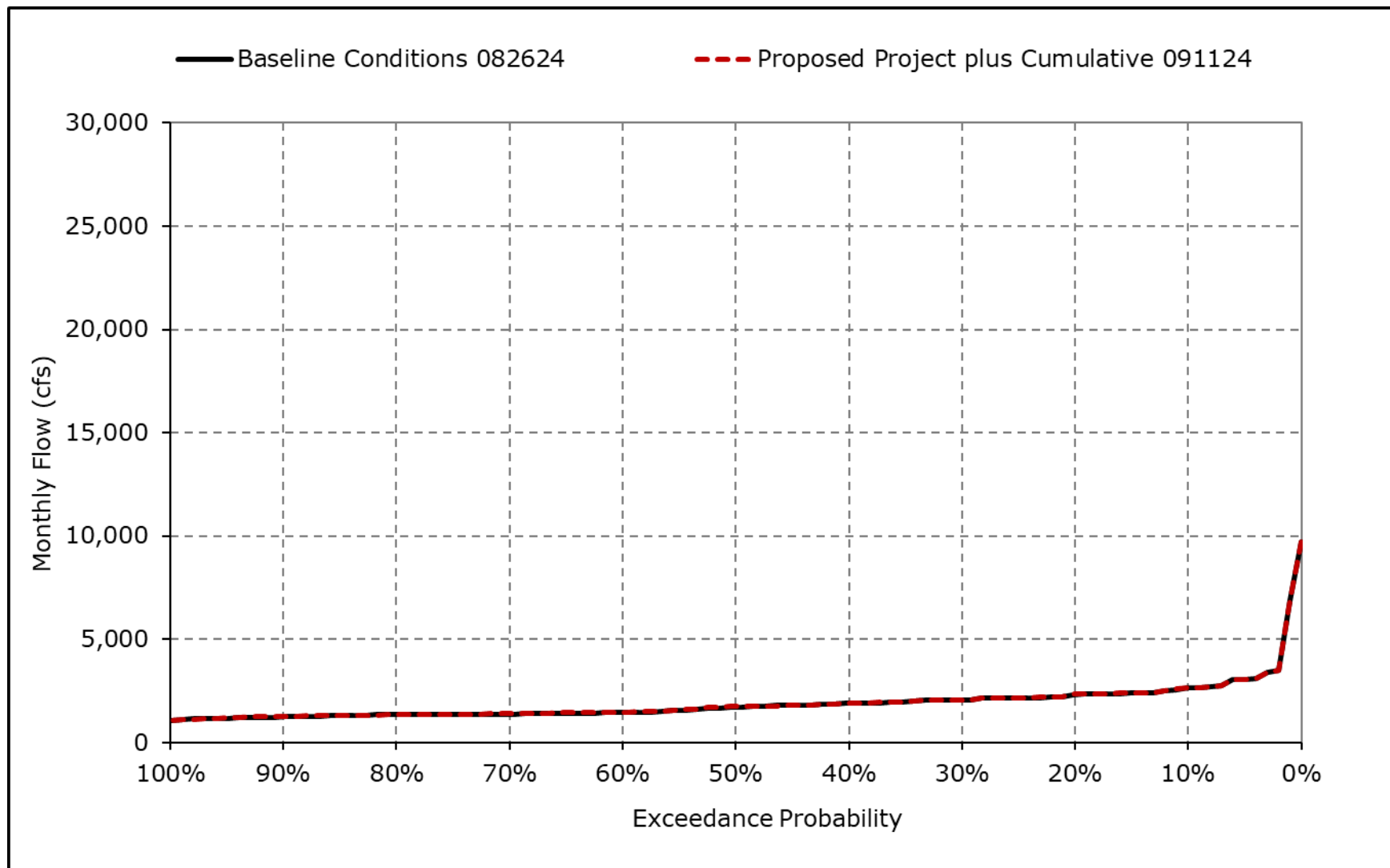
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



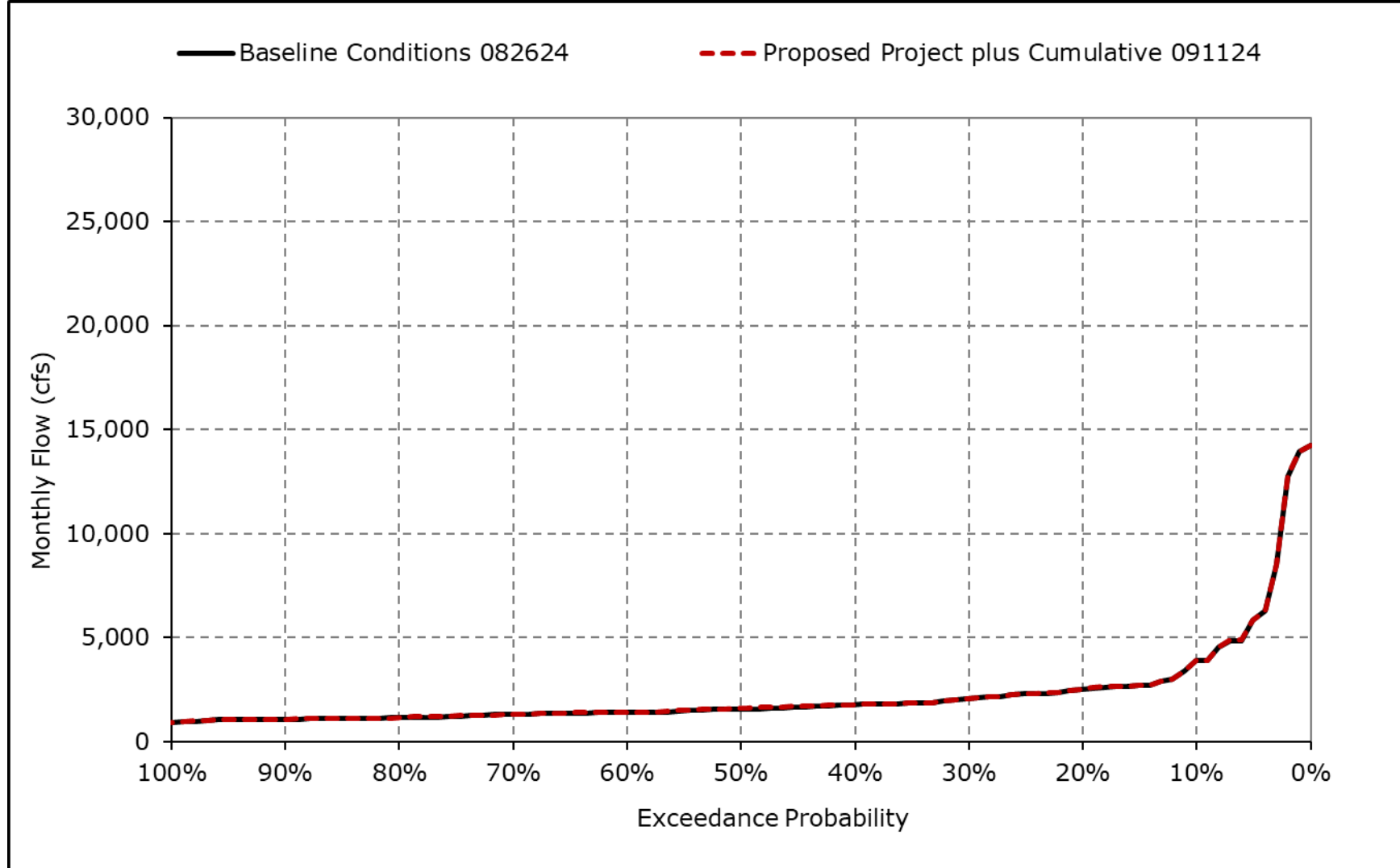
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



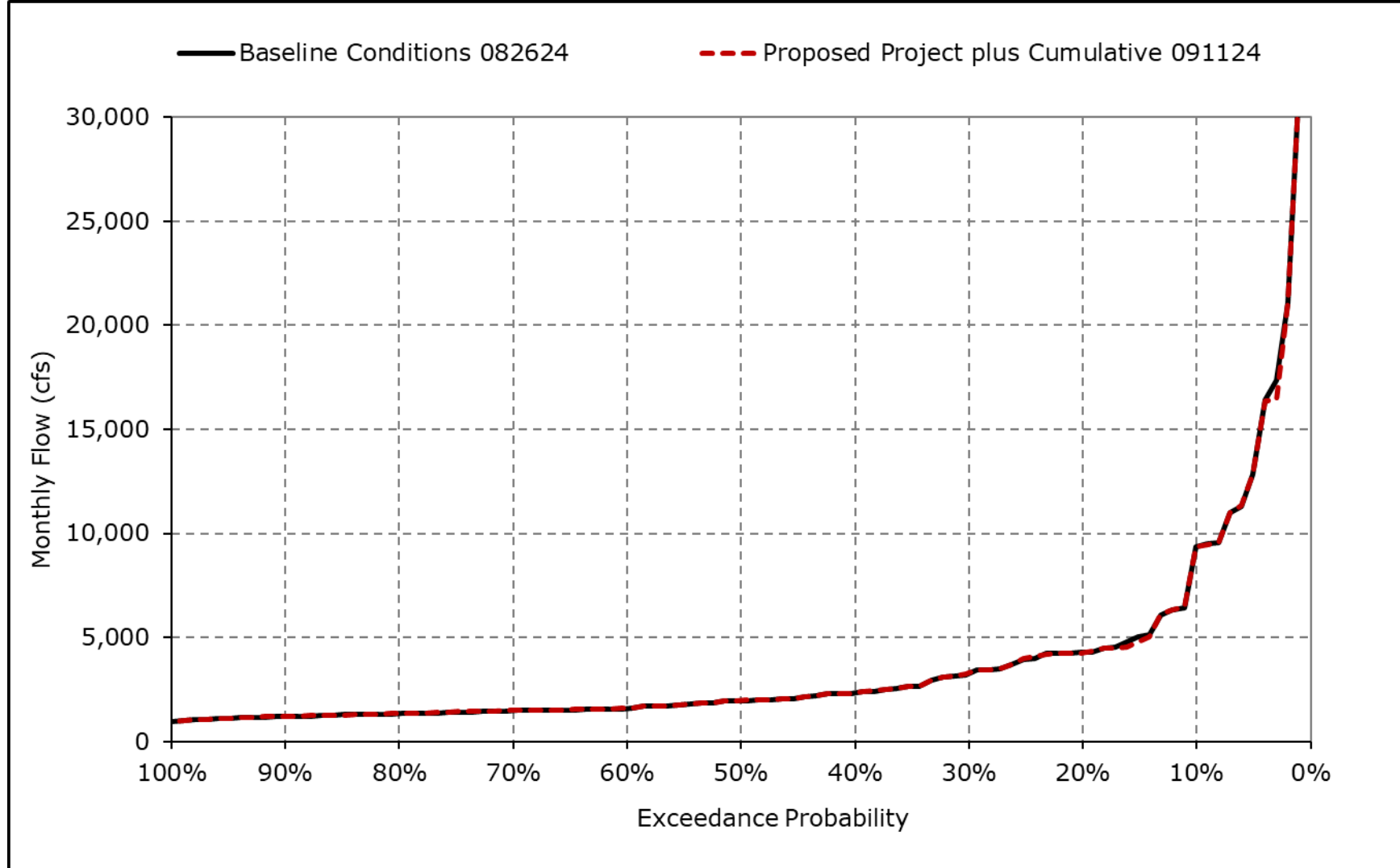
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



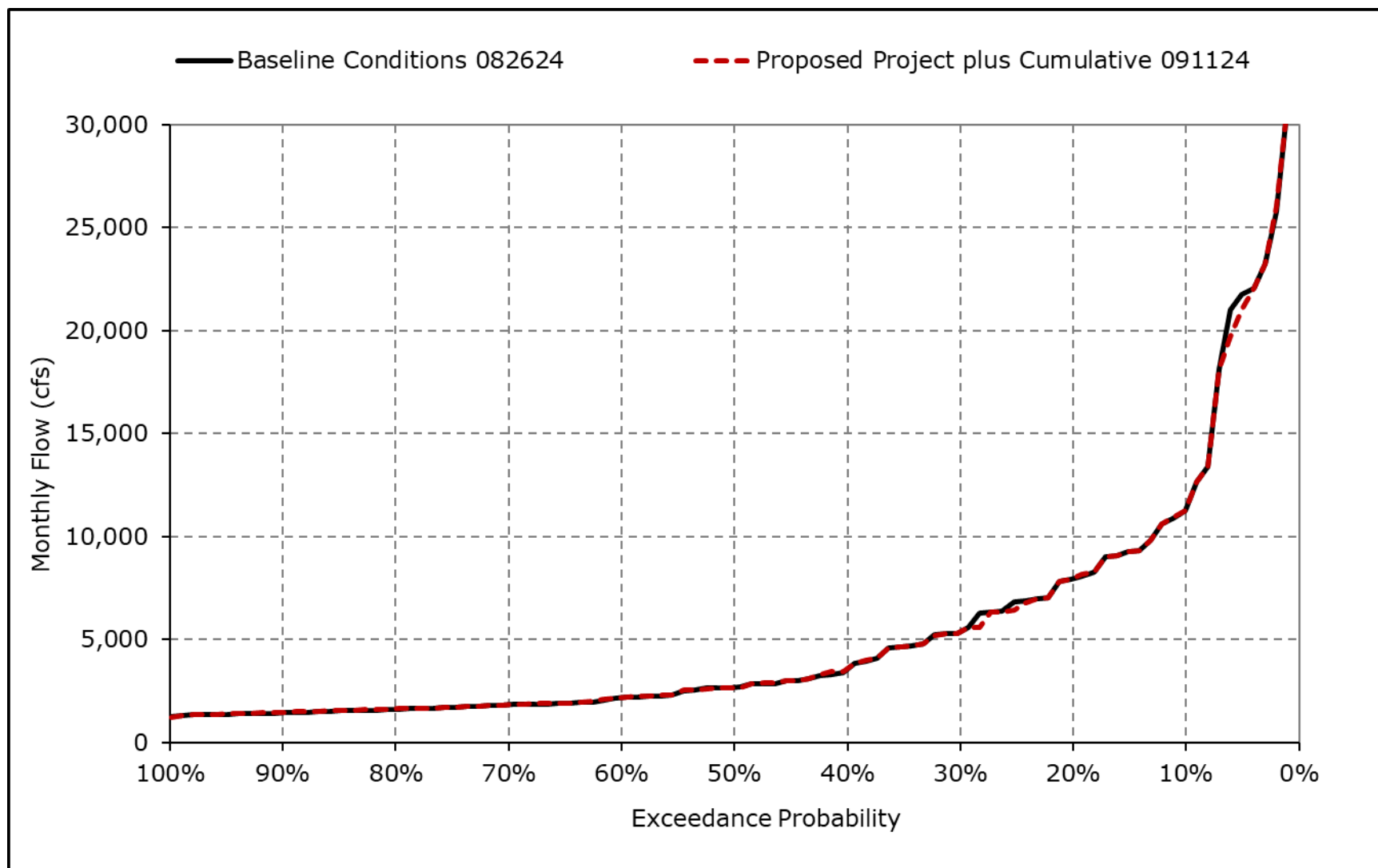
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



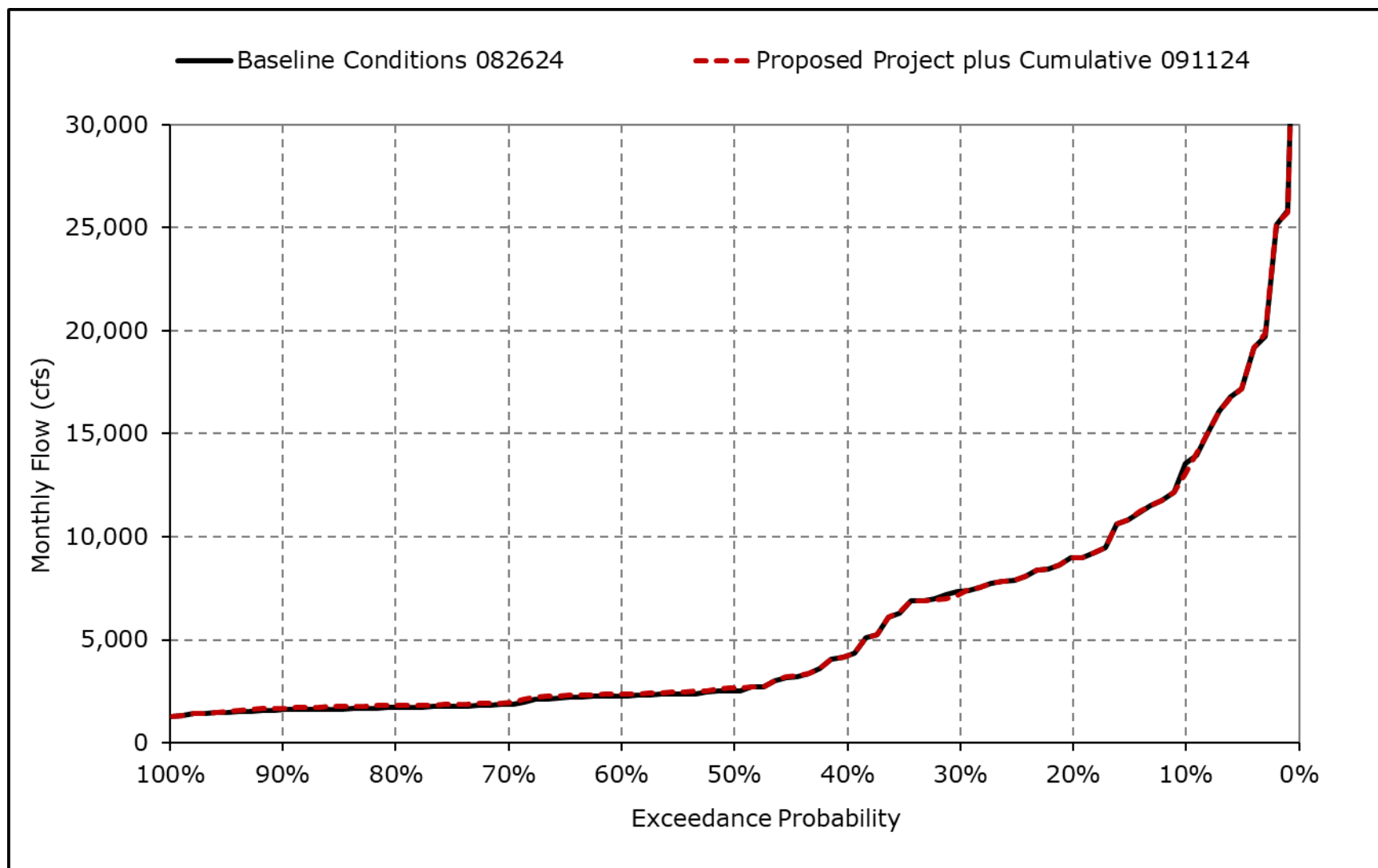
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



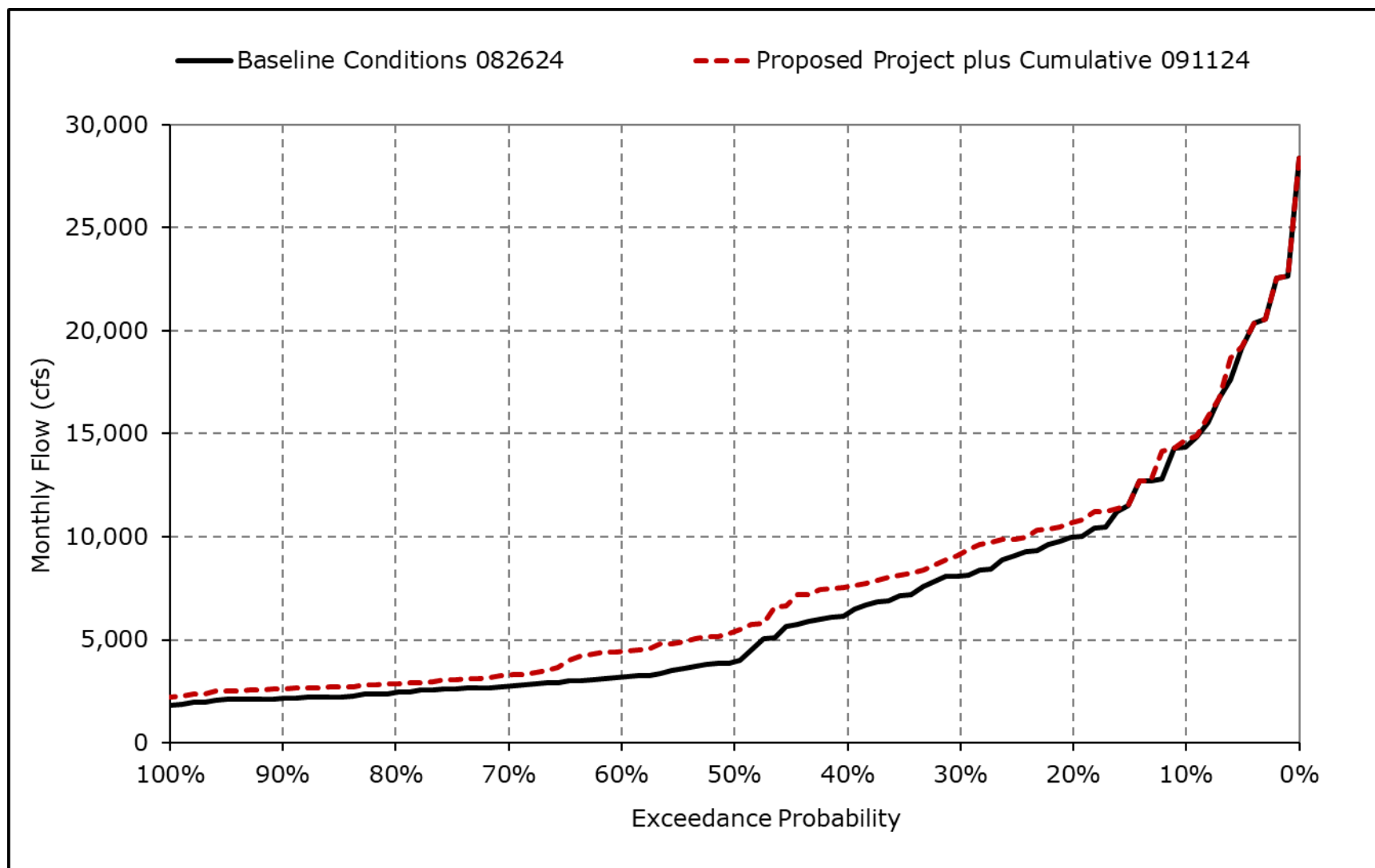
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



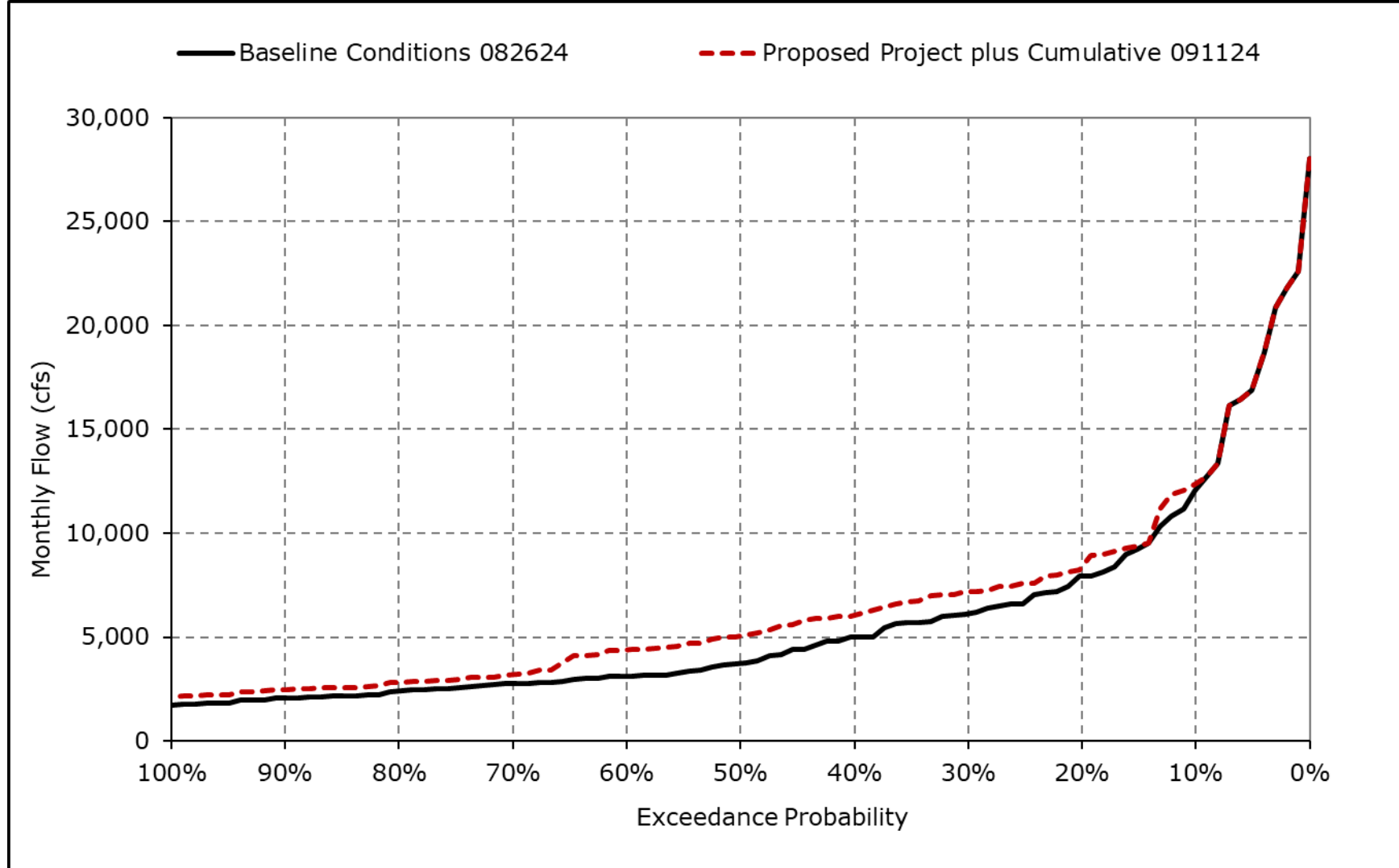
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



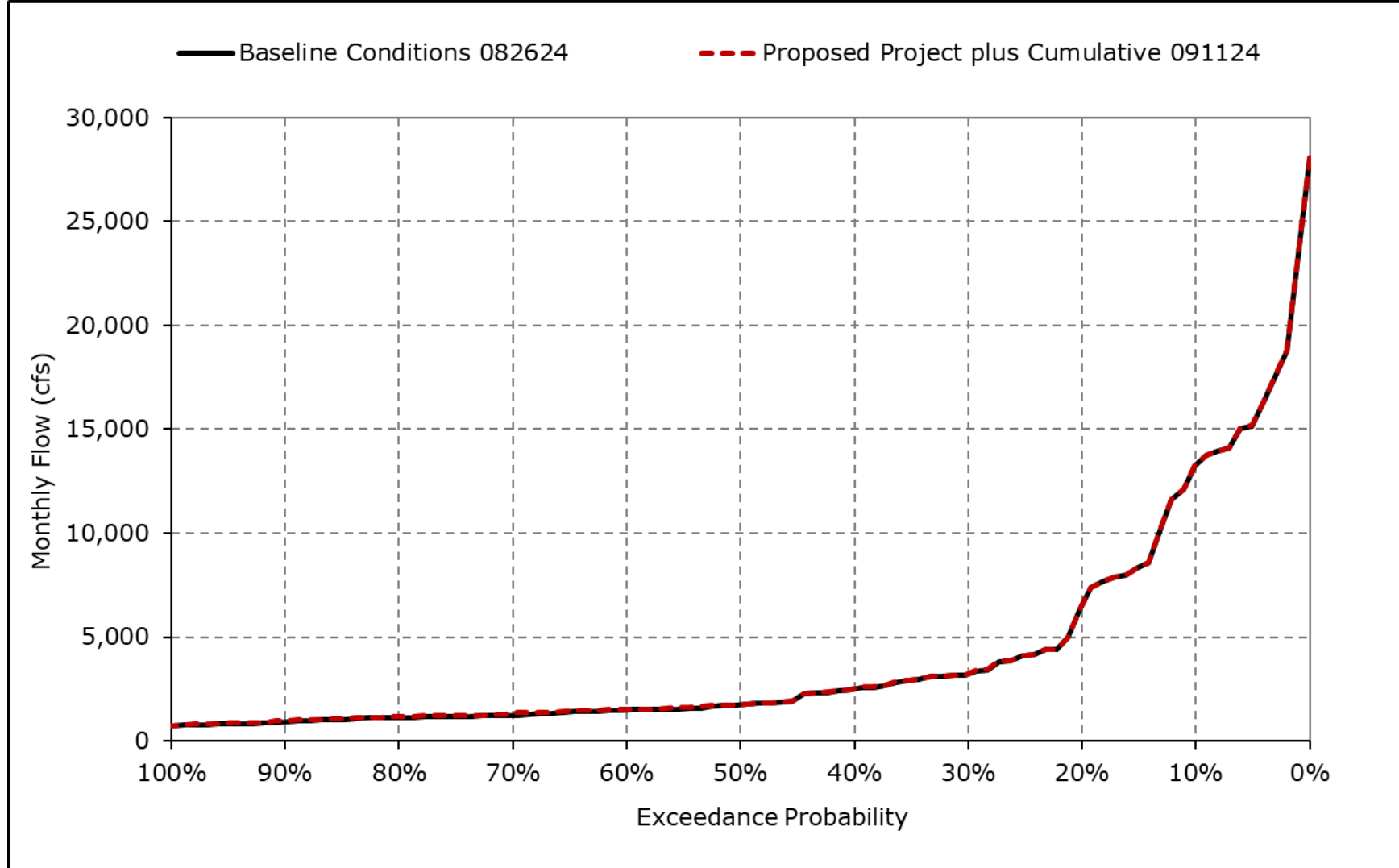
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



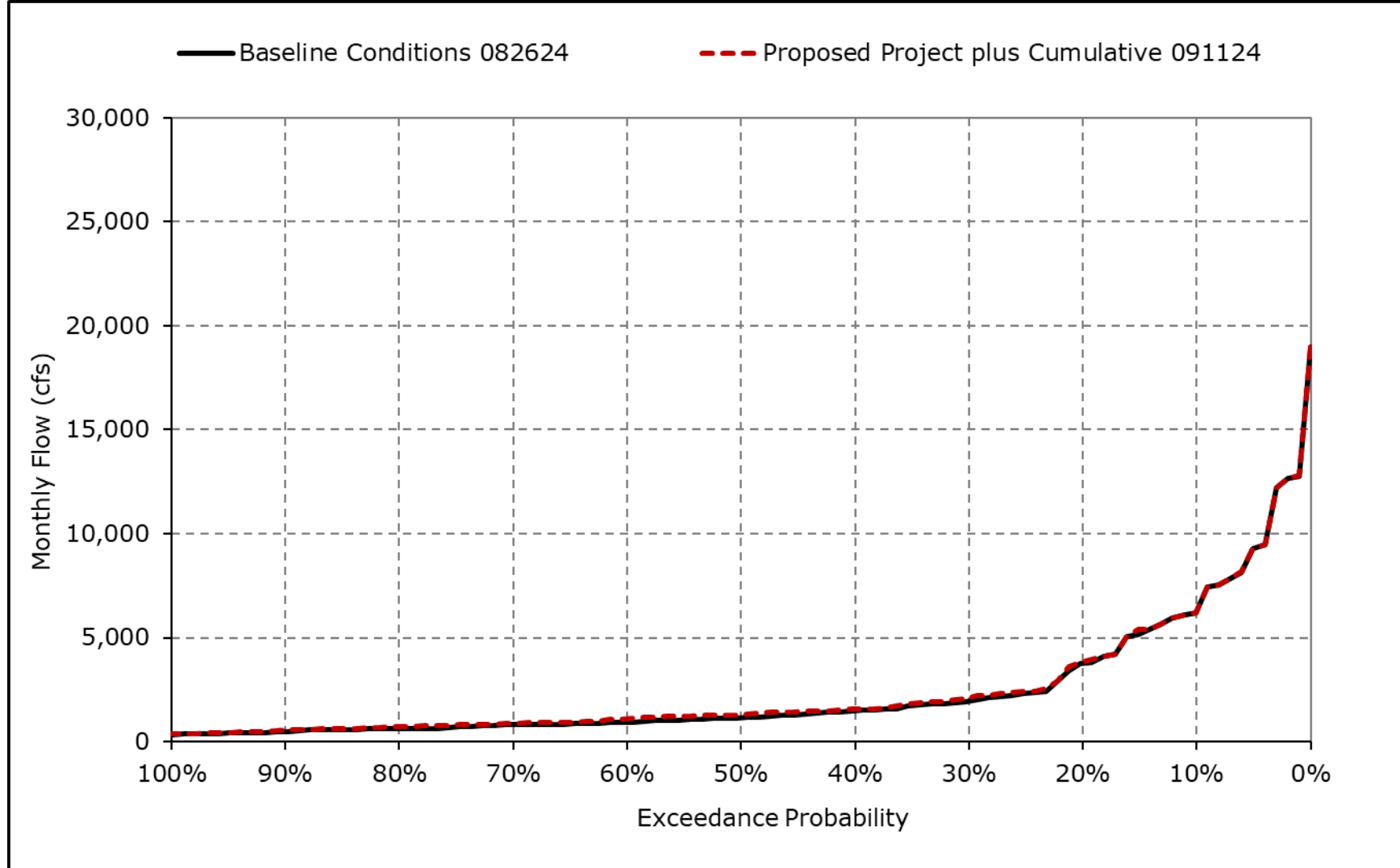
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



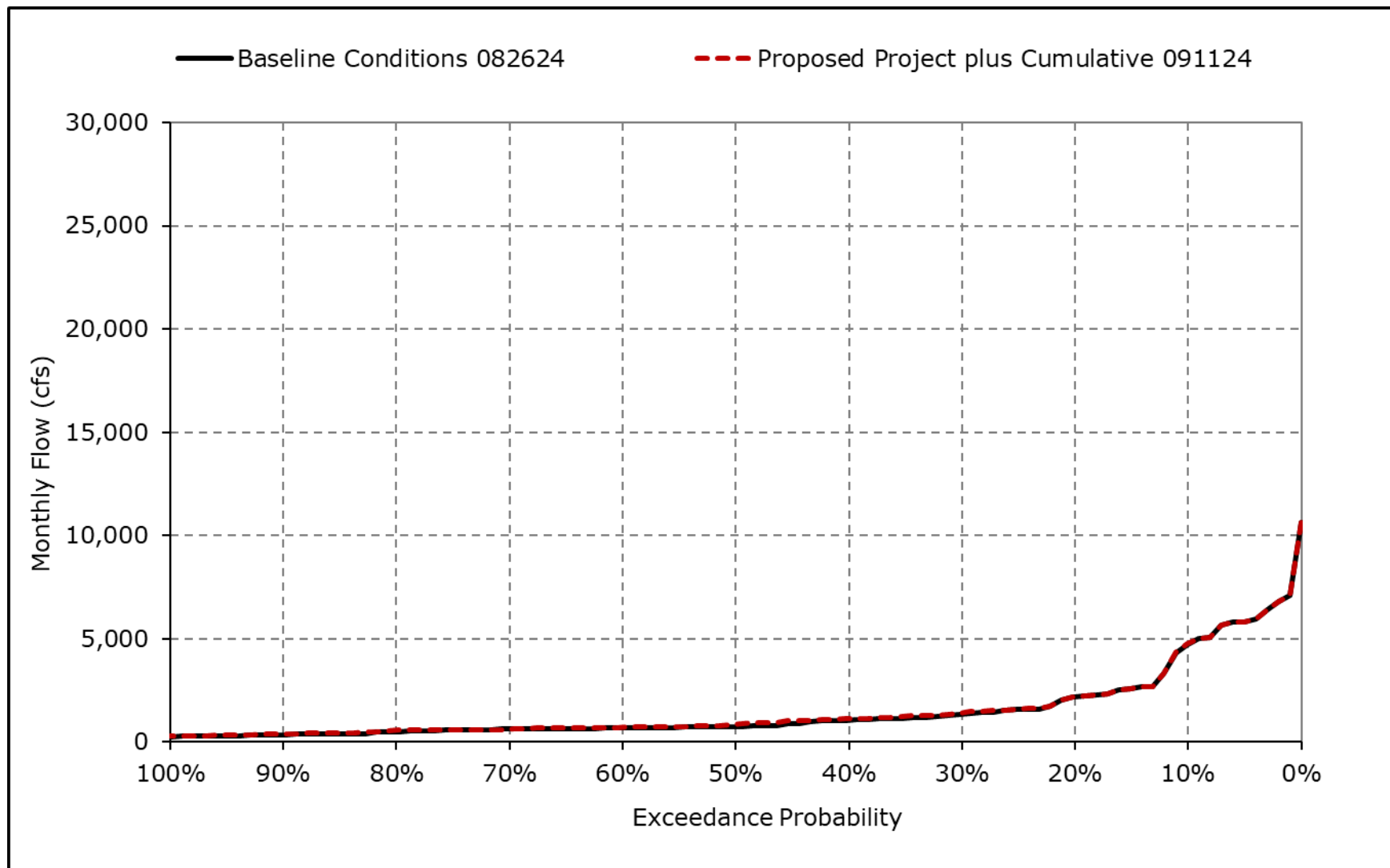
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



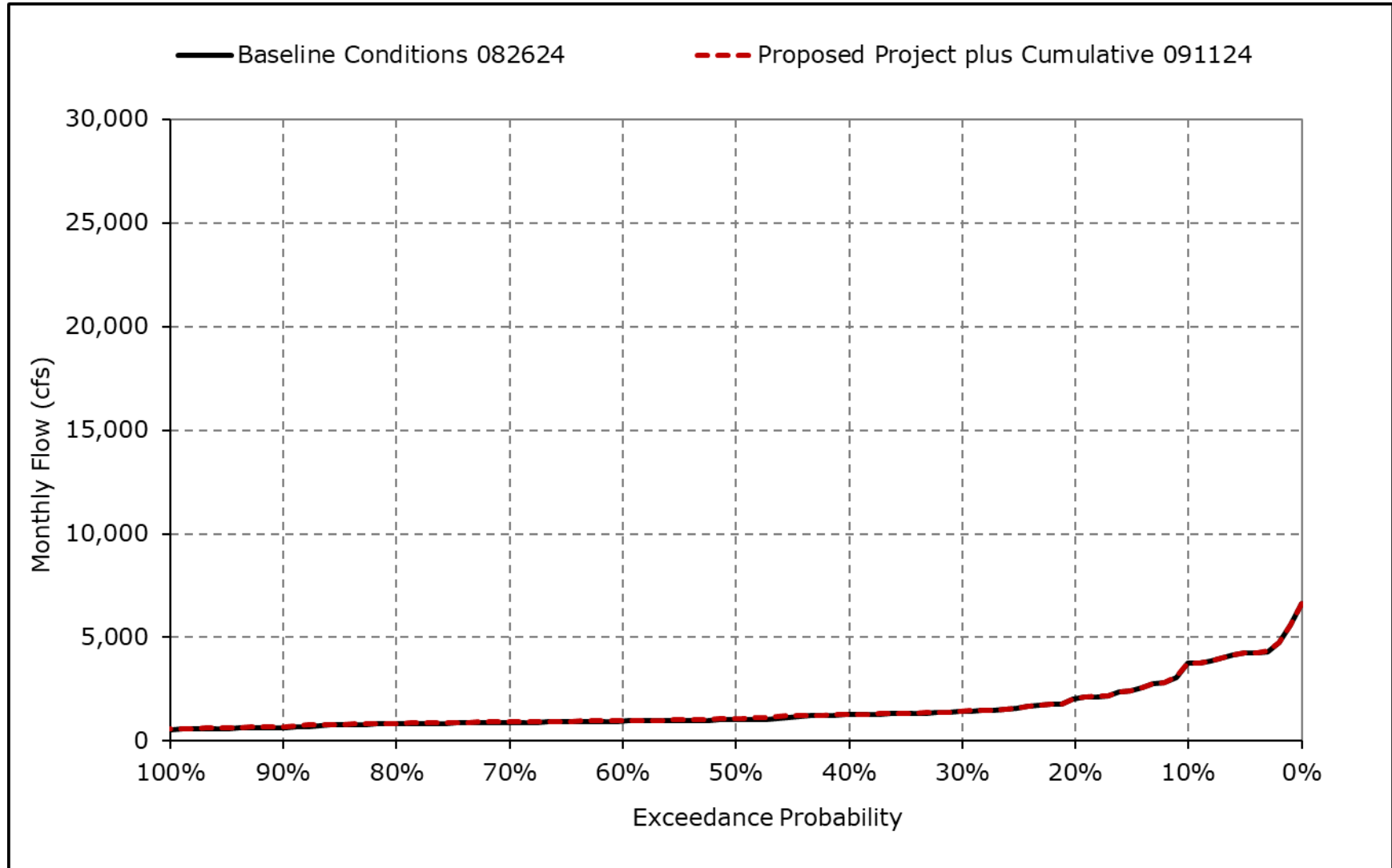
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-4-1a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,975	2,642	3,876	9,369	11,402	13,581	14,413	12,125	13,329	6,337	4,759	3,781
20% Exceedance	3,678	2,321	2,521	4,272	7,952	8,982	10,005	7,943	6,530	3,765	2,198	2,041
30% Exceedance	3,191	2,055	2,062	3,284	5,398	7,366	8,101	6,118	3,235	1,940	1,332	1,439
40% Exceedance	2,278	1,883	1,772	2,333	3,585	4,248	6,279	5,019	2,493	1,483	1,072	1,267
50% Exceedance	1,843	1,714	1,571	1,963	2,681	2,533	3,922	3,742	1,747	1,152	759	1,044
60% Exceedance	1,747	1,432	1,399	1,591	2,179	2,285	3,172	3,122	1,490	937	689	966
70% Exceedance	1,684	1,371	1,298	1,476	1,832	1,887	2,754	2,762	1,249	807	617	909
80% Exceedance	1,592	1,332	1,158	1,338	1,605	1,713	2,438	2,415	1,141	618	506	827
90% Exceedance	1,466	1,239	1,077	1,202	1,458	1,613	2,146	2,070	929	487	355	657
Full Simulation Period Average ^a	2,537	1,919	2,287	4,074	5,550	5,941	6,711	5,825	4,240	2,498	1,578	1,548
Wet Water Years (24%)	2,783	2,057	3,645	9,748	13,118	14,606	14,700	12,756	11,680	6,931	4,168	3,248
Above Normal Water Years (18%)	2,635	2,339	2,684	4,072	6,066	5,977	7,545	5,934	3,691	2,026	1,314	1,431
Below Normal Water Years (13%)	2,554	1,950	2,041	2,194	3,510	3,745	5,076	4,453	1,962	1,176	757	987
Dry Water Years (13%)	2,847	1,934	1,714	1,842	2,026	2,312	3,080	3,042	1,414	915	644	913
Critical Water Years (32%)	2,164	1,561	1,377	1,491	1,844	1,788	2,390	2,253	1,043	618	498	826

Table 4G-3-4-1b. San Joaquin River at Vernalis (60-20-20), Proposed Project plus Cumulative 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,981	2,645	3,884	9,367	11,406	13,178	14,726	12,419	13,348	6,343	4,784	3,780
20% Exceedance	3,687	2,330	2,527	4,261	7,979	8,983	10,698	8,360	6,536	3,820	2,199	2,047
30% Exceedance	3,199	2,066	2,066	3,289	5,386	7,236	9,183	7,197	3,242	2,116	1,399	1,452
40% Exceedance	2,290	1,887	1,787	2,338	3,625	4,254	7,590	6,062	2,510	1,575	1,144	1,279
50% Exceedance	1,882	1,739	1,590	1,967	2,674	2,688	5,418	5,053	1,760	1,293	845	1,095
60% Exceedance	1,767	1,449	1,408	1,601	2,201	2,372	4,441	4,390	1,525	1,102	716	988
70% Exceedance	1,691	1,400	1,300	1,486	1,843	1,949	3,291	3,196	1,334	885	629	924
80% Exceedance	1,627	1,333	1,160	1,347	1,663	1,821	2,876	2,831	1,164	745	562	860
90% Exceedance	1,502	1,268	1,082	1,205	1,482	1,689	2,631	2,488	987	562	395	703
Full Simulation Period Average ^a	2,554	1,930	2,300	4,066	5,533	5,980	7,445	6,538	4,268	2,587	1,618	1,574
Wet Water Years (24%)	2,805	2,067	3,671	9,693	12,992	14,580	14,990	13,056	11,694	6,965	4,177	3,255
Above Normal Water Years (18%)	2,649	2,350	2,693	4,075	6,082	5,979	8,616	6,969	3,705	2,138	1,333	1,445
Below Normal Water Years (13%)	2,580	1,965	2,049	2,201	3,510	3,753	6,417	5,764	1,977	1,305	793	1,025
Dry Water Years (13%)	2,860	1,941	1,728	1,847	2,036	2,380	4,146	4,089	1,443	1,038	684	946
Critical Water Years (32%)	2,177	1,571	1,385	1,500	1,872	1,899	2,887	2,716	1,095	705	574	863

Table 4G-3-4-1c. San Joaquin River at Vernalis (60-20-20), Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	6	4	8	-3	5	-403	313	294	18	5	24	0
20% Exceedance	9	8	6	-12	27	1	693	417	5	55	1	6
30% Exceedance	8	11	3	5	-12	-130	1,081	1,079	8	176	67	13
40% Exceedance	12	3	15	5	40	6	1,311	1,043	16	92	72	12
50% Exceedance	38	25	19	5	-7	155	1,496	1,311	14	142	86	51
60% Exceedance	20	17	10	10	22	87	1,268	1,268	36	165	27	22
70% Exceedance	6	29	2	10	11	62	538	434	85	77	12	15
80% Exceedance	35	2	2	9	58	108	438	416	22	126	56	32
90% Exceedance	36	29	5	3	24	76	485	418	58	74	39	46
Full Simulation Period Average ^a	17	10	13	-8	-17	39	734	713	28	89	40	25
Wet Water Years (24%)	22	10	27	-55	-126	-26	290	301	14	34	9	7
Above Normal Water Years (18%)	13	10	10	3	16	2	1,070	1,035	13	111	19	14
Below Normal Water Years (13%)	26	15	8	8	0	8	1,341	1,311	15	129	36	37
Dry Water Years (13%)	13	7	13	5	10	68	1,065	1,047	29	122	41	34
Critical Water Years (32%)	12	10	7	9	28	111	497	464	52	87	76	37

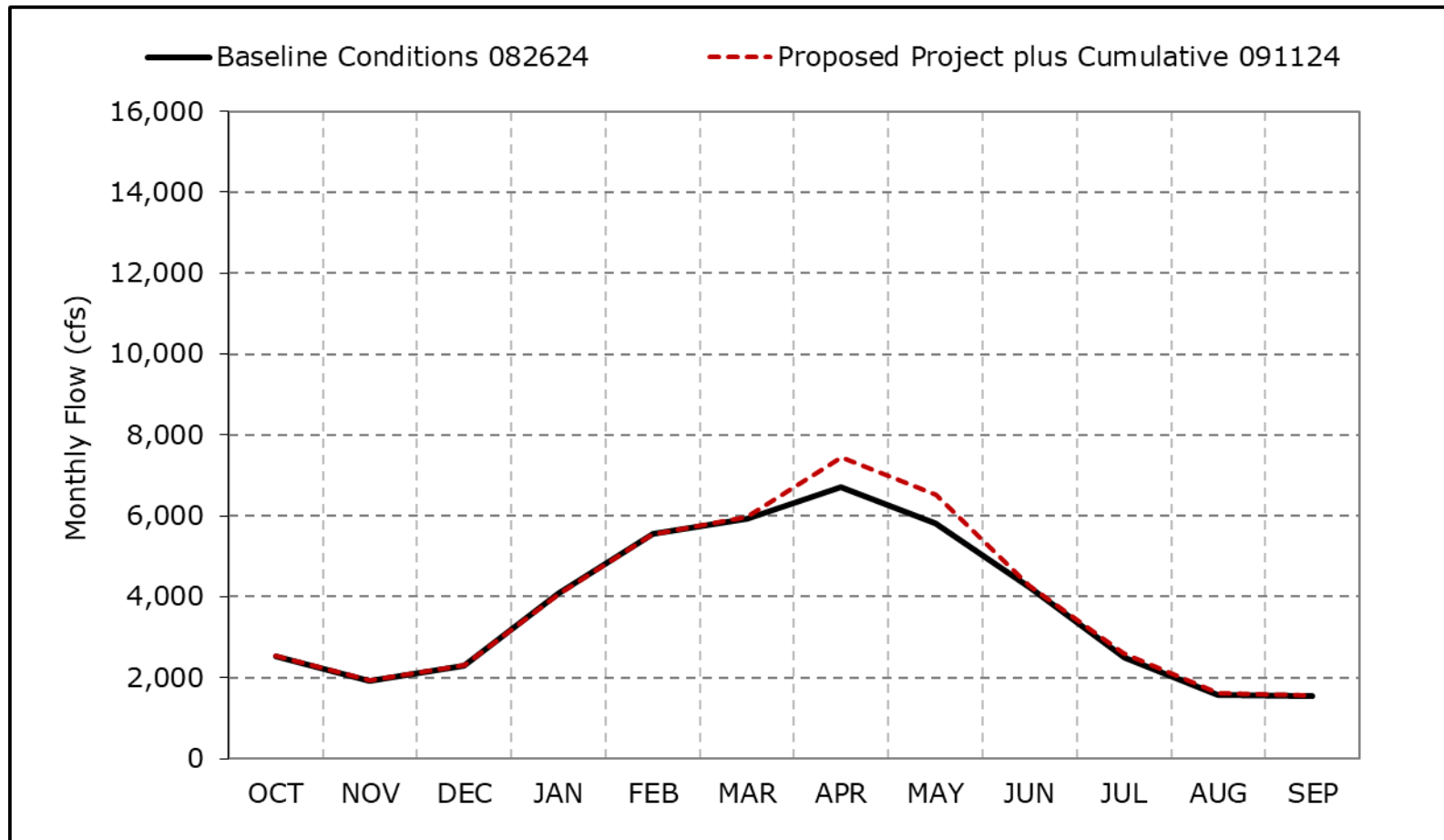
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-4a. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow

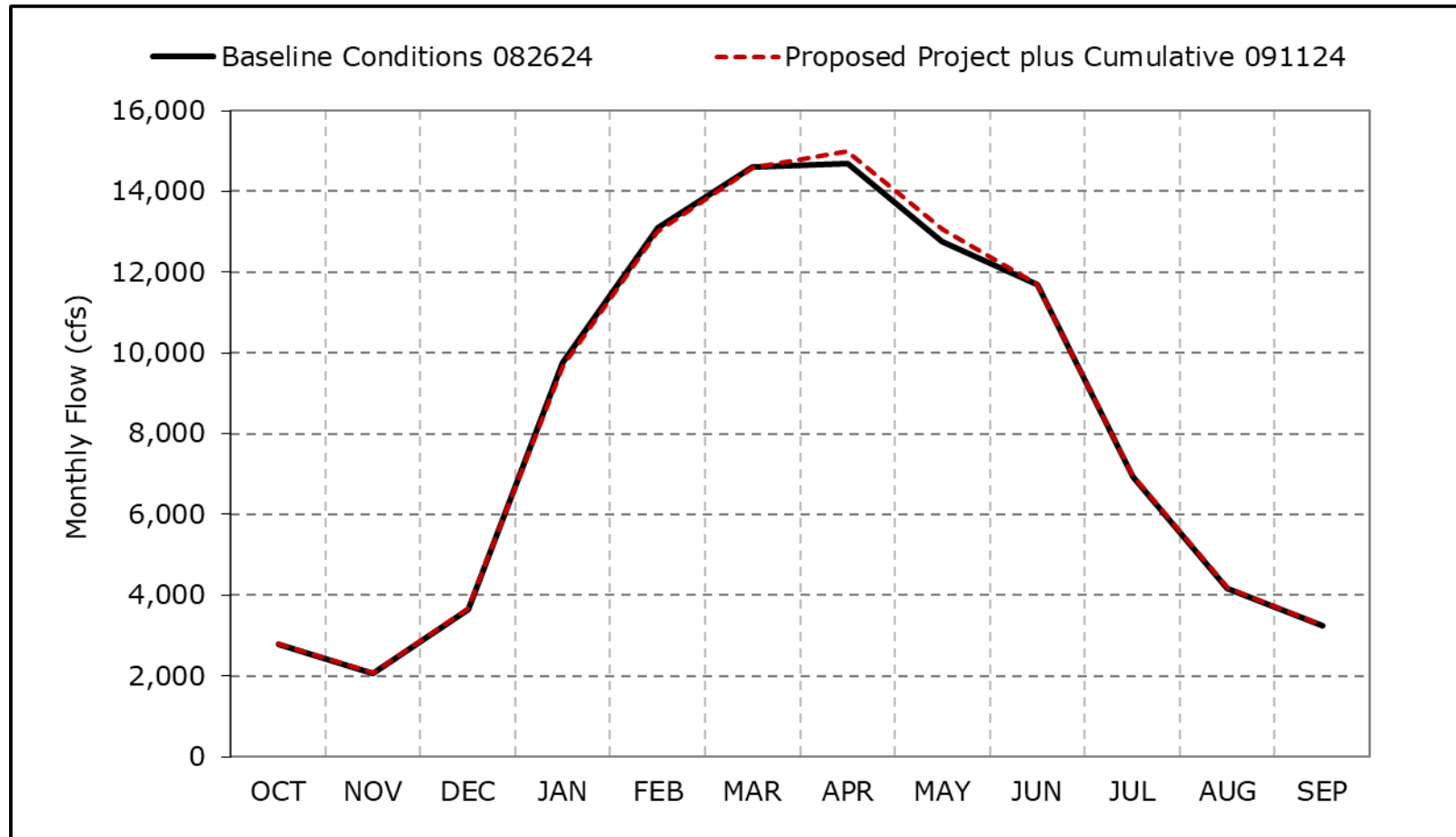


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-4b. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow

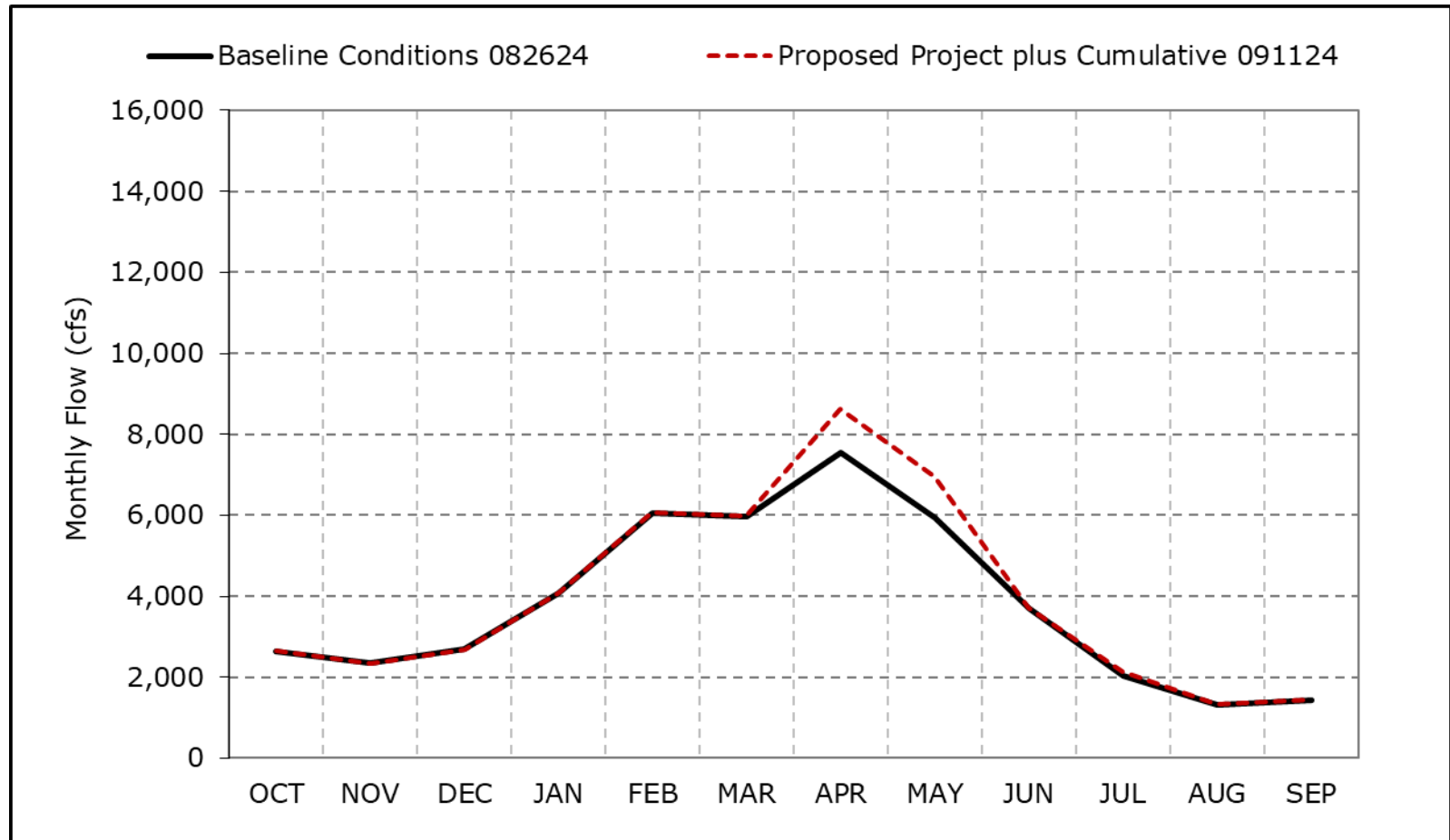


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-4c. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow

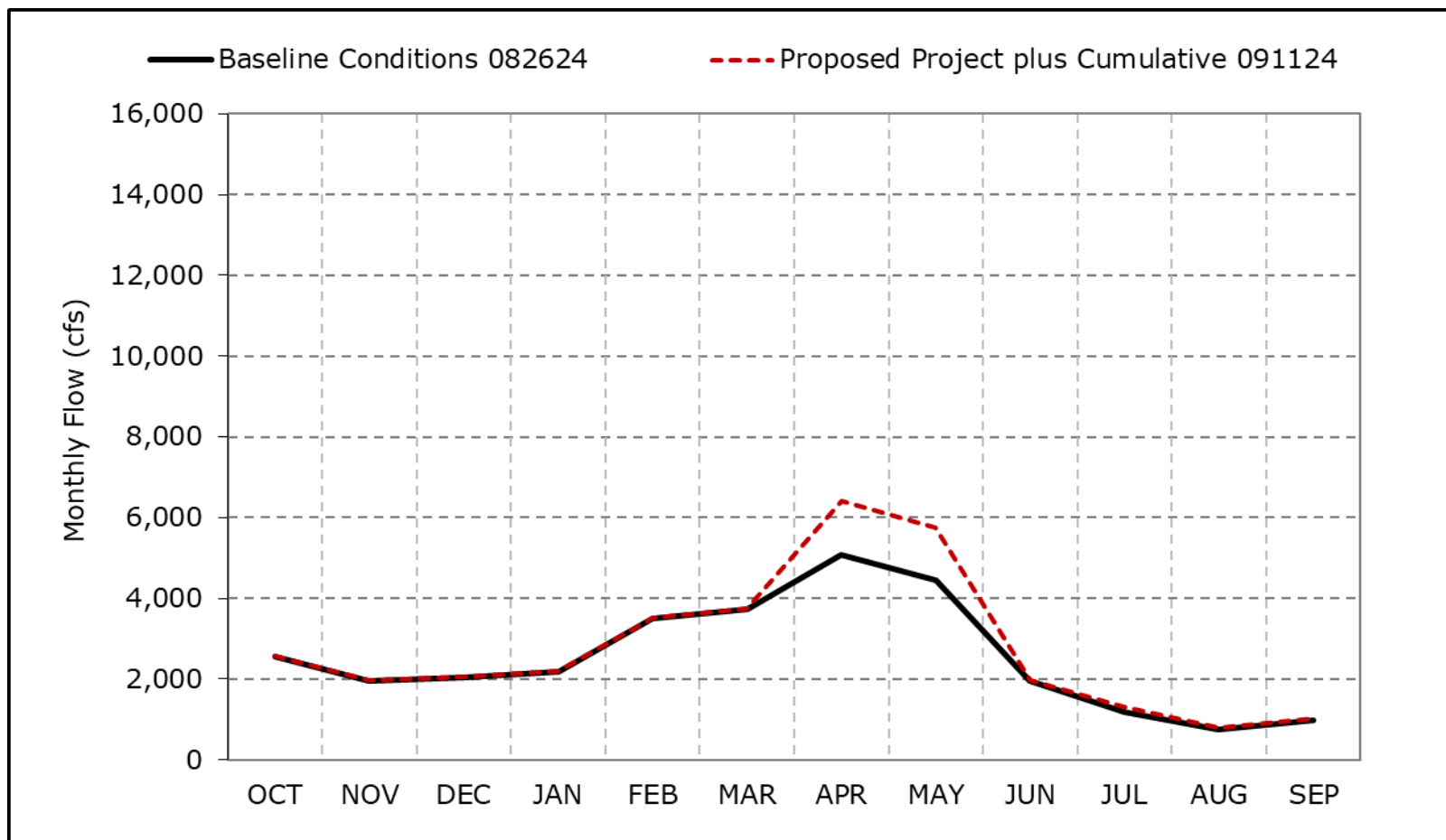


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-4d. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow

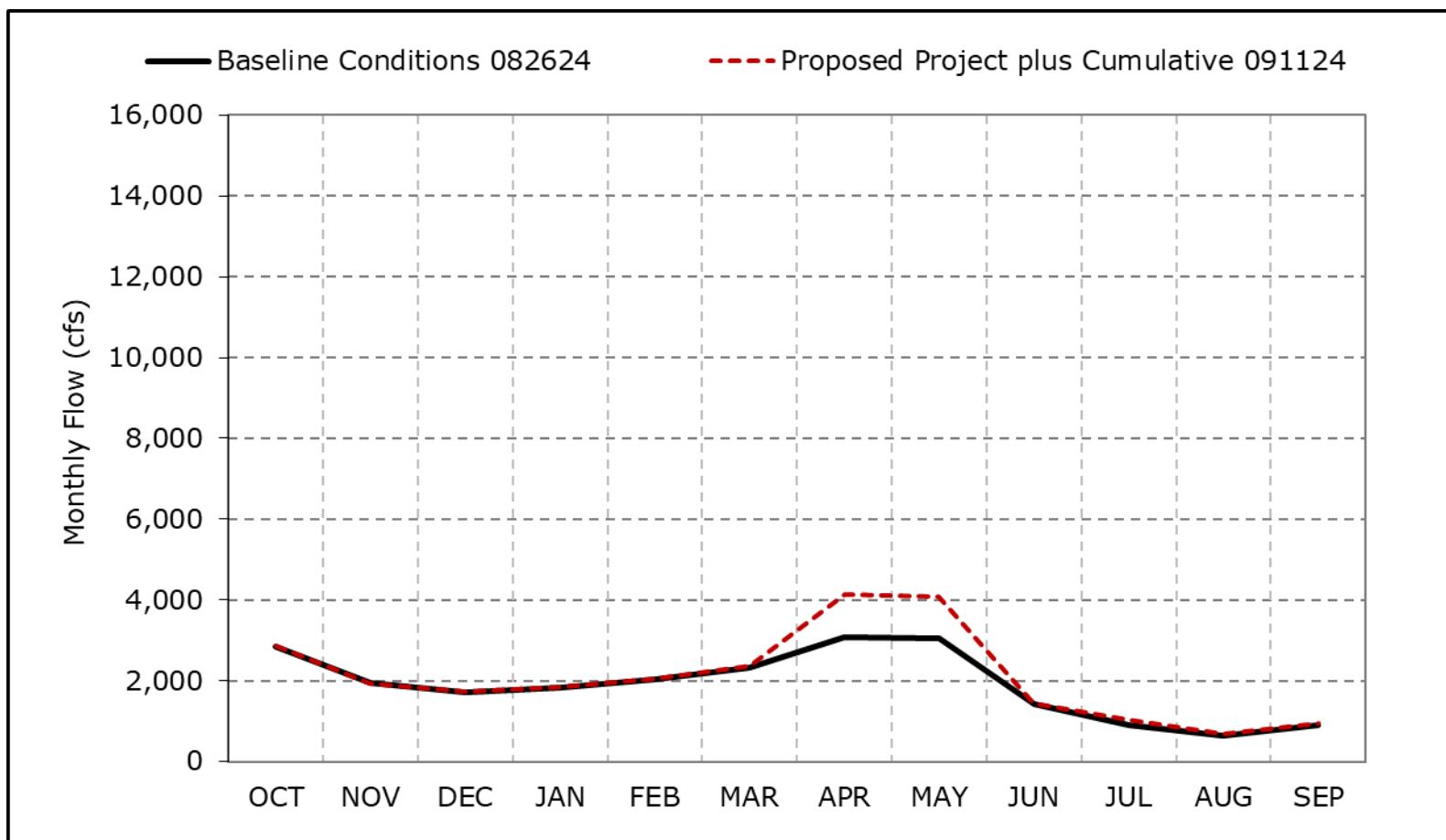


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-4e. San Joaquin River at Vernalis (60-20-20), Dry Year Average Flow

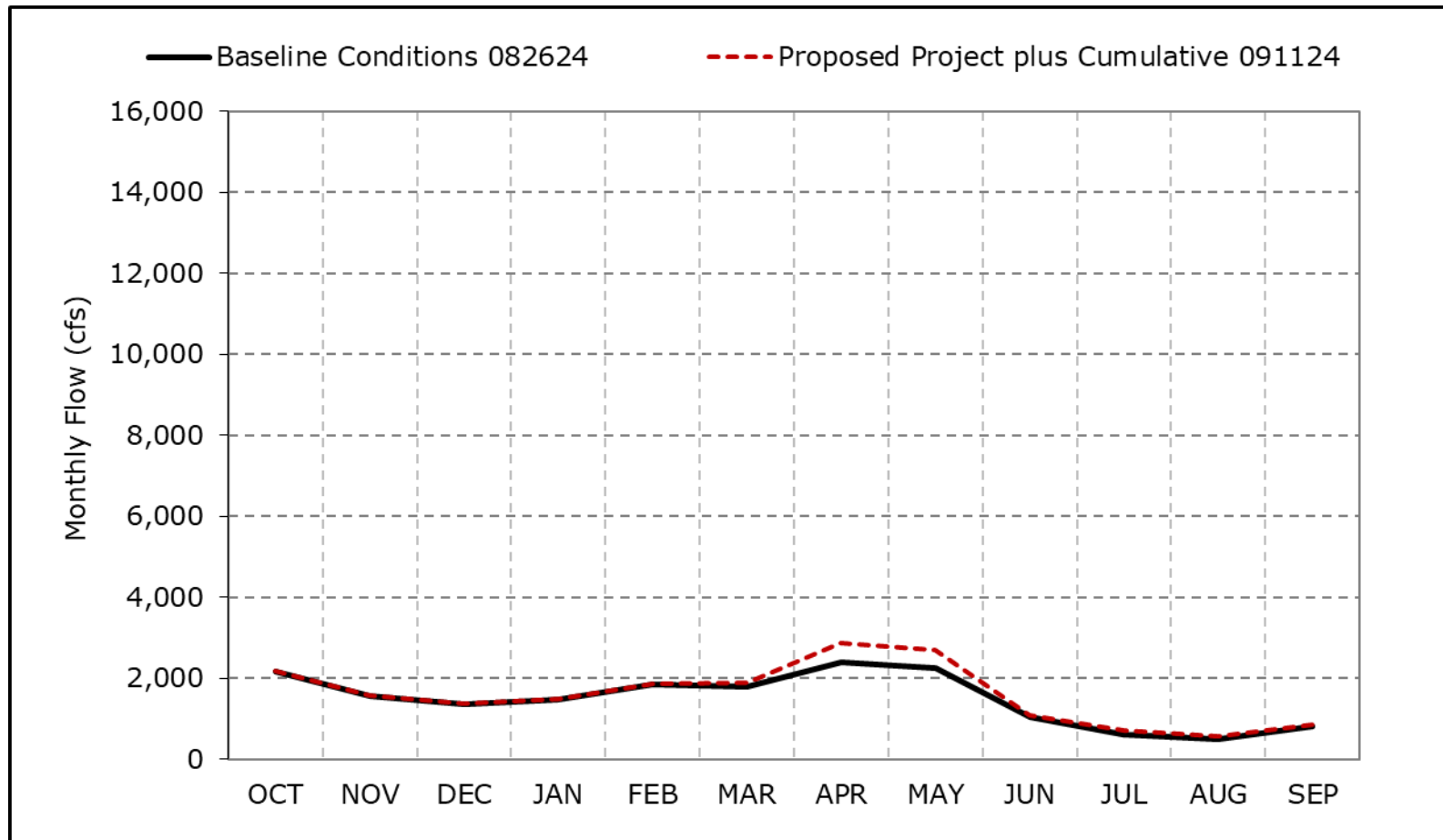


*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-4f. 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 current climate condition and 0 cm sea level rise.

Table 4G-3-5-1a. Mokelumne River below Cosumnes, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	532	717	2,529	6,241	5,962	5,448	4,818	4,237	2,330	978	763	866
20% Exceedance	420	517	1,390	3,739	3,980	3,727	2,754	2,430	1,739	794	722	839
30% Exceedance	374	432	812	1,935	3,068	2,857	1,926	1,546	1,155	644	680	805
40% Exceedance	345	385	595	1,243	2,028	2,277	1,717	1,100	607	550	643	754
50% Exceedance	325	360	510	906	1,275	1,500	1,320	858	407	122	164	655
60% Exceedance	307	341	438	685	1,086	1,294	904	605	275	81	72	73
70% Exceedance	261	313	409	531	808	1,036	714	469	131	73	62	60
80% Exceedance	222	275	373	461	599	793	610	314	79	54	48	49
90% Exceedance	208	225	276	370	476	547	414	135	58	39	30	35
Full Simulation Period Average ^a	369	473	1,120	2,248	2,573	2,504	1,965	1,526	882	463	375	448
Wet Water Years (32%)	472	707	2,210	5,061	5,057	4,759	3,820	3,227	1,950	1,043	739	849
Above Normal Water Years (9%)	310	390	713	2,101	2,398	2,468	1,664	1,425	976	464	545	634
Below Normal Water Years (20%)	367	412	740	1,106	1,907	2,009	1,625	1,055	560	282	306	410
Dry Water Years (21%)	320	361	554	646	1,055	1,162	916	526	194	112	107	142
Critical Water Years (18%)	274	299	469	458	754	627	420	244	97	40	35	41

Table 4G-3-5-1b. Mokelumne River below Cosumnes, Proposed Project plus Cumulative 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	621	710	2,519	6,057	5,803	5,445	4,815	4,136	2,329	975	761	864
20% Exceedance	527	499	1,350	3,716	3,961	3,718	2,804	2,427	1,602	791	720	838
30% Exceedance	498	422	801	1,931	3,064	2,906	2,089	1,553	1,081	641	673	804
40% Exceedance	485	381	587	1,226	2,017	2,287	1,734	1,199	536	537	619	752
50% Exceedance	460	357	499	873	1,259	1,515	1,474	982	407	102	97	434
60% Exceedance	440	339	434	659	1,041	1,285	1,049	670	274	80	70	72
70% Exceedance	268	306	409	531	805	1,055	789	518	128	72	59	56
80% Exceedance	242	258	367	449	597	779	668	344	78	54	47	47
90% Exceedance	195	210	259	370	461	565	414	135	57	39	29	32
Full Simulation Period Average ^a	436	463	1,097	2,224	2,545	2,509	2,029	1,539	861	448	363	438
Wet Water Years (32%)	553	696	2,166	5,011	5,012	4,757	3,884	3,196	1,941	1,028	715	847
Above Normal Water Years (9%)	403	374	697	2,075	2,359	2,484	1,821	1,406	896	400	528	632
Below Normal Water Years (20%)	428	405	723	1,099	1,876	2,022	1,698	1,114	528	259	292	368
Dry Water Years (21%)	386	351	545	637	1,046	1,175	971	574	172	112	105	141
Critical Water Years (18%)	311	288	458	447	743	622	437	256	97	40	34	40

Table 4G-3-5-1c. Mokelumne River below Cosumnes, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	89	-6	-10	-184	-160	-3	-3	-101	-1	-2	-2	-3
20% Exceedance	106	-17	-40	-23	-19	-9	50	-3	-137	-4	-2	-1
30% Exceedance	124	-10	-11	-4	-3	49	162	7	-74	-3	-7	-2
40% Exceedance	140	-4	-7	-17	-12	10	18	99	-70	-13	-24	-2
50% Exceedance	136	-3	-11	-33	-16	15	154	124	-1	-20	-66	-221
60% Exceedance	133	-2	-4	-26	-45	-9	146	65	-1	-1	-2	-1
70% Exceedance	7	-7	-1	0	-3	19	75	49	-3	-1	-3	-3
80% Exceedance	20	-16	-6	-12	-2	-14	59	30	-1	0	-1	-2
90% Exceedance	-14	-14	-17	0	-15	18	0	0	-1	0	-1	-3
Full Simulation Period Average ^a	67	-10	-23	-24	-28	5	64	13	-21	-15	-12	-10
Wet Water Years (32%)	81	-11	-44	-50	-45	-2	64	-31	-9	-15	-24	-2
Above Normal Water Years (9%)	93	-16	-16	-26	-39	17	157	-19	-80	-64	-18	-2
Below Normal Water Years (20%)	61	-7	-17	-8	-30	12	73	59	-32	-23	-13	-43
Dry Water Years (21%)	66	-10	-9	-9	-9	13	55	48	-21	0	-2	-1
Critical Water Years (18%)	37	-11	-11	-11	-11	-5	16	13	0	0	0	-1

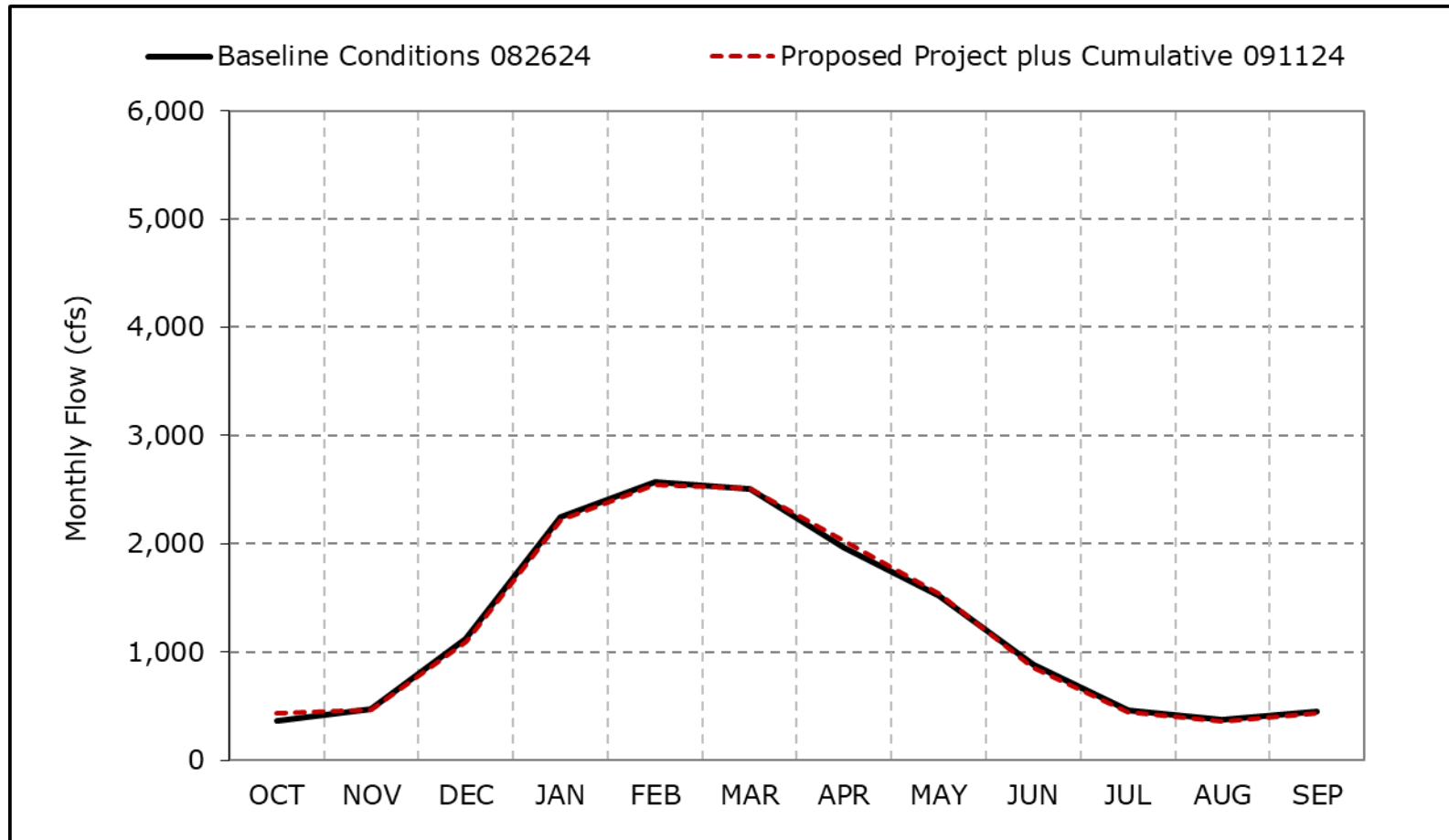
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-5a. Mokelumne River below Cosumnes, Long-Term Average Flow

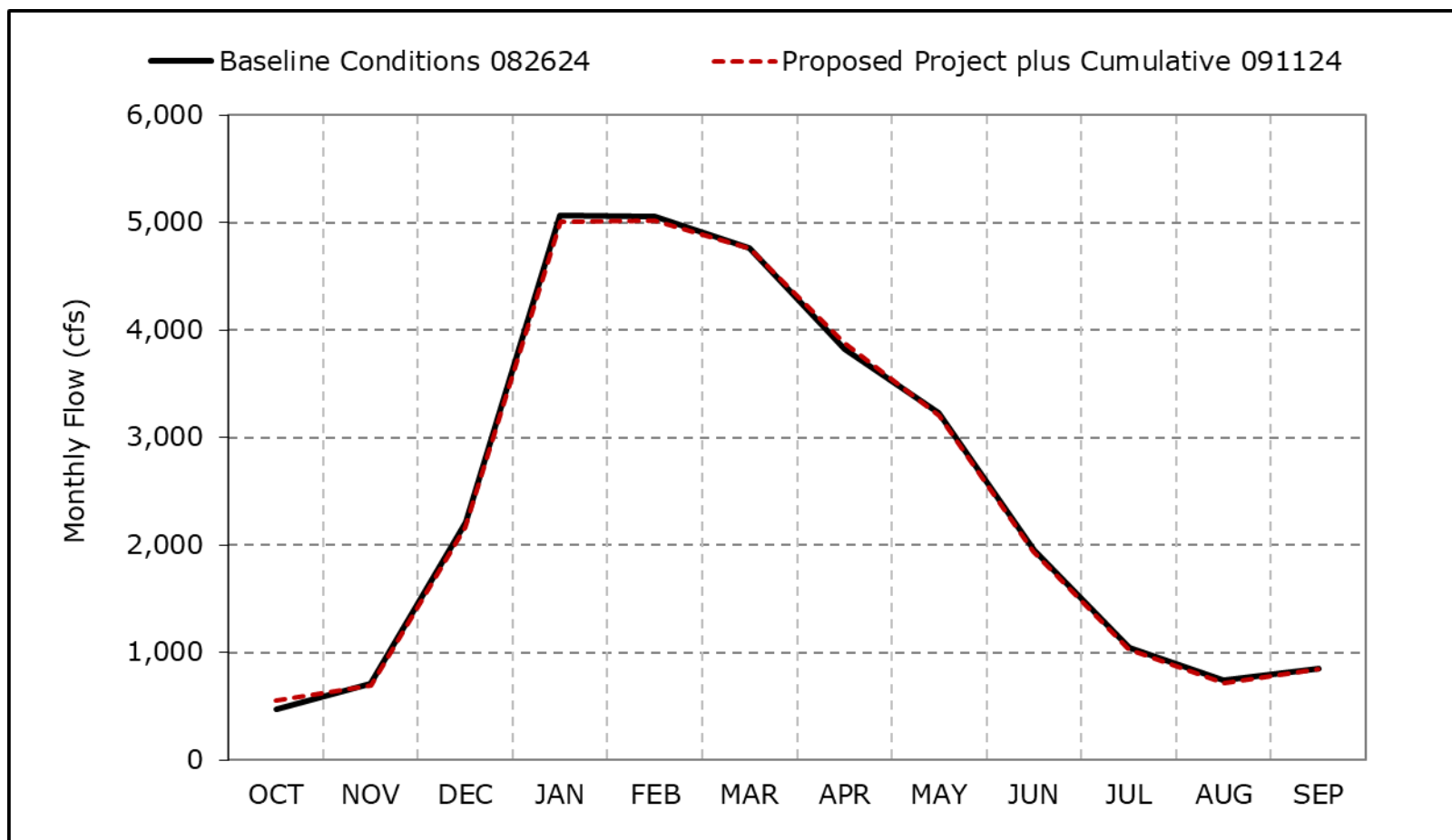


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-5b. Mokelumne River below Cosumnes, Wet Year Average Flow

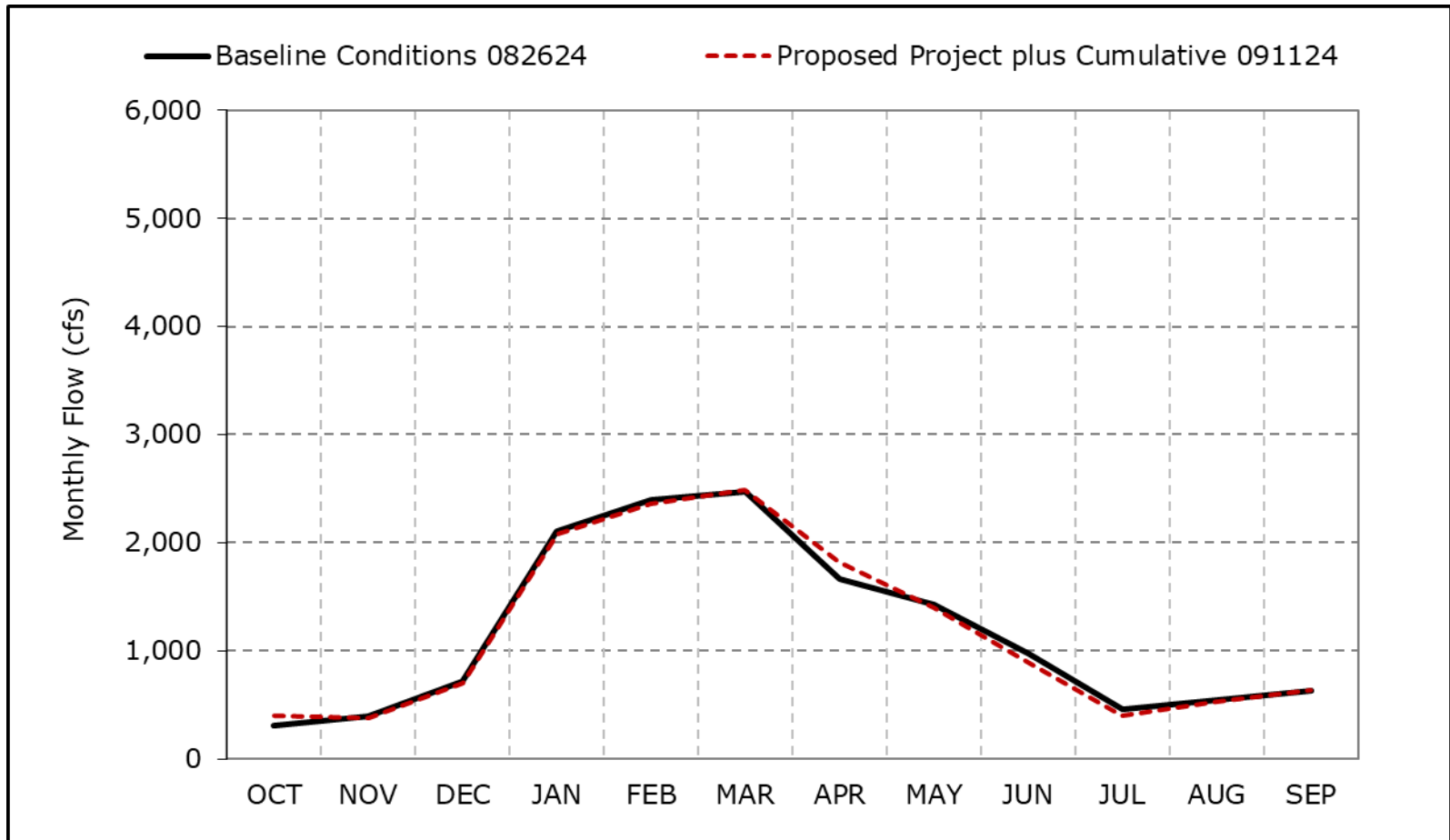


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-5c. Mokelumne River below Cosumnes, Above Normal Year Average Flow

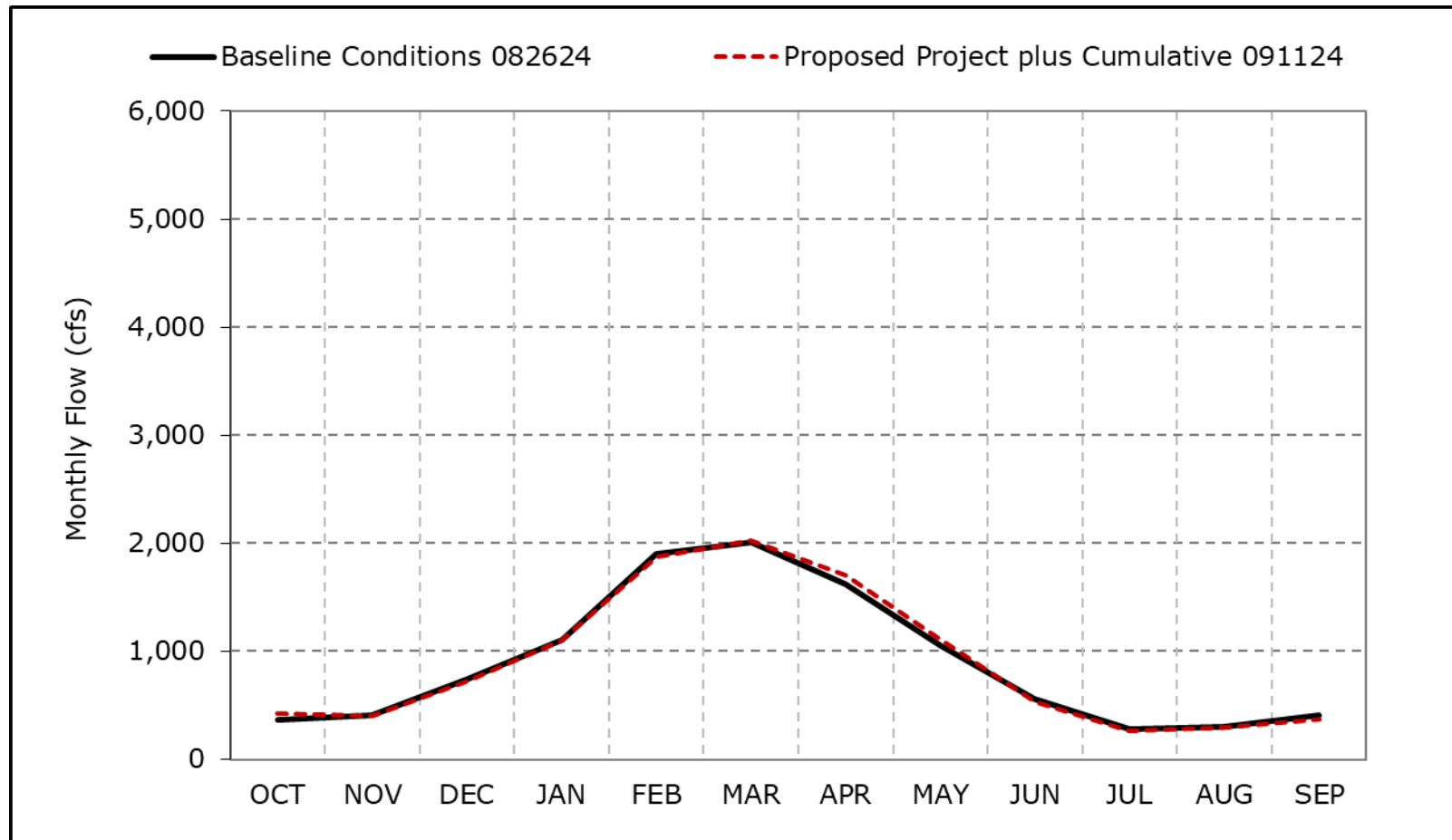


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-5d. Mokelumne River below Cosumnes, Below Normal Year Average Flow

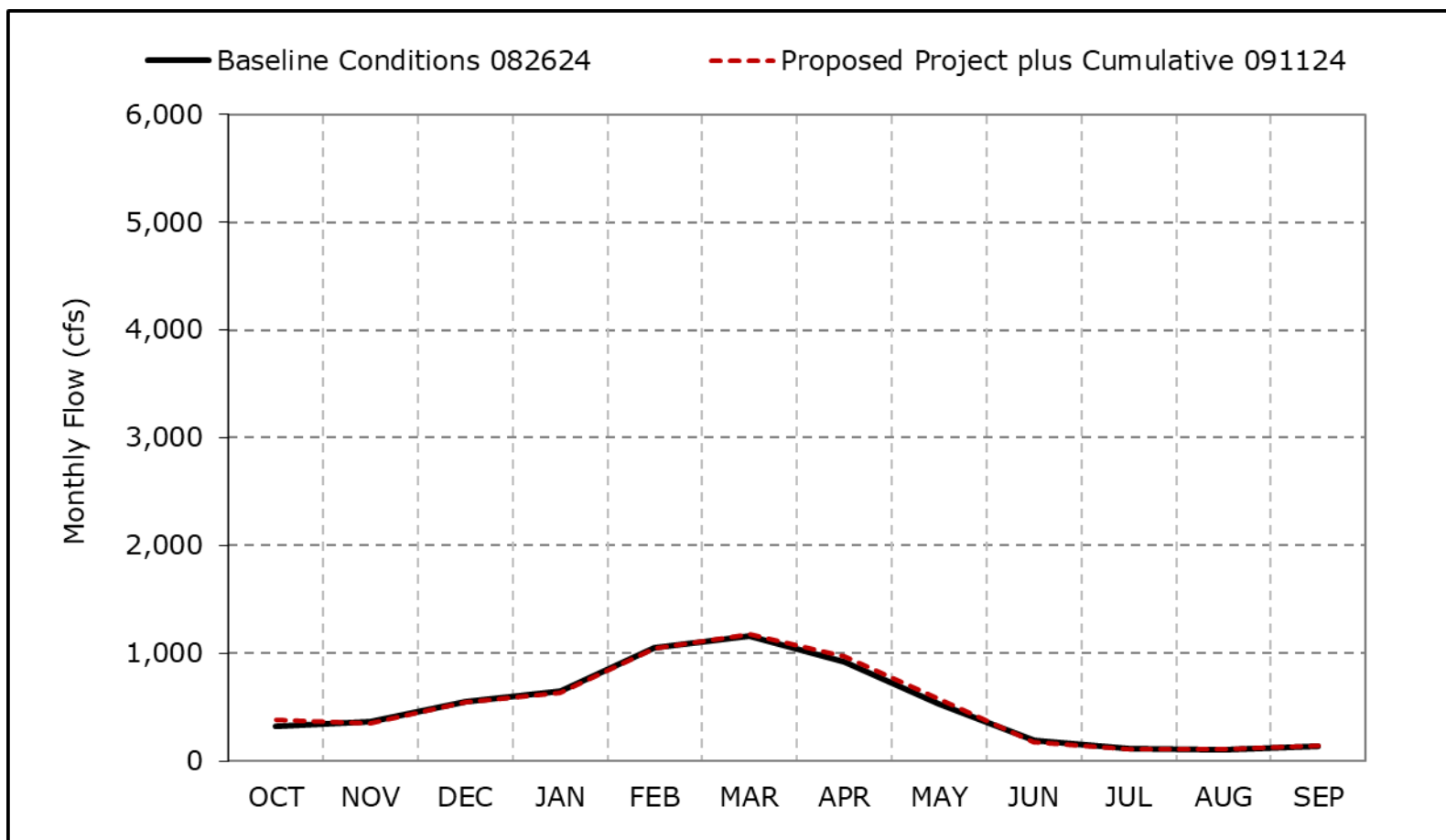


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-5e. Mokelumne River below Cosumnes, Dry Year Average Flow

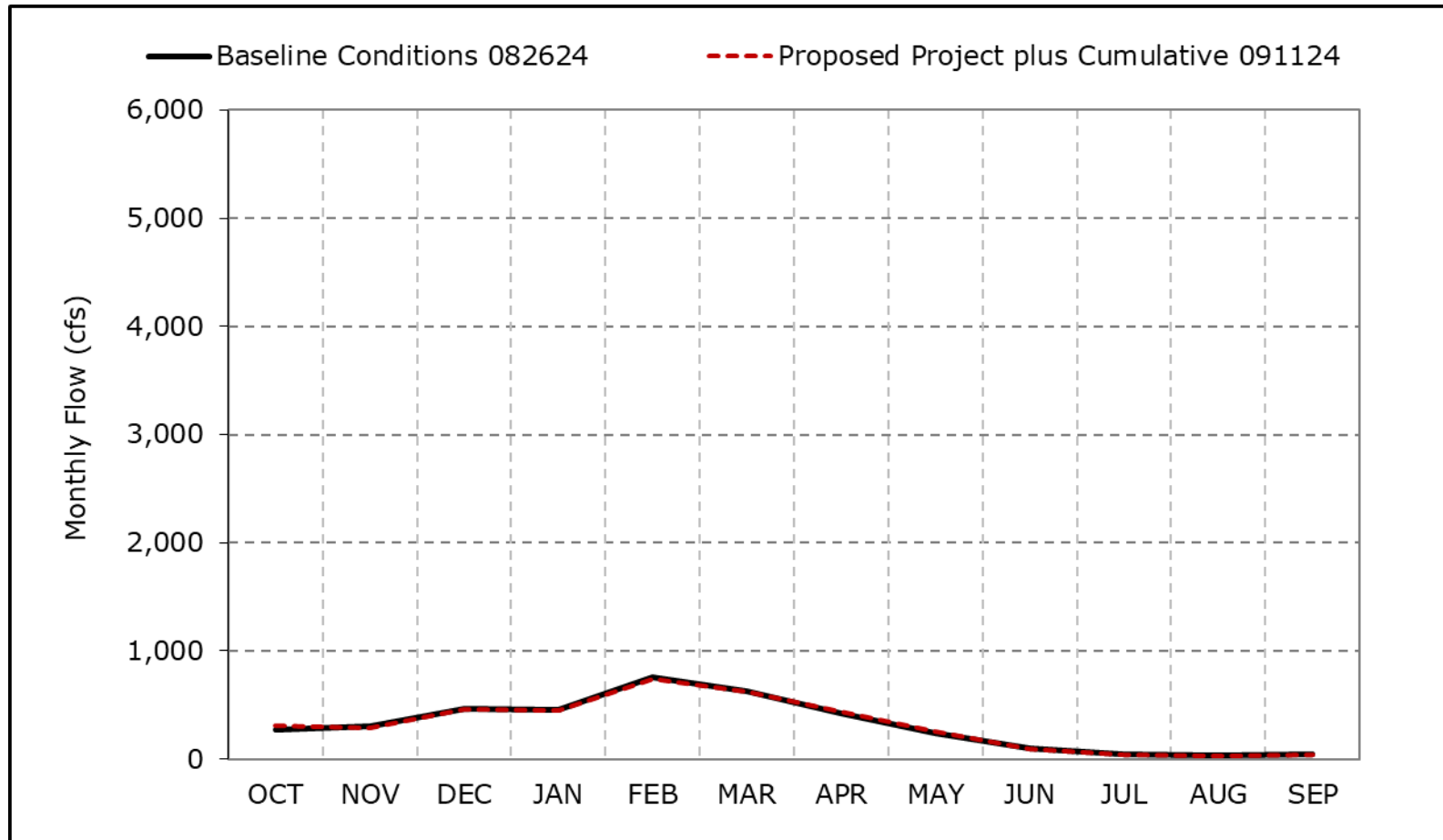


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-5f. Mokelumne River below Cosumnes, Critical Year Average Flow

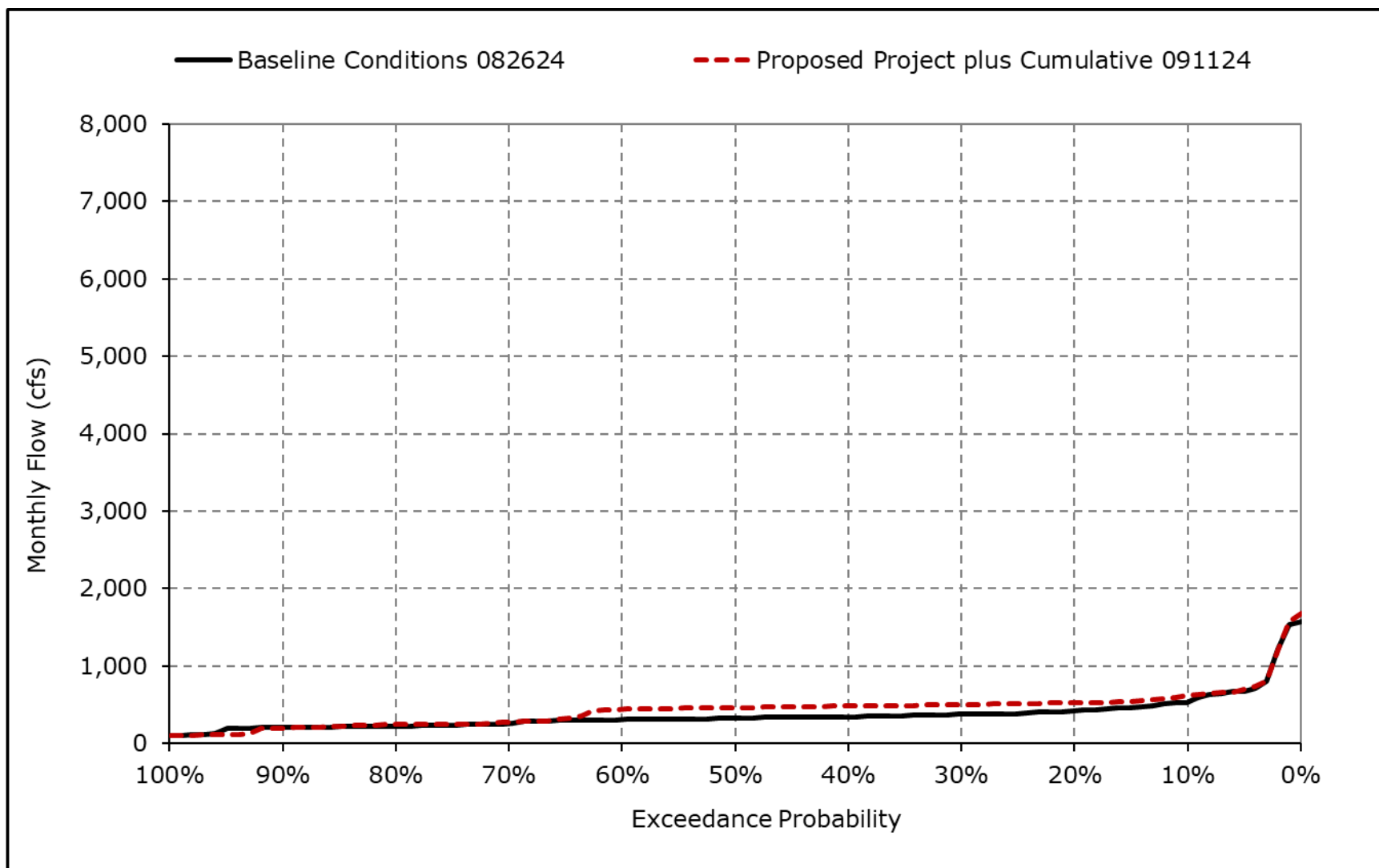


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

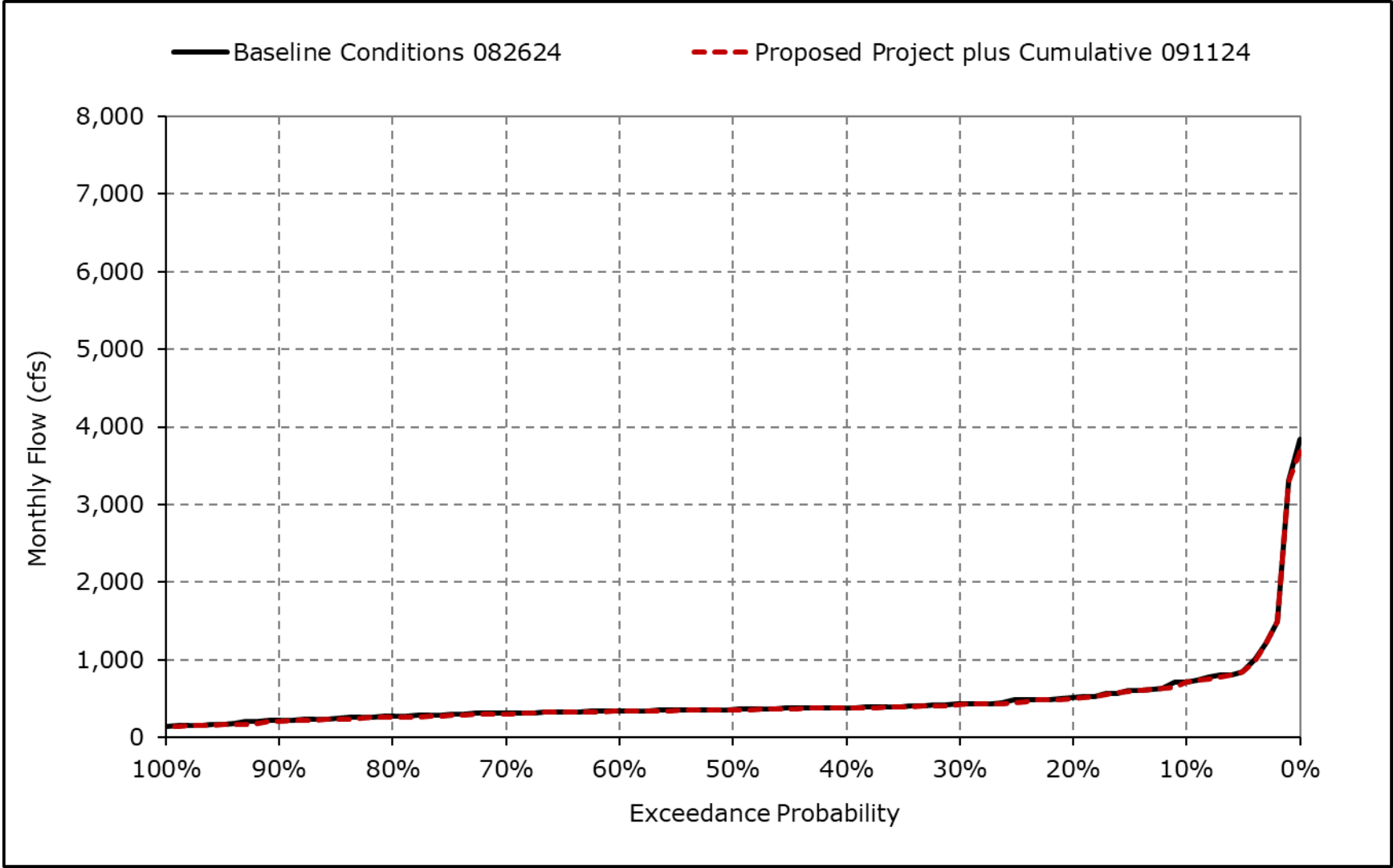
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5g. Mokelumne River below Cosumnes, October



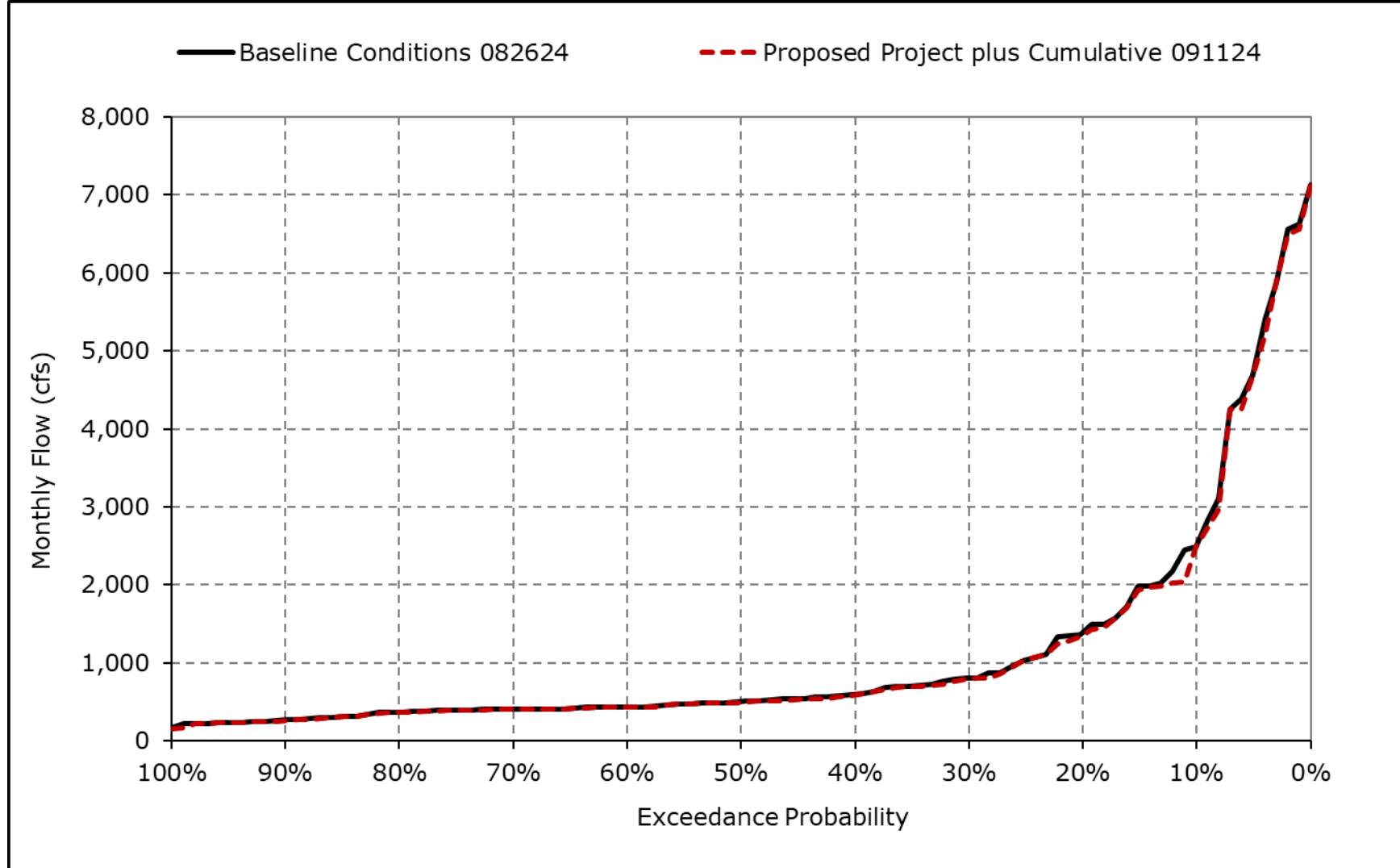
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5h. Mokelumne River below Cosumnes, November



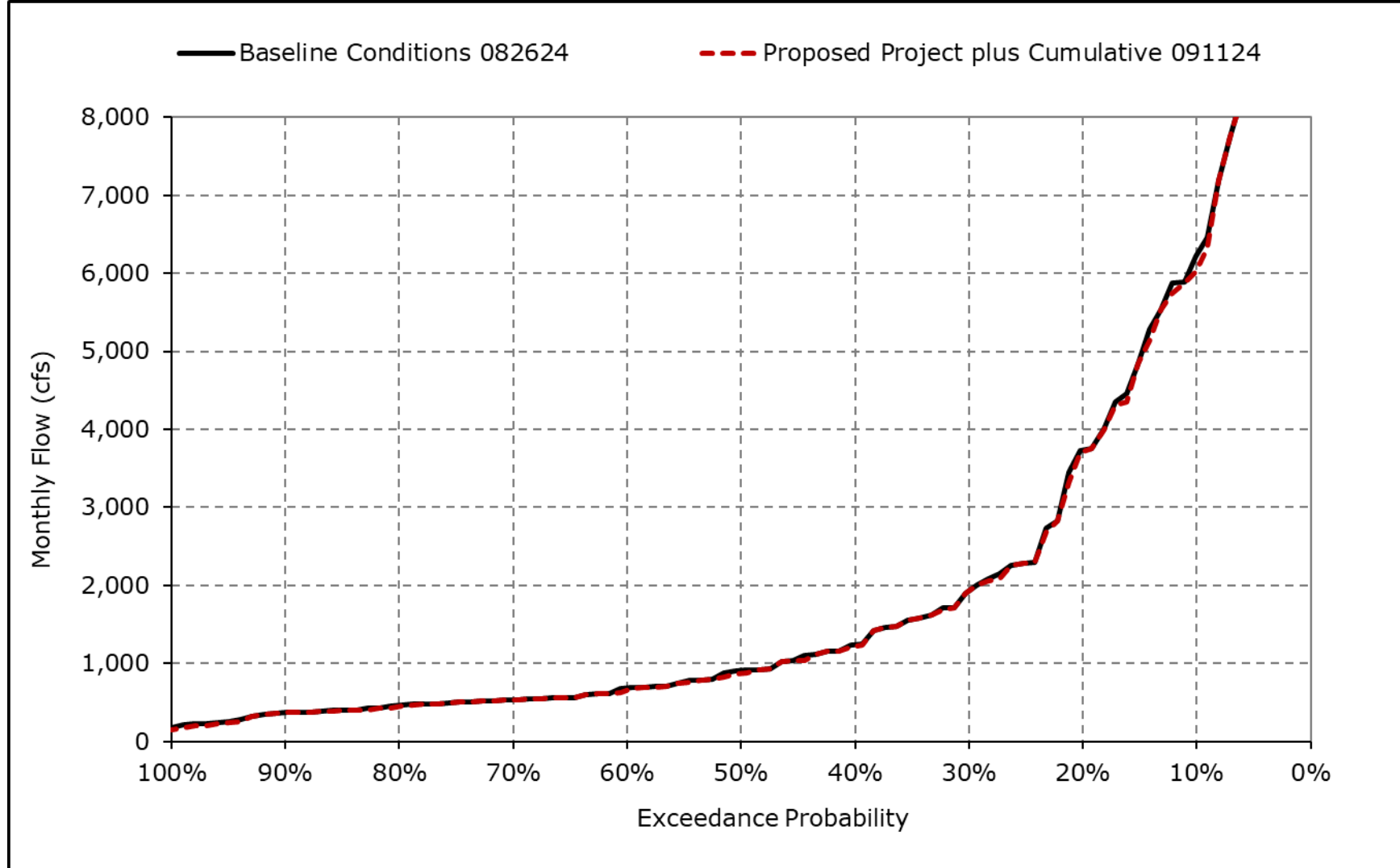
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5i. Mokelumne River below Cosumnes, December



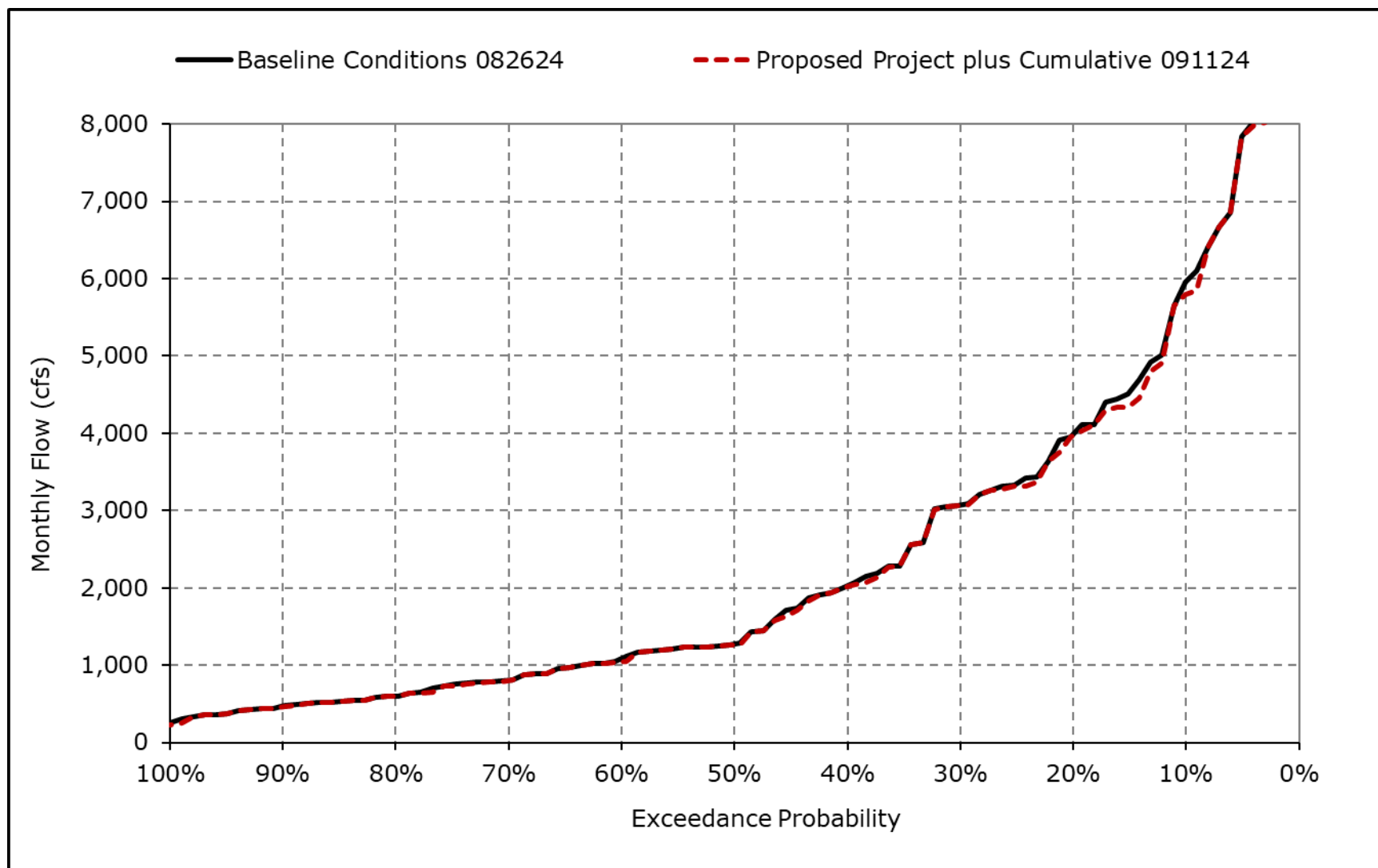
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5j. Mokelumne River below Cosumnes, January



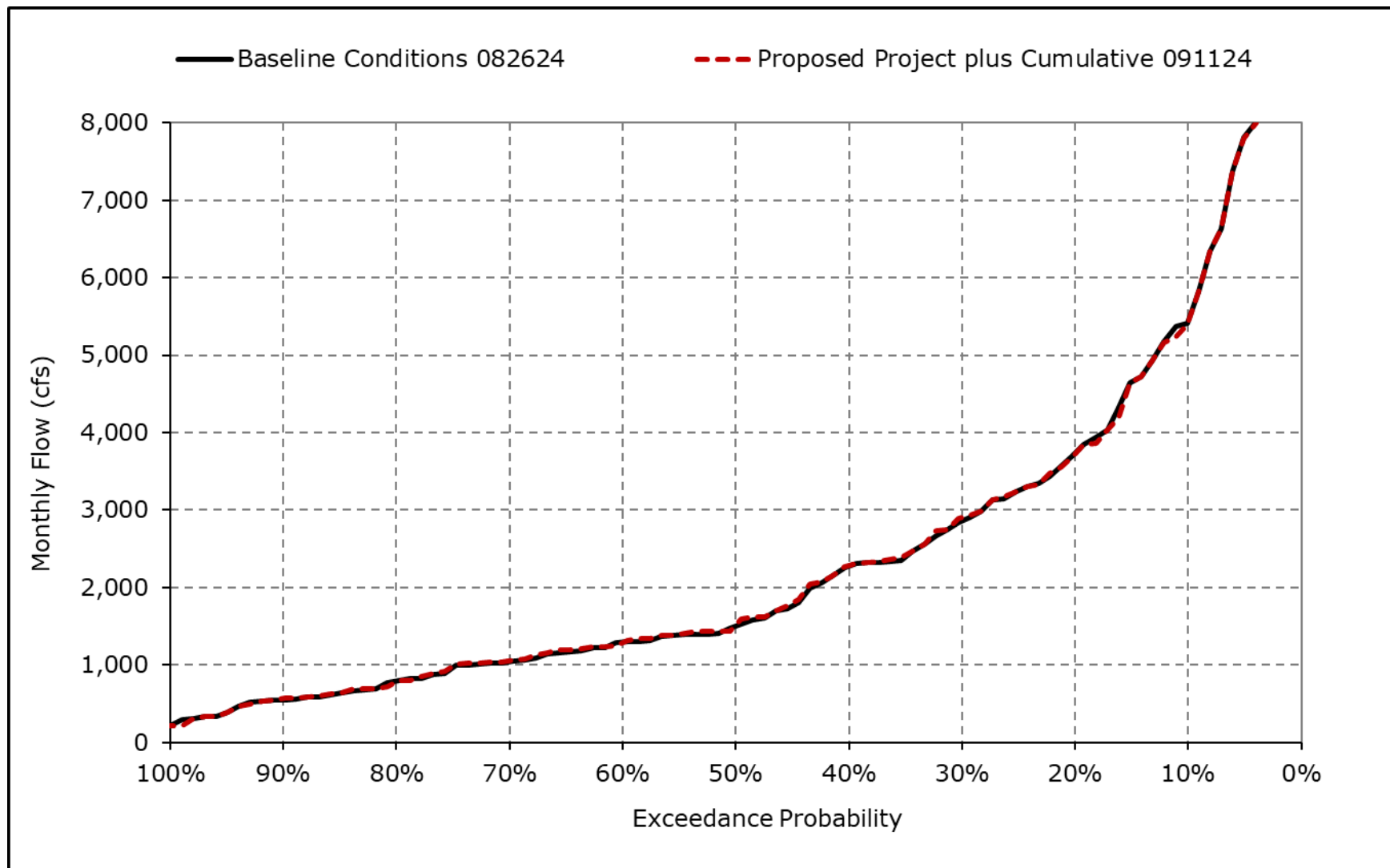
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5k. Mokelumne River below Cosumnes, February



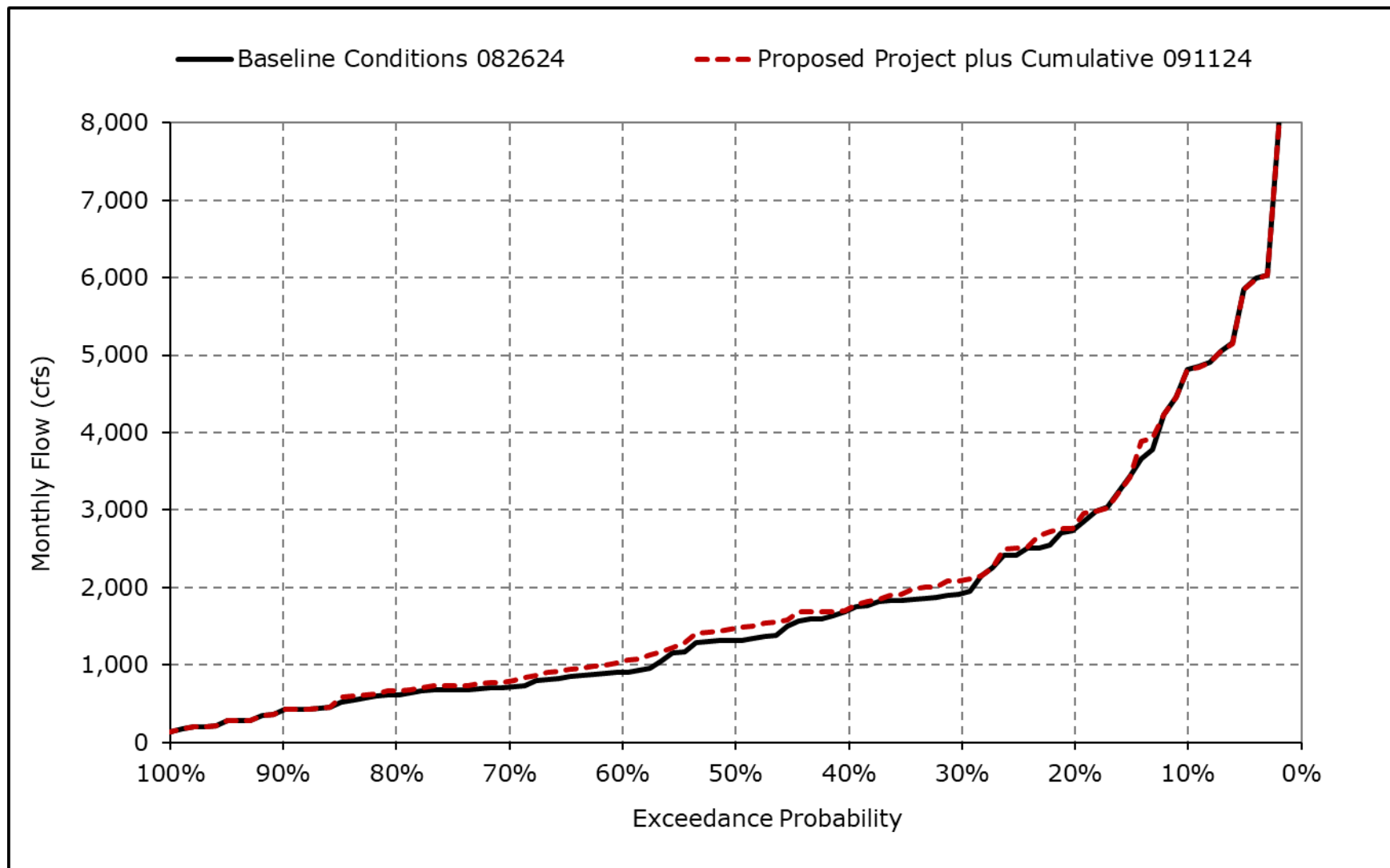
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5I. Mokelumne River below Cosumnes, March



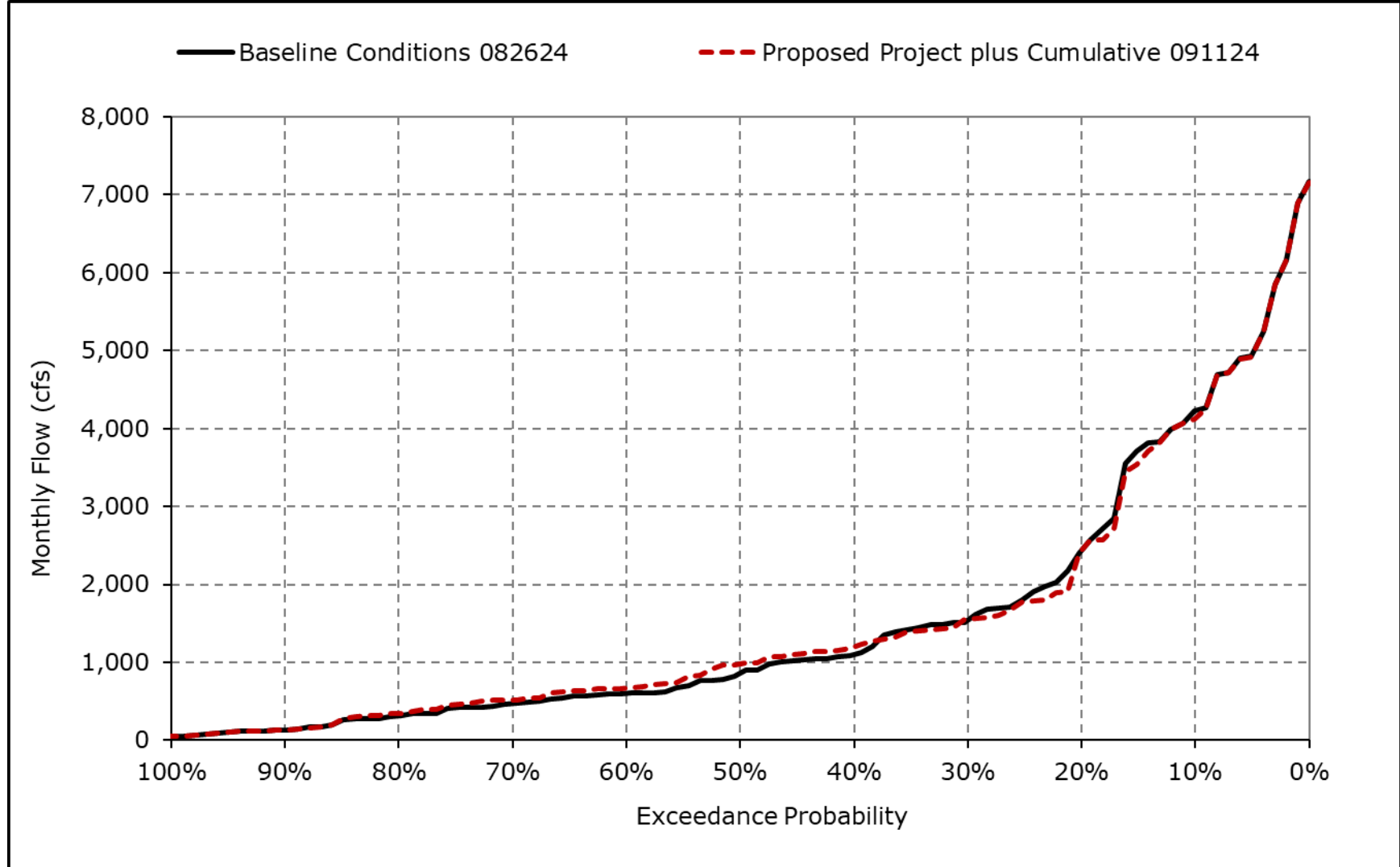
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5m. Mokelumne River below Cosumnes, April



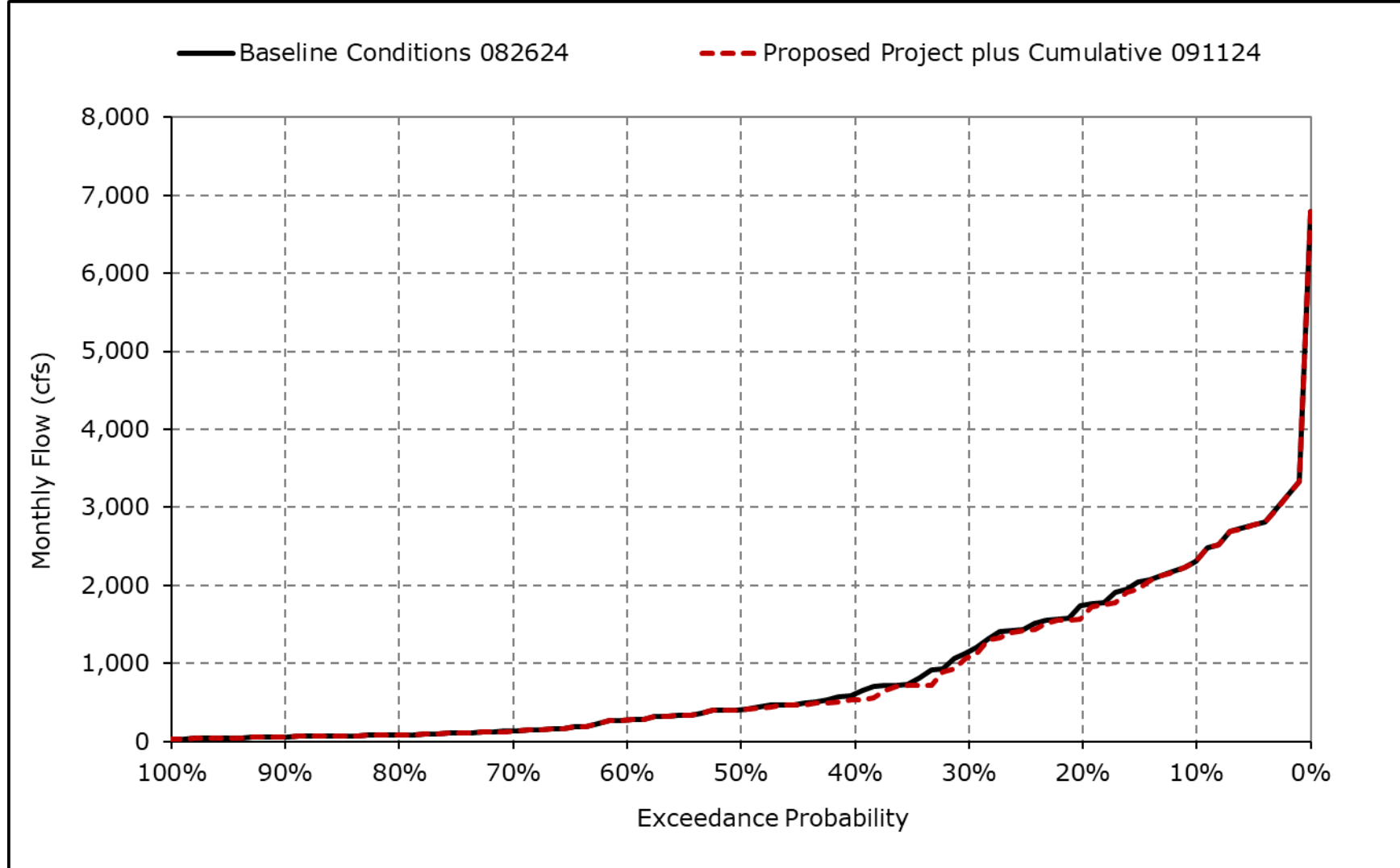
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5n. Mokelumne River below Cosumnes, May



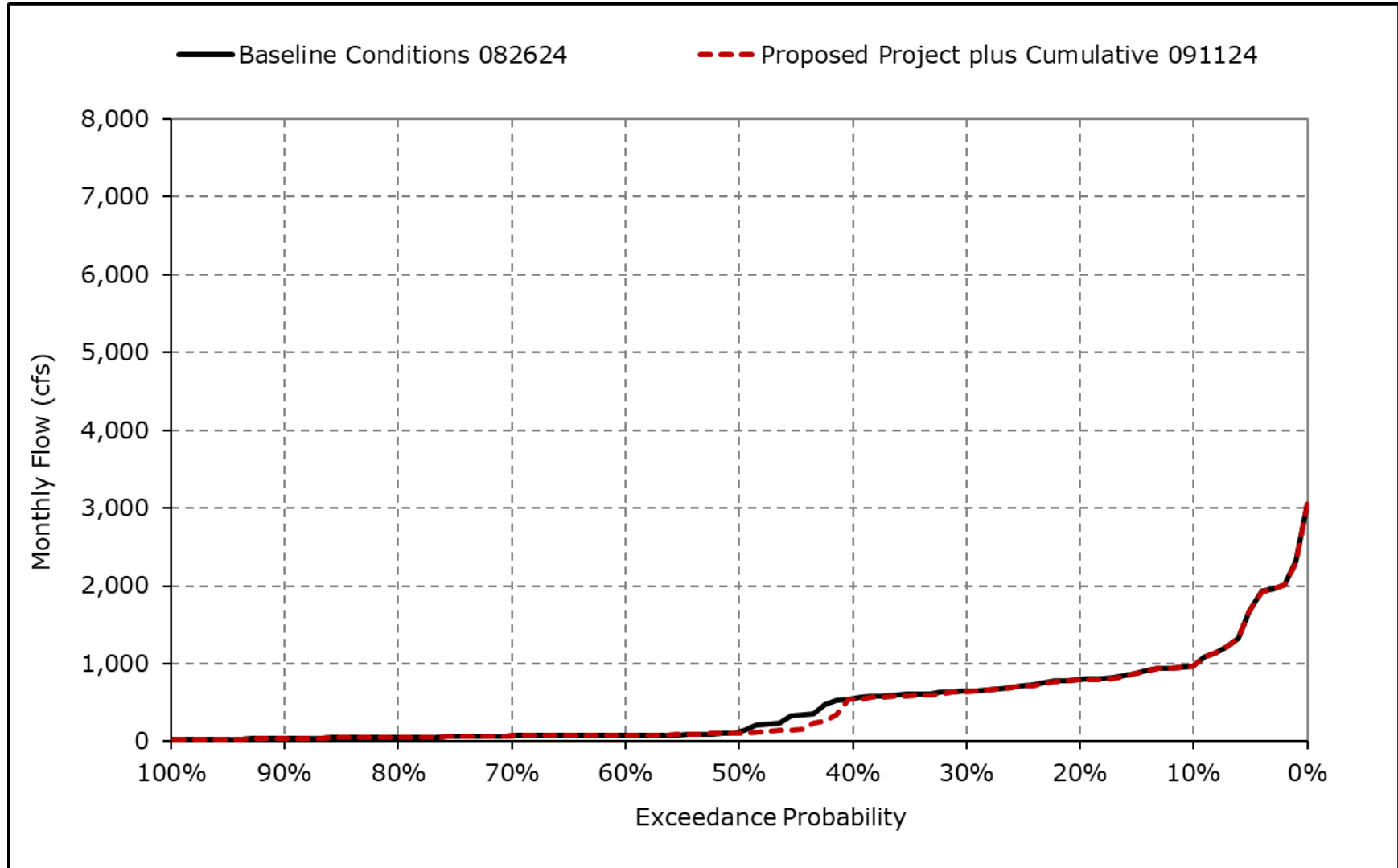
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5o. Mokelumne River below Cosumnes, June



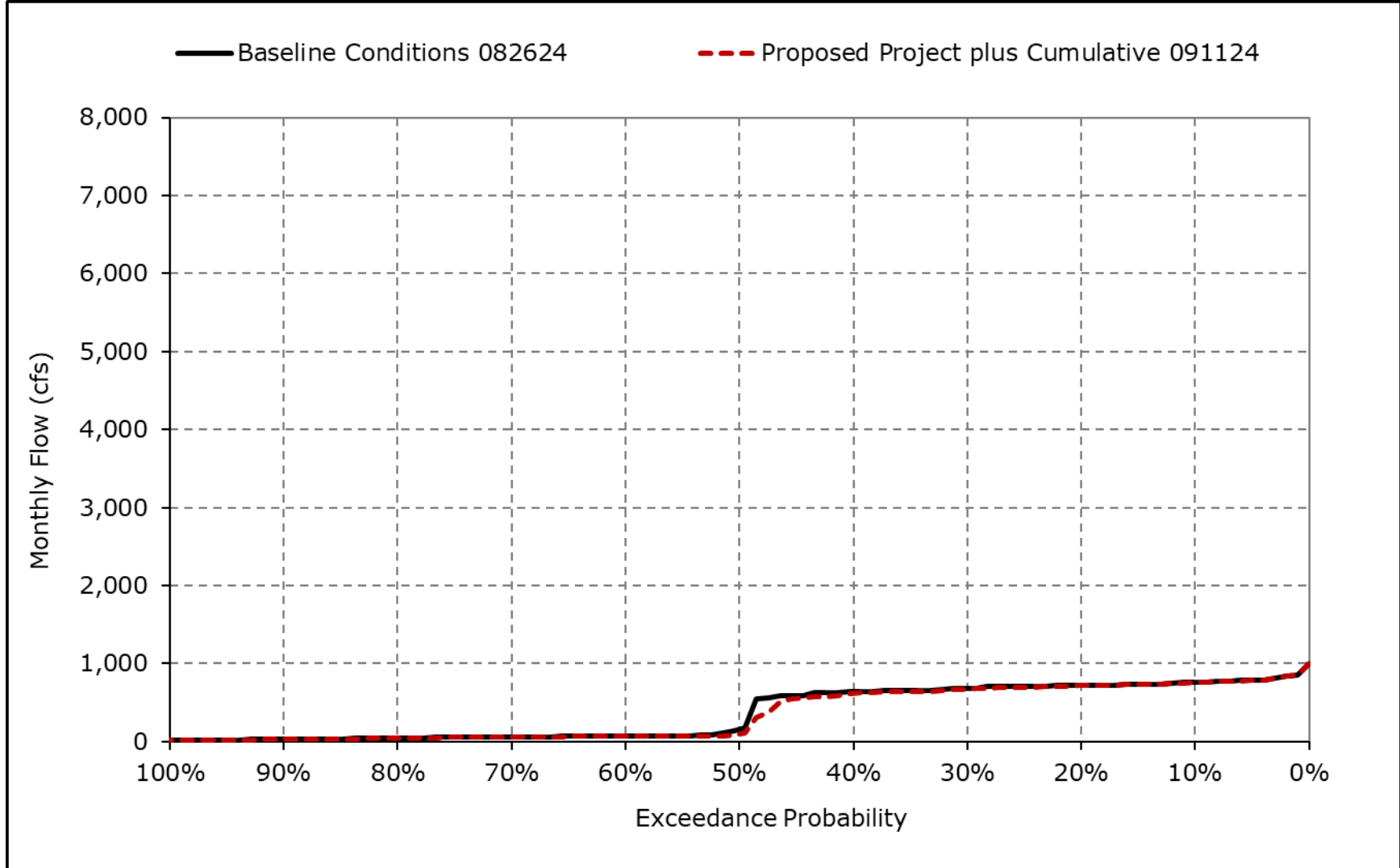
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5p. Mokelumne River below Cosumnes, July



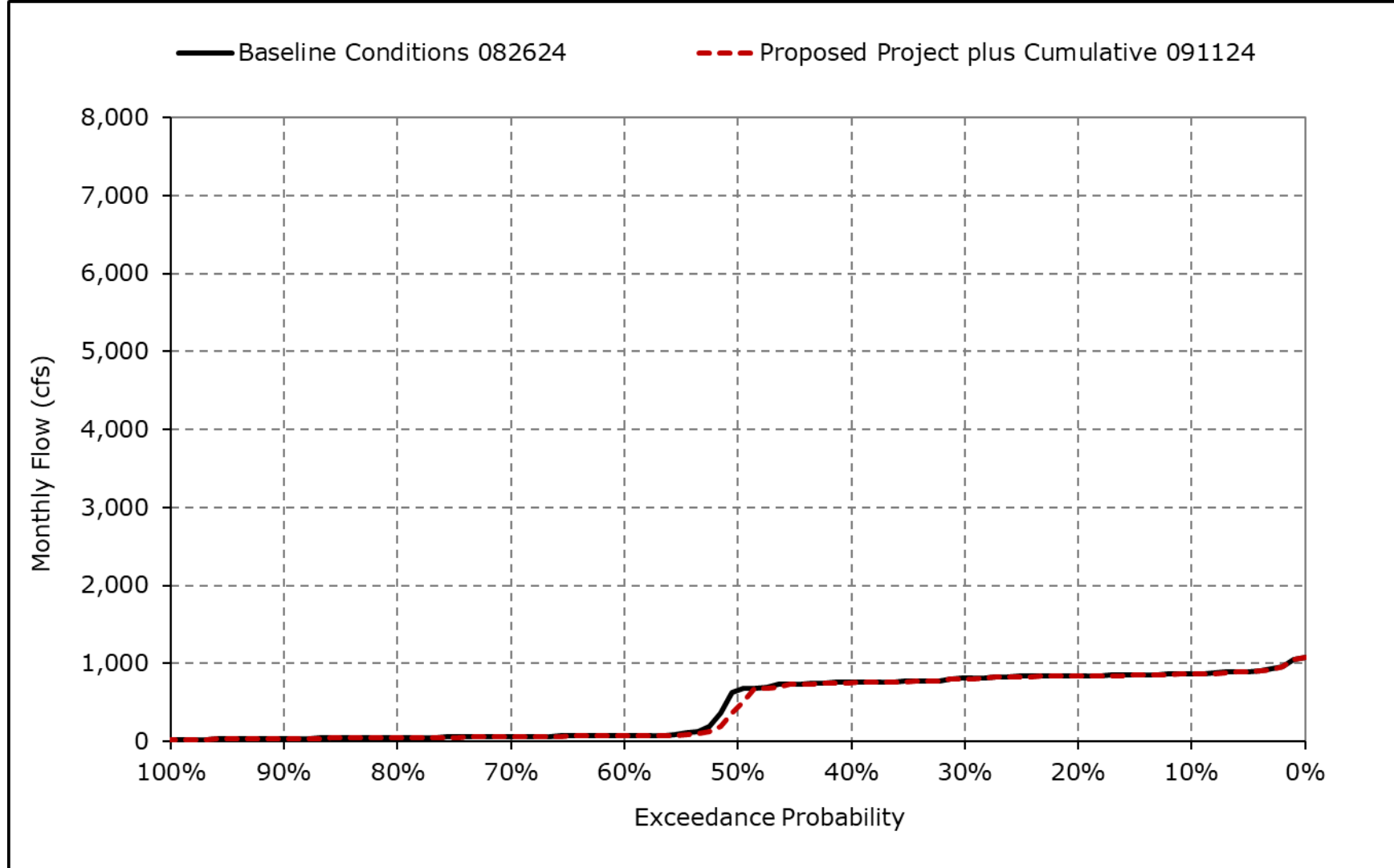
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-5q. Mokelumne River below Cosumnes, August



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

Figure 4G-3-5r. Mokelumne River below Cosumnes, September



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

Table 4G-3-6-1a. Old and Middle River Flow, Baseline Conditions 082624, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,274	-1,649	-2,406	-2,131	-1,898	-1,346	1,295	378	-1,804	-2,912	-2,356	-3,403
20% Exceedance	-3,666	-3,268	-3,217	-3,645	-4,292	-2,829	244	-449	-3,630	-5,028	-3,284	-4,197
30% Exceedance	-4,046	-3,960	-4,910	-3,645	-4,329	-3,370	-268	-976	-4,388	-7,261	-4,497	-5,031
40% Exceedance	-4,731	-5,828	-5,290	-3,645	-4,329	-3,409	-526	-1,386	-4,544	-8,783	-7,286	-5,664
50% Exceedance	-5,332	-6,717	-5,290	-4,516	-4,464	-3,413	-754	-1,595	-4,839	-9,595	-9,097	-6,322
60% Exceedance	-5,847	-8,370	-5,290	-4,516	-4,464	-3,425	-1,059	-1,728	-5,000	-10,065	-9,607	-7,669
70% Exceedance	-6,348	-8,874	-5,290	-4,516	-4,464	-3,442	-1,262	-1,998	-5,000	-10,775	-10,252	-8,624
80% Exceedance	-7,357	-9,131	-6,062	-4,608	-4,483	-4,191	-1,413	-2,405	-5,000	-11,108	-10,585	-9,394
90% Exceedance	-8,501	-9,492	-8,156	-5,000	-4,963	-4,196	-1,873	-3,587	-5,000	-11,401	-11,155	-9,911
Full Simulation Period Average ^a	-5,339	-6,250	-5,185	-3,569	-3,743	-2,825	-493	-1,445	-4,138	-8,442	-7,480	-6,690
Wet Water Years (32%)	-6,285	-7,266	-5,452	-2,870	-2,540	-1,398	-677	-2,092	-3,976	-9,344	-9,910	-8,390
Above Normal Water Years (9%)	-4,689	-6,826	-6,718	-4,183	-4,331	-3,391	-735	-2,338	-4,820	-9,926	-10,090	-6,690
Below Normal Water Years (20%)	-5,629	-6,728	-5,134	-4,167	-4,301	-3,666	516	-585	-4,842	-10,771	-9,792	-8,294
Dry Water Years (21%)	-5,146	-6,261	-5,156	-4,097	-4,421	-3,902	-767	-1,020	-4,859	-8,634	-4,813	-5,392
Critical Water Years (18%)	-3,887	-3,609	-4,032	-3,222	-4,177	-2,887	-845	-1,299	-2,459	-3,286	-2,396	-3,400

Table 4G-3-6-1b. Old and Middle River Flow, Proposed Project plus Cumulative 091124, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,893	-2,174	-2,408	-1,330	-2,749	-1,079	958	-1,633	-1,578	-2,530	-2,131	-3,296
20% Exceedance	-3,767	-3,282	-3,517	-3,334	-3,617	-1,311	207	-1,959	-3,430	-4,552	-2,802	-4,383
30% Exceedance	-4,140	-4,452	-4,800	-3,592	-3,808	-1,428	-202	-2,127	-3,848	-7,200	-4,114	-5,083
40% Exceedance	-4,745	-5,984	-5,290	-3,645	-3,899	-1,604	-581	-2,439	-4,115	-8,840	-7,633	-5,690
50% Exceedance	-5,185	-7,008	-5,290	-4,084	-3,947	-2,325	-881	-2,637	-4,129	-9,416	-9,213	-6,807
60% Exceedance	-5,877	-8,369	-5,290	-4,235	-4,091	-3,397	-1,105	-2,856	-4,205	-9,817	-9,913	-7,828
70% Exceedance	-6,452	-8,873	-5,290	-4,419	-4,236	-3,685	-1,238	-3,154	-4,310	-10,435	-10,471	-9,198
80% Exceedance	-7,292	-9,144	-6,077	-4,520	-4,357	-3,773	-1,561	-3,425	-4,310	-10,938	-10,882	-9,929
90% Exceedance	-8,571	-9,495	-8,072	-4,700	-4,379	-4,108	-2,006	-3,608	-4,400	-11,225	-11,179	-10,714
Full Simulation Period Average ^a	-5,449	-6,360	-5,159	-3,378	-3,434	-2,133	-569	-2,528	-3,615	-8,196	-7,498	-7,022
Wet Water Years (32%)	-6,404	-7,311	-5,500	-2,763	-2,496	-1,270	-432	-2,680	-3,426	-9,377	-10,259	-9,377
Above Normal Water Years (9%)	-4,492	-7,088	-6,650	-4,010	-3,946	-2,120	226	-2,711	-4,186	-10,301	-10,729	-7,353
Below Normal Water Years (20%)	-5,476	-6,786	-5,212	-3,891	-3,974	-2,103	-439	-2,760	-4,305	-10,298	-9,530	-7,970
Dry Water Years (21%)	-5,399	-6,421	-5,066	-3,869	-3,851	-2,862	-651	-2,407	-4,273	-8,128	-4,541	-5,432
Critical Water Years (18%)	-4,257	-3,762	-3,858	-3,013	-3,760	-2,858	-1,261	-2,050	-2,133	-2,785	-2,164	-3,472

Table 4G-3-6-1c. Old and Middle River Flow, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-619	-526	-2	801	-851	267	-338	-2,010	227	382	224	107
20% Exceedance	-101	-14	-300	311	675	1,518	-37	-1,510	199	477	482	-187
30% Exceedance	-94	-492	110	53	521	1,942	67	-1,150	540	61	383	-53
40% Exceedance	-14	-156	0	0	430	1,805	-55	-1,053	429	-57	-347	-26
50% Exceedance	147	-291	0	432	517	1,088	-128	-1,042	710	178	-116	-485
60% Exceedance	-30	2	0	281	373	28	-46	-1,128	795	248	-306	-159
70% Exceedance	-104	2	0	97	228	-243	24	-1,156	690	340	-219	-574
80% Exceedance	65	-13	-15	88	126	418	-148	-1,020	690	170	-297	-536
90% Exceedance	-70	-3	84	300	584	88	-133	-21	600	176	-24	-803
Full Simulation Period Average ^a	-109	-111	25	190	309	691	-77	-1,083	522	247	-18	-332
Wet Water Years (32%)	-119	-45	-48	107	44	127	245	-588	550	-34	-349	-987
Above Normal Water Years (9%)	197	-261	68	173	385	1,271	962	-374	634	-375	-638	-663
Below Normal Water Years (20%)	153	-58	-78	276	326	1,562	-955	-2,175	537	473	262	324
Dry Water Years (21%)	-253	-161	90	228	570	1,041	116	-1,388	586	506	272	-40
Critical Water Years (18%)	-370	-153	174	209	417	29	-417	-751	326	501	232	-72

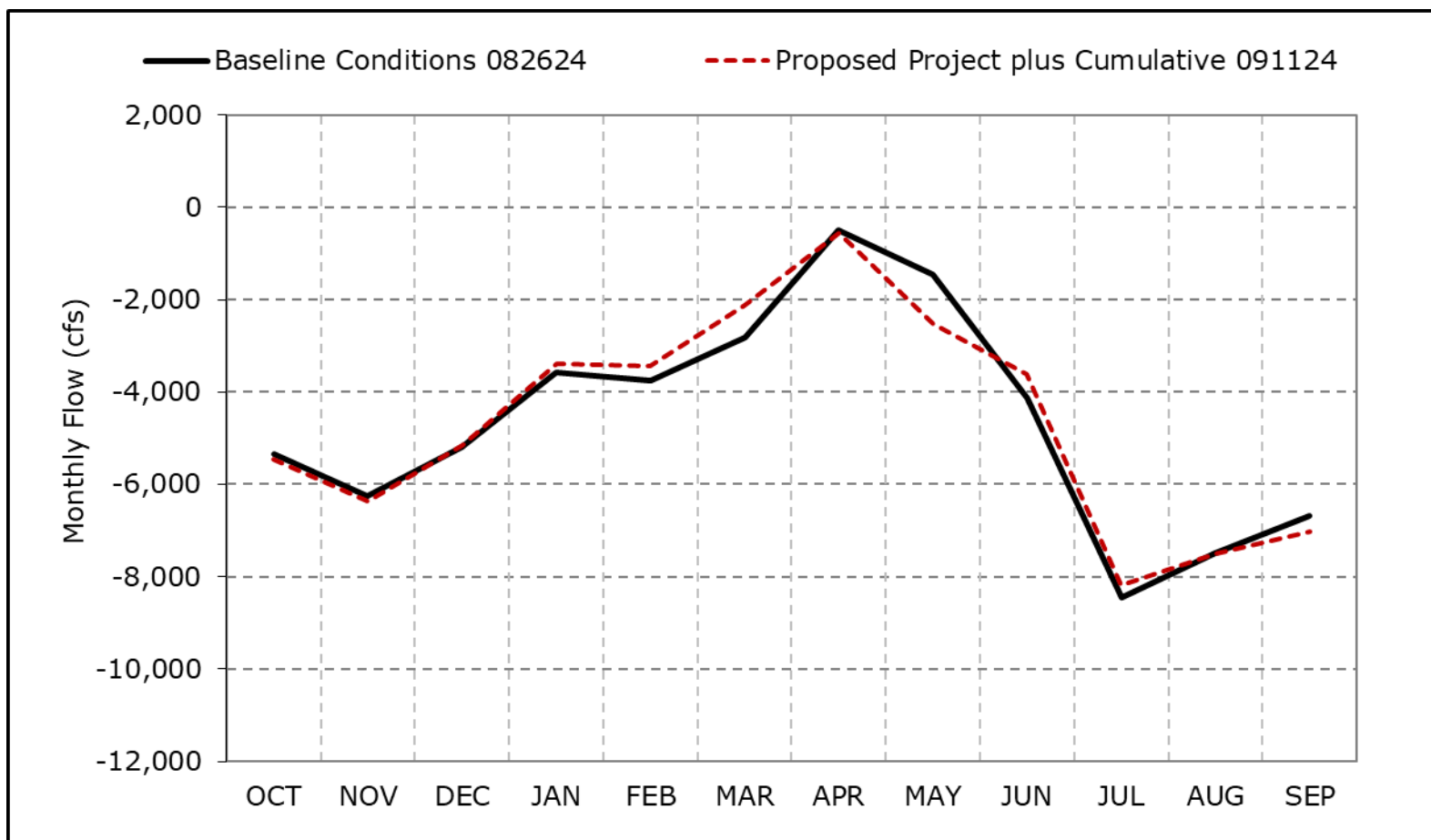
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-6a. Old and Middle River Flow, Long-Term Average Flow

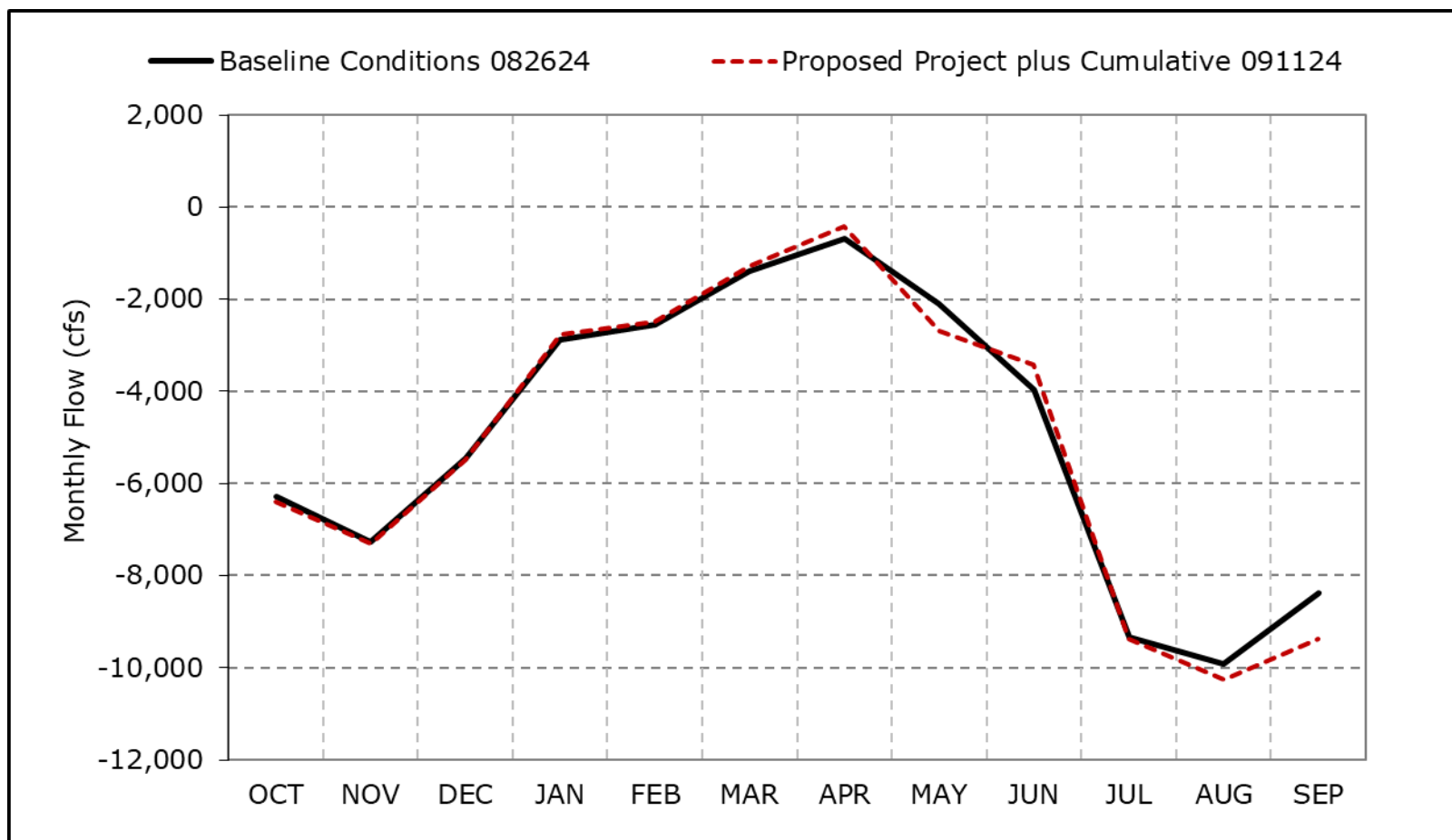


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-6b. Old and Middle River Flow, Wet Year Average Flow

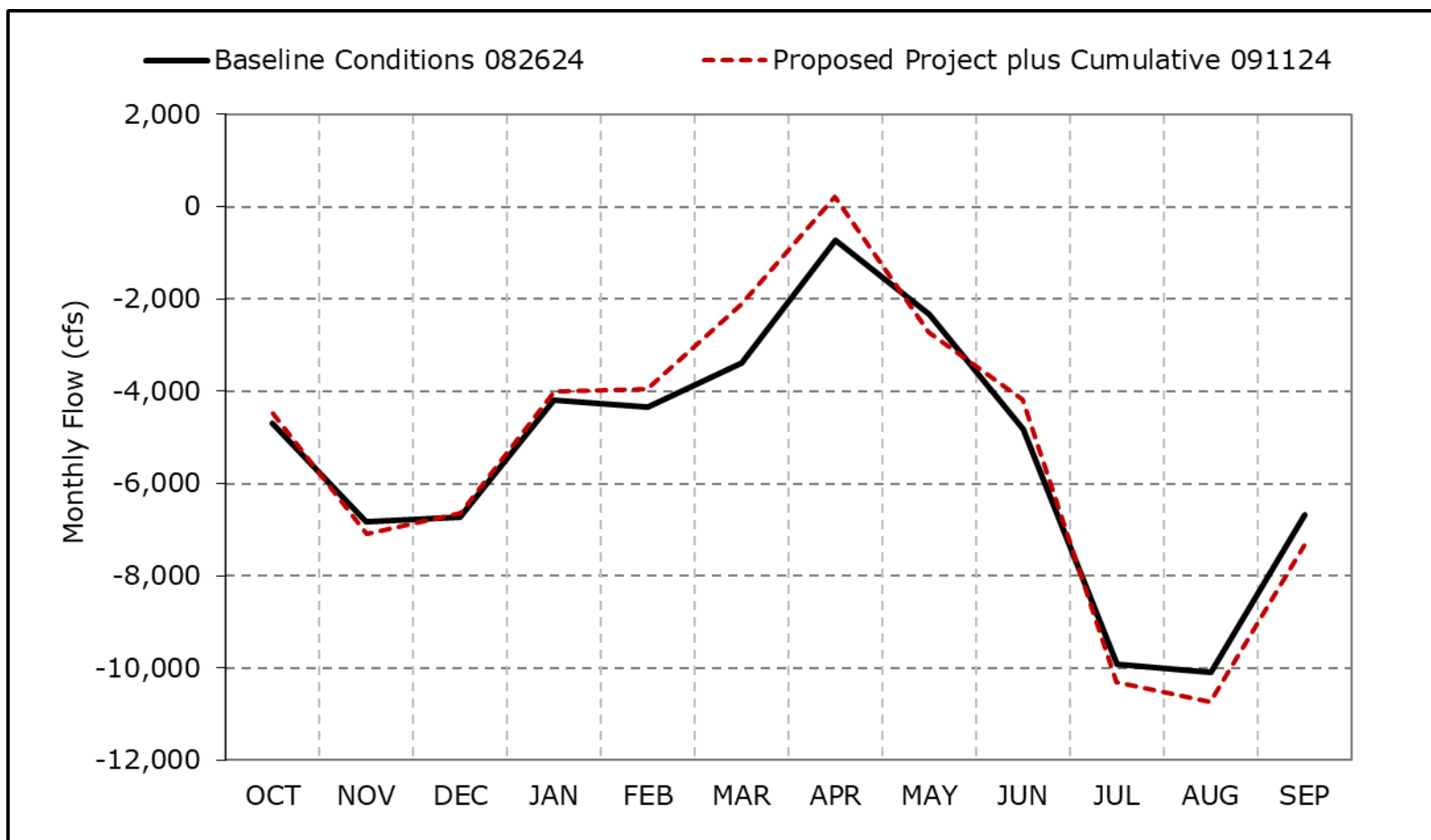


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-6c. Old and Middle River Flow, Above Normal Year Average Flow

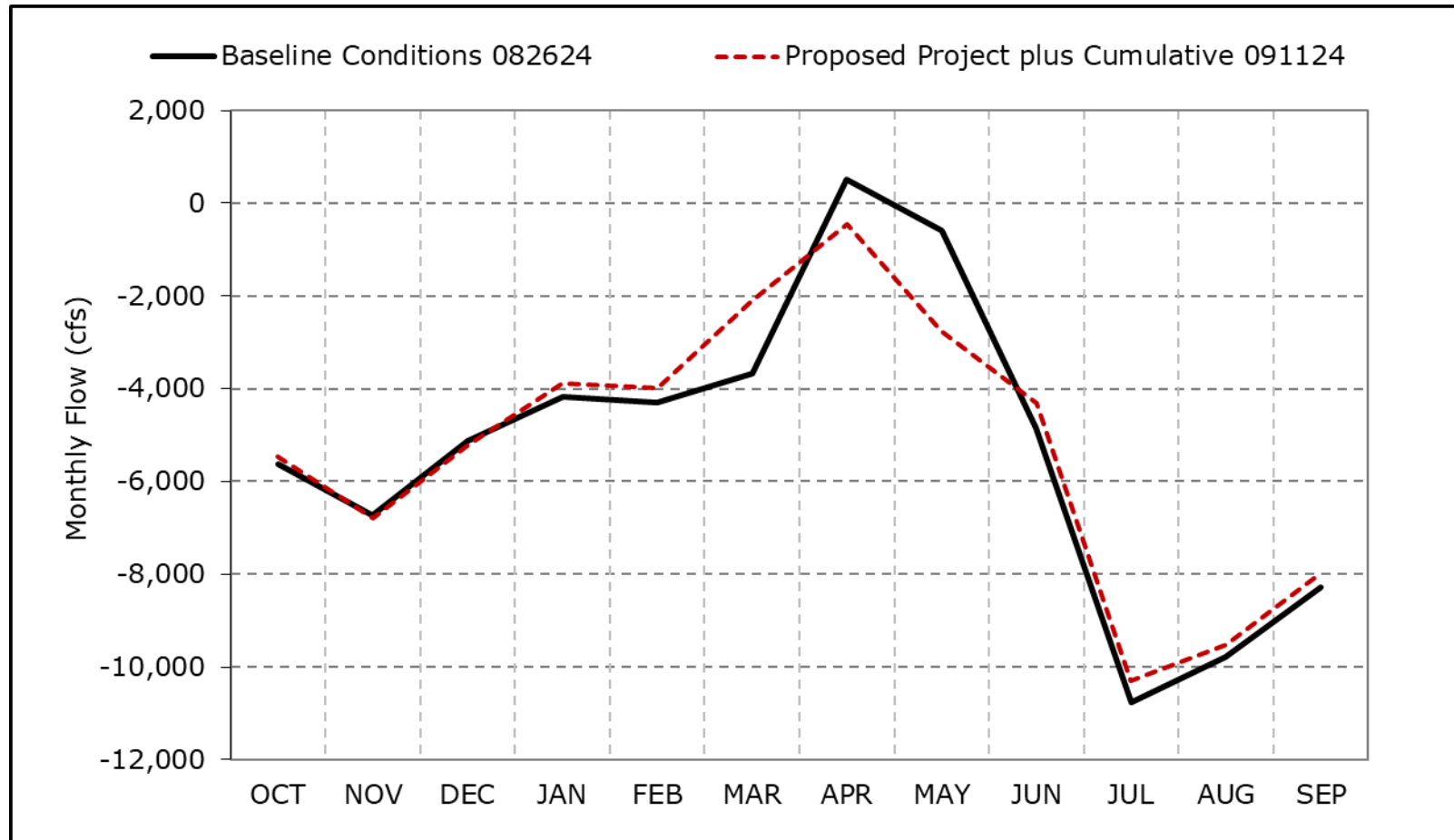


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-6d. Old and Middle River Flow, Below Normal Year Average Flow

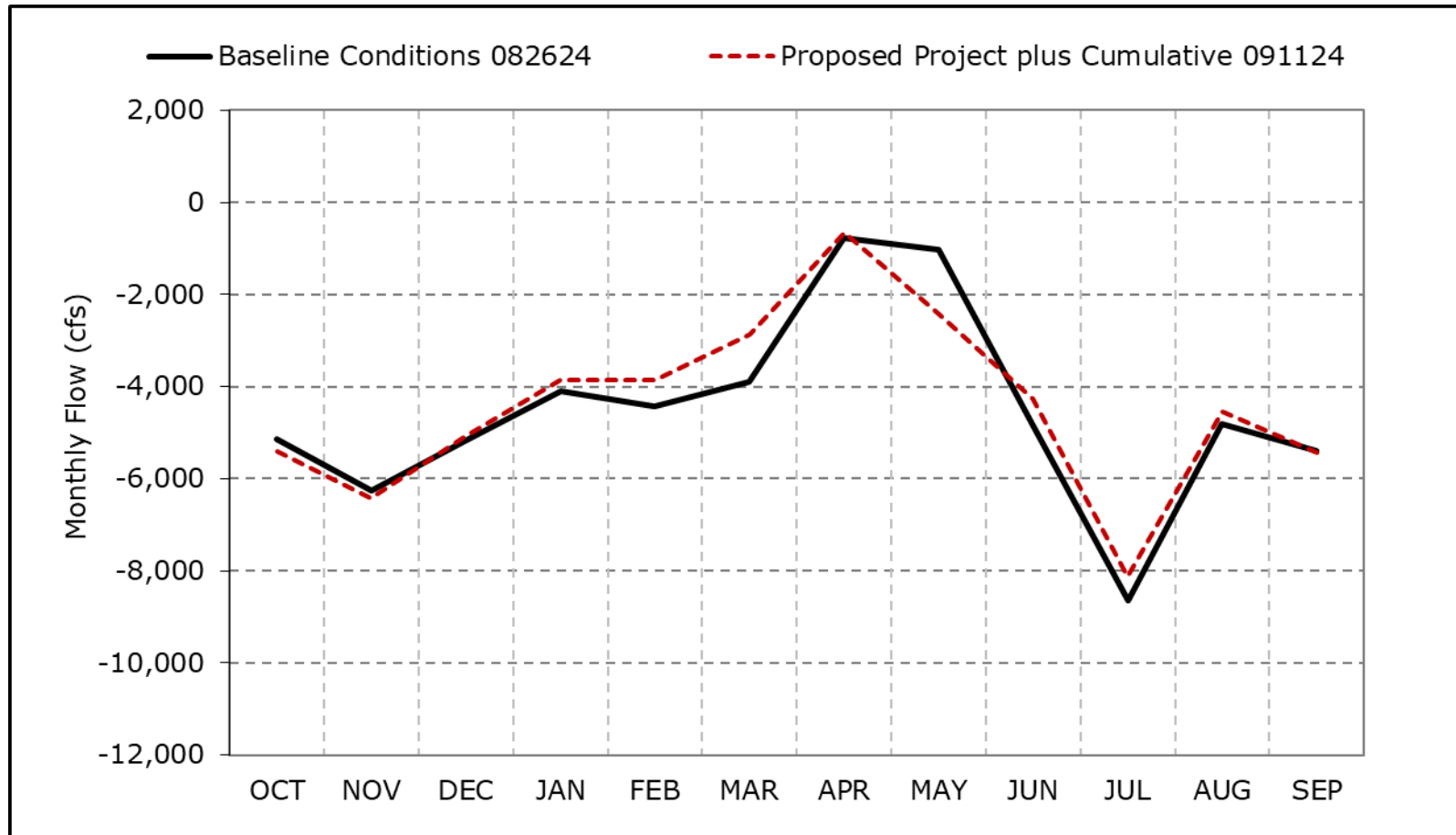


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-6e. Old and Middle River Flow, Dry Year Average Flow

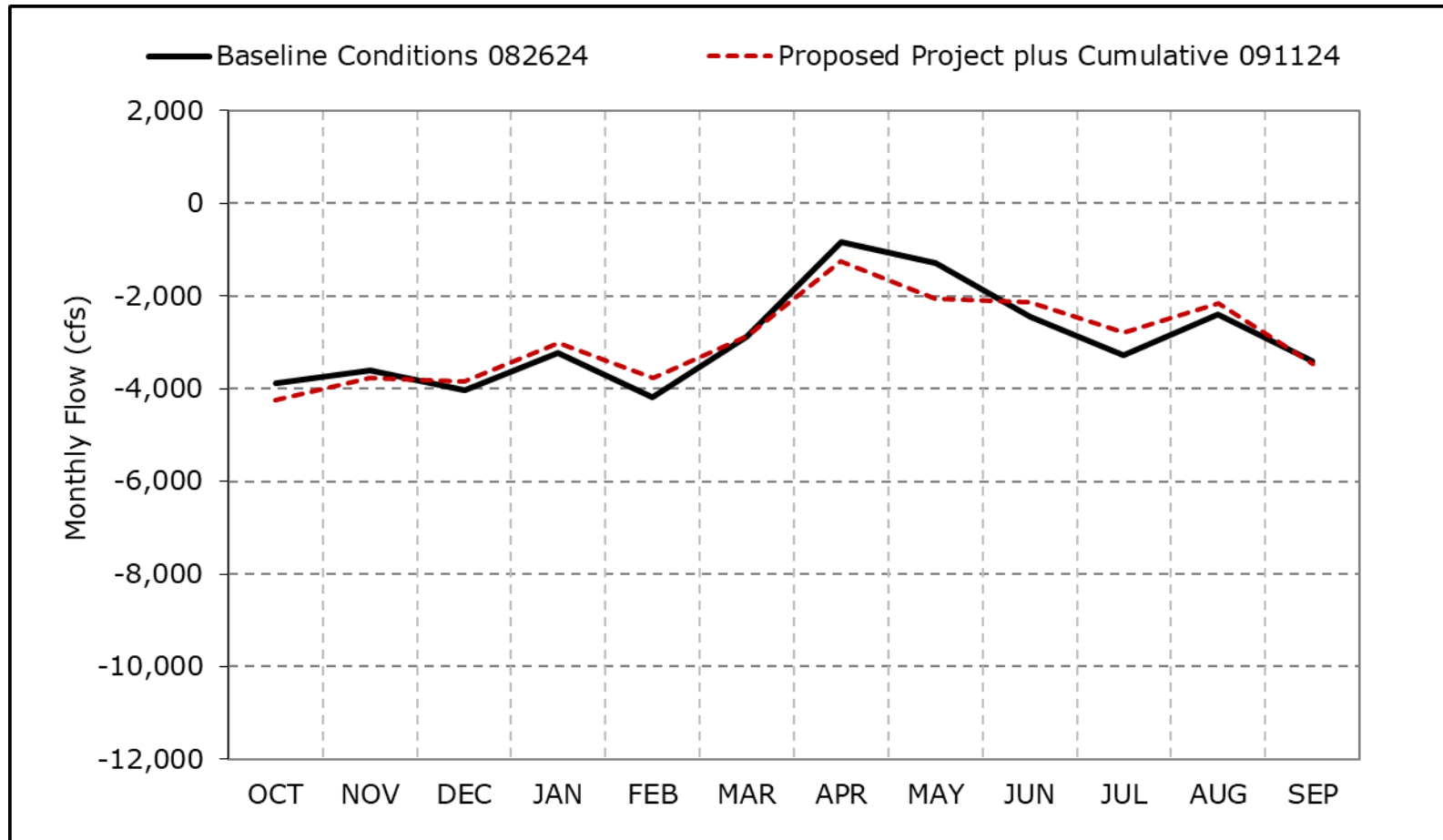


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-6f. Old and Middle River Flow, Critical Year Average Flow

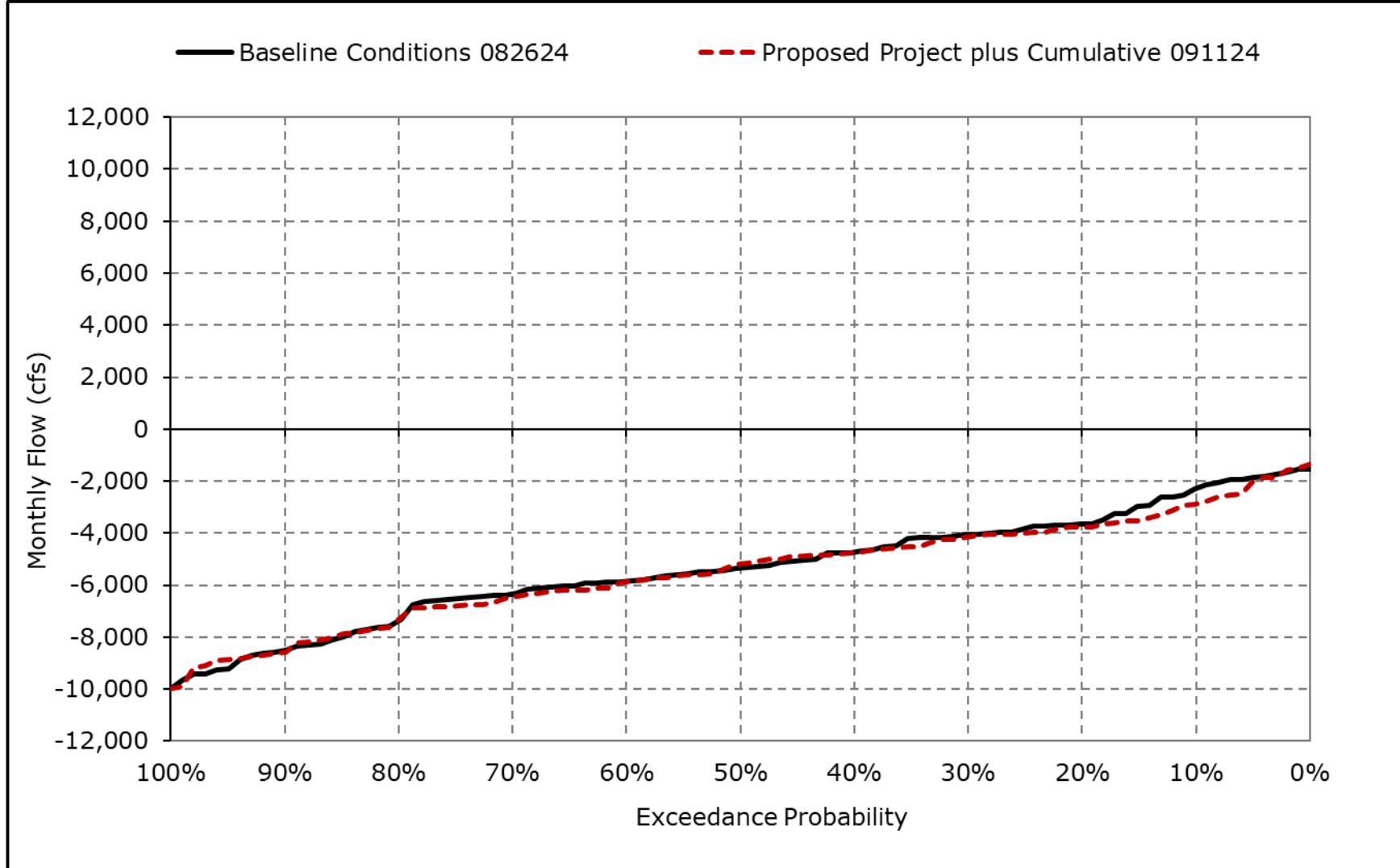


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

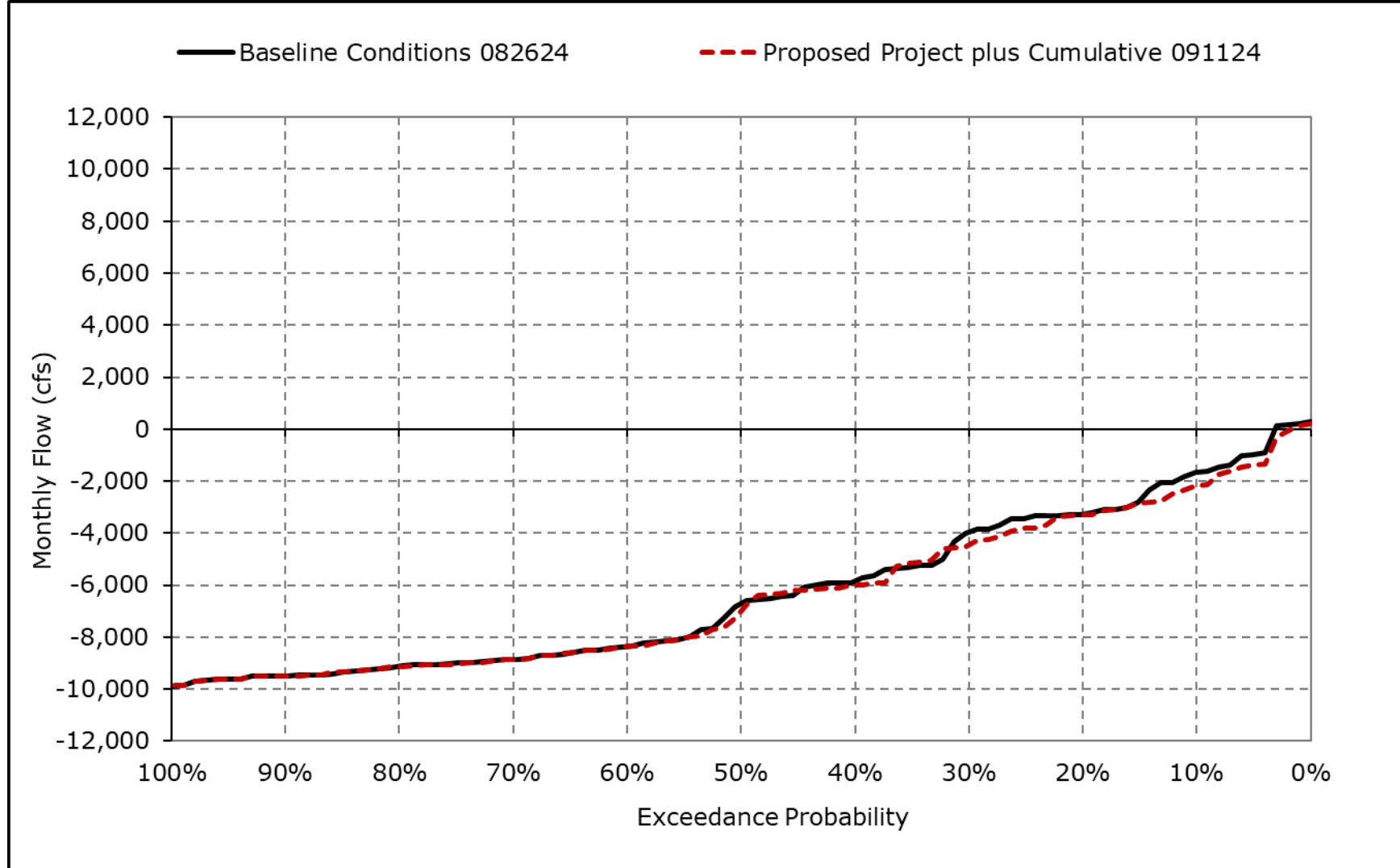
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6g. Old and Middle River Flow, October



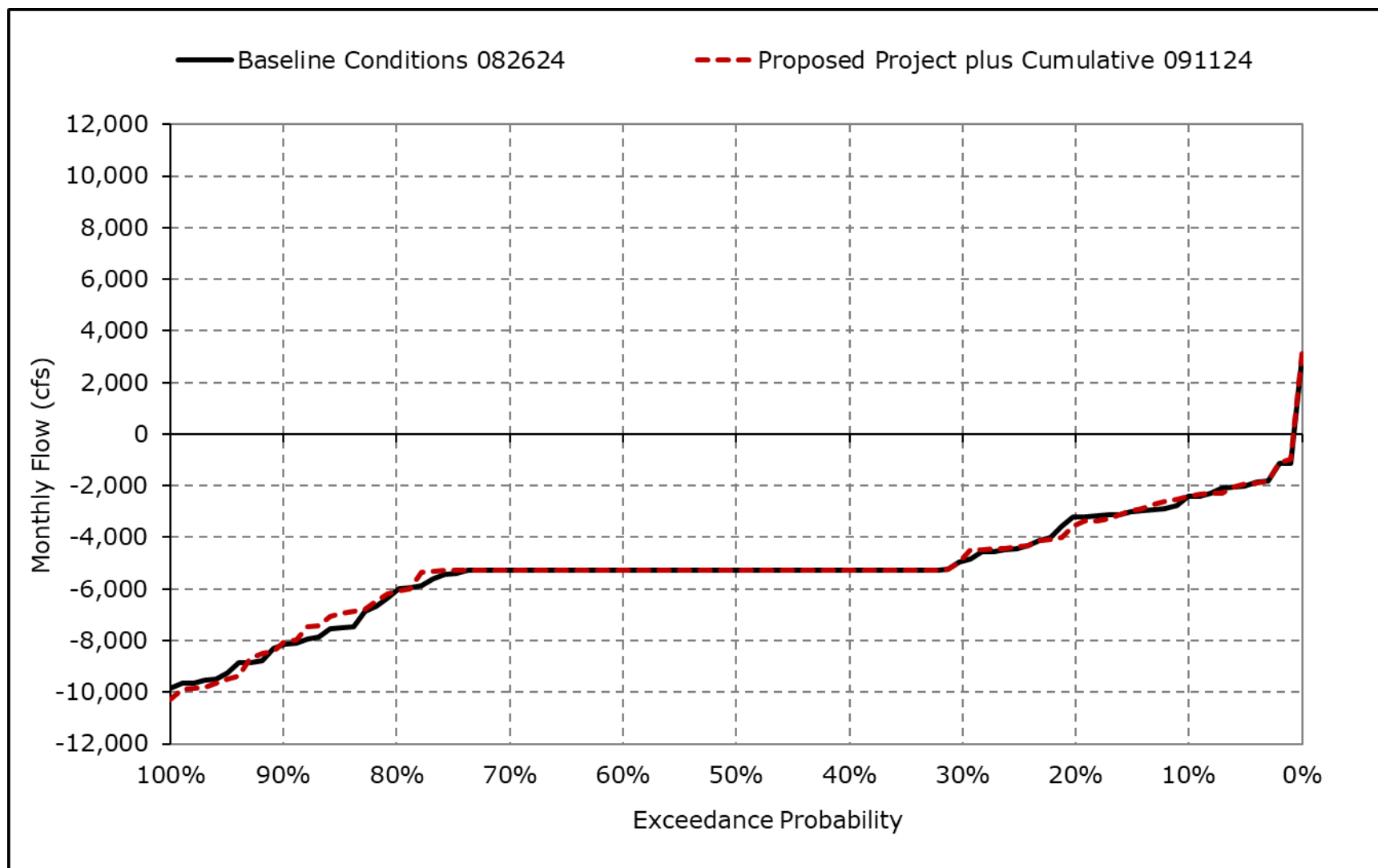
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6h. Old and Middle River Flow, November



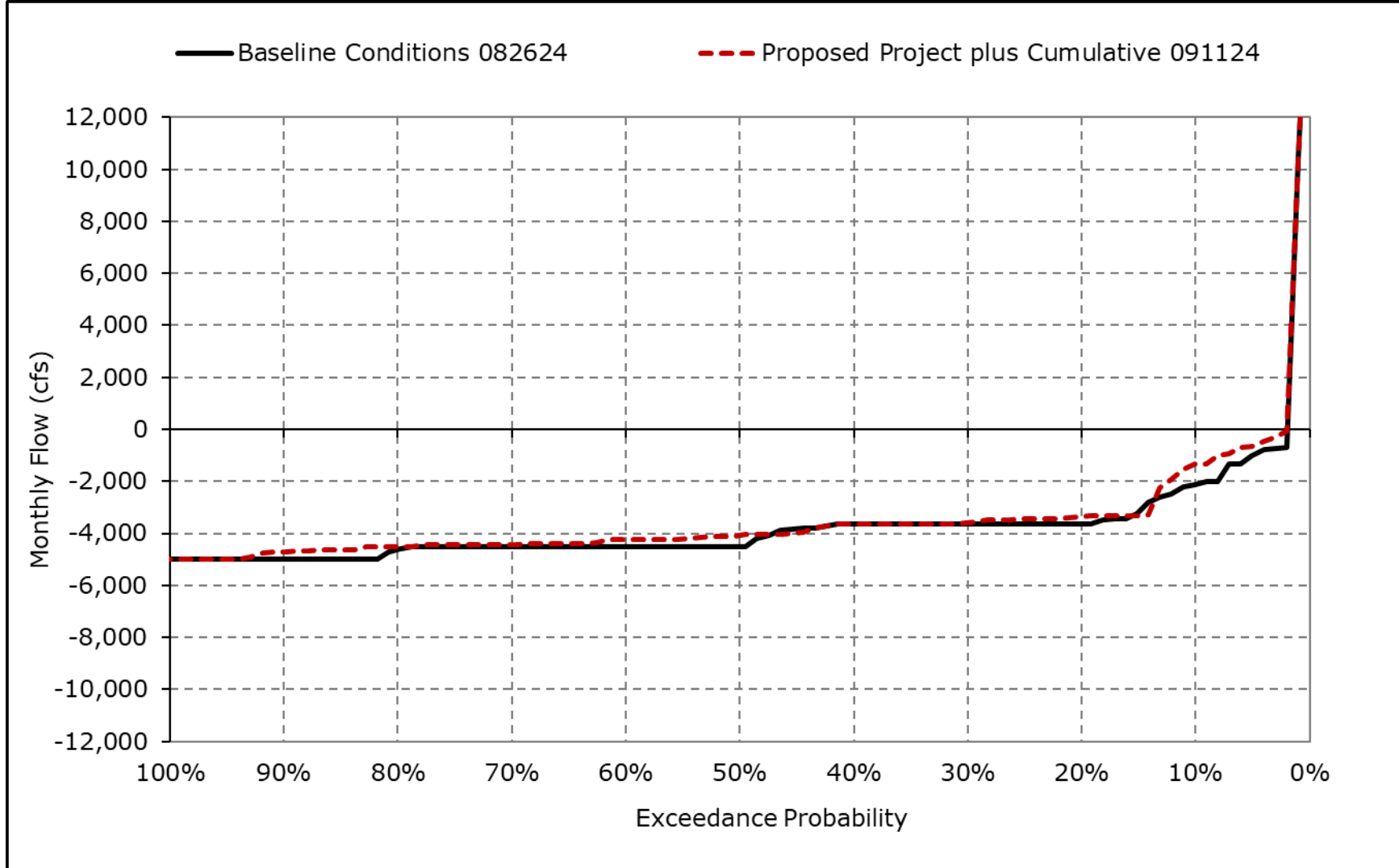
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6i. Old and Middle River Flow, December



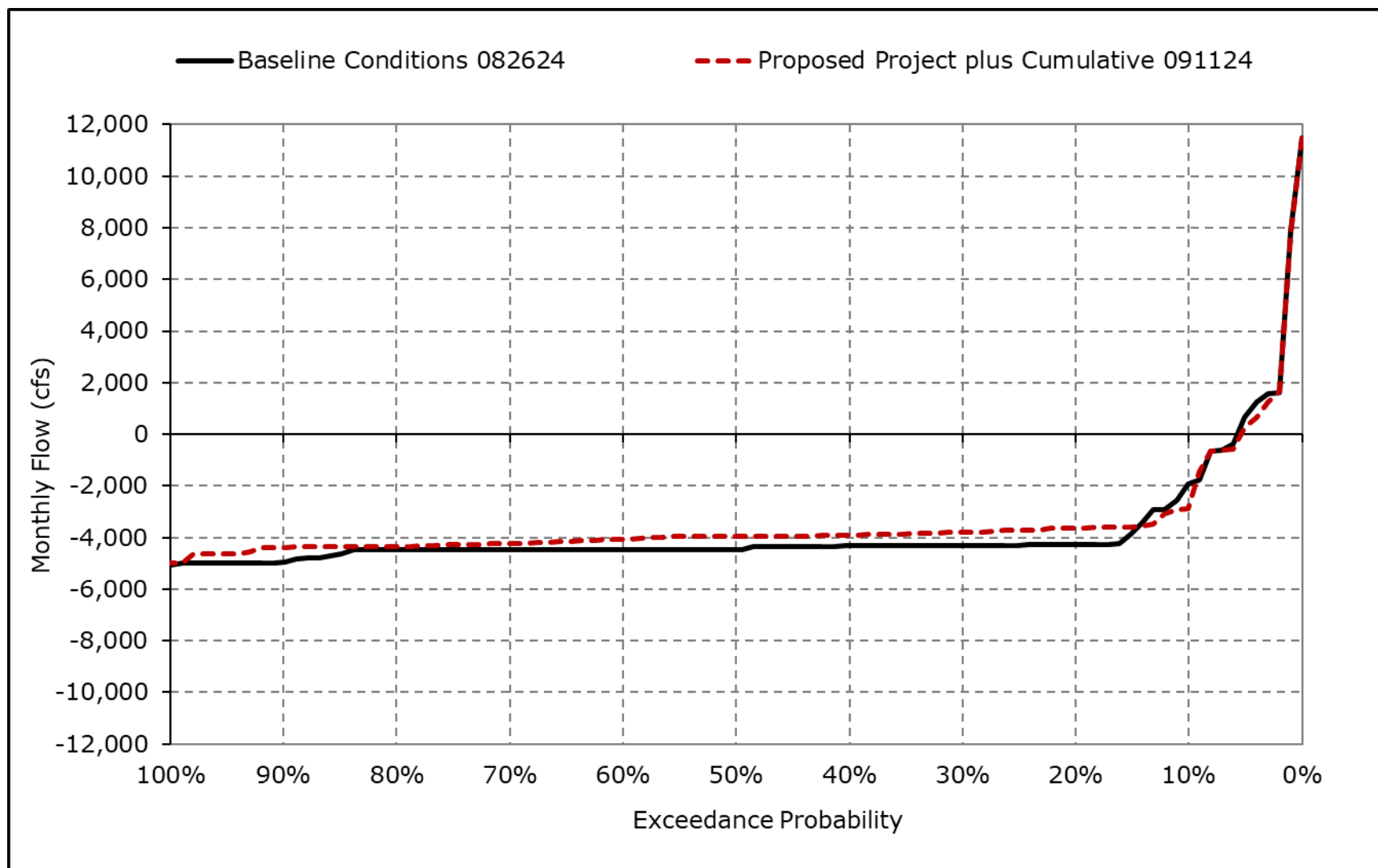
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6j. Old and Middle River Flow, January



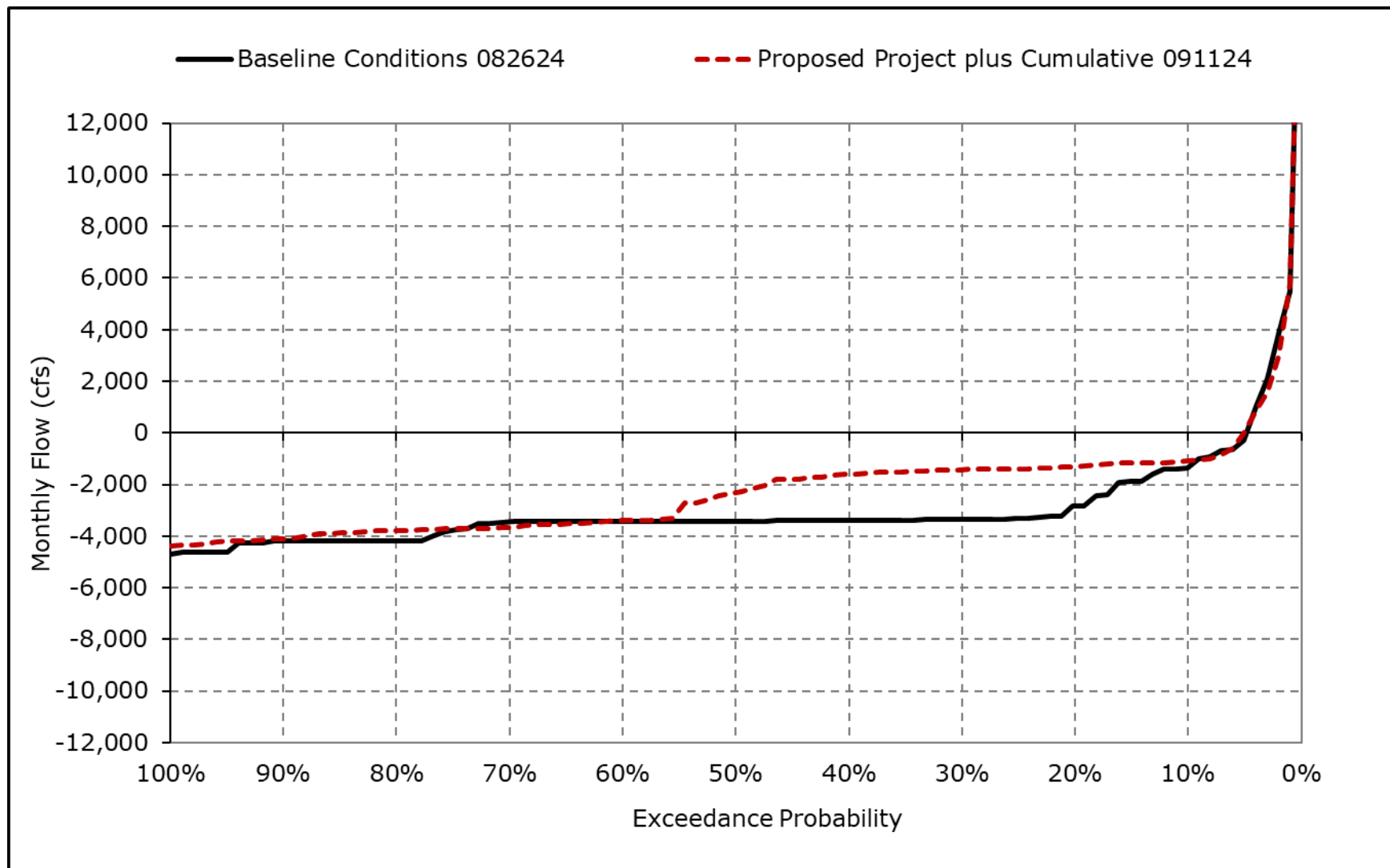
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6k. Old and Middle River Flow, February



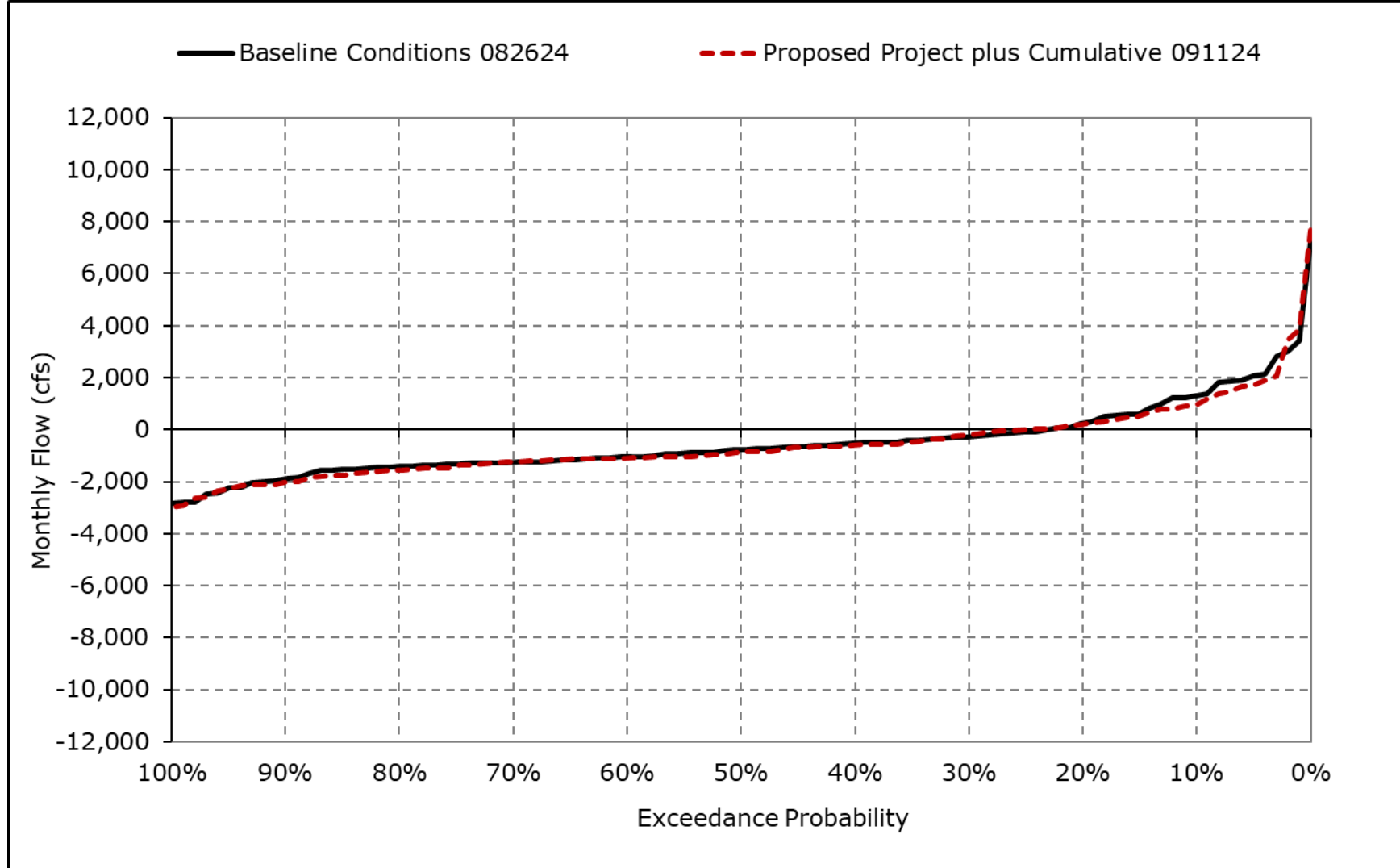
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6I. Old and Middle River Flow, March



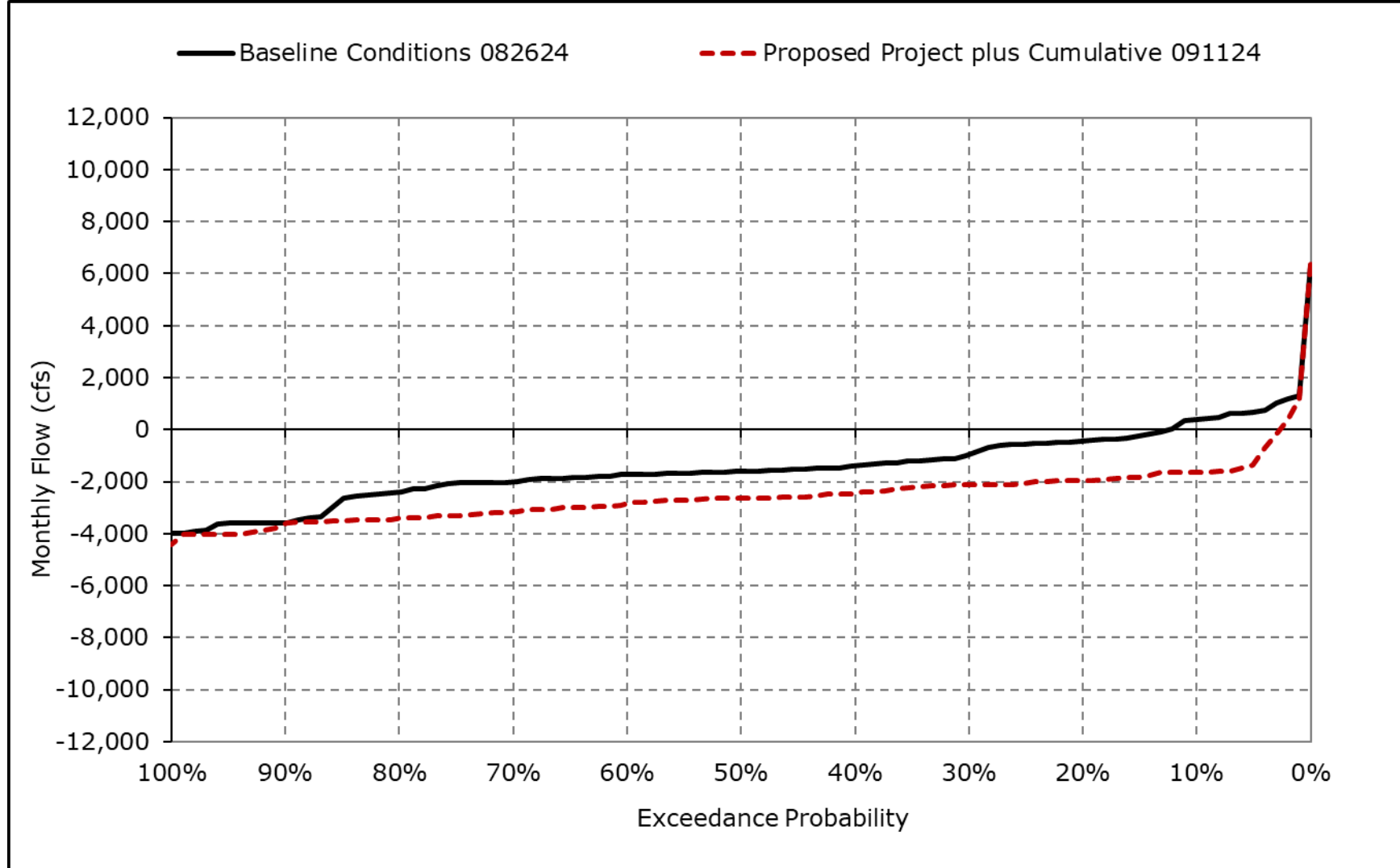
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6m. Old and Middle River Flow, April



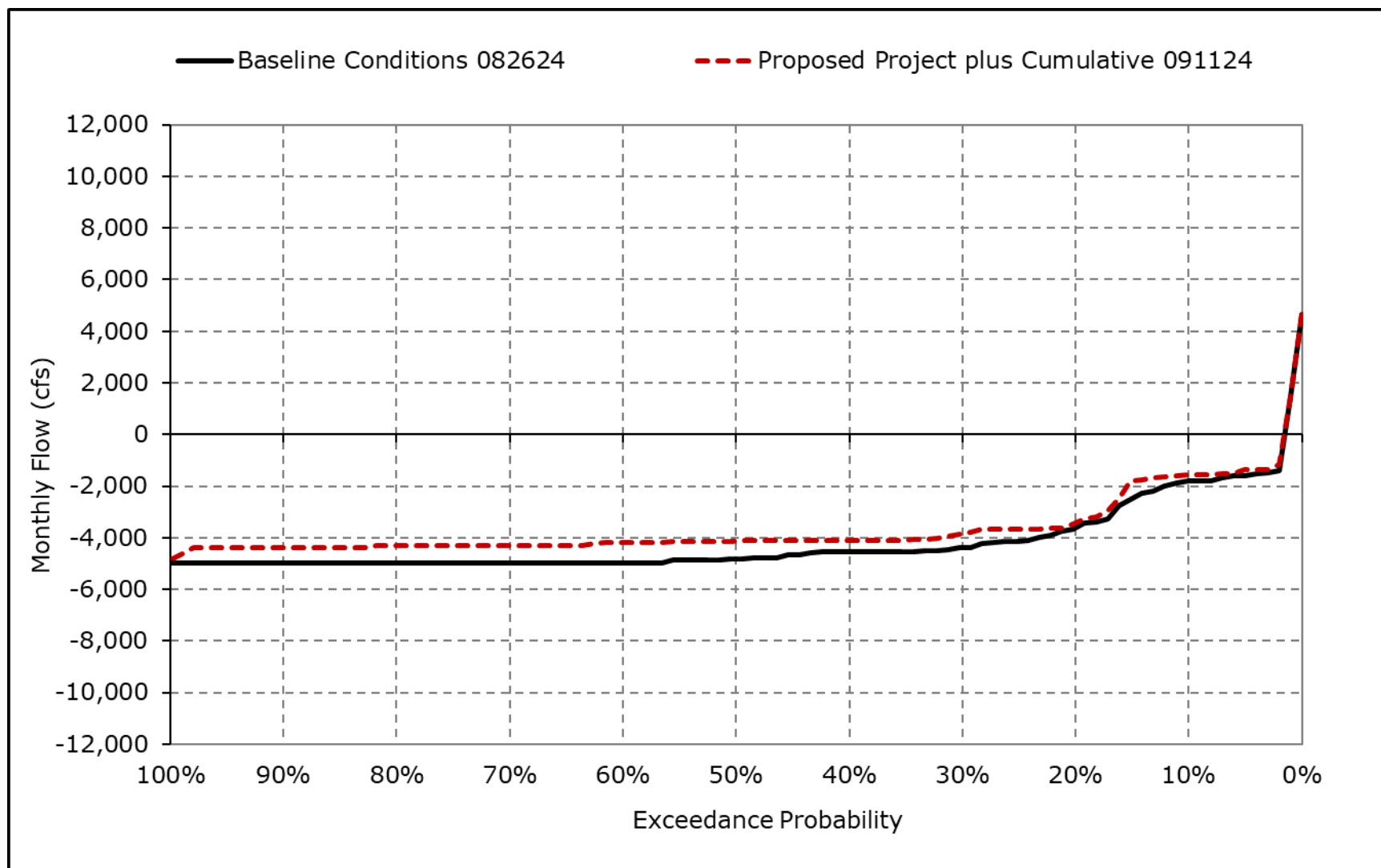
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6n. Old and Middle River Flow, May



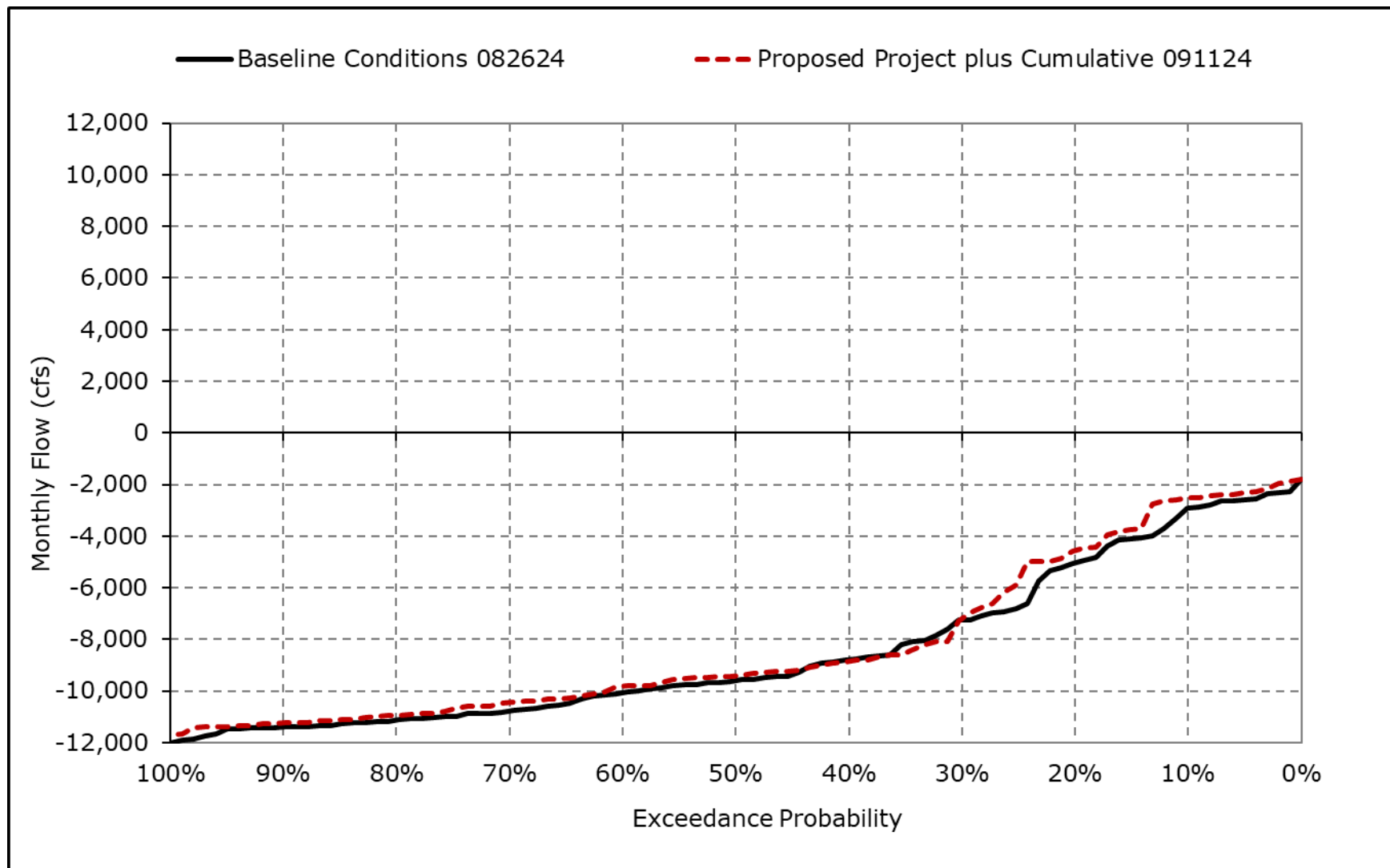
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6o. Old and Middle River Flow, June



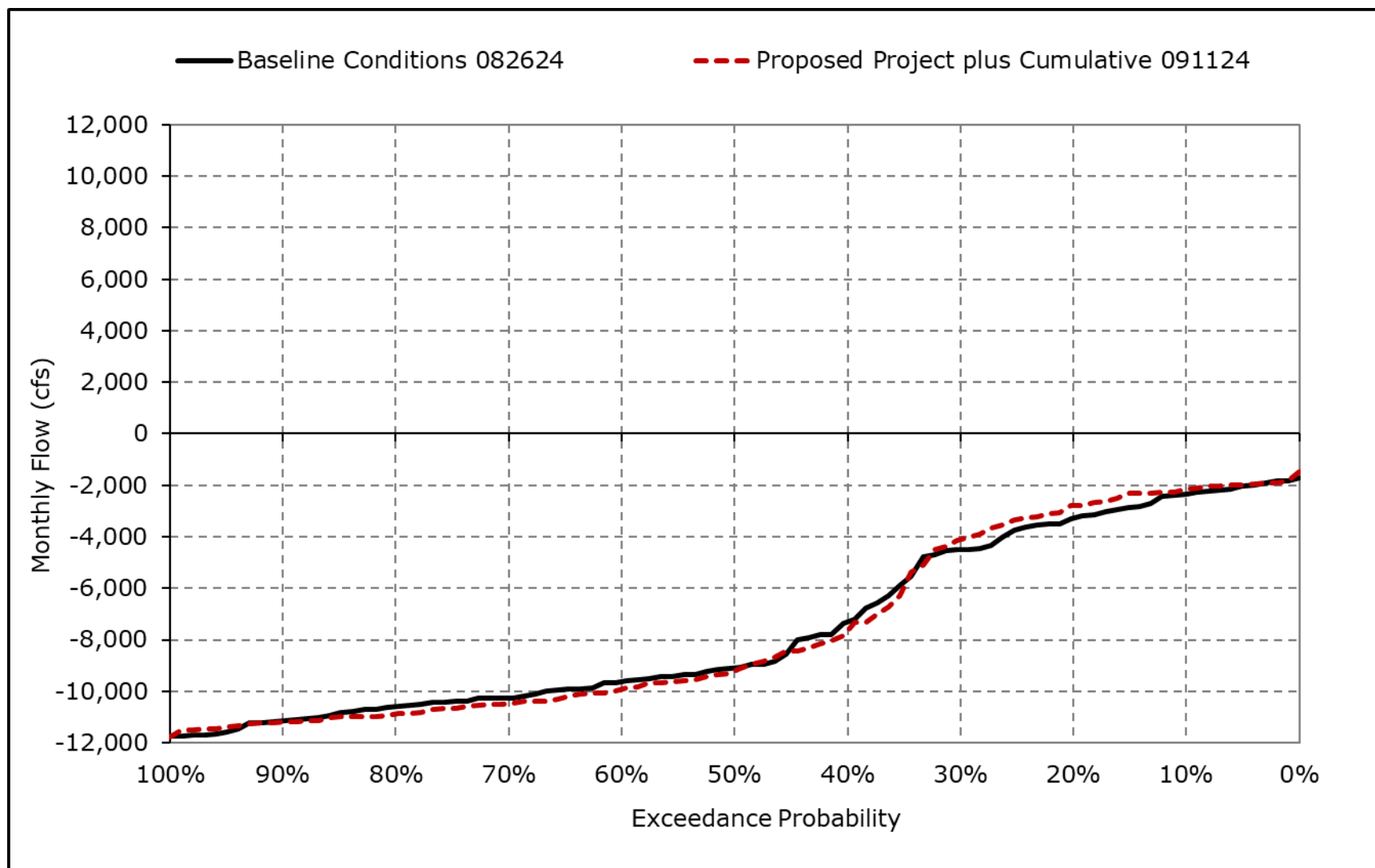
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6p. Old and Middle River Flow, July



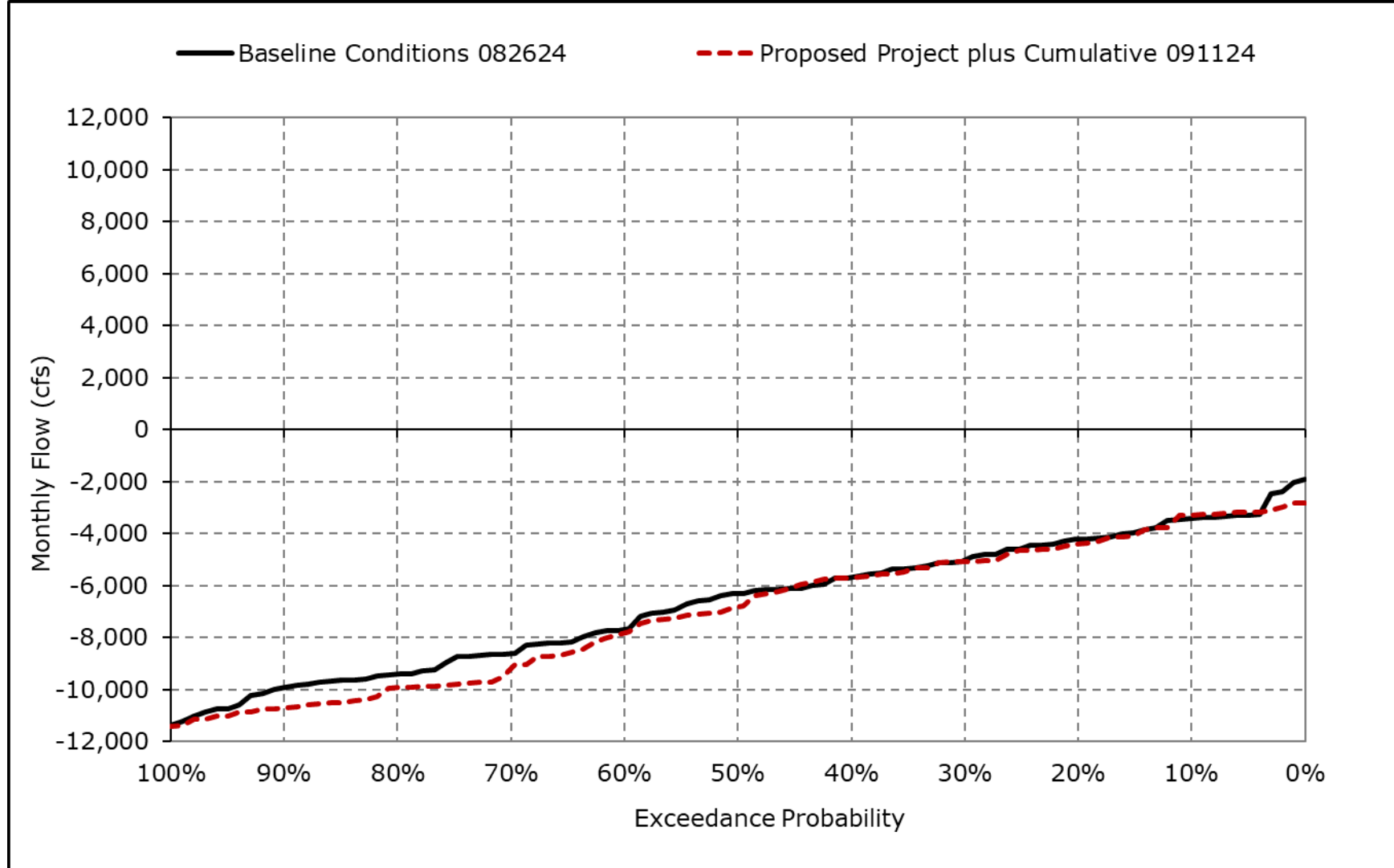
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-6q. Old and Middle River Flow, August



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

Figure 4G-3-6r. Old and Middle River Flow, September



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

Table 4G-3-7-1a. Qwest, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,552	765	7,513	18,028	21,137	20,930	16,991	14,774	10,980	1,853	1,551	2,062
20% Exceedance	1,118	74	2,702	11,876	13,311	14,256	13,134	8,692	5,420	1,448	1,183	918
30% Exceedance	889	-163	1,105	4,851	10,270	9,733	10,669	6,713	3,454	478	813	588
40% Exceedance	716	-1,299	496	3,390	6,132	7,195	8,280	5,507	2,228	-219	73	128
50% Exceedance	491	-1,717	-207	1,813	4,003	4,293	6,333	4,501	1,872	-1,102	-957	-140
60% Exceedance	186	-2,628	-903	1,037	2,203	2,671	5,148	3,657	1,225	-1,776	-2,246	-361
70% Exceedance	-154	-3,253	-2,045	-147	1,321	2,119	3,655	2,372	749	-2,590	-2,563	-653
80% Exceedance	-578	-3,674	-3,167	-1,134	130	1,466	2,717	2,050	567	-3,049	-3,066	-1,165
90% Exceedance	-1,549	-4,058	-5,164	-1,938	-646	402	2,237	1,689	341	-3,478	-3,823	-2,013
Full Simulation Period Average ^a	287	-1,578	777	5,855	8,319	8,512	8,771	6,362	3,631	-612	-1,050	-53
Wet Water Years (32%)	-64	-1,562	4,414	15,695	18,943	18,821	16,008	11,654	7,977	1,105	-1,412	814
Above Normal Water Years (9%)	738	-2,403	-1,569	6,198	8,536	8,887	8,330	5,510	3,065	-1,353	-2,547	1,395
Below Normal Water Years (20%)	216	-1,947	-802	1,793	5,318	5,512	8,028	5,776	1,584	-2,739	-3,151	-2,093
Dry Water Years (21%)	437	-1,925	-1,113	-316	1,685	1,801	3,873	3,084	682	-2,382	78	-508
Critical Water Years (18%)	590	-378	-558	-97	396	1,159	2,667	1,854	1,903	1,133	1,362	480

Table 4G-3-7-1b. Qwest, Proposed Project plus Cumulative 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,876	683	7,457	18,092	20,867	20,801	17,872	13,861	11,340	2,040	1,671	1,192
20% Exceedance	1,158	-52	2,777	11,982	13,251	15,538	14,780	7,747	6,043	1,610	1,415	855
30% Exceedance	953	-553	995	5,087	10,464	10,066	10,023	5,722	3,697	719	924	247
40% Exceedance	679	-1,380	546	3,630	6,648	8,619	8,960	4,584	2,732	51	-124	-61
50% Exceedance	542	-1,918	-201	2,381	4,422	5,035	7,644	3,566	2,265	-1,144	-1,568	-290
60% Exceedance	296	-2,610	-788	1,221	2,982	4,199	5,551	2,778	1,832	-1,720	-2,493	-670
70% Exceedance	-129	-3,279	-1,851	-5	1,491	3,023	4,732	2,128	1,350	-2,416	-2,901	-974
80% Exceedance	-781	-3,671	-3,061	-995	637	2,060	3,030	1,698	1,126	-2,903	-3,415	-1,163
90% Exceedance	-1,495	-4,117	-4,663	-1,905	-285	756	2,403	1,245	900	-3,157	-3,813	-1,839
Full Simulation Period Average ^a	351	-1,633	838	6,062	8,653	9,305	9,396	5,757	4,130	-450	-1,085	-240
Wet Water Years (32%)	1	-1,550	4,396	15,770	18,946	18,951	16,761	11,367	8,566	1,028	-1,645	7
Above Normal Water Years (9%)	1,036	-2,626	-1,386	6,372	8,946	10,297	10,540	5,877	3,599	-1,690	-3,251	1,207
Below Normal Water Years (20%)	385	-2,002	-918	2,096	5,711	7,266	8,022	4,191	2,142	-2,411	-3,025	-1,853
Dry Water Years (21%)	406	-2,060	-970	-35	2,306	3,040	4,812	2,317	1,172	-2,010	170	-515
Critical Water Years (18%)	529	-375	-312	166	881	1,236	2,605	1,476	2,171	1,539	1,683	708

Table 4G-3-7-1c. Qwest, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	324	-82	-56	64	-271	-129	881	-913	360	187	120	-870
20% Exceedance	40	-126	75	106	-60	1,282	1,646	-944	624	162	231	-62
30% Exceedance	64	-390	-110	236	194	334	-647	-992	243	241	111	-341
40% Exceedance	-37	-80	50	240	516	1,424	679	-923	504	270	-197	-189
50% Exceedance	50	-201	6	567	420	742	1,312	-935	393	-42	-611	-150
60% Exceedance	110	19	115	184	780	1,528	404	-879	607	56	-247	-309
70% Exceedance	26	-26	195	142	169	903	1,077	-243	601	174	-338	-320
80% Exceedance	-203	3	106	138	508	594	312	-353	559	146	-349	1
90% Exceedance	54	-59	501	33	362	354	165	-444	559	321	10	173
Full Simulation Period Average ^a	64	-55	62	207	334	793	625	-605	500	162	-35	-187
Wet Water Years (32%)	64	12	-18	75	3	130	753	-287	589	-77	-233	-807
Above Normal Water Years (9%)	298	-223	183	173	410	1,411	2,210	367	534	-338	-705	-187
Below Normal Water Years (20%)	169	-55	-116	303	394	1,754	-6	-1,584	558	329	126	240
Dry Water Years (21%)	-31	-135	142	282	621	1,239	938	-767	491	372	92	-7
Critical Water Years (18%)	-61	3	246	263	485	77	-62	-378	267	406	322	228

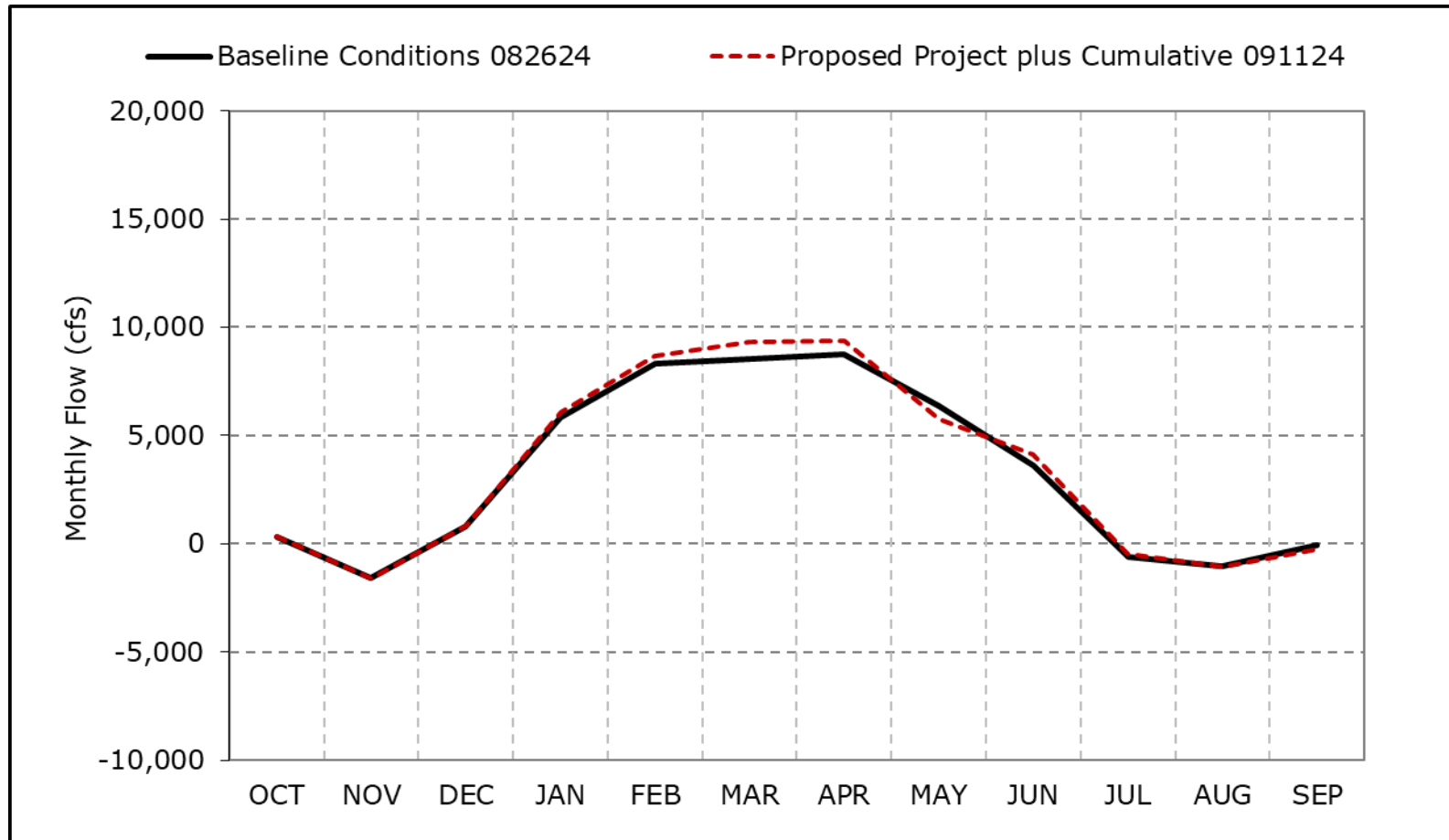
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-7a. Qwest, Long-Term Average Flow

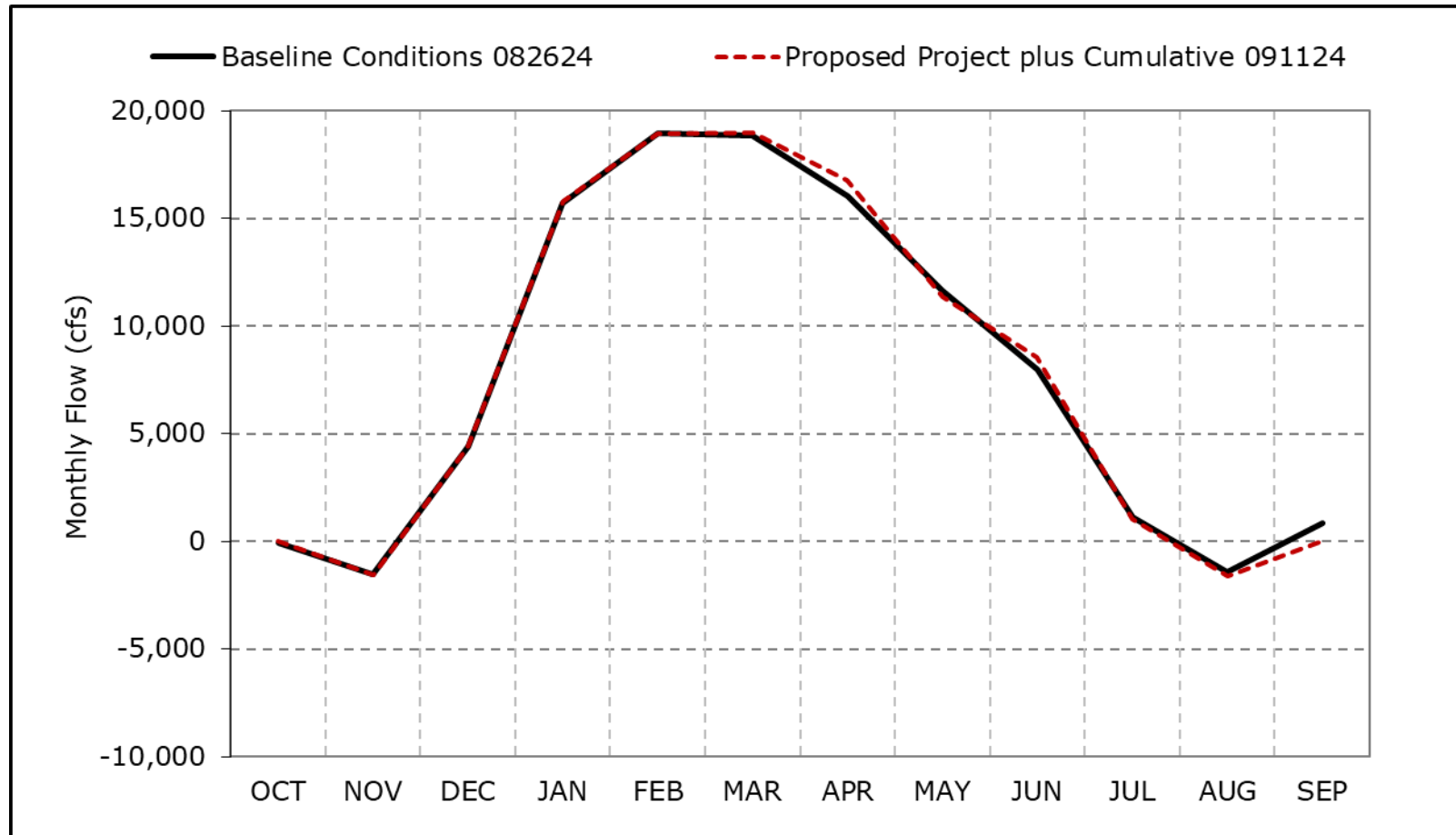


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-7b. Qwest, Wet Year Average Flow

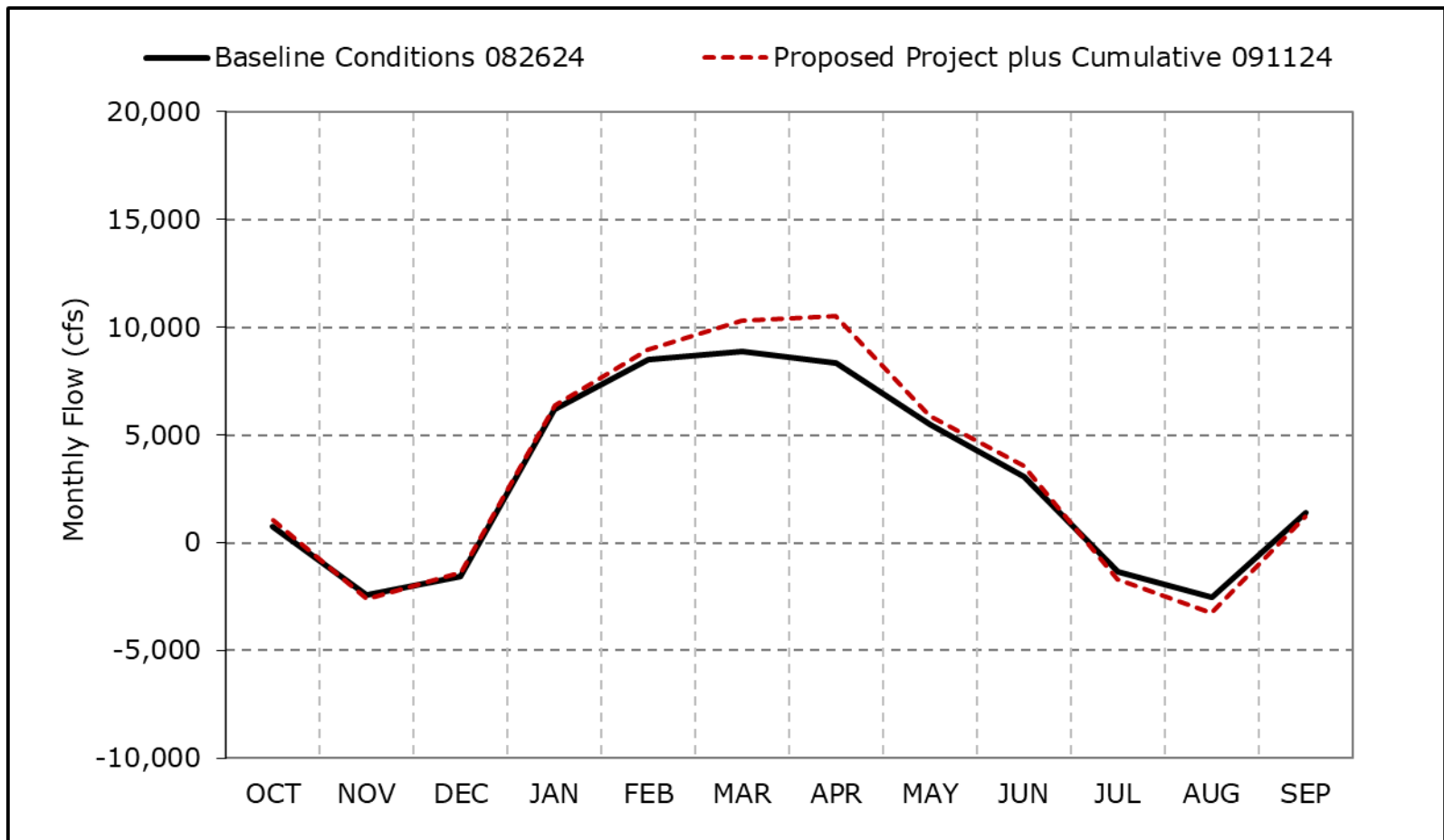


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-7c. Qwest, Above Normal Year Average Flow

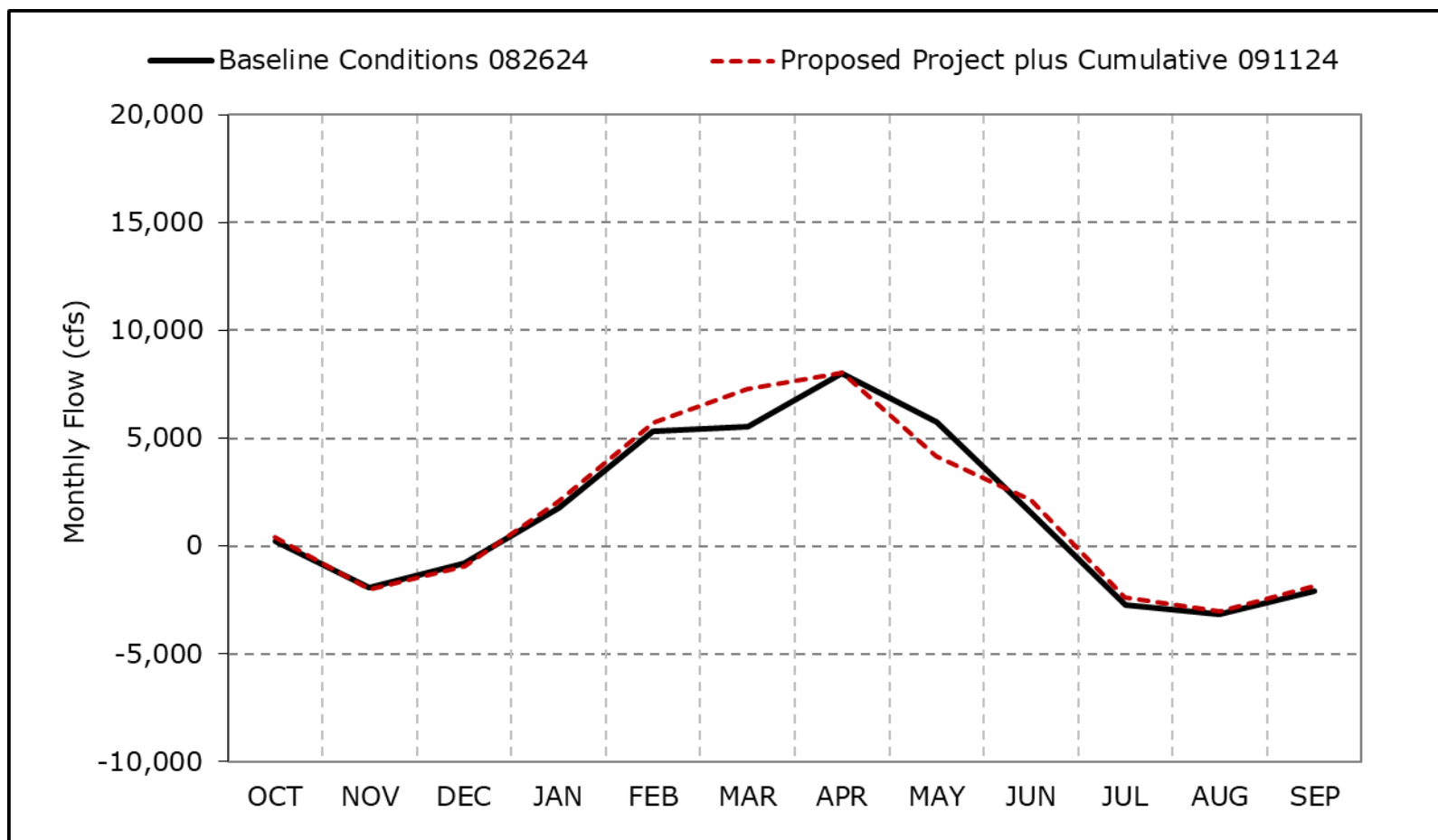


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-7d. Qwest, Below Normal Year Average Flow

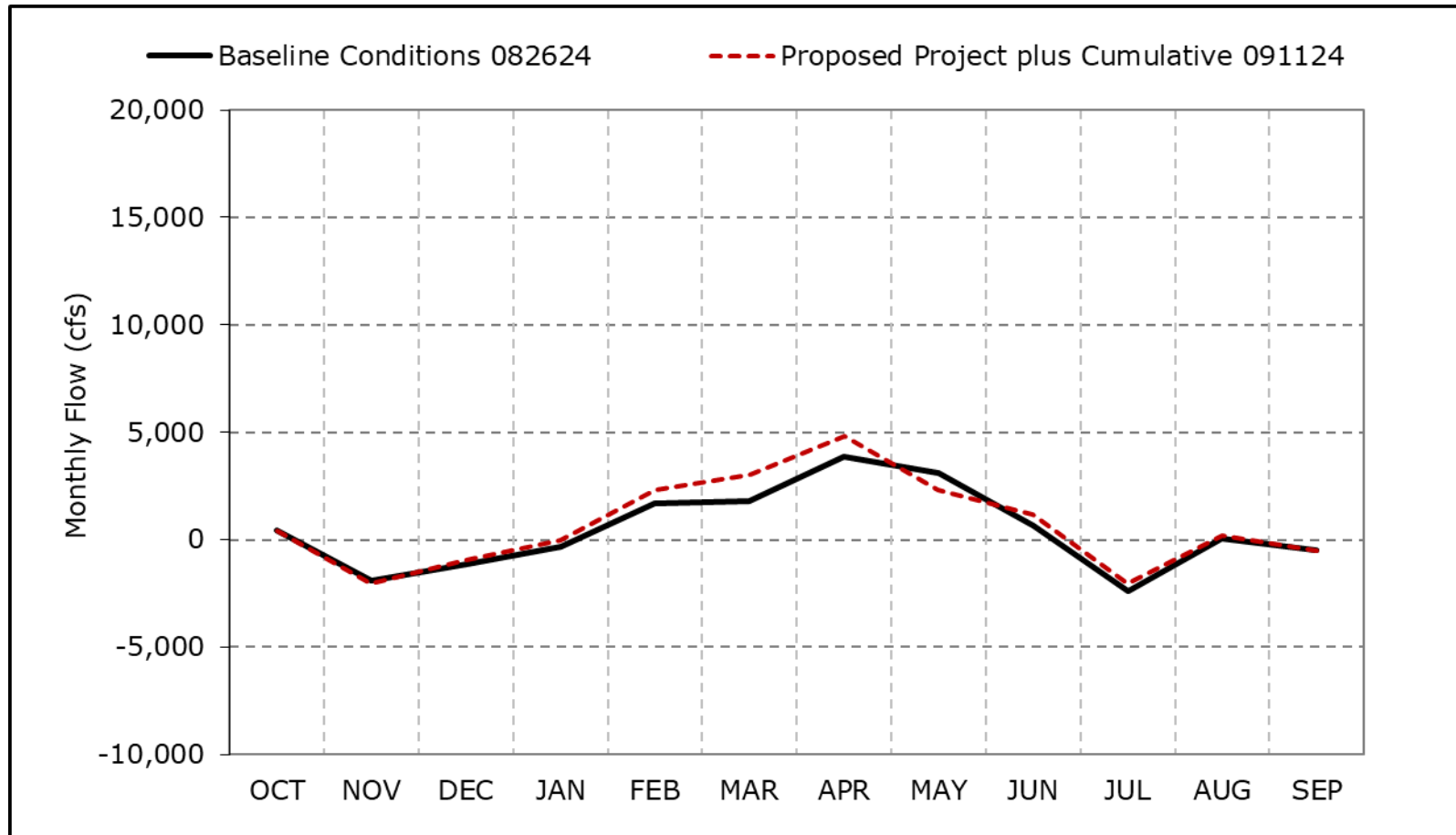


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-7e. Qwest, Dry Year Average Flow

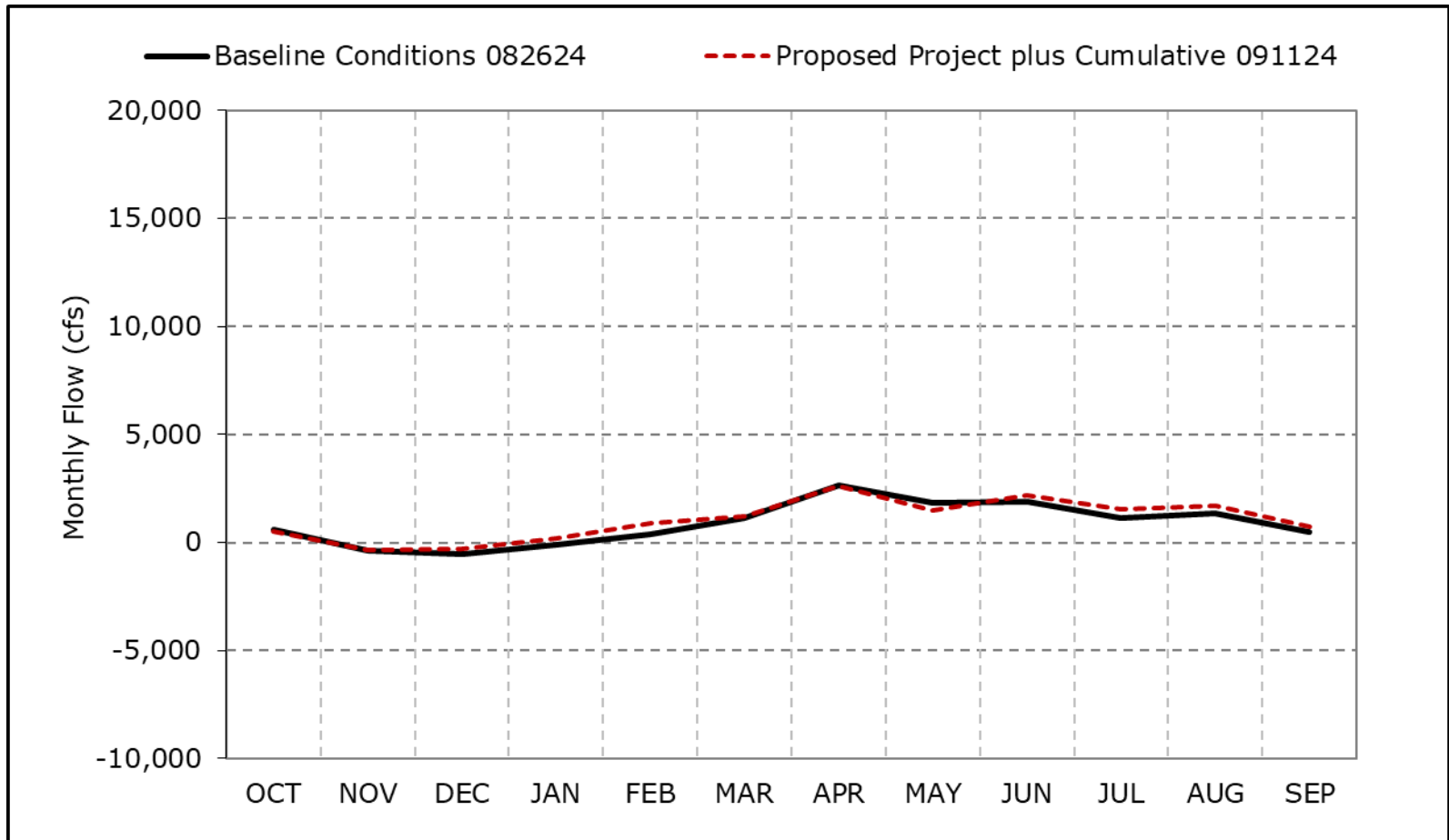


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-7f. Qwest, Critical Year Average Flow

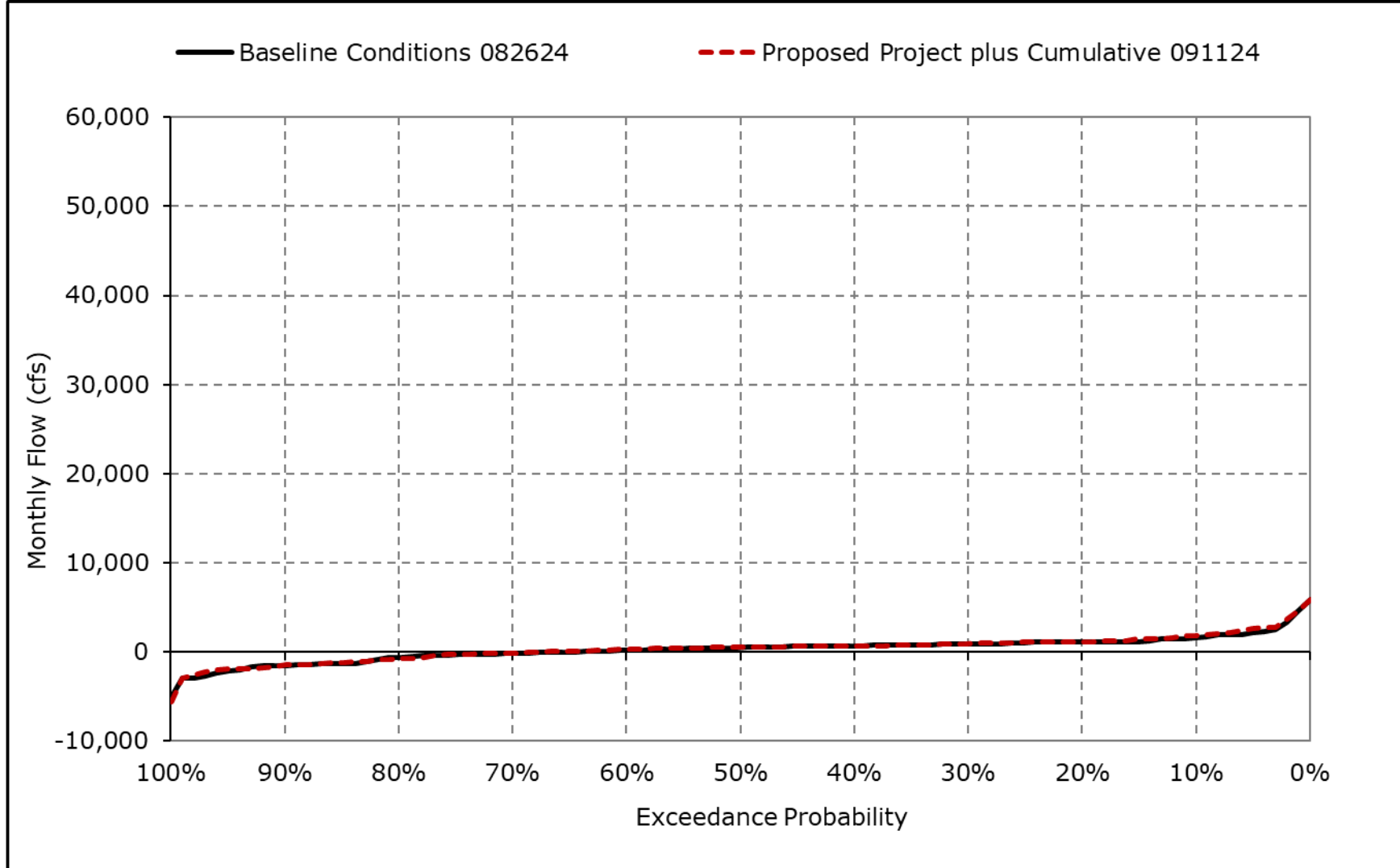


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

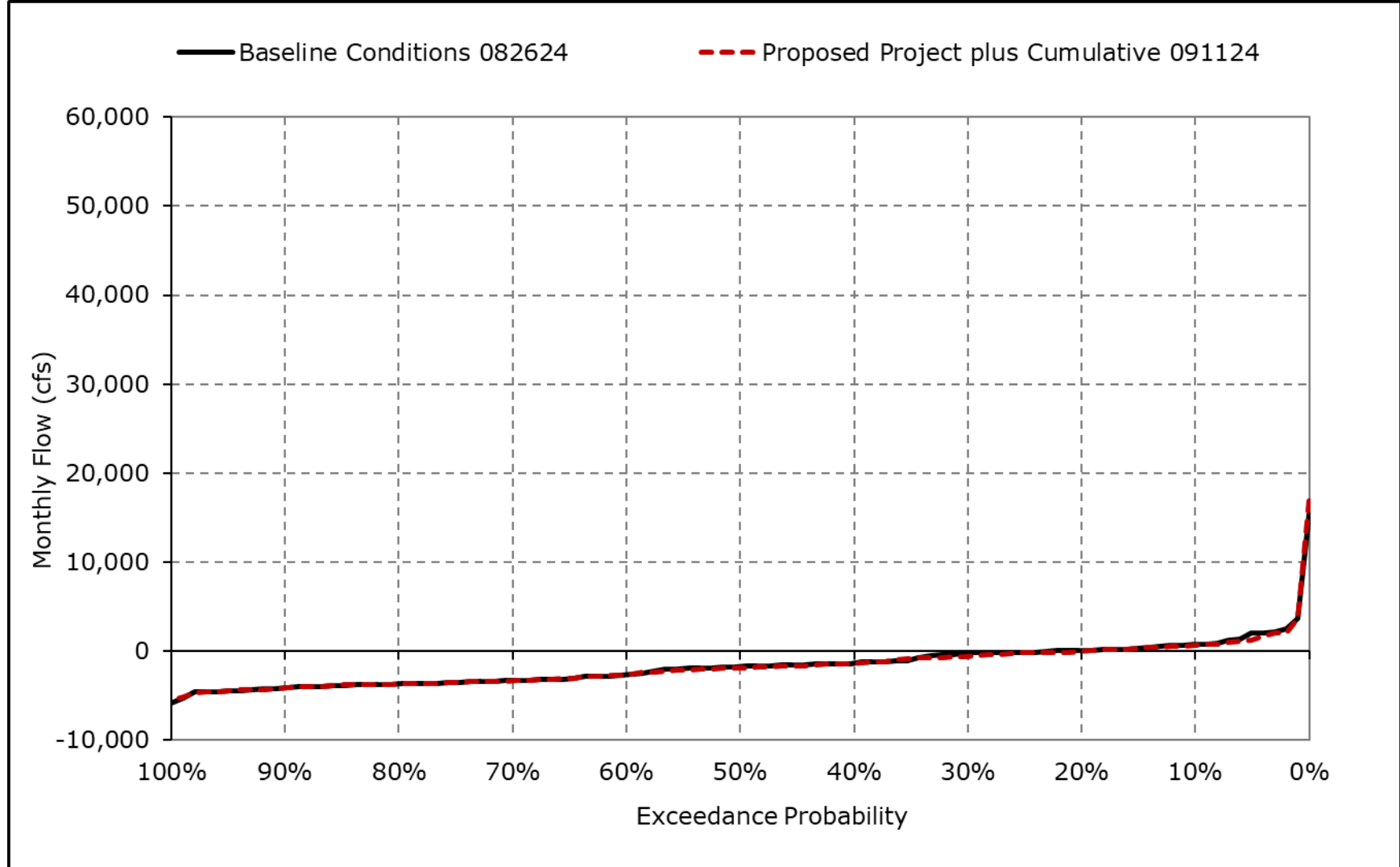
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7g. Qwest, October



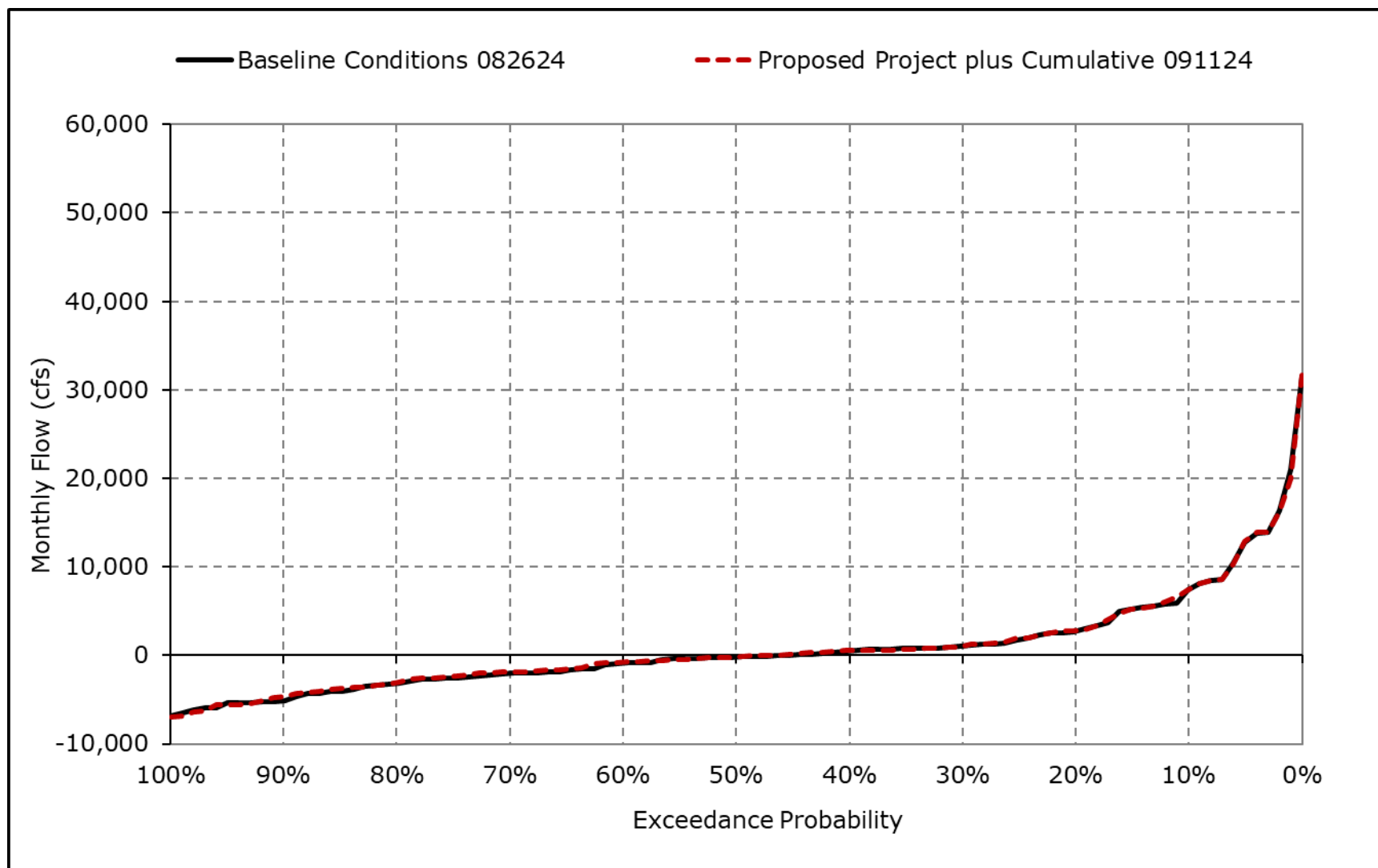
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7h. Qwest, November



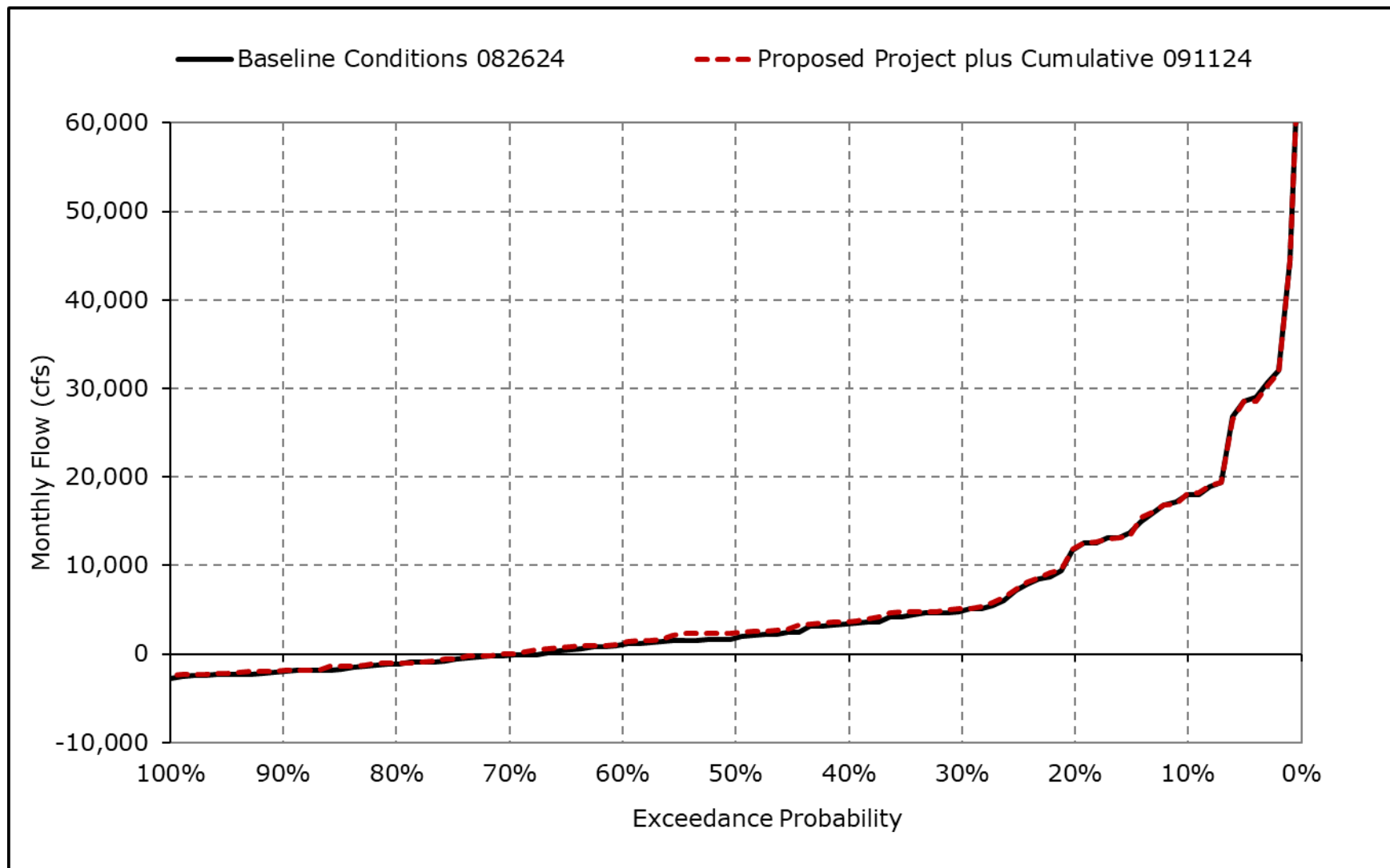
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7i. Qwest, December



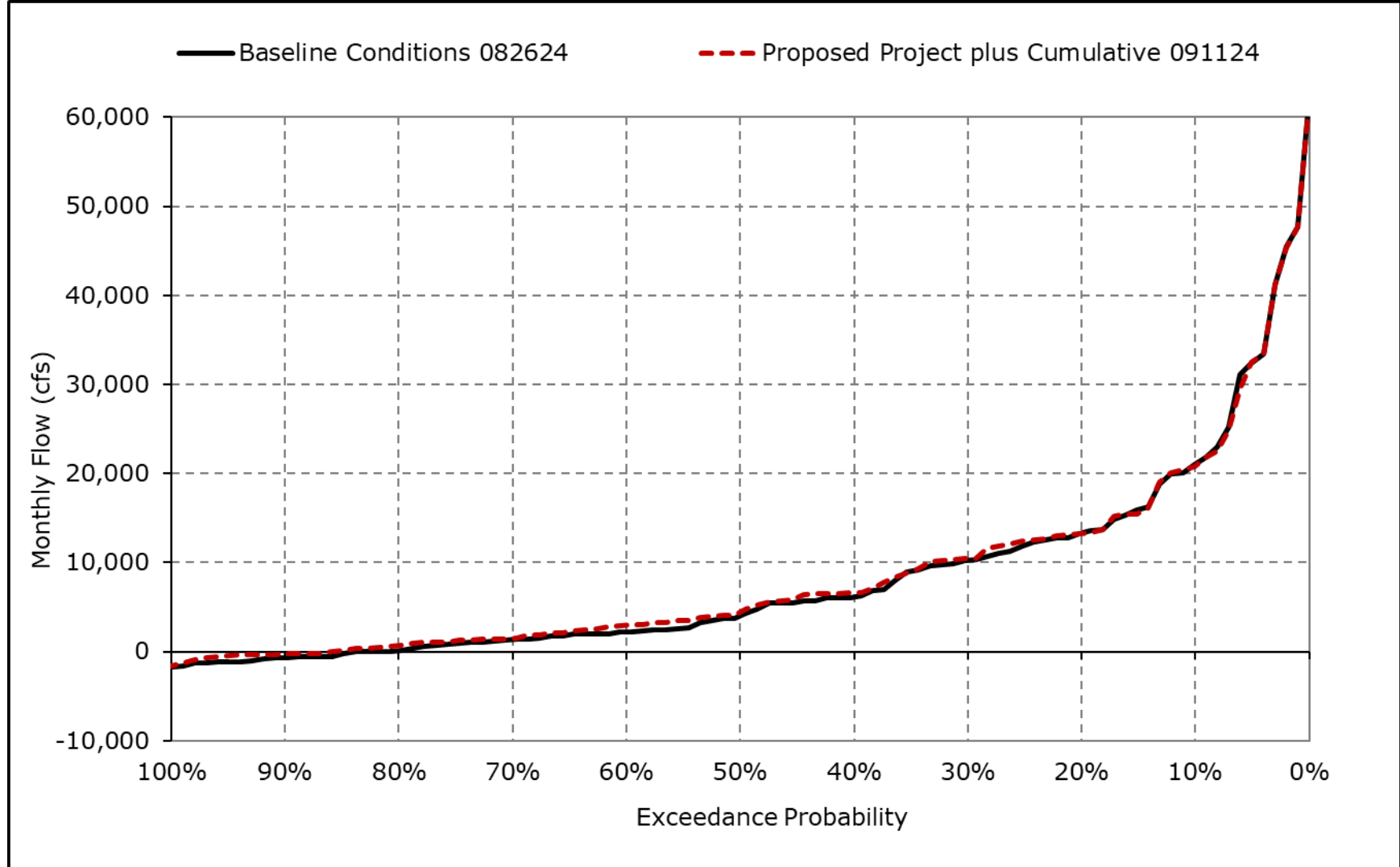
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7j. Qwest, January



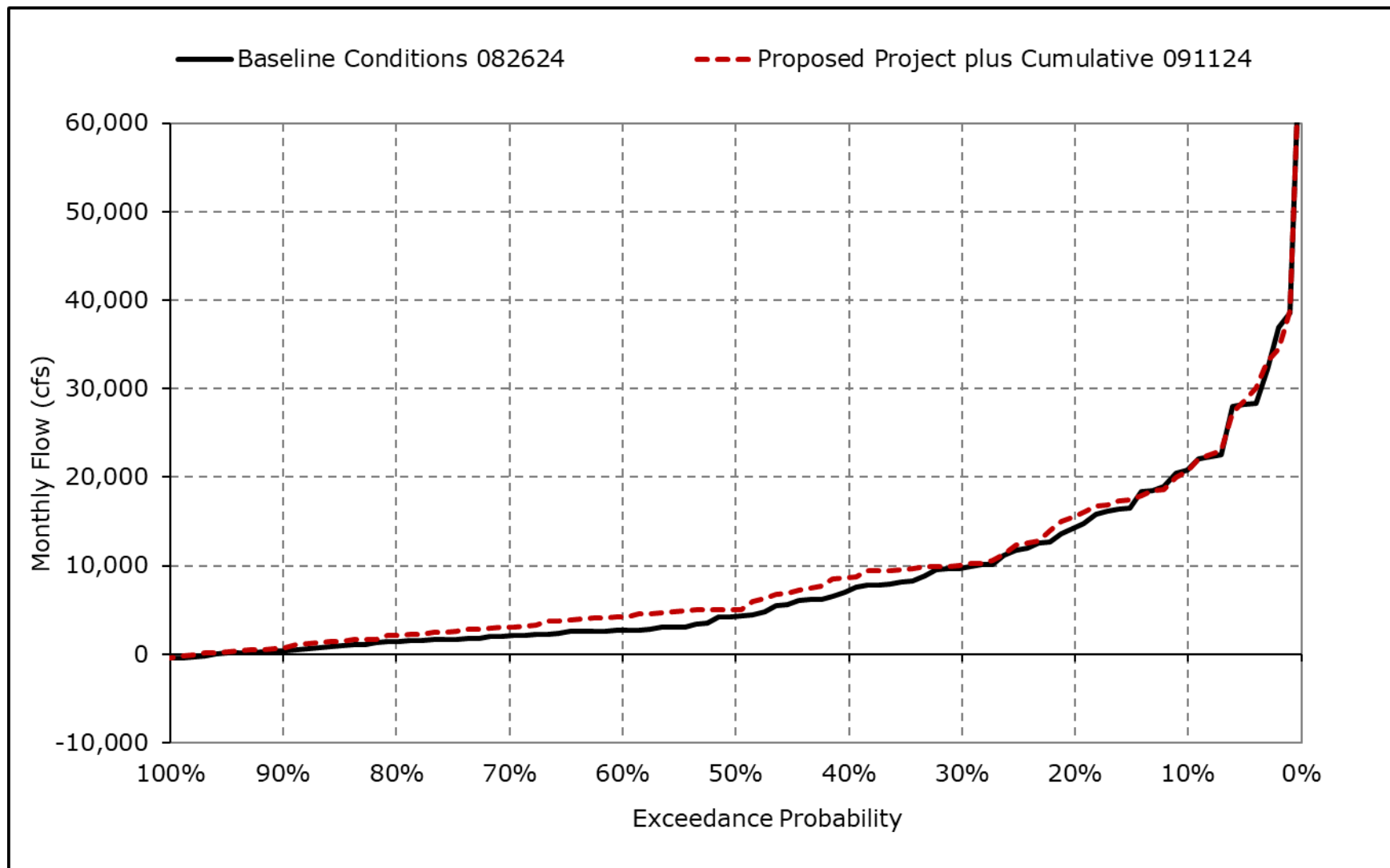
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7k. Qwest, February



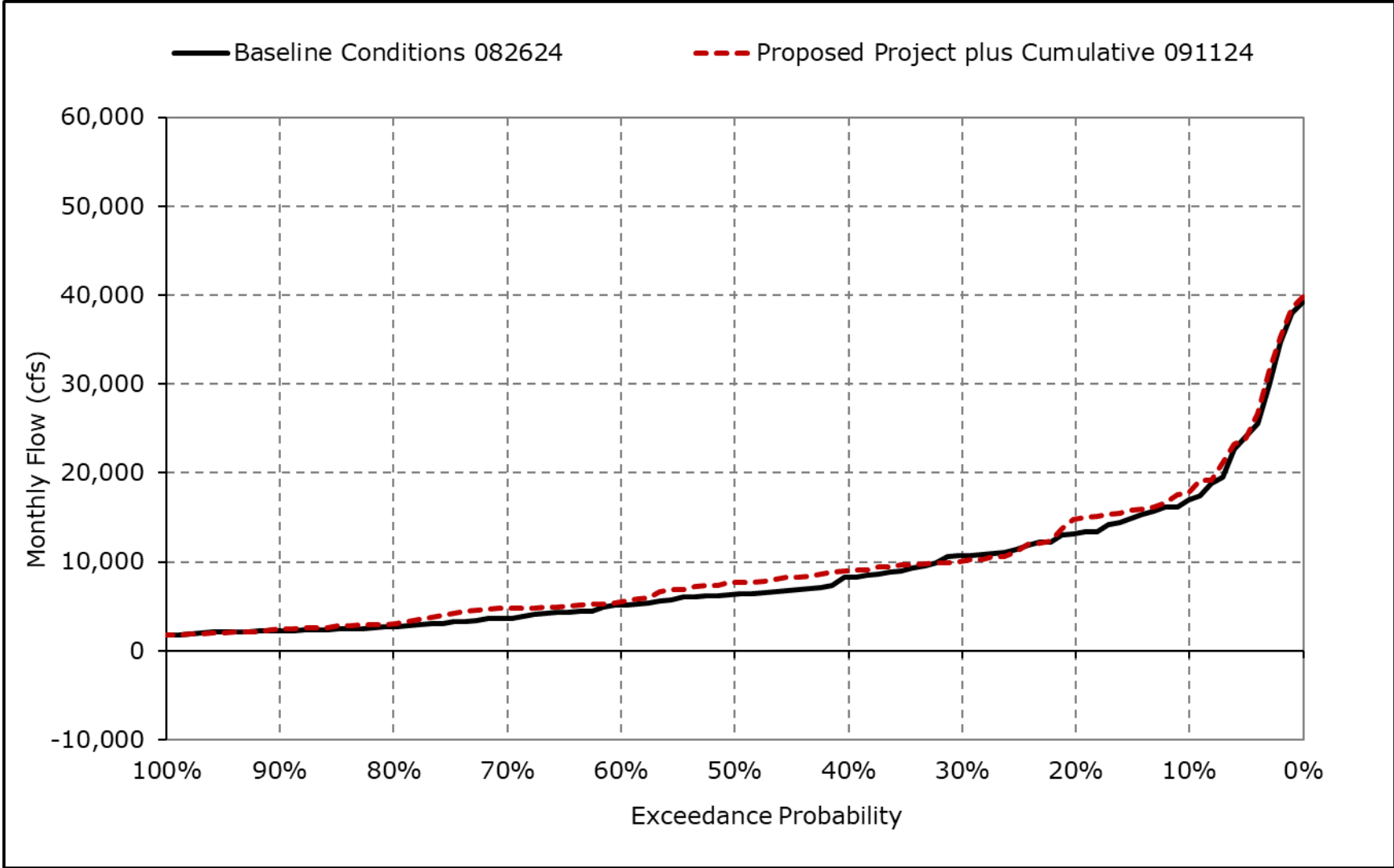
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7I. Qwest, March



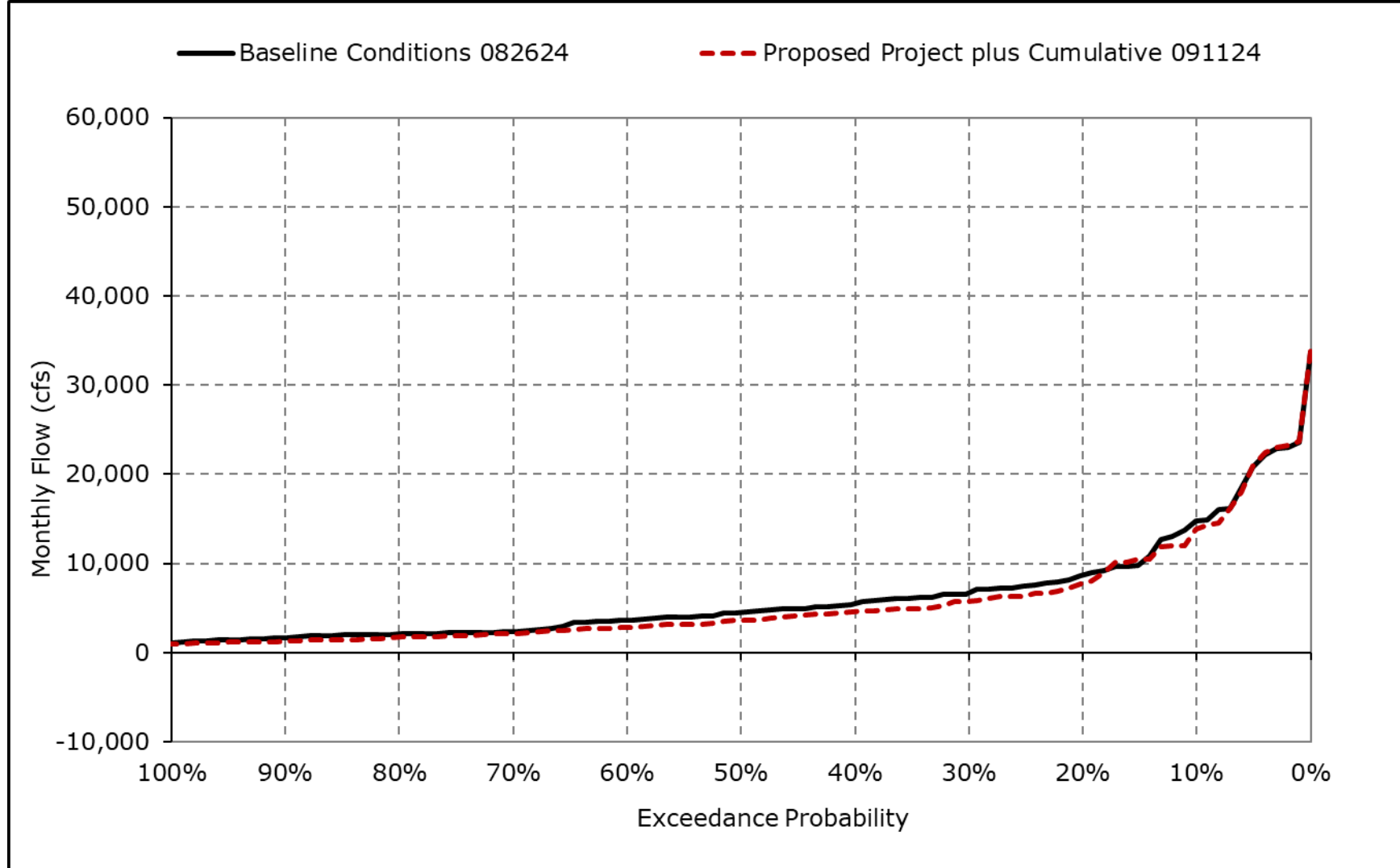
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7m. Qwest, April



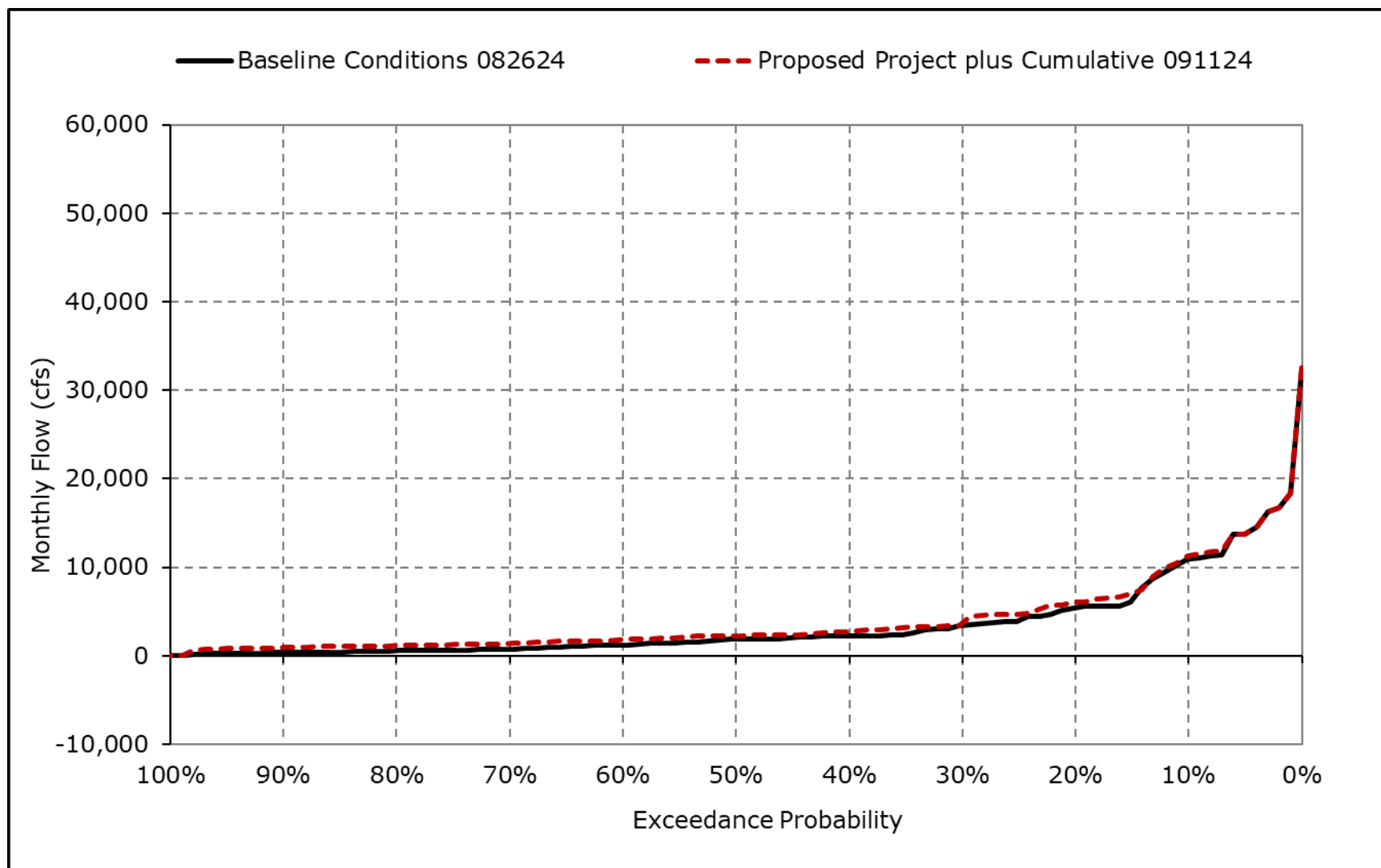
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7n. Qwest, May



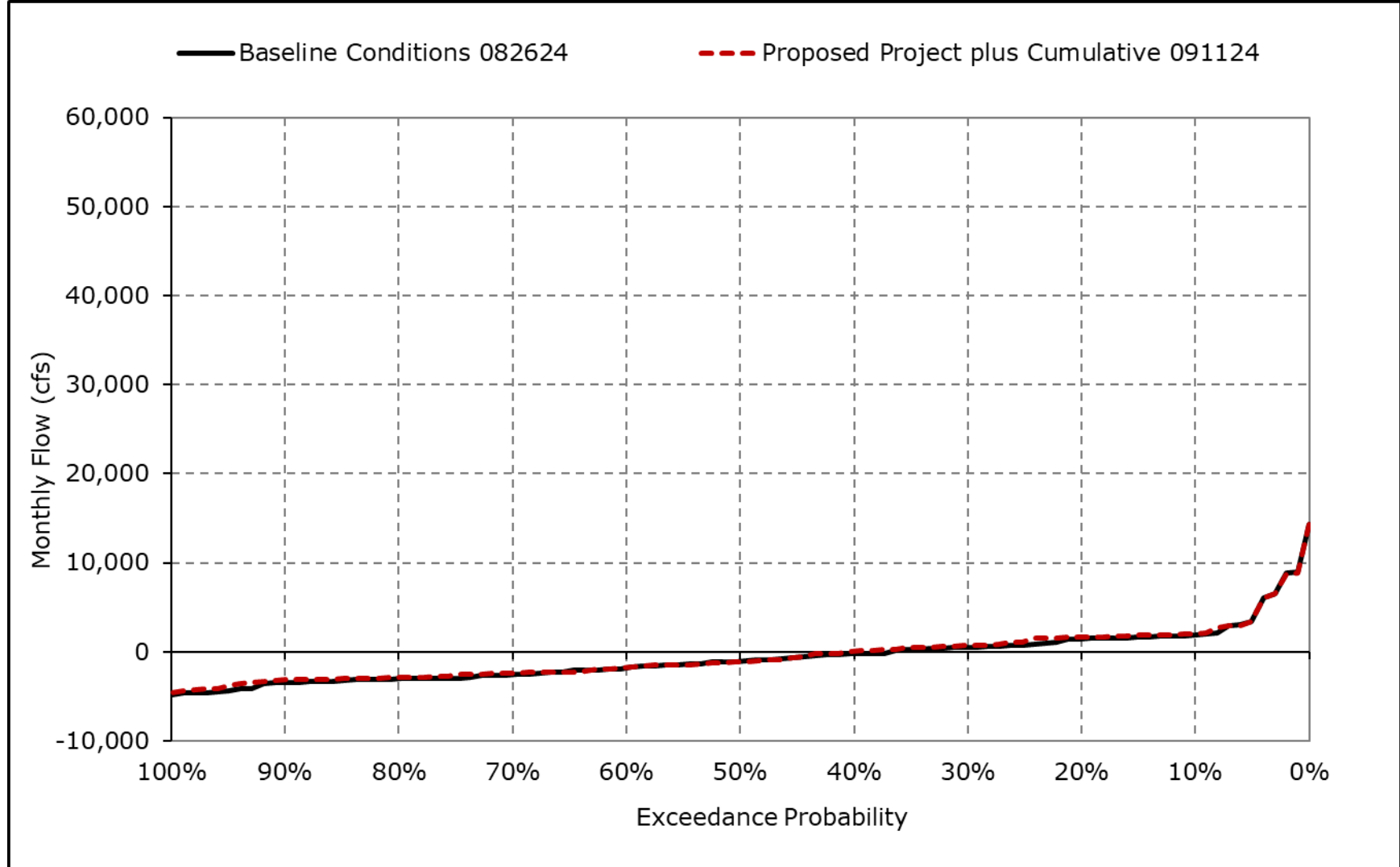
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7o. Qwest, June



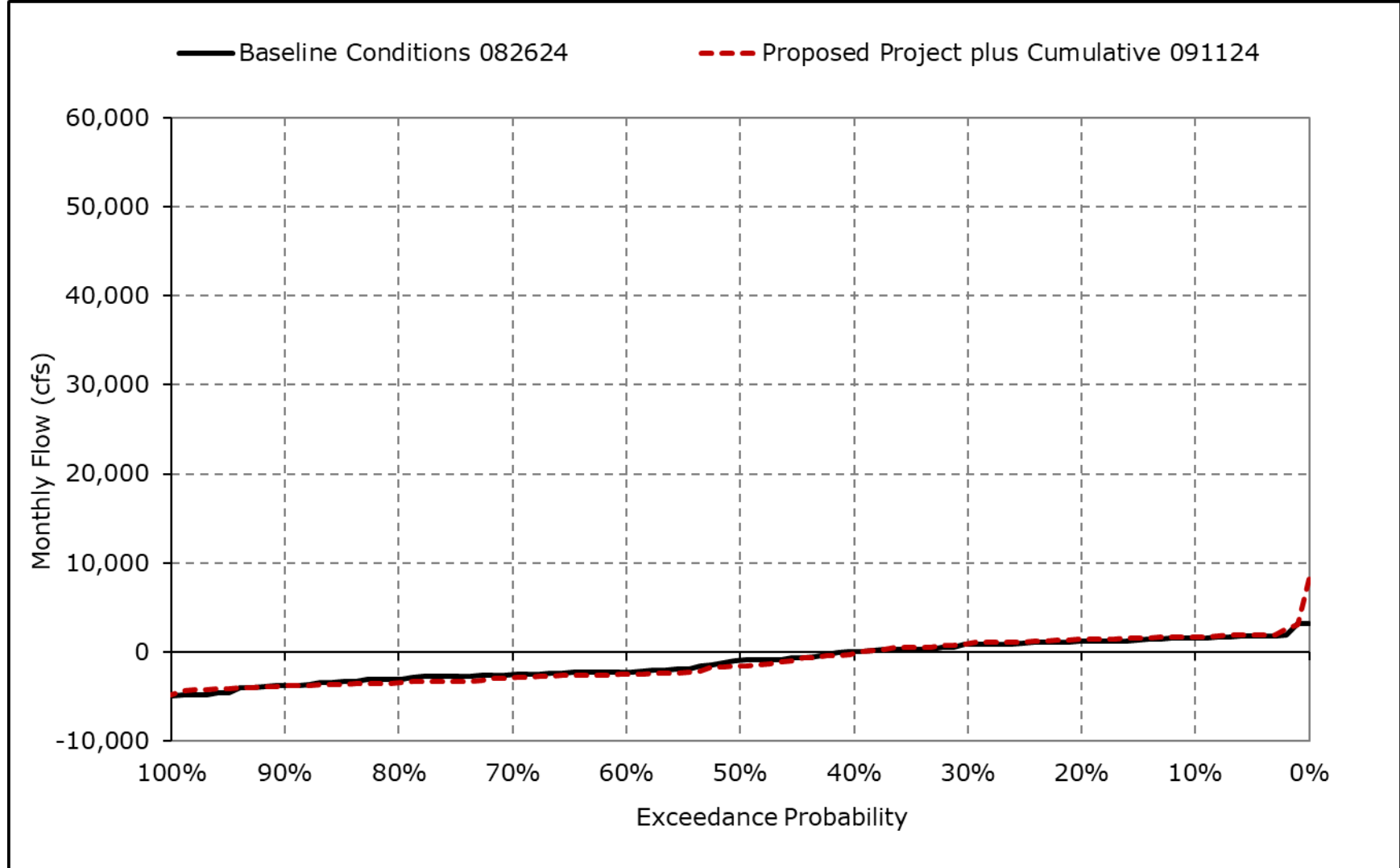
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7p. Qwest, July



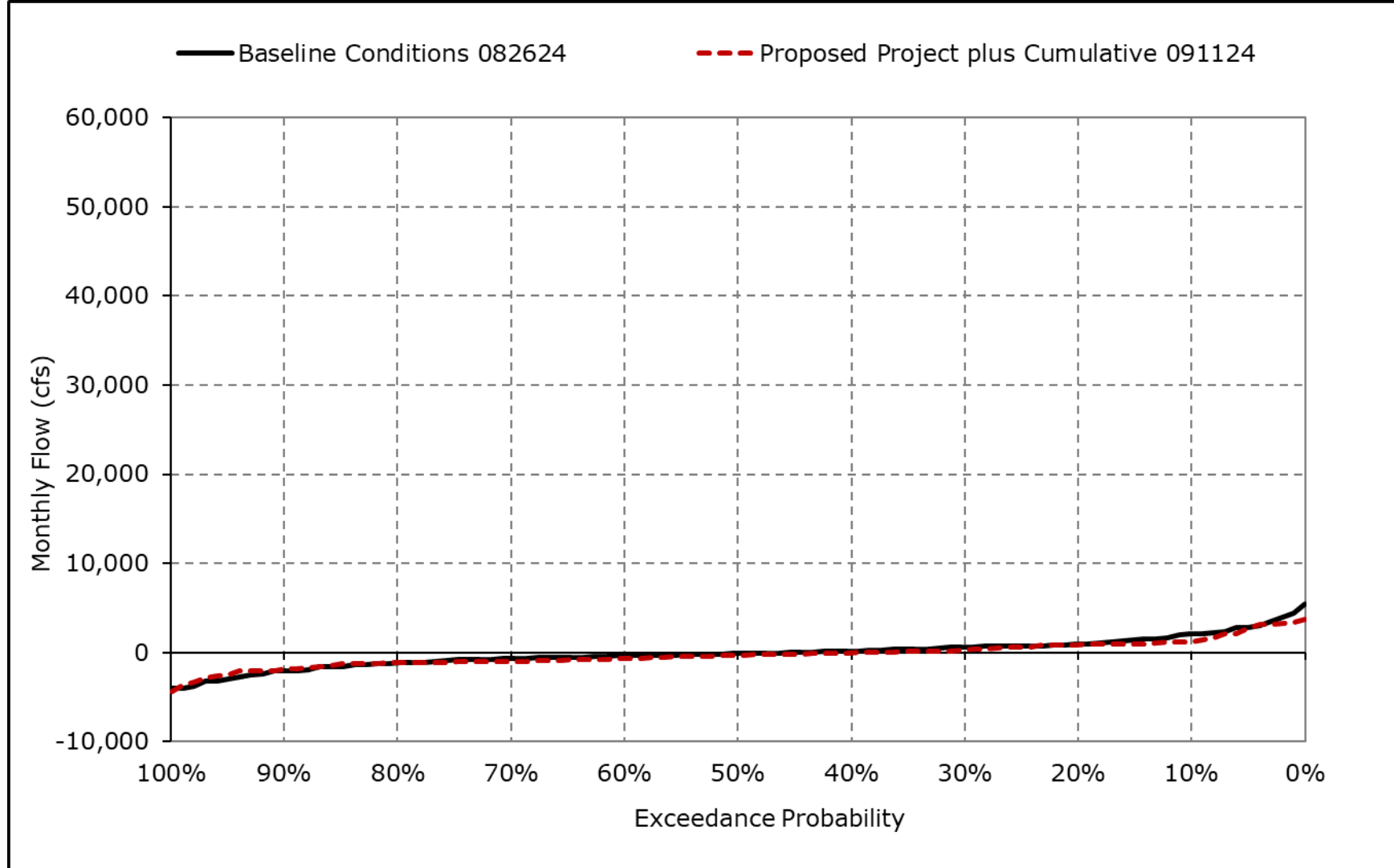
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-7q. Qwest, August



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

Figure 4G-3-7r. Qwest, September



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

Table 4G-3-8-1a. Delta Outflow, Baseline Conditions 082624, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,438	13,624	59,011	112,525	128,285	113,467	67,792	53,491	30,424	11,561	7,017	10,313
20% Exceedance	8,125	7,620	32,860	72,643	82,060	69,795	47,729	35,950	20,512	9,699	6,189	10,156
30% Exceedance	7,969	6,523	20,116	39,101	59,783	52,002	30,353	24,404	12,184	9,053	5,659	10,000
40% Exceedance	7,410	6,042	12,428	28,243	43,041	41,303	24,709	18,883	8,736	8,512	5,488	9,074
50% Exceedance	4,834	5,708	8,699	20,615	30,591	28,115	19,003	15,082	7,277	8,104	4,445	4,063
60% Exceedance	4,110	5,557	7,579	15,265	23,586	22,079	15,133	12,221	7,100	6,522	4,000	3,363
70% Exceedance	4,000	5,121	6,728	12,146	17,910	17,542	12,270	10,627	6,856	5,078	3,979	3,000
80% Exceedance	4,000	4,782	5,931	8,989	12,959	13,029	10,835	9,334	6,081	5,000	3,500	3,000
90% Exceedance	3,000	4,500	5,126	7,694	10,210	9,626	9,551	6,727	4,000	4,000	3,000	3,000
Full Simulation Period Average ^a	6,352	7,865	21,002	42,437	52,812	47,134	30,428	22,855	13,987	8,027	5,119	6,521
Wet Water Years (32%)	7,745	11,099	39,990	89,212	105,597	93,358	58,766	41,598	27,036	11,668	7,242	11,223
Above Normal Water Years (9%)	6,386	6,784	16,470	51,796	54,040	53,952	29,011	24,476	14,645	9,746	6,338	10,254
Below Normal Water Years (20%)	6,331	6,484	12,969	22,072	35,101	31,308	22,225	18,703	8,338	8,053	4,286	3,845
Dry Water Years (21%)	5,797	6,817	12,536	13,473	22,336	19,338	13,514	11,380	6,903	5,165	3,941	3,321
Critical Water Years (18%)	4,530	5,411	8,318	11,023	13,594	11,564	9,606	6,725	5,000	4,004	3,033	3,002

Table 4G-3-8-1b. Delta Outflow, Proposed Project plus Cumulative 091124, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,594	13,476	59,807	112,939	126,913	115,446	68,867	53,391	31,293	10,414	5,966	10,984
20% Exceedance	8,128	7,510	36,628	72,907	82,193	69,431	50,366	37,482	21,207	9,199	5,532	10,313
30% Exceedance	7,969	6,540	19,895	39,760	60,495	53,299	32,821	25,277	13,102	8,998	5,369	10,035
40% Exceedance	7,813	6,054	12,259	28,888	45,385	41,213	28,341	18,783	9,462	8,191	5,179	8,908
50% Exceedance	5,084	5,860	8,998	21,306	33,051	29,006	21,993	15,628	7,390	7,951	4,004	4,177
60% Exceedance	4,104	5,432	7,708	15,762	24,088	23,192	17,926	12,869	7,126	6,522	4,000	3,343
70% Exceedance	4,000	5,064	6,918	13,441	18,508	18,326	14,764	11,608	7,100	5,021	3,501	3,031
80% Exceedance	4,000	4,735	5,841	9,624	13,467	14,966	13,601	10,820	6,796	5,000	3,500	3,016
90% Exceedance	3,000	4,505	5,311	7,658	10,471	9,574	10,135	7,137	4,020	4,000	3,000	3,003
Full Simulation Period Average ^a	6,381	7,855	21,315	42,889	53,450	48,038	32,785	23,549	14,349	7,855	4,837	6,543
Wet Water Years (32%)	7,744	11,185	40,531	89,617	106,205	93,611	60,513	42,179	27,597	11,500	6,894	10,956
Above Normal Water Years (9%)	6,574	6,311	16,584	51,967	54,616	55,476	33,771	26,339	14,950	9,393	5,611	11,155
Below Normal Water Years (20%)	6,406	6,476	13,051	22,444	35,897	33,001	24,981	18,685	8,876	7,776	4,080	3,910
Dry Water Years (21%)	5,791	6,846	12,696	13,994	22,913	20,799	16,716	12,503	7,126	5,015	3,621	3,380
Critical Water Years (18%)	4,525	5,417	8,756	11,707	14,210	11,785	10,414	7,324	5,005	4,004	3,052	3,007

Table 4G-3-8-1c. Delta Outflow, Proposed Project plus Cumulative 091124 minus Baseline Conditions 082624, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	156	-148	796	413	-1,371	1,978	1,076	-99	869	-1,147	-1,051	672
20% Exceedance	3	-111	3,768	263	133	-364	2,637	1,532	695	-499	-658	156
30% Exceedance	0	17	-221	660	713	1,297	2,468	872	918	-55	-290	35
40% Exceedance	403	12	-169	645	2,344	-90	3,632	-100	726	-321	-309	-167
50% Exceedance	251	152	299	691	2,460	891	2,991	546	113	-153	-441	115
60% Exceedance	-5	-125	129	498	502	1,113	2,793	648	26	0	0	-20
70% Exceedance	0	-57	190	1,295	598	784	2,494	981	244	-57	-479	31
80% Exceedance	0	-47	-90	635	508	1,937	2,766	1,486	716	0	0	16
90% Exceedance	0	5	185	-37	261	-52	584	409	20	0	0	3
Full Simulation Period Average ^a	29	-10	312	452	638	903	2,356	693	362	-172	-282	22
Wet Water Years (32%)	-1	86	541	405	608	253	1,746	581	560	-168	-348	-267
Above Normal Water Years (9%)	188	-473	114	170	576	1,523	4,760	1,863	305	-352	-728	900
Below Normal Water Years (20%)	75	-9	83	371	795	1,693	2,757	-19	538	-276	-206	65
Dry Water Years (21%)	-6	29	160	521	577	1,460	3,202	1,123	223	-150	-320	59
Critical Water Years (18%)	-5	6	439	684	616	221	808	599	5	0	19	5

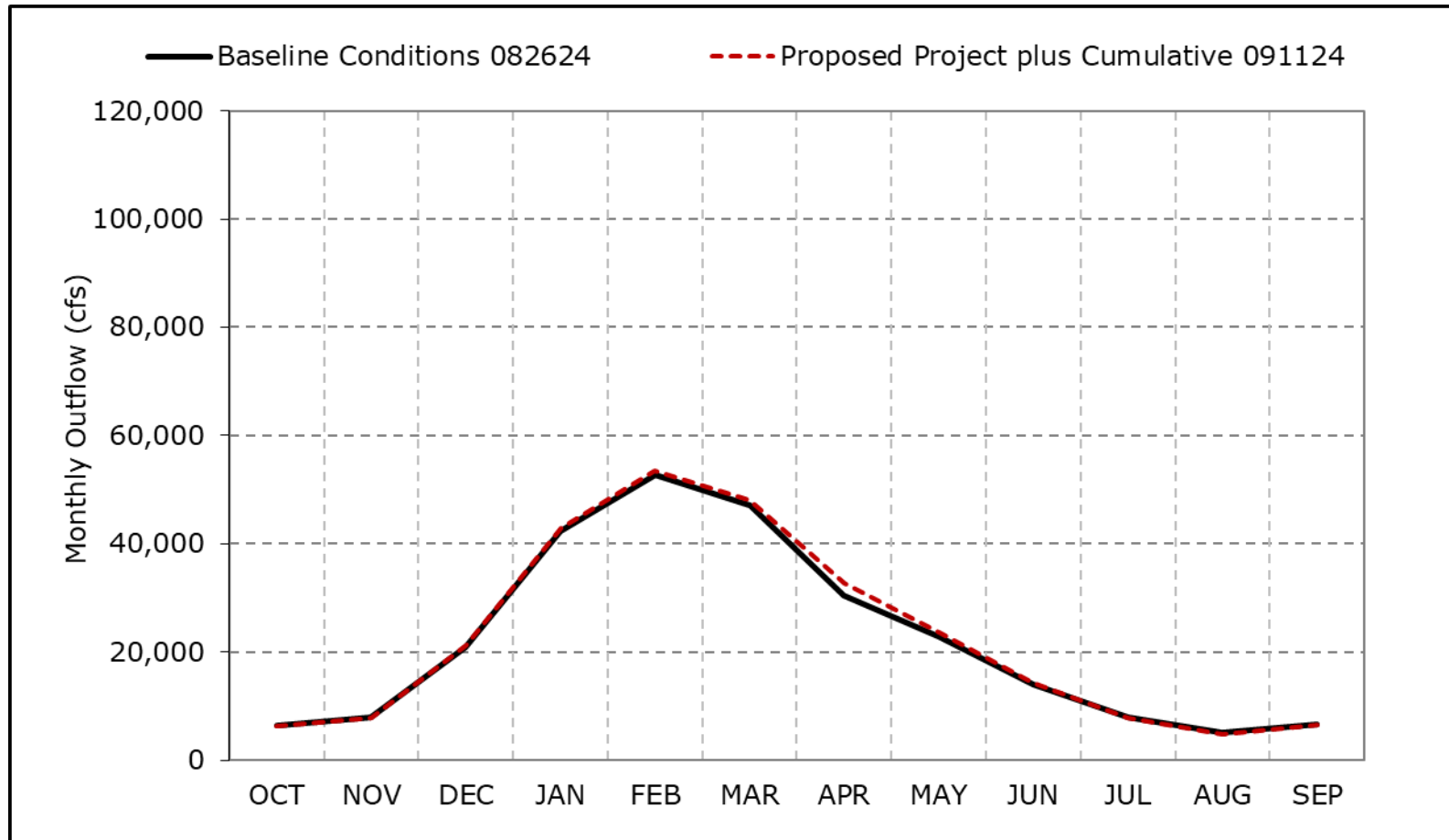
^a Based on the 100-year simulation period.

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

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

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

Figure 4G-3-8a. Delta Outflow, Long-Term Average Outflow

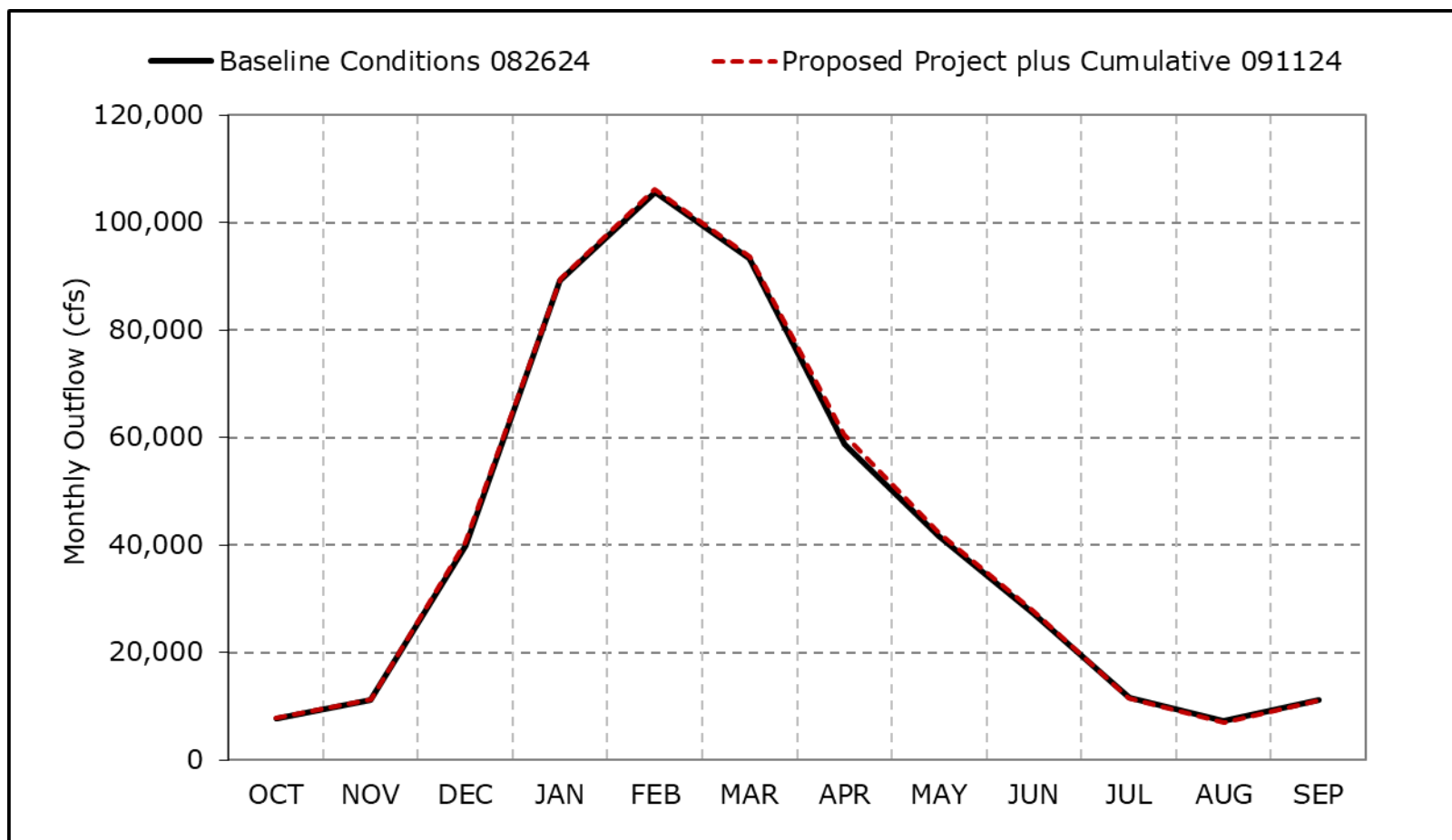


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-8b. Delta Outflow, Wet Year Average Outflow

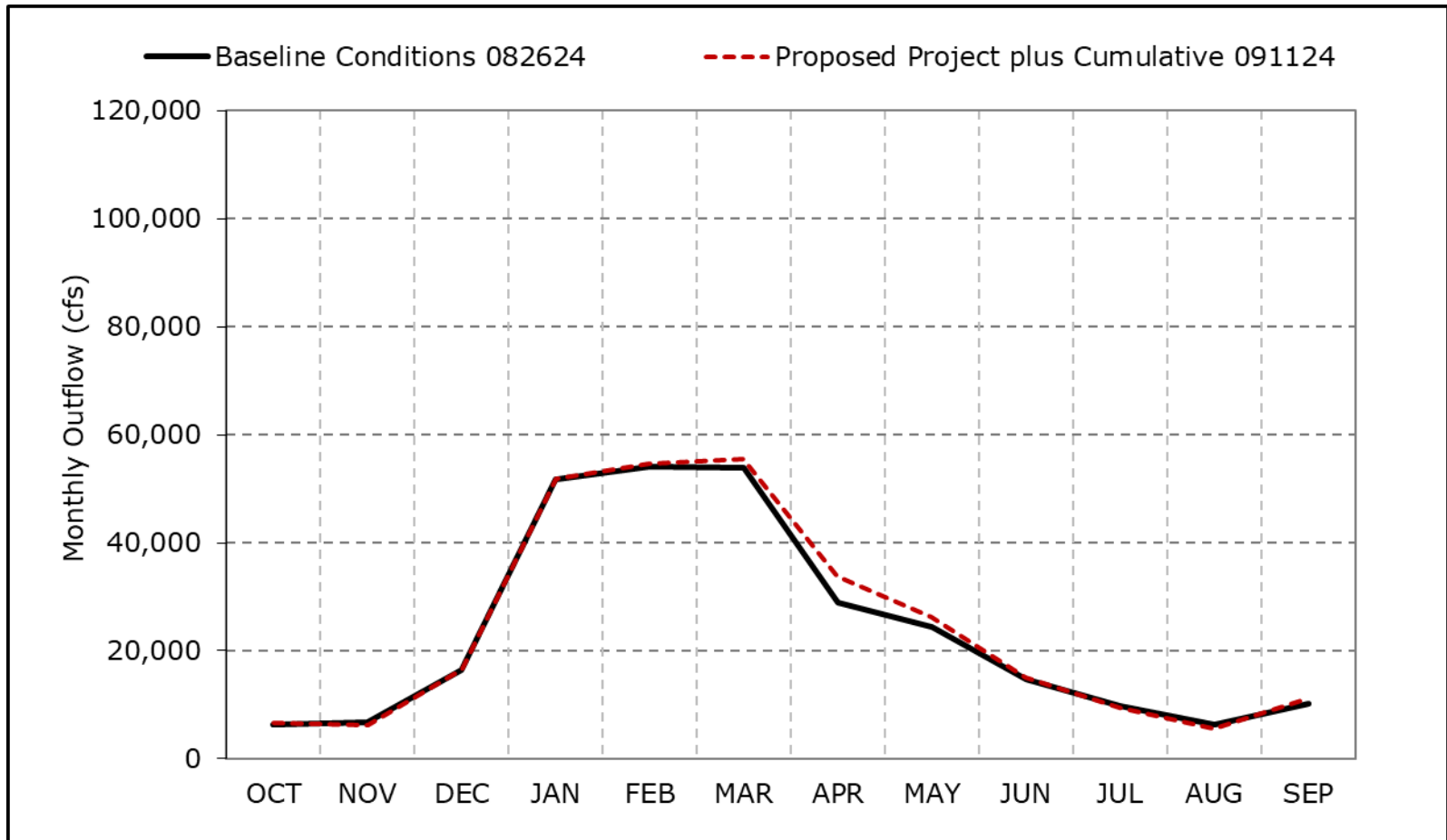


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-8c. Delta Outflow, Above Normal Year Average Outflow

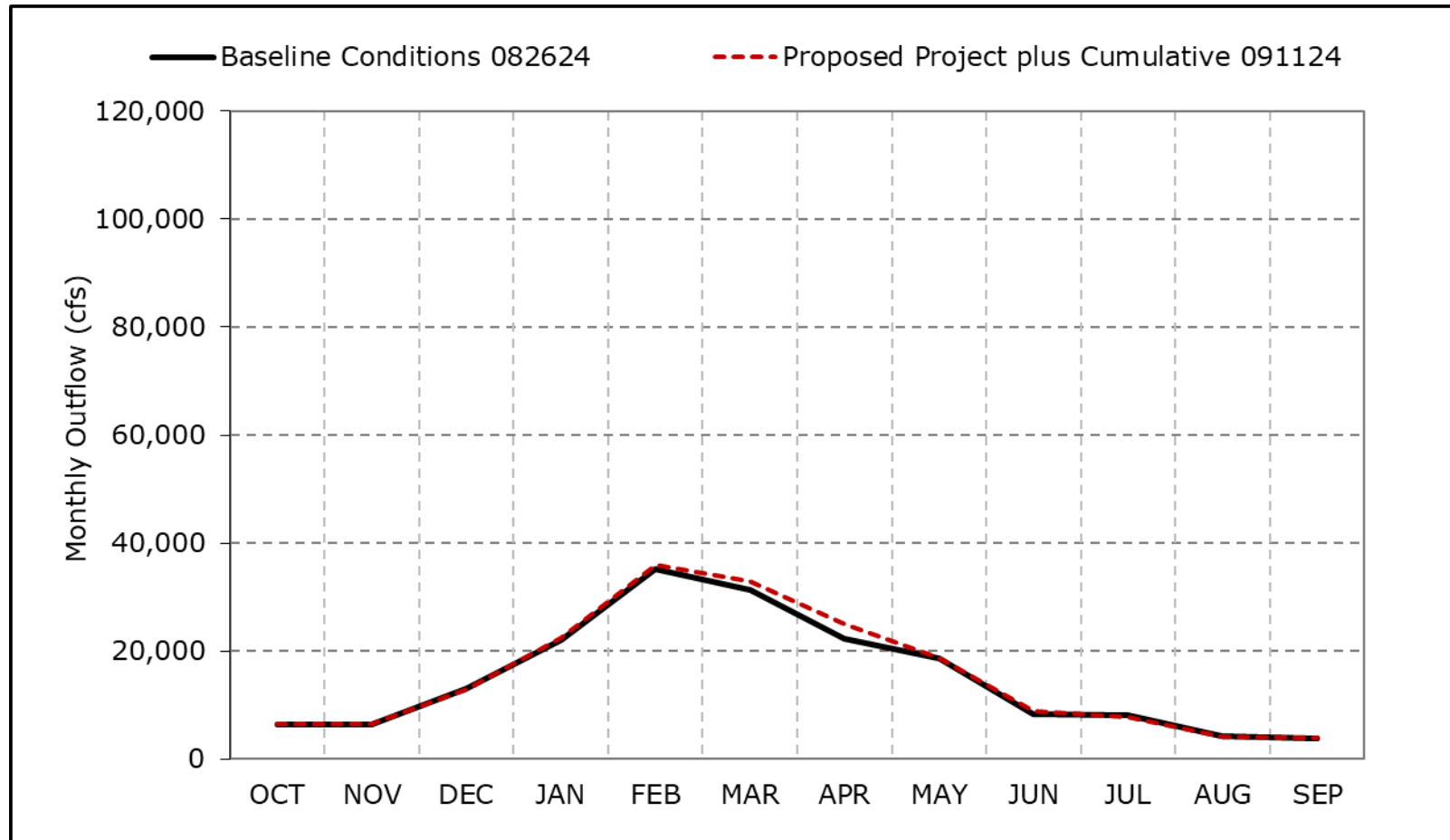


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-8d. Delta Outflow, Below Normal Year Average Outflow

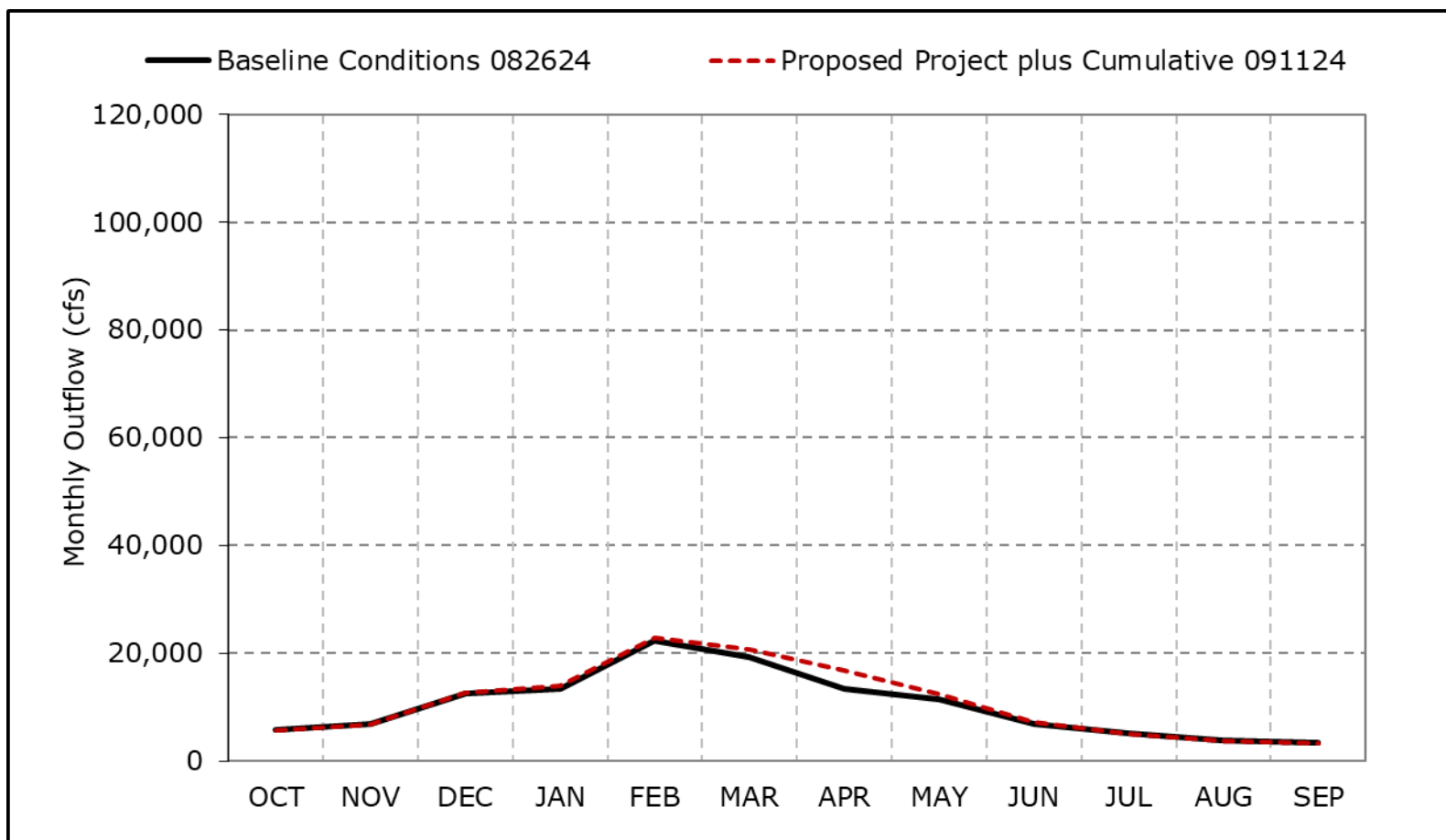


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-8e. Delta Outflow, Dry Year Average Outflow

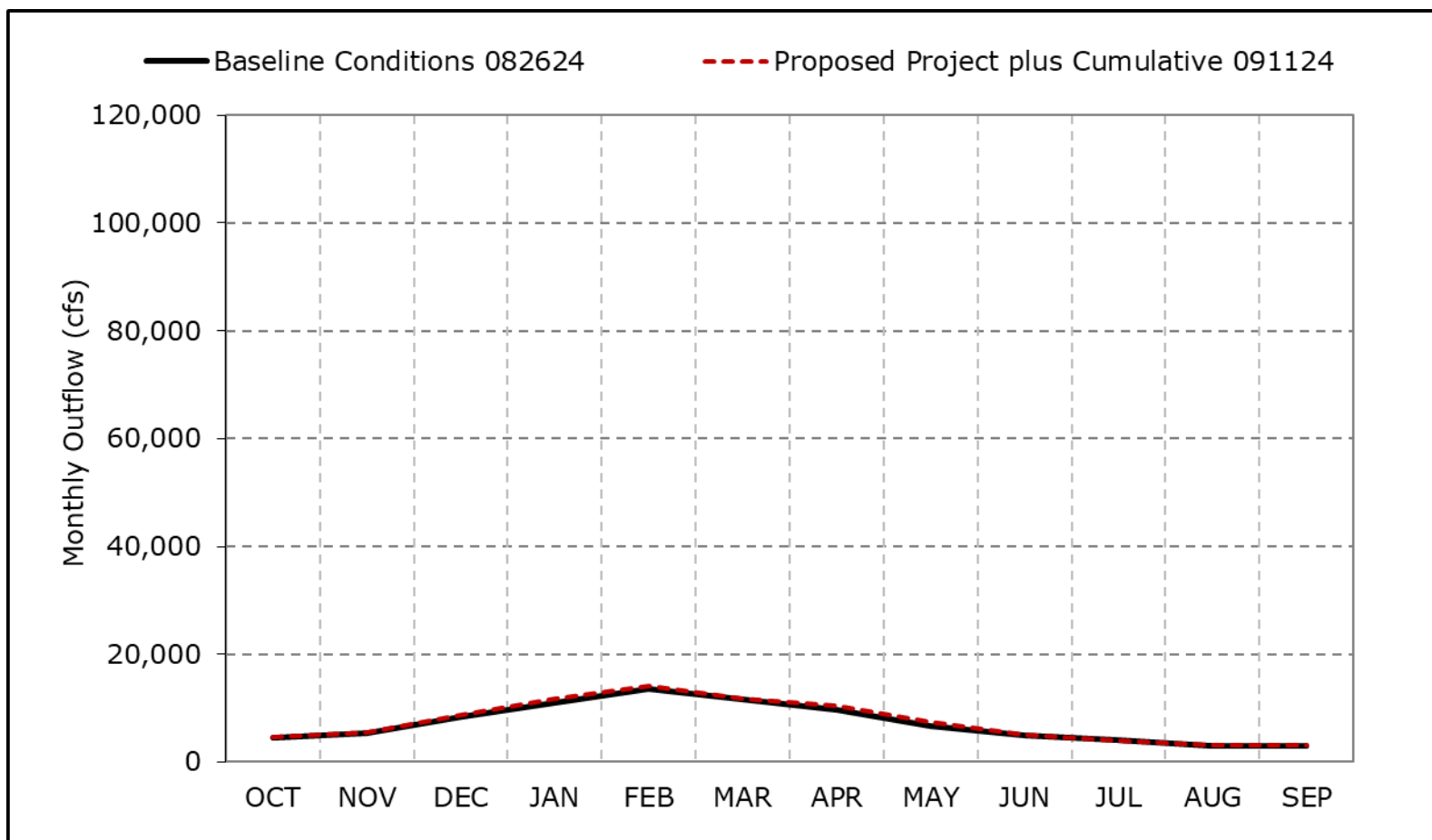


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

Figure 4G-3-8f. Delta Outflow, Critical Year Average Outflow

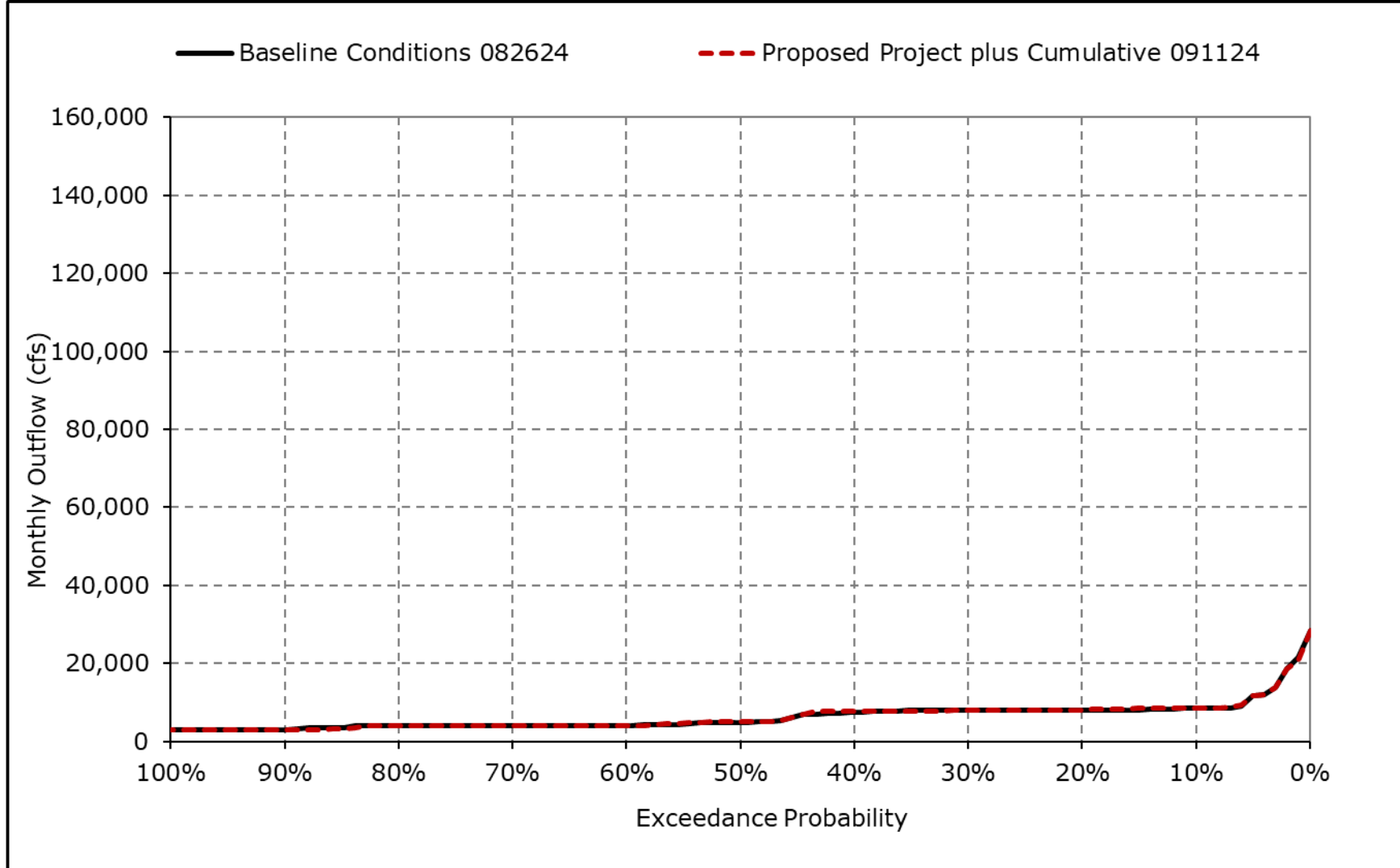


*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

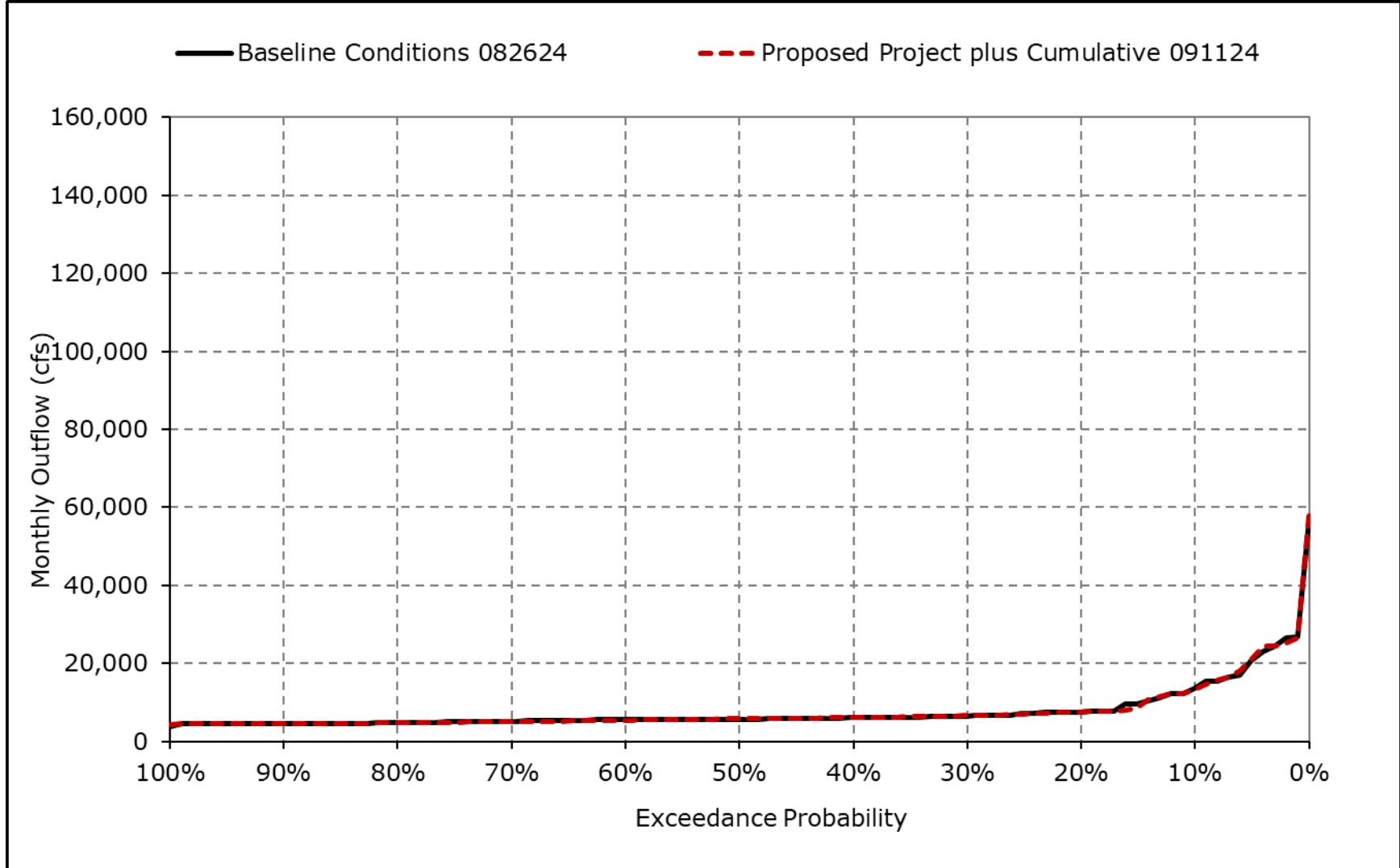
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8g. Delta Outflow, October



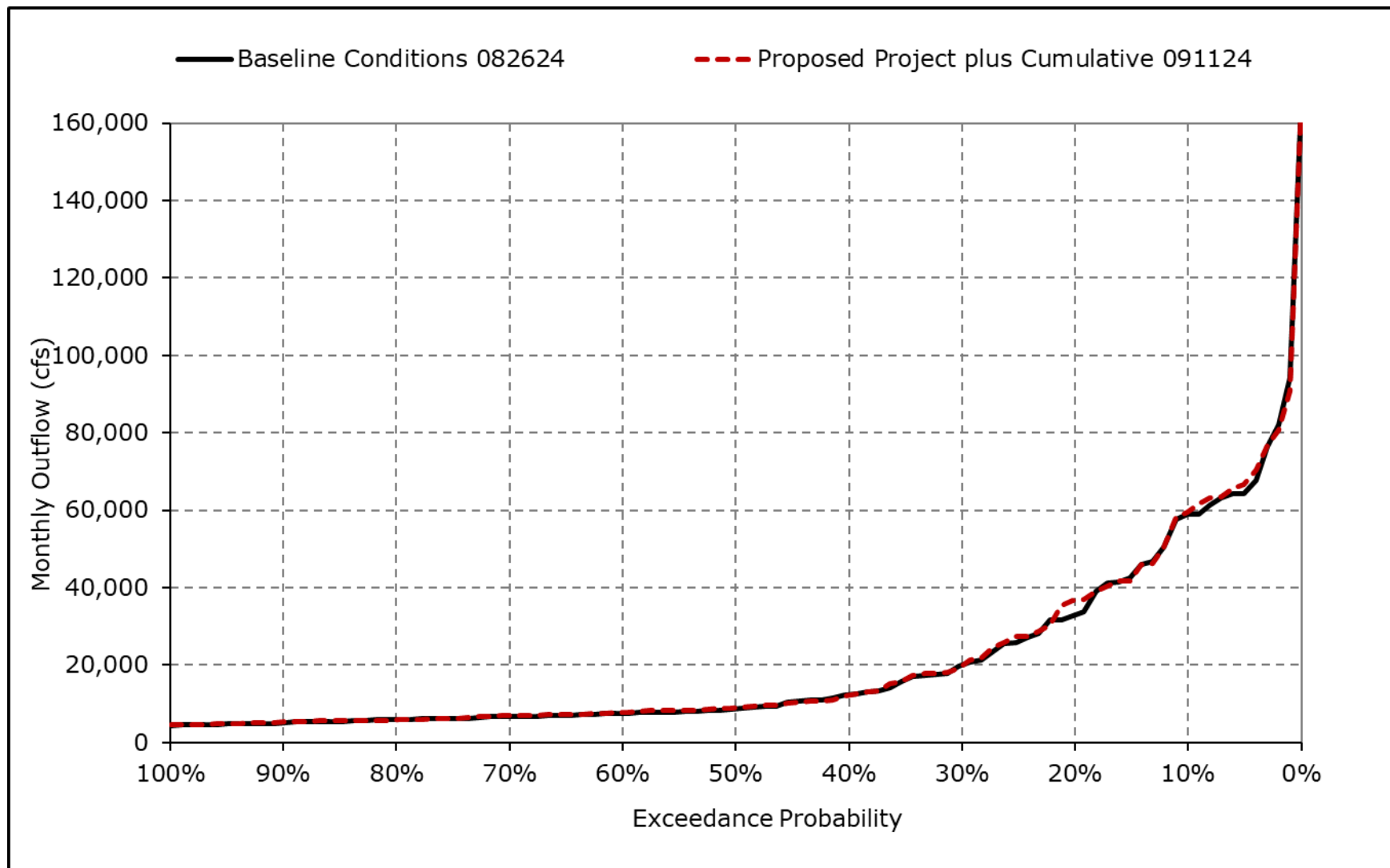
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8h. Delta Outflow, November



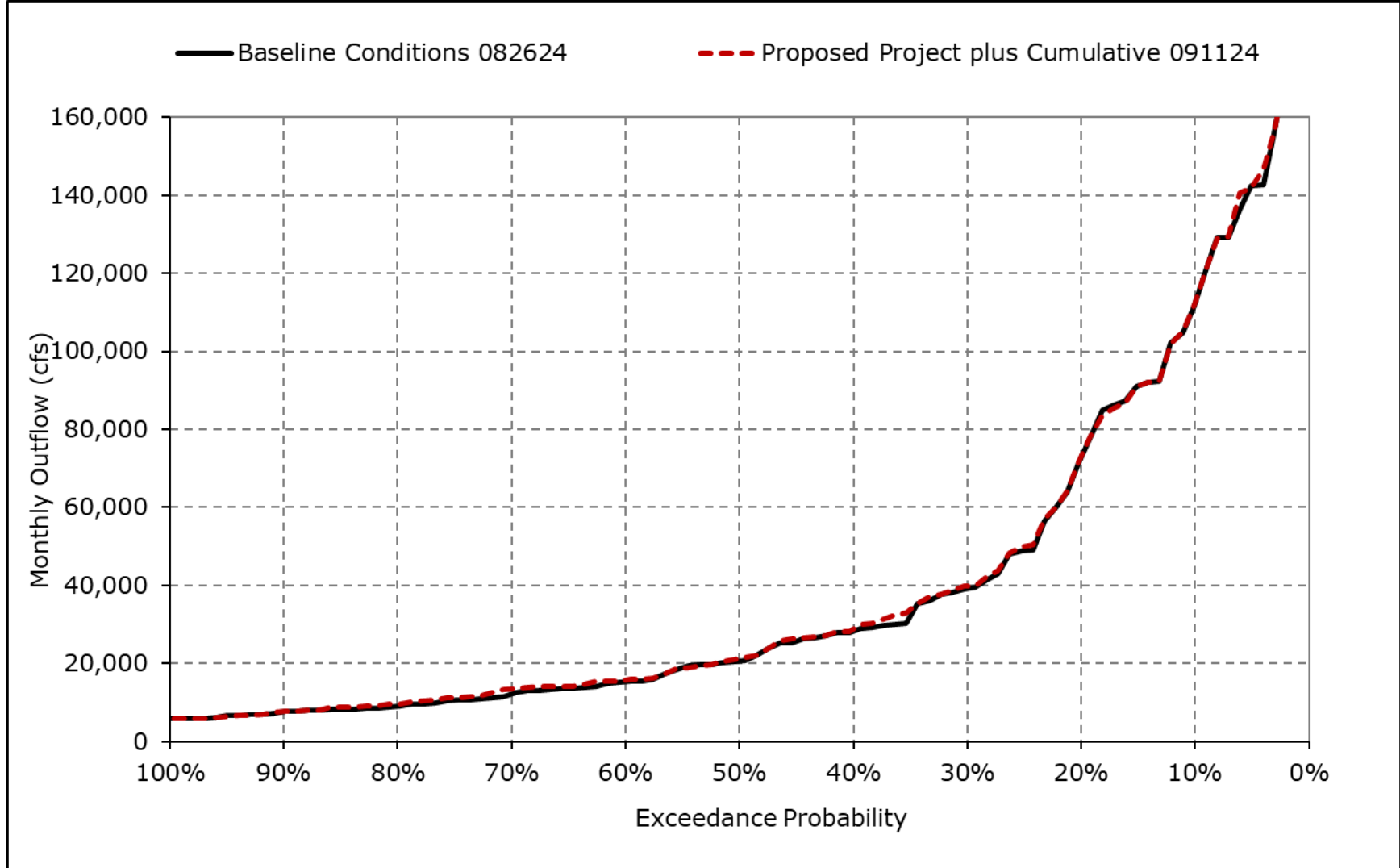
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8i. Delta Outflow, December



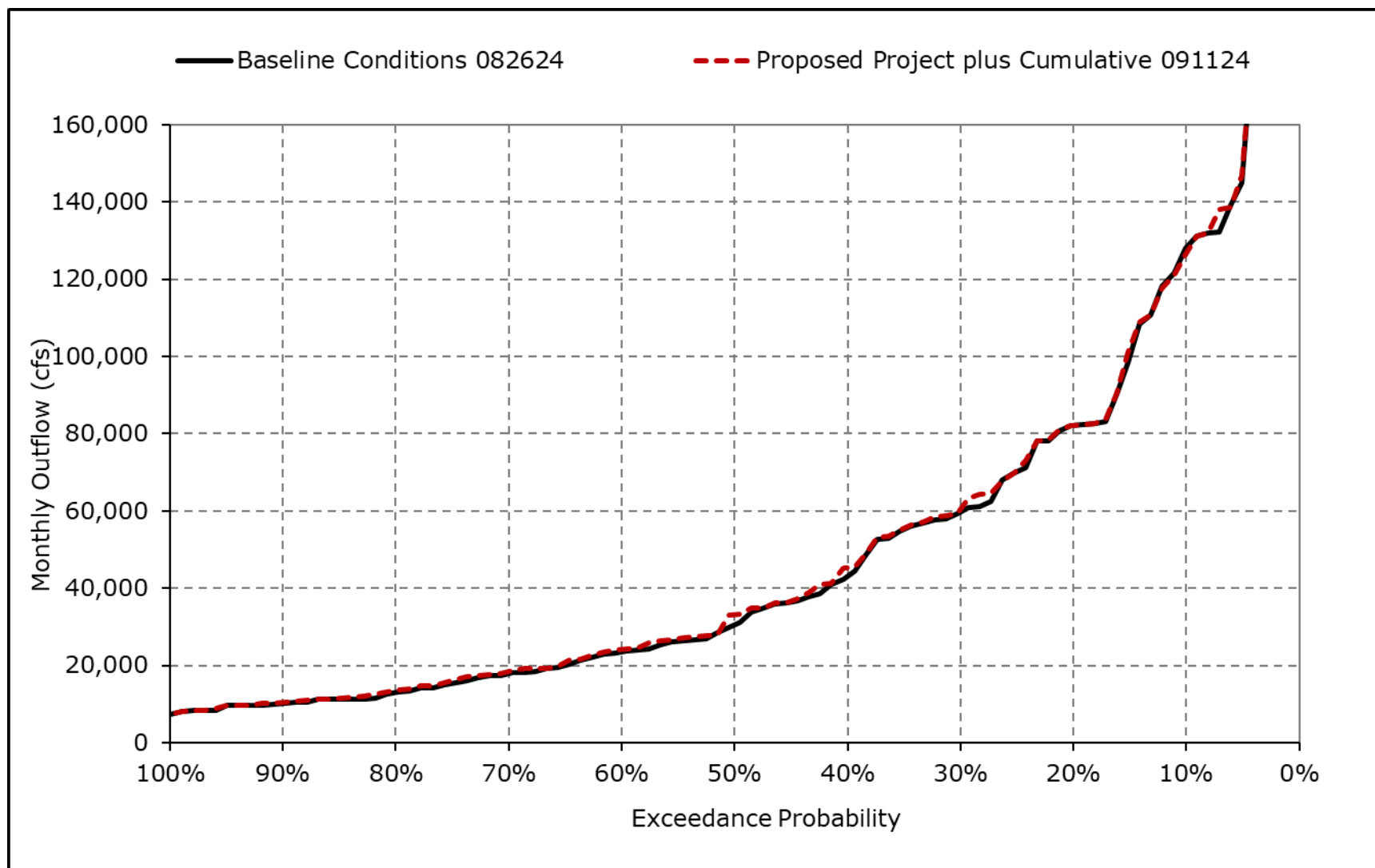
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8j. Delta Outflow, January



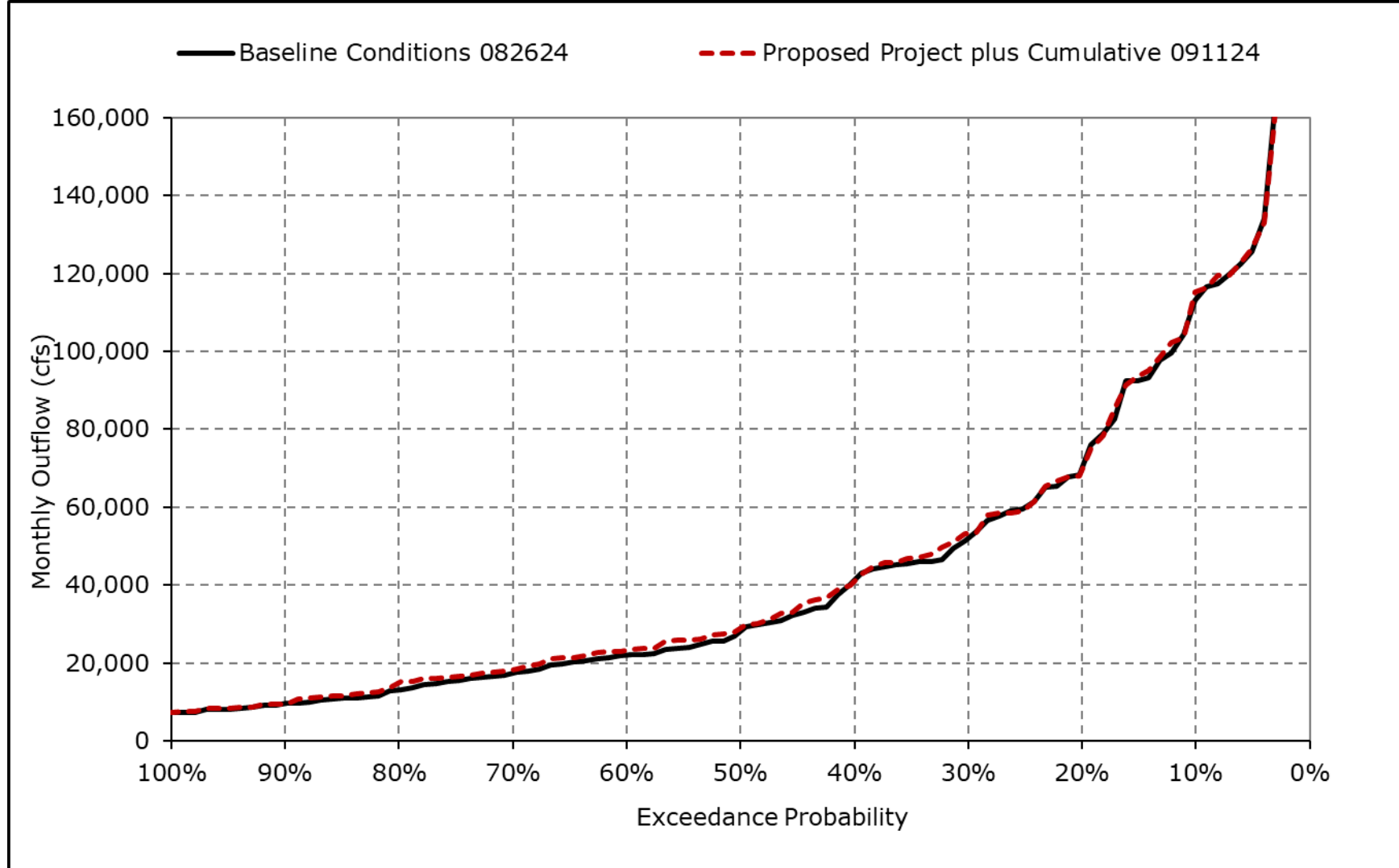
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8k. Delta Outflow, February



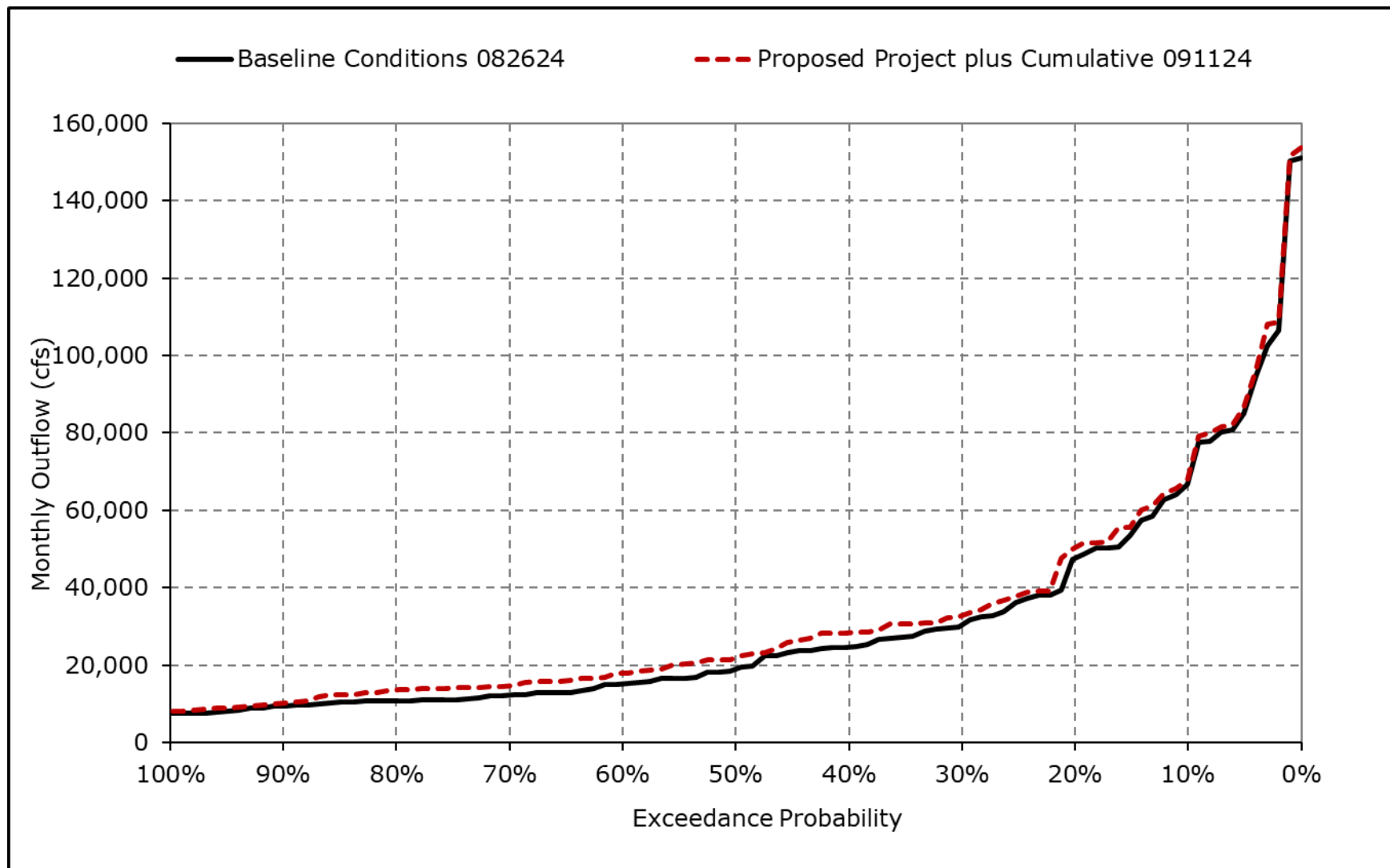
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8I. Delta Outflow, March



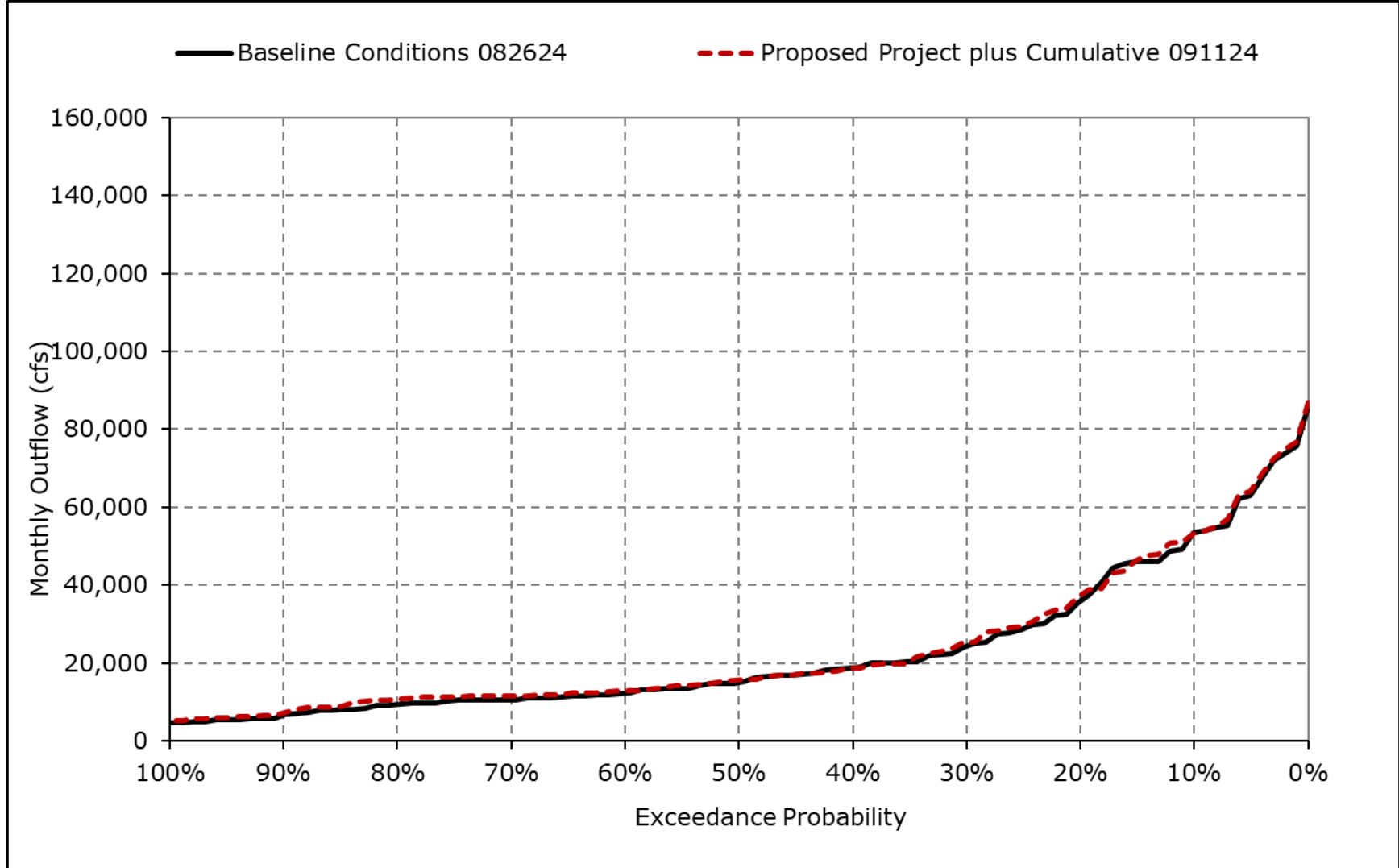
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8m. Delta Outflow, April



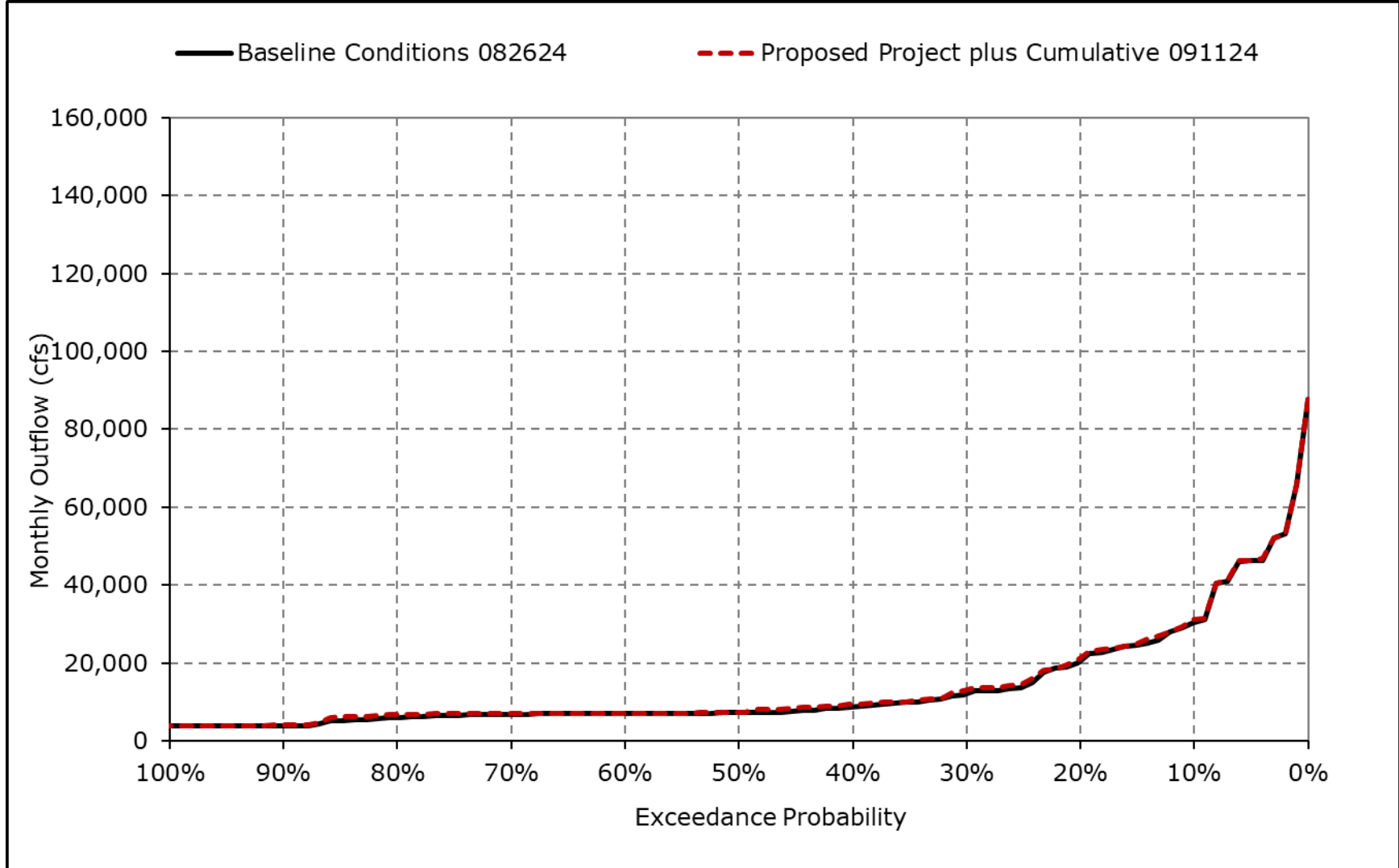
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8n. Delta Outflow, May



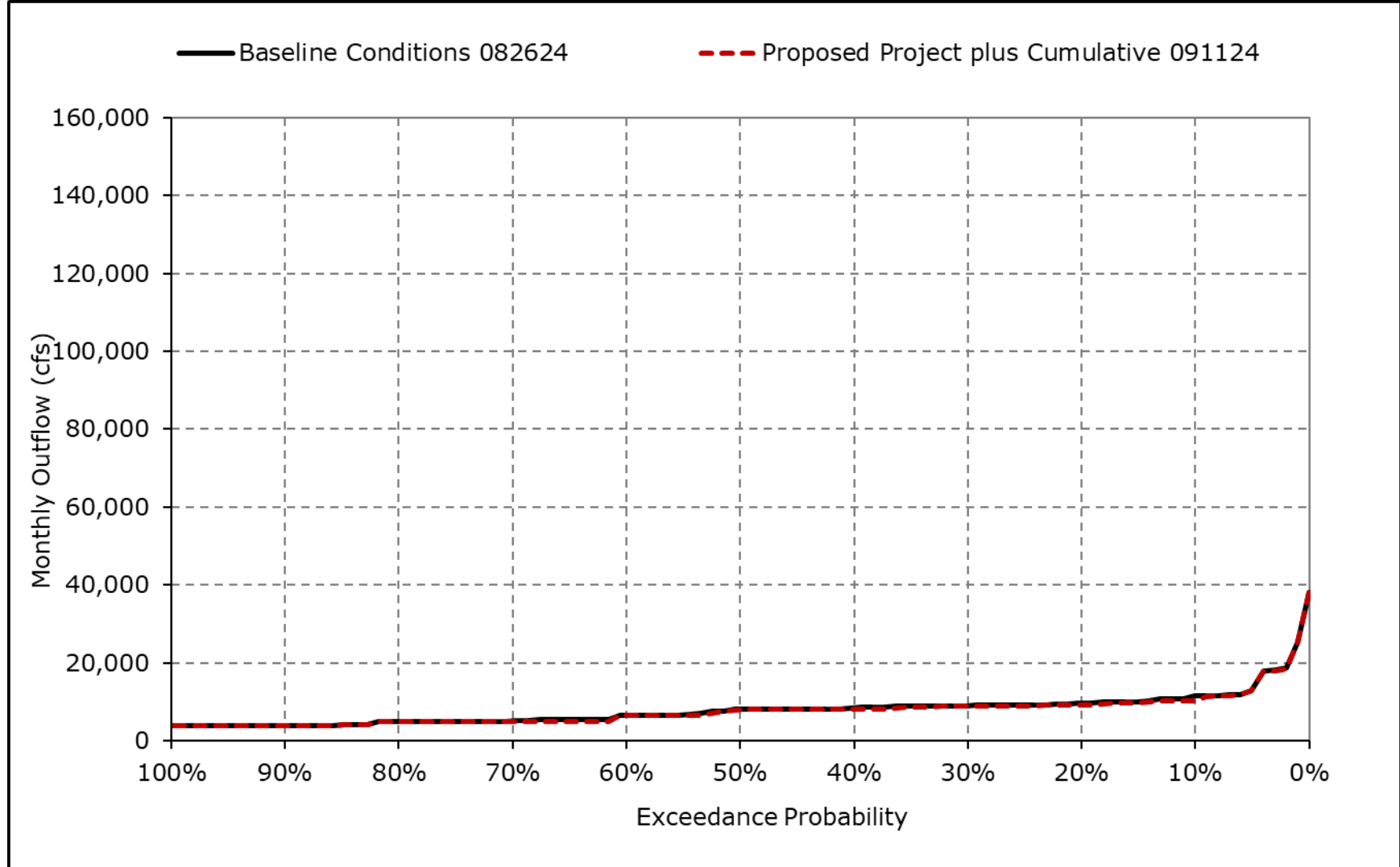
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8o. Delta Outflow, June



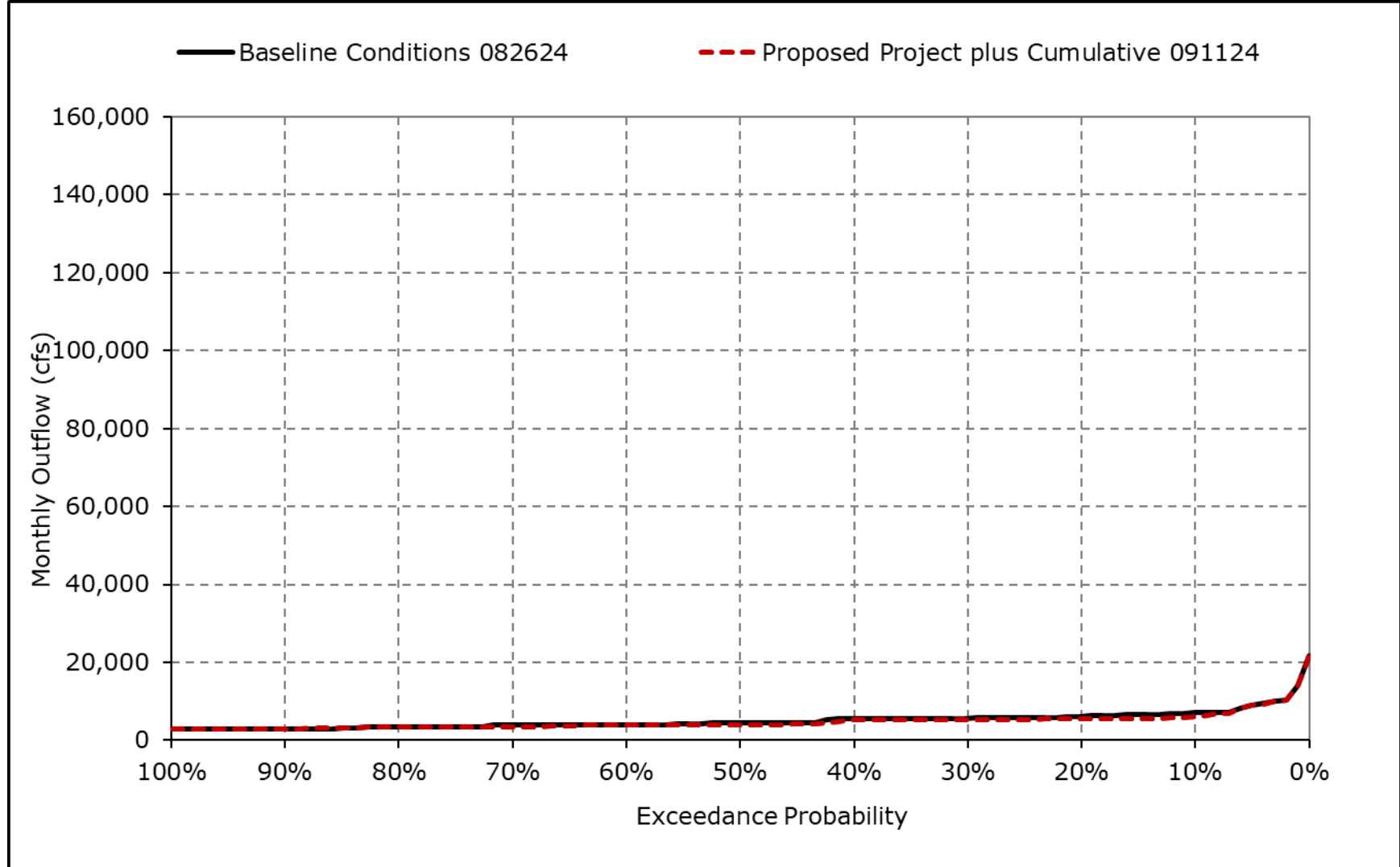
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8p. Delta Outflow, July



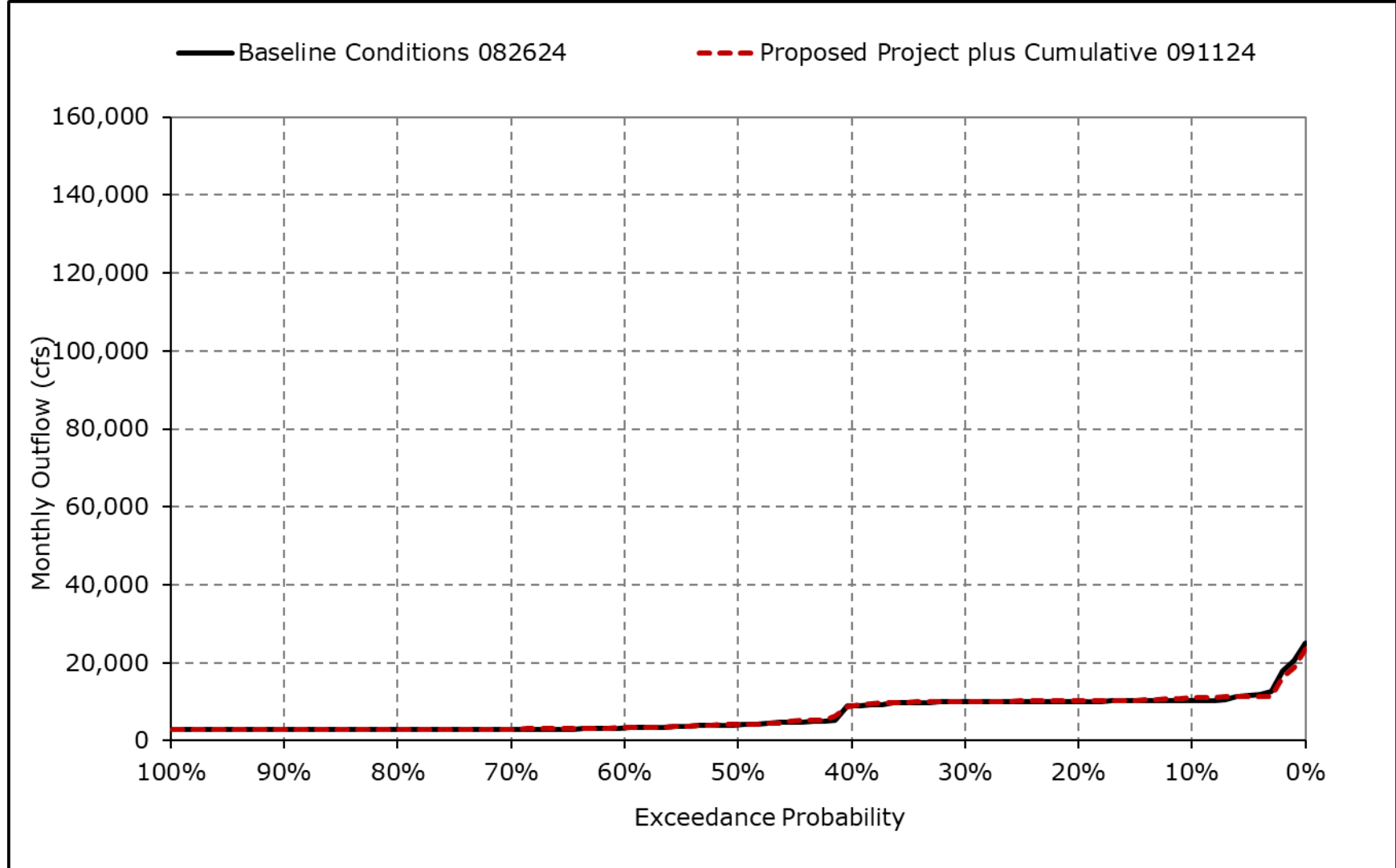
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4G-3-8q. Delta Outflow, August



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

Figure 4G-3-8r. Delta Outflow, September



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