Appendix 4F

Attachment 3b: Flow Results (CalSim 3)

Appendix 4F
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 CVP Proposed Action, Sacramento and Feather River VAs (091124)
- Proposed Project plus CVP Proposed Action, Sacramento and Feather River VAs, includes TUCPs (091124)

Title	Model Parameter	Table Numbers	Figure Numbers
Sacramento River Flow at Freeport	C_SAC048	4F-3-1-1a to 4F-3-1-2c	4F-3-1a to 4F-3-1r
Georgiana Slough Flow	C_SAC029B	4F-3-2-1a to 4F-3-2-2c	4F-3-2a to 4F-3-2r
Yolo Bypass Flow	C_YBP020	4F-3-3-1a to 4F-3-3-2c	4F-3-3a to 4F-3-3r
Sacramento River Flow at Rio Vista	C_SAC007	4F-3-4-1a to 4F-3-4-2c	4F-3-4a to 4F-3-4r
San Joaquin River at Vernalis	C_SJR070	4F-3-5-1a to 4F-3-5-2c	4F-3-5a to 4F-3-5r
San Joaquin River at Vernalis (60-20-20)	C_SJR070	4F-3-6-1a to 4F-3-6-2c	4F-3-6a to 4F-3-6f
Mokelumne River below Cosumnes	C_MOK019	4F-3-7-1a to 4F-3-7-2c	4F-3-7a to 4F-3-7r
Old and Middle River Flow	C_OMR014	4F-3-8-1a to 4F-3-8-2c	4F-3-8a to 4F-3-8r
Qwest	C_SJR013	4F-3-9-1a to 4F-3-9-2c	4F-3-9a to 4F-3-9r
Delta Outflow	NDOI	4F-3-10-1a to 4F-3-10-2c	4F-3-10a to 4F-3-10r

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 4F-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 4F-3-1-1b. Sacramento River Flow at Freeport, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,774	19,798	48,257	66,671	69,532	69,137	57,041	45,619	29,553	22,902	18,409	21,462
20% Exceedance	14,739	14,617	35,086	53,596	62,951	56,759	37,266	34,913	22,547	21,640	17,880	20,025
30% Exceedance	13,328	13,700	23,697	36,691	50,055	46,024	26,143	23,274	16,708	20,724	17,436	18,674
40% Exceedance	12,607	13,289	17,256	28,260	38,846	35,754	20,770	16,918	14,099	18,853	16,838	16,468
50% Exceedance	10,921	12,834	15,230	22,146	28,680	26,900	17,034	14,800	13,167	18,091	15,753	13,154
60% Exceedance	9,200	11,195	14,091	17,770	24,469	22,665	13,145	13,209	12,759	17,413	13,902	10,931
70% Exceedance	8,442	10,075	11,369	14,270	19,492	19,962	11,702	12,444	12,306	16,032	9,954	10,058
80% Exceedance	8,266	8,697	10,337	12,479	16,216	14,729	11,076	11,642	11,639	12,235	8,343	9,071
90% Exceedance	6,843	7,512	8,673	10,771	13,571	11,597	9,730	7,800	8,968	9,338	7,867	8,041
Full Simulation Period Average[a]	11,410	13,153	21,847	30,874	37,211	34,587	24,381	21,473	17,476	17,426	14,044	14,458
Wet Water Years (32%)	13,361	16,374	34,540	52,484	60,910	56,181	43,199	36,054	27,064	19,975	17,692	20,339
Above Normal Water Years (9%)	10,908	12,816	21,044	41,212	43,431	43,918	26,120	24,468	19,035	21,314	18,183	19,365
Below Normal Water Years (20%)	11,300	12,404	16,241	23,133	30,761	29,389	18,618	17,703	13,669	20,413	15,837	13,057
Dry Water Years (21%)	10,953	12,602	16,537	15,799	22,943	20,822	12,939	12,723	13,001	15,755	10,433	10,221
Critical Water Years (18%)	8,848	9,068	12,105	13,475	15,784	13,369	9,809	8,452	9,099	9,581	7,712	8,048

Table 4F-3-1-1c. Sacramento River Flow at Freeport, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	184	202	683	555	-16	9	11	-361	-2	-479	-183	1,014
20% Exceedance	108	21	2,438	159	474	-7	120	33	-138	-575	-368	865
30% Exceedance	-140	-126	957	1,000	299	-199	1,254	687	-372	-90	-205	1,281
40% Exceedance	-239	58	278	347	841	184	1,377	-4	-66	-645	-370	359
50% Exceedance	231	295	-104	-99	536	685	121	1,029	-402	-676	-506	-65
60% Exceedance	-173	83	47	5	212	-18	825	637	-484	-340	353	105
70% Exceedance	47	51	318	48	981	6	492	1,158	-66	-230	-917	105
80% Exceedance	222	152	133	352	235	-170	653	1,050	124	-922	-693	12
90% Exceedance	656	283	-200	196	204	2	467	32	-718	-640	-68	-184
Full Simulation Period Average[a]	102	130	250	235	200	61	608	557	-171	-485	-237	401
Wet Water Years (32%)	115	174	473	200	177	6	85	24	-10	-120	9	827
Above Normal Water Years (9%)	-97	-118	206	97	182	-118	1,373	747	-184	-4	-115	1,672
Below Normal Water Years (20%)	-159	74	170	296	437	121	1,401	965	8	-801	-527	-255
Dry Water Years (21%)	174	172	27	74	50	152	692	1,085	-383	-828	-623	145
Critical Water Years (18%)	384	188	224	489	163	75	176	339	-404	-621	39	34

[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.

Table 4F-3-1-2a. 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 4F-3-1-2b. Sacramento River Flow at Freeport, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,778	19,803	48,259	66,804	69,533	69,135	57,043	45,623	29,556	22,922	18,412	21,463
20% Exceedance	14,715	14,617	35,318	55,536	62,950	56,759	37,269	34,914	22,548	21,644	17,887	20,027
30% Exceedance	13,330	13,700	23,728	36,412	50,173	46,834	26,142	23,295	16,708	20,727	17,444	18,671
40% Exceedance	12,609	13,290	17,268	28,262	38,846	35,755	20,724	16,984	14,088	18,863	16,781	16,460
50% Exceedance	10,824	12,835	15,316	22,152	29,239	26,780	17,042	14,825	13,166	18,141	15,780	13,342
60% Exceedance	9,521	11,315	14,052	17,962	24,475	22,668	13,066	13,571	12,760	17,523	13,907	10,931
70% Exceedance	8,438	10,102	11,356	14,267	19,913	19,968	11,681	12,463	12,380	16,186	10,113	10,199
80% Exceedance	8,257	8,746	10,354	12,471	16,354	14,622	10,324	11,804	11,506	12,253	8,235	9,071
90% Exceedance	6,924	8,152	9,020	10,721	13,574	11,268	8,219	7,688	7,316	8,994	7,760	8,164
Full Simulation Period Average[a]	11,455	13,205	21,870	30,877	37,288	34,601	24,101	21,495	17,353	17,325	14,047	14,489
Wet Water Years (32%)	13,333	16,378	34,556	52,506	60,906	56,184	43,202	36,056	27,066	19,977	17,697	20,348
Above Normal Water Years (9%)	10,992	13,096	21,039	41,461	43,651	44,549	26,354	24,498	19,043	21,320	18,190	19,366
Below Normal Water Years (20%)	11,494	12,456	16,277	23,108	30,870	29,460	18,662	17,778	13,702	20,532	15,867	13,116
Dry Water Years (21%)	10,993	12,664	16,548	15,816	22,956	20,815	12,779	12,772	12,980	15,734	10,431	10,276
Critical Water Years (18%)	8,843	9,084	12,156	13,340	15,972	13,055	8,269	8,413	8,400	8,904	7,685	8,076

Table 4F-3-1-2c. Sacramento River Flow at Freeport, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	188	206	684	688	-15	8	12	-357	1	-460	-180	1,015
20% Exceedance	84	22	2,670	2,099	473	-7	123	35	-136	-571	-362	867
30% Exceedance	-138	-126	988	721	417	610	1,253	708	-372	-87	-197	1,278
40% Exceedance	-238	59	290	349	841	185	1,330	62	-77	-636	-426	352
50% Exceedance	134	296	-19	-93	1,094	565	128	1,054	-403	-626	-479	123
60% Exceedance	147	203	8	197	218	-15	746	999	-483	-230	357	105
70% Exceedance	43	78	305	46	1,402	12	471	1,176	8	-76	-758	247
80% Exceedance	213	201	149	344	373	-276	-98	1,212	-9	-904	-801	13
90% Exceedance	737	923	147	147	207	-327	-1,044	-80	-2,371	-985	-175	-60
Full Simulation Period Average[a]	147	182	273	239	277	75	328	578	-294	-586	-234	432
Wet Water Years (32%)	88	177	490	221	173	10	88	26	-7	-118	14	836
Above Normal Water Years (9%)	-13	161	200	345	402	513	1,607	777	-177	3	-108	1,673
Below Normal Water Years (20%)	34	126	206	270	546	192	1,445	1,040	41	-682	-498	-196
Dry Water Years (21%)	213	234	38	91	63	145	532	1,134	-404	-849	-625	199
Critical Water Years (18%)	379	203	275	354	351	-239	-1,364	299	-1,104	-1,298	12	63

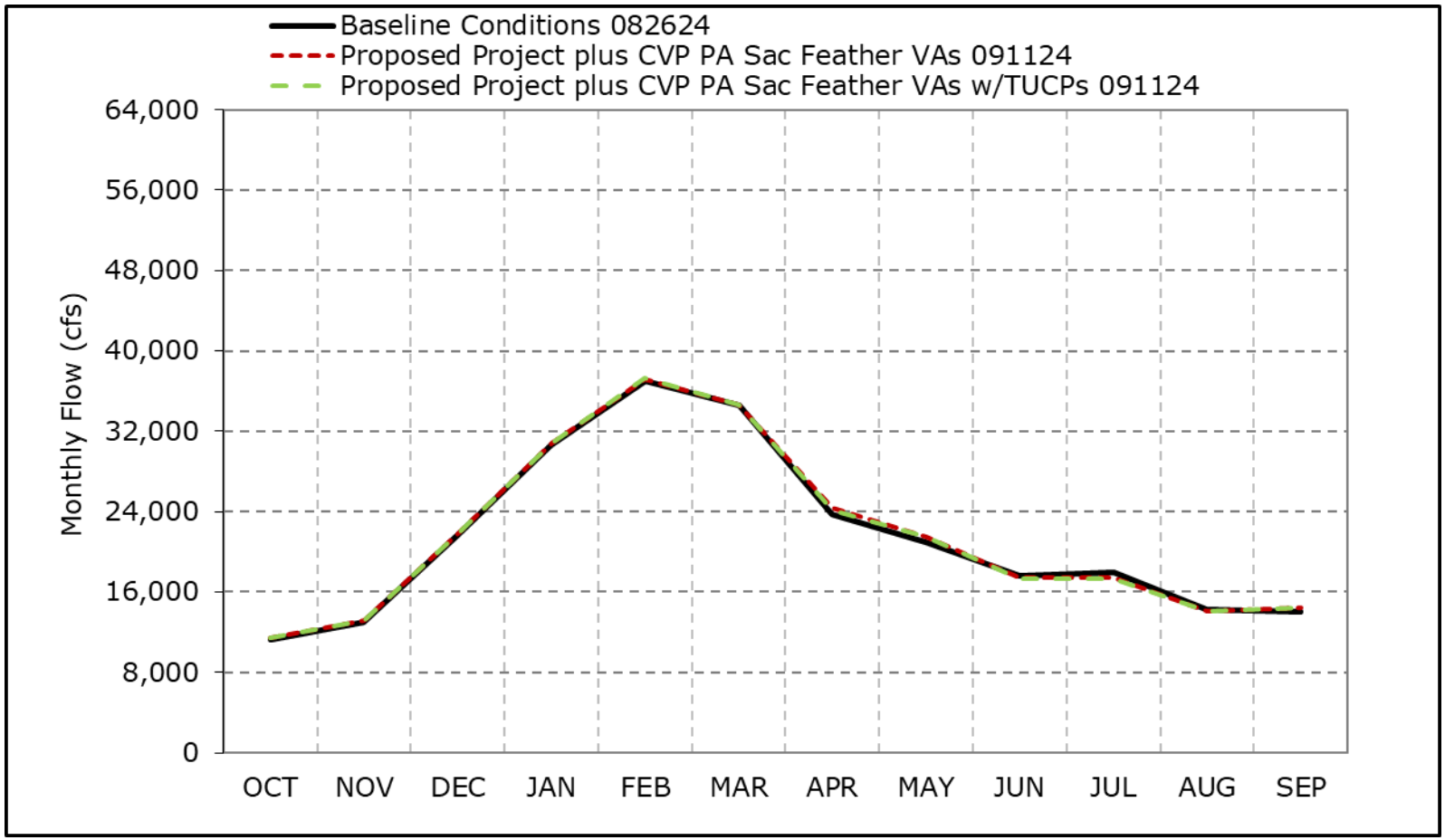
[a] Based on the 100-year simulation period.

* 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).

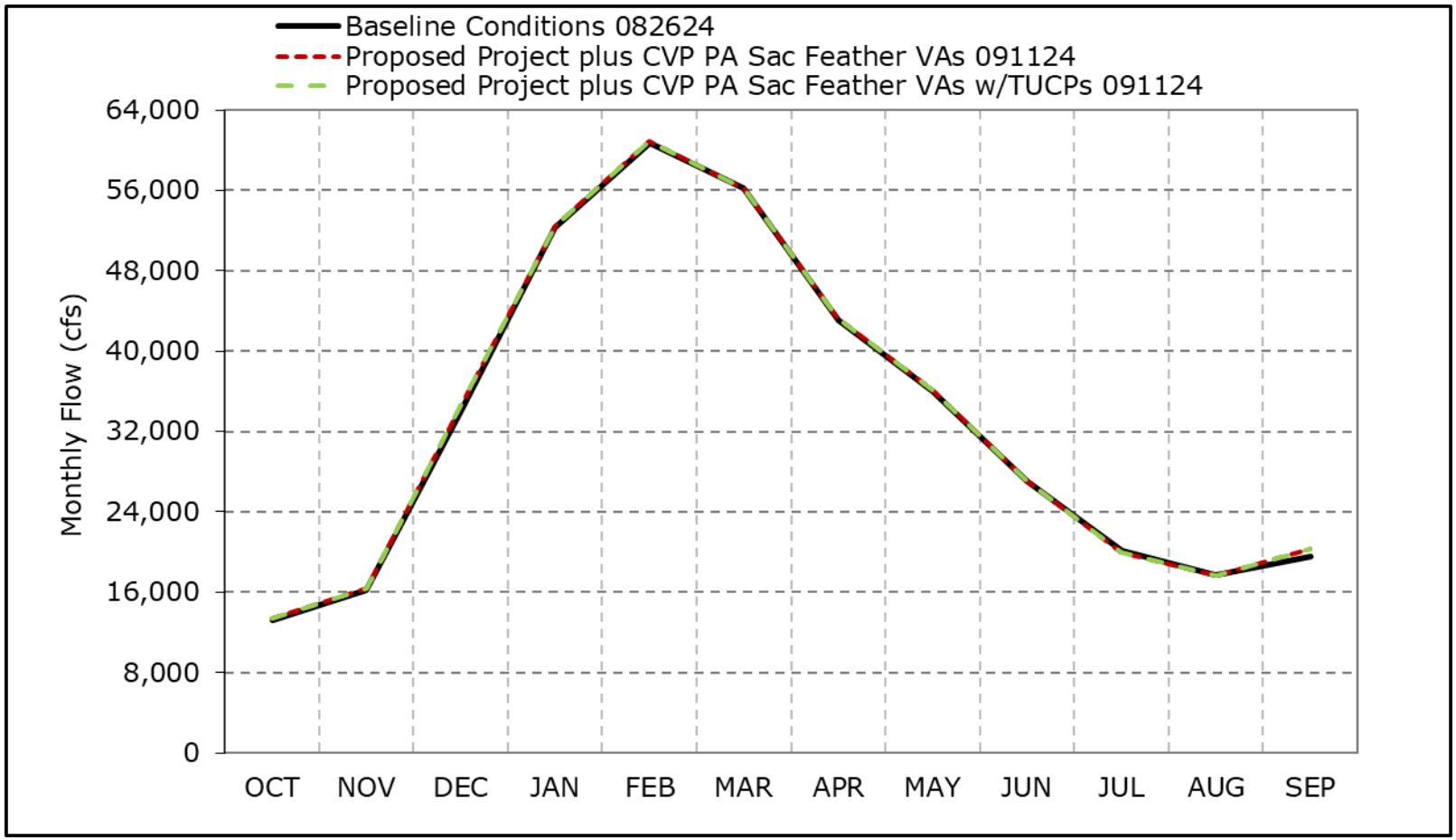
* Water Year Types results are displayed with water year - year type sorting.

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



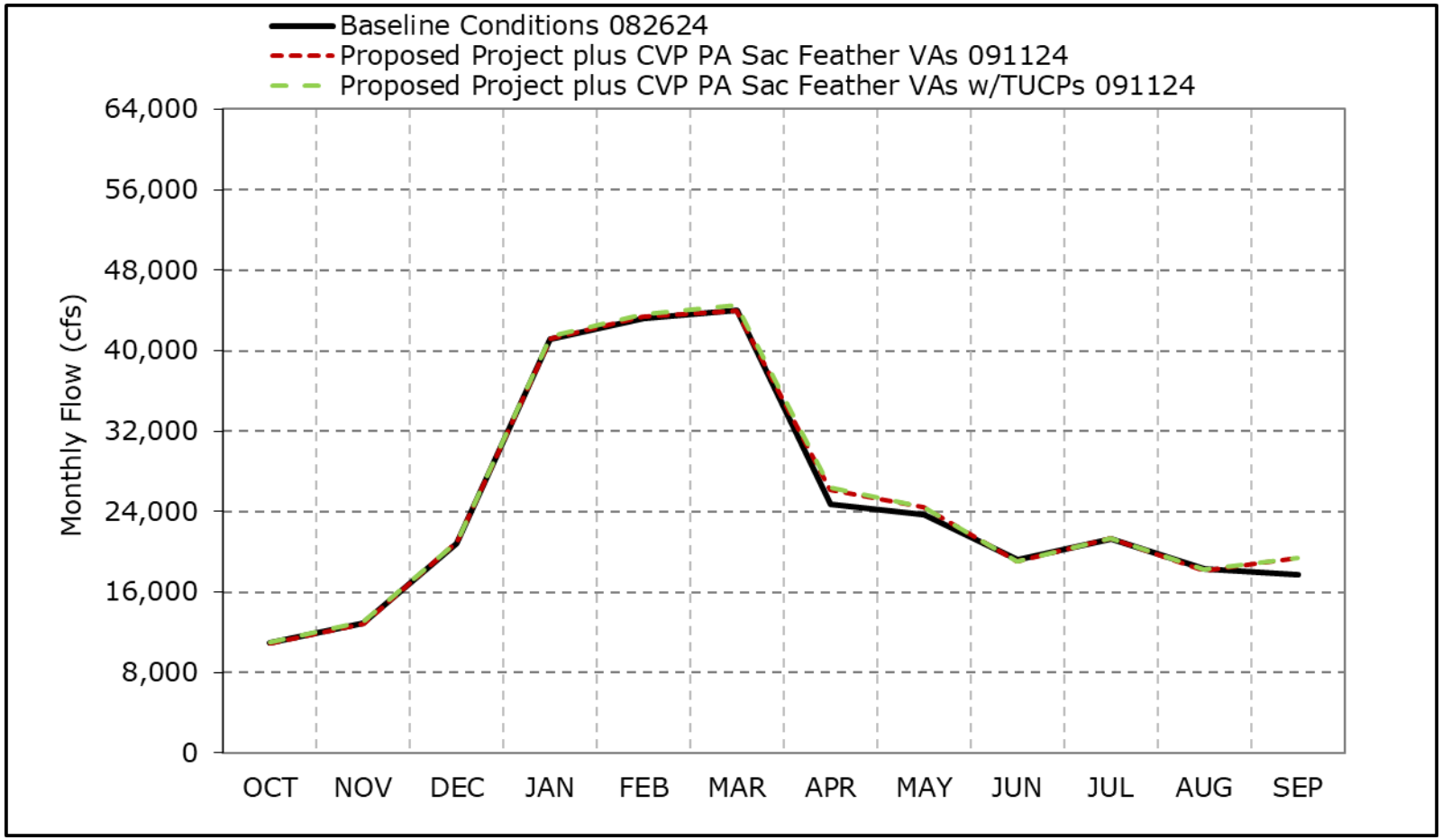
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



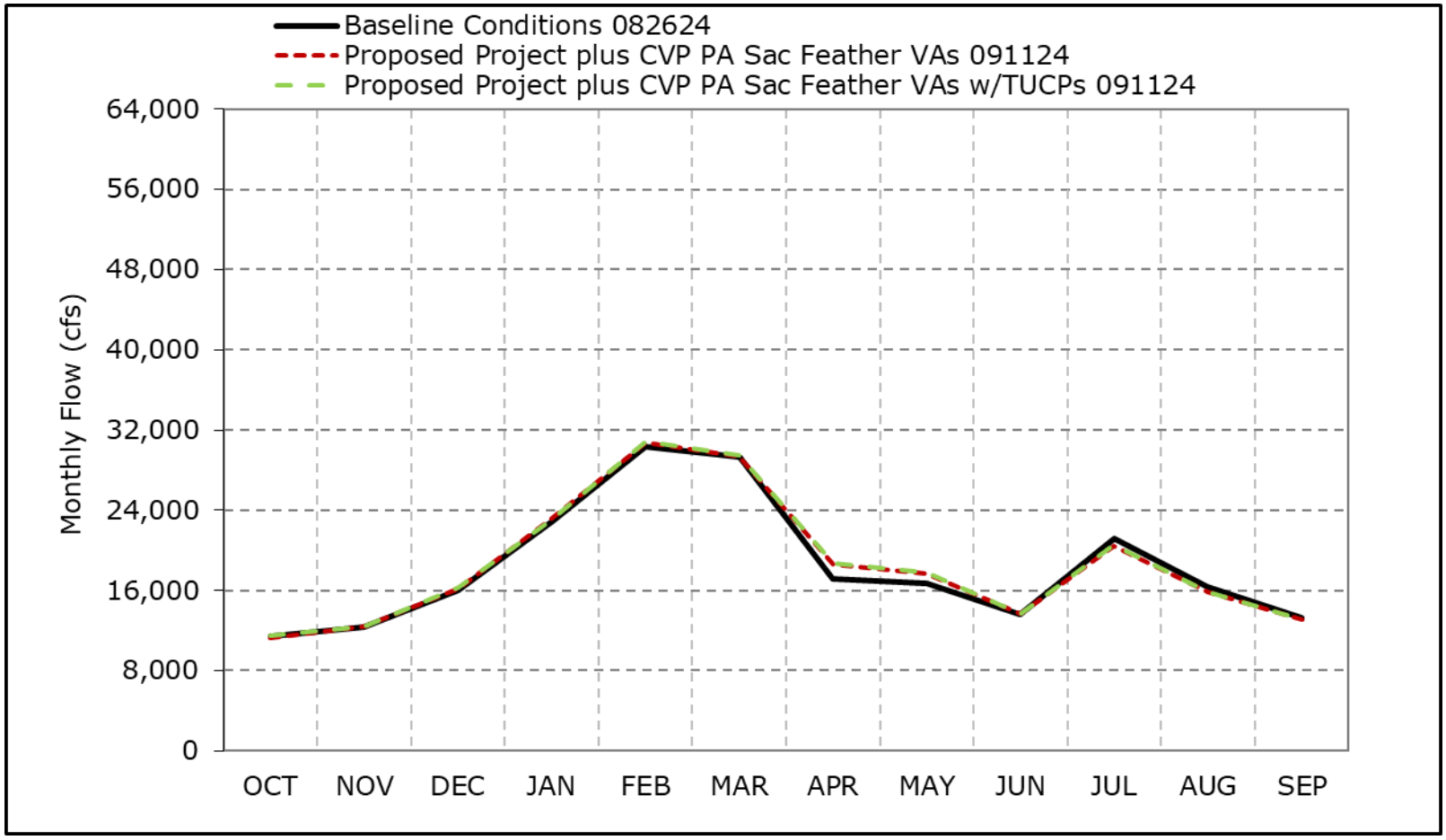
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



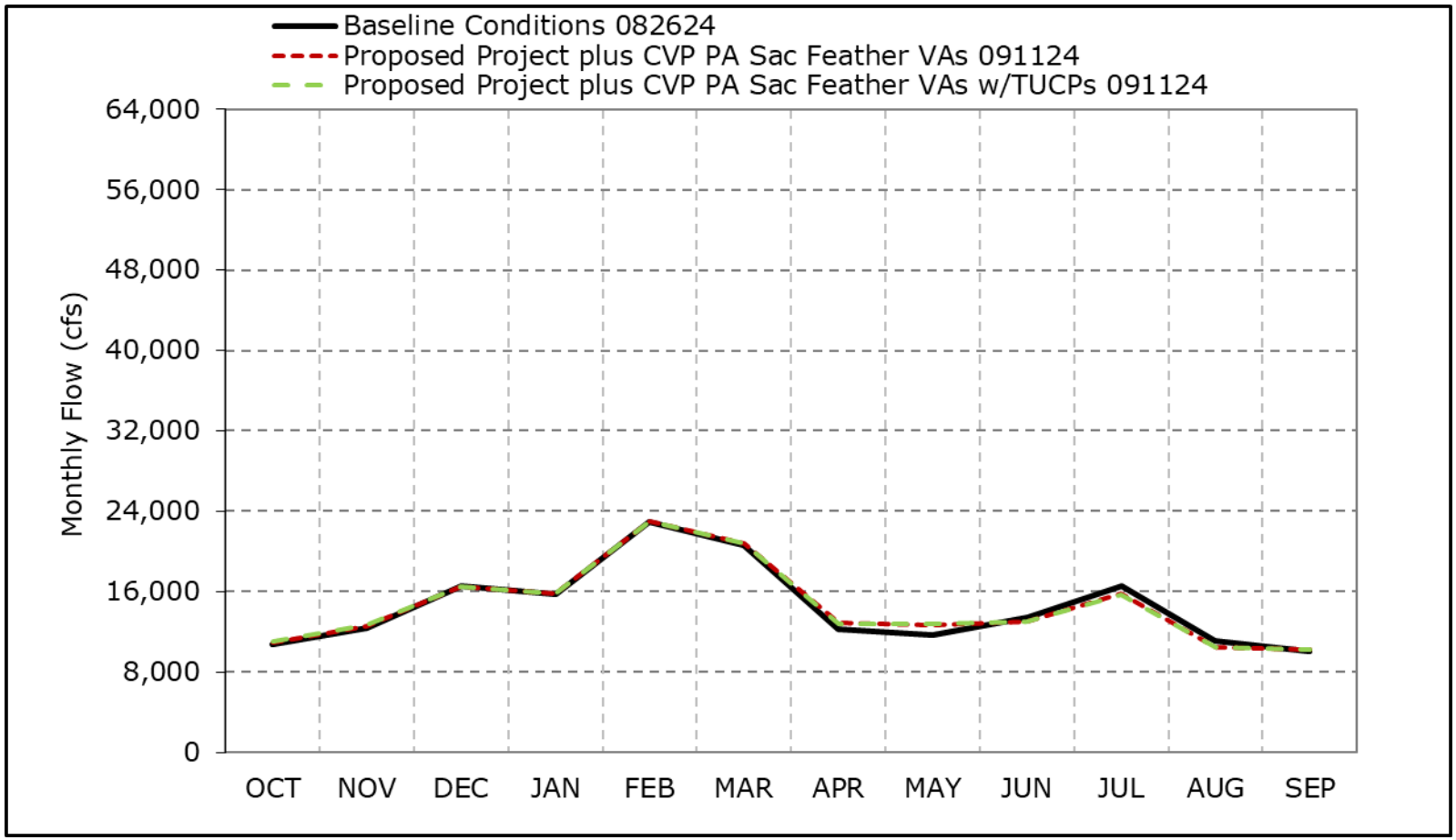
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



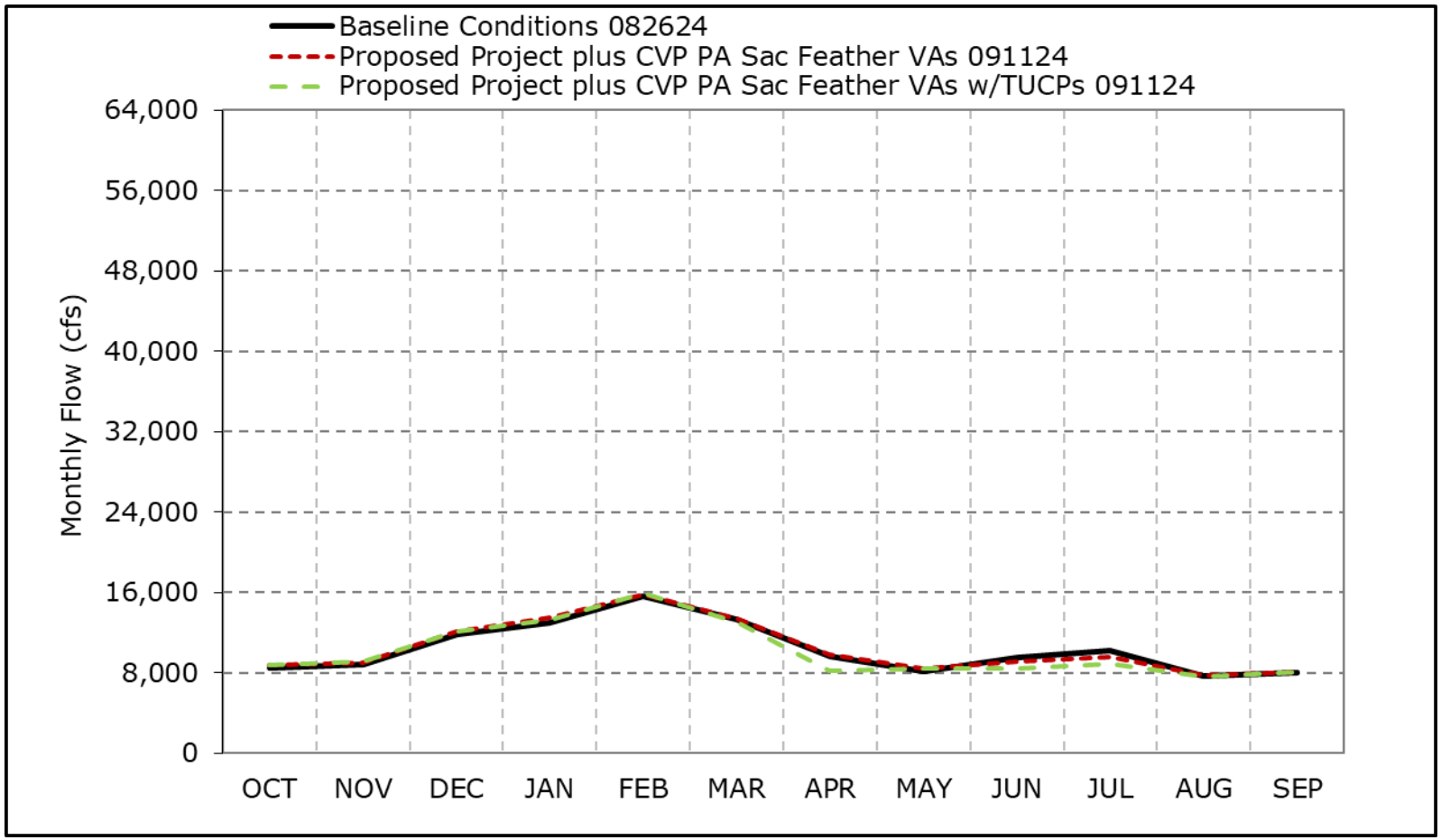
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



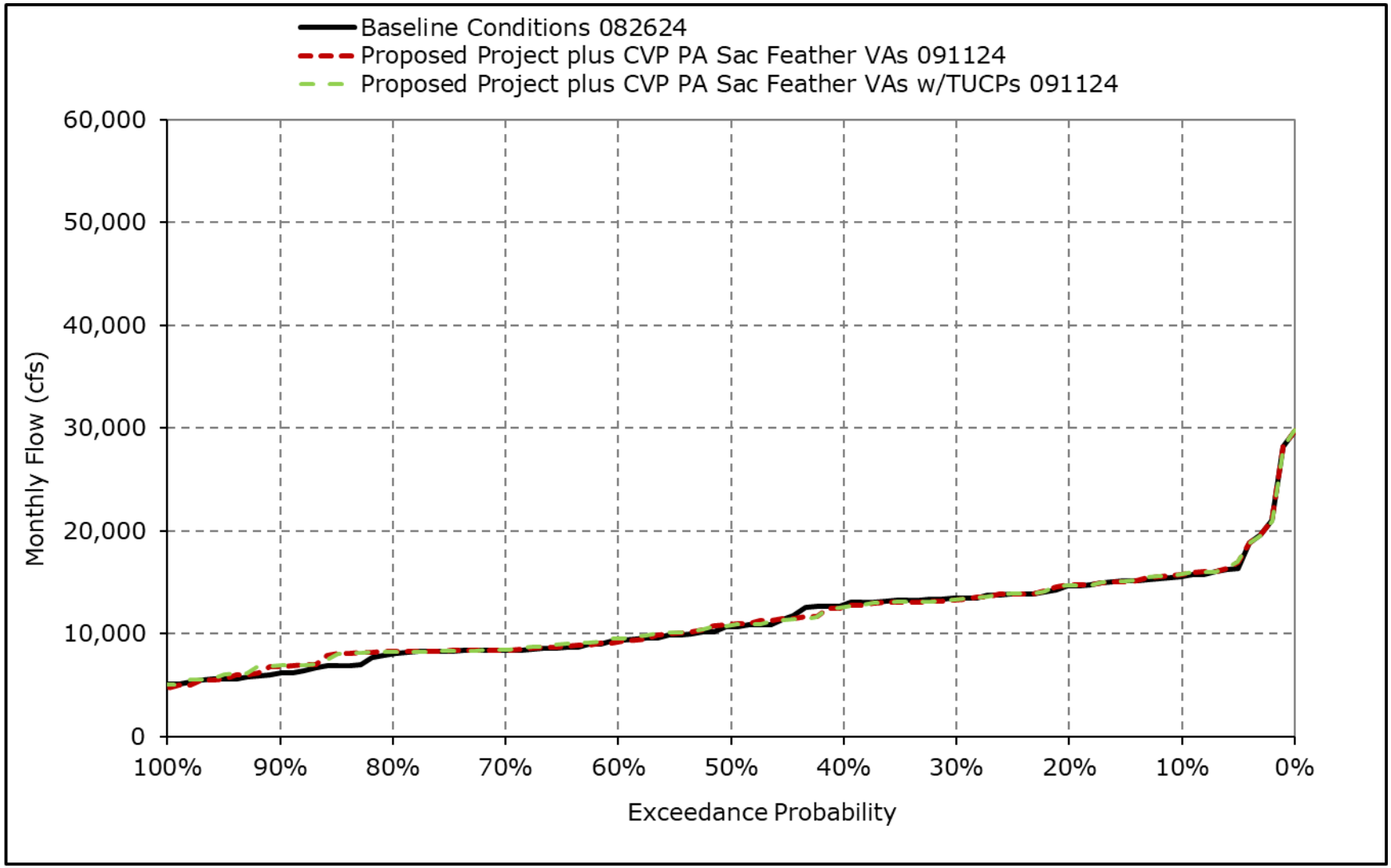
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



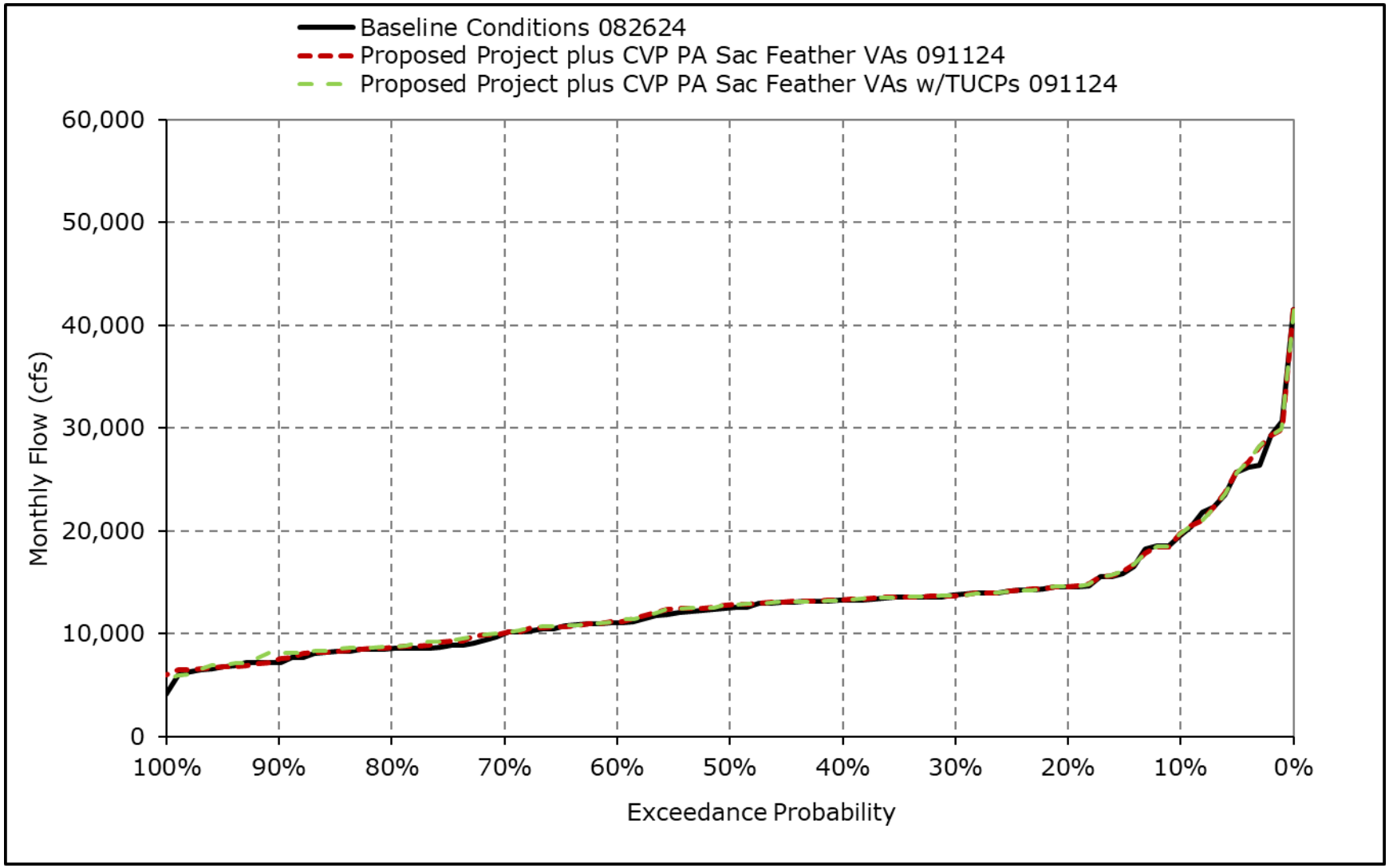
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



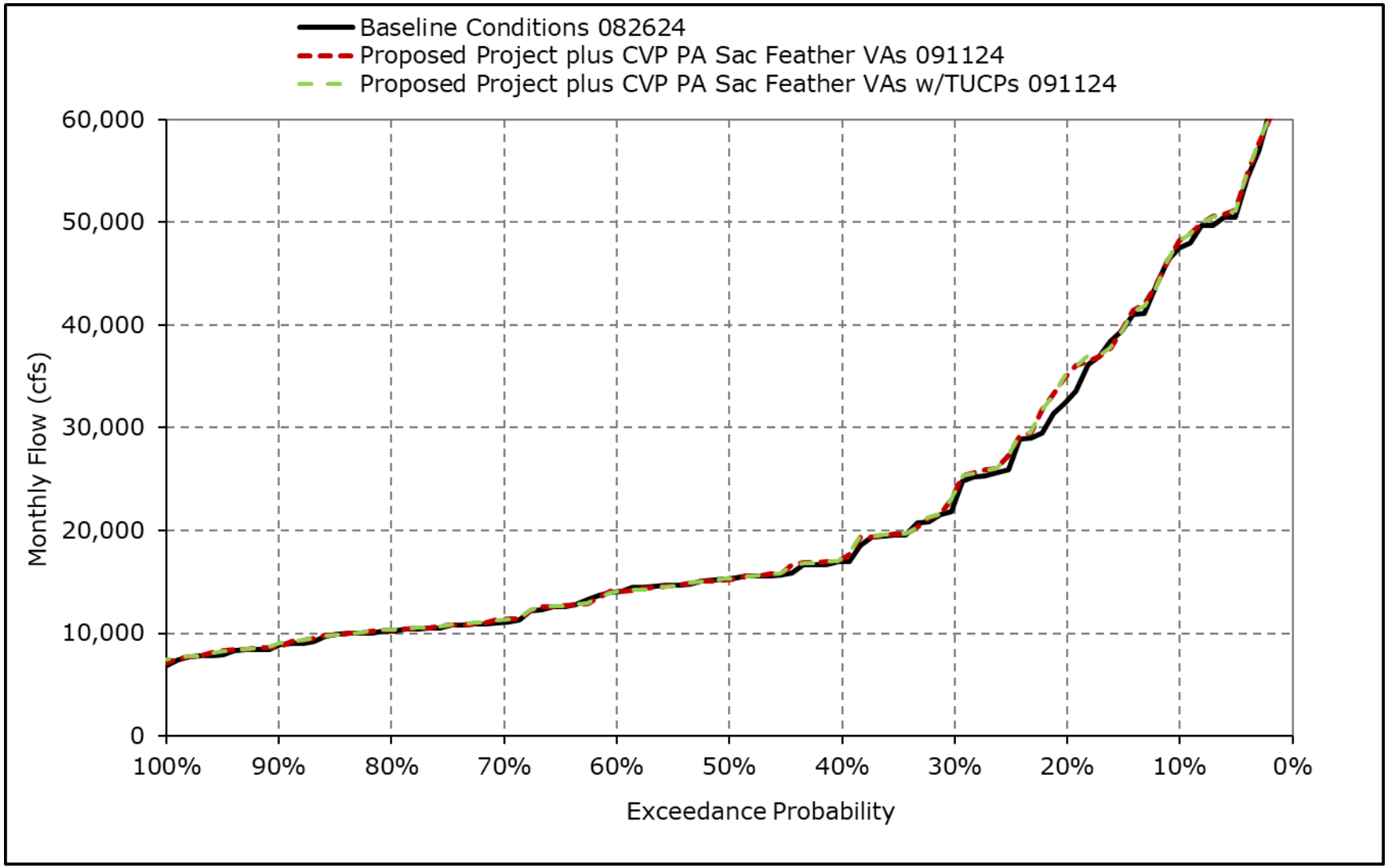
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



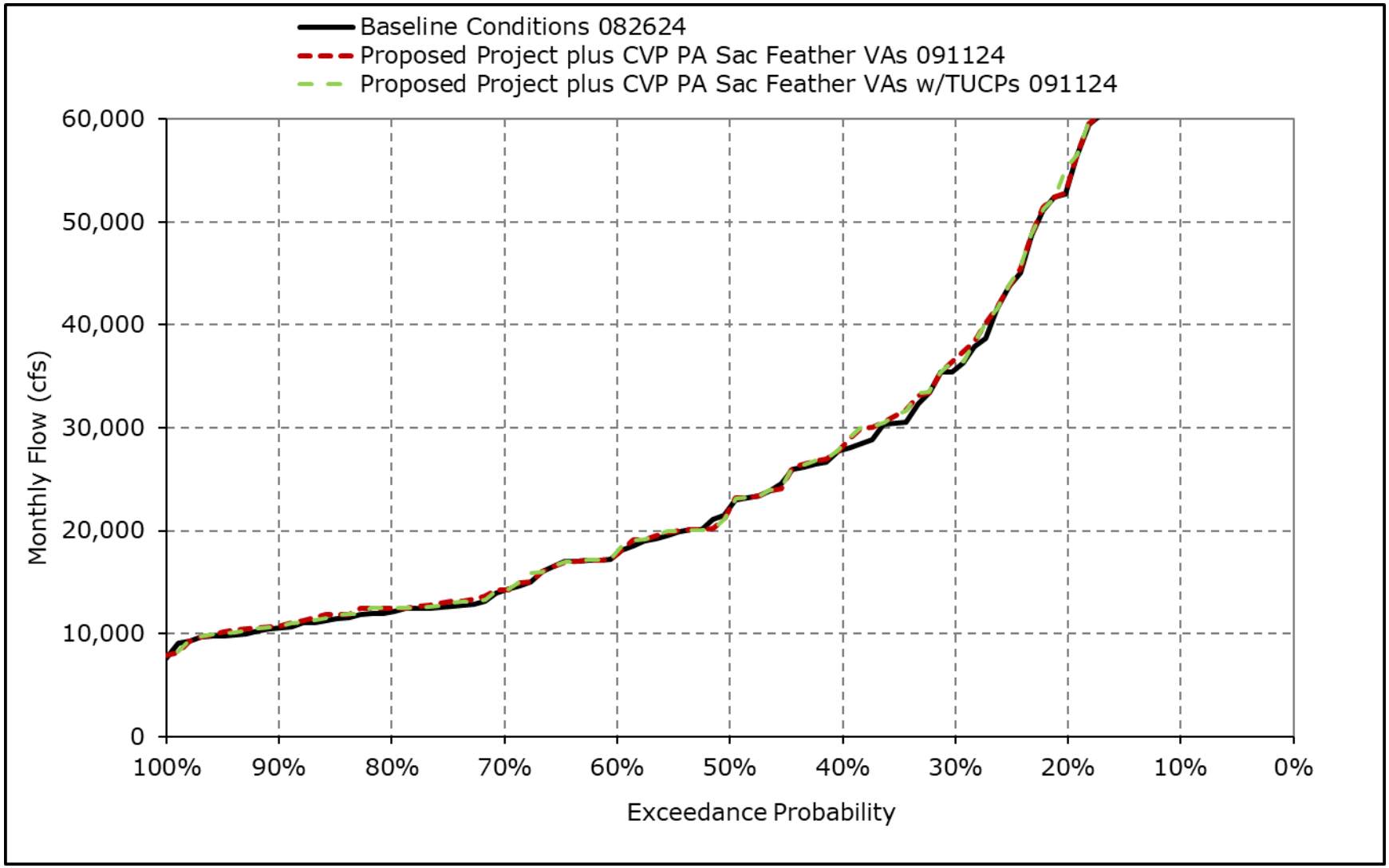
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



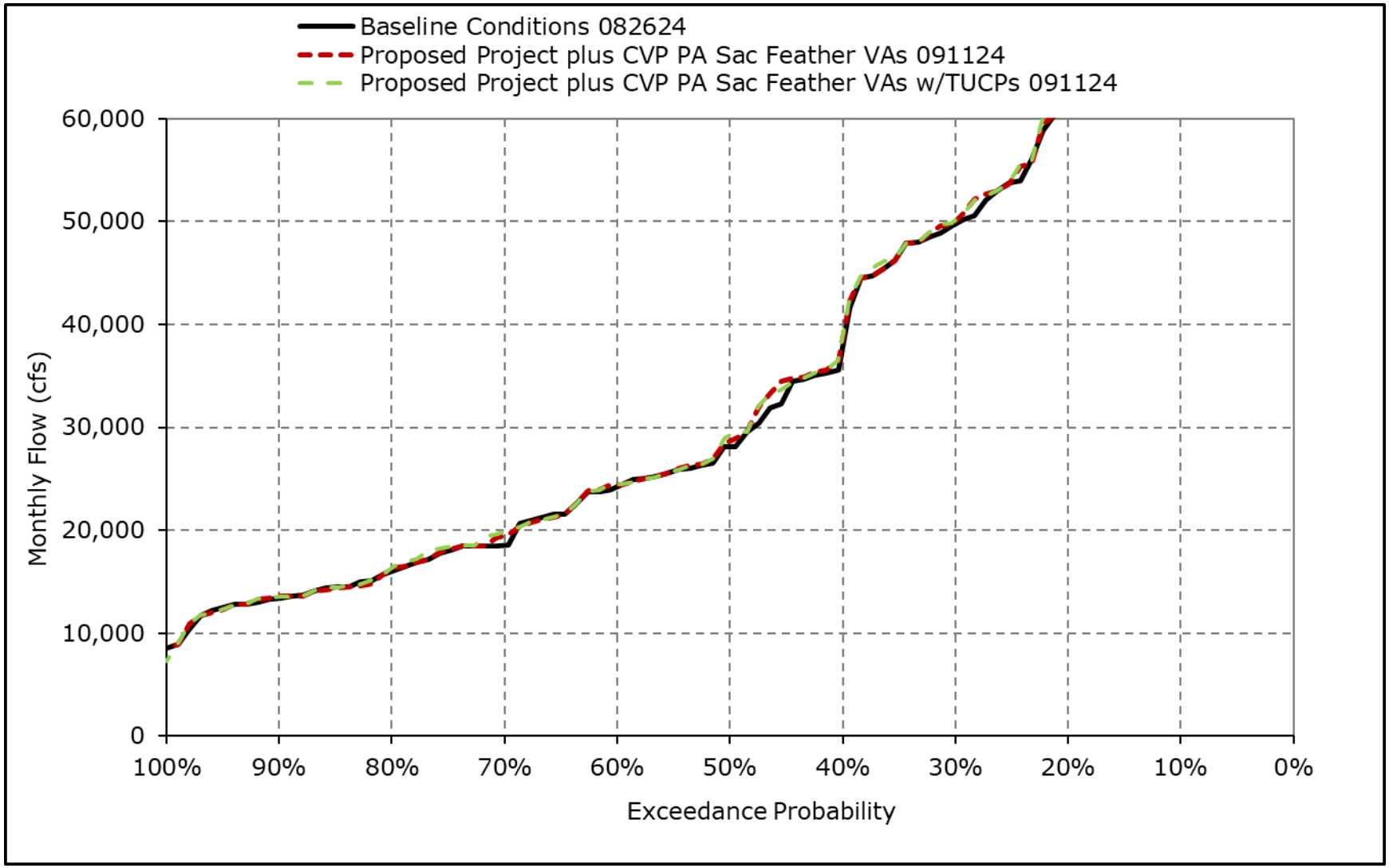
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



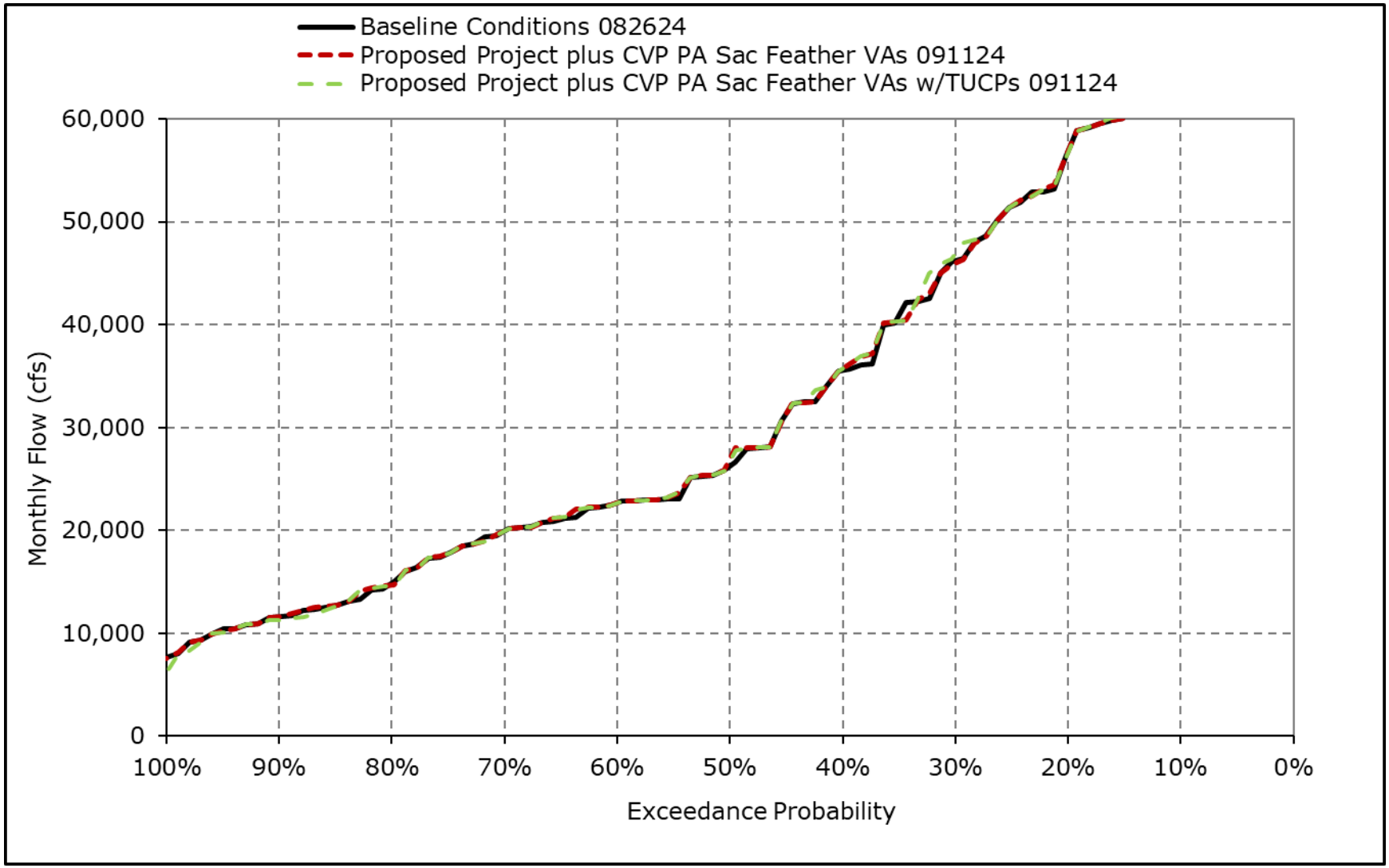
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



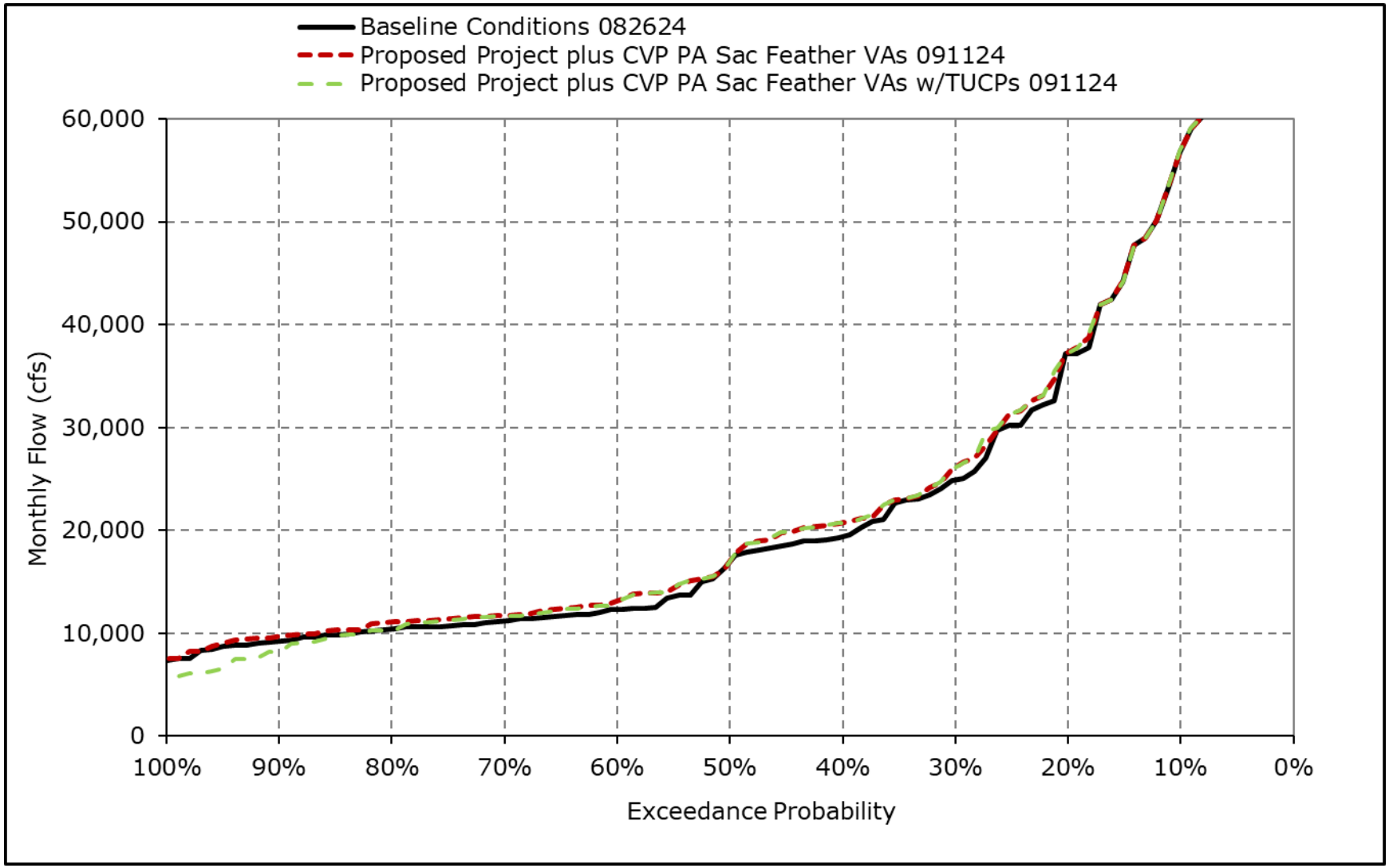
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-1l. Sacramento River Flow at Freeport, March



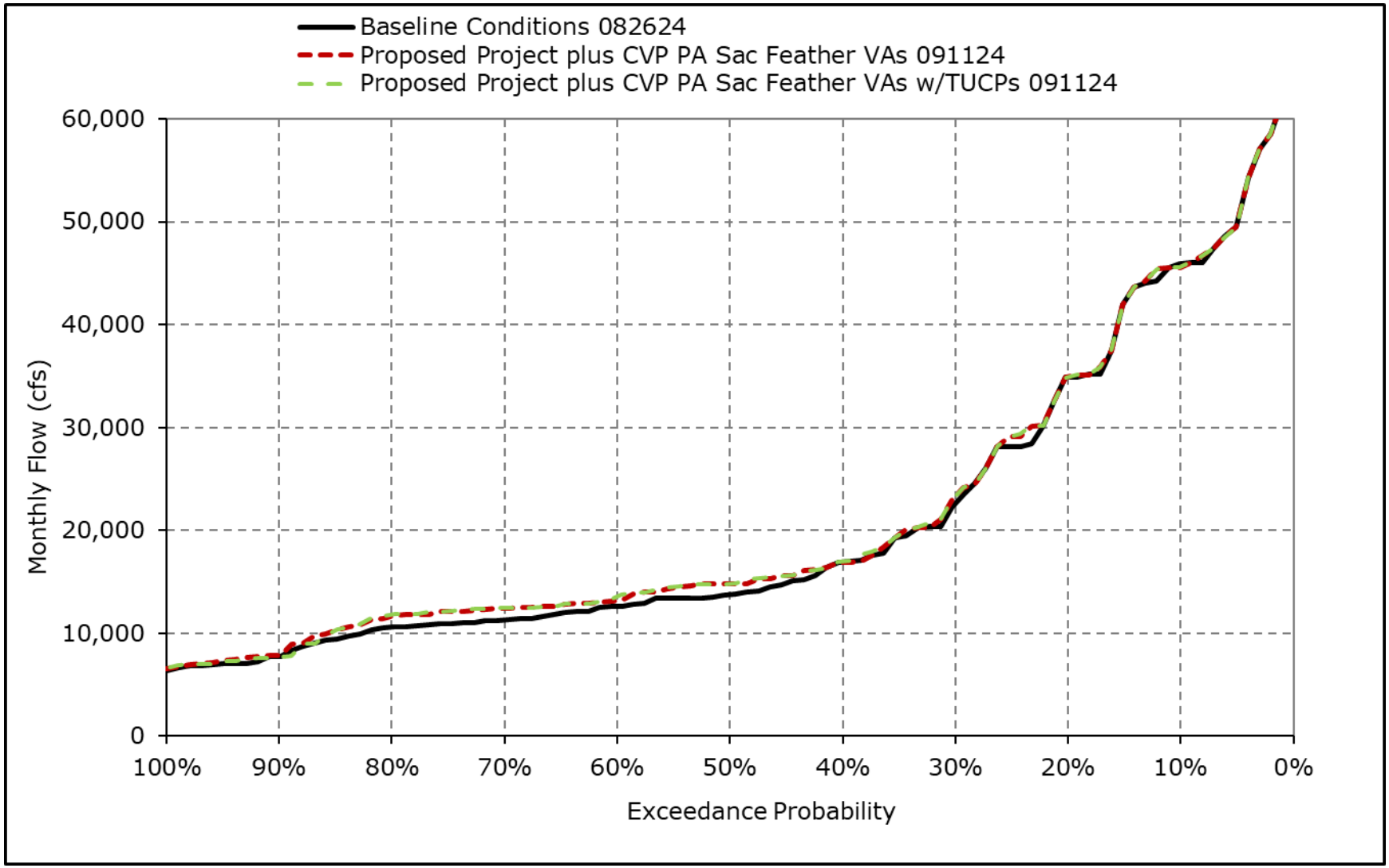
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



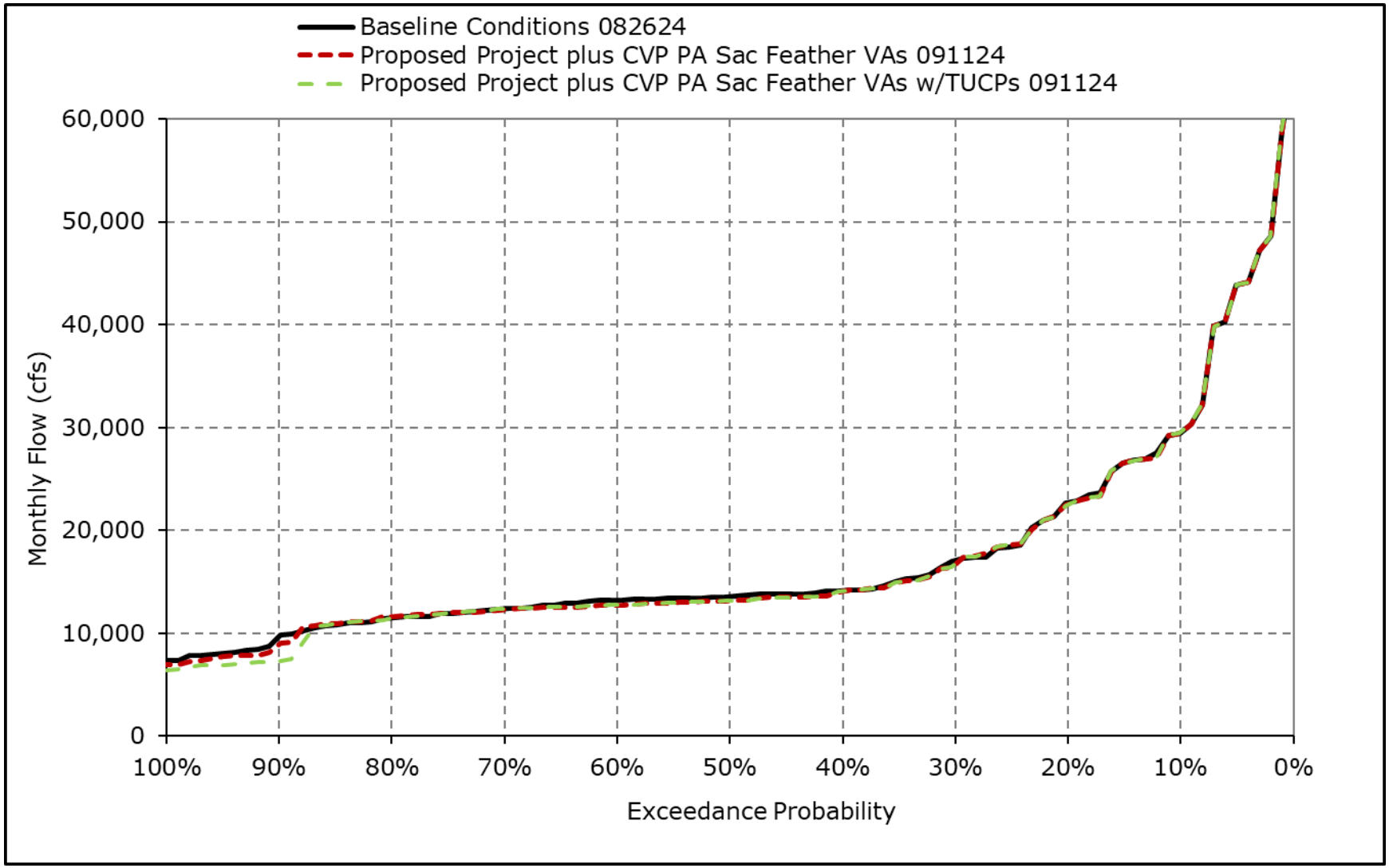
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



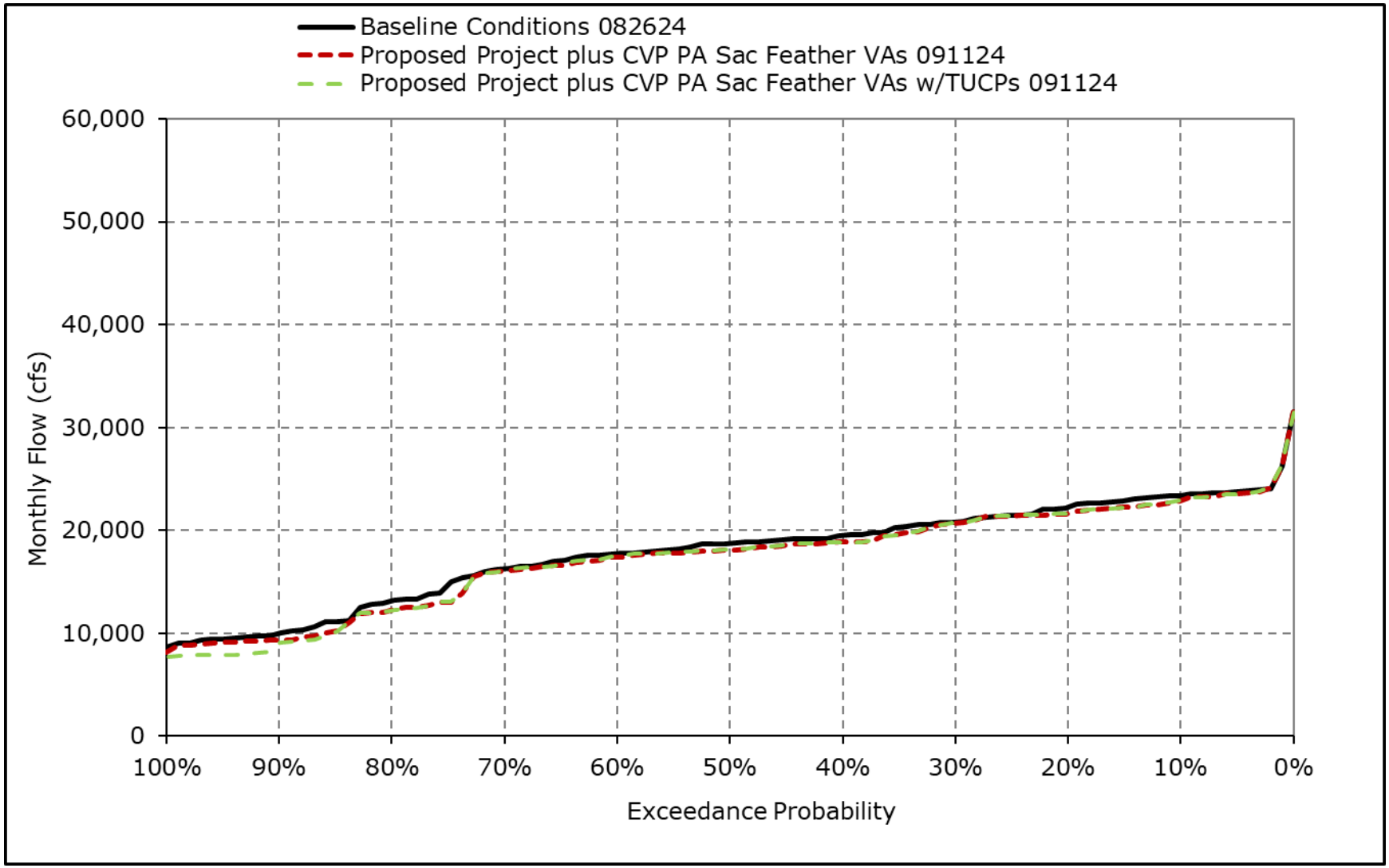
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



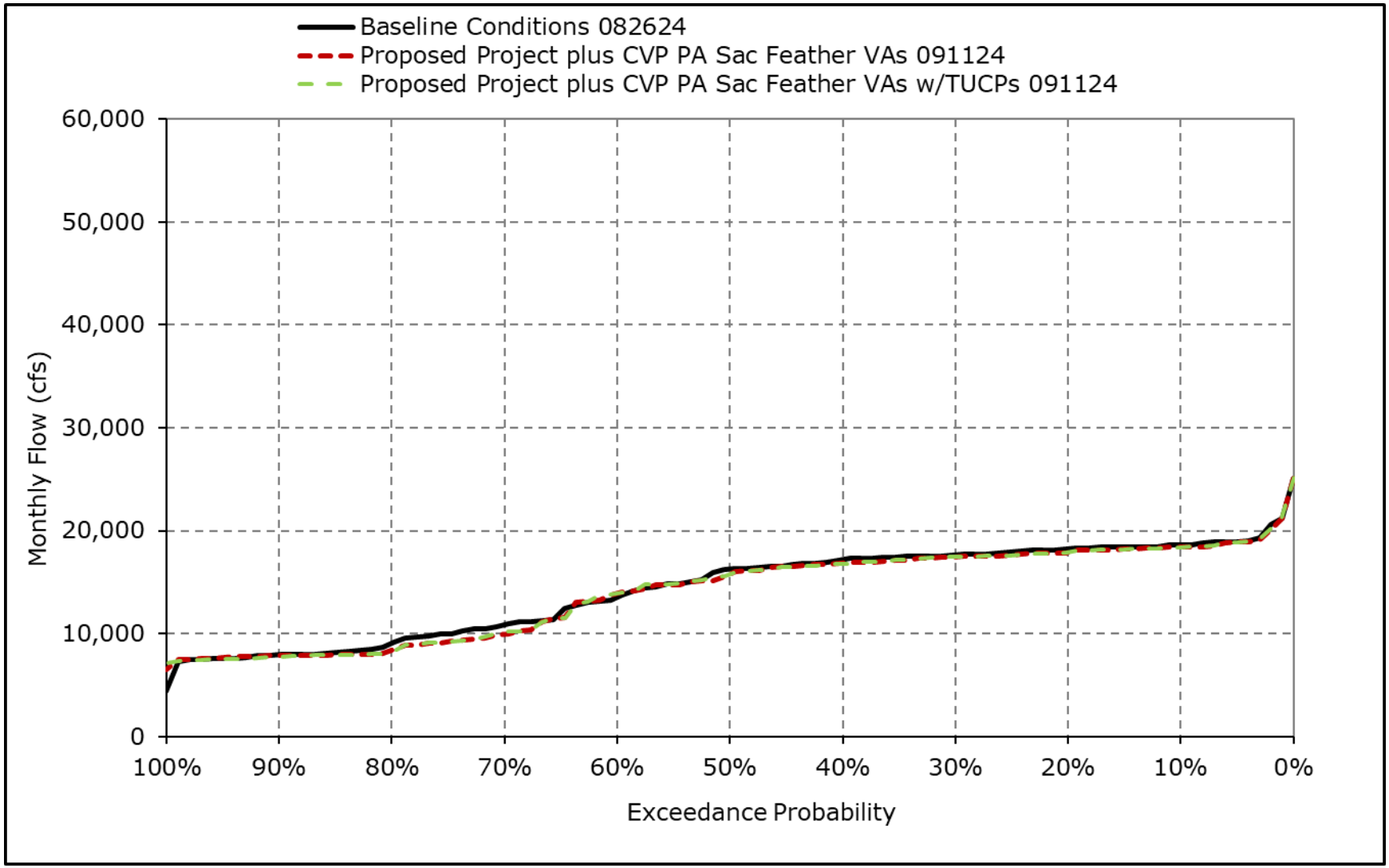
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



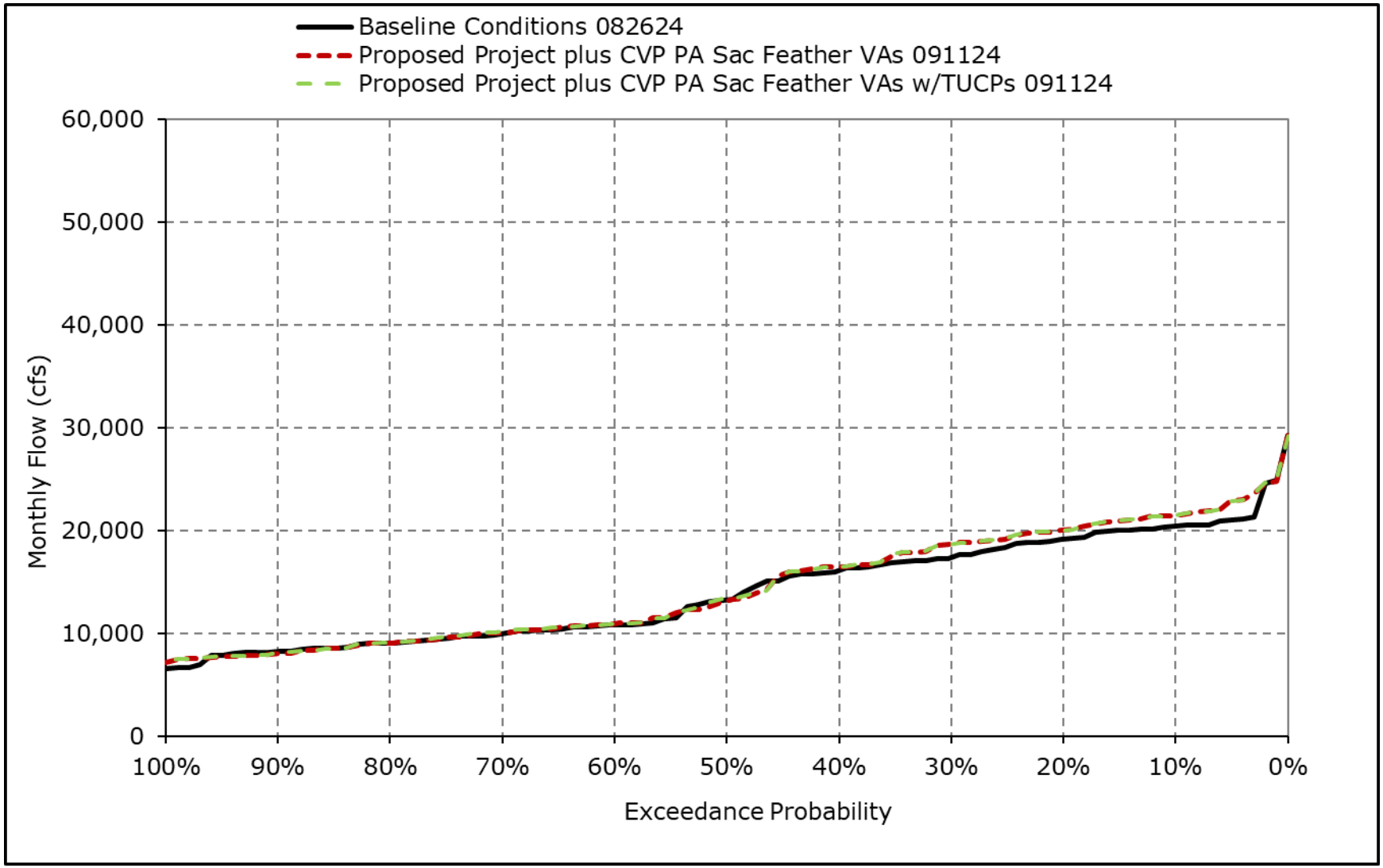
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4F-3-2-1a. Georgiana Slough Flow, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,174	3,740	7,716	10,338	10,825	10,764	9,038	7,471	5,144	4,269	3,595	3,860
20% Exceedance	3,039	3,027	5,606	8,552	9,829	9,011	6,230	5,903	4,170	4,105	3,545	3,677
30% Exceedance	2,874	2,915	4,187	6,028	8,019	7,516	4,493	4,161	3,379	3,906	3,459	3,427
40% Exceedance	2,786	2,830	3,372	4,926	6,357	6,015	3,712	3,358	2,966	3,721	3,399	3,245
50% Exceedance	2,484	2,738	3,137	4,117	4,967	4,686	3,360	2,912	2,880	3,616	3,264	2,838
60% Exceedance	2,298	2,536	2,959	3,481	4,417	4,182	2,708	2,742	2,834	3,473	2,879	2,498
70% Exceedance	2,158	2,381	2,535	2,977	3,601	3,798	2,556	2,561	2,711	3,263	2,501	2,374
80% Exceedance	2,108	2,169	2,406	2,676	3,237	3,081	2,442	2,463	2,591	2,822	2,241	2,247
90% Exceedance	1,844	1,978	2,222	2,456	2,868	2,615	2,279	2,064	2,331	2,372	2,087	2,129
Full Simulation Period Average[a]	2,569	2,805	4,025	5,307	6,221	5,862	4,333	3,924	3,458	3,495	2,984	2,955
Wet Water Years (32%)	2,844	3,257	5,794	8,376	9,580	8,928	7,071	6,063	4,793	3,804	3,466	3,727
Above Normal Water Years (9%)	2,526	2,793	3,920	6,795	7,106	7,209	4,470	4,321	3,681	3,977	3,553	3,470
Below Normal Water Years (20%)	2,591	2,706	3,240	4,201	5,274	5,118	3,405	3,333	2,894	3,963	3,279	2,850
Dry Water Years (21%)	2,494	2,720	3,303	3,192	4,221	3,900	2,701	2,611	2,855	3,307	2,528	2,392
Critical Water Years (18%)	2,166	2,215	2,647	2,803	3,191	2,856	2,330	2,112	2,306	2,404	2,049	2,099

Table 4F-3-2-1b. Georgiana Slough Flow, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,201	3,769	7,813	10,416	10,823	10,766	9,040	7,420	5,144	4,200	3,569	4,003
20% Exceedance	3,054	3,034	5,951	8,575	9,896	9,010	6,251	5,910	4,151	4,023	3,493	3,799
30% Exceedance	2,855	2,902	4,320	6,167	8,069	7,488	4,671	4,258	3,325	3,893	3,431	3,609
40% Exceedance	2,753	2,842	3,413	4,968	6,484	6,035	3,908	3,357	2,956	3,629	3,346	3,295
50% Exceedance	2,517	2,781	3,121	4,103	5,050	4,782	3,378	3,059	2,823	3,521	3,192	2,829
60% Exceedance	2,271	2,547	2,963	3,481	4,449	4,179	2,826	2,833	2,766	3,425	2,930	2,513
70% Exceedance	2,164	2,382	2,578	2,983	3,736	3,799	2,625	2,724	2,703	3,229	2,372	2,389
80% Exceedance	2,138	2,189	2,424	2,729	3,271	3,055	2,533	2,611	2,608	2,693	2,145	2,249
90% Exceedance	1,936	2,019	2,187	2,491	2,895	2,616	2,345	2,068	2,230	2,281	2,076	2,103
Full Simulation Period Average[a]	2,584	2,823	4,060	5,340	6,249	5,871	4,419	4,003	3,434	3,427	2,951	3,012
Wet Water Years (32%)	2,860	3,281	5,861	8,404	9,605	8,929	7,083	6,066	4,791	3,787	3,467	3,844
Above Normal Water Years (9%)	2,512	2,776	3,949	6,808	7,131	7,192	4,665	4,426	3,655	3,976	3,537	3,706
Below Normal Water Years (20%)	2,568	2,716	3,264	4,243	5,336	5,135	3,603	3,469	2,895	3,849	3,204	2,814
Dry Water Years (21%)	2,519	2,744	3,307	3,202	4,228	3,922	2,799	2,764	2,801	3,190	2,440	2,413
Critical Water Years (18%)	2,221	2,242	2,679	2,872	3,214	2,866	2,354	2,160	2,249	2,316	2,055	2,104

Table 4F-3-2-1c. Georgiana Slough Flow, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	28	29	97	79	-2	1	1	-51	0	-69	-26	143
20% Exceedance	15	7	345	22	67	-1	20	7	-20	-82	-52	122
30% Exceedance	-19	-14	133	139	49	-28	177	97	-54	-13	-28	182
40% Exceedance	-33	11	41	42	127	20	196	-1	-10	-91	-53	50
50% Exceedance	33	43	-16	-14	84	96	18	147	-57	-95	-72	-9
60% Exceedance	-27	10	3	1	32	-3	119	92	-68	-49	51	15
70% Exceedance	6	1	43	7	134	1	68	163	-8	-34	-129	15
80% Exceedance	30	20	18	53	33	-26	92	148	18	-129	-96	2
90% Exceedance	92	40	-35	35	26	0	66	4	-101	-91	-12	-26
Full Simulation Period Average[a]	14	18	35	33	28	9	86	79	-24	-69	-34	57
Wet Water Years (32%)	16	25	67	28	25	1	12	3	-1	-17	1	117
Above Normal Water Years (9%)	-14	-17	29	14	26	-17	194	106	-26	-1	-16	237
Below Normal Water Years (20%)	-23	10	24	42	62	17	198	137	1	-113	-75	-36
Dry Water Years (21%)	25	24	4	10	7	22	98	153	-54	-117	-88	20
Critical Water Years (18%)	54	27	32	69	23	11	25	48	-57	-88	6	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.

Table 4F-3-2-2a. Georgiana Slough Flow, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,174	3,740	7,716	10,338	10,825	10,764	9,038	7,471	5,144	4,269	3,595	3,860
20% Exceedance	3,039	3,027	5,606	8,552	9,829	9,011	6,230	5,903	4,170	4,105	3,545	3,677
30% Exceedance	2,874	2,915	4,187	6,028	8,019	7,516	4,493	4,161	3,379	3,906	3,459	3,427
40% Exceedance	2,786	2,830	3,372	4,926	6,357	6,015	3,712	3,358	2,966	3,721	3,399	3,245
50% Exceedance	2,484	2,738	3,137	4,117	4,967	4,686	3,360	2,912	2,880	3,616	3,264	2,838
60% Exceedance	2,298	2,536	2,959	3,481	4,417	4,182	2,708	2,742	2,834	3,473	2,879	2,498
70% Exceedance	2,158	2,381	2,535	2,977	3,601	3,798	2,556	2,561	2,711	3,263	2,501	2,374
80% Exceedance	2,108	2,169	2,406	2,676	3,237	3,081	2,442	2,463	2,591	2,822	2,241	2,247
90% Exceedance	1,844	1,978	2,222	2,456	2,868	2,615	2,279	2,064	2,331	2,372	2,087	2,129
Full Simulation Period Average[a]	2,569	2,805	4,025	5,307	6,221	5,862	4,333	3,924	3,458	3,495	2,984	2,955
Wet Water Years (32%)	2,844	3,257	5,794	8,376	9,580	8,928	7,071	6,063	4,793	3,804	3,466	3,727
Above Normal Water Years (9%)	2,526	2,793	3,920	6,795	7,106	7,209	4,470	4,321	3,681	3,977	3,553	3,470
Below Normal Water Years (20%)	2,591	2,706	3,240	4,201	5,274	5,118	3,405	3,333	2,894	3,963	3,279	2,850
Dry Water Years (21%)	2,494	2,720	3,303	3,192	4,221	3,900	2,701	2,611	2,855	3,307	2,528	2,392
Critical Water Years (18%)	2,166	2,215	2,647	2,803	3,191	2,856	2,330	2,112	2,306	2,404	2,049	2,099

Table 4F-3-2-2b. Georgiana Slough Flow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,202	3,769	7,813	10,435	10,823	10,766	9,040	7,420	5,144	4,203	3,569	4,003
20% Exceedance	3,051	3,034	5,984	8,849	9,896	9,010	6,251	5,910	4,151	4,024	3,494	3,799
30% Exceedance	2,855	2,902	4,324	6,128	8,096	7,602	4,670	4,261	3,325	3,893	3,432	3,609
40% Exceedance	2,753	2,842	3,413	4,968	6,484	6,036	3,901	3,367	2,954	3,631	3,338	3,294
50% Exceedance	2,503	2,781	3,133	4,104	5,124	4,766	3,379	3,062	2,823	3,528	3,196	2,856
60% Exceedance	2,318	2,564	2,956	3,508	4,450	4,179	2,816	2,884	2,767	3,440	2,931	2,513
70% Exceedance	2,164	2,386	2,578	2,983	3,798	3,800	2,621	2,727	2,712	3,252	2,395	2,408
80% Exceedance	2,136	2,196	2,428	2,726	3,292	3,040	2,431	2,634	2,589	2,696	2,128	2,249
90% Exceedance	1,949	2,114	2,242	2,484	2,895	2,566	2,133	2,053	1,997	2,234	2,064	2,121
Full Simulation Period Average[a]	2,590	2,830	4,064	5,341	6,260	5,873	4,379	4,006	3,417	3,412	2,951	3,016
Wet Water Years (32%)	2,857	3,282	5,863	8,407	9,605	8,929	7,084	6,067	4,792	3,788	3,468	3,845
Above Normal Water Years (9%)	2,524	2,816	3,948	6,843	7,162	7,281	4,698	4,431	3,656	3,977	3,538	3,706
Below Normal Water Years (20%)	2,595	2,723	3,269	4,239	5,351	5,145	3,609	3,480	2,900	3,866	3,209	2,822
Dry Water Years (21%)	2,524	2,753	3,309	3,205	4,230	3,921	2,776	2,771	2,798	3,187	2,440	2,420
Critical Water Years (18%)	2,220	2,244	2,686	2,853	3,240	2,822	2,137	2,155	2,150	2,221	2,051	2,108

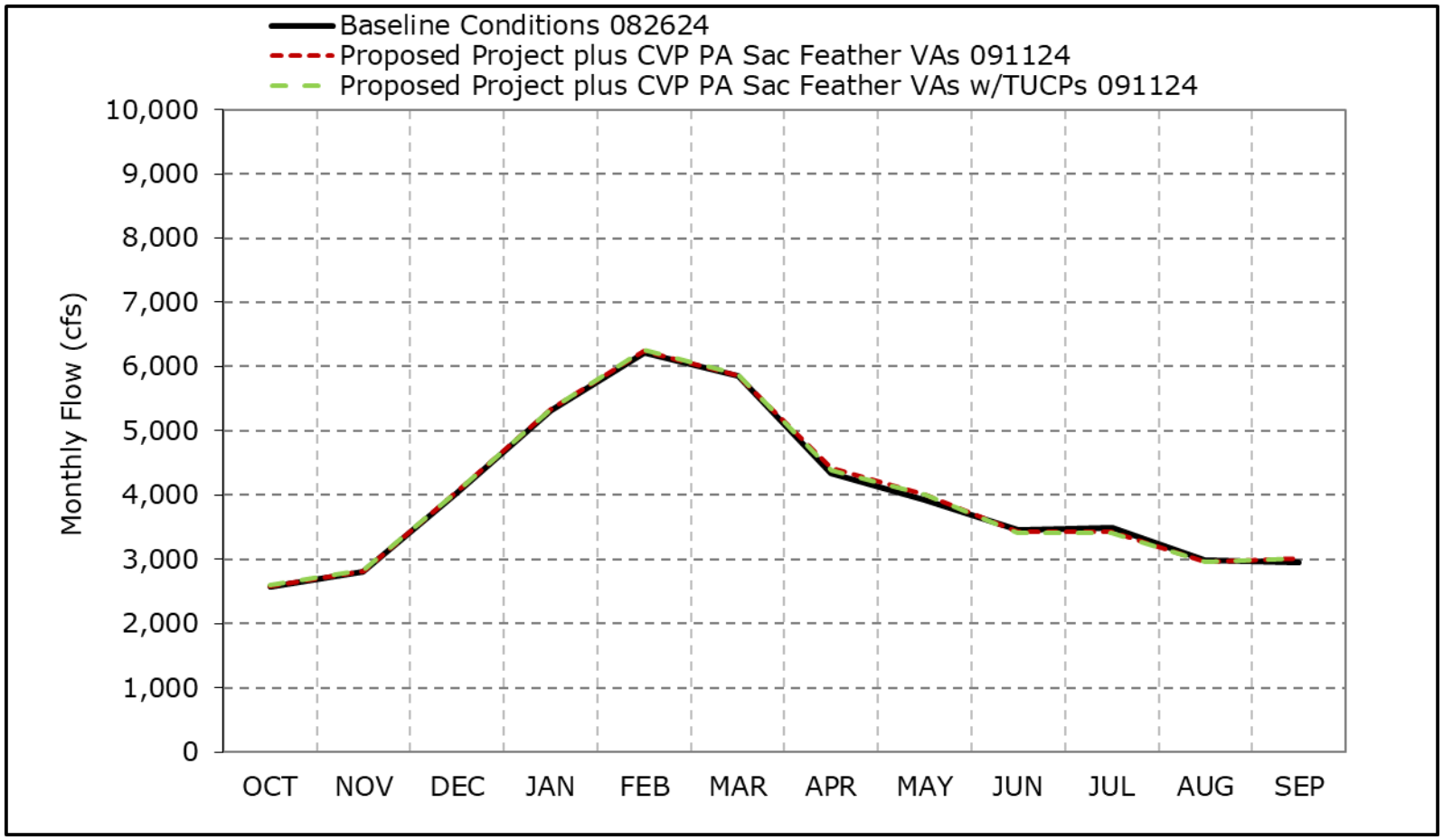
Table 4F-3-2-2c. Georgiana Slough Flow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	28	29	97	97	-2	1	2	-51	0	-66	-25	143
20% Exceedance	12	7	378	297	67	-1	21	7	-19	-81	-51	123
30% Exceedance	-19	-14	137	100	76	86	177	100	-54	-13	-27	182
40% Exceedance	-33	12	41	43	127	20	190	9	-12	-90	-61	49
50% Exceedance	19	43	-4	-13	158	80	19	150	-57	-88	-69	17
60% Exceedance	20	27	-3	28	33	-2	108	142	-68	-33	52	15
70% Exceedance	6	5	43	6	196	2	65	166	1	-11	-106	34
80% Exceedance	29	27	22	50	55	-41	-11	171	-2	-126	-113	2
90% Exceedance	104	136	20	28	27	-50	-147	-11	-334	-138	-23	-9
Full Simulation Period Average[a]	21	26	39	34	39	11	46	82	-42	-83	-33	61
Wet Water Years (32%)	12	25	69	31	25	1	12	4	-1	-17	2	118
Above Normal Water Years (9%)	-2	23	28	49	57	73	227	110	-25	0	-15	237
Below Normal Water Years (20%)	5	18	29	38	77	27	204	147	6	-96	-70	-28
Dry Water Years (21%)	30	33	5	13	9	21	75	160	-57	-120	-88	28
Critical Water Years (18%)	54	29	39	50	50	-34	-193	42	-156	-184	2	9

[a] Based on the 100-year simulation period.

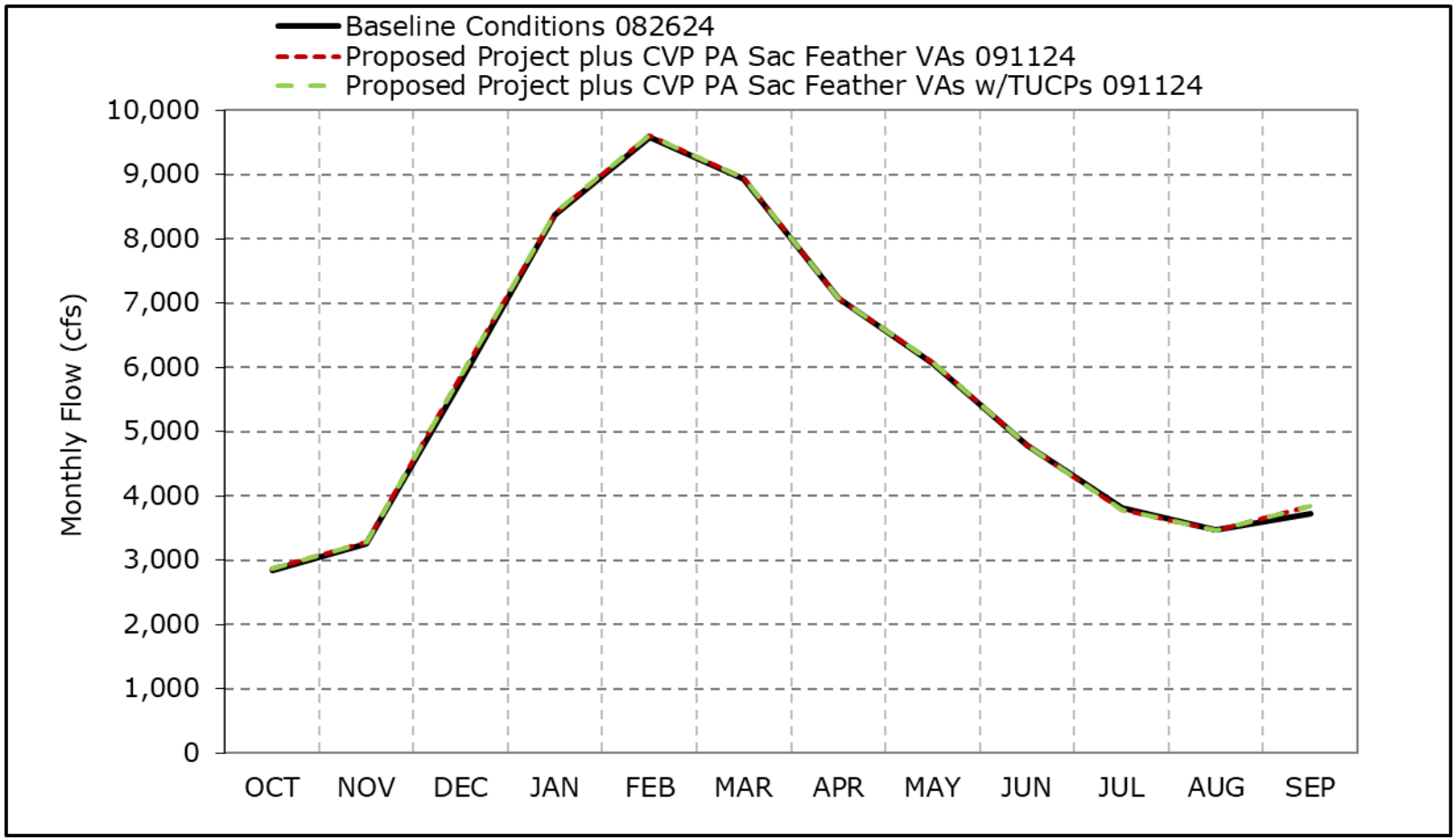
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-2a. Georgiana Slough Flow, Long-Term Average Flow



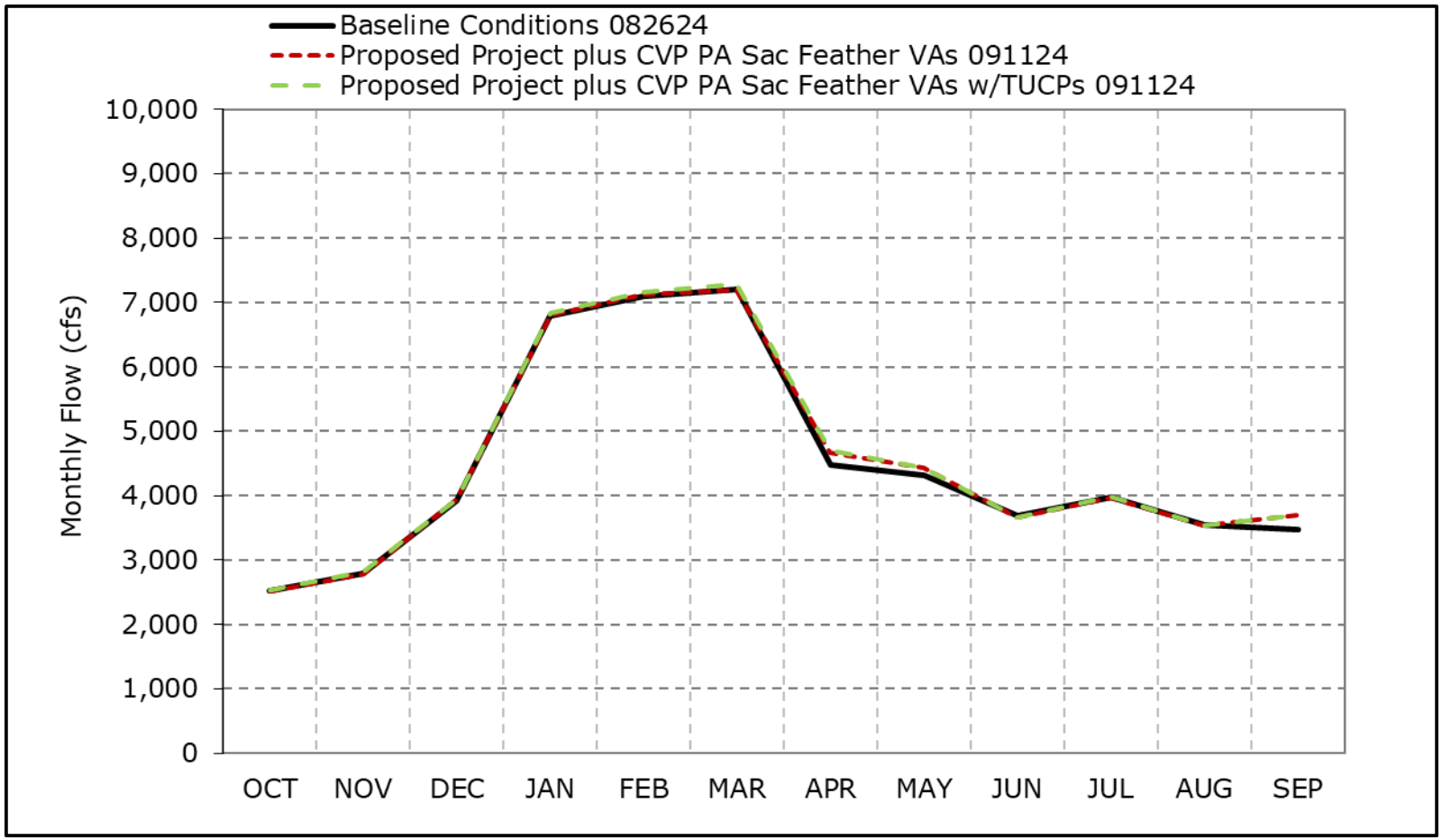
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2b. Georgiana Slough Flow, Wet Year Average Flow



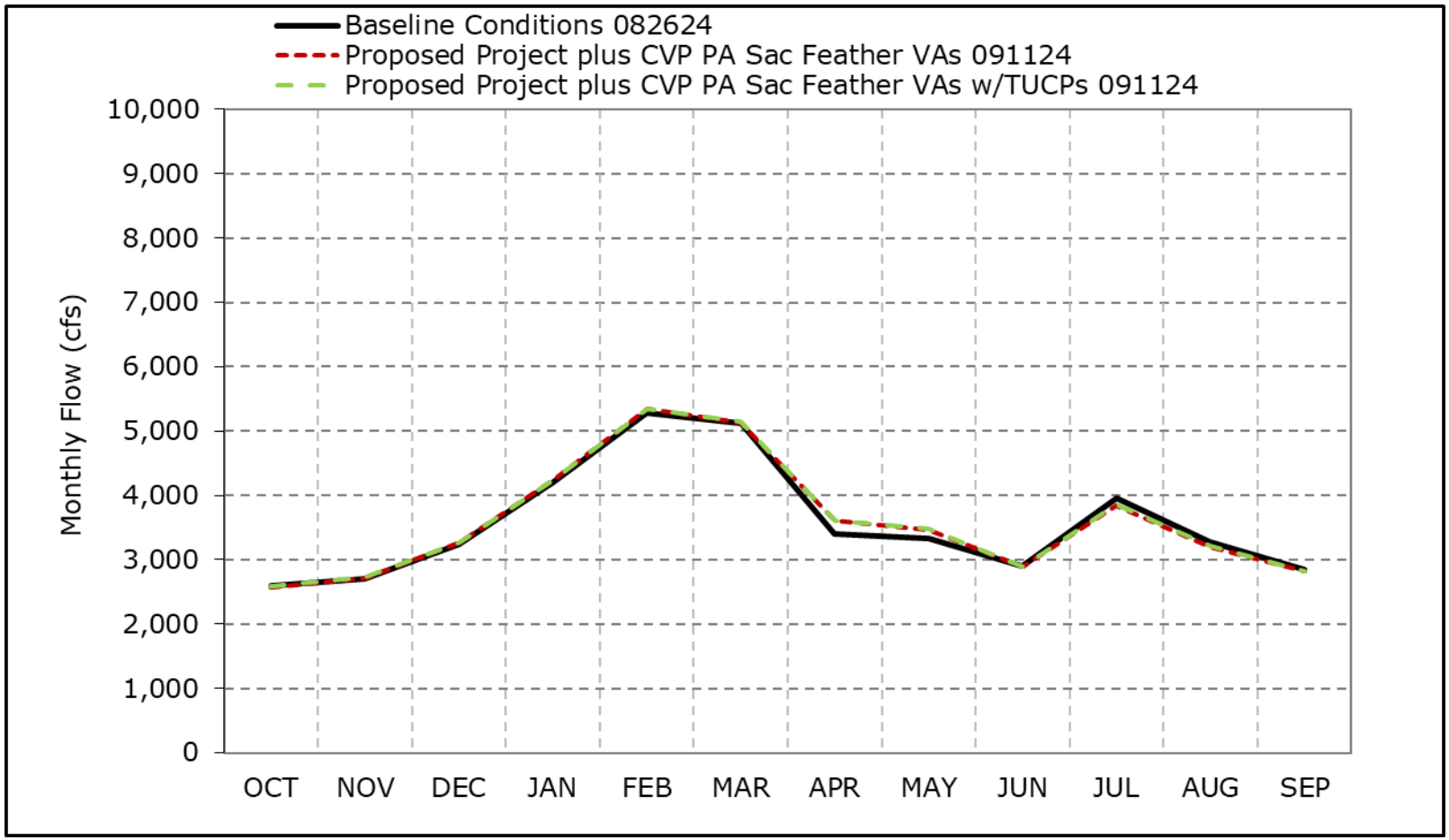
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2c. Georgiana Slough Flow, Above Normal Year Average Flow



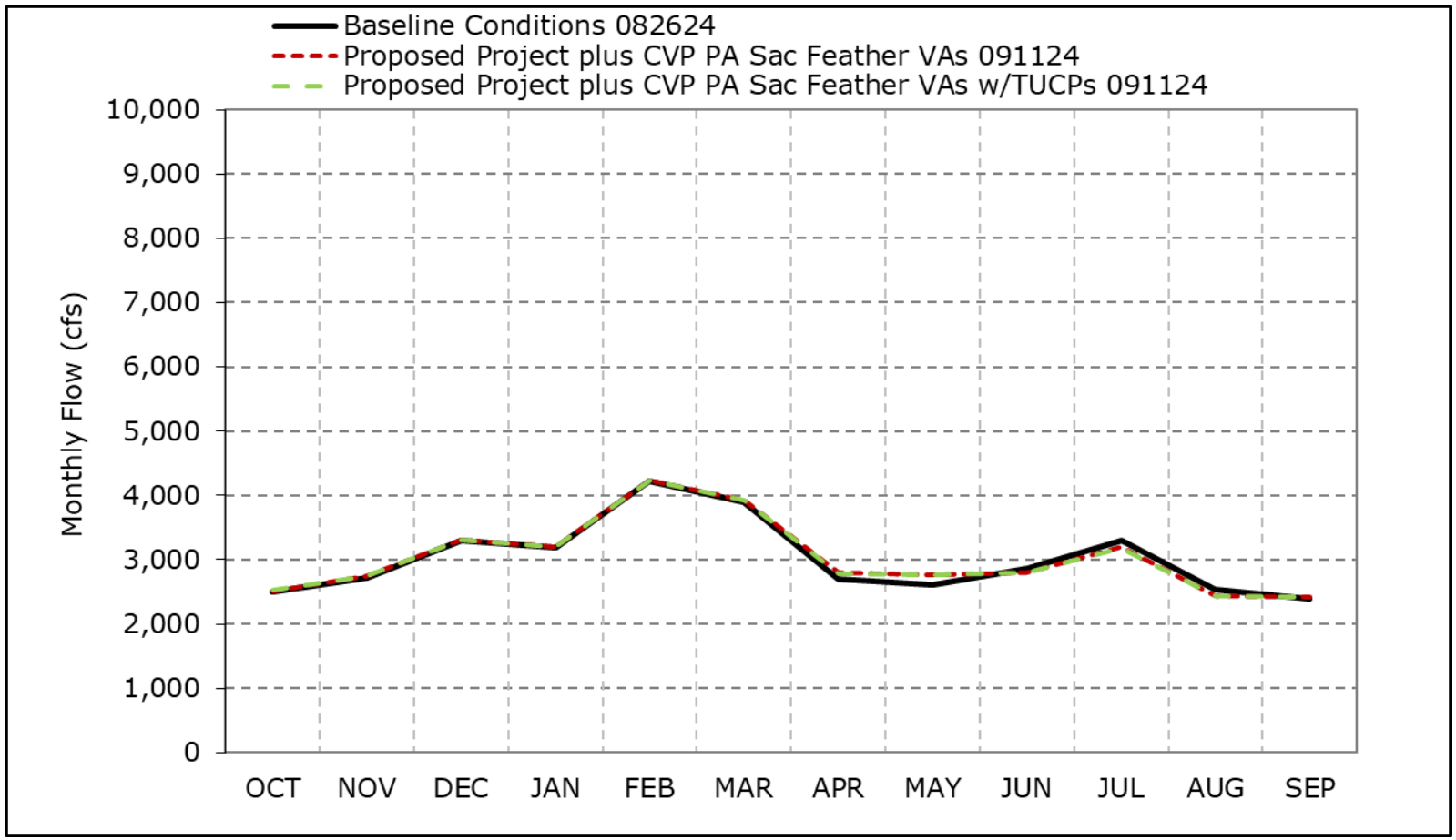
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2d. Georgiana Slough Flow, Below Normal Year Average Flow



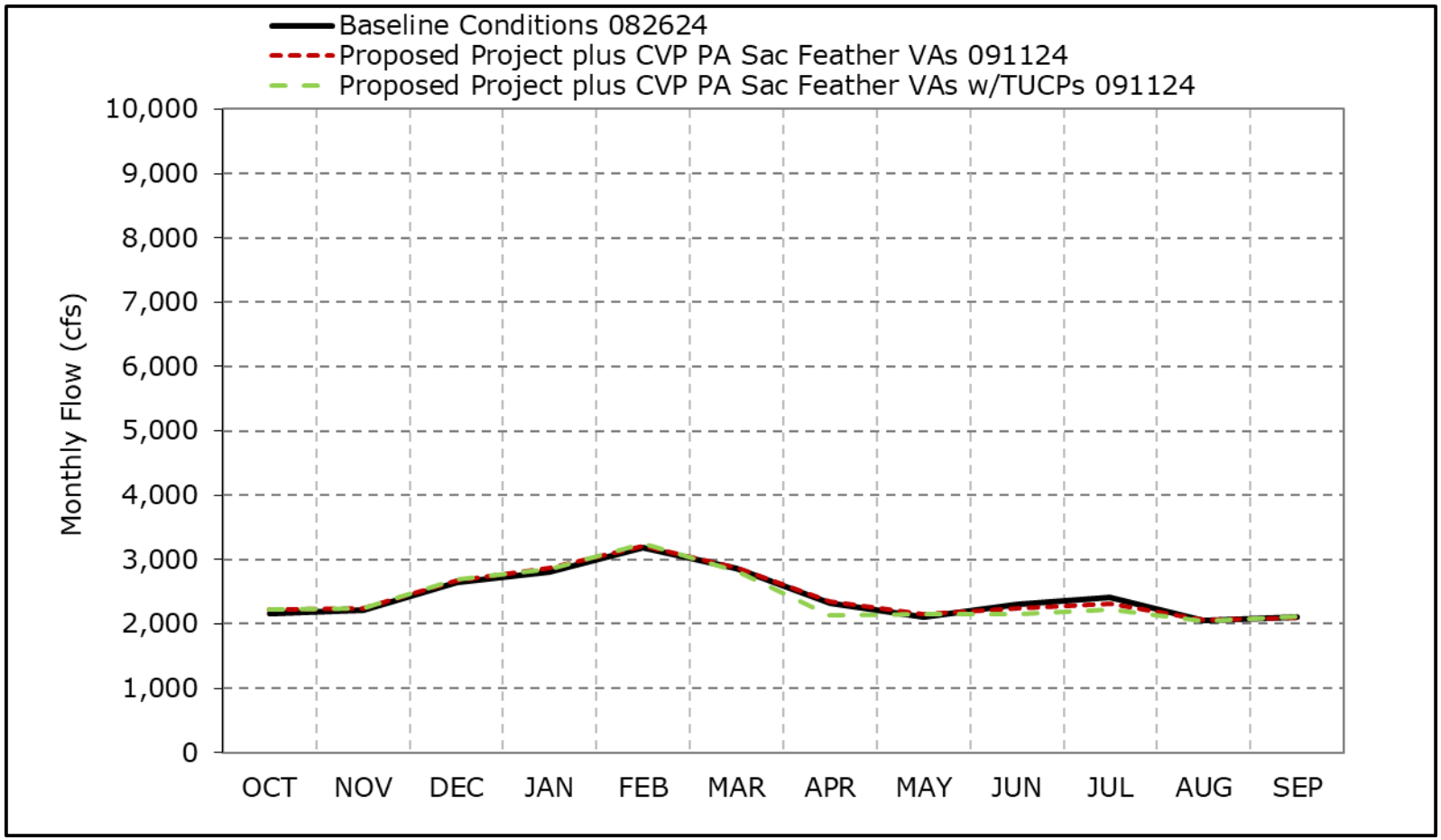
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2e. Georgiana Slough Flow, Dry Year Average Flow



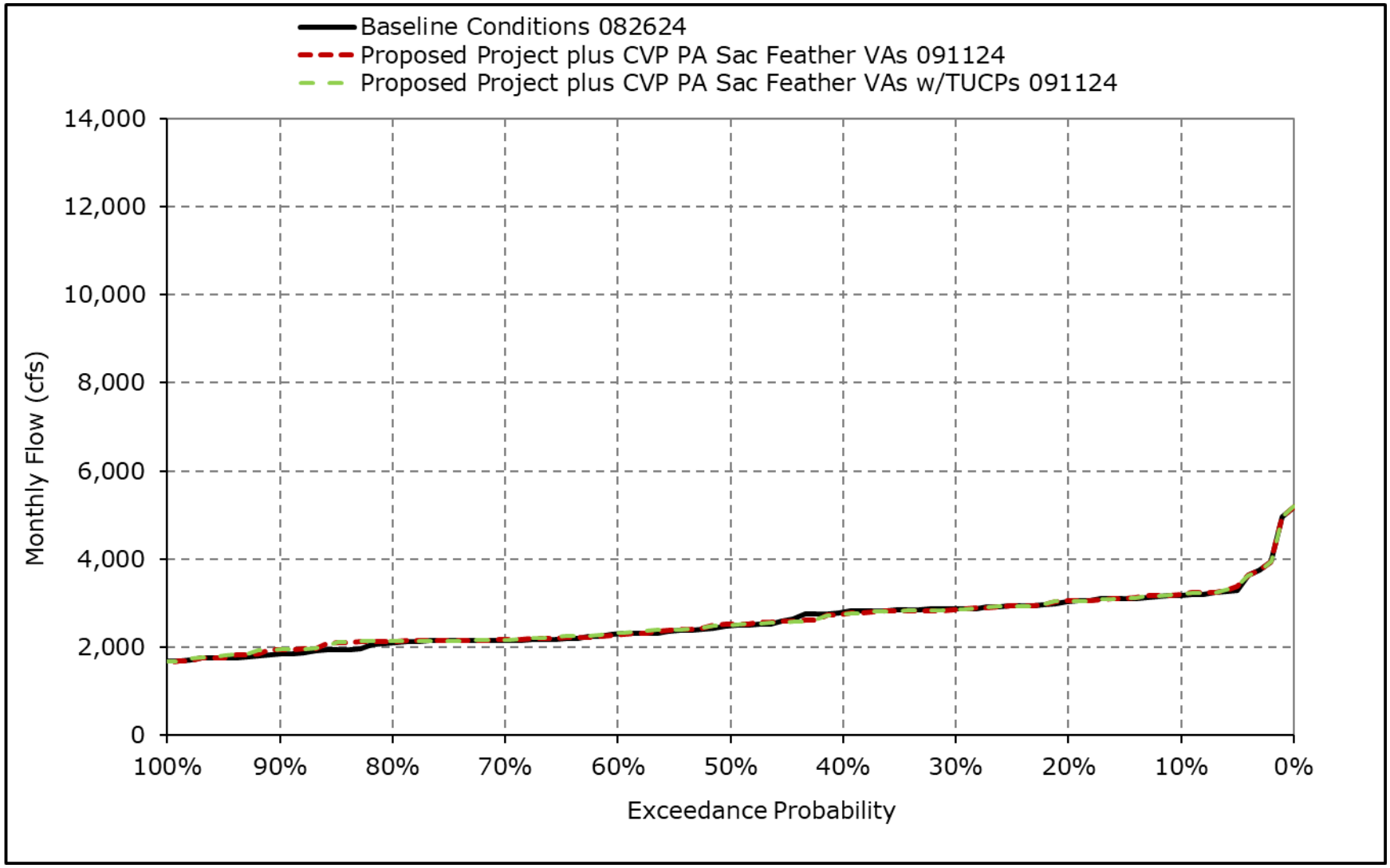
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2f. Georgiana Slough Flow, Critical Year Average Flow



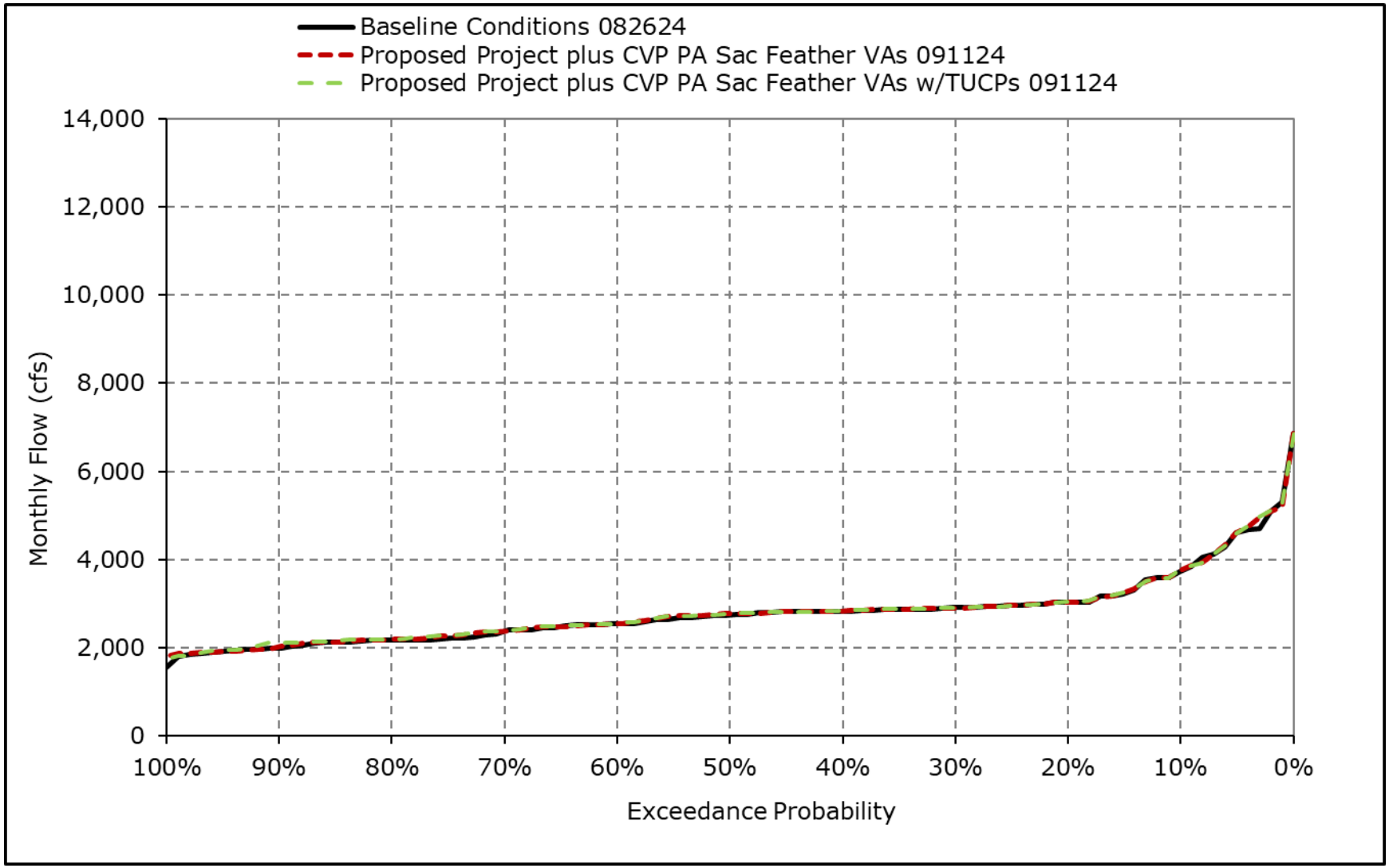
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2g. Georgiana Slough Flow, October



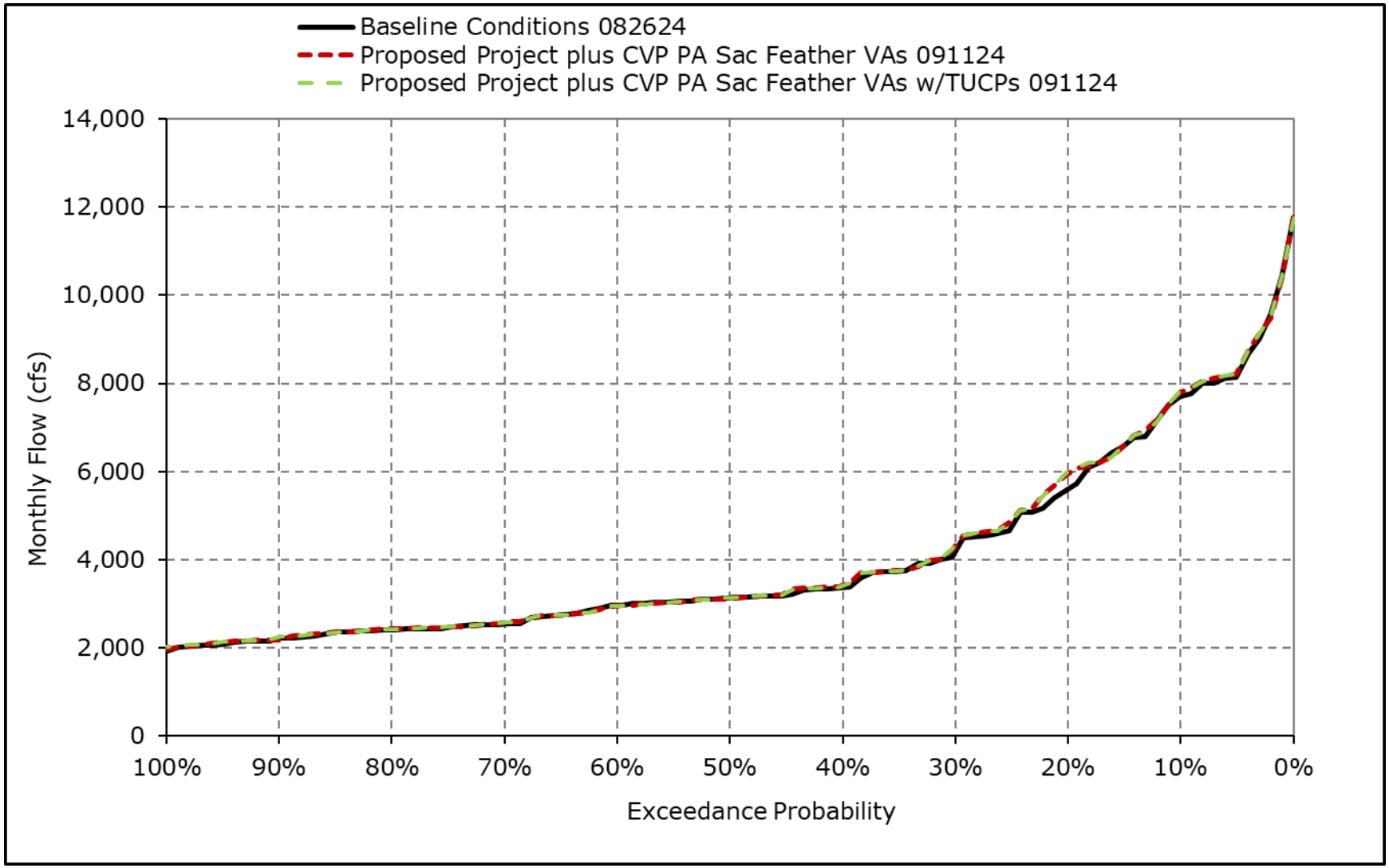
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2h. Georgiana Slough Flow, November



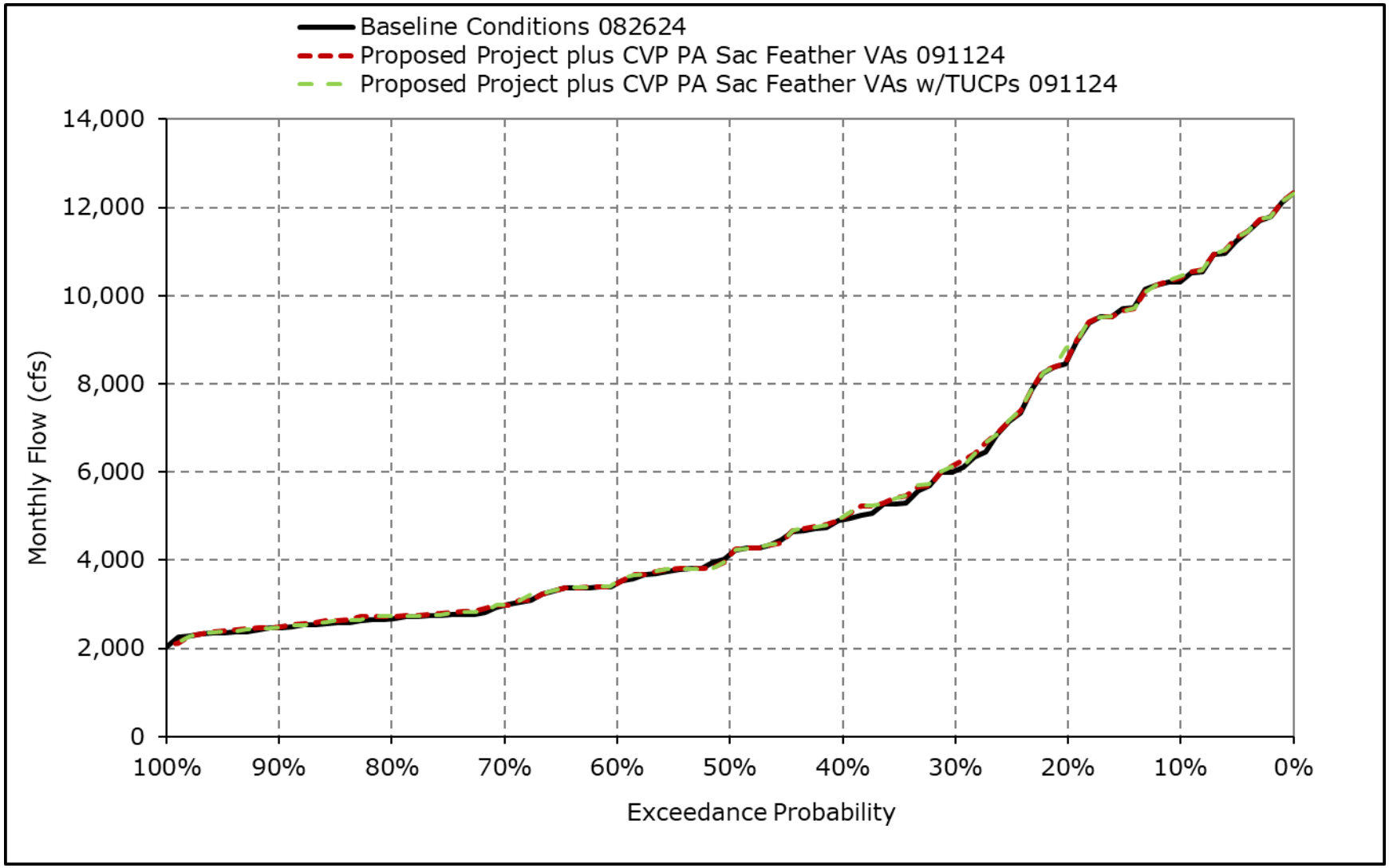
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2i. Georgiana Slough Flow, December



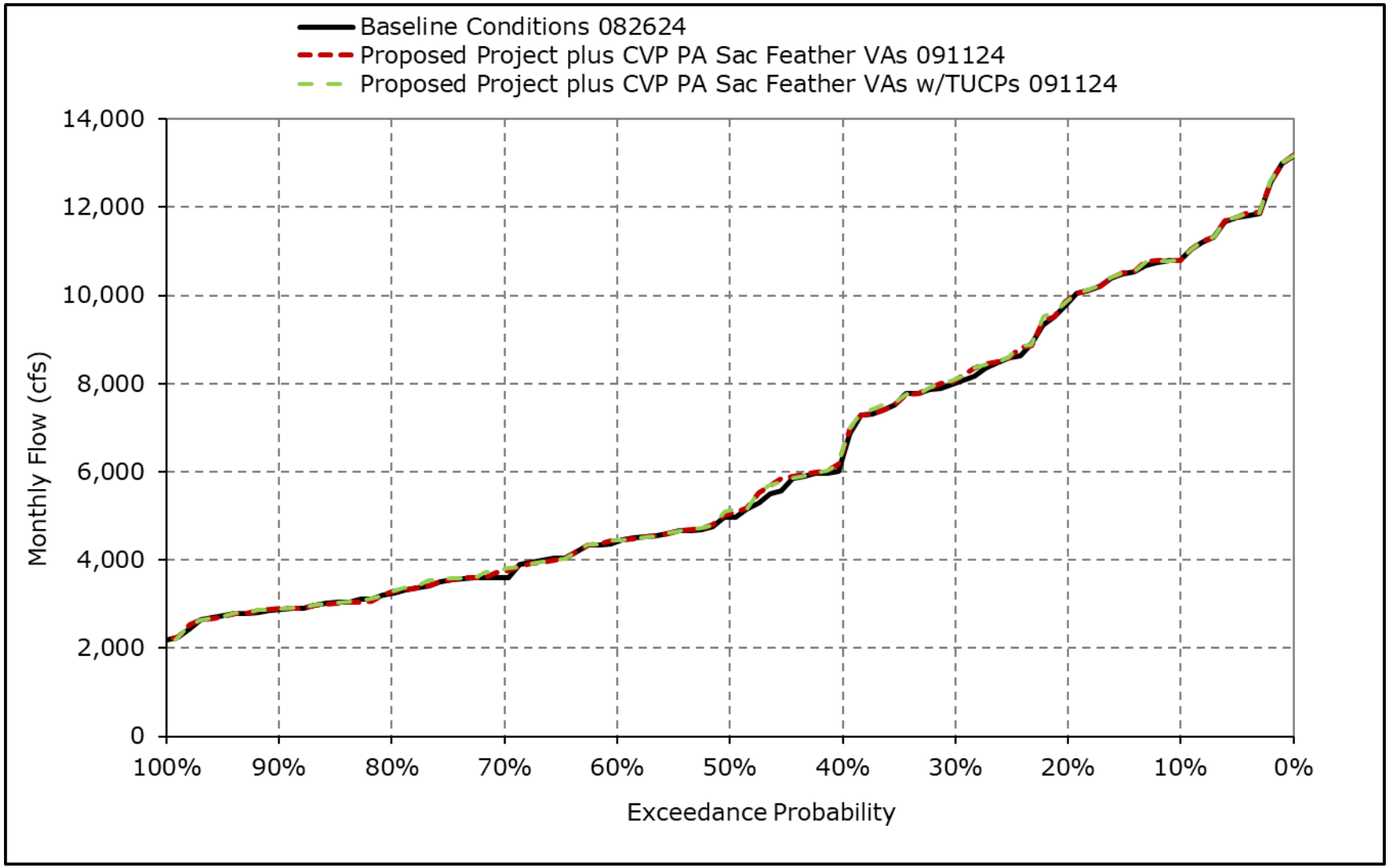
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2j. Georgiana Slough Flow, January



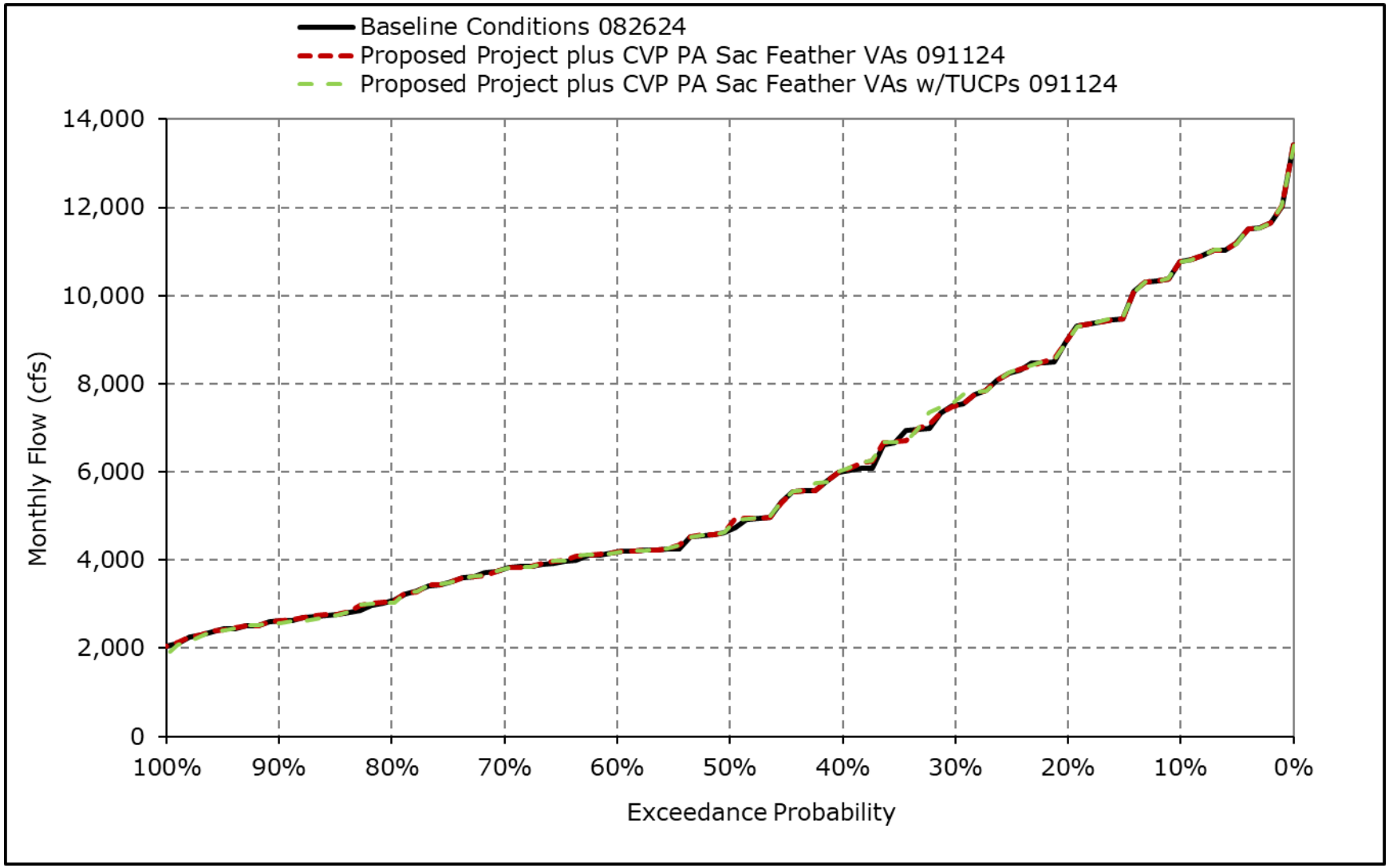
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2k. Georgiana Slough Flow, February



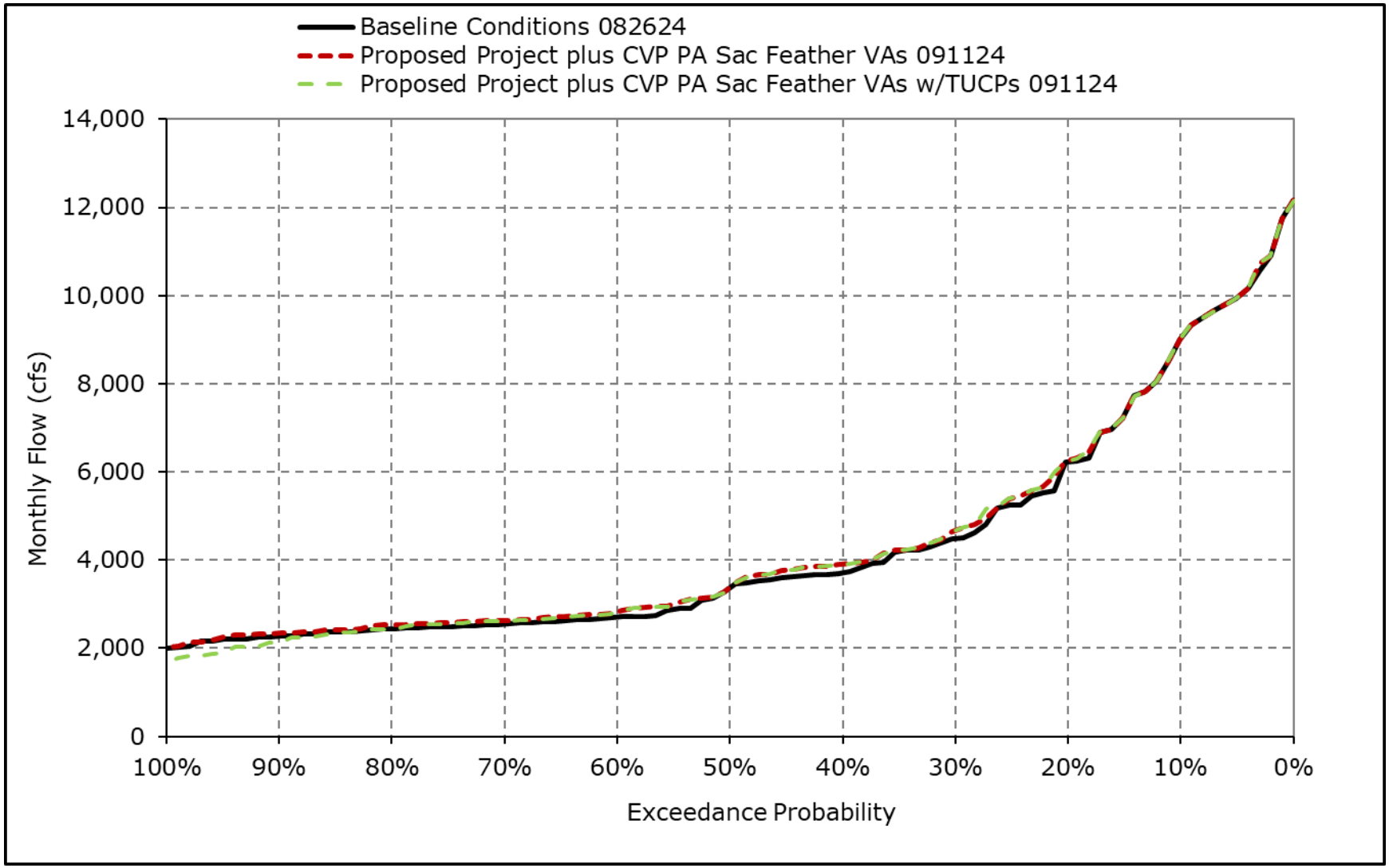
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2l. Georgiana Slough Flow, March



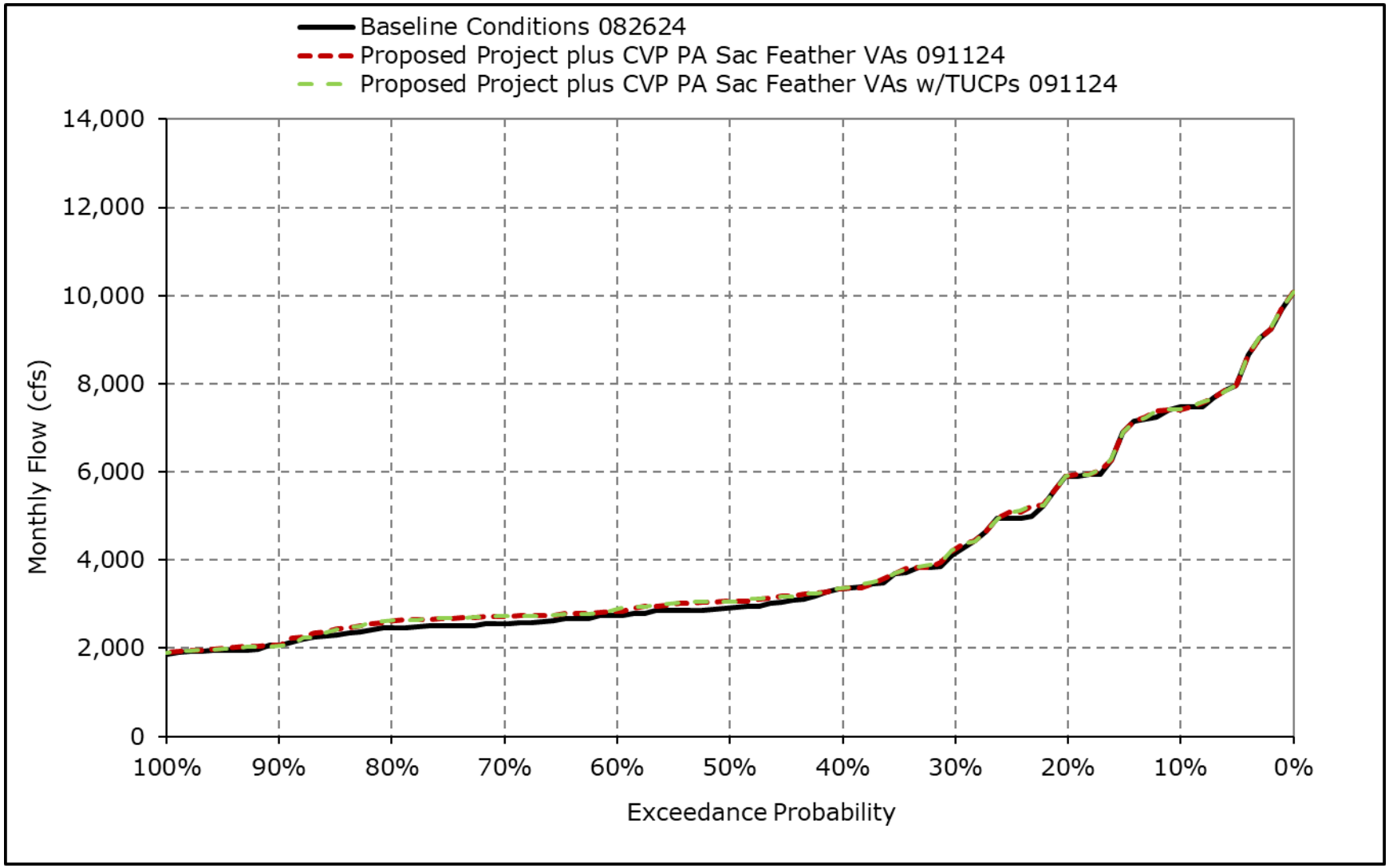
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2m. Georgiana Slough Flow, April



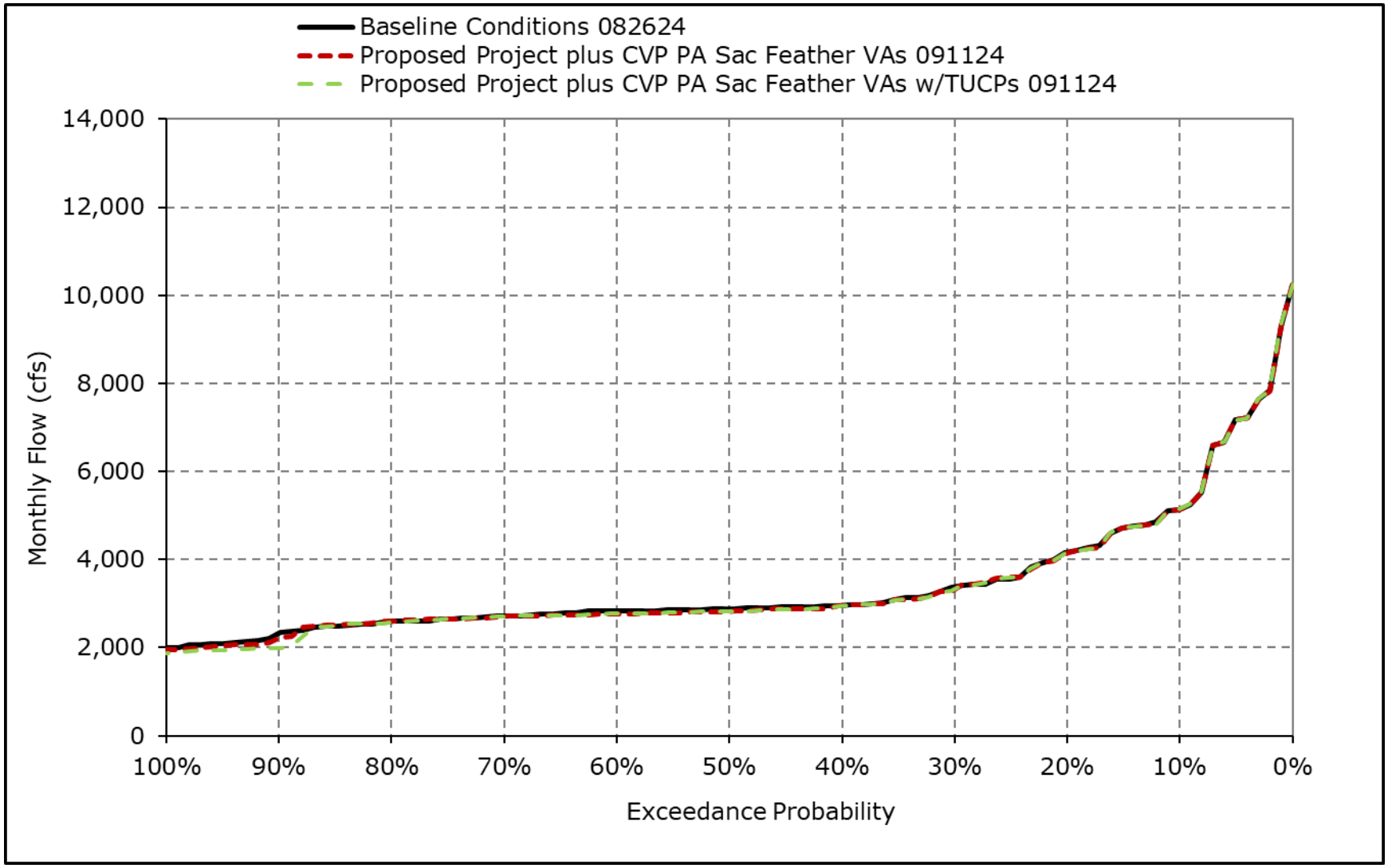
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2n. Georgiana Slough Flow, May



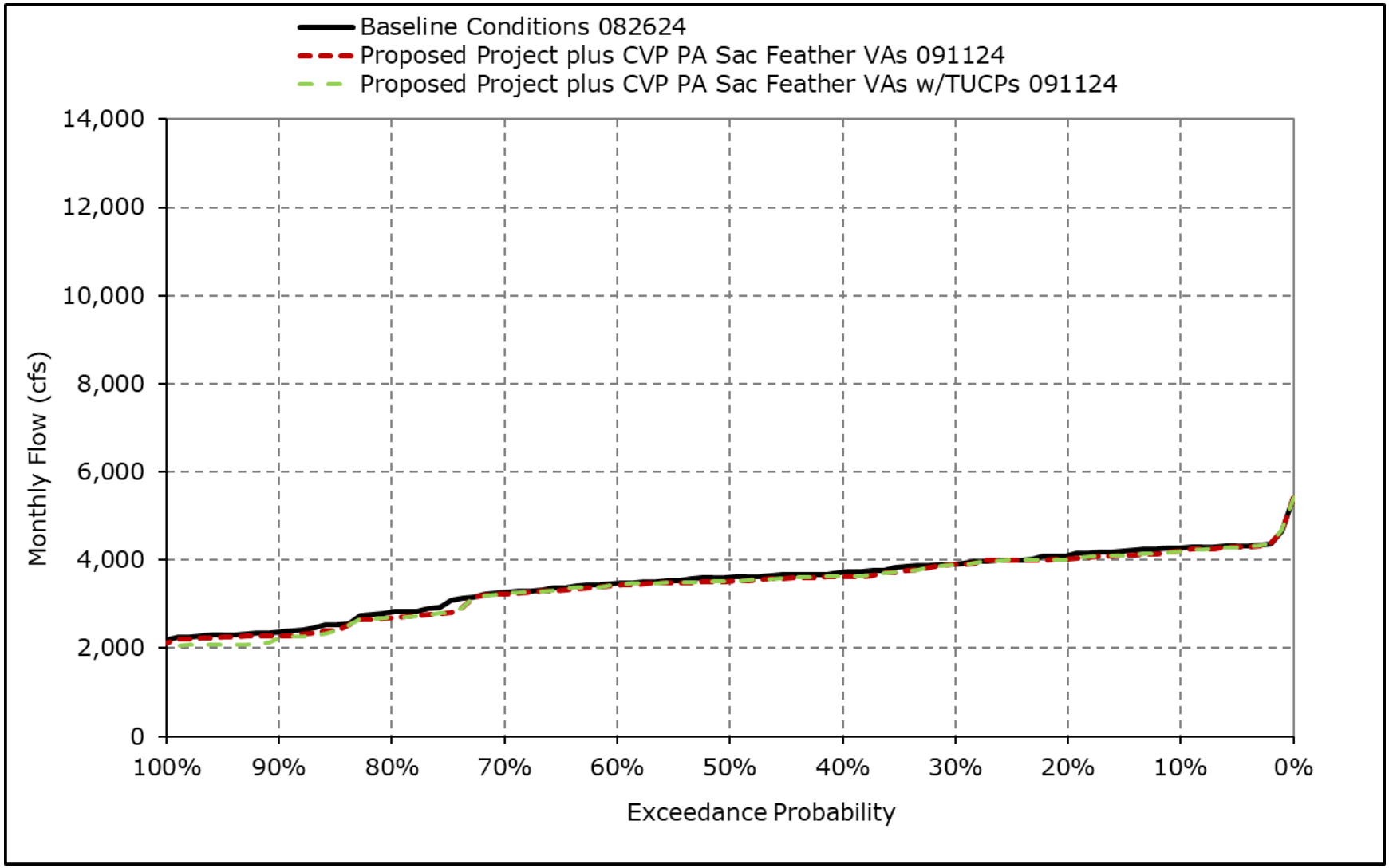
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2o. Georgiana Slough Flow, June



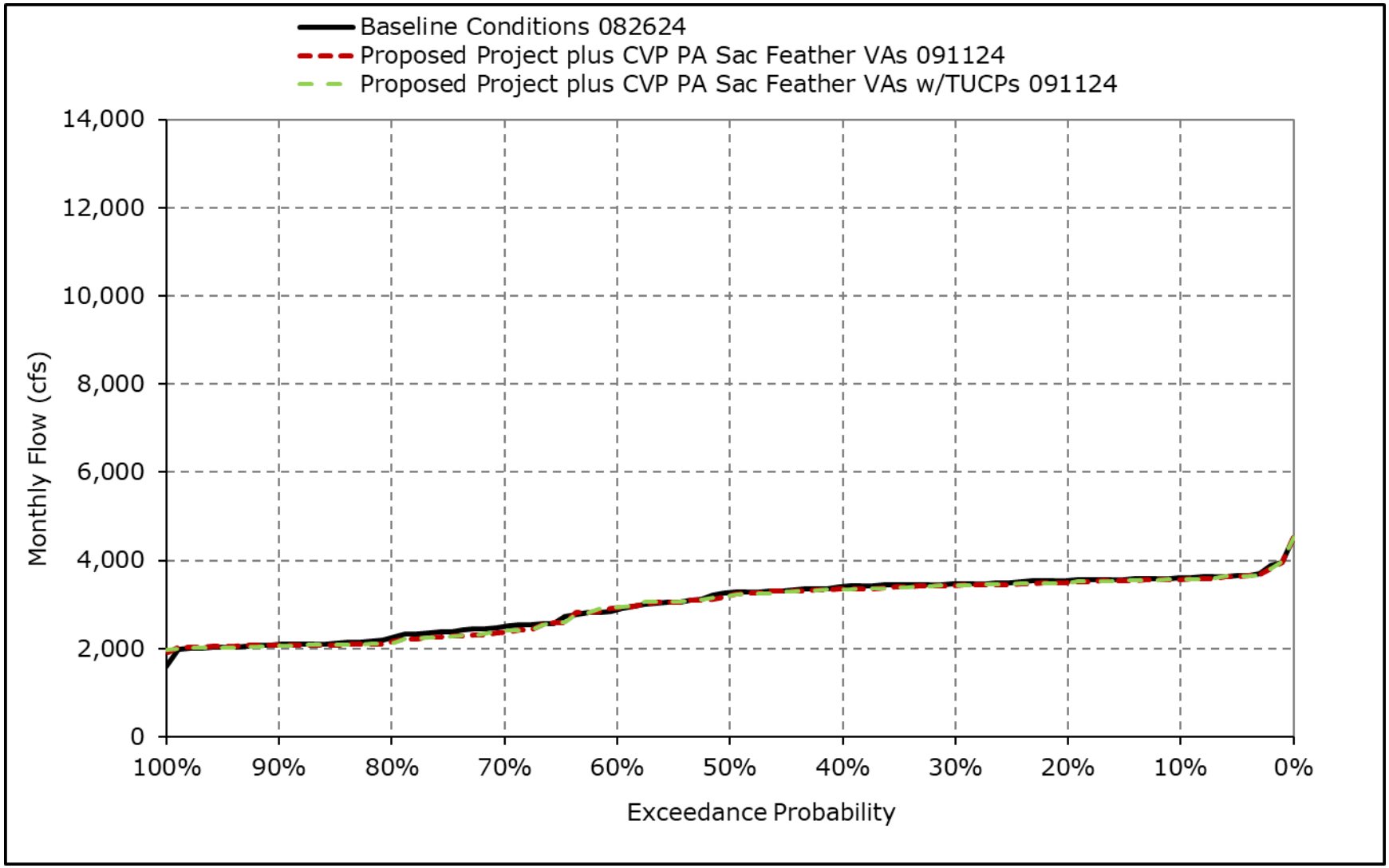
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2p. Georgiana Slough Flow, July



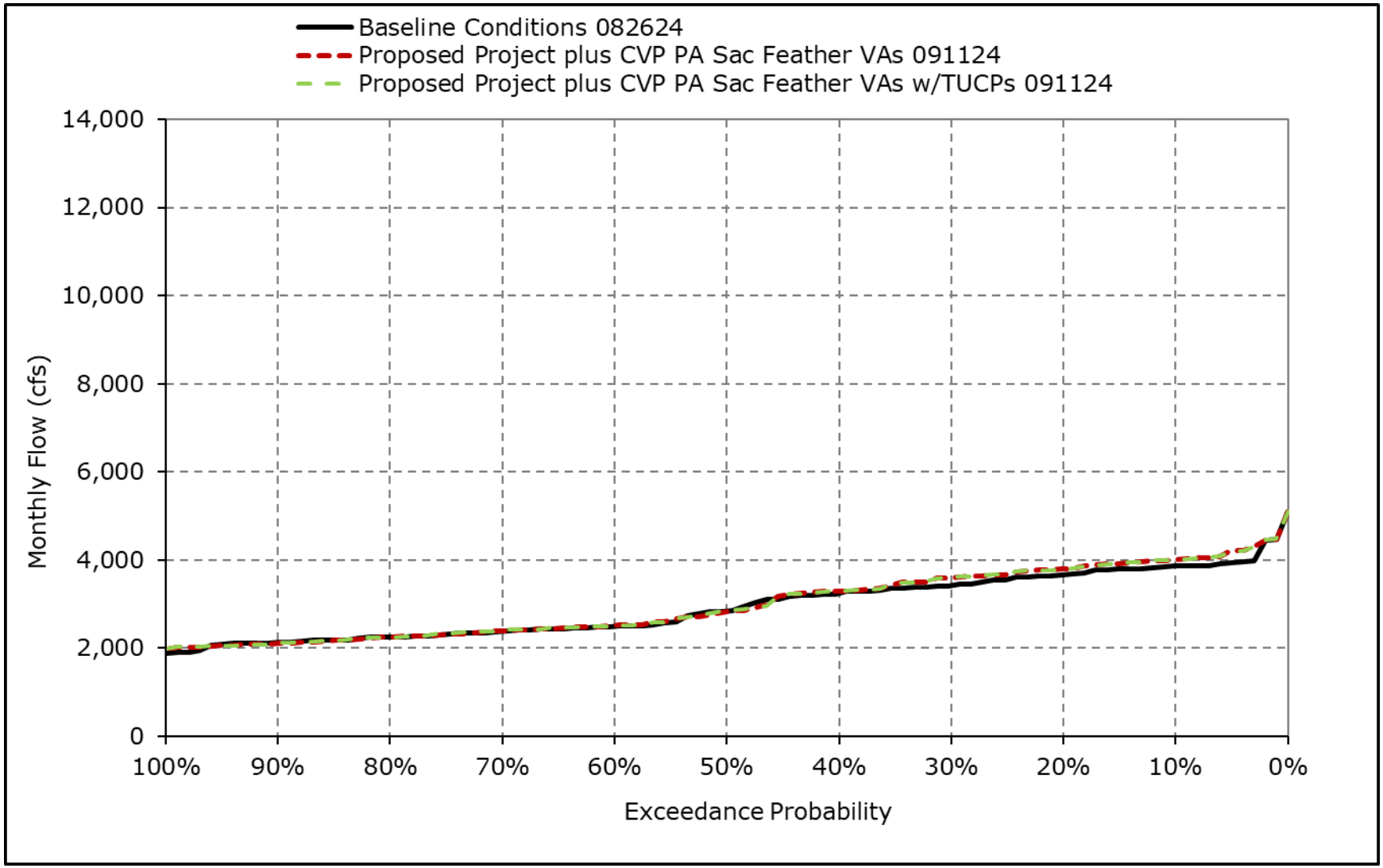
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-2q. Georgiana Slough Flow, August



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

Figure 4F-3-2r. Georgiana Slough Flow, September



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

Table 4F-3-3-1a. 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 4F-3-3-1b. Yolo Bypass Flow, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	175	830	11,364	40,220	49,385	35,981	3,600	1,605	543	322	247	306
20% Exceedance	123	343	5,954	14,346	17,577	9,168	1,716	872	377	259	199	276
30% Exceedance	109	255	1,568	5,522	10,562	5,792	858	552	313	252	190	261
40% Exceedance	90	169	844	2,694	6,115	2,885	604	399	246	248	186	250
50% Exceedance	79	134	447	1,469	2,840	1,613	329	300	235	243	182	239
60% Exceedance	68	119	274	780	1,910	824	289	262	226	236	179	232
70% Exceedance	54	99	163	414	732	456	268	245	221	233	174	214
80% Exceedance	47	85	109	221	350	300	250	227	209	225	170	205
90% Exceedance	42	74	87	127	209	105	222	195	197	214	150	180
Full Simulation Period Average[a]	130	450	3,759	11,990	15,273	10,557	2,733	742	354	255	192	246
Wet Water Years (32%)	212	919	8,975	31,686	39,060	28,392	7,549	1,457	615	313	238	289
Above Normal Water Years (9%)	78	305	2,691	12,951	11,074	8,562	946	658	277	241	177	235
Below Normal Water Years (20%)	118	193	1,397	2,063	5,733	2,195	589	593	245	209	183	233
Dry Water Years (21%)	95	317	1,235	776	2,336	970	337	297	226	244	180	239
Critical Water Years (18%)	64	131	589	608	779	323	244	201	200	224	139	197

Table 4F-3-3-1c. Yolo Bypass Flow, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-9	-2	215	-410	82	-32	-5	81	1	-3	-28	-4
20% Exceedance	-1	-30	-569	488	14	-131	-12	103	-3	0	-3	-3
30% Exceedance	-4	-1	-88	8	-23	217	-2	19	7	1	-2	-3
40% Exceedance	0	-3	1	-152	-347	74	-2	5	2	1	-2	-4
50% Exceedance	0	-5	-4	3	-221	-4	-6	7	0	0	-1	-4
60% Exceedance	1	-5	-1	-4	-17	-56	-5	1	0	2	-1	-2
70% Exceedance	0	-3	-5	31	-2	-22	-3	1	0	1	0	-4
80% Exceedance	-2	1	0	-1	0	13	8	4	-1	1	0	-5
90% Exceedance	-2	0	-1	0	20	0	2	-6	-4	7	-9	-4
Full Simulation Period Average[a]	-1	-2	-16	76	90	21	6	9	0	1	-50	-3
Wet Water Years (32%)	0	8	-7	289	451	76	26	3	0	0	-1	-3
Above Normal Water Years (9%)	-1	-36	-99	-100	-298	45	-10	2	-1	0	0	-10
Below Normal Water Years (20%)	-1	-2	51	-35	-44	-39	-6	47	2	4	9	1
Dry Water Years (21%)	-3	0	29	0	4	2	-1	0	1	1	-1	3
Critical Water Years (18%)	0	-3	-114	0	-109	1	3	-8	-1	-1	-286	-13

[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.

Table 4F-3-3-2a. 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 4F-3-3-2b. Yolo Bypass Flow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	175	830	11,367	40,351	49,402	35,982	3,612	1,608	543	323	247	307
20% Exceedance	123	343	5,959	14,349	17,582	9,374	1,718	872	377	259	199	276
30% Exceedance	111	255	1,575	5,525	10,553	6,256	857	551	313	252	190	262
40% Exceedance	90	169	844	2,694	6,125	2,886	605	401	247	248	187	250
50% Exceedance	79	134	447	1,470	2,843	1,613	329	299	235	243	182	239
60% Exceedance	66	122	274	787	1,910	824	279	262	225	236	180	231
70% Exceedance	54	101	163	414	732	457	262	246	218	233	175	214
80% Exceedance	49	85	109	221	352	301	234	227	205	224	171	206
90% Exceedance	43	73	87	127	209	105	202	197	174	207	162	188
Full Simulation Period Average[a]	130	451	3,758	12,010	15,293	10,627	2,725	743	349	253	194	247
Wet Water Years (32%)	212	919	8,969	31,732	39,066	28,395	7,552	1,458	615	313	238	289
Above Normal Water Years (9%)	79	305	2,692	13,000	11,164	9,324	947	658	277	241	177	235
Below Normal Water Years (20%)	118	193	1,398	2,063	5,761	2,200	591	593	246	209	181	232
Dry Water Years (21%)	95	318	1,237	777	2,354	970	337	297	227	244	180	239
Critical Water Years (18%)	64	132	590	611	782	322	192	200	170	216	157	203

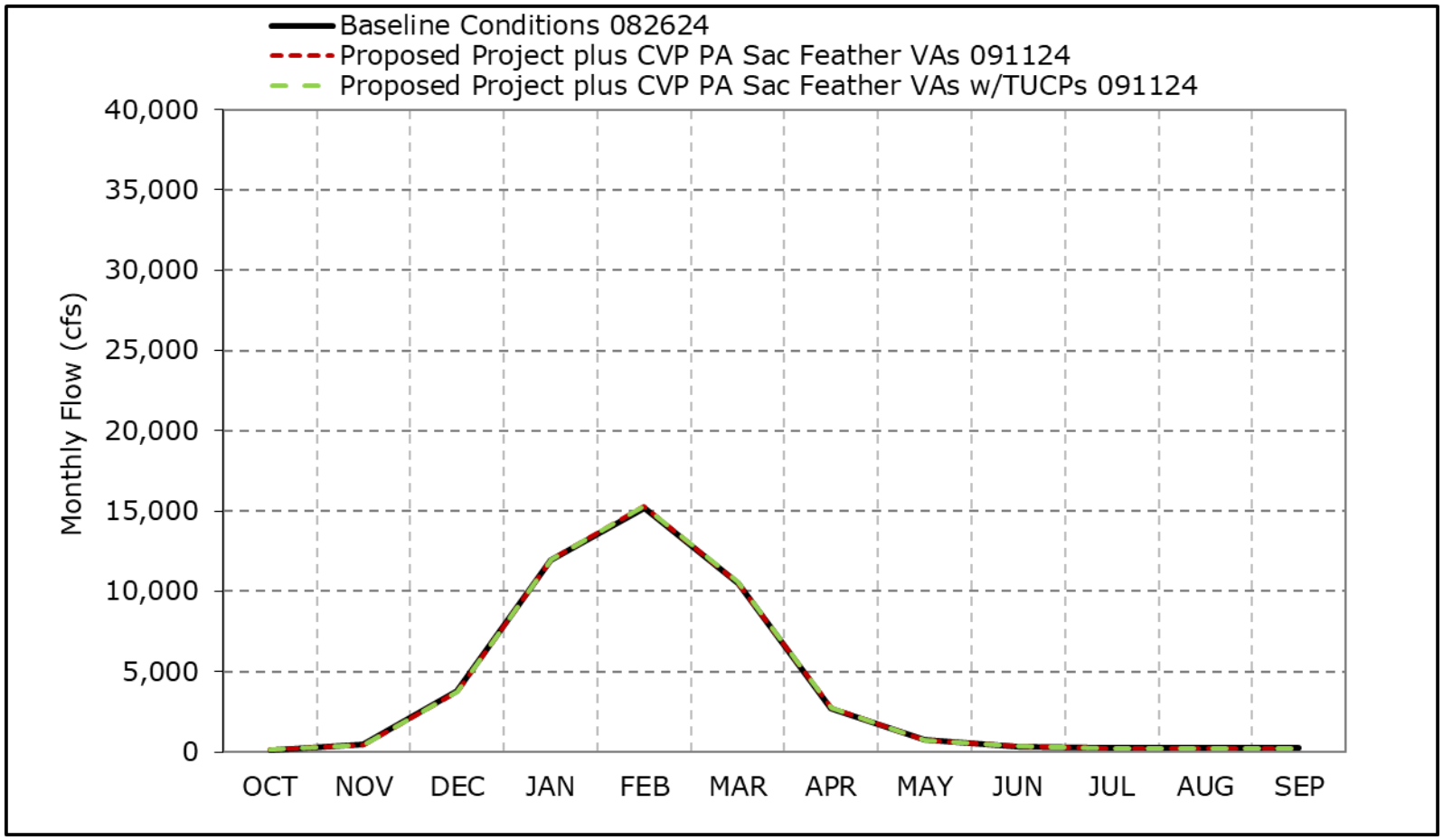
Table 4F-3-3-2c. Yolo Bypass Flow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-9	-2	218	-280	99	-30	8	84	1	-3	-28	-2
20% Exceedance	-1	-30	-564	491	18	76	-11	103	-2	0	-3	-3
30% Exceedance	-1	0	-81	12	-32	682	-3	18	7	1	-2	-3
40% Exceedance	0	-3	1	-152	-337	75	-2	7	2	1	-1	-4
50% Exceedance	0	-4	-4	4	-218	-3	-6	7	0	0	0	-4
60% Exceedance	0	-2	-1	3	-17	-55	-16	1	0	1	1	-2
70% Exceedance	0	-1	-5	30	-2	-22	-9	1	-3	0	0	-3
80% Exceedance	0	1	0	-1	3	14	-8	4	-5	0	1	-4
90% Exceedance	-1	0	-1	0	20	0	-18	-4	-28	0	2	4
Full Simulation Period Average[a]	0	-2	-16	97	110	92	-1	10	-4	-1	-47	-2
Wet Water Years (32%)	0	8	-13	336	457	79	29	4	0	0	0	-3
Above Normal Water Years (9%)	0	-36	-99	-51	-208	807	-8	3	0	0	0	-10
Below Normal Water Years (20%)	-1	-2	52	-34	-15	-34	-4	47	3	4	6	0
Dry Water Years (21%)	-2	0	31	1	21	2	-1	0	2	1	-1	3
Critical Water Years (18%)	0	-3	-113	2	-106	0	-50	-8	-31	-10	-269	-7

[a] Based on the 100-year simulation period.

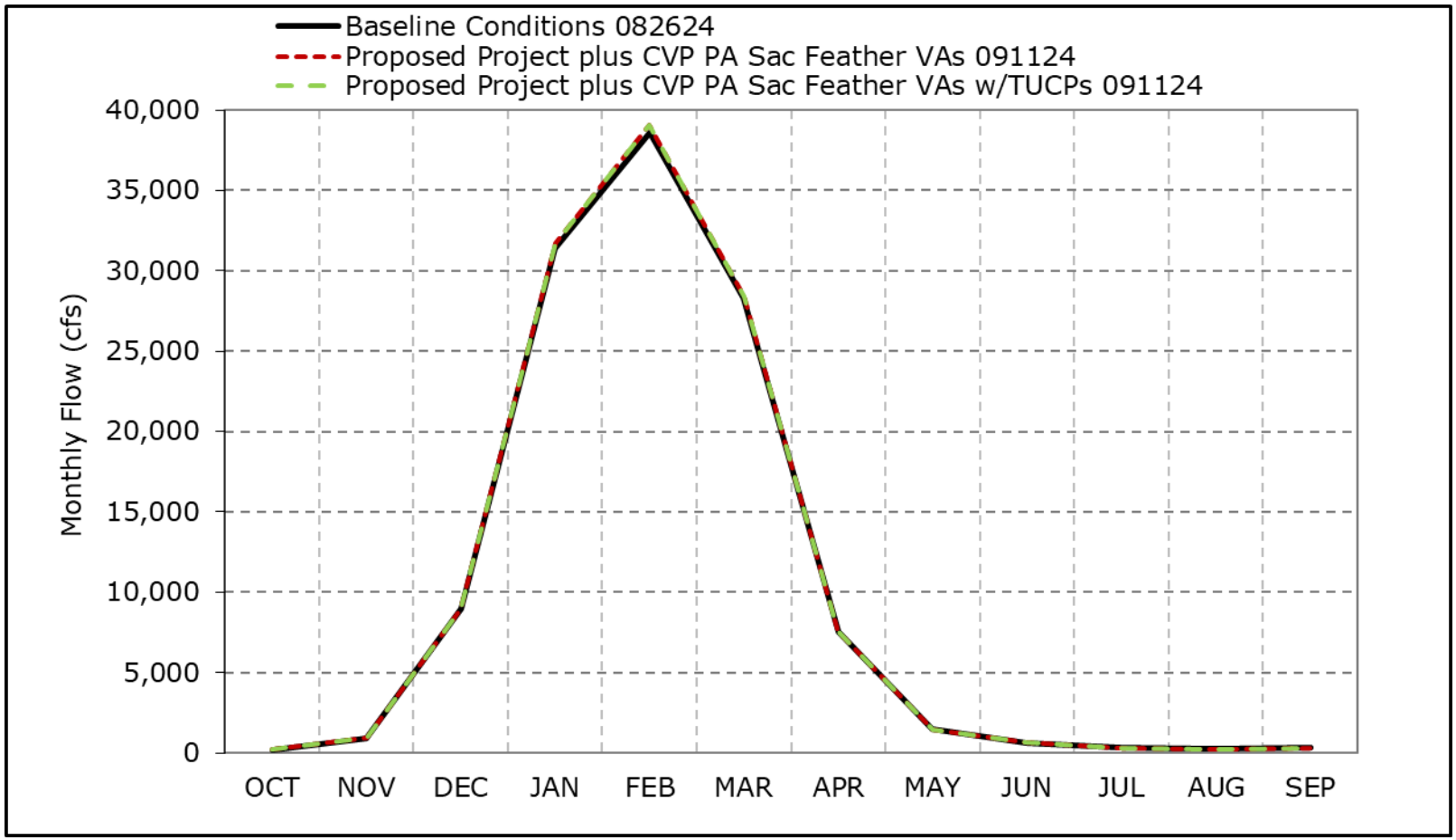
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



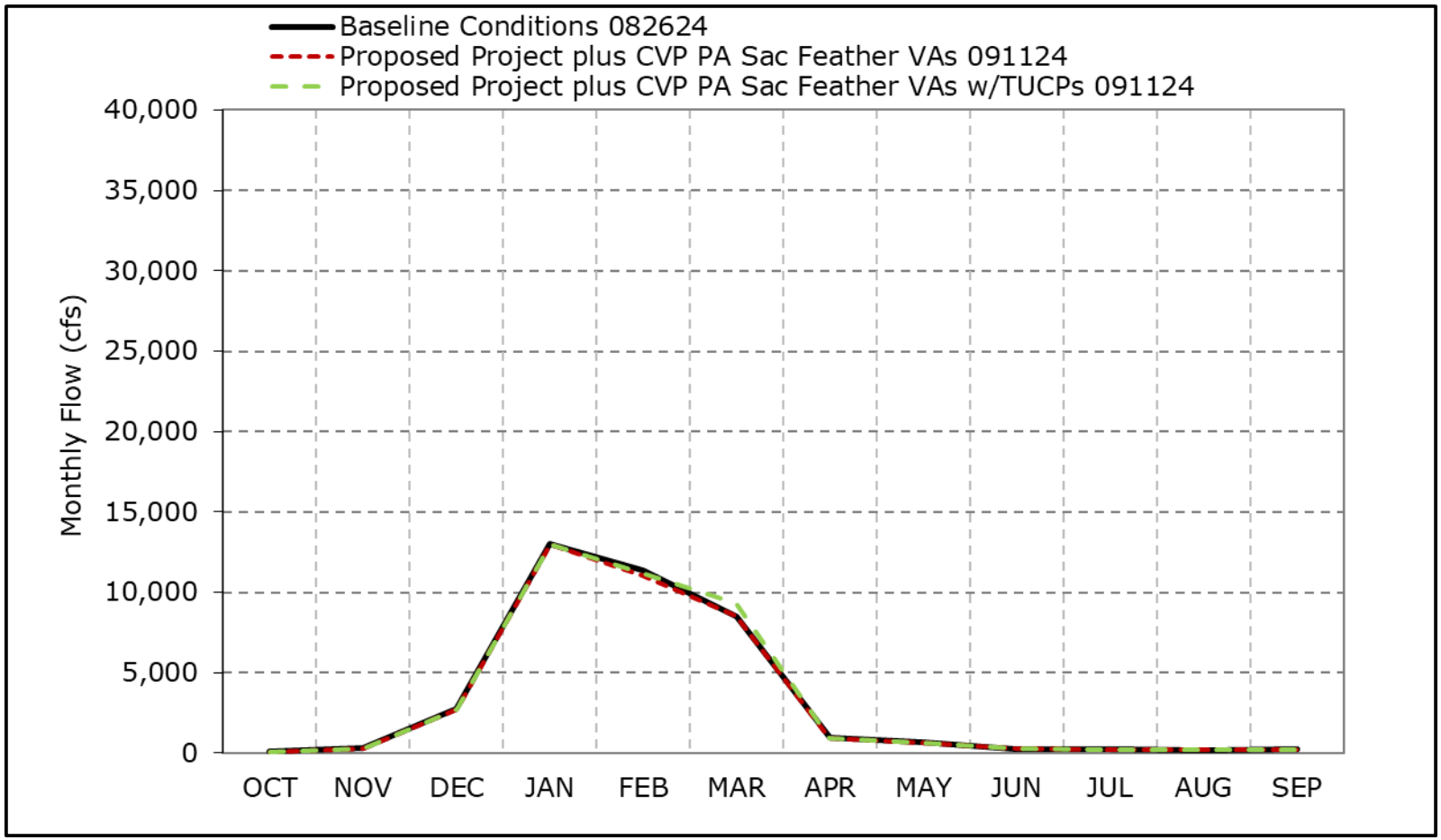
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



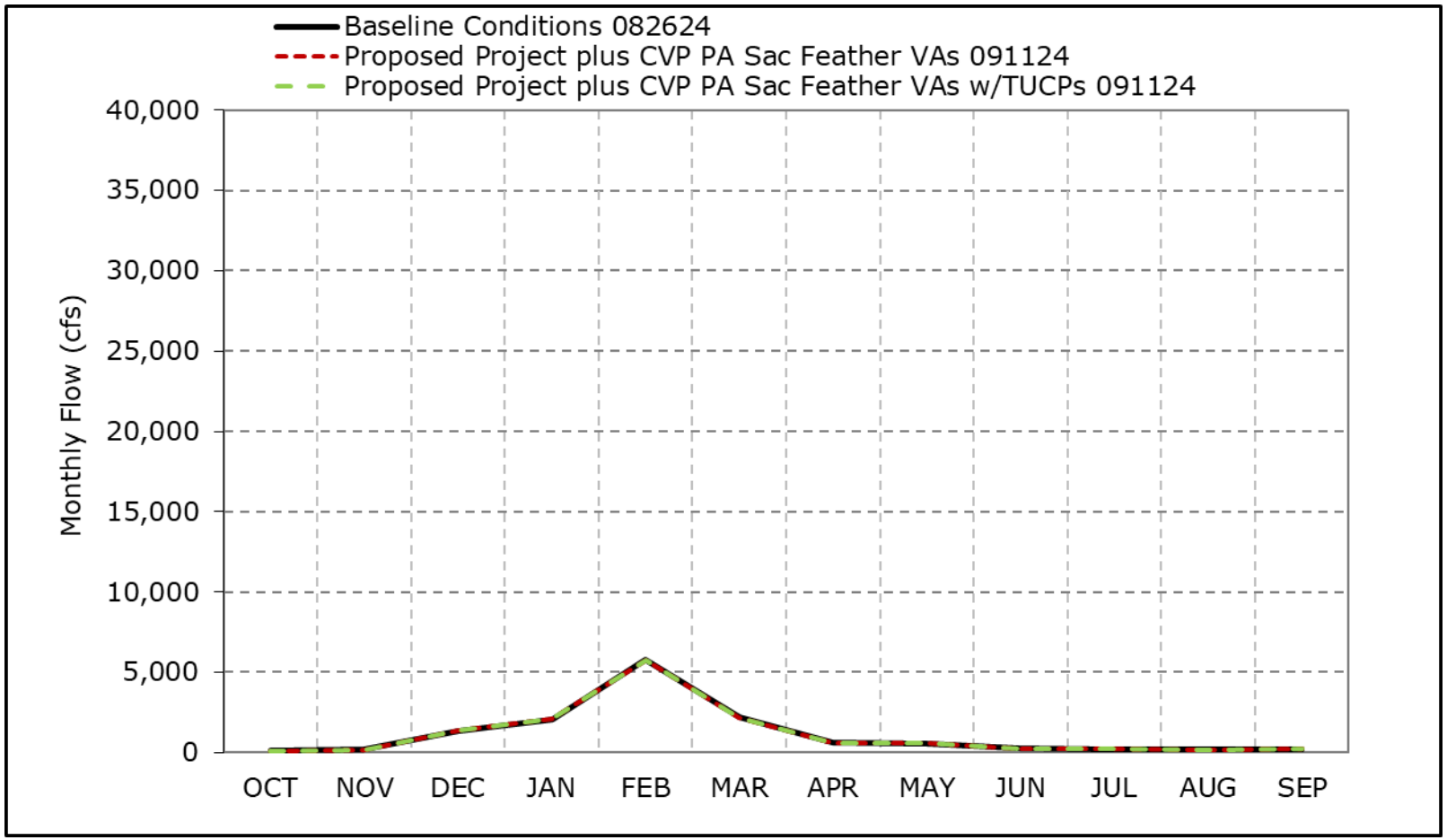
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



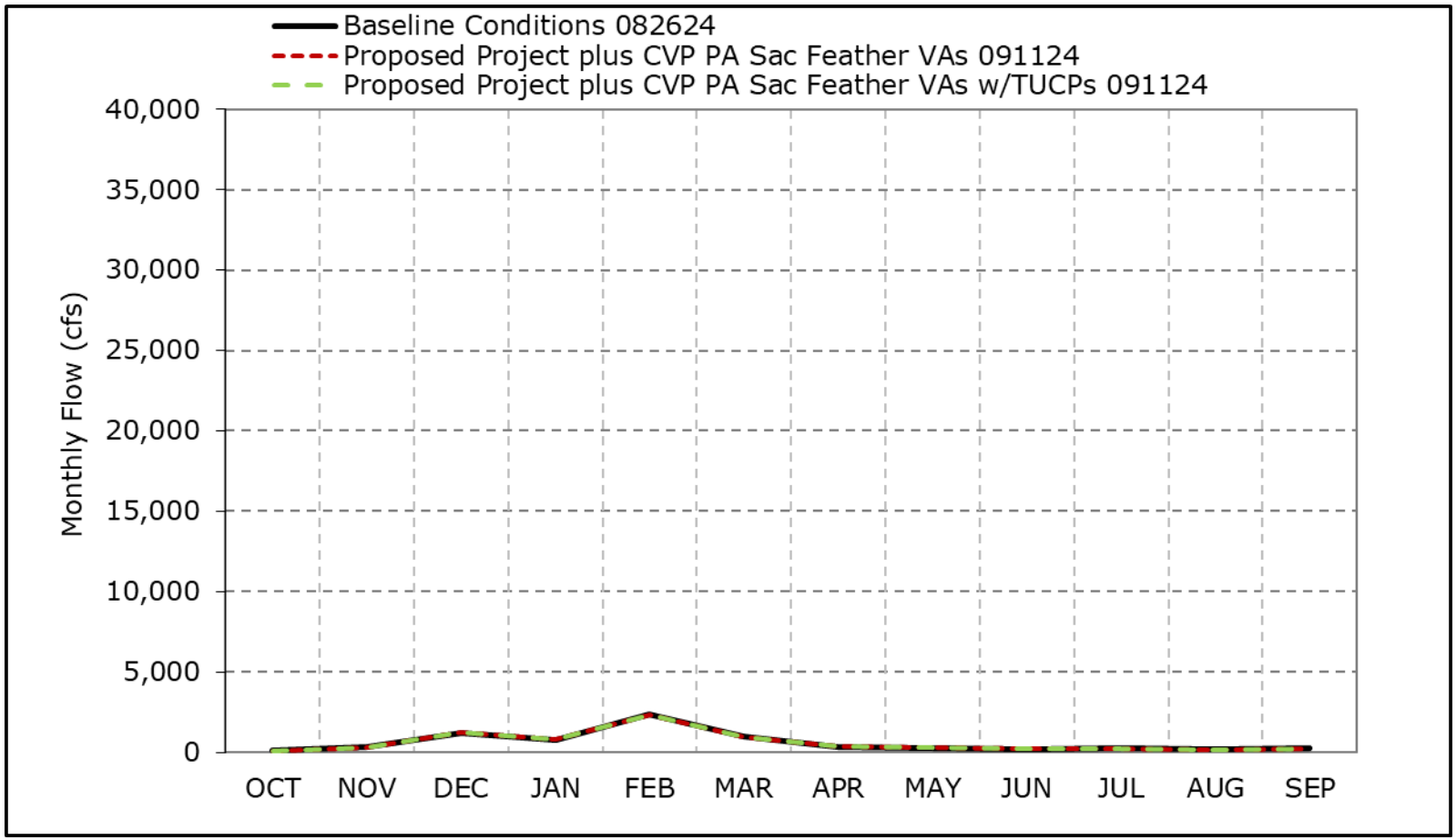
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



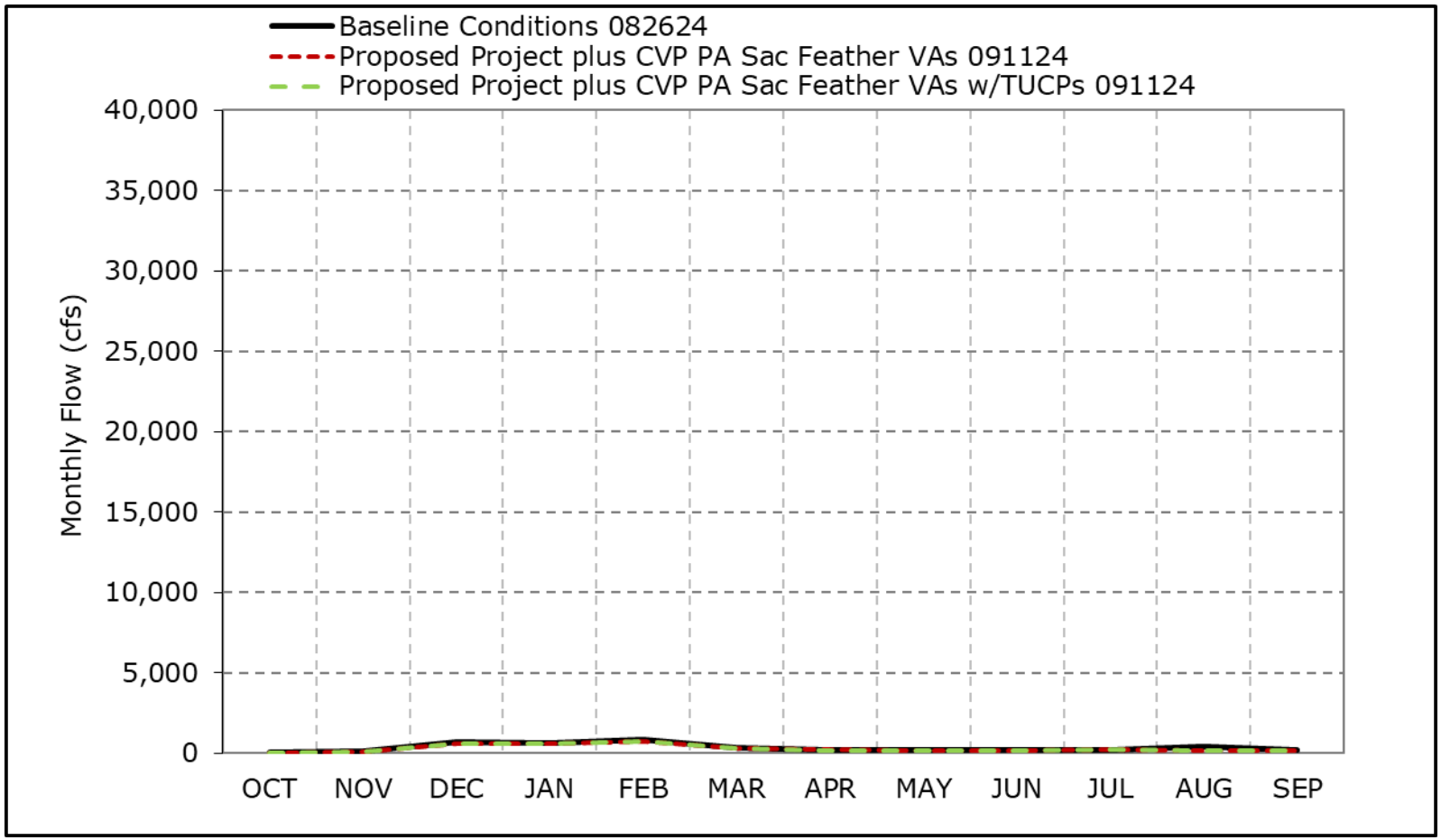
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



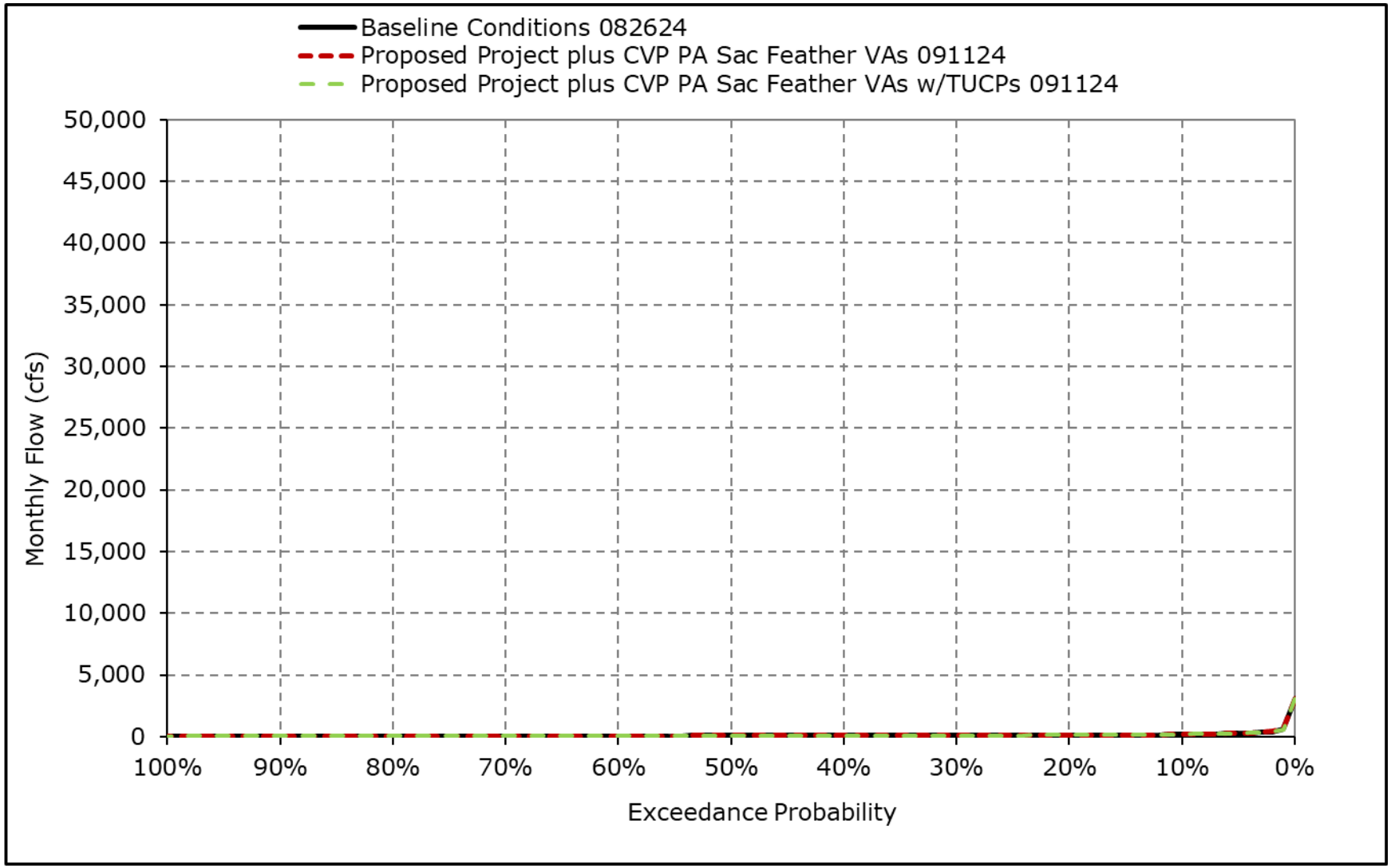
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



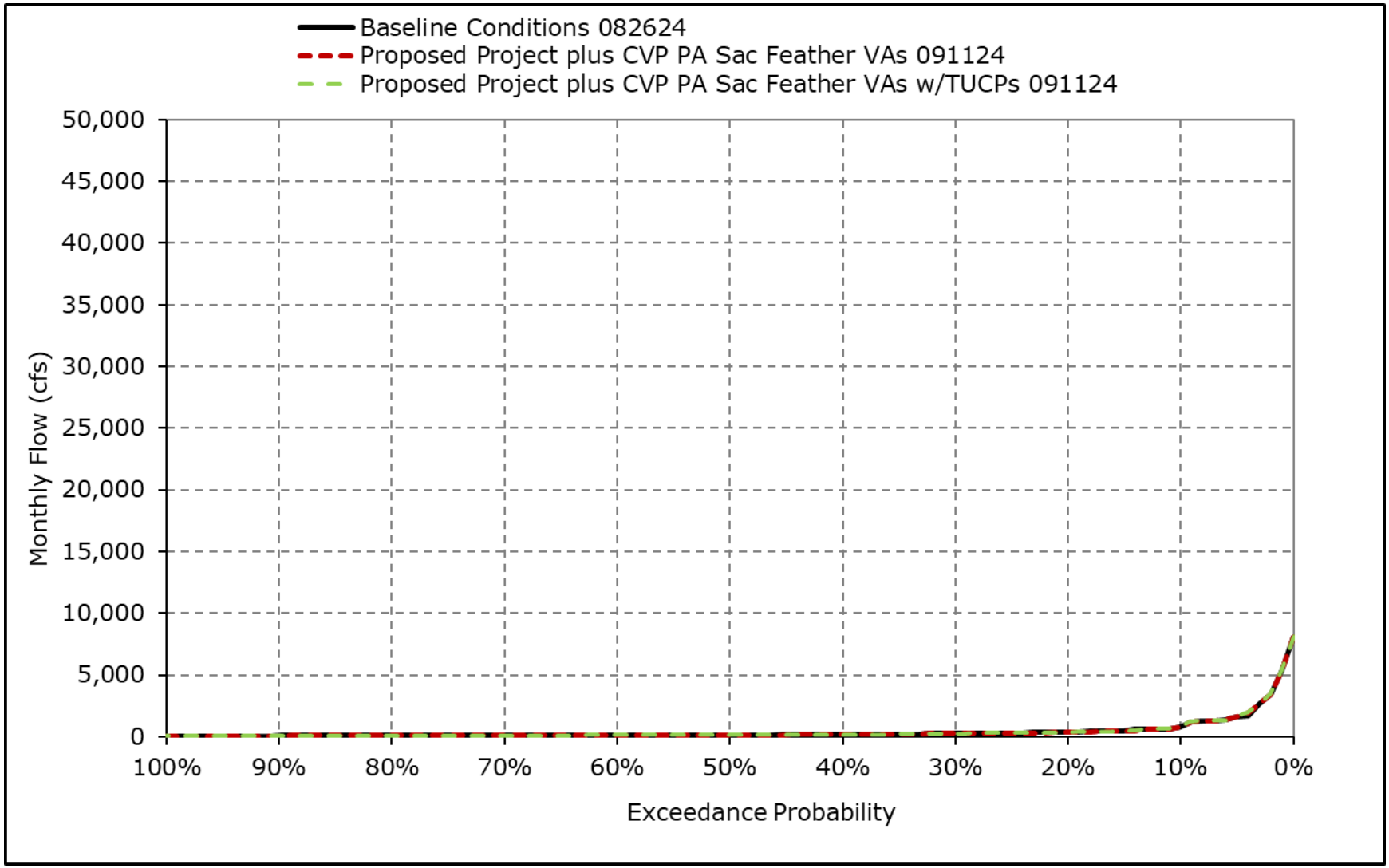
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3g. Yolo Bypass Flow, October



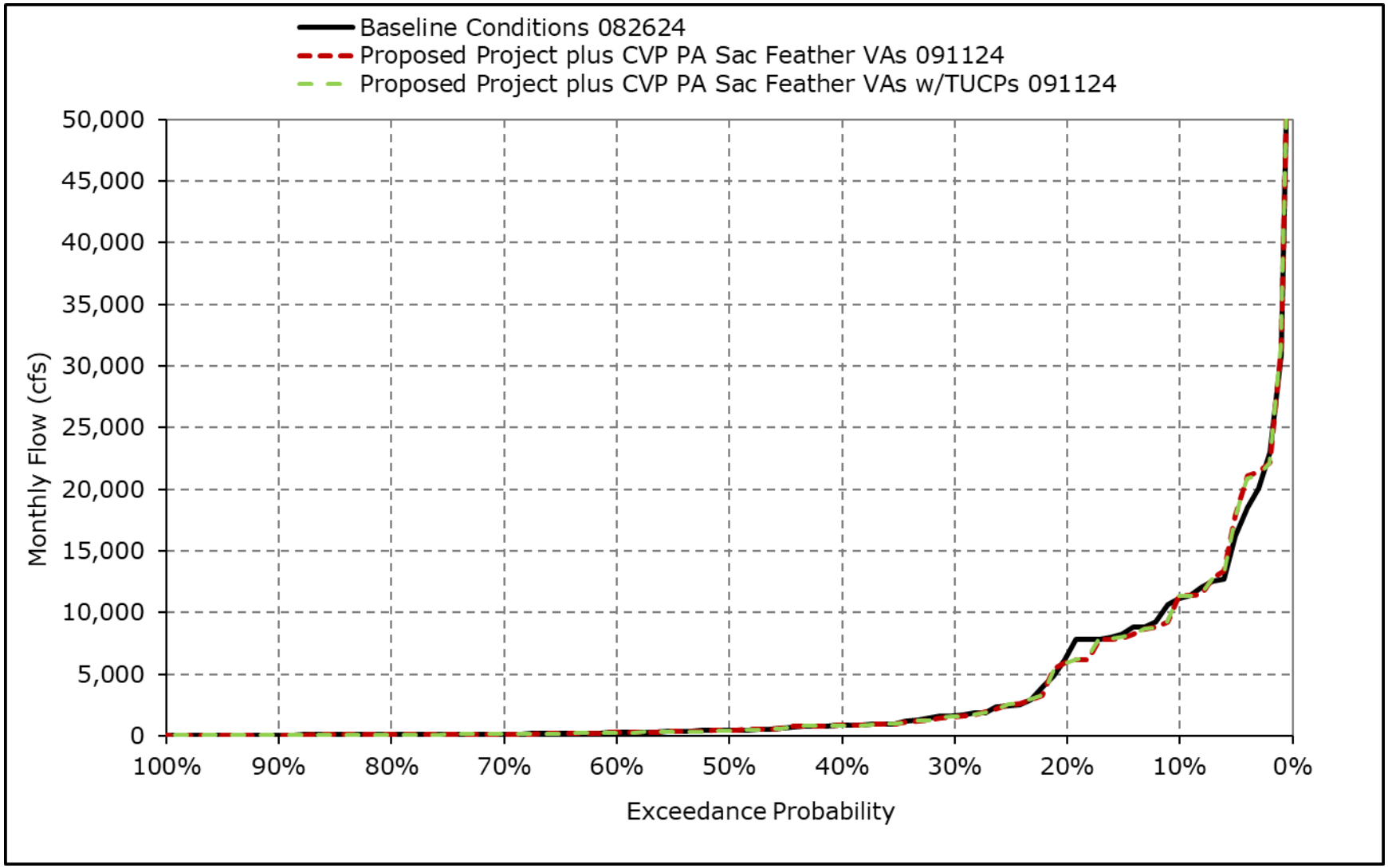
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3h. Yolo Bypass Flow, November



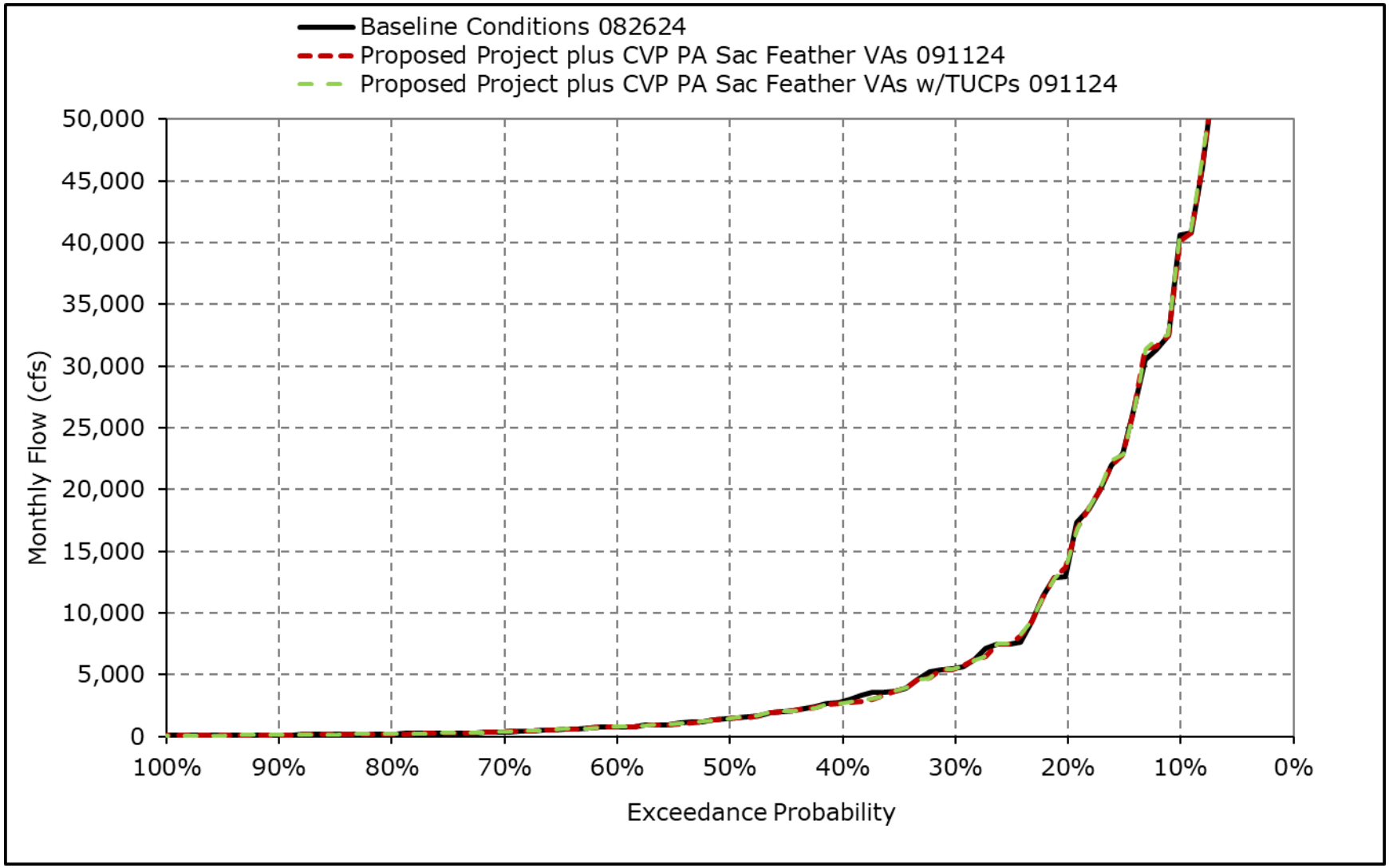
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3i. Yolo Bypass Flow, December



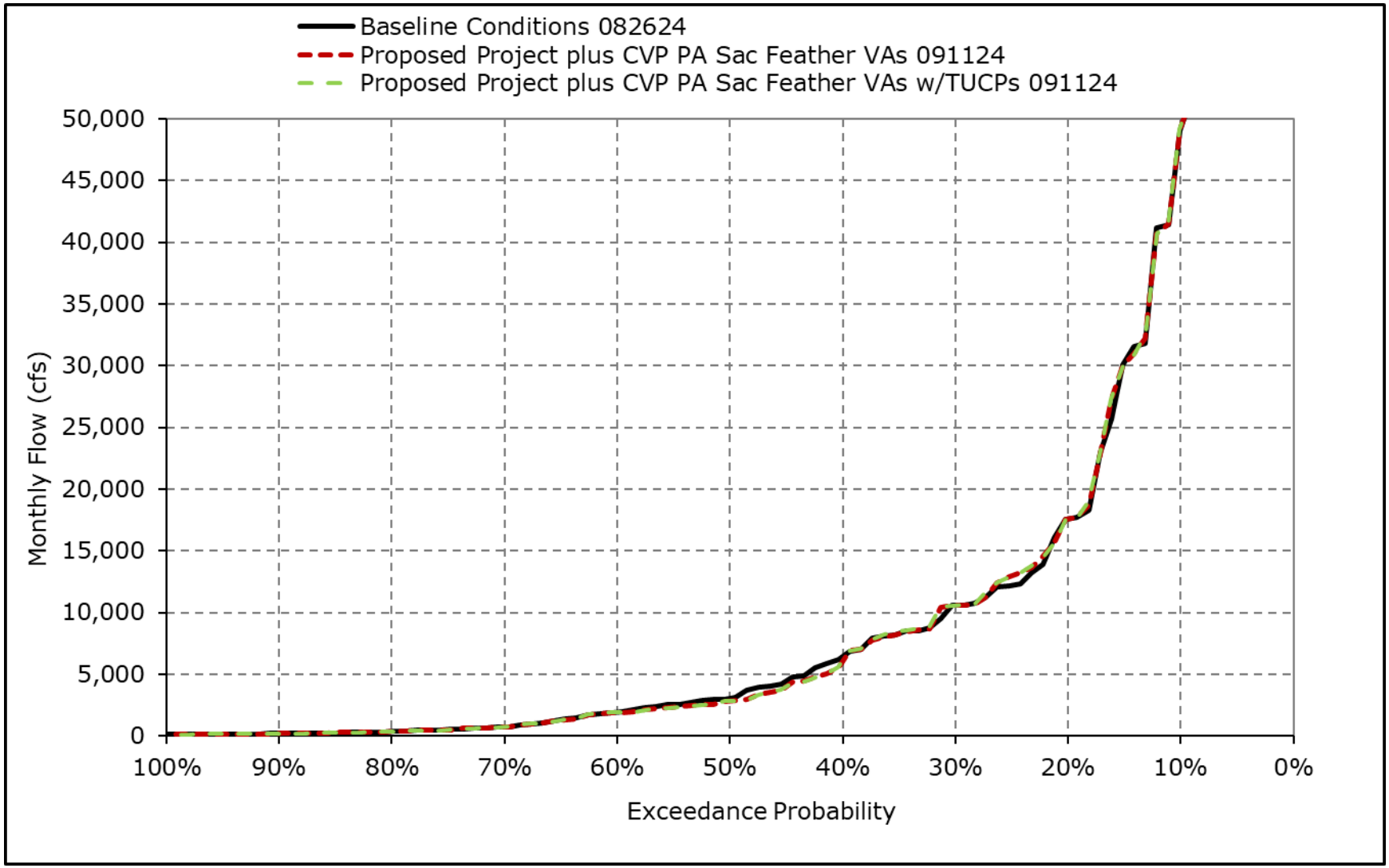
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3j. Yolo Bypass Flow, January



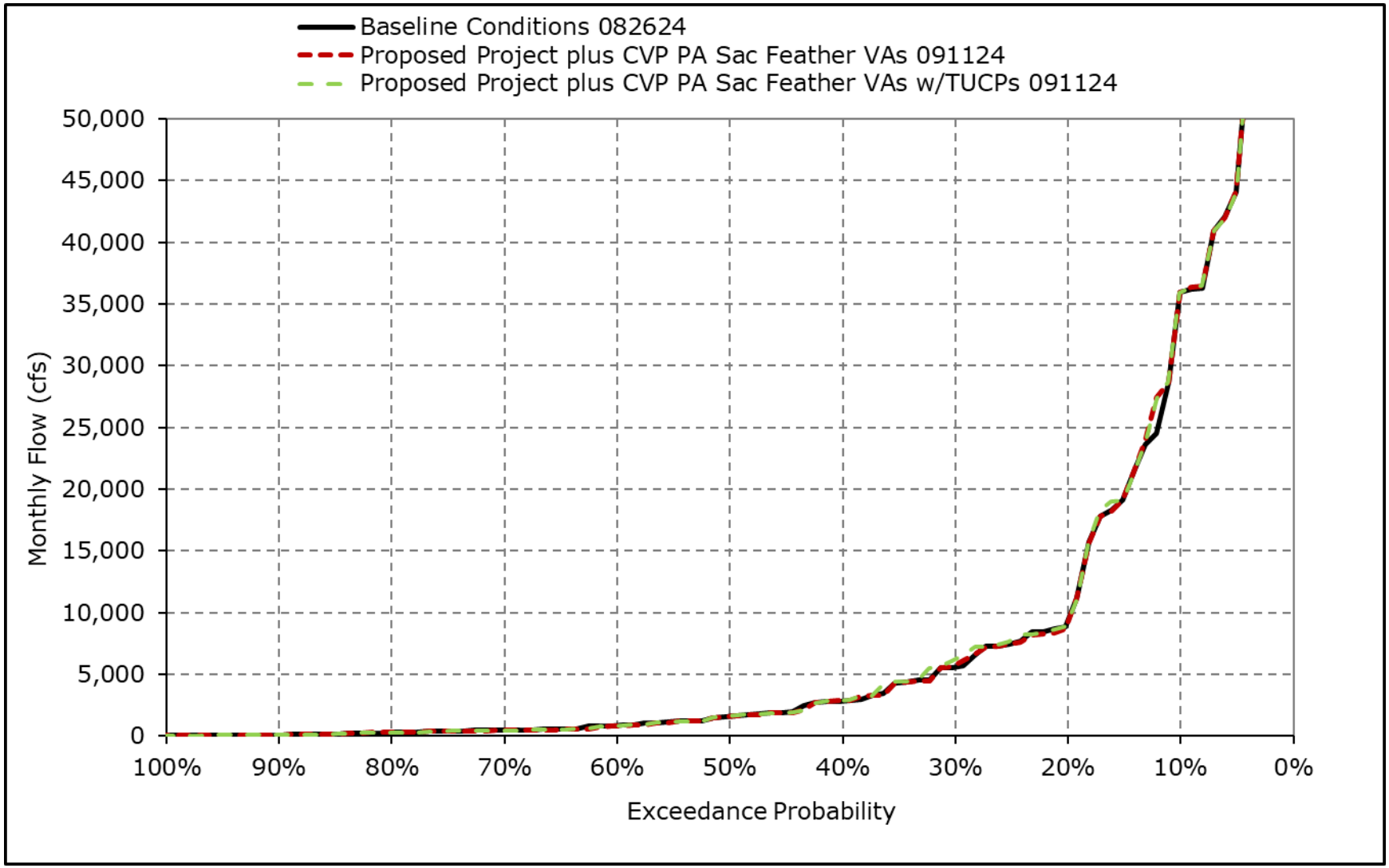
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3k. Yolo Bypass Flow, February



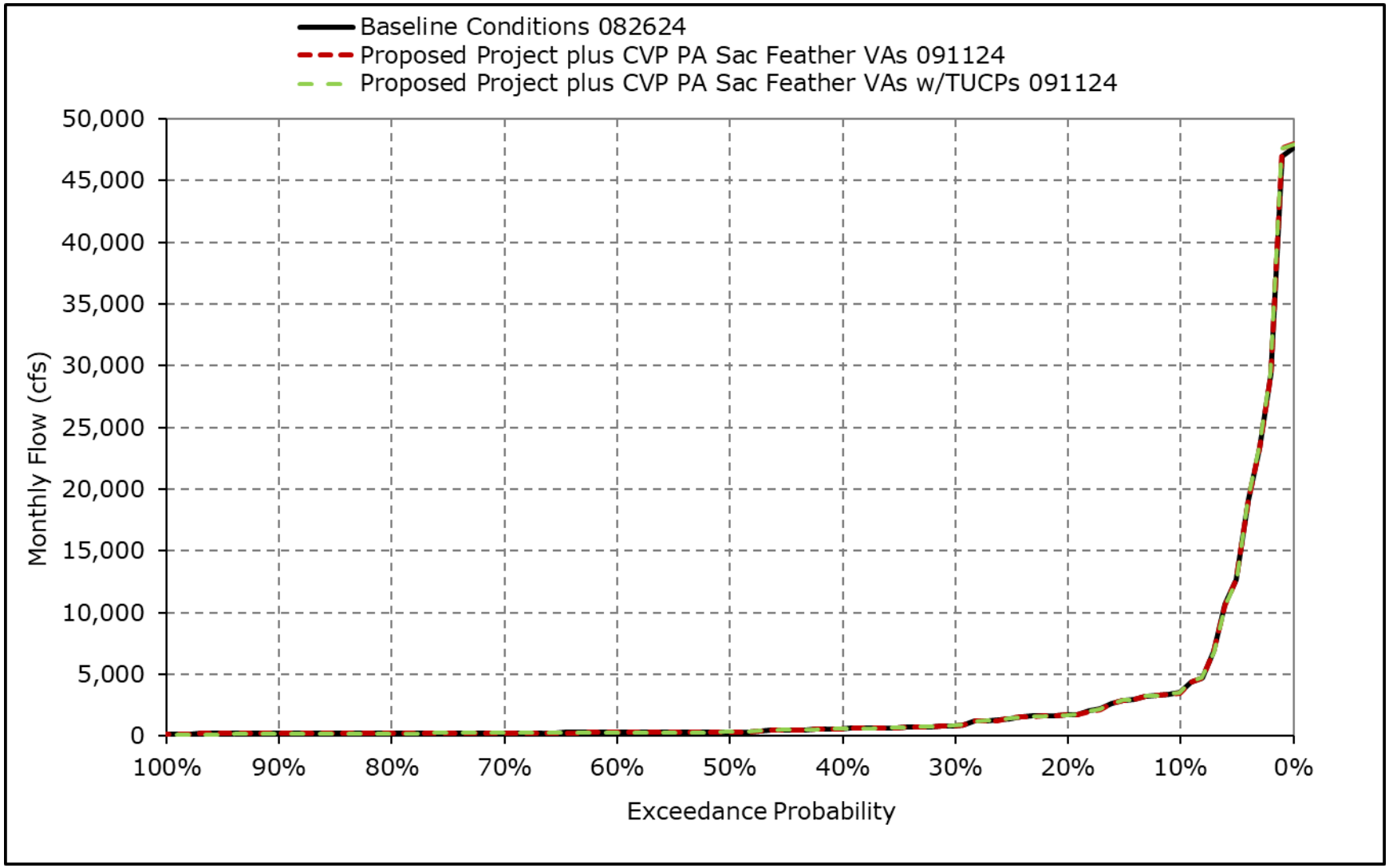
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3l. Yolo Bypass Flow, March



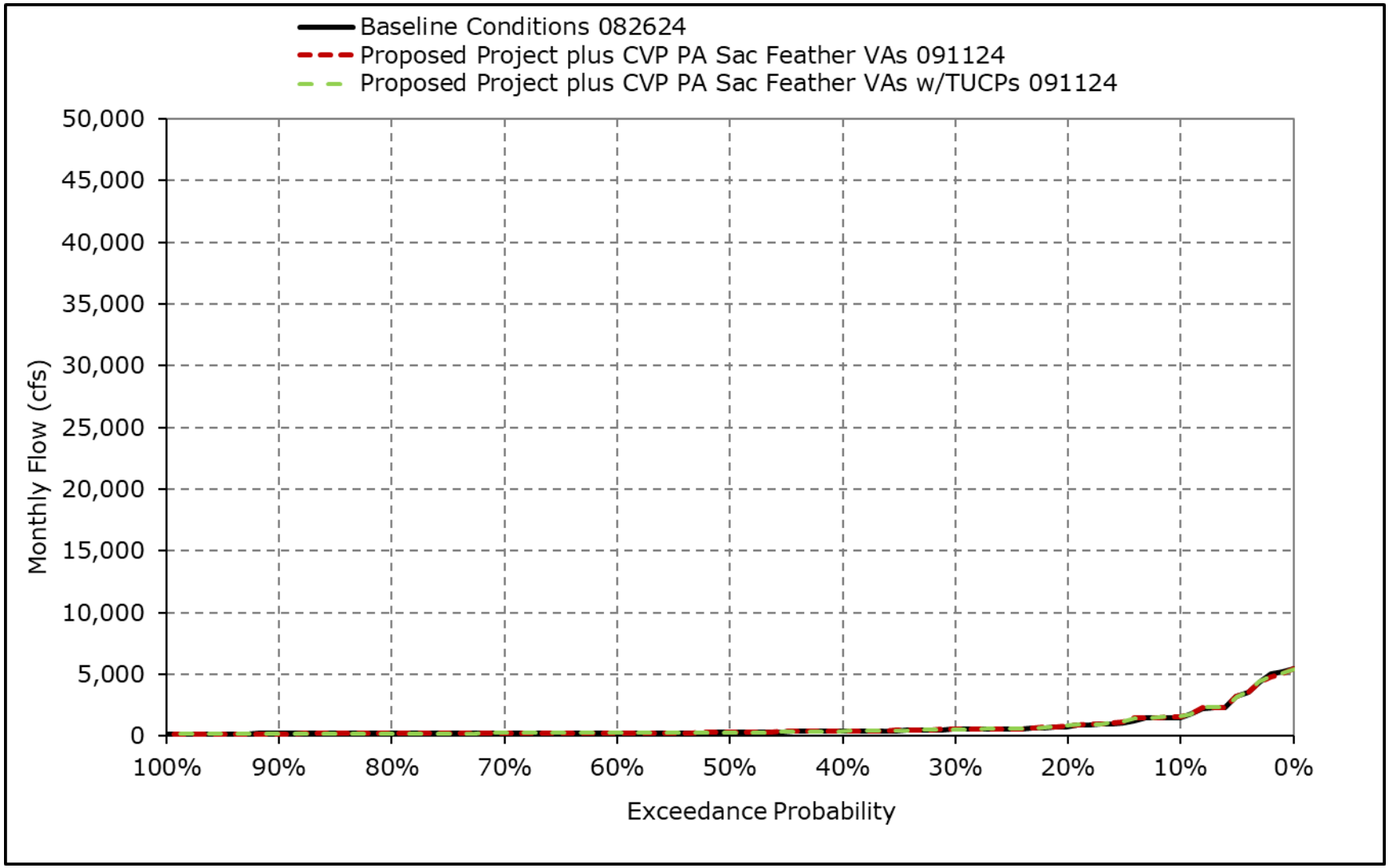
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3m. Yolo Bypass Flow, April



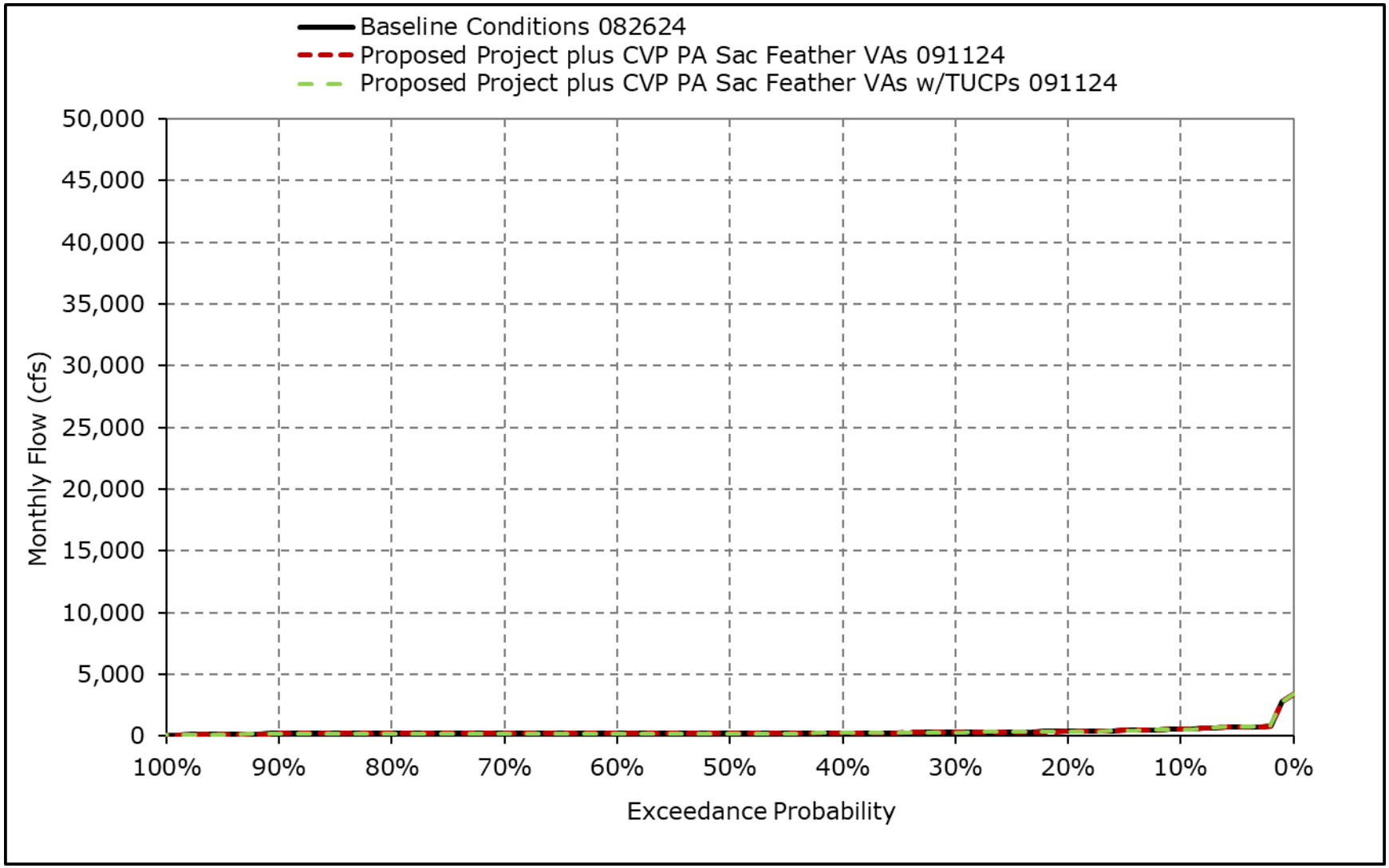
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3n. Yolo Bypass Flow, May



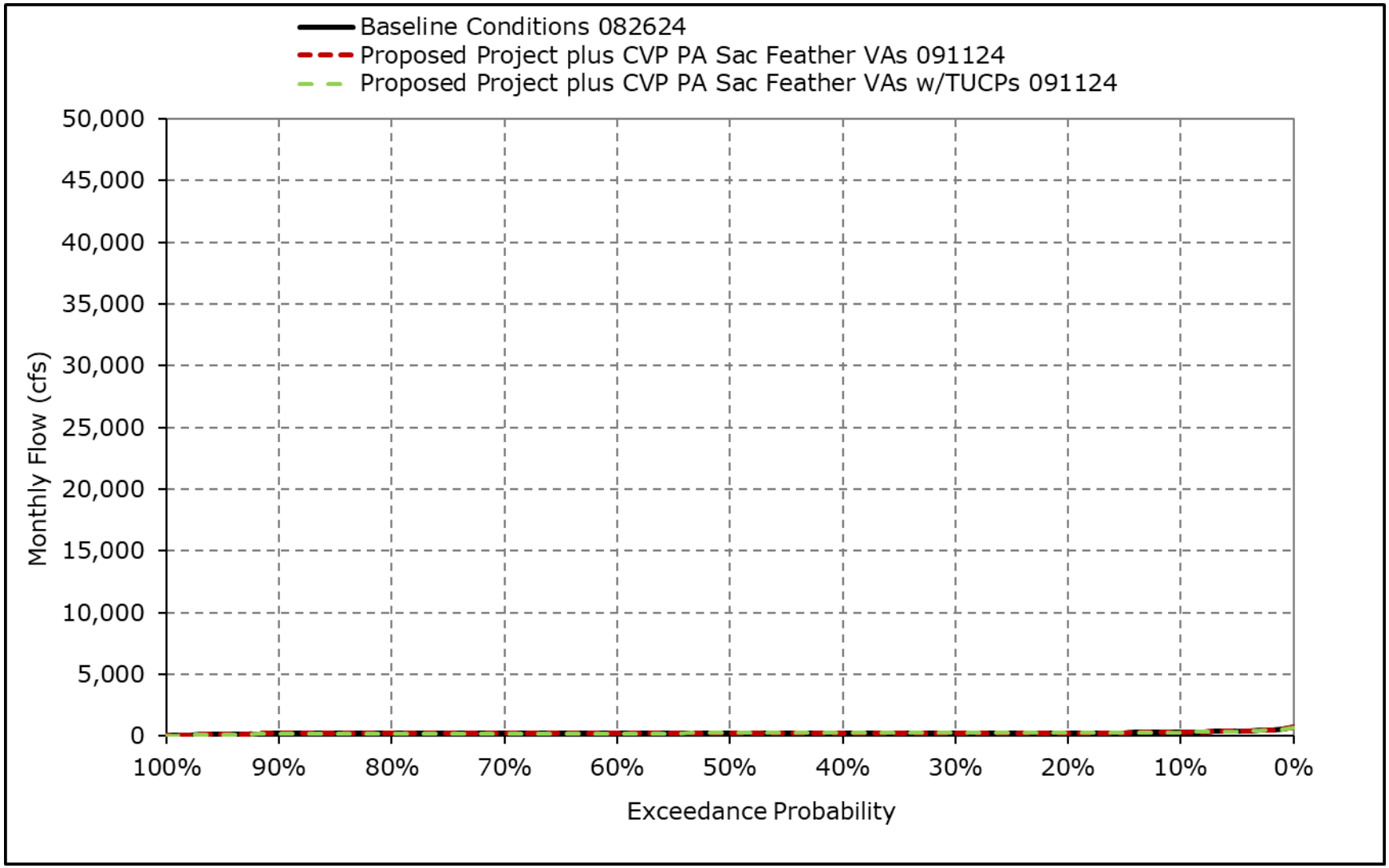
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3o. Yolo Bypass Flow, June



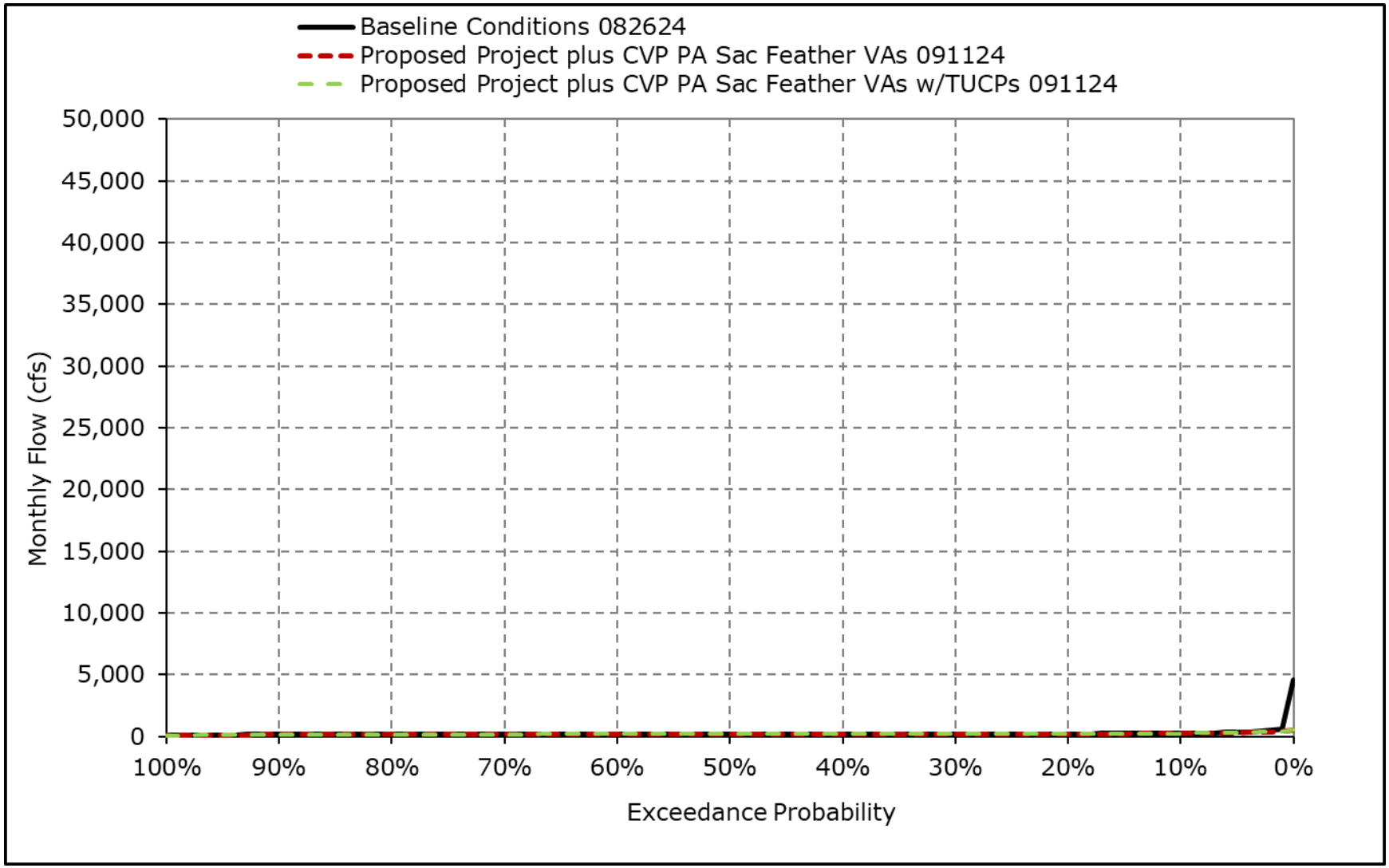
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3p. Yolo Bypass Flow, July



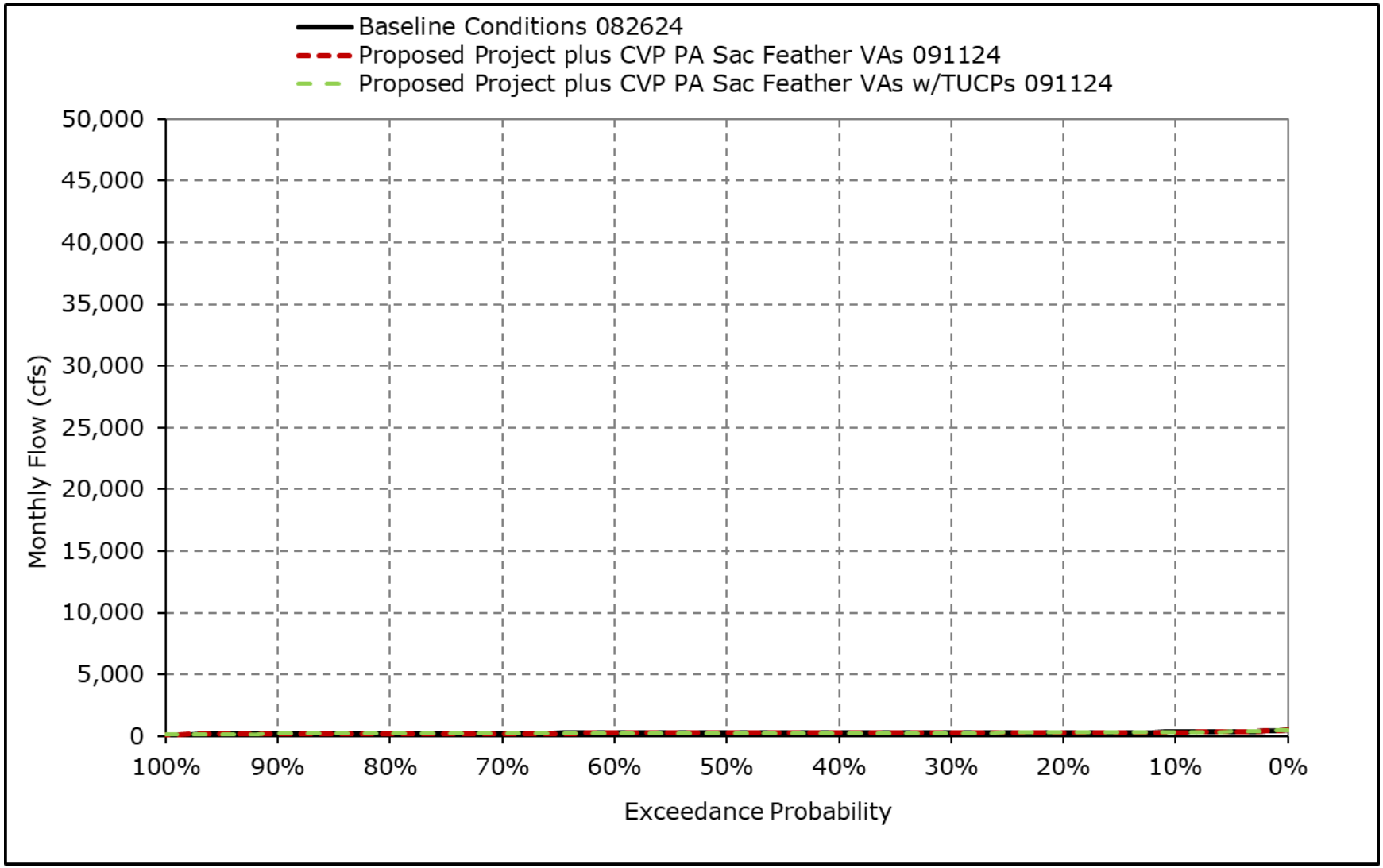
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-3q. Yolo Bypass Flow, August



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

Figure 4F-3-3r. Yolo Bypass Flow, September



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

Table 4F-3-4-1a. Sacramento River Flow at Rio Vista, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,415	16,212	50,783	95,850	106,810	92,672	50,816	39,995	24,026	13,599	10,497	12,118
20% Exceedance	9,002	9,558	36,256	62,806	68,742	55,345	32,942	29,063	13,654	12,920	10,238	11,238
30% Exceedance	7,956	8,667	19,813	35,021	52,742	44,441	21,220	18,098	9,853	11,829	9,822	10,174
40% Exceedance	7,104	8,219	14,650	25,510	38,715	32,948	16,122	13,065	7,812	10,928	9,645	9,169
50% Exceedance	5,882	7,865	12,706	19,240	27,557	23,727	13,171	10,204	7,319	10,412	8,899	7,453
60% Exceedance	4,833	6,977	11,327	14,684	22,713	19,050	9,109	9,271	7,050	9,768	7,013	5,616
70% Exceedance	4,150	5,857	8,523	10,994	16,555	16,517	8,415	8,177	6,549	8,796	5,327	5,005
80% Exceedance	4,000	4,653	7,349	9,010	13,051	12,084	7,529	7,588	5,872	6,636	4,304	4,409
90% Exceedance	3,499	4,475	5,910	7,862	10,668	8,930	6,527	5,193	4,631	4,812	3,387	3,964
Full Simulation Period Average[a]	6,883	8,994	21,330	37,364	46,510	39,277	21,646	16,934	11,388	10,021	7,685	7,923
Wet Water Years (32%)	8,687	12,405	37,714	75,934	90,625	75,843	43,226	30,638	20,217	11,763	10,056	11,731
Above Normal Water Years (9%)	6,472	8,894	19,972	47,951	48,127	45,462	20,696	19,235	12,386	12,152	10,298	10,277
Below Normal Water Years (20%)	6,897	7,862	13,892	20,674	31,275	26,392	13,835	13,157	7,376	12,088	8,971	7,339
Dry Water Years (21%)	6,131	8,189	14,196	13,005	21,316	17,691	9,295	8,523	7,184	8,956	5,357	5,091
Critical Water Years (18%)	4,746	5,178	9,468	10,465	13,596	10,678	6,847	5,429	4,556	4,803	3,452	3,930

Table 4F-3-4-1b. Sacramento River Flow at Rio Vista, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,513	15,668	50,867	95,133	106,936	92,727	50,800	40,060	24,061	13,184	10,398	12,867
20% Exceedance	9,011	9,598	36,426	62,843	68,776	55,319	33,991	29,050	13,556	12,416	10,001	11,888
30% Exceedance	7,762	8,724	20,157	35,173	53,020	44,179	22,213	18,708	9,655	11,734	9,739	10,986
40% Exceedance	6,947	8,262	14,905	25,691	39,396	33,268	17,015	13,125	7,698	10,547	9,290	9,416
50% Exceedance	6,078	7,965	12,690	19,237	27,506	24,285	13,724	11,228	7,016	10,028	8,569	7,298
60% Exceedance	4,738	6,926	10,942	15,041	22,701	19,091	10,079	9,829	6,715	9,558	7,280	5,654
70% Exceedance	4,198	5,971	8,659	11,202	16,899	16,506	8,856	9,181	6,478	8,550	4,638	5,052
80% Exceedance	4,000	4,693	7,419	9,334	13,255	11,817	8,081	8,488	6,018	6,069	3,648	4,360
90% Exceedance	3,463	4,262	6,244	8,041	10,698	9,102	6,985	5,188	4,139	4,261	3,285	3,802
Full Simulation Period Average[a]	6,889	9,054	21,517	37,646	46,771	39,351	22,174	17,421	11,269	9,708	7,486	8,161
Wet Water Years (32%)	8,692	12,501	38,114	76,394	91,228	75,925	43,325	30,662	20,209	11,681	10,061	12,285
Above Normal Water Years (9%)	6,399	8,673	19,945	47,934	47,985	45,405	21,865	19,878	12,244	12,149	10,219	11,393
Below Normal Water Years (20%)	6,822	7,928	14,126	20,893	31,604	26,457	15,032	14,032	7,387	11,557	8,628	7,178
Dry Water Years (21%)	6,151	8,322	14,210	13,067	21,361	17,825	9,886	9,453	6,920	8,417	4,937	5,195
Critical Water Years (18%)	4,866	5,218	9,531	10,904	13,624	10,744	6,998	5,714	4,276	4,431	3,248	3,768

Table 4F-3-4-1c. Sacramento River Flow at Rio Vista, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	99	-544	84	-717	126	55	-16	65	35	-415	-99	749
20% Exceedance	9	40	170	37	34	-26	1,049	-13	-97	-504	-237	650
30% Exceedance	-194	57	343	152	278	-262	993	610	-198	-96	-83	812
40% Exceedance	-156	43	254	181	681	320	893	60	-114	-382	-355	247
50% Exceedance	196	100	-16	-3	-51	558	553	1,024	-302	-384	-330	-156
60% Exceedance	-95	-52	-385	357	-12	41	970	558	-335	-210	266	38
70% Exceedance	47	114	136	208	343	-11	441	1,003	-71	-246	-689	47
80% Exceedance	0	40	69	323	204	-267	552	900	146	-567	-655	-48
90% Exceedance	-36	-213	334	178	30	172	458	-5	-492	-551	-102	-162
Full Simulation Period Average[a]	6	59	187	282	260	74	528	487	-119	-313	-199	238
Wet Water Years (32%)	5	96	401	460	603	82	99	24	-9	-82	5	554
Above Normal Water Years (9%)	-73	-221	-27	-17	-142	-56	1,169	644	-142	-2	-78	1,117
Below Normal Water Years (20%)	-75	67	234	219	329	65	1,197	876	11	-532	-343	-161
Dry Water Years (21%)	20	133	14	63	45	133	591	930	-264	-539	-420	103
Critical Water Years (18%)	119	41	64	440	28	66	151	285	-280	-372	-203	-161

[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.

Table 4F-3-4-2a. Sacramento River Flow at Rio Vista, Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,415	16,212	50,783	95,850	106,810	92,672	50,816	39,995	24,026	13,599	10,497	12,118
20% Exceedance	9,002	9,558	36,256	62,806	68,742	55,345	32,942	29,063	13,654	12,920	10,238	11,238
30% Exceedance	7,956	8,667	19,813	35,021	52,742	44,441	21,220	18,098	9,853	11,829	9,822	10,174
40% Exceedance	7,104	8,219	14,650	25,510	38,715	32,948	16,122	13,065	7,812	10,928	9,645	9,169
50% Exceedance	5,882	7,865	12,706	19,240	27,557	23,727	13,171	10,204	7,319	10,412	8,899	7,453
60% Exceedance	4,833	6,977	11,327	14,684	22,713	19,050	9,109	9,271	7,050	9,768	7,013	5,616
70% Exceedance	4,150	5,857	8,523	10,994	16,555	16,517	8,415	8,177	6,549	8,796	5,327	5,005
80% Exceedance	4,000	4,653	7,349	9,010	13,051	12,084	7,529	7,588	5,872	6,636	4,304	4,409
90% Exceedance	3,499	4,475	5,910	7,862	10,668	8,930	6,527	5,193	4,631	4,812	3,387	3,964
Full Simulation Period Average[a]	6,883	8,994	21,330	37,364	46,510	39,277	21,646	16,934	11,388	10,021	7,685	7,923
Wet Water Years (32%)	8,687	12,405	37,714	75,934	90,625	75,843	43,226	30,638	20,217	11,763	10,056	11,731
Above Normal Water Years (9%)	6,472	8,894	19,972	47,951	48,127	45,462	20,696	19,235	12,386	12,152	10,298	10,277
Below Normal Water Years (20%)	6,897	7,862	13,892	20,674	31,275	26,392	13,835	13,157	7,376	12,088	8,971	7,339
Dry Water Years (21%)	6,131	8,189	14,196	13,005	21,316	17,691	9,295	8,523	7,184	8,956	5,357	5,091
Critical Water Years (18%)	4,746	5,178	9,468	10,465	13,596	10,678	6,847	5,429	4,556	4,803	3,452	3,930

Table 4F-3-4-2b. Sacramento River Flow at Rio Vista, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,516	15,672	50,870	95,278	106,954	92,692	50,804	40,064	24,065	13,197	10,399	12,871
20% Exceedance	9,016	9,598	36,491	62,966	68,782	55,320	34,190	29,055	13,558	12,420	10,005	11,890
30% Exceedance	7,764	8,725	20,159	35,037	53,017	47,173	22,215	18,727	9,655	11,736	9,742	10,984
40% Exceedance	6,949	8,265	14,848	25,693	39,398	33,273	16,967	13,315	7,687	10,552	9,284	9,410
50% Exceedance	6,041	7,965	12,785	19,306	27,516	24,252	13,730	11,246	7,018	10,073	8,573	7,432
60% Exceedance	4,926	7,066	10,950	15,048	22,705	19,109	10,077	10,131	6,714	9,686	7,283	5,655
70% Exceedance	4,240	5,979	8,940	11,180	17,160	16,511	8,841	9,180	6,507	8,718	4,687	5,117
80% Exceedance	4,000	4,789	7,420	9,321	13,468	11,806	7,579	8,516	5,905	6,069	3,648	4,303
90% Exceedance	3,513	4,499	6,258	8,027	10,698	8,642	5,770	5,153	3,059	3,883	3,251	3,817
Full Simulation Period Average[a]	6,911	9,118	21,560	37,669	46,856	39,431	21,933	17,440	11,185	9,634	7,487	8,178
Wet Water Years (32%)	8,674	12,503	38,123	76,460	91,230	75,931	43,331	30,665	20,211	11,683	10,065	12,291
Above Normal Water Years (9%)	6,471	8,994	20,046	48,197	48,263	46,709	22,067	19,905	12,251	12,154	10,223	11,394
Below Normal Water Years (20%)	6,892	7,966	14,156	20,871	31,727	26,523	15,071	14,097	7,410	11,629	8,637	7,207
Dry Water Years (21%)	6,188	8,371	14,259	13,084	21,390	17,817	9,747	9,495	6,907	8,384	4,934	5,230
Critical Water Years (18%)	4,860	5,311	9,618	10,792	13,787	10,465	5,664	5,681	3,789	3,973	3,236	3,775

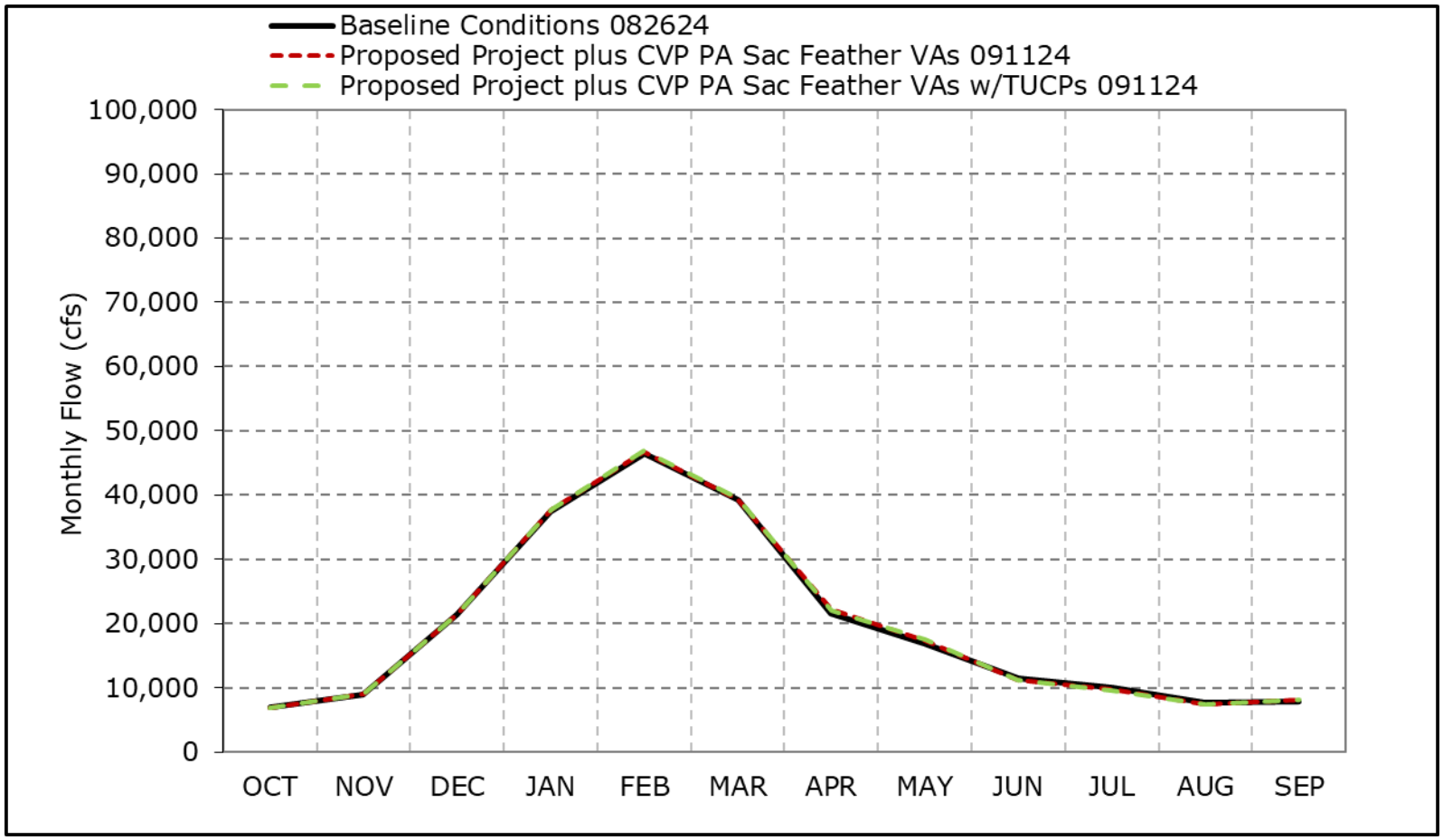
Table 4F-3-4-2c. Sacramento River Flow at Rio Vista, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	101	-540	87	-572	144	19	-12	69	39	-402	-98	753
20% Exceedance	14	40	235	160	40	-25	1,248	-8	-96	-500	-233	652
30% Exceedance	-192	58	346	15	276	2,732	995	629	-198	-94	-80	810
40% Exceedance	-154	46	198	183	683	324	845	250	-125	-376	-360	241
50% Exceedance	159	100	79	67	-40	525	559	1,042	-301	-339	-326	-22
60% Exceedance	93	89	-377	364	-8	59	968	860	-336	-82	269	38
70% Exceedance	90	122	417	186	605	-6	426	1,002	-42	-78	-640	112
80% Exceedance	0	135	71	311	418	-278	50	928	33	-568	-655	-106
90% Exceedance	14	24	348	165	30	-288	-757	-39	-1,572	-929	-136	-147
Full Simulation Period Average[a]	27	123	231	305	346	155	286	506	-204	-387	-198	255
Wet Water Years (32%)	-13	98	409	526	605	88	105	26	-6	-80	9	560
Above Normal Water Years (9%)	-1	101	74	246	136	1,247	1,372	670	-135	2	-74	1,117
Below Normal Water Years (20%)	-5	105	264	197	451	131	1,236	940	34	-459	-334	-132
Dry Water Years (21%)	58	181	63	79	74	126	452	973	-277	-572	-422	139
Critical Water Years (18%)	114	133	150	327	191	-213	-1,183	252	-767	-830	-215	-154

[a] Based on the 100-year simulation period.

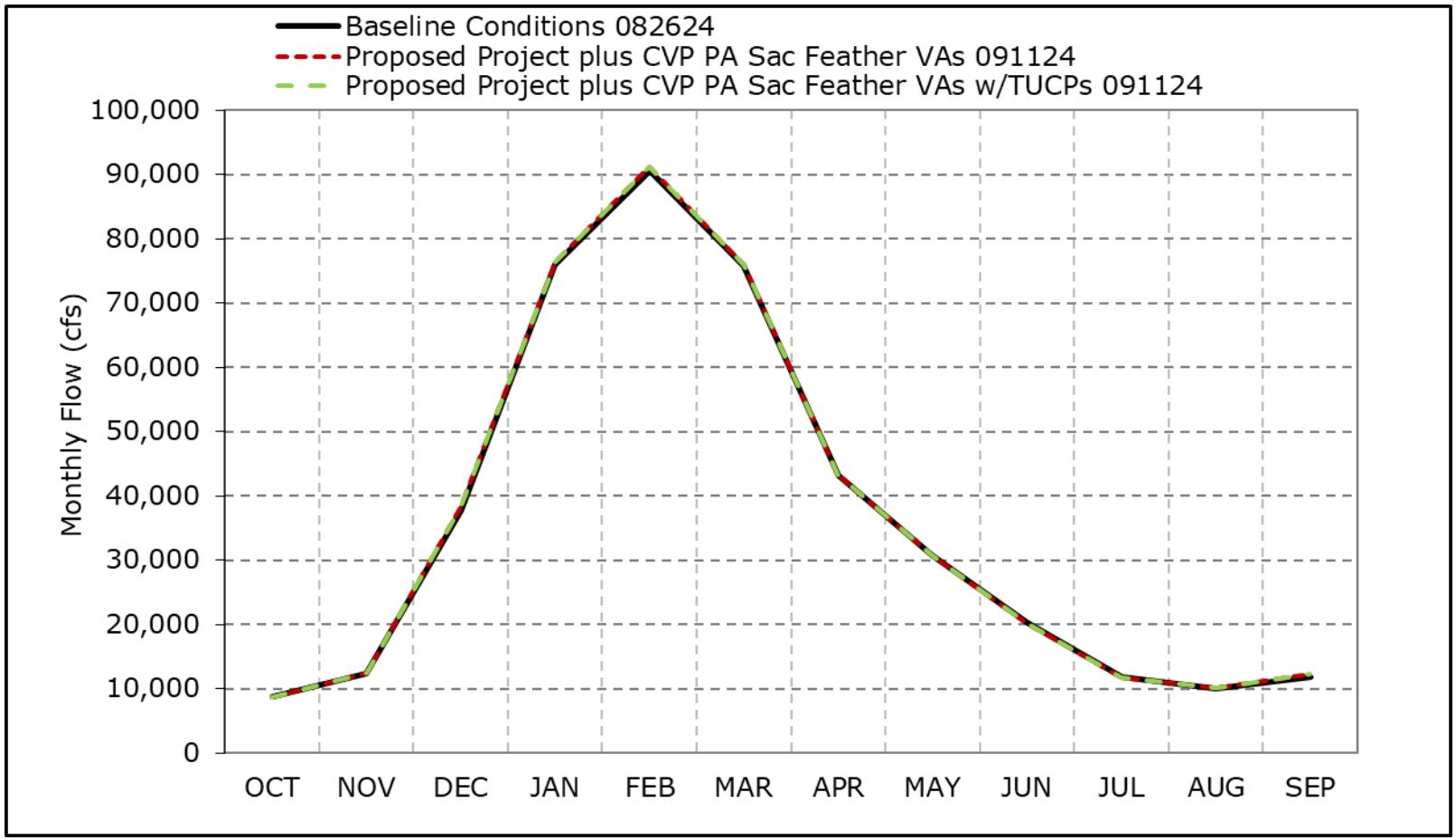
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-4a. Sacramento River Flow at Rio Vista, Long-Term Average Flow



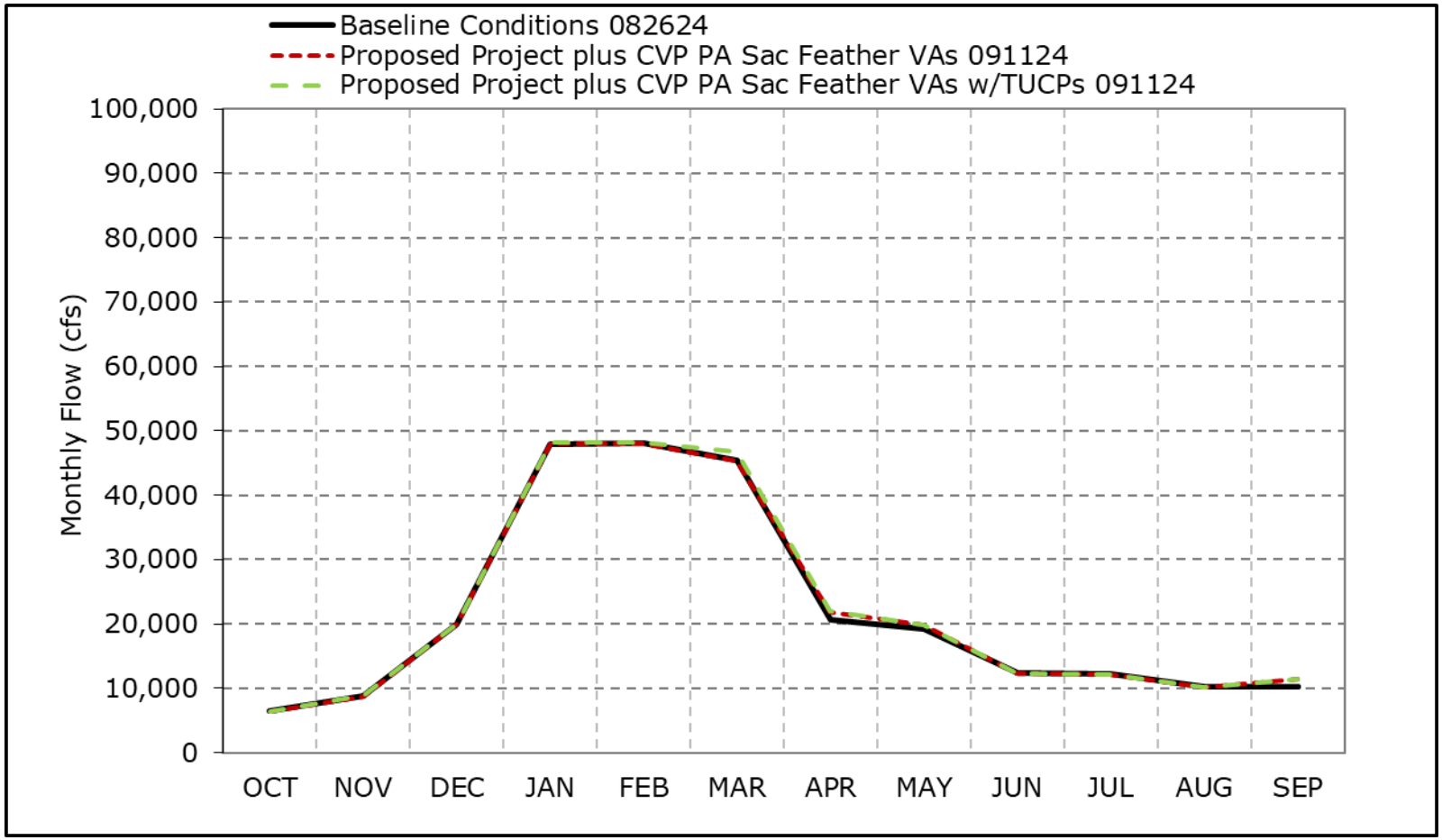
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4b. Sacramento River Flow at Rio Vista, Wet Year Average Flow



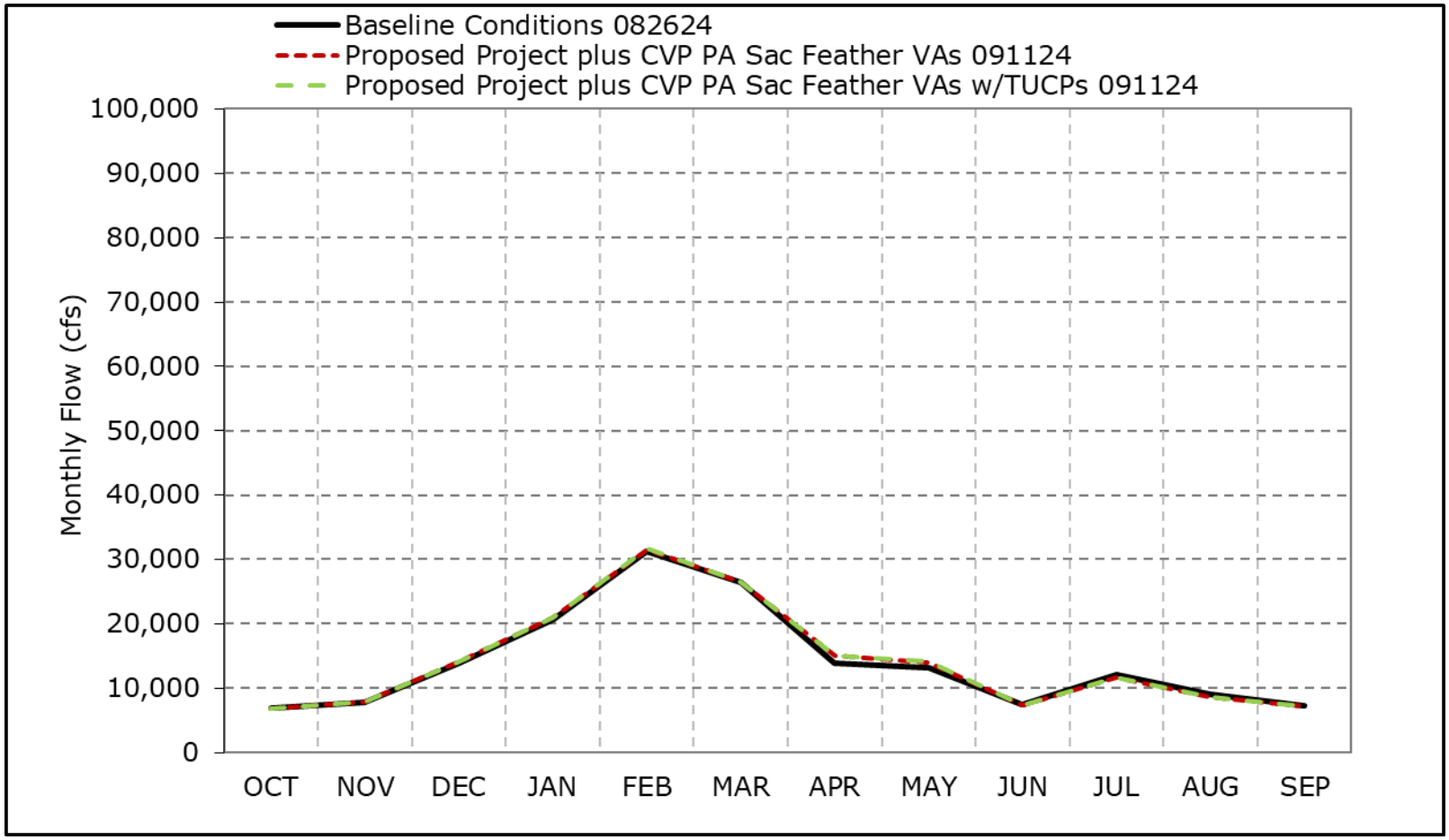
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4c. Sacramento River Flow at Rio Vista, Above Normal Year Average Flow



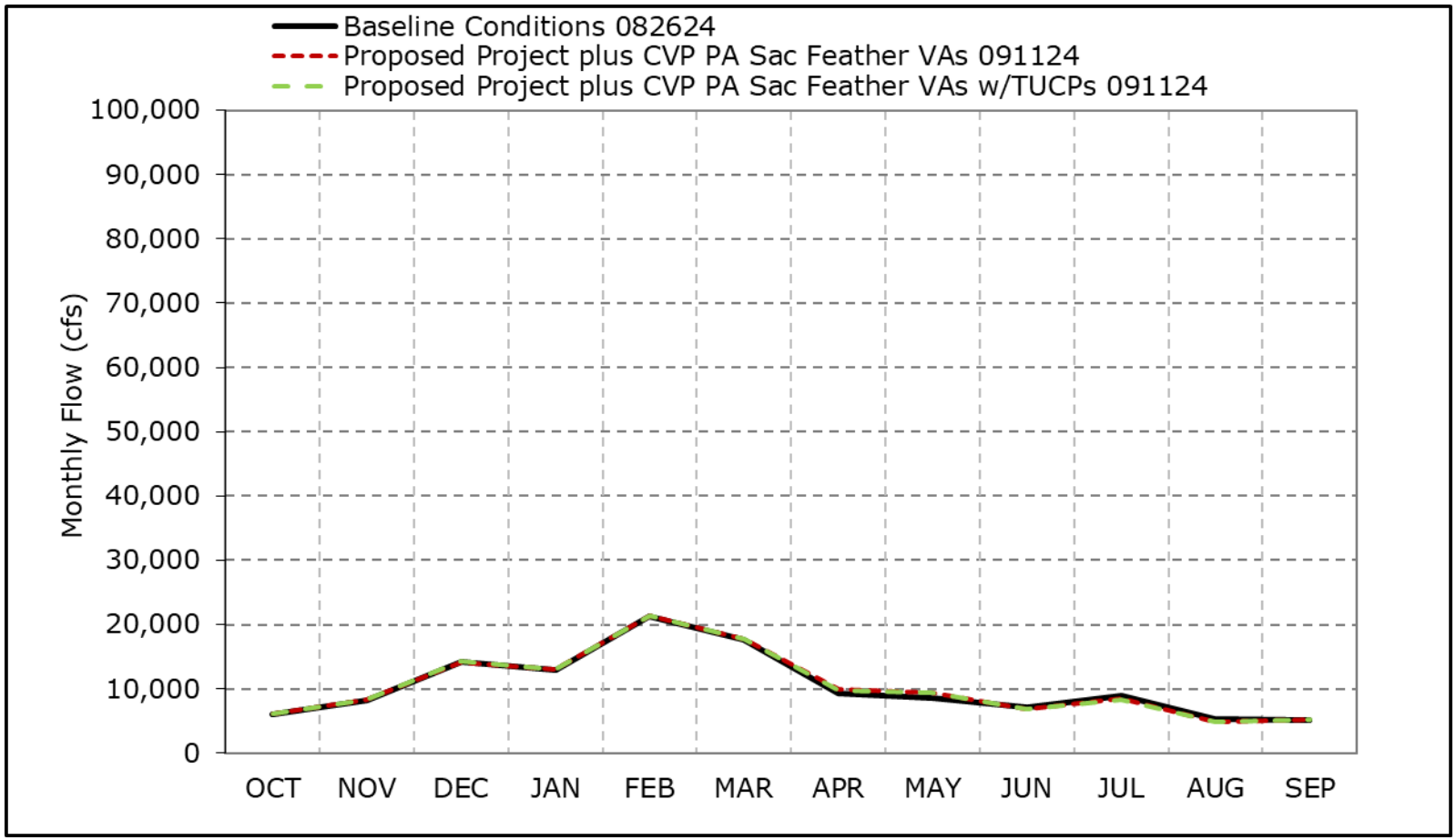
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4d. Sacramento River Flow at Rio Vista, Below Normal Year Average Flow



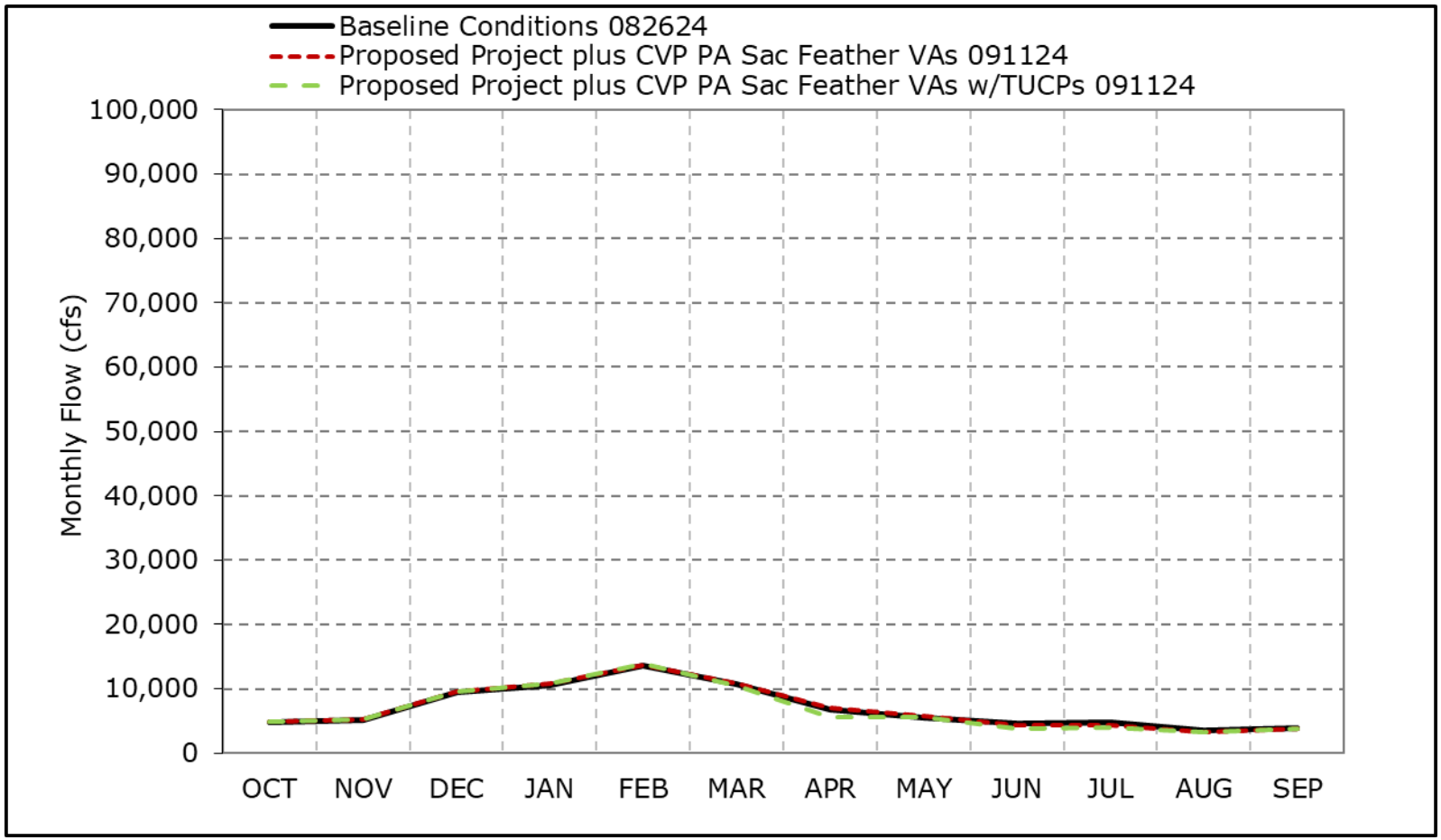
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4e. Sacramento River Flow at Rio Vista, Dry Year Average Flow



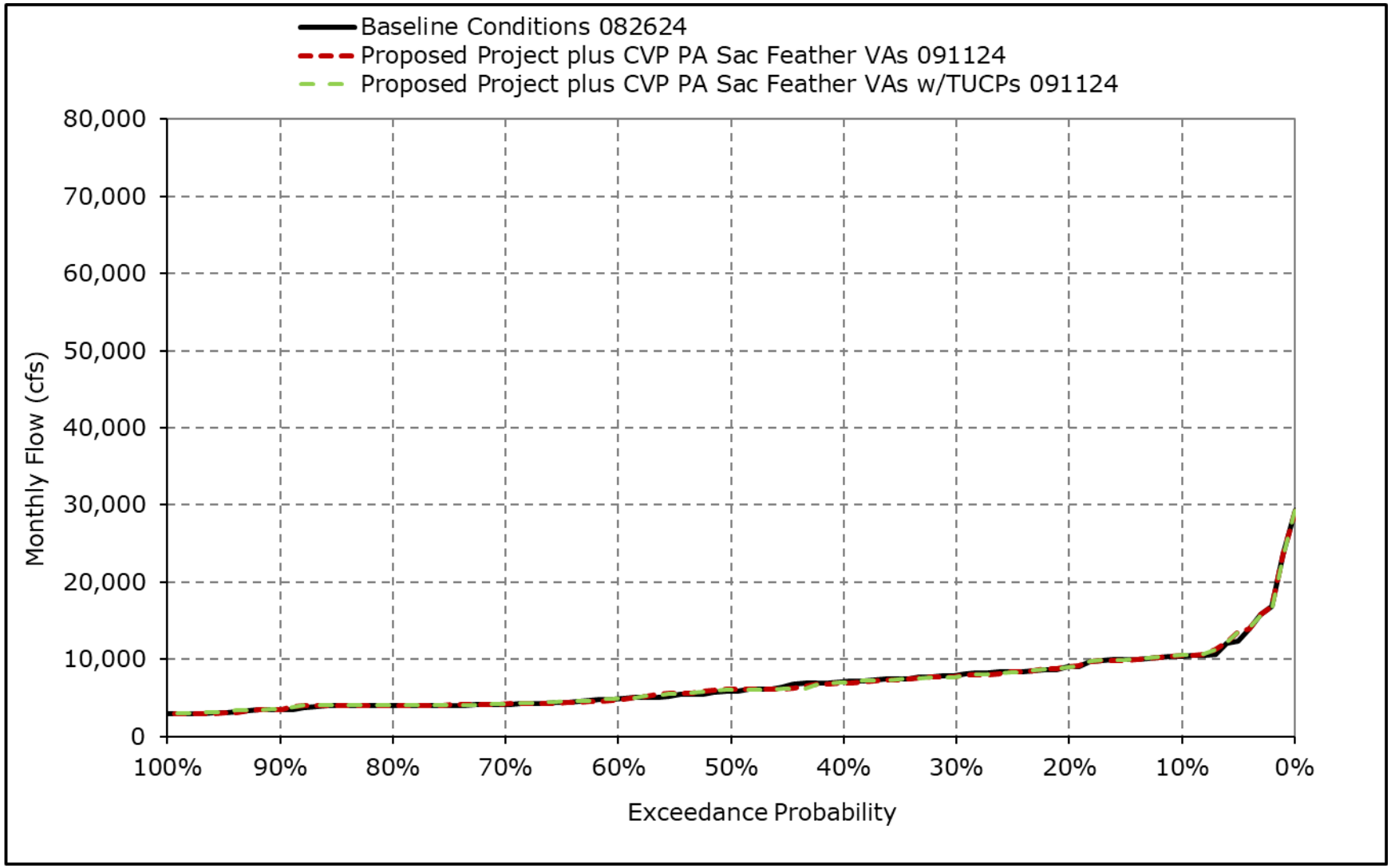
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4f. Sacramento River Flow at Rio Vista, Critical Year Average Flow



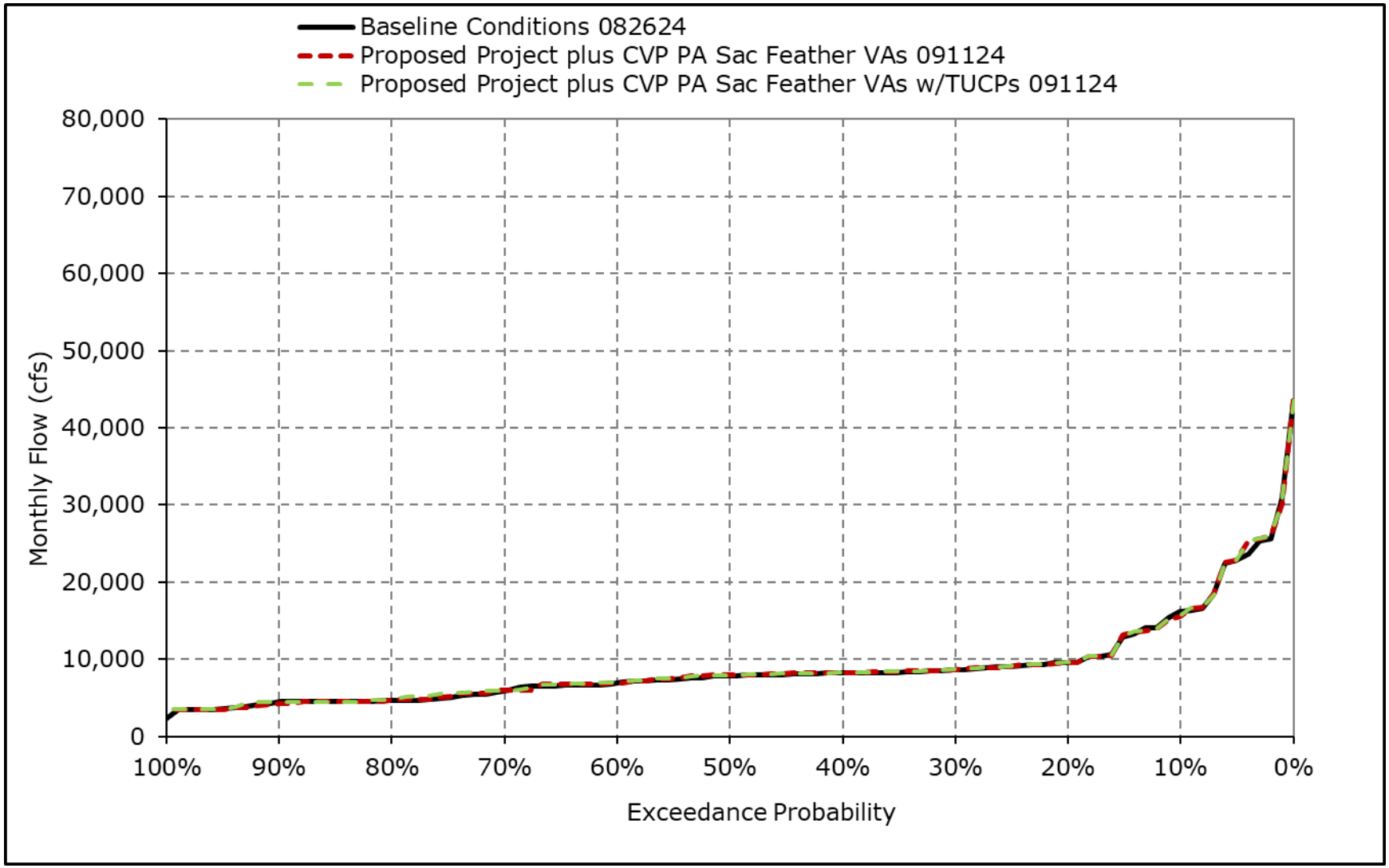
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4g. Sacramento River Flow at Rio Vista, October



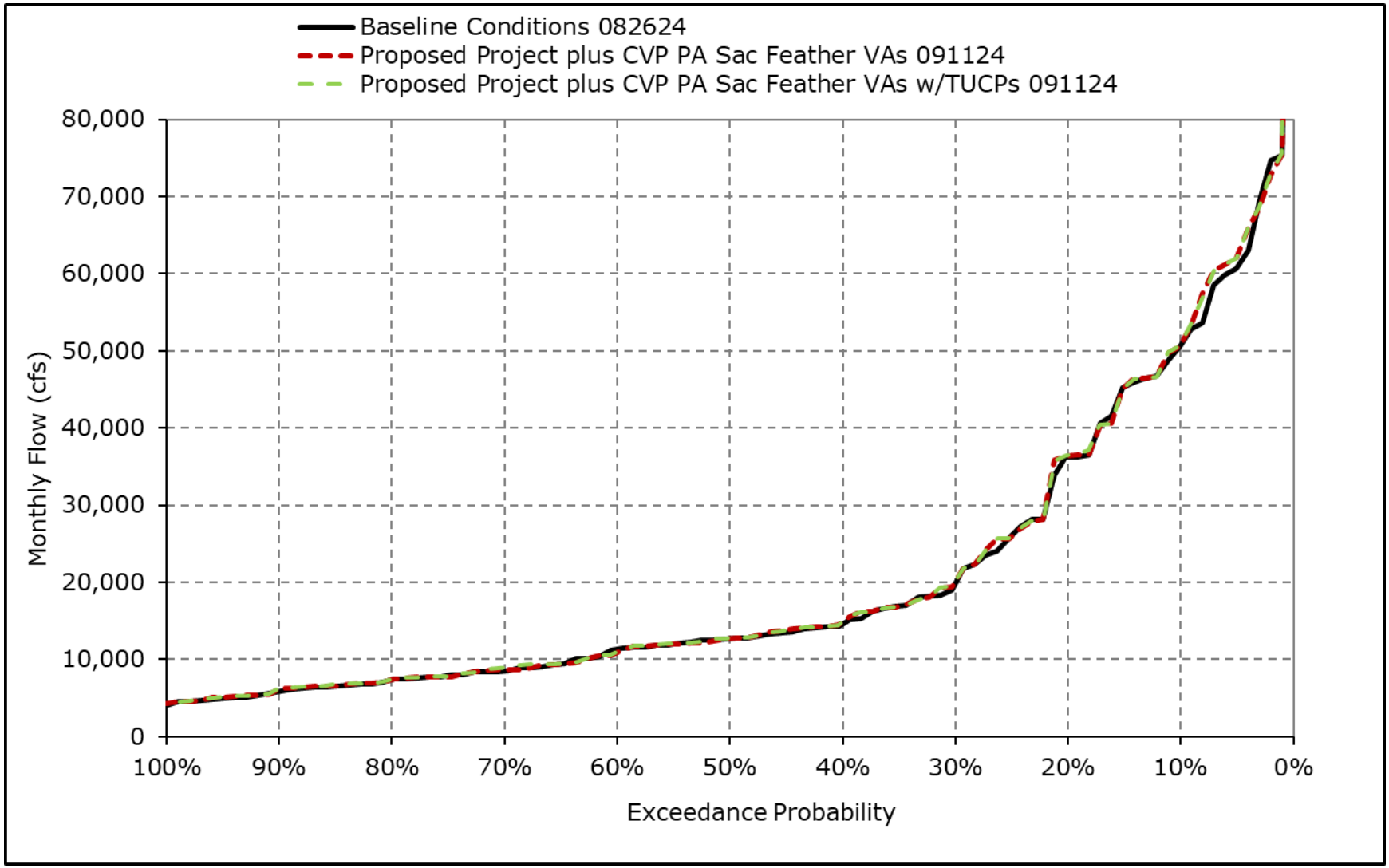
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4h. Sacramento River Flow at Rio Vista, November



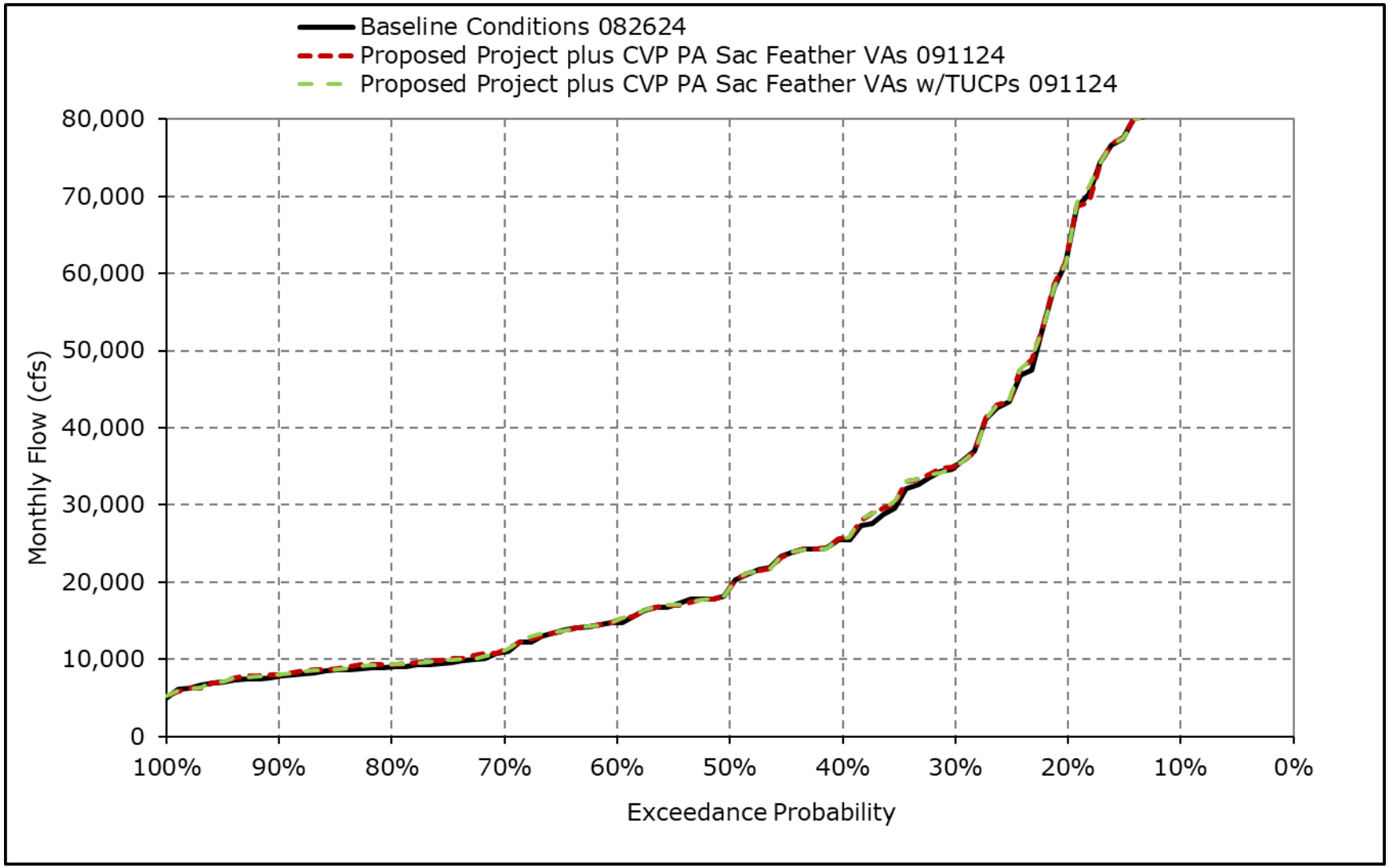
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4i. Sacramento River Flow at Rio Vista, December



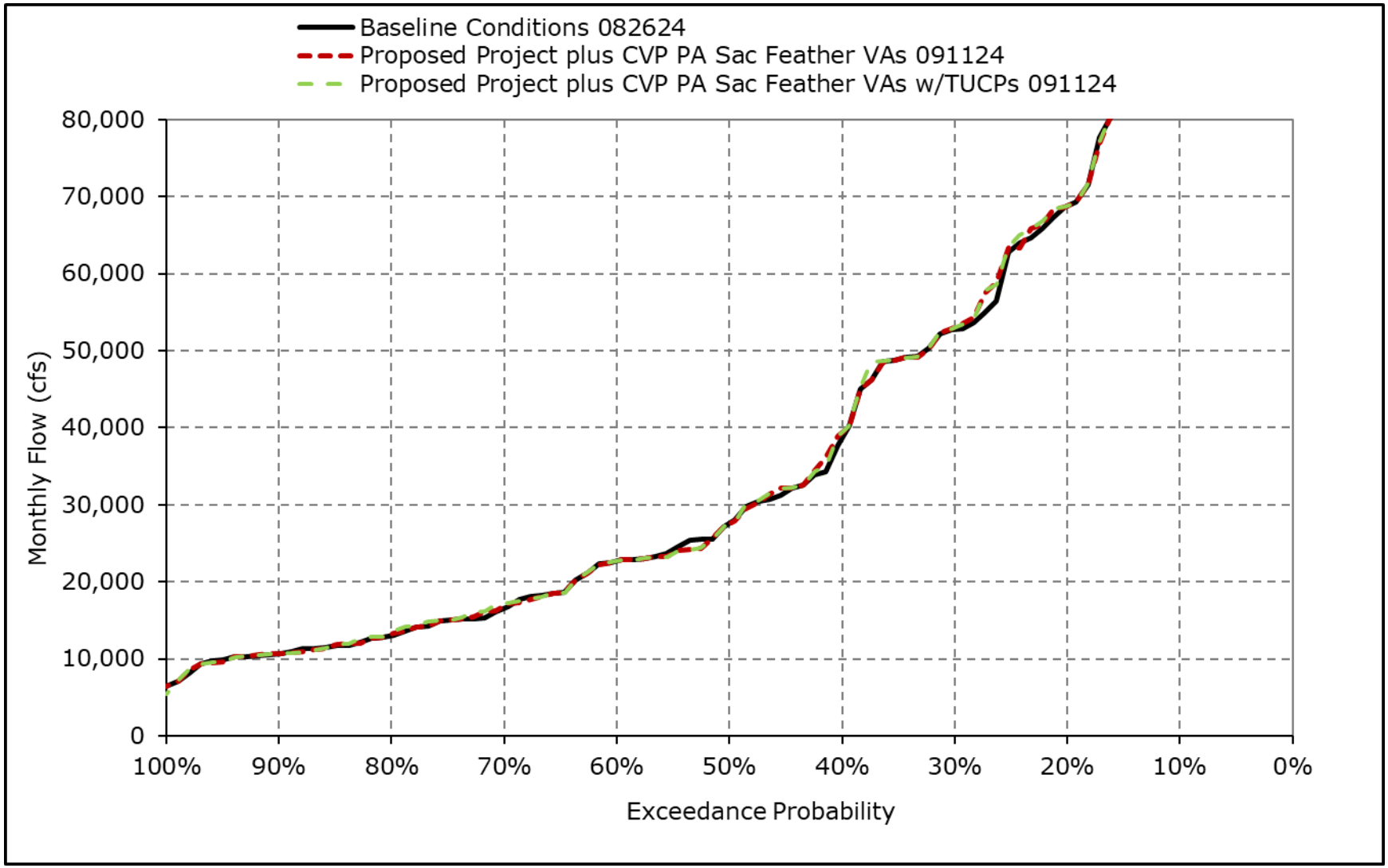
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4j. Sacramento River Flow at Rio Vista, January



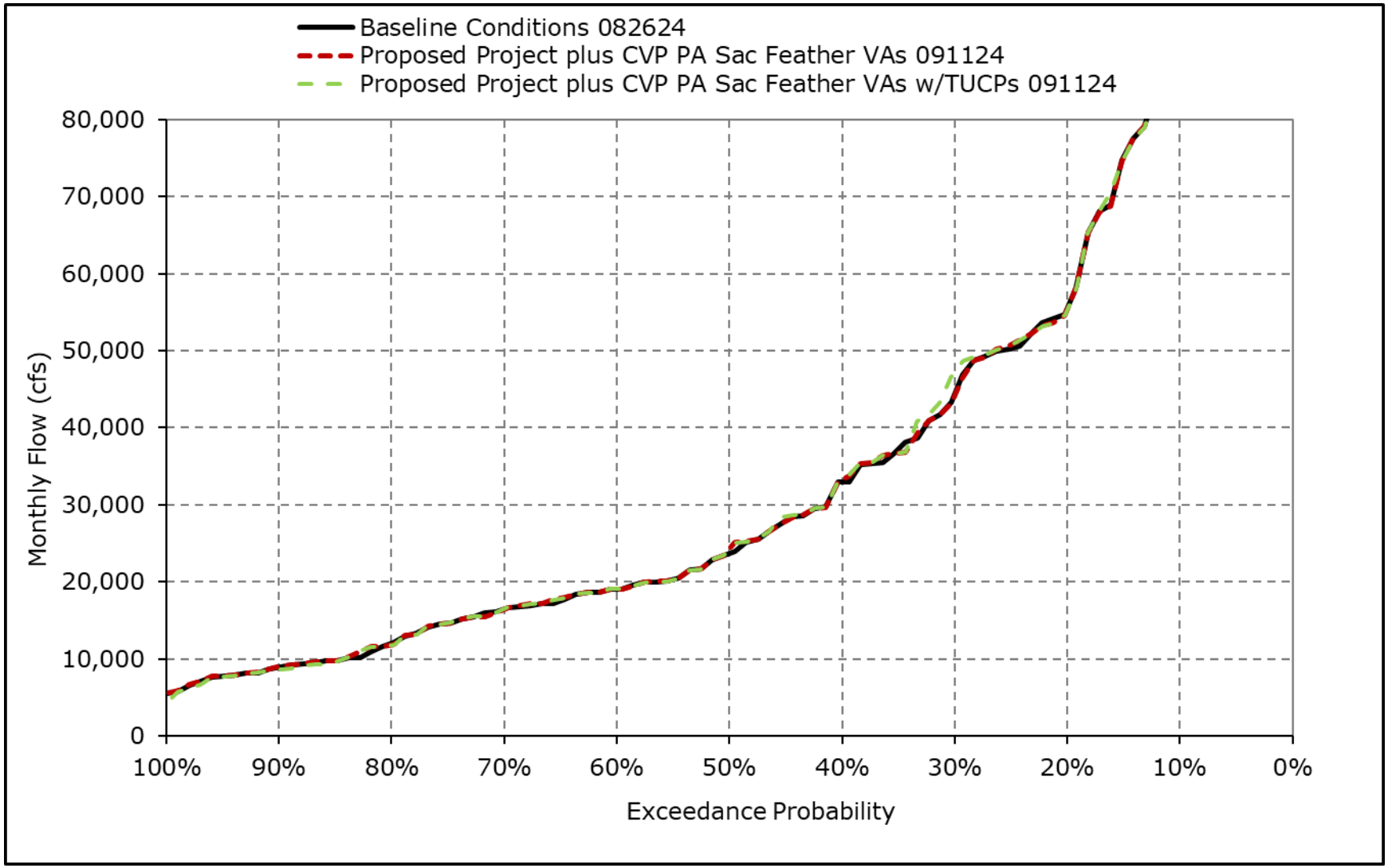
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4k. Sacramento River Flow at Rio Vista, February



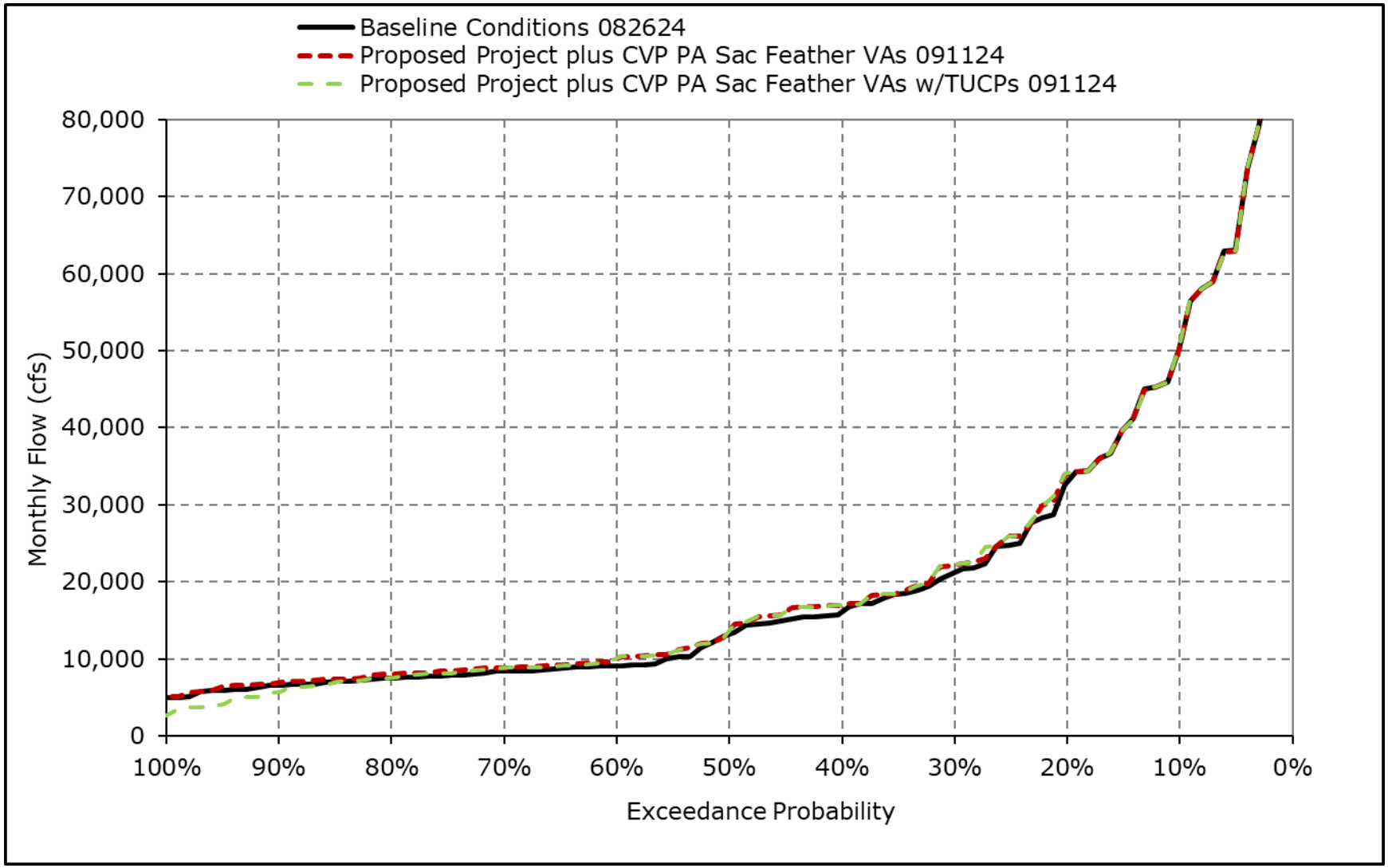
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4l. Sacramento River Flow at Rio Vista, March



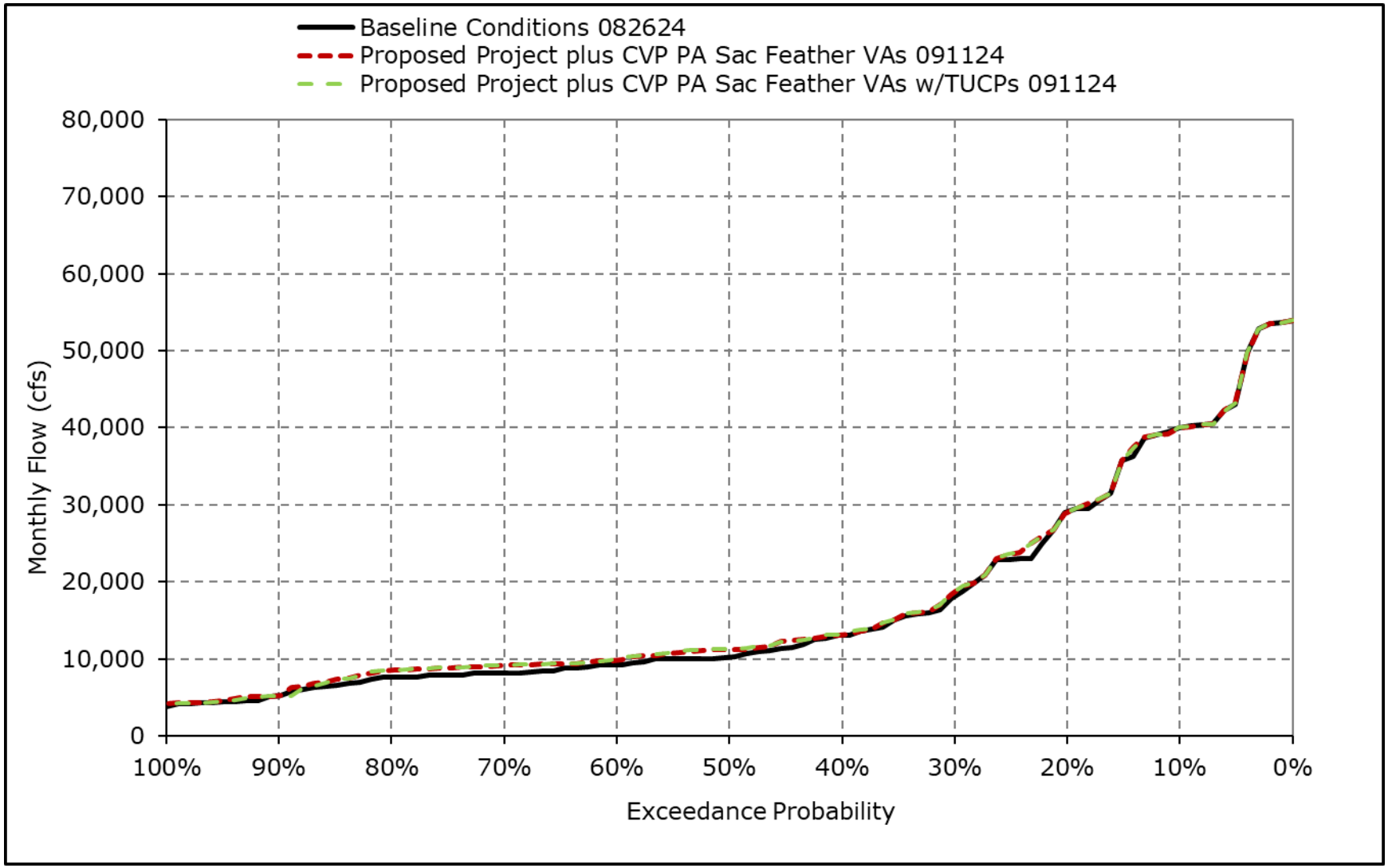
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4m. Sacramento River Flow at Rio Vista, April



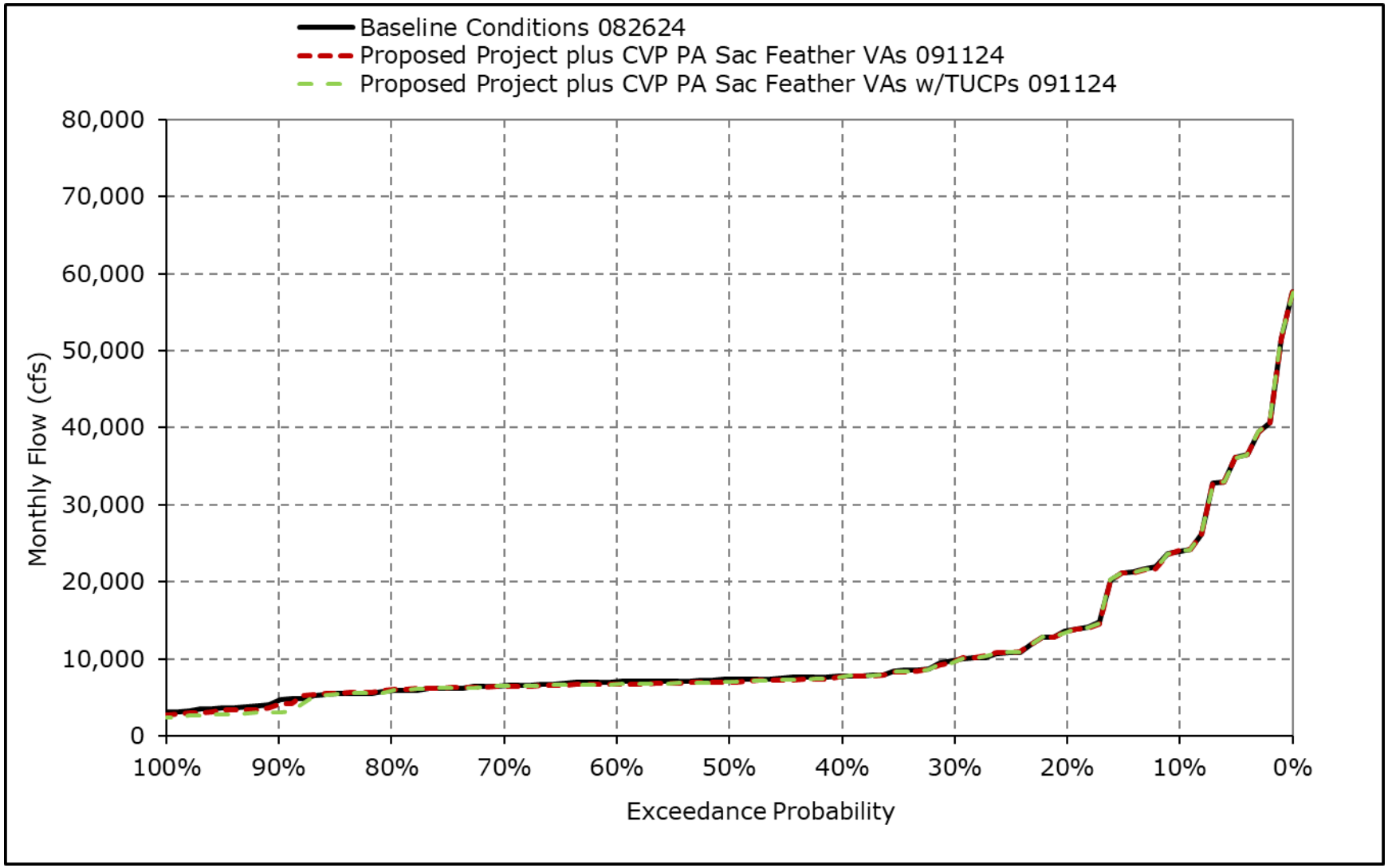
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4n. Sacramento River Flow at Rio Vista, May



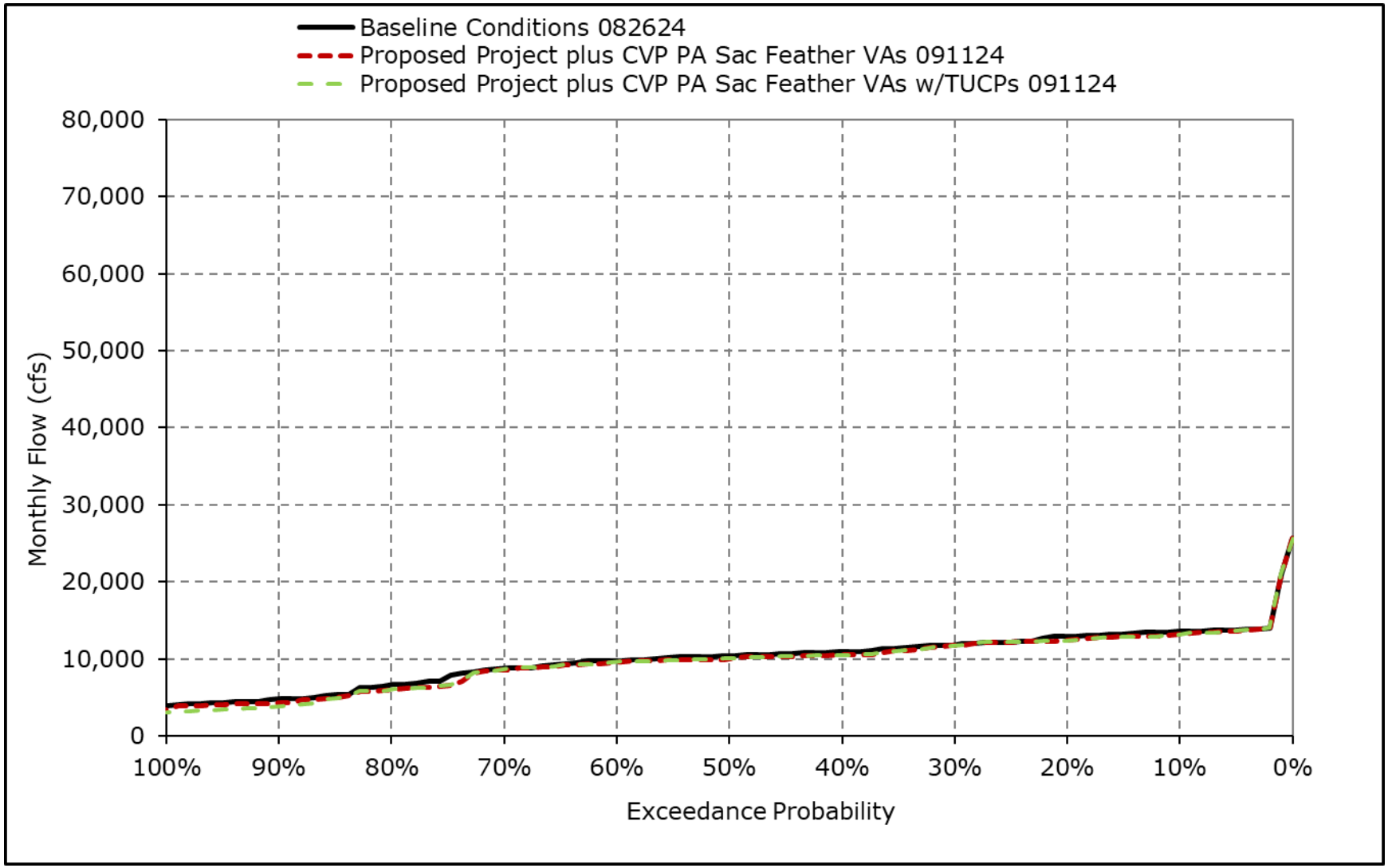
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4o. Sacramento River Flow at Rio Vista, June



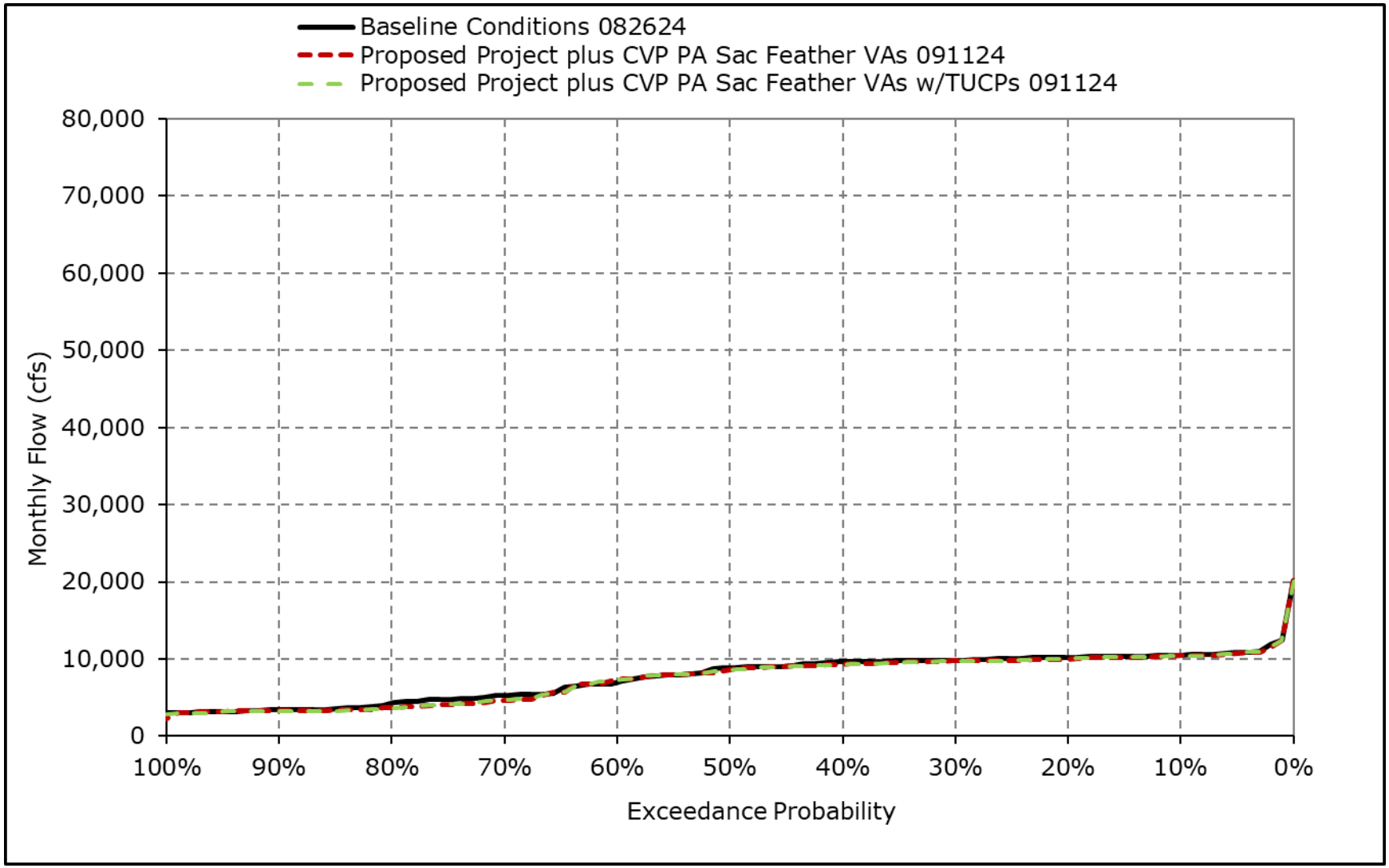
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4p. Sacramento River Flow at Rio Vista, July



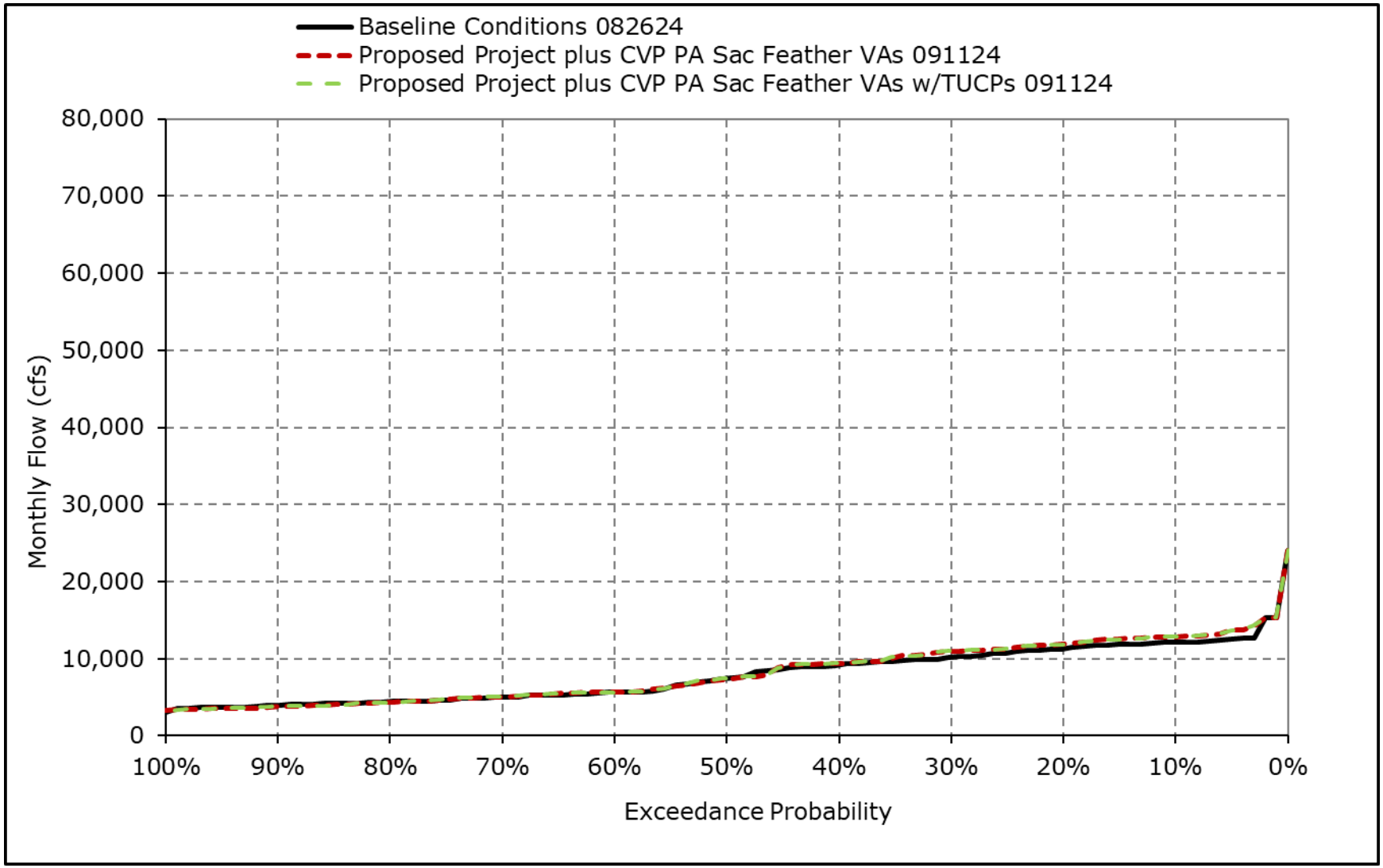
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-4q. Sacramento River Flow at Rio Vista, August



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

Figure 4F-3-4r. Sacramento River Flow at Rio Vista, September



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

Table 4F-3-5-1a. 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 4F-3-5-1b. San Joaquin River at Vernalis, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,980	2,646	3,884	9,366	11,406	13,186	14,636	12,136	13,348	6,343	4,782	3,780
20% Exceedance	3,688	2,330	2,528	4,260	7,979	8,982	9,954	7,980	6,536	3,784	2,199	2,047
30% Exceedance	3,198	2,065	2,066	3,289	5,394	7,236	8,148	6,138	3,242	1,950	1,399	1,452
40% Exceedance	2,291	1,887	1,779	2,338	3,587	4,255	6,284	5,018	2,509	1,518	1,127	1,280
50% Exceedance	1,882	1,739	1,575	1,967	2,674	2,539	3,929	3,775	1,760	1,217	828	1,089
60% Exceedance	1,762	1,449	1,405	1,601	2,185	2,274	3,173	3,147	1,527	1,024	711	994
70% Exceedance	1,694	1,394	1,300	1,486	1,828	1,889	2,761	2,780	1,308	852	619	926
80% Exceedance	1,614	1,339	1,165	1,347	1,615	1,709	2,442	2,404	1,153	648	561	842
90% Exceedance	1,443	1,264	1,086	1,204	1,464	1,586	2,151	2,062	984	548	386	703
Full Simulation Period Average[a]	2,553	1,929	2,294	4,064	5,519	5,933	6,726	5,850	4,264	2,532	1,613	1,572
Wet Water Years (32%)	2,939	2,363	3,720	8,660	11,175	12,143	12,538	10,651	9,325	5,551	3,382	2,716
Above Normal Water Years (9%)	2,307	1,847	1,943	2,764	4,912	5,437	6,664	5,645	3,543	1,951	1,230	1,444
Below Normal Water Years (20%)	2,783	1,994	1,793	2,223	3,940	4,287	5,536	4,807	2,507	1,464	973	1,187
Dry Water Years (21%)	2,391	1,665	1,560	1,587	1,871	1,896	2,775	2,753	1,299	843	640	941
Critical Water Years (18%)	1,922	1,437	1,347	1,476	1,775	1,682	2,354	2,191	1,041	613	508	767

Table 4F-3-5-1c. San Joaquin River at Vernalis, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	5	4	8	-3	4	-395	223	11	18	5	22	0
20% Exceedance	10	9	6	-12	26	0	-51	37	6	19	1	6
30% Exceedance	7	11	4	5	-4	-130	47	21	8	10	67	13
40% Exceedance	13	3	7	6	2	7	5	-1	16	35	54	13
50% Exceedance	38	25	4	4	-7	6	7	33	14	66	69	45
60% Exceedance	15	17	7	10	6	-11	1	25	37	87	22	28
70% Exceedance	9	23	2	11	-4	2	7	19	60	44	2	16
80% Exceedance	22	7	8	9	10	-4	4	-10	12	30	55	15
90% Exceedance	-23	25	9	2	6	-27	5	-8	55	61	31	46
Full Simulation Period Average[a]	16	10	7	-11	-32	-8	15	26	24	34	35	24
Wet Water Years (32%)	5	1	5	-46	-101	-15	16	8	11	9	7	5
Above Normal Water Years (9%)	28	18	11	1	-9	-11	52	127	8	10	10	5
Below Normal Water Years (20%)	19	20	10	6	11	0	14	26	22	29	37	30
Dry Water Years (21%)	33	15	8	6	0	-9	9	31	15	25	18	19
Critical Water Years (18%)	7	6	7	8	-4	0	1	1	68	107	114	64

[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.

Table 4F-3-5-2a. 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 4F-3-5-2b. San Joaquin River at Vernalis, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,980	2,645	3,883	9,364	11,403	13,184	14,603	12,134	13,343	6,341	4,780	3,780
20% Exceedance	3,688	2,330	2,527	4,265	7,977	8,982	9,953	7,968	6,539	3,782	2,197	2,045
30% Exceedance	3,197	2,063	2,065	3,288	5,393	7,369	8,147	6,138	3,245	1,949	1,334	1,451
40% Exceedance	2,289	1,886	1,778	2,337	3,586	4,253	6,283	5,017	2,508	1,488	1,109	1,278
50% Exceedance	1,881	1,738	1,574	1,966	2,673	2,538	3,919	3,809	1,759	1,198	811	1,076
60% Exceedance	1,758	1,449	1,405	1,600	2,184	2,274	3,172	3,145	1,505	989	709	988
70% Exceedance	1,683	1,378	1,282	1,484	1,825	1,887	2,759	2,780	1,260	847	625	917
80% Exceedance	1,604	1,325	1,155	1,346	1,613	1,707	2,441	2,404	1,142	644	519	831
90% Exceedance	1,453	1,249	1,085	1,206	1,460	1,584	2,150	2,059	985	548	386	670
Full Simulation Period Average[a]	2,545	1,923	2,291	4,068	5,529	5,935	6,726	5,851	4,257	2,521	1,602	1,563
Wet Water Years (32%)	2,937	2,362	3,719	8,678	11,211	12,153	12,539	10,650	9,323	5,549	3,380	2,715
Above Normal Water Years (9%)	2,305	1,845	1,946	2,766	4,914	5,437	6,668	5,643	3,541	1,950	1,229	1,444
Below Normal Water Years (20%)	2,774	1,980	1,785	2,221	3,936	4,285	5,537	4,808	2,510	1,467	974	1,187
Dry Water Years (21%)	2,378	1,657	1,556	1,585	1,869	1,893	2,772	2,759	1,299	848	644	934
Critical Water Years (18%)	1,910	1,430	1,343	1,472	1,773	1,680	2,354	2,190	1,003	550	442	723

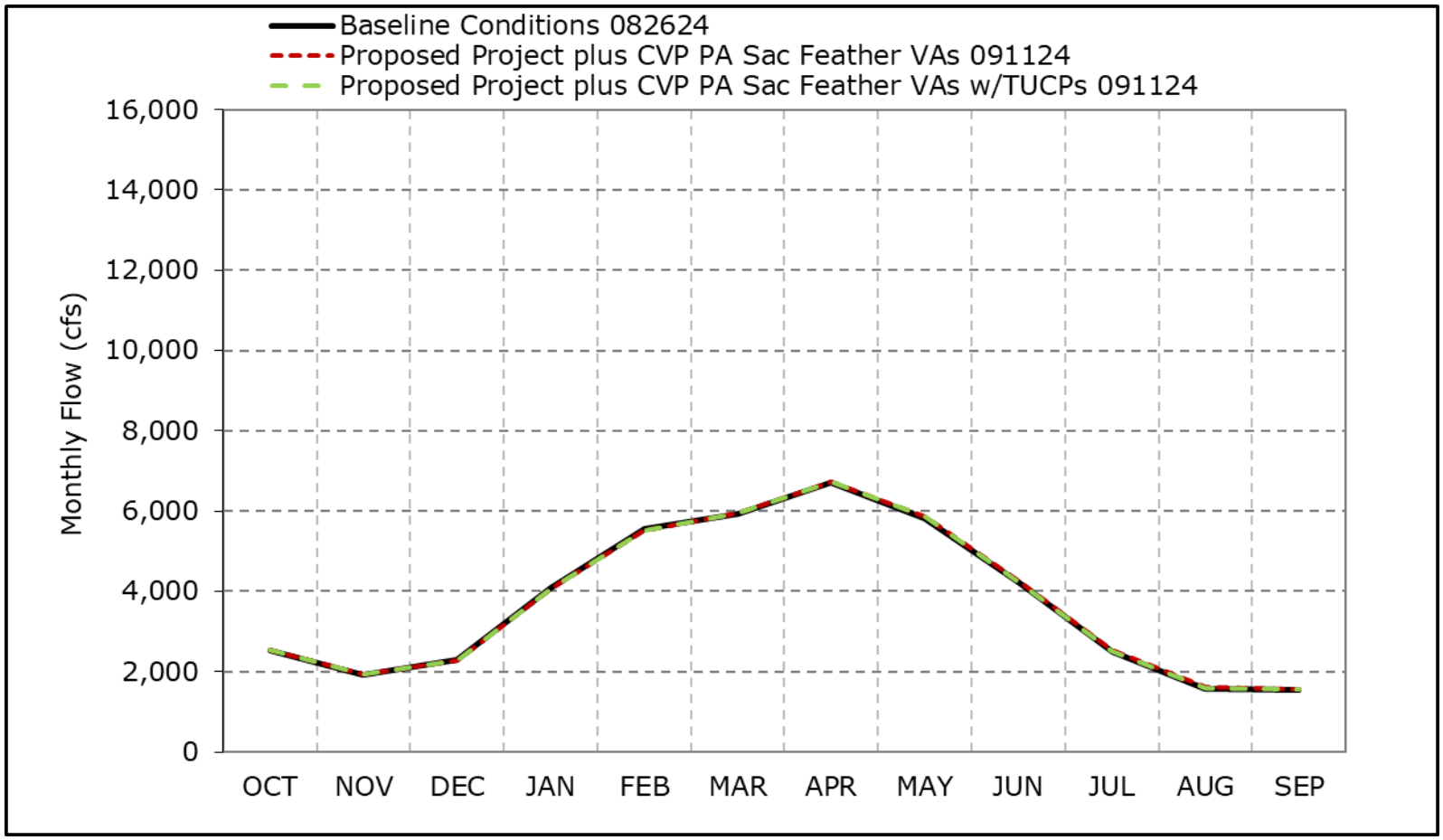
Table 4F-3-5-2c. San Joaquin River at Vernalis, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	4	3	7	-5	1	-397	190	9	14	4	21	-1
20% Exceedance	10	8	6	-7	25	0	-51	25	8	17	-1	4
30% Exceedance	6	8	3	3	-5	3	46	20	10	9	2	12
40% Exceedance	11	3	6	5	1	5	4	-2	15	5	37	11
50% Exceedance	38	25	3	4	-8	5	-3	67	12	46	52	32
60% Exceedance	11	17	6	9	5	-11	0	24	15	52	20	22
70% Exceedance	-1	7	-16	9	-7	0	6	18	12	39	8	8
80% Exceedance	12	-6	-3	7	9	-6	3	-11	0	26	12	3
90% Exceedance	-13	11	8	4	1	-28	4	-11	56	61	31	13
Full Simulation Period Average[a]	8	4	4	-6	-22	-6	15	26	17	23	24	14
Wet Water Years (32%)	3	0	4	-28	-65	-6	17	7	9	7	6	5
Above Normal Water Years (9%)	25	16	14	3	-7	-11	56	125	6	9	9	6
Below Normal Water Years (20%)	10	5	3	4	6	-2	15	27	25	31	38	30
Dry Water Years (21%)	19	7	4	4	-1	-12	6	36	15	30	22	12
Critical Water Years (18%)	-6	-1	3	5	-6	-2	0	0	30	44	48	21

[a] Based on the 100-year simulation period.

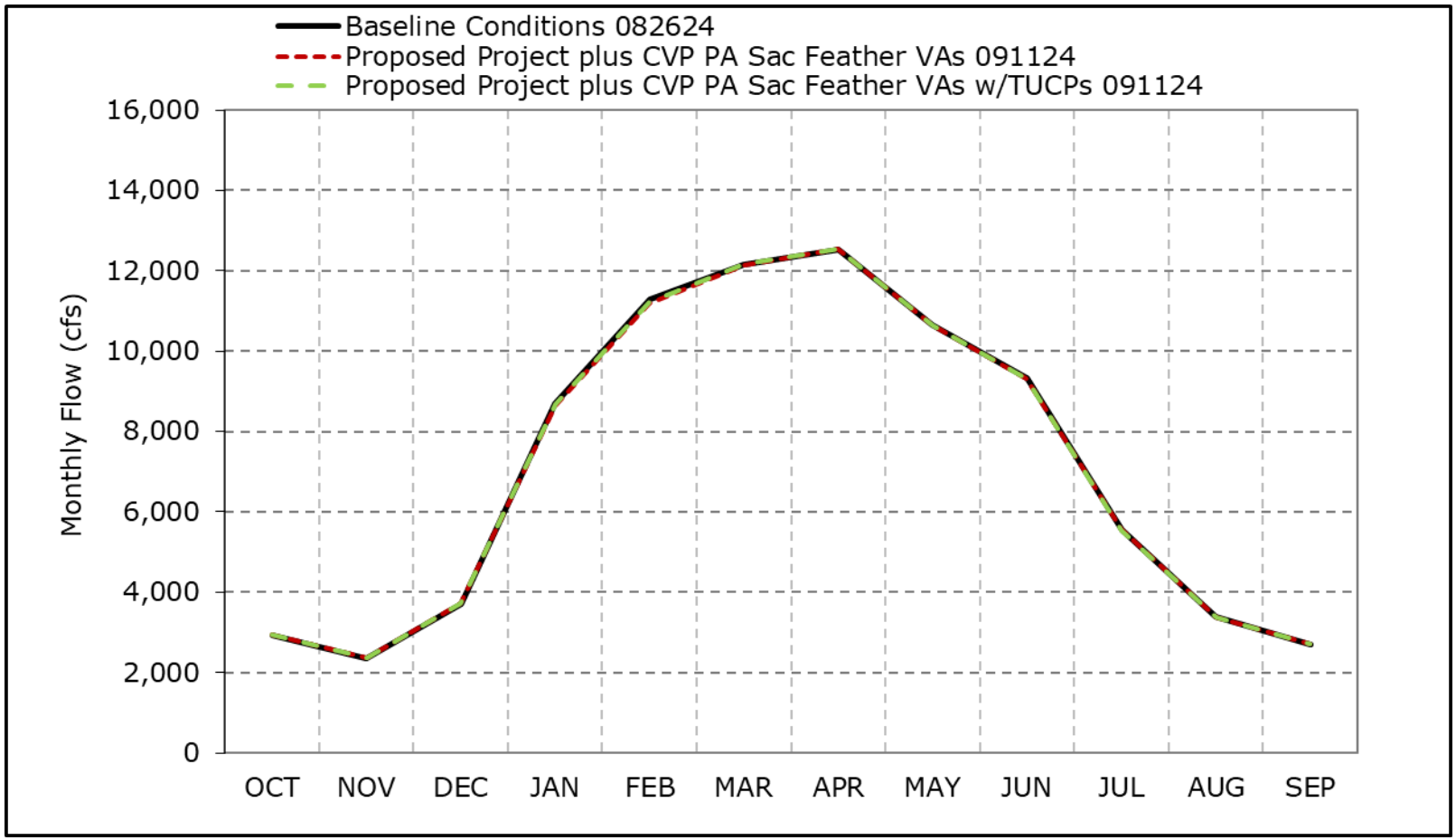
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-5a. San Joaquin River at Vernalis, Long-Term Average Flow



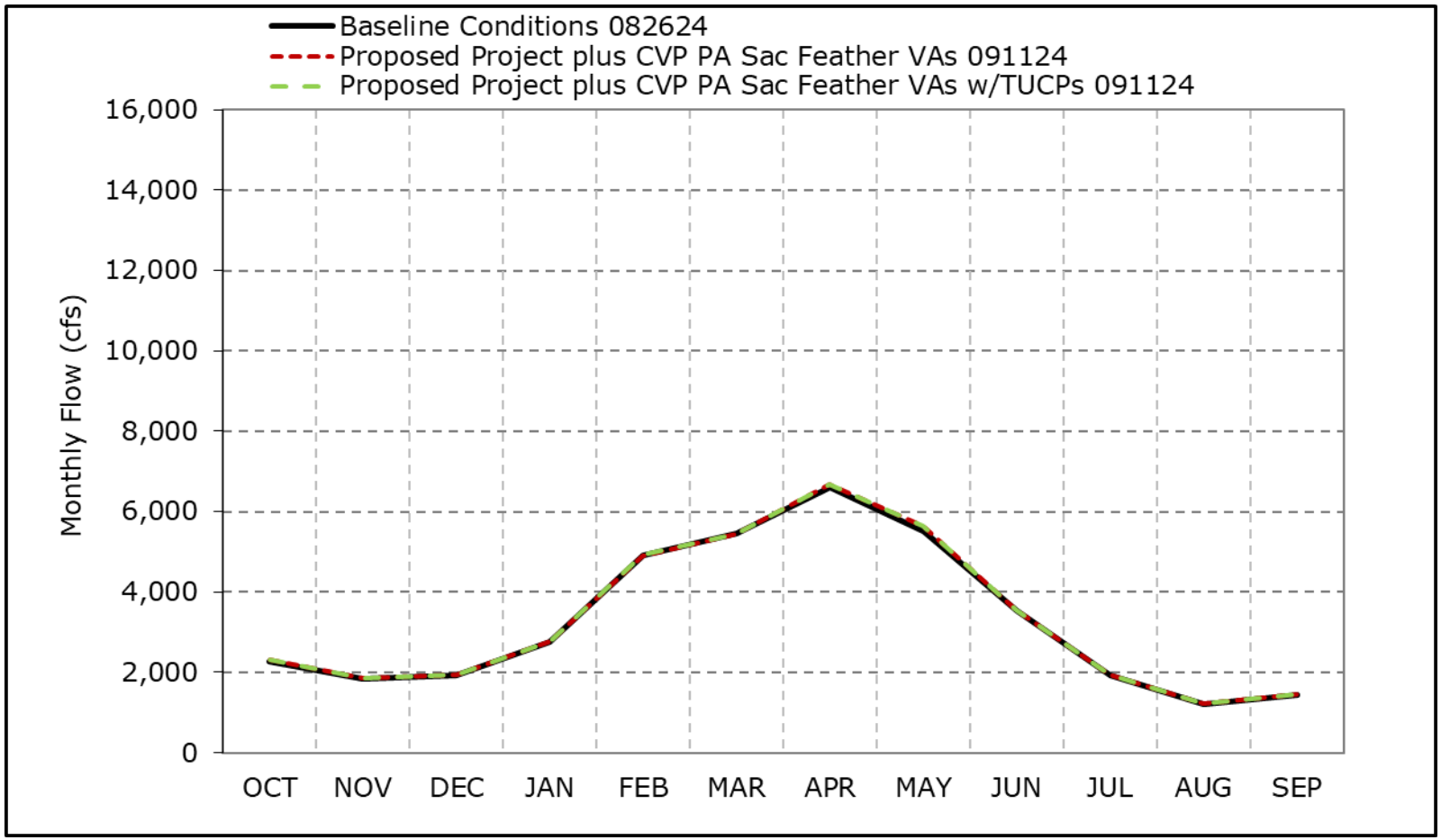
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5b. San Joaquin River at Vernalis, Wet Year Average Flow



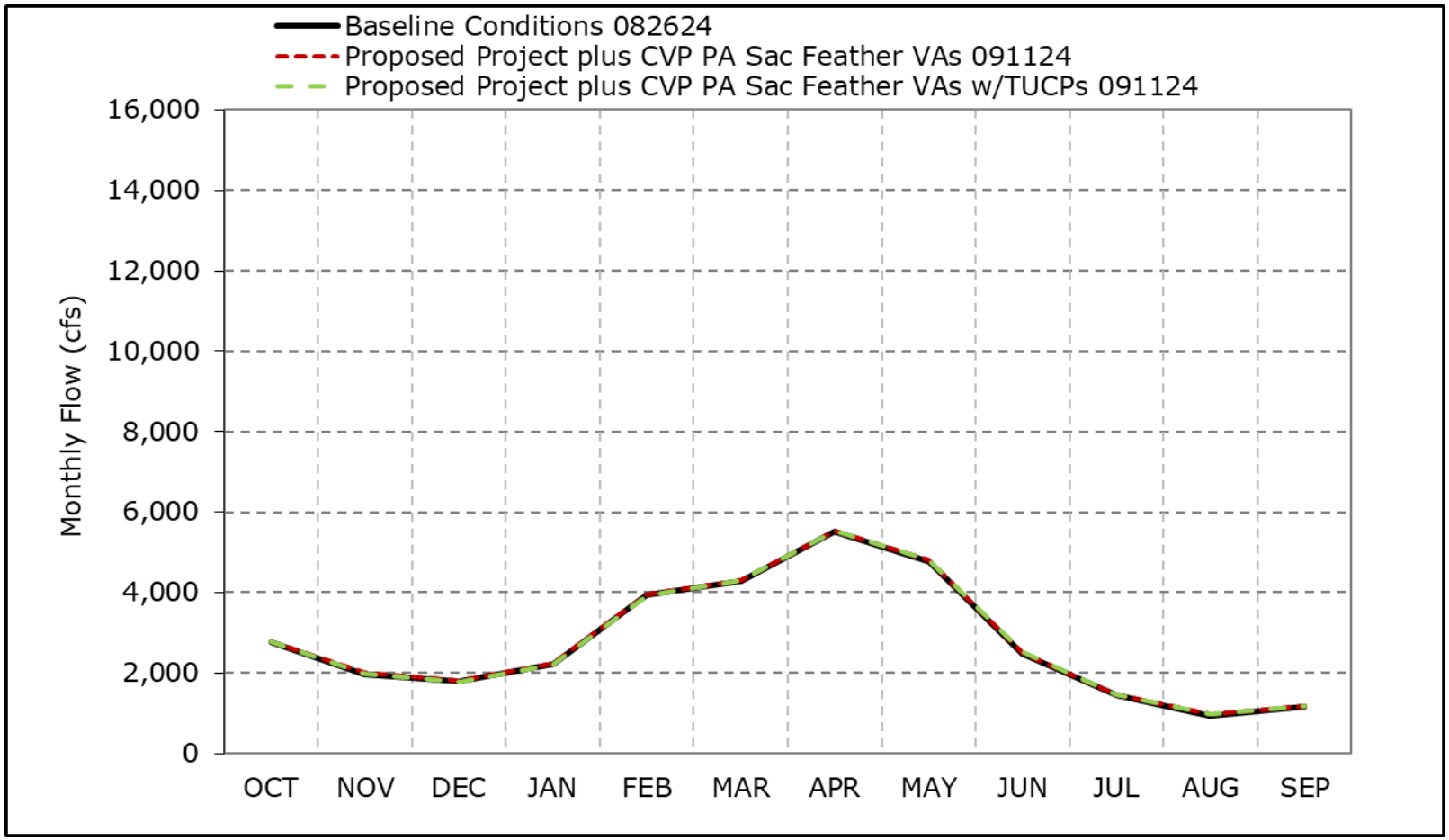
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5c. San Joaquin River at Vernalis, Above Normal Year Average Flow



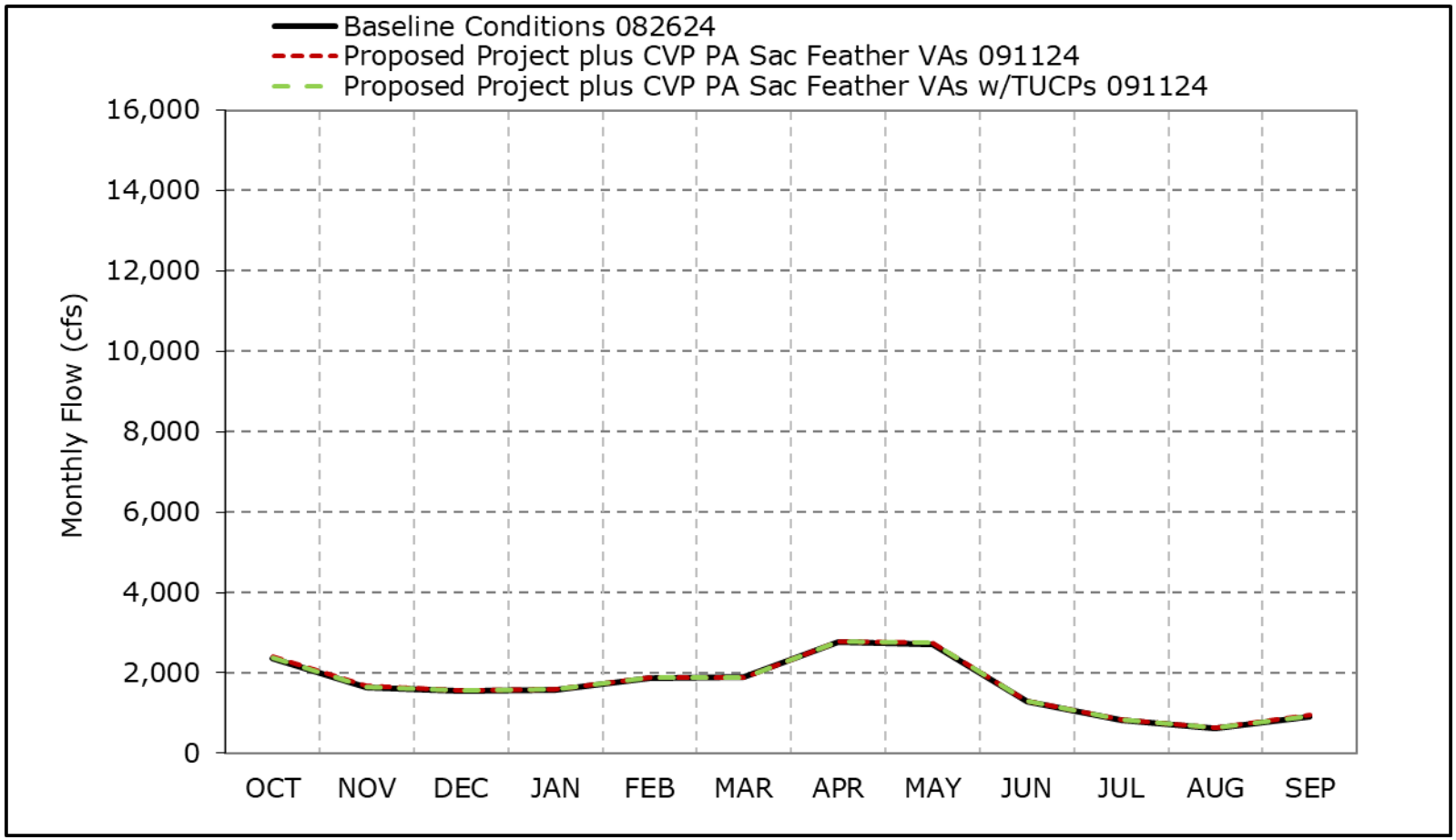
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5d. San Joaquin River at Vernalis, Below Normal Year Average Flow



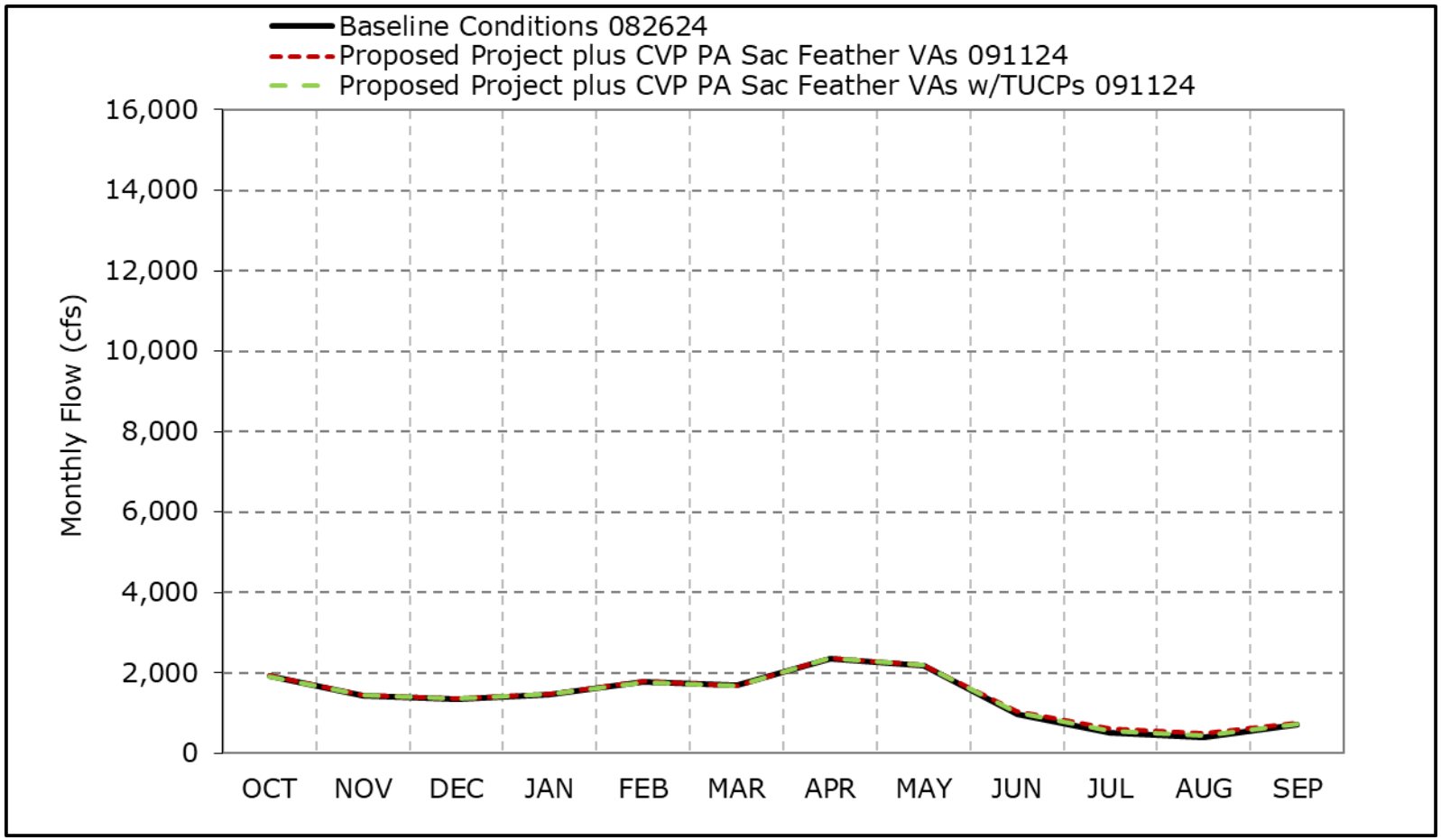
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5e. San Joaquin River at Vernalis, Dry Year Average Flow



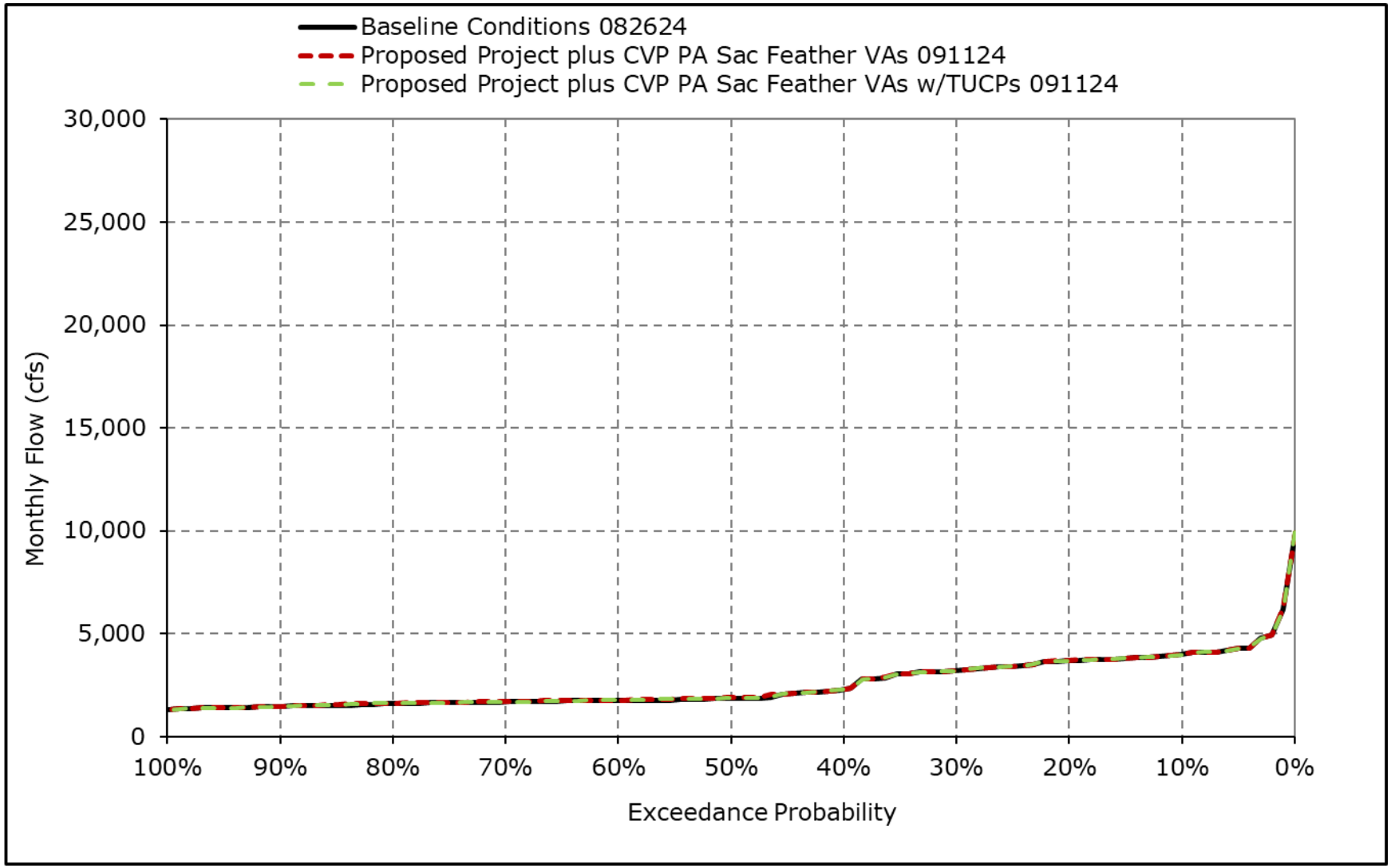
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5f. San Joaquin River at Vernalis, Critical Year Average Flow



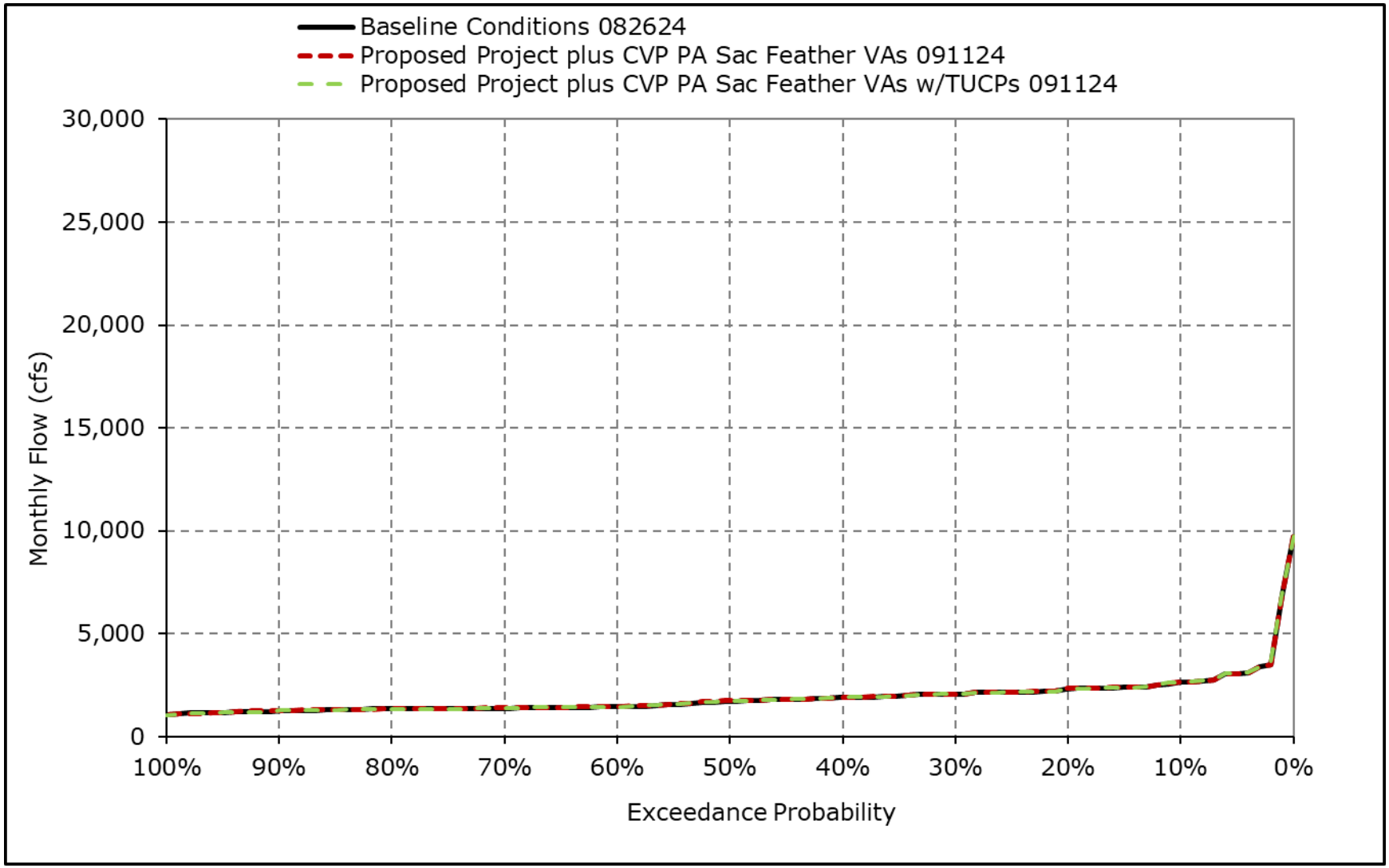
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5g. San Joaquin River at Vernalis, October



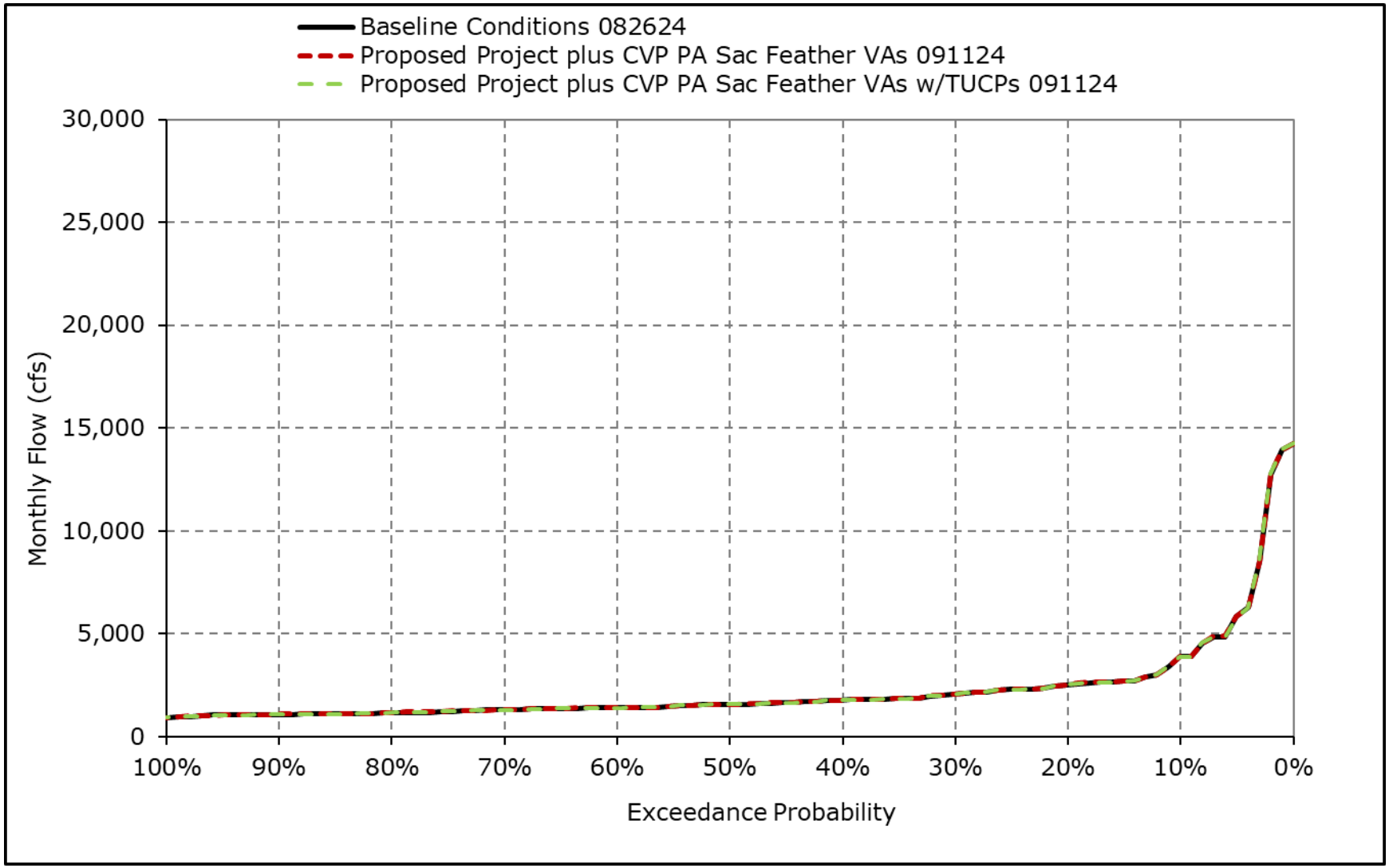
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5h. San Joaquin River at Vernalis, November



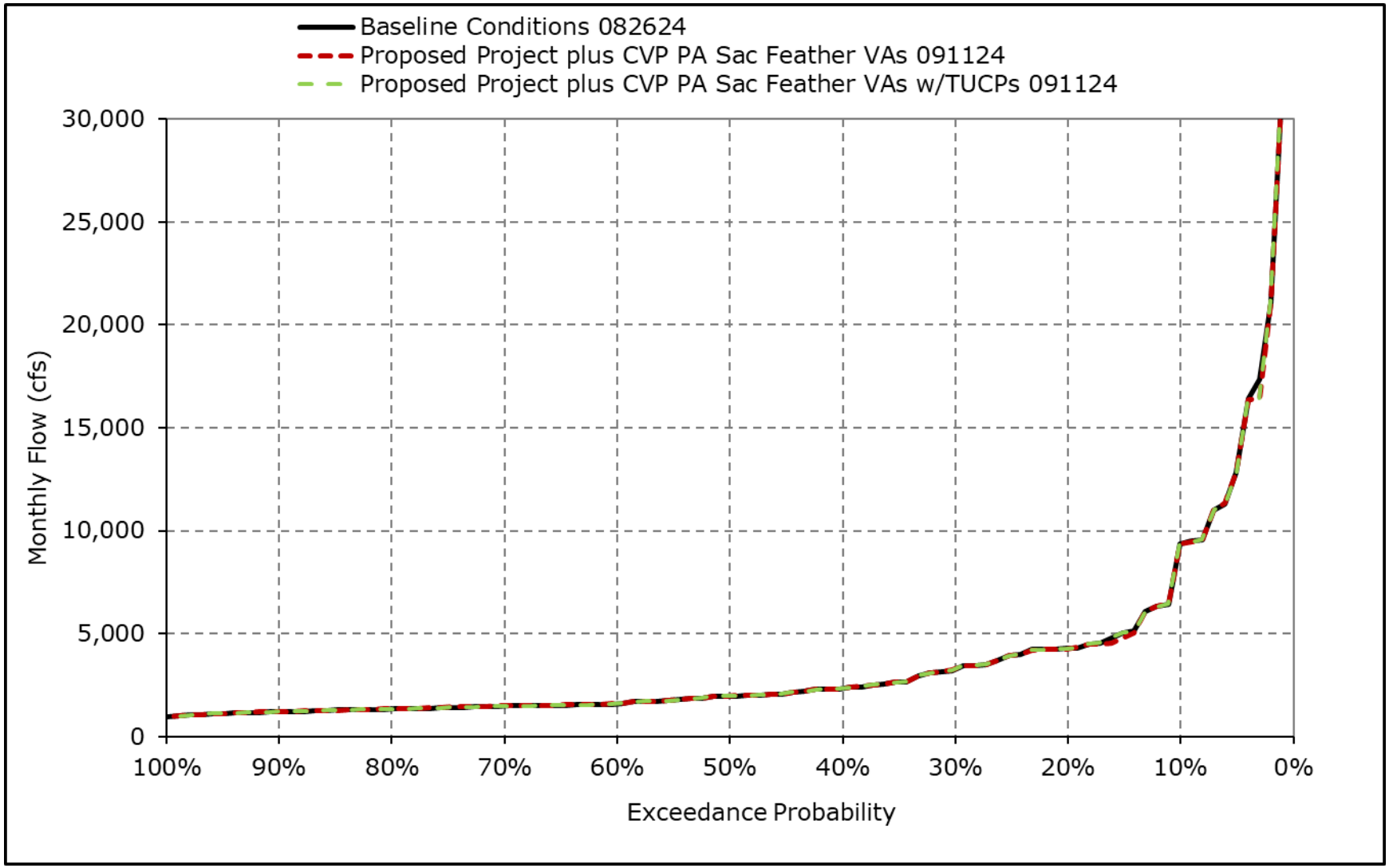
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5i. San Joaquin River at Vernalis, December



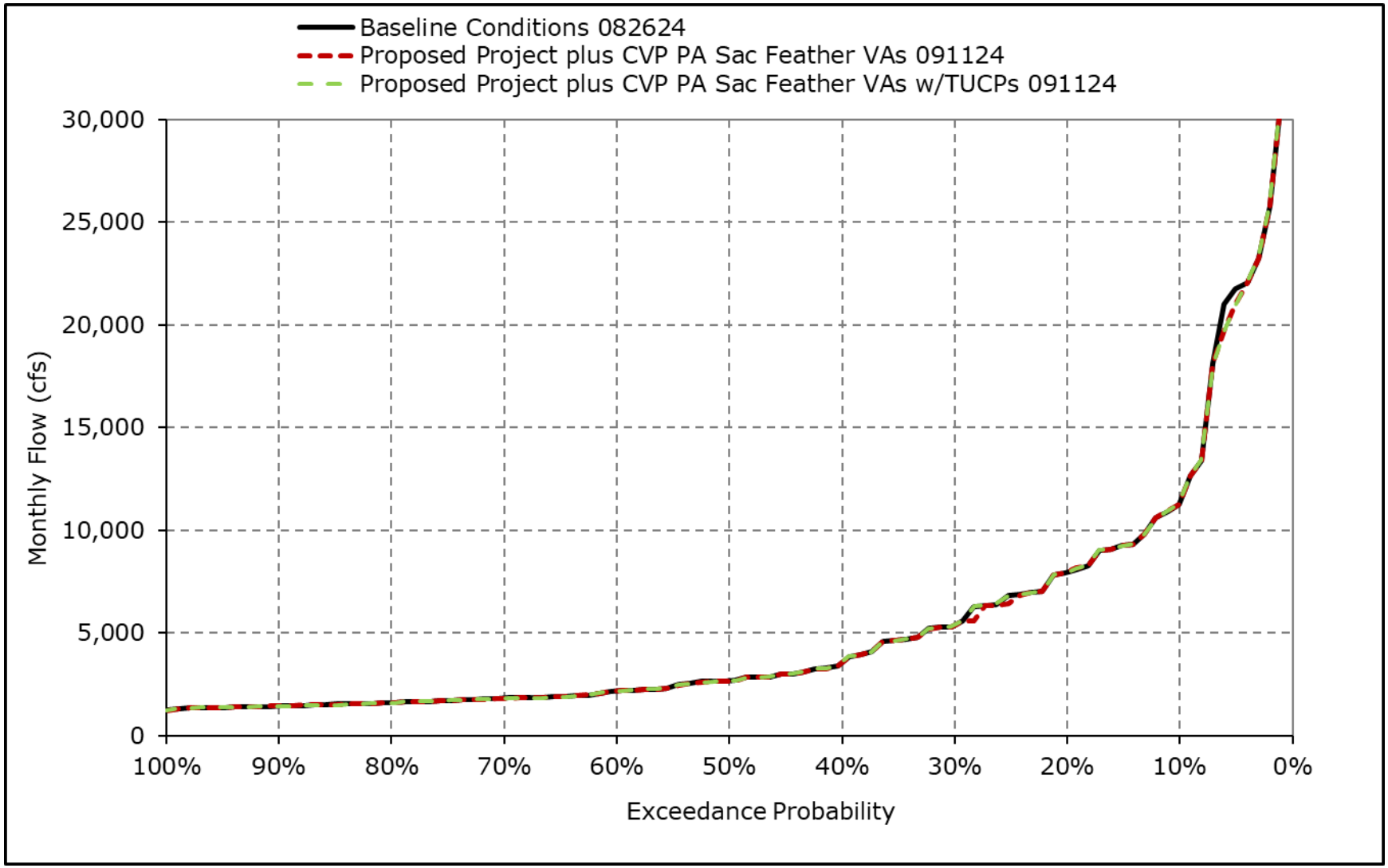
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5j. San Joaquin River at Vernalis, January



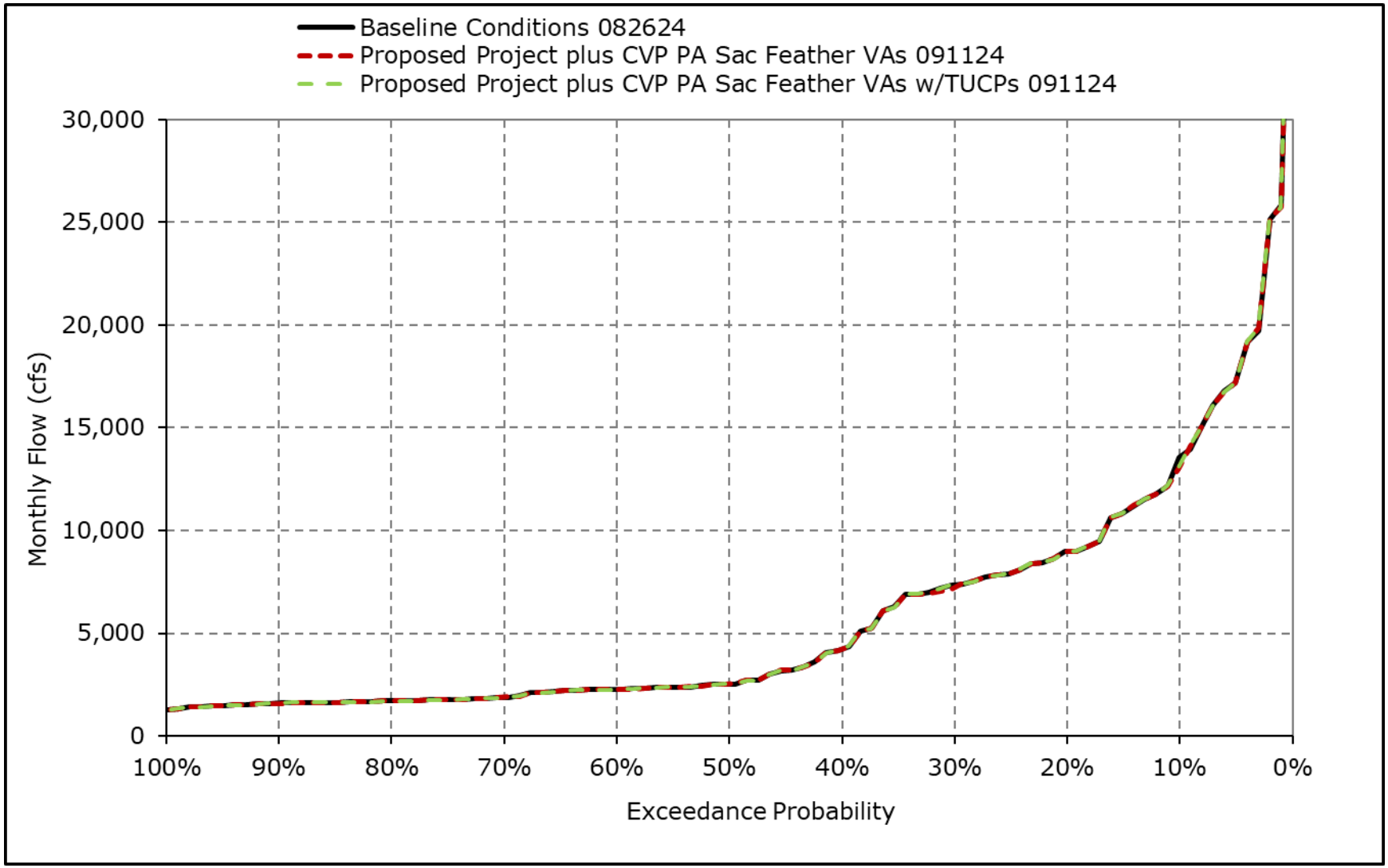
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5k. San Joaquin River at Vernalis, February



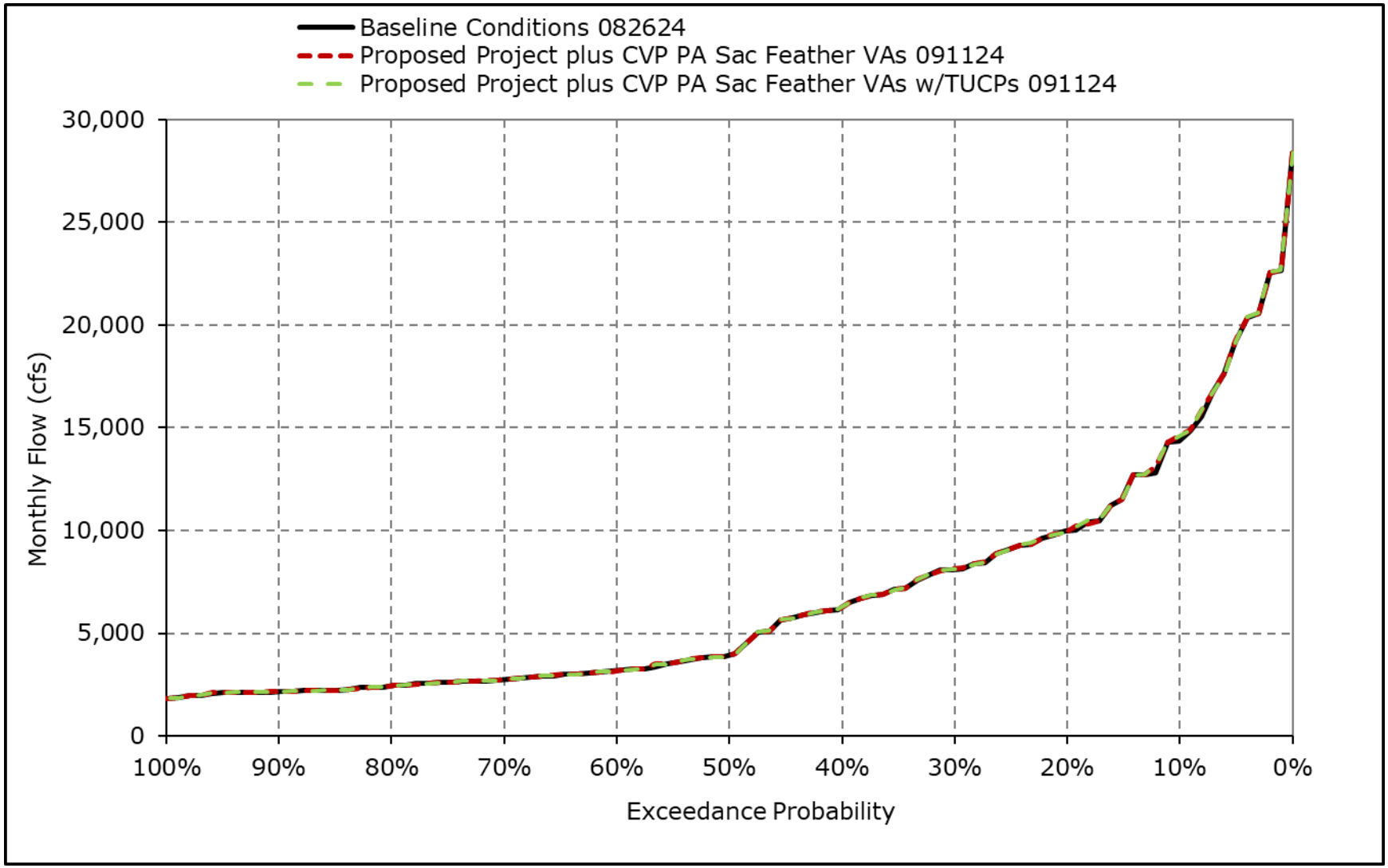
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5l. San Joaquin River at Vernalis, March



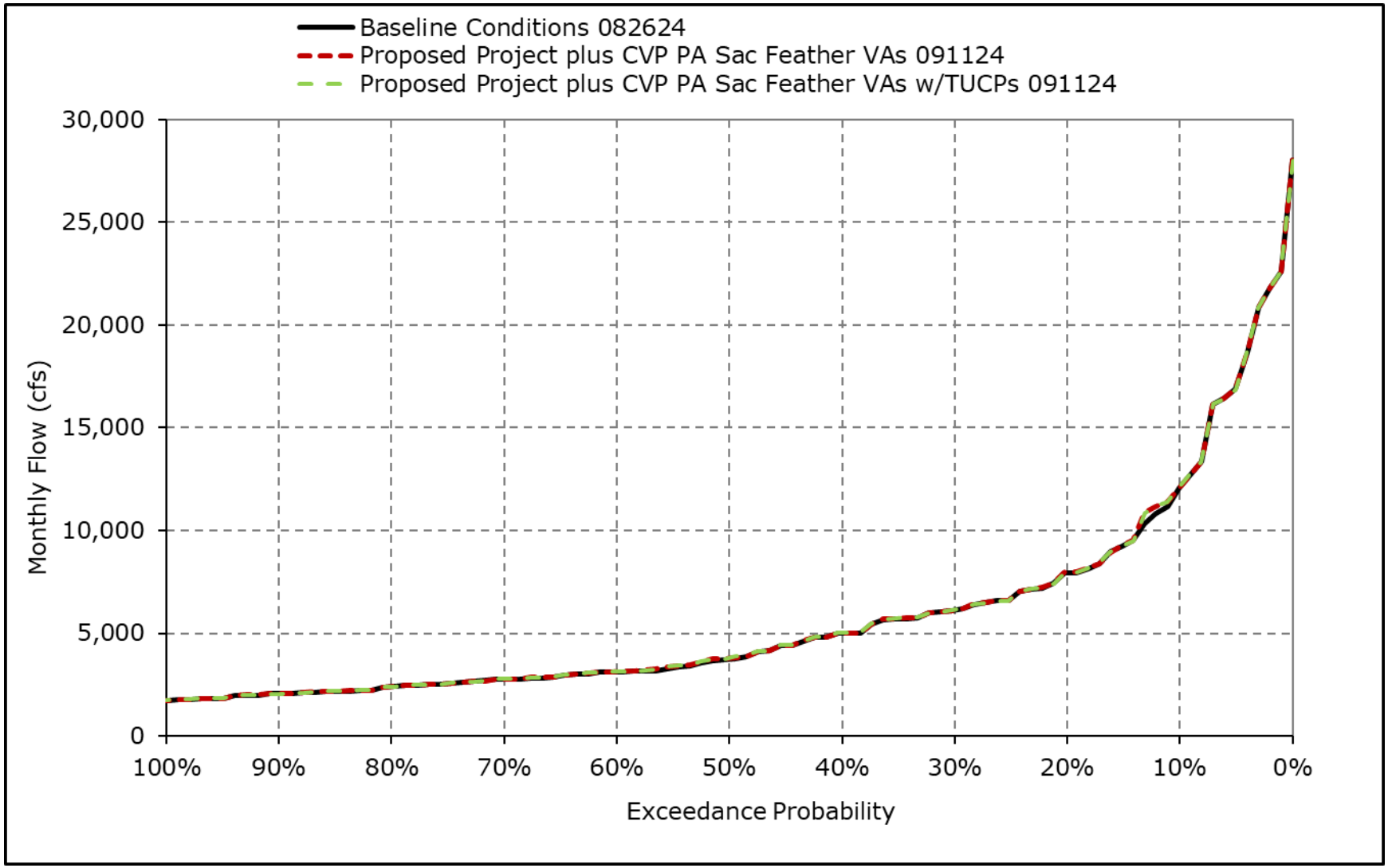
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5m. San Joaquin River at Vernalis, April



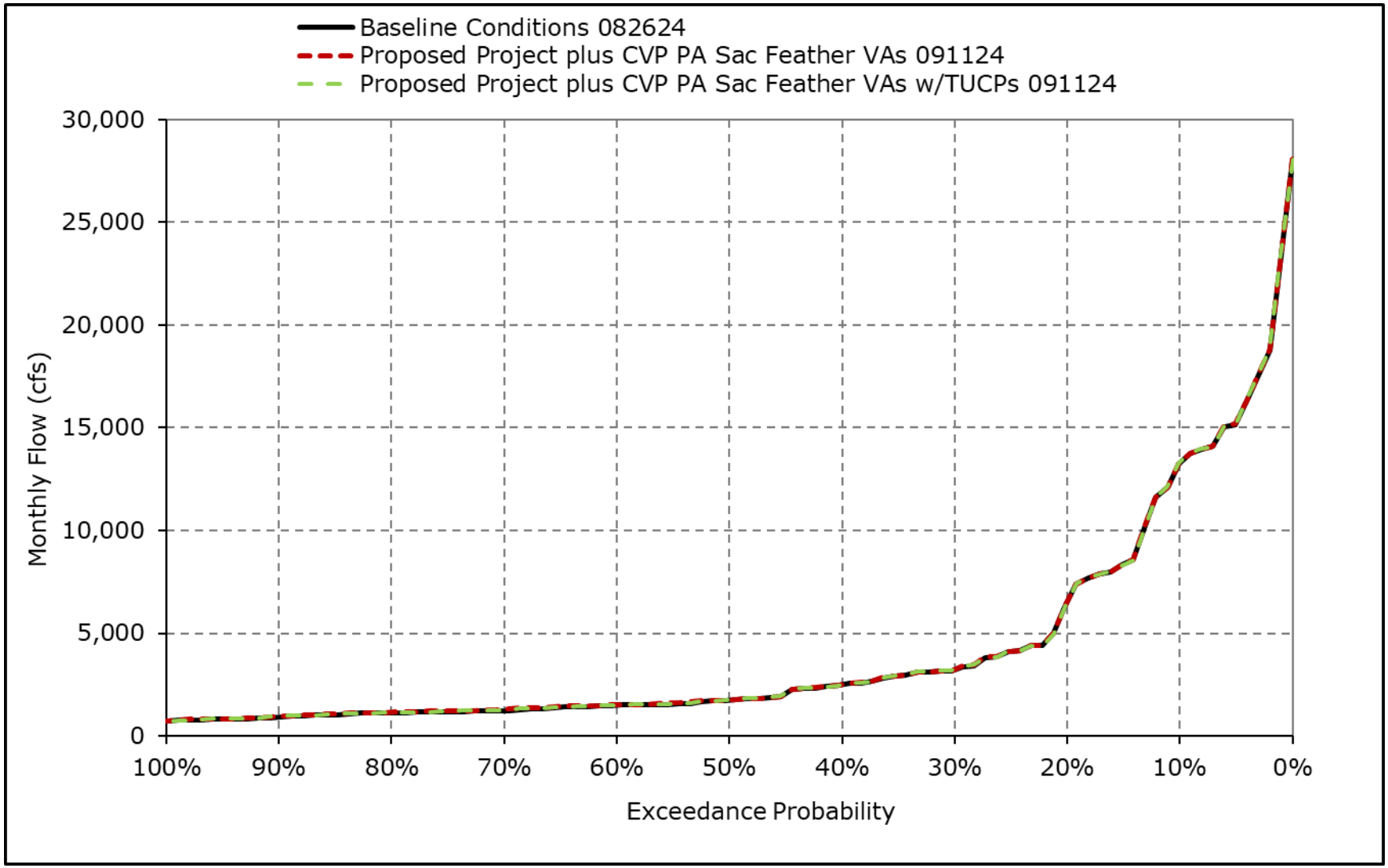
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5n. San Joaquin River at Vernalis, May



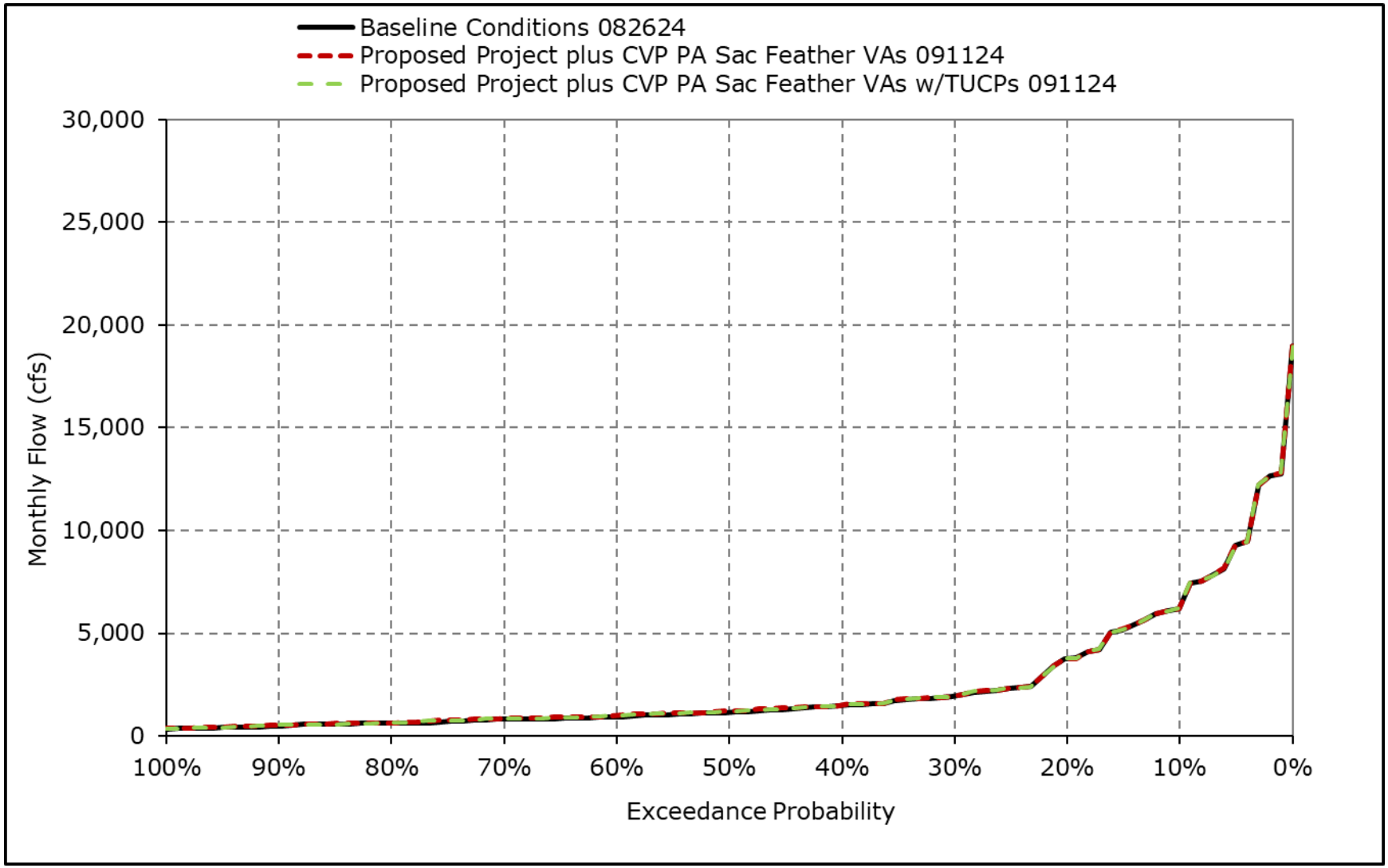
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5o. San Joaquin River at Vernalis, June



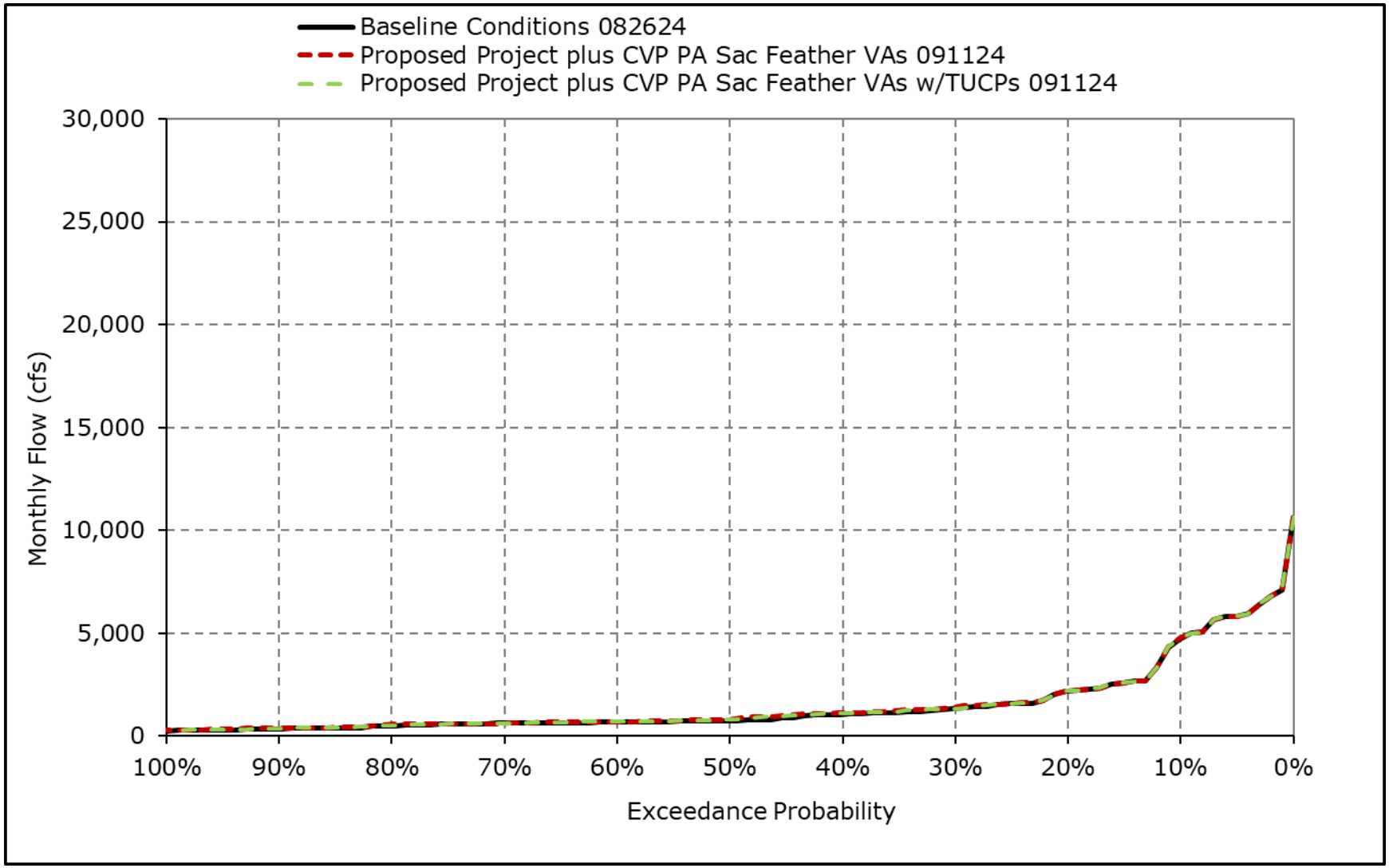
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5p. San Joaquin River at Vernalis, July



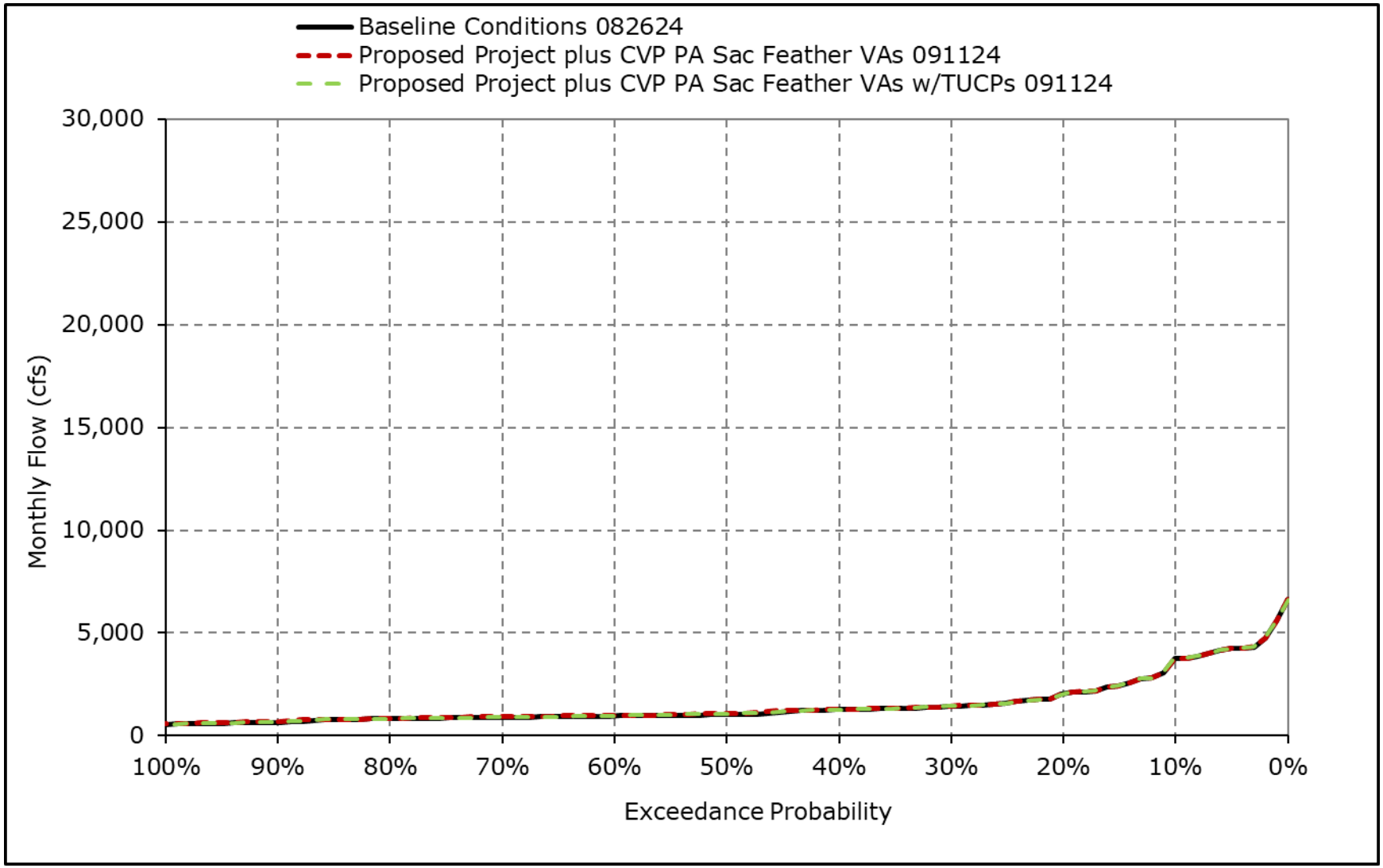
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-5q. San Joaquin River at Vernalis, August



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

Figure 4F-3-5r. San Joaquin River at Vernalis, September



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

Table 4F-3-6-1a. 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 4F-3-6-1b. San Joaquin River at Vernalis (60-20-20), Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,980	2,646	3,884	9,366	11,406	13,186	14,636	12,136	13,348	6,343	4,782	3,780
20% Exceedance	3,688	2,330	2,528	4,260	7,979	8,982	9,954	7,980	6,536	3,784	2,199	2,047
30% Exceedance	3,198	2,065	2,066	3,289	5,394	7,236	8,148	6,138	3,242	1,950	1,399	1,452
40% Exceedance	2,291	1,887	1,779	2,338	3,587	4,255	6,284	5,018	2,509	1,518	1,127	1,280
50% Exceedance	1,882	1,739	1,575	1,967	2,674	2,539	3,929	3,775	1,760	1,217	828	1,089
60% Exceedance	1,762	1,449	1,405	1,601	2,185	2,274	3,173	3,147	1,527	1,024	711	994
70% Exceedance	1,694	1,394	1,300	1,486	1,828	1,889	2,761	2,780	1,308	852	619	926
80% Exceedance	1,614	1,339	1,165	1,347	1,615	1,709	2,442	2,404	1,153	648	561	842
90% Exceedance	1,443	1,264	1,086	1,204	1,464	1,586	2,151	2,062	984	548	386	703
Full Simulation Period Average[a]	2,553	1,929	2,294	4,064	5,519	5,933	6,726	5,850	4,264	2,532	1,613	1,572
Wet Water Years (24%)	2,794	2,060	3,650	9,685	12,986	14,584	14,731	12,809	11,694	6,941	4,175	3,253
Above Normal Water Years (18%)	2,650	2,349	2,692	4,075	6,072	5,979	7,566	5,952	3,703	2,044	1,330	1,443
Below Normal Water Years (13%)	2,579	1,965	2,049	2,201	3,509	3,739	5,085	4,475	1,977	1,196	790	1,021
Dry Water Years (13%)	2,876	1,957	1,723	1,848	2,023	2,304	3,091	3,082	1,436	947	673	951
Critical Water Years (32%)	2,175	1,570	1,384	1,499	1,843	1,786	2,392	2,257	1,087	686	568	860

Table 4F-3-6-1c. San Joaquin River at Vernalis (60-20-20), Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	5	4	8	-3	4	-395	223	11	18	5	22	0
20% Exceedance	10	9	6	-12	26	0	-51	37	6	19	1	6
30% Exceedance	7	11	4	5	-4	-130	47	21	8	10	67	13
40% Exceedance	13	3	7	6	2	7	5	-1	16	35	54	13
50% Exceedance	38	25	4	4	-7	6	7	33	14	66	69	45
60% Exceedance	15	17	7	10	6	-11	1	25	37	87	22	28
70% Exceedance	9	23	2	11	-4	2	7	19	60	44	2	16
80% Exceedance	22	7	8	9	10	-4	4	-10	12	30	55	15
90% Exceedance	-23	25	9	2	6	-27	5	-8	55	61	31	46
Full Simulation Period Average[a]	16	10	7	-11	-32	-8	15	26	24	34	35	24
Wet Water Years (24%)	12	2	6	-63	-132	-22	31	53	14	10	8	5
Above Normal Water Years (18%)	15	9	8	3	7	1	21	18	12	17	17	12
Below Normal Water Years (13%)	25	15	8	7	-1	-7	9	22	15	19	33	33
Dry Water Years (13%)	30	23	8	6	-3	-8	11	40	22	32	30	38
Critical Water Years (32%)	11	9	7	7	-2	-3	3	5	43	68	69	34

[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.

Table 4F-3-6-2a. 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 4F-3-6-2b. San Joaquin River at Vernalis (60-20-20), Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,980	2,645	3,883	9,364	11,403	13,184	14,603	12,134	13,343	6,341	4,780	3,780
20% Exceedance	3,688	2,330	2,527	4,265	7,977	8,982	9,953	7,968	6,539	3,782	2,197	2,045
30% Exceedance	3,197	2,063	2,065	3,288	5,393	7,369	8,147	6,138	3,245	1,949	1,334	1,451
40% Exceedance	2,289	1,886	1,778	2,337	3,586	4,253	6,283	5,017	2,508	1,488	1,109	1,278
50% Exceedance	1,881	1,738	1,574	1,966	2,673	2,538	3,919	3,809	1,759	1,198	811	1,076
60% Exceedance	1,758	1,449	1,405	1,600	2,184	2,274	3,172	3,145	1,505	989	709	988
70% Exceedance	1,683	1,378	1,282	1,484	1,825	1,887	2,759	2,780	1,260	847	625	917
80% Exceedance	1,604	1,325	1,155	1,346	1,613	1,707	2,441	2,404	1,142	644	519	831
90% Exceedance	1,453	1,249	1,085	1,206	1,460	1,584	2,150	2,059	985	548	386	670
Full Simulation Period Average[a]	2,545	1,923	2,291	4,068	5,529	5,935	6,726	5,851	4,257	2,521	1,602	1,563
Wet Water Years (24%)	2,793	2,059	3,649	9,709	13,034	14,597	14,733	12,807	11,691	6,939	4,173	3,252
Above Normal Water Years (18%)	2,642	2,342	2,690	4,075	6,070	5,978	7,569	5,954	3,707	2,047	1,333	1,444
Below Normal Water Years (13%)	2,562	1,958	2,046	2,199	3,507	3,734	5,082	4,484	1,973	1,190	781	1,000
Dry Water Years (13%)	2,864	1,936	1,715	1,845	2,022	2,303	3,090	3,080	1,435	946	676	941
Critical Water Years (32%)	2,168	1,566	1,382	1,496	1,841	1,784	2,391	2,257	1,067	656	535	843

Table 4F-3-6-2c. San Joaquin River at Vernalis (60-20-20), Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	4	3	7	-5	1	-397	190	9	14	4	21	-1
20% Exceedance	10	8	6	-7	25	0	-51	25	8	17	-1	4
30% Exceedance	6	8	3	3	-5	3	46	20	10	9	2	12
40% Exceedance	11	3	6	5	1	5	4	-2	15	5	37	11
50% Exceedance	38	25	3	4	-8	5	-3	67	12	46	52	32
60% Exceedance	11	17	6	9	5	-11	0	24	15	52	20	22
70% Exceedance	-1	7	-16	9	-7	0	6	18	12	39	8	8
80% Exceedance	12	-6	-3	7	9	-6	3	-11	0	26	12	3
90% Exceedance	-13	11	8	4	1	-28	4	-11	56	61	31	13
Full Simulation Period Average[a]	8	4	4	-6	-22	-6	15	26	17	23	24	14
Wet Water Years (24%)	11	2	4	-39	-84	-9	33	51	11	8	6	4
Above Normal Water Years (18%)	7	3	6	3	4	0	23	20	16	20	19	14
Below Normal Water Years (13%)	8	8	5	5	-3	-11	6	32	11	14	24	13
Dry Water Years (13%)	17	2	1	3	-4	-10	10	38	21	30	32	29
Critical Water Years (32%)	4	5	4	5	-4	-4	1	4	23	38	36	17

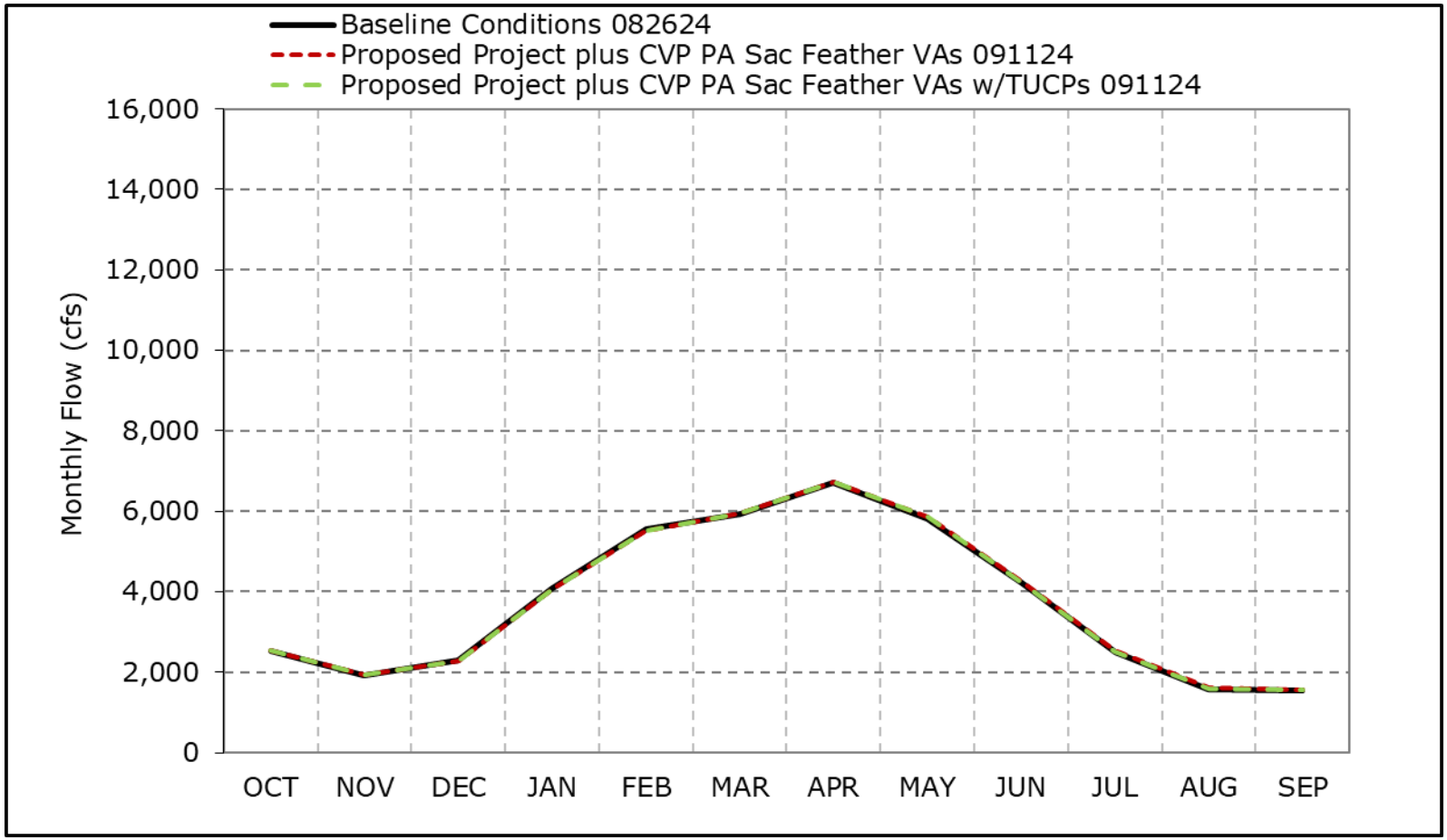
[a] Based on the 100-year simulation period.

* 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).

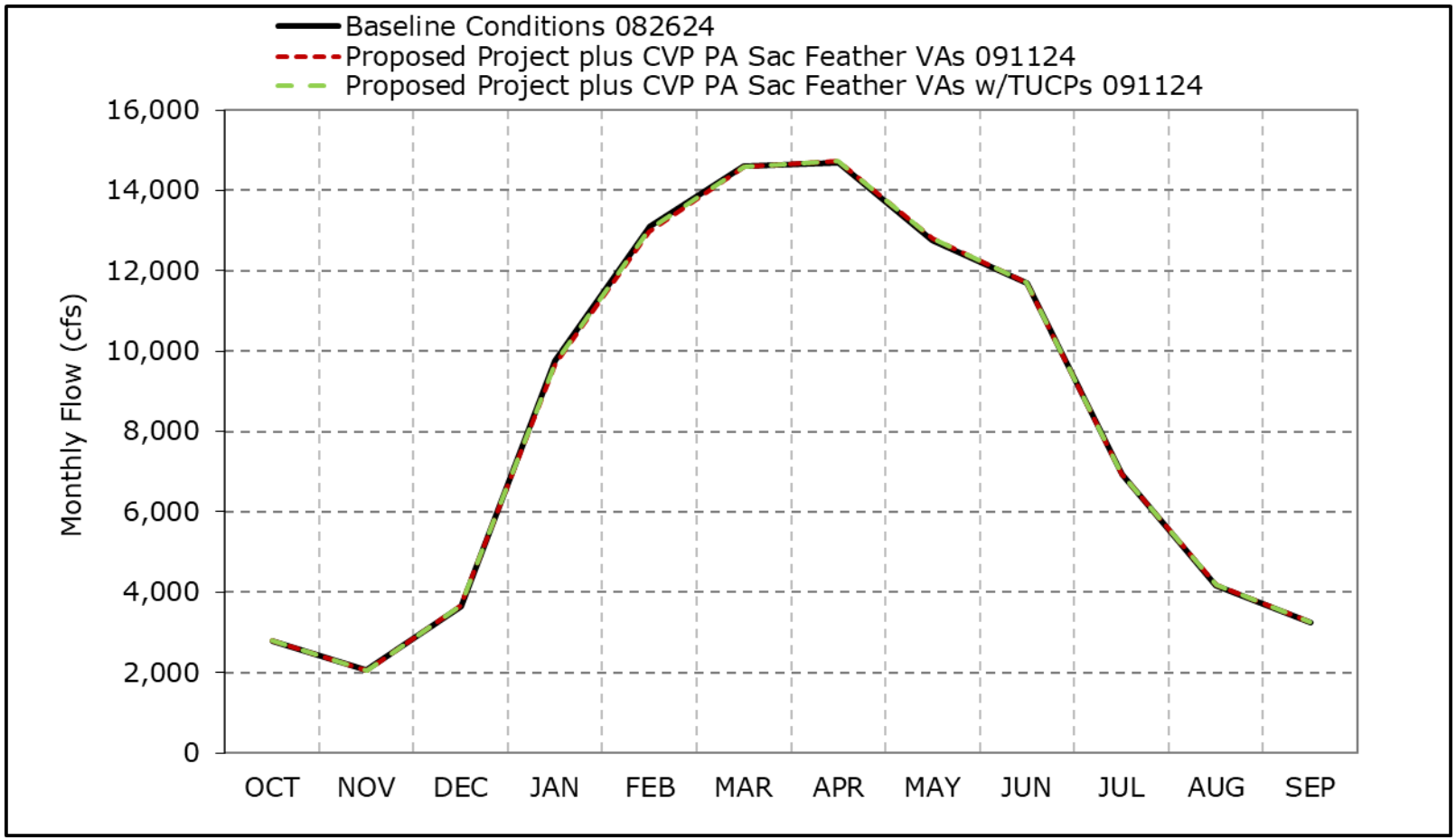
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-6a. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow



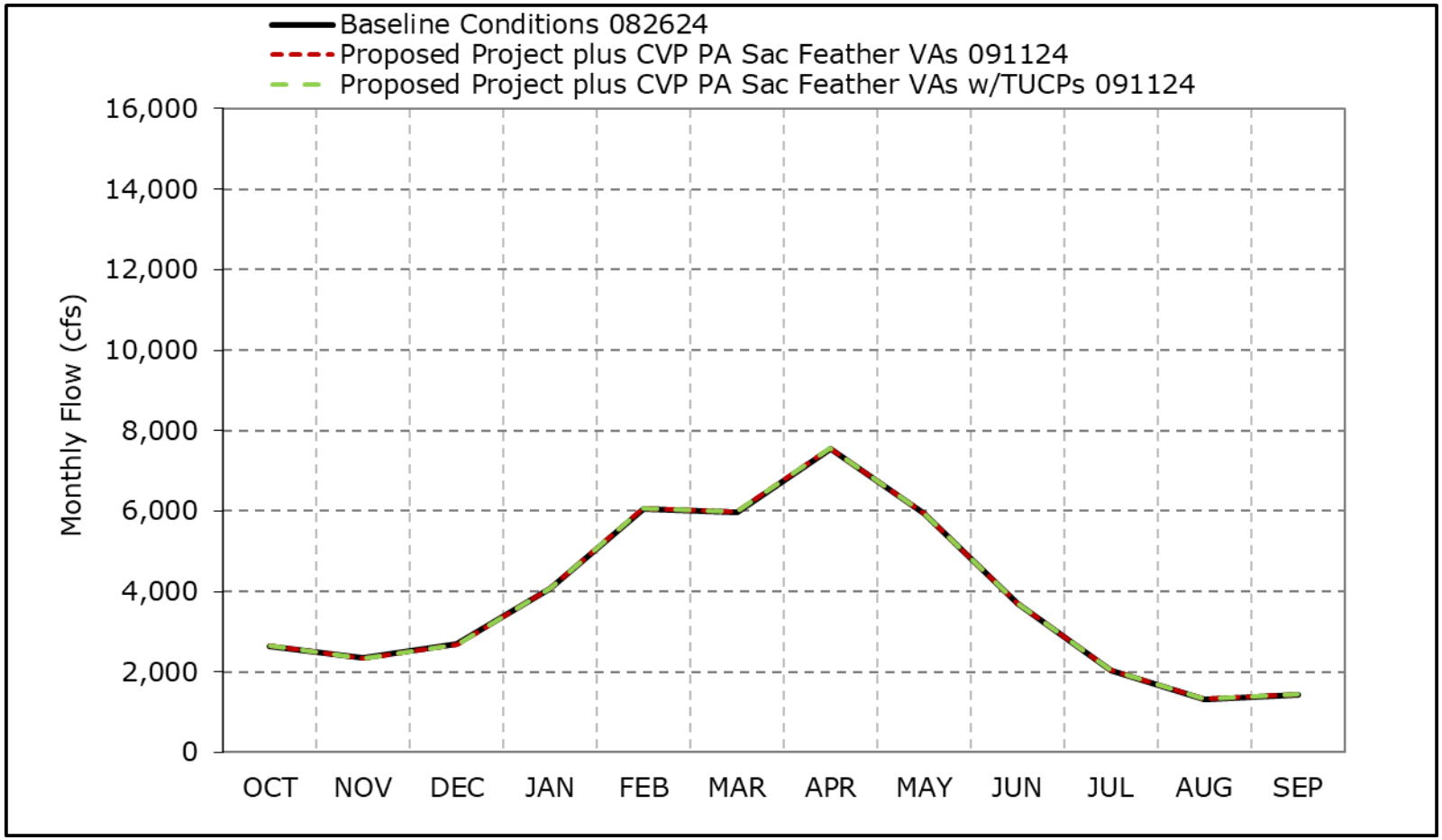
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-6b. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow



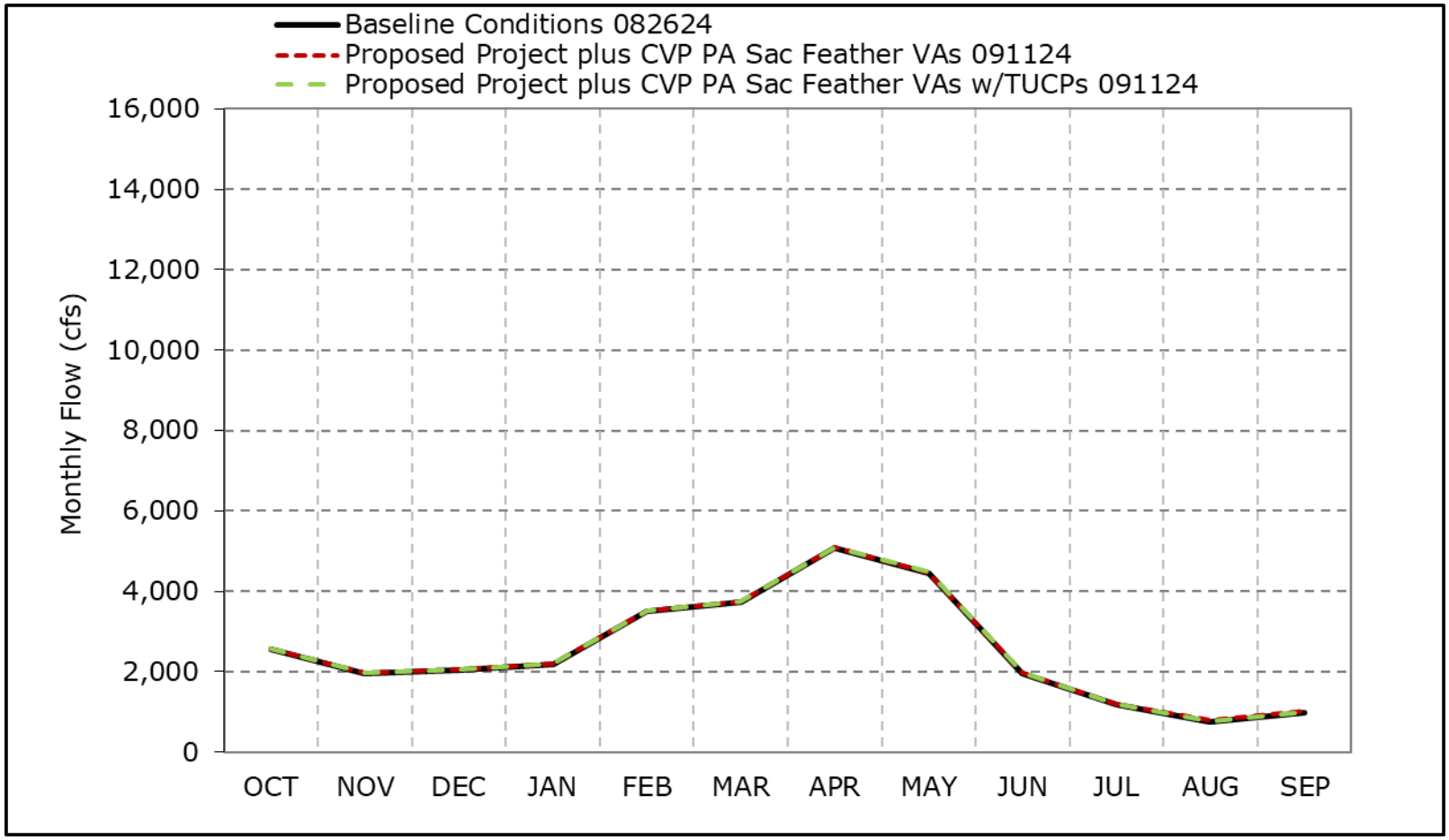
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-6c. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow



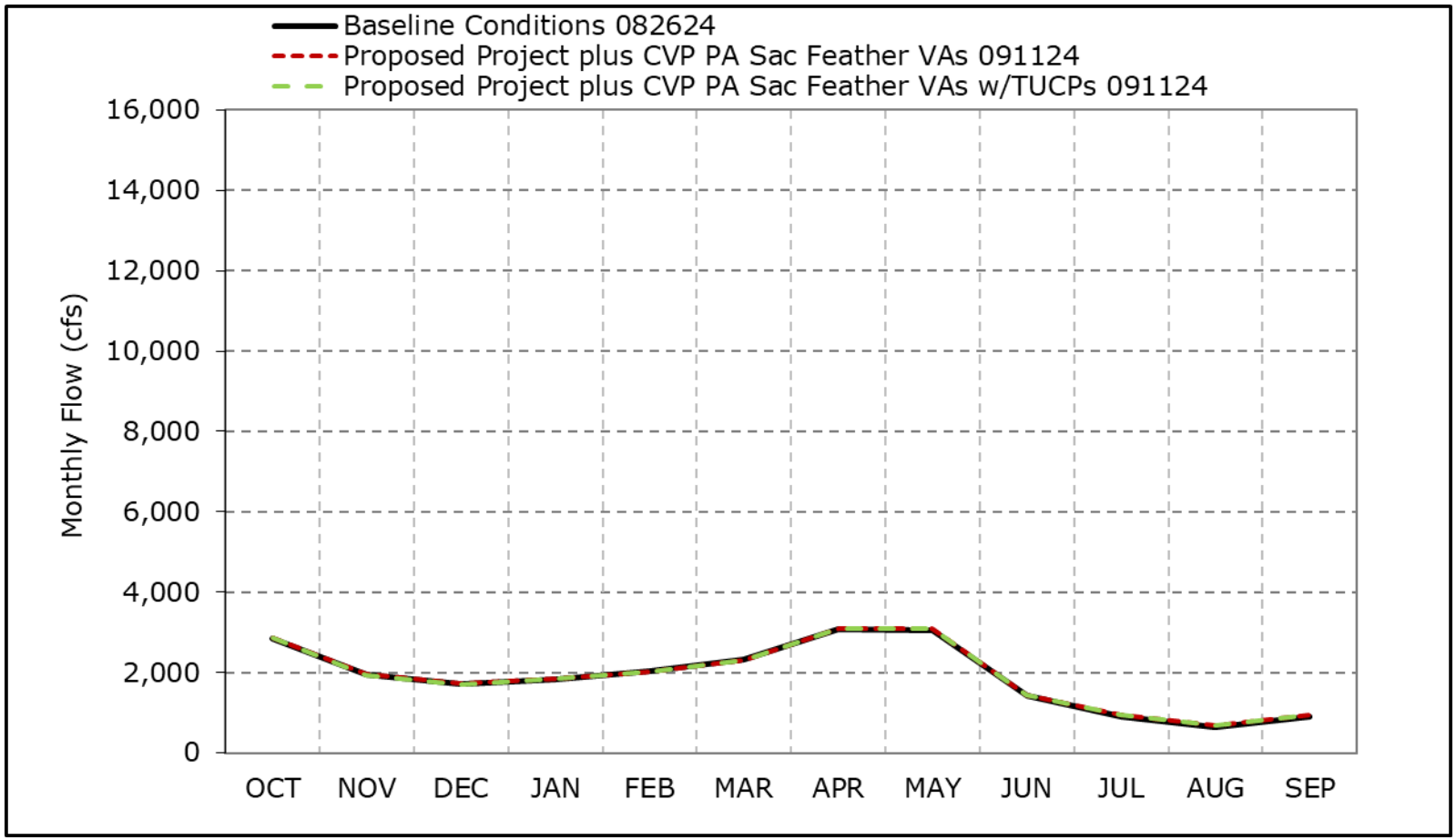
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-6d. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow



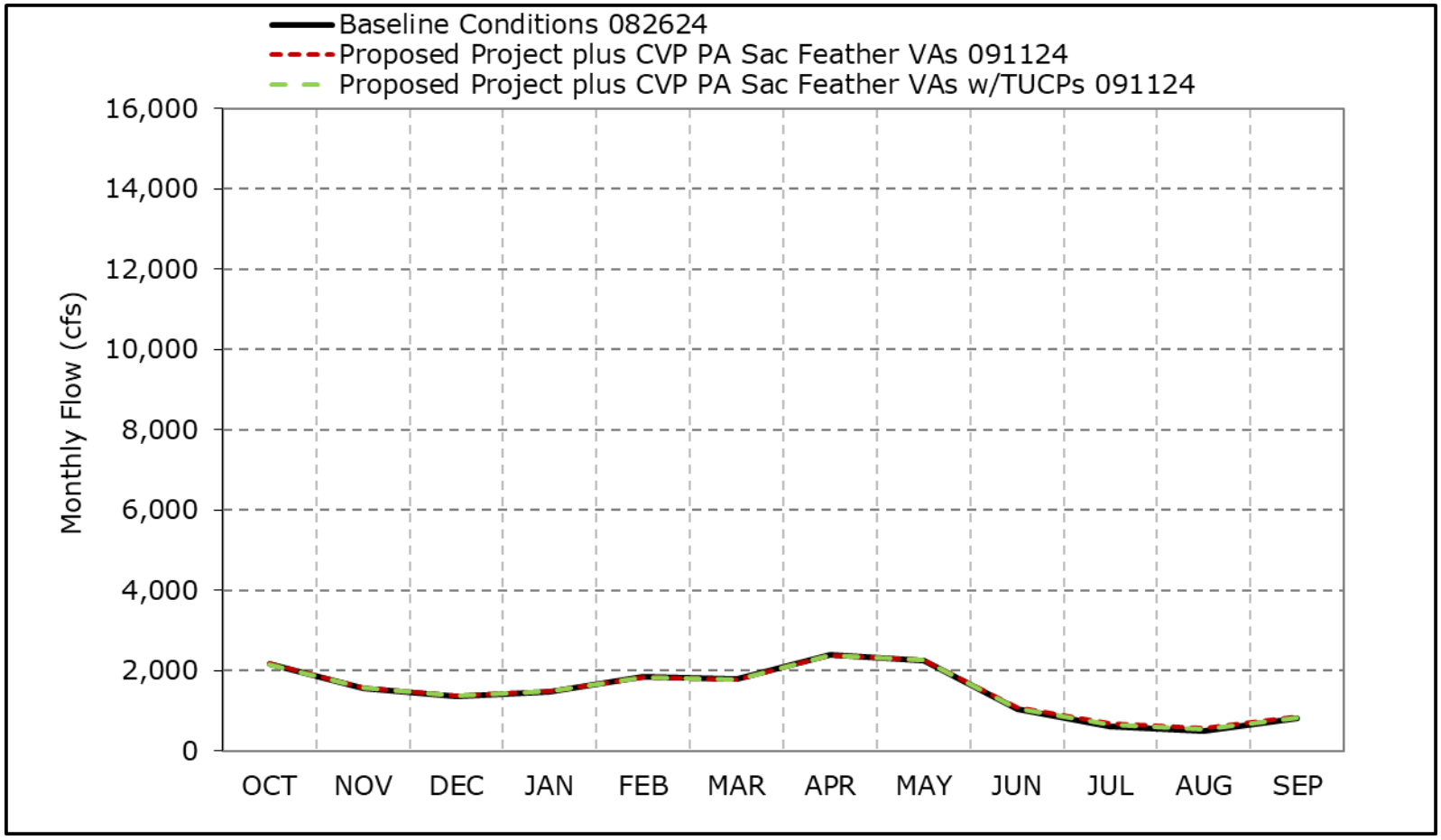
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-6e. 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 4F-3-6f. 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 4F-3-7-1a. 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 4F-3-7-1b. Mokelumne River below Cosumnes, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	531	717	2,529	6,238	5,960	5,448	4,818	4,231	2,330	977	762	866
20% Exceedance	420	516	1,382	3,739	3,964	3,726	2,753	2,430	1,737	794	722	839
30% Exceedance	373	432	812	1,934	3,066	2,857	1,926	1,552	1,155	647	679	805
40% Exceedance	345	385	595	1,243	2,028	2,276	1,716	1,099	645	549	642	753
50% Exceedance	325	359	509	907	1,274	1,500	1,319	858	407	122	149	596
60% Exceedance	310	342	435	685	1,042	1,267	903	606	274	80	70	73
70% Exceedance	251	312	409	531	808	1,036	715	468	128	73	59	60
80% Exceedance	221	271	367	449	597	793	610	314	79	54	47	49
90% Exceedance	207	219	276	370	476	548	414	135	59	40	30	34
Full Simulation Period Average[a]	367	471	1,118	2,246	2,571	2,502	1,965	1,525	880	462	374	446
Wet Water Years (32%)	471	706	2,209	5,060	5,056	4,758	3,819	3,226	1,949	1,042	739	849
Above Normal Water Years (9%)	309	390	713	2,101	2,398	2,466	1,665	1,416	955	464	545	634
Below Normal Water Years (20%)	362	411	740	1,106	1,906	2,010	1,624	1,054	559	281	299	404
Dry Water Years (21%)	315	357	550	642	1,051	1,158	917	526	196	113	106	142
Critical Water Years (18%)	274	294	464	454	750	623	420	244	97	40	34	40

Table 4F-3-7-1c. Mokelumne River below Cosumnes, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-1	0	0	-3	-3	0	-1	-6	0	0	0	0
20% Exceedance	0	0	-8	0	-16	-1	-1	0	-2	-1	0	0
30% Exceedance	0	0	0	-1	-2	0	0	6	0	3	0	0
40% Exceedance	0	-1	0	0	-1	-1	0	-1	38	-1	-1	-1
50% Exceedance	0	0	0	1	-1	0	0	0	0	0	-15	-60
60% Exceedance	3	1	-3	0	-45	-27	-1	1	-2	-1	-2	0
70% Exceedance	-10	-1	0	0	0	0	1	-1	-3	0	-3	0
80% Exceedance	0	-4	-6	-12	-2	0	0	0	0	0	-1	0
90% Exceedance	-2	-6	0	0	0	0	0	0	0	0	0	-1
Full Simulation Period Average[a]	-2	-2	-2	-2	-2	-2	0	-1	-2	0	-2	-2
Wet Water Years (32%)	0	0	-1	-1	-2	-1	-1	-1	-1	-1	0	0
Above Normal Water Years (9%)	-1	0	0	0	0	-1	0	-9	-20	1	-1	-1
Below Normal Water Years (20%)	-5	0	0	0	0	0	0	-1	0	-1	-7	-7
Dry Water Years (21%)	-4	-4	-4	-4	-4	-4	1	0	2	0	-1	0
Critical Water Years (18%)	0	-5	-5	-4	-5	-4	0	0	0	0	0	0

[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.

Table 4F-3-7-2a. 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 4F-3-7-2b. Mokelumne River below Cosumnes, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	531	717	2,529	6,237	5,956	5,448	4,818	4,231	2,330	977	762	866
20% Exceedance	420	516	1,382	3,739	3,963	3,725	2,752	2,430	1,736	793	722	839
30% Exceedance	373	432	812	1,934	3,065	2,857	1,924	1,509	1,155	647	679	805
40% Exceedance	345	384	595	1,243	2,028	2,276	1,708	1,099	643	550	642	753
50% Exceedance	324	359	509	907	1,274	1,500	1,319	857	407	122	149	521
60% Exceedance	310	342	436	685	1,042	1,267	903	606	275	81	70	72
70% Exceedance	251	313	409	531	807	1,036	715	468	128	73	62	61
80% Exceedance	222	271	367	449	597	793	610	314	79	54	47	49
90% Exceedance	207	219	276	370	476	547	414	135	59	39	31	34
Full Simulation Period Average[a]	367	471	1,118	2,246	2,570	2,501	1,964	1,523	880	463	374	445
Wet Water Years (32%)	471	706	2,209	5,060	5,055	4,757	3,819	3,226	1,949	1,041	738	848
Above Normal Water Years (9%)	310	390	713	2,101	2,397	2,466	1,654	1,391	955	464	544	633
Below Normal Water Years (20%)	362	412	740	1,106	1,905	2,008	1,624	1,054	559	283	299	394
Dry Water Years (21%)	316	357	550	642	1,051	1,158	916	526	196	113	106	142
Critical Water Years (18%)	274	294	464	454	750	623	420	244	97	40	35	41

Table 4F-3-7-2c. Mokelumne River below Cosumnes, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-1	0	0	-4	-7	-1	-1	-6	0	0	-1	0
20% Exceedance	0	-1	-8	0	-17	-2	-1	0	-3	-1	0	0
30% Exceedance	0	0	0	-1	-3	0	-2	-37	-1	3	0	-1
40% Exceedance	0	-1	0	0	-1	-1	-9	-1	36	-1	-2	-1
50% Exceedance	0	0	0	0	-1	0	0	0	0	0	-15	-134
60% Exceedance	3	0	-2	0	-45	-27	-1	1	0	0	-2	0
70% Exceedance	-10	0	0	0	0	0	0	-1	-3	0	-1	1
80% Exceedance	0	-4	-6	-12	-2	0	0	0	0	0	-1	0
90% Exceedance	-1	-6	0	0	0	0	0	0	1	0	1	-1
Full Simulation Period Average[a]	-2	-2	-2	-2	-3	-2	-1	-3	-2	0	-2	-4
Wet Water Years (32%)	0	0	-1	-2	-3	-1	-1	-1	-1	-2	-1	-1
Above Normal Water Years (9%)	0	0	0	0	-1	-1	-10	-33	-21	0	-1	-1
Below Normal Water Years (20%)	-5	0	0	0	-1	-1	-1	-1	0	1	-6	-16
Dry Water Years (21%)	-4	-4	-4	-4	-4	-4	0	0	2	1	-1	0
Critical Water Years (18%)	0	-5	-5	-5	-5	-5	0	0	0	0	0	0

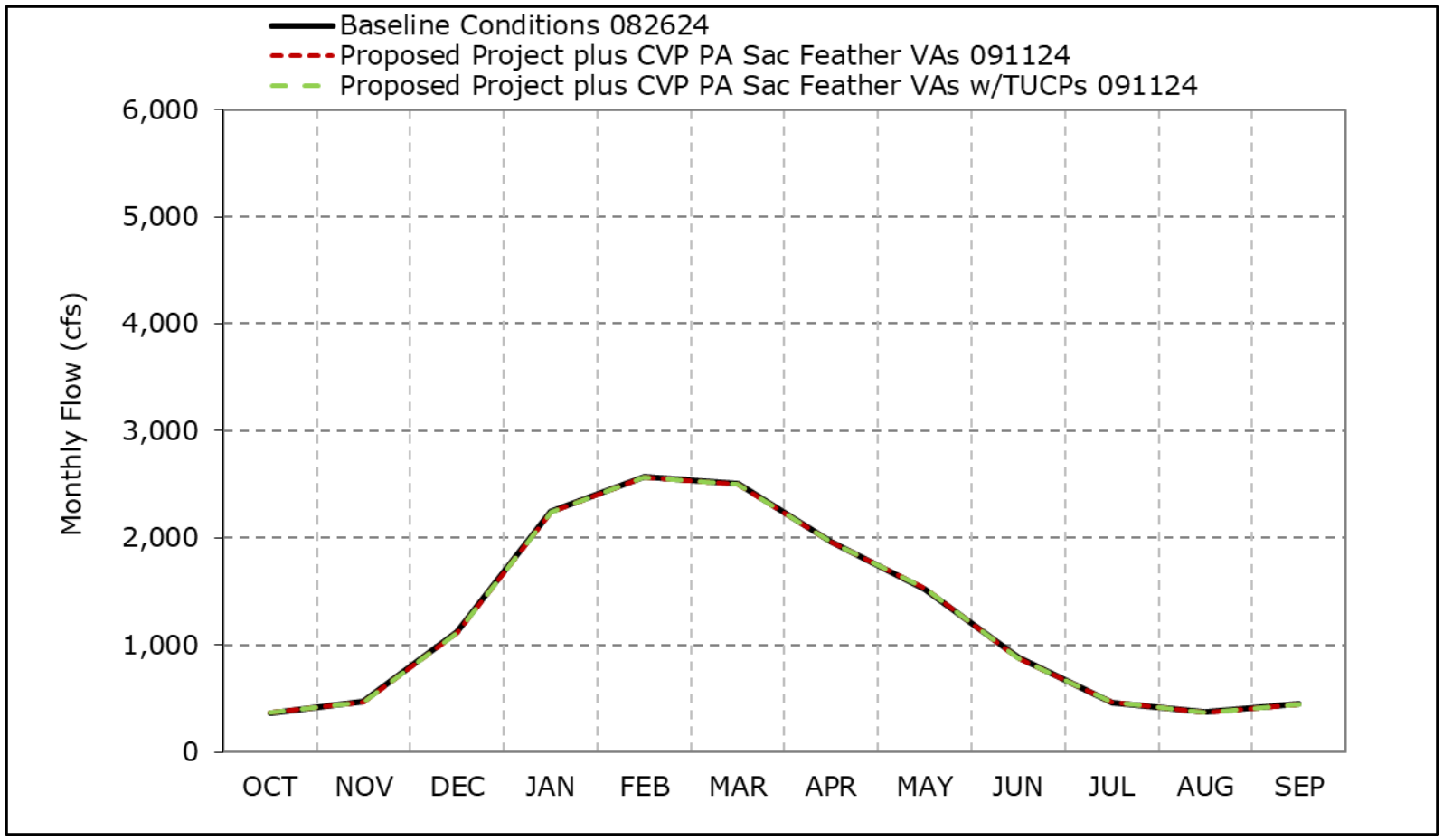
[a] Based on the 100-year simulation period.

* 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).

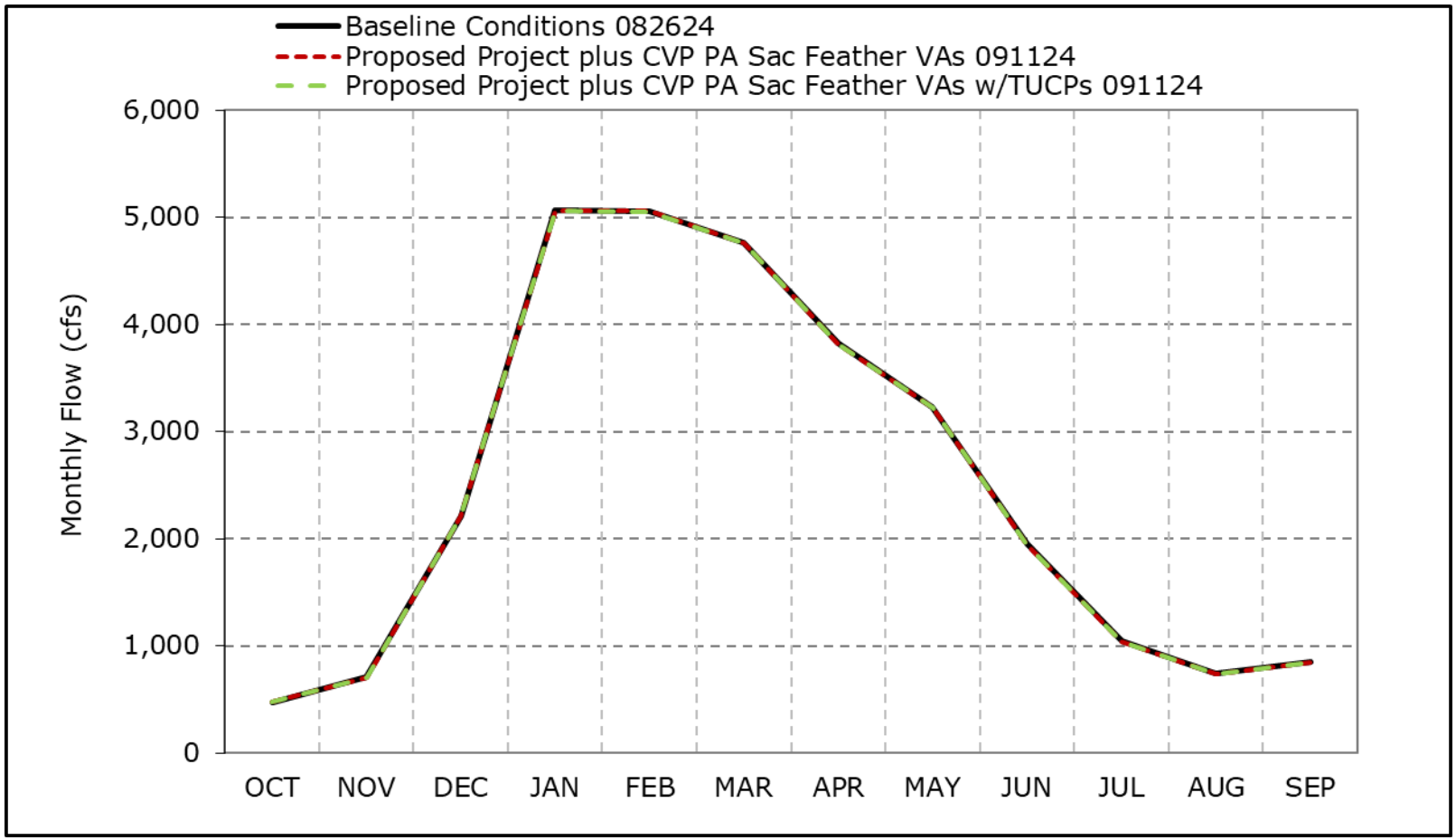
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-7a. Mokelumne River below Cosumnes, Long-Term Average Flow



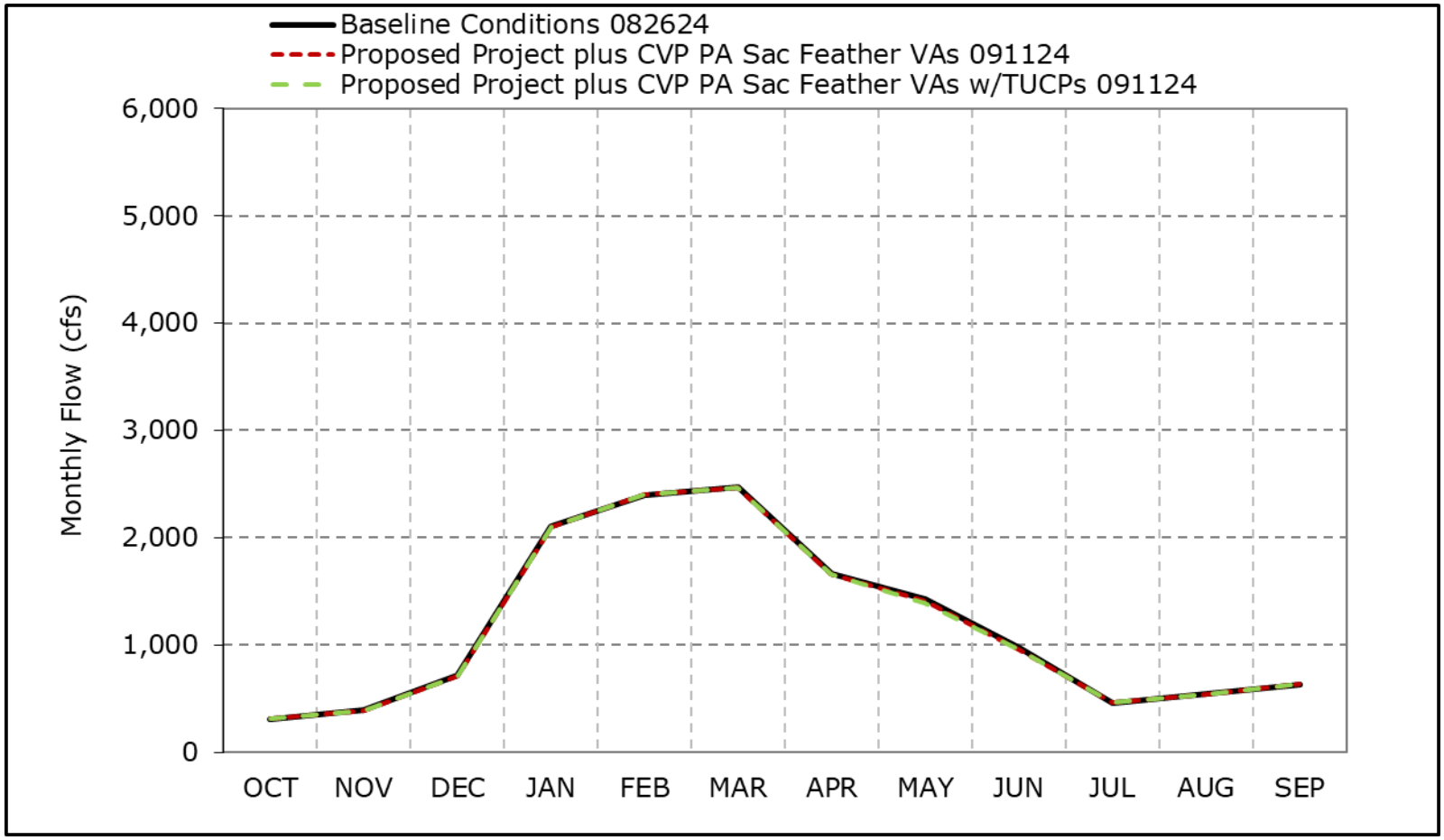
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7b. Mokelumne River below Cosumnes, Wet Year Average Flow



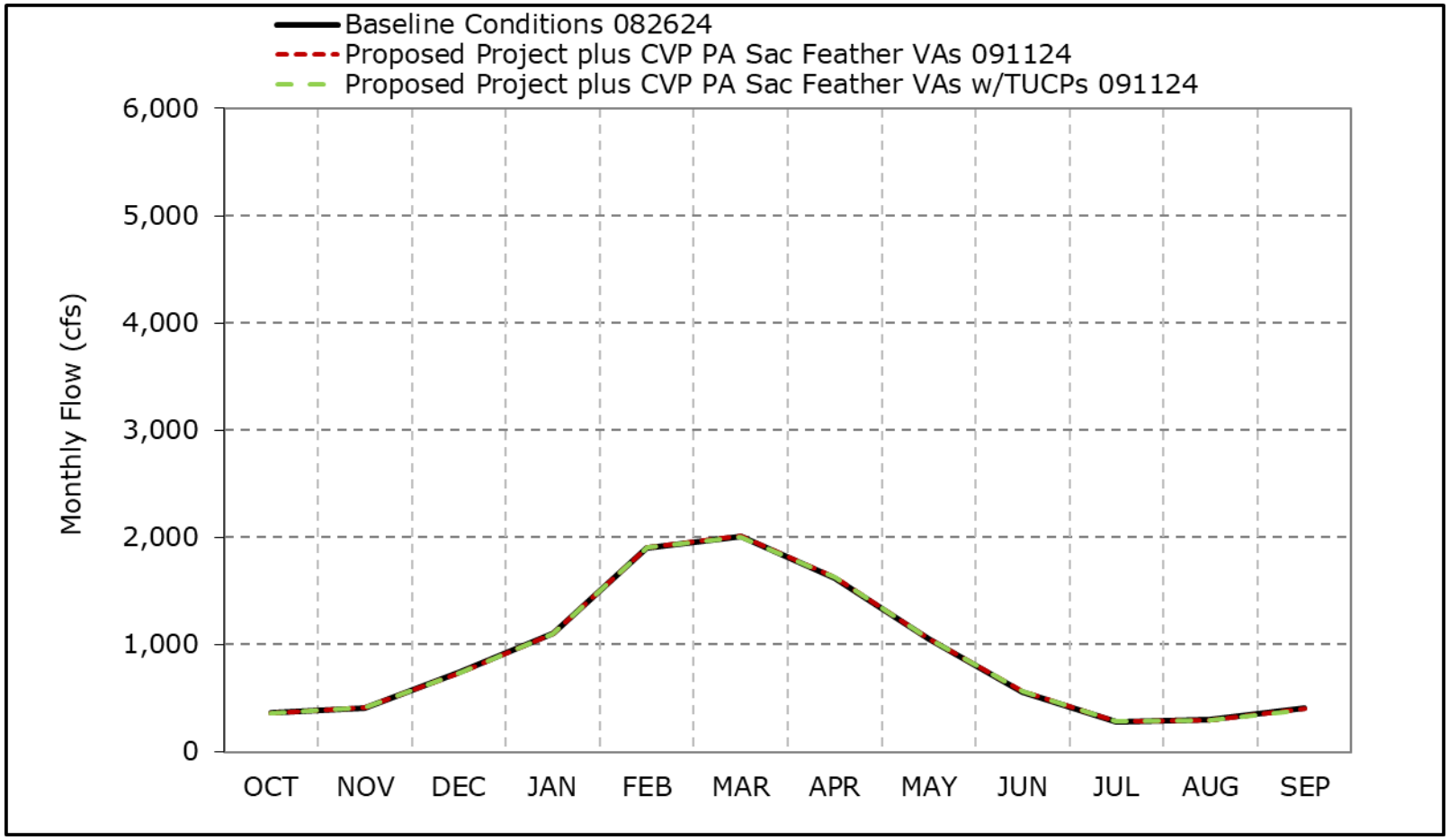
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7c. Mokelumne River below Cosumnes, Above Normal Year Average Flow



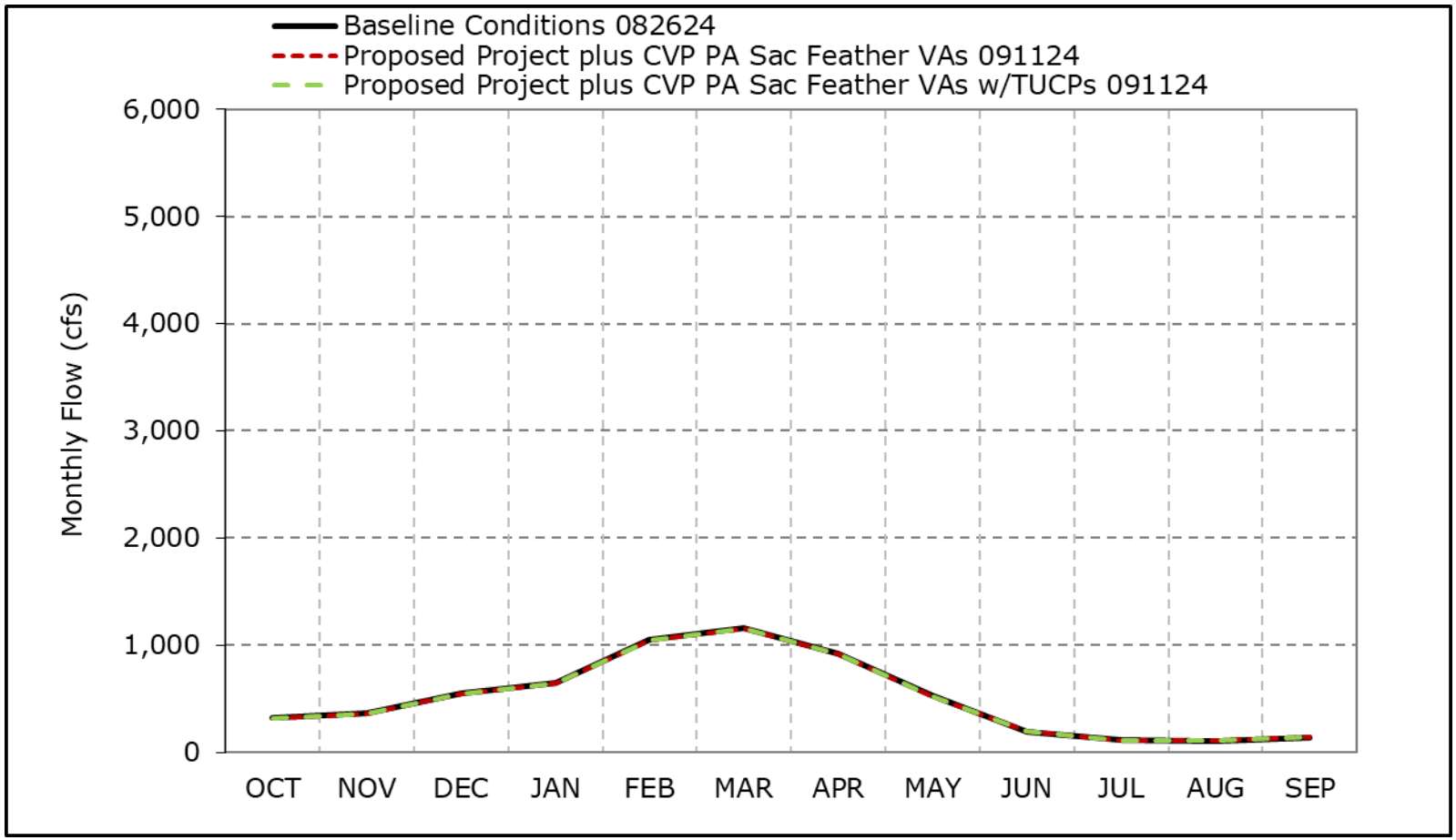
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7d. Mokelumne River below Cosumnes, Below Normal Year Average Flow



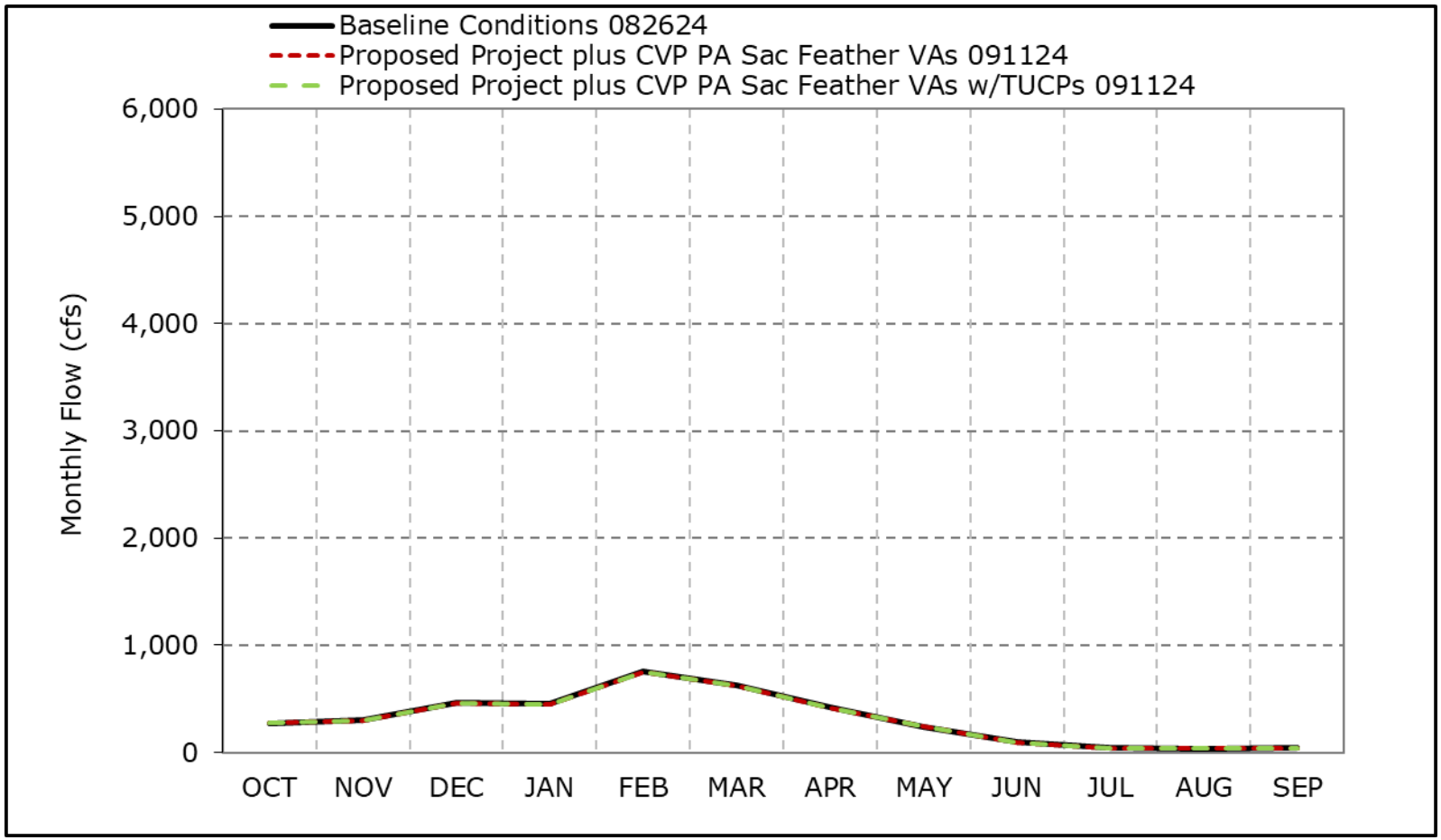
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7e. Mokelumne River below Cosumnes, Dry Year Average Flow



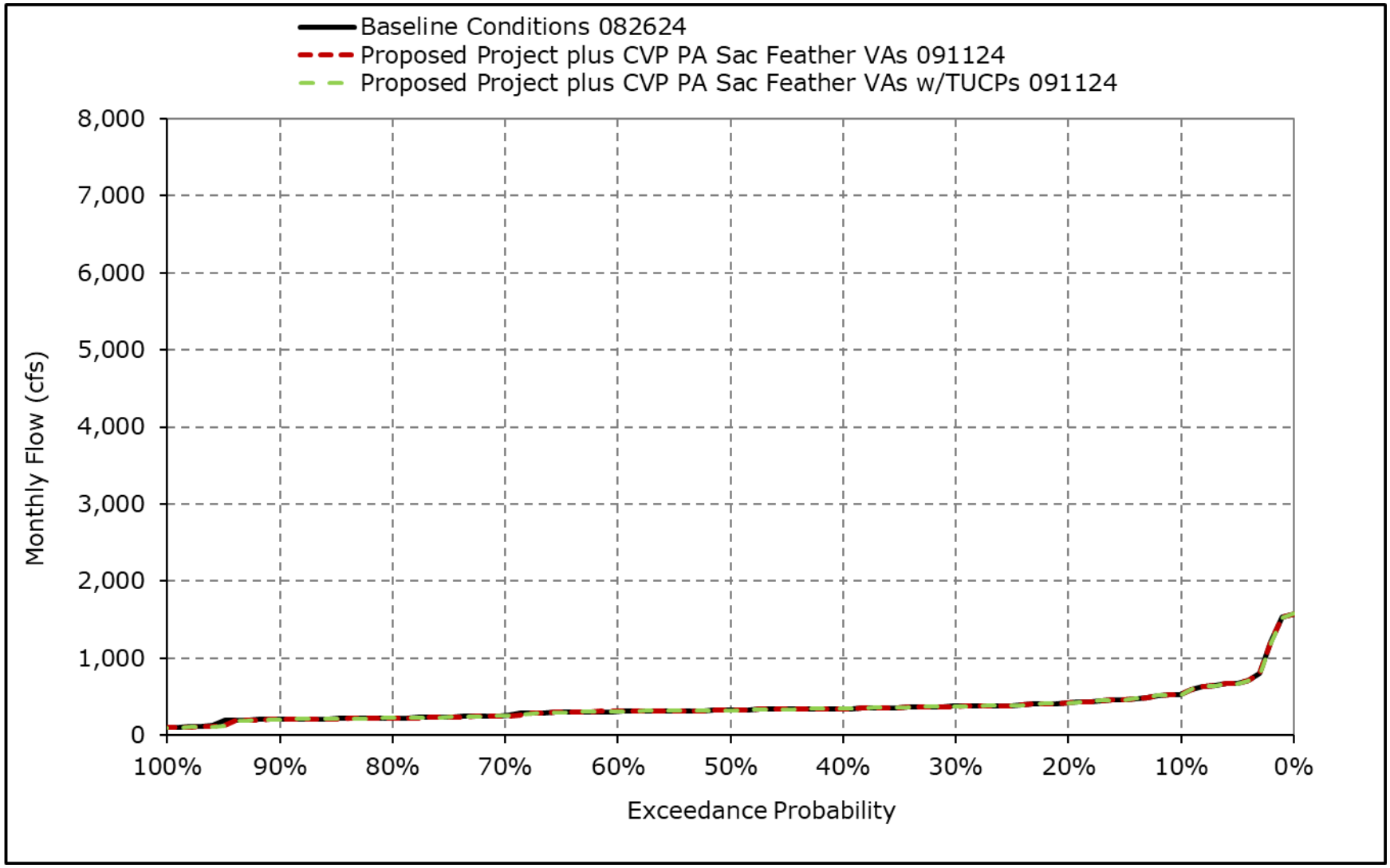
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7f. Mokelumne River below Cosumnes, Critical Year Average Flow



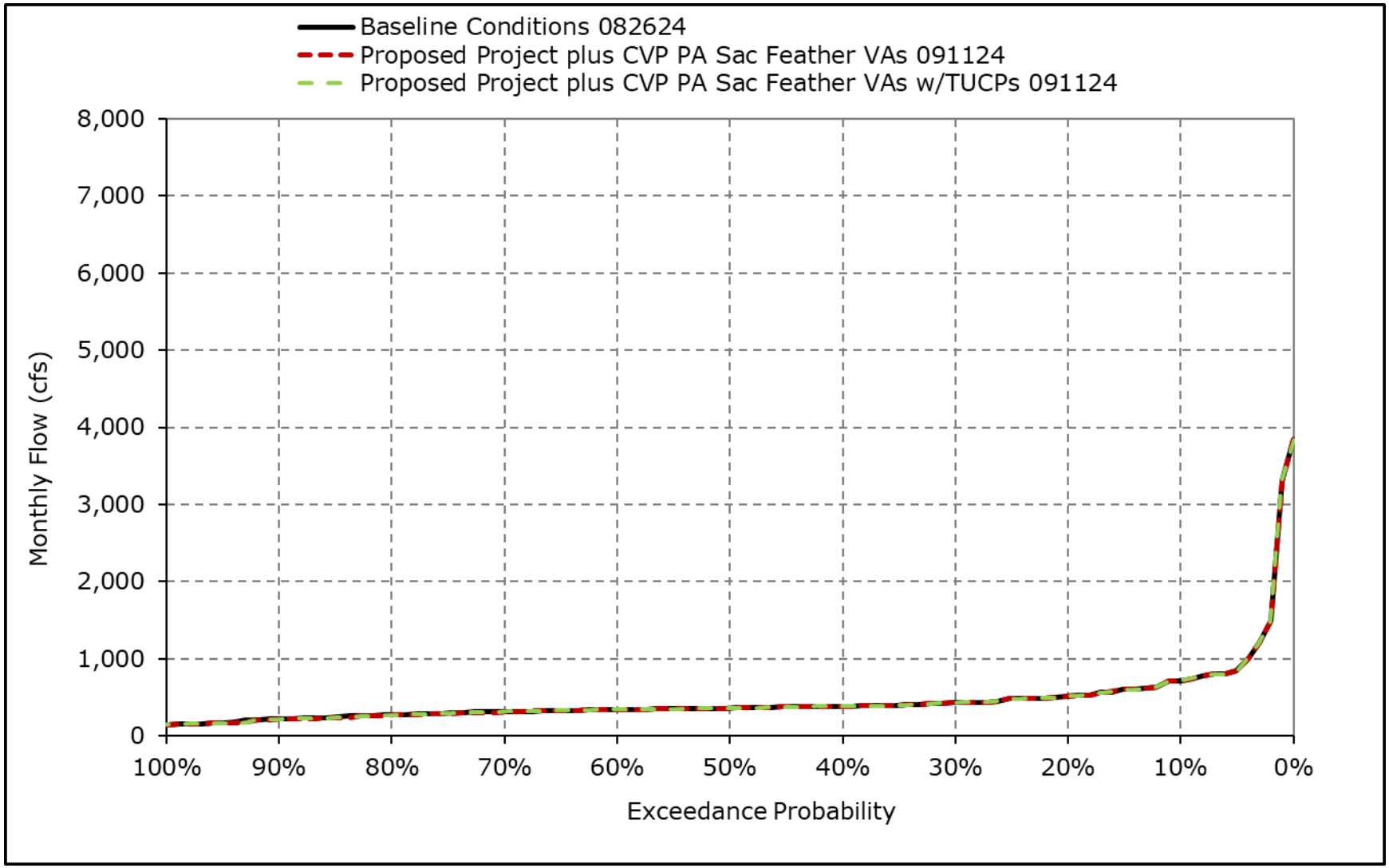
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7g. Mokelumne River below Cosumnes, October



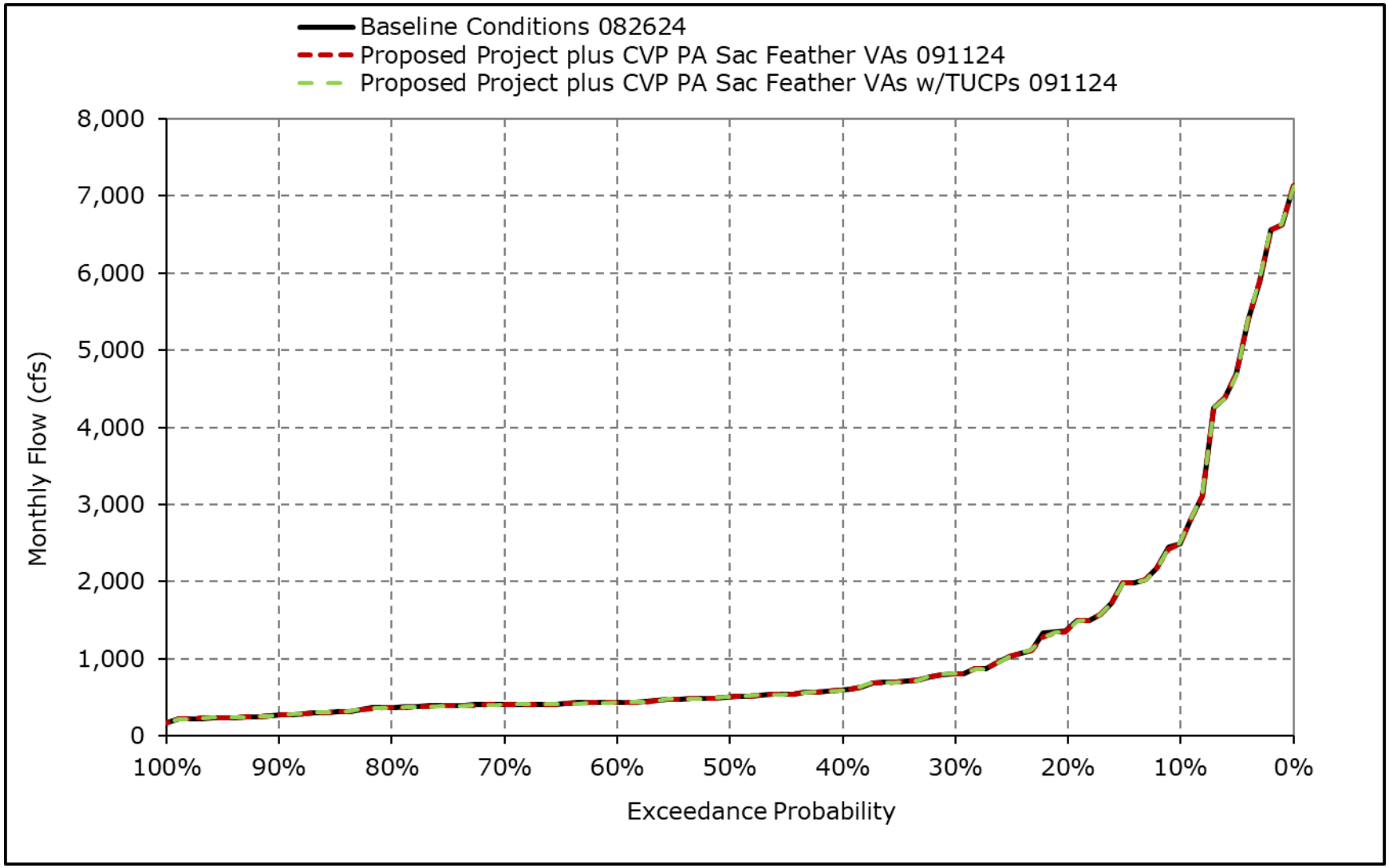
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7h. Mokelumne River below Cosumnes, November



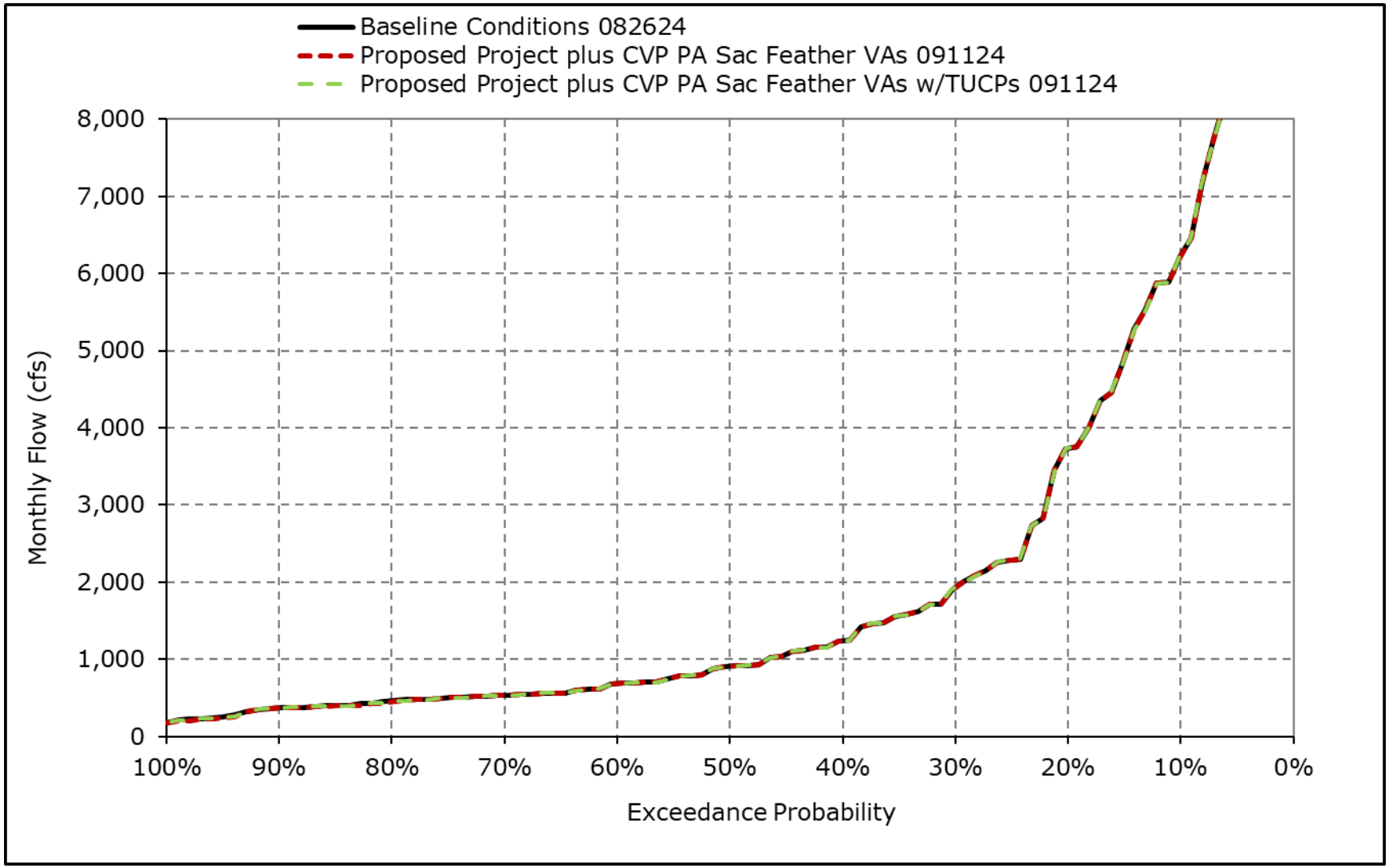
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7i. Mokelumne River below Cosumnes, December



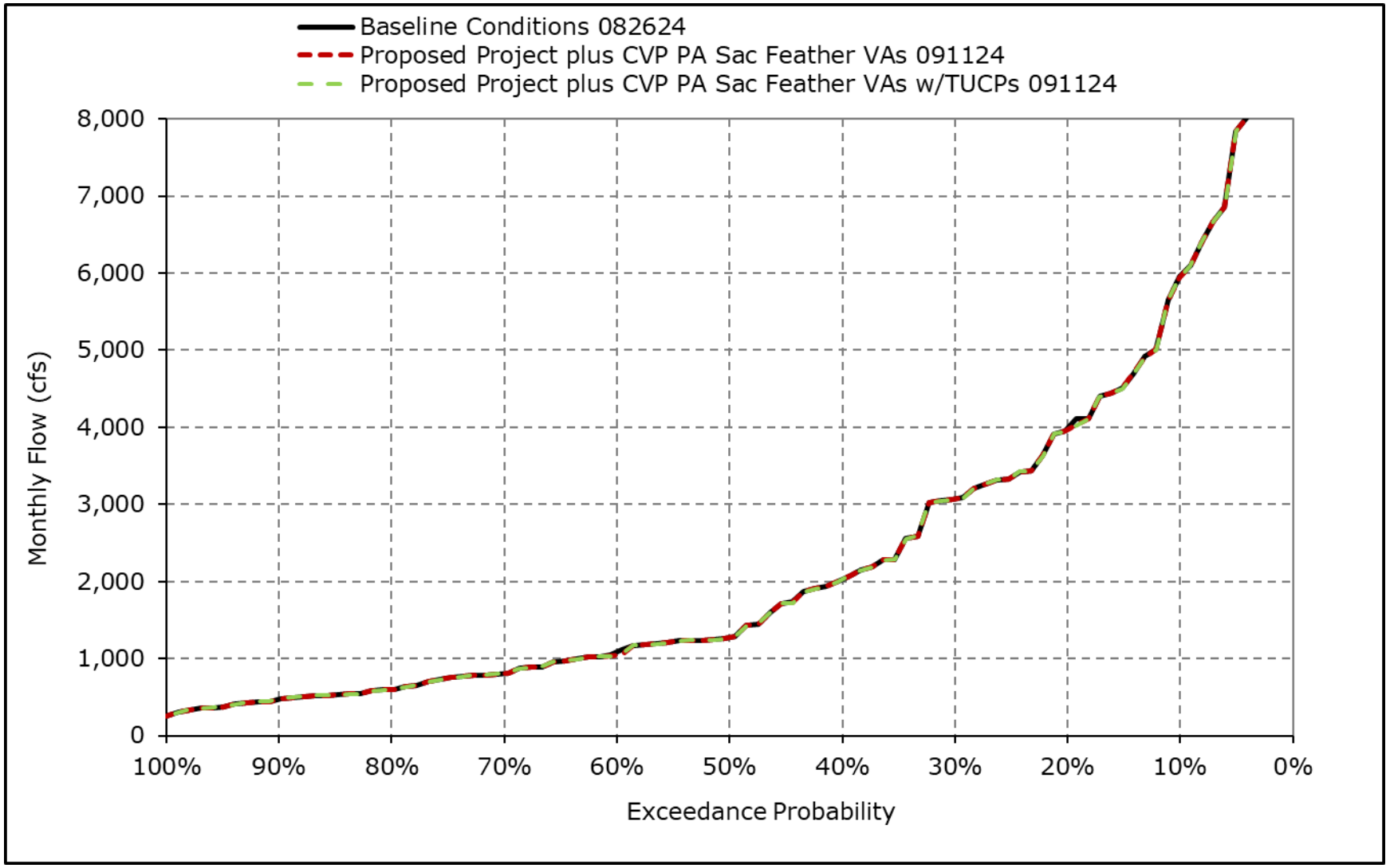
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7j. Mokelumne River below Cosumnes, January



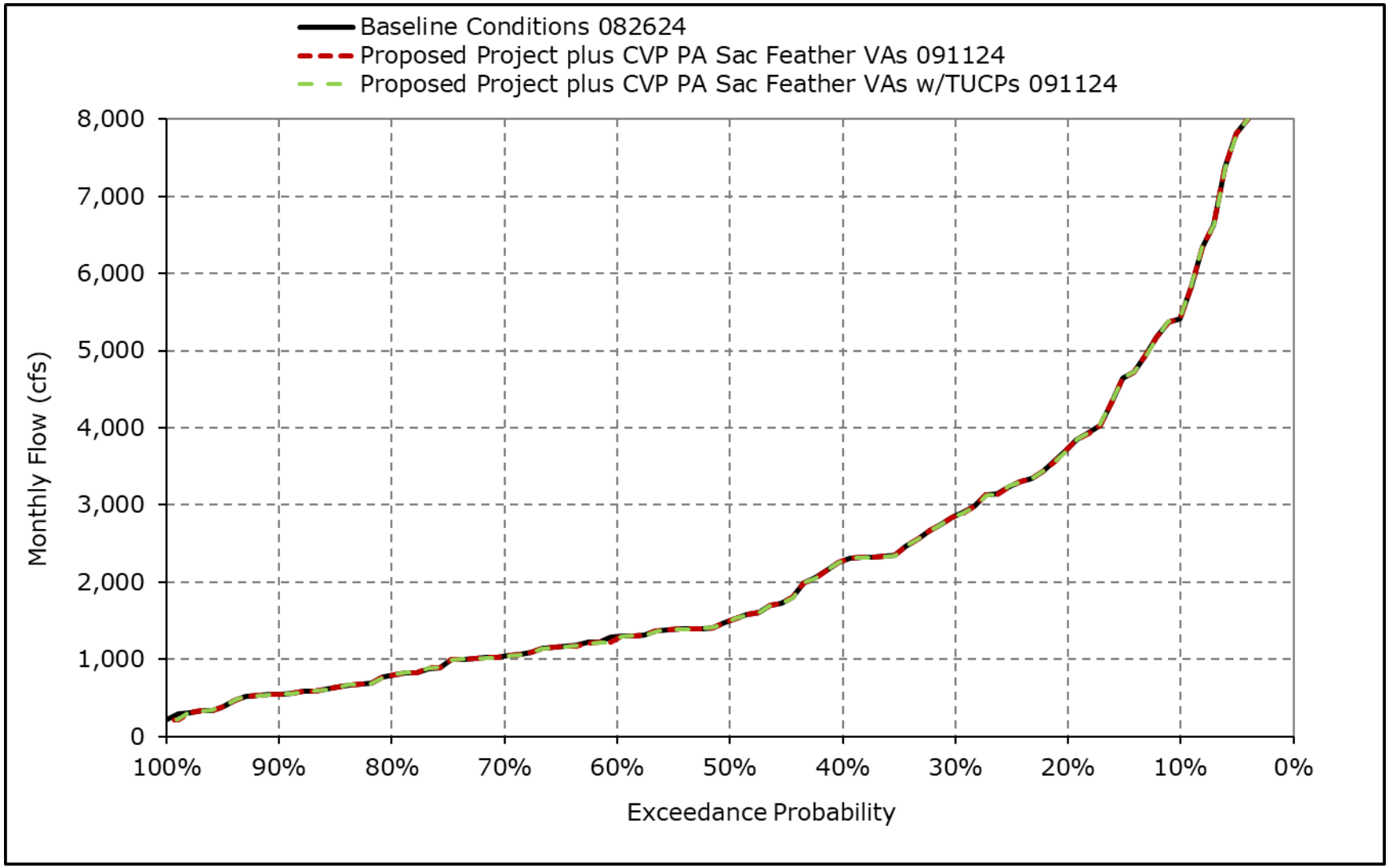
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7k. Mokelumne River below Cosumnes, February



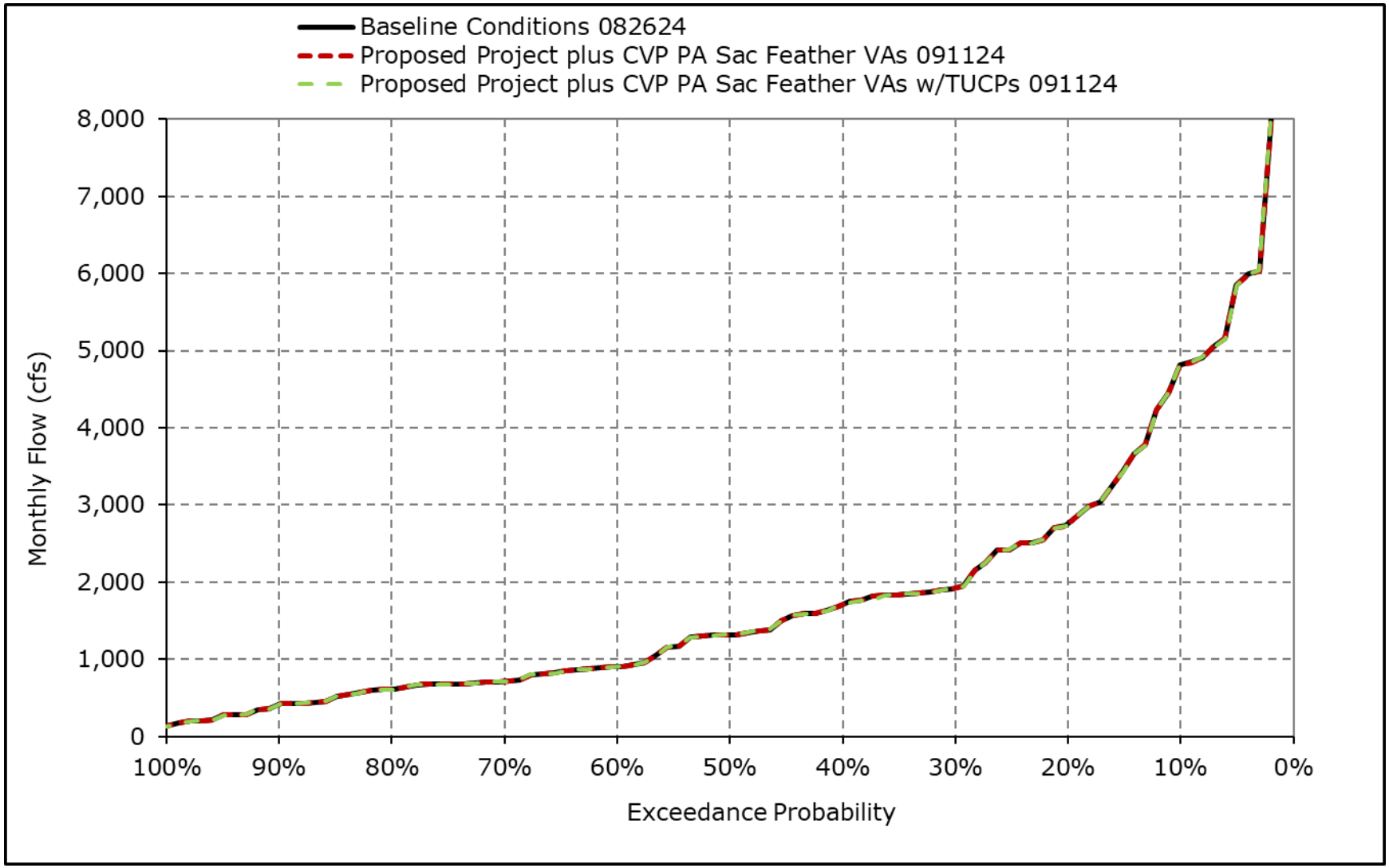
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7l. Mokelumne River below Cosumnes, March



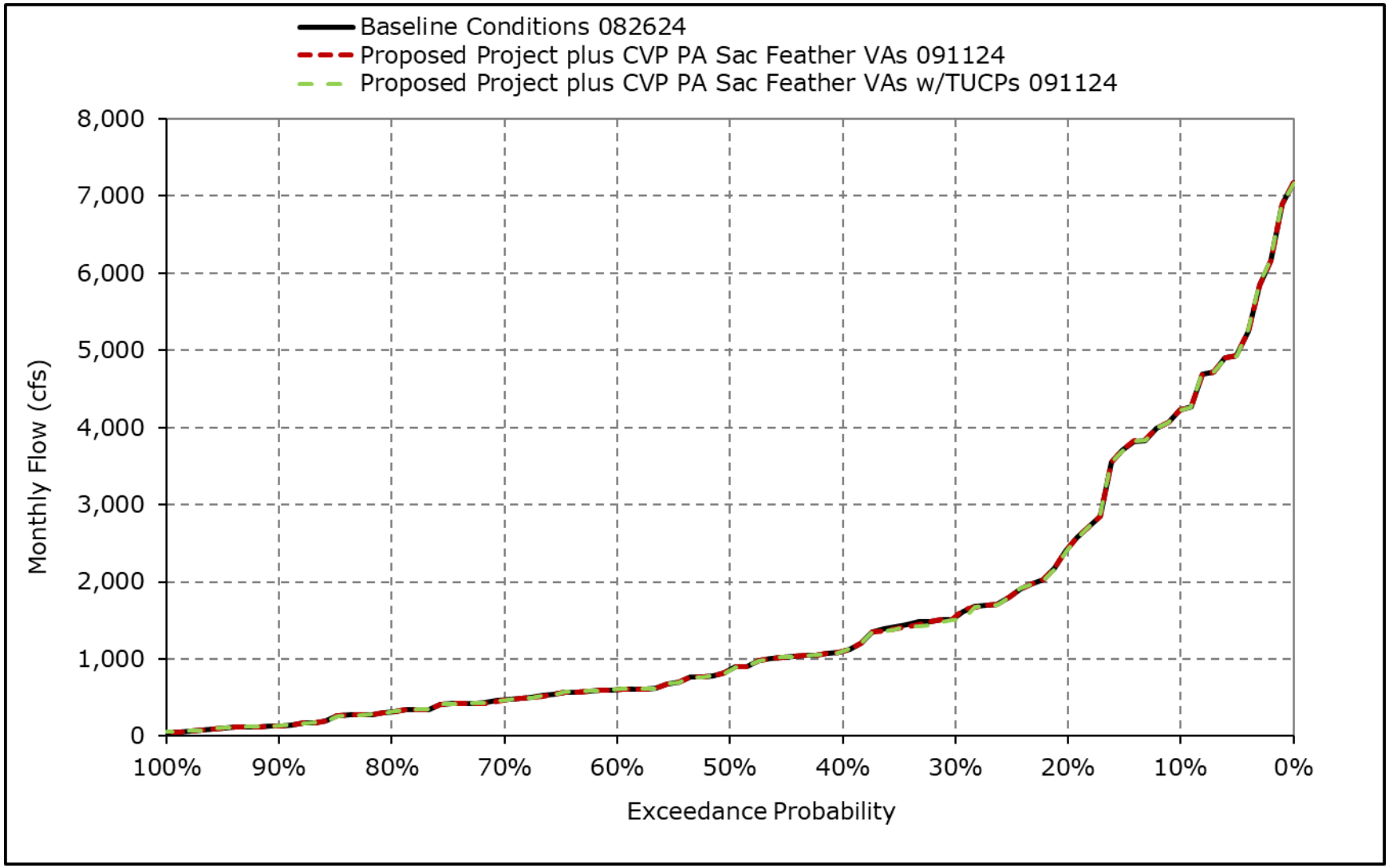
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7m. Mokelumne River below Cosumnes, April



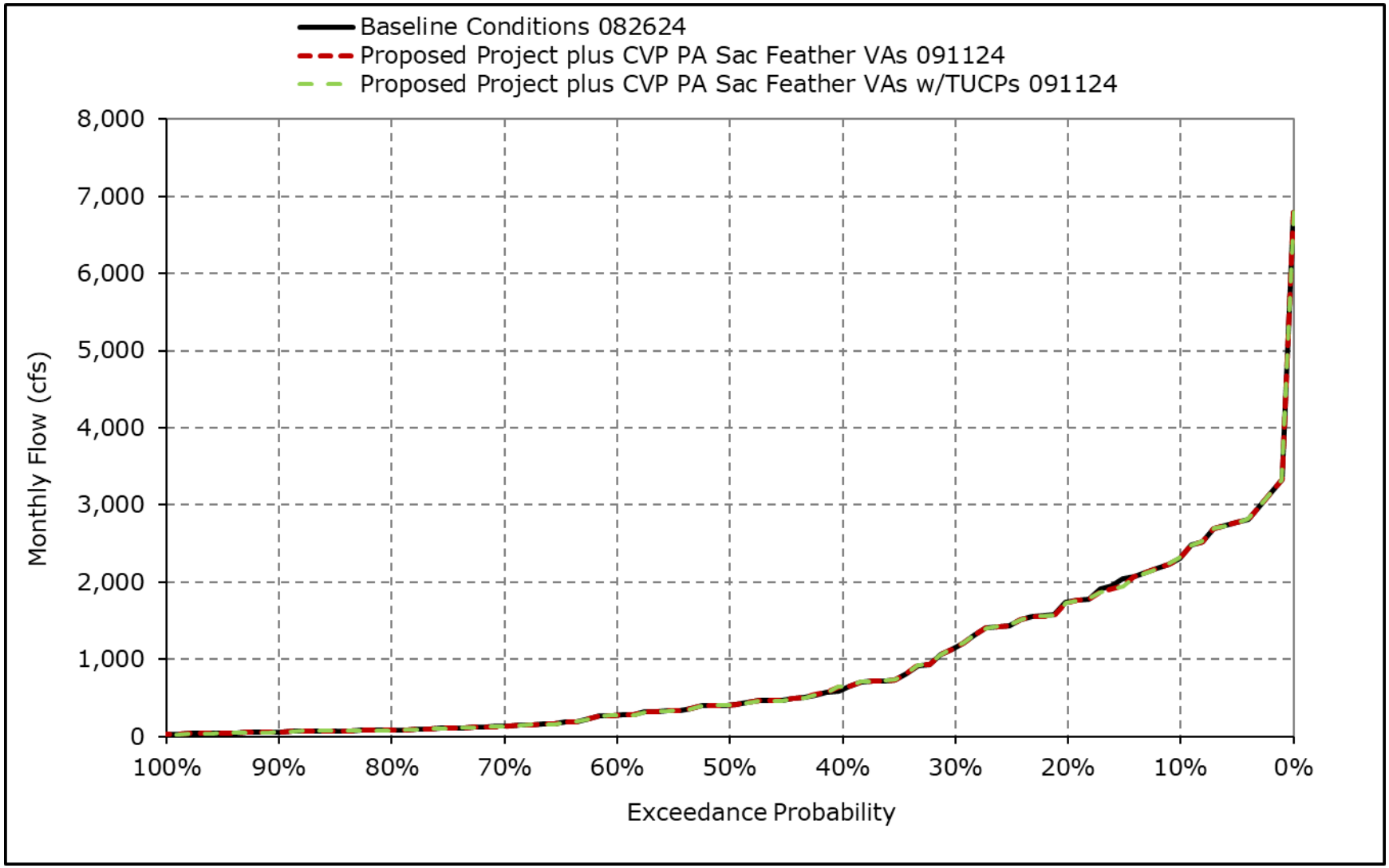
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7n. Mokelumne River below Cosumnes, May



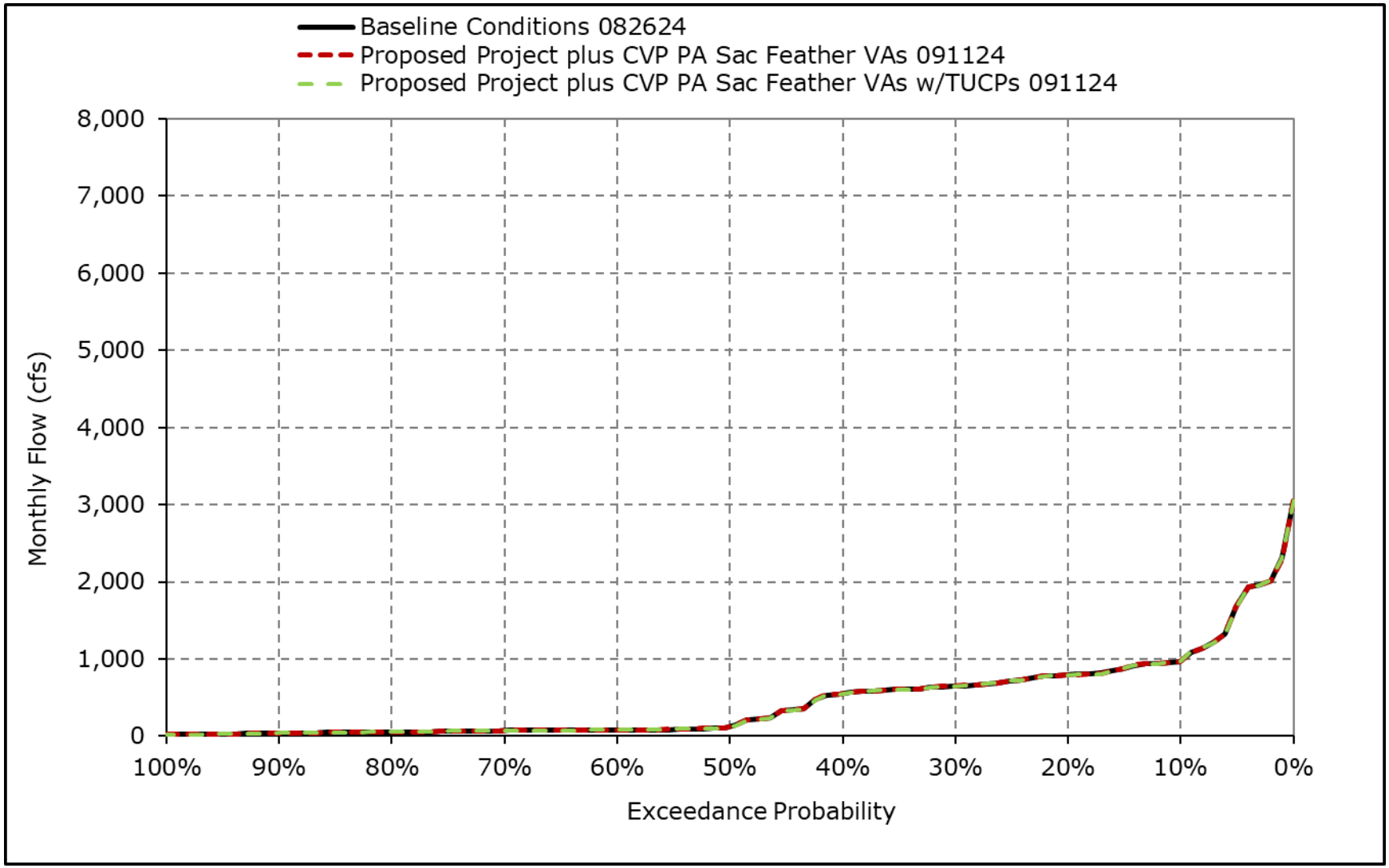
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7o. Mokelumne River below Cosumnes, June



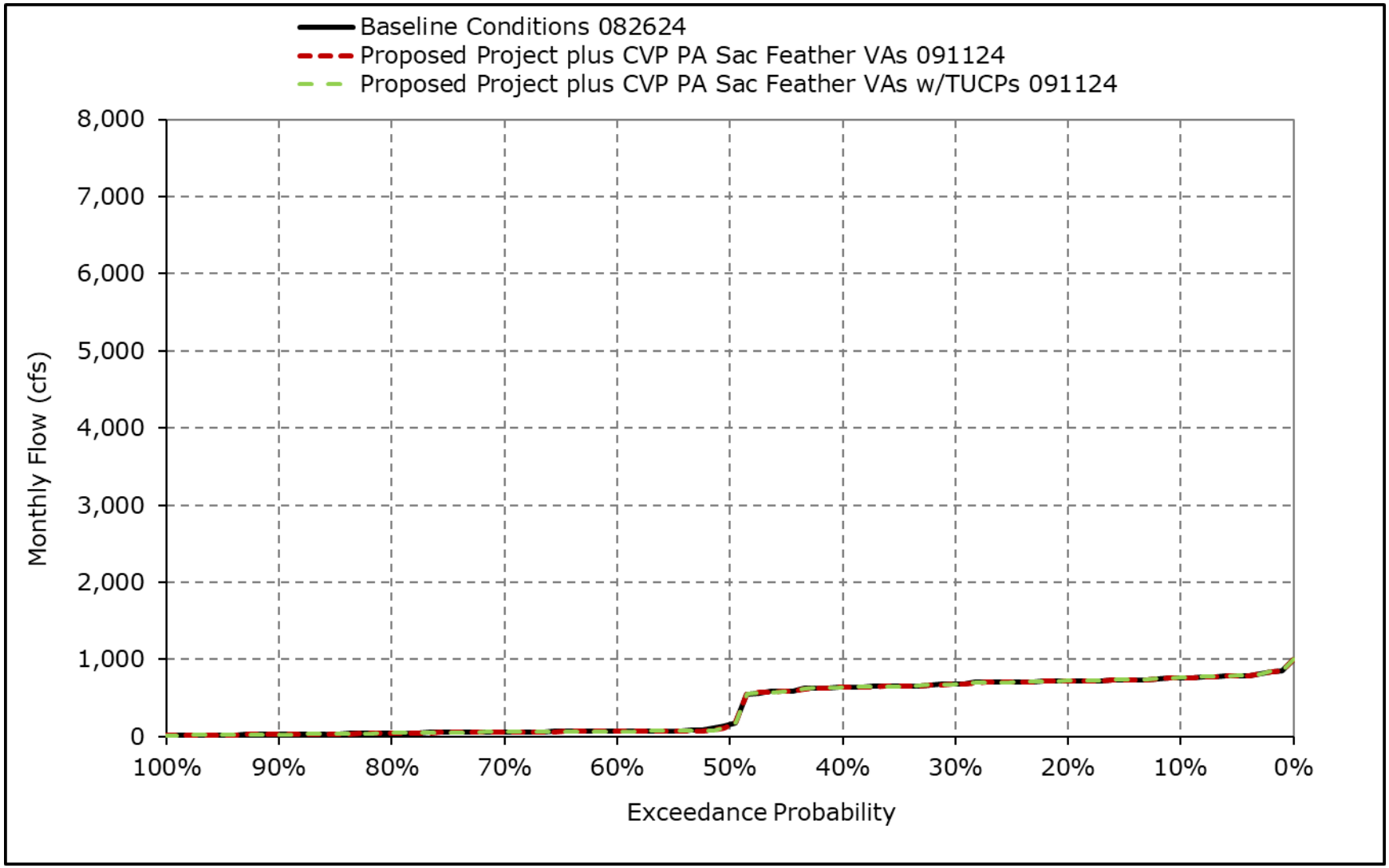
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7p. Mokelumne River below Cosumnes, July



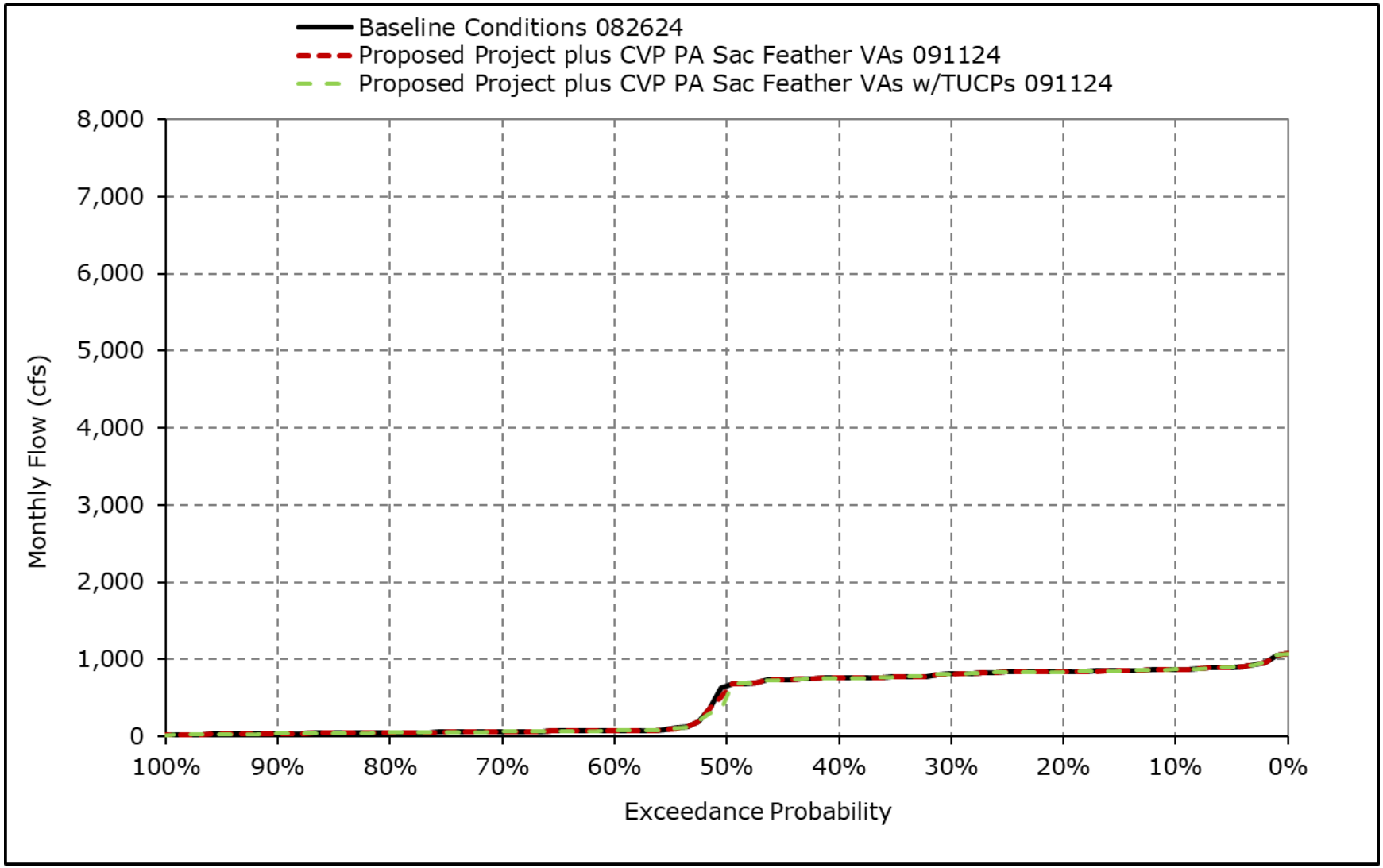
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-7q. Mokelumne River below Cosumnes, August



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

Figure 4F-3-7r. Mokelumne River below Cosumnes, September



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

Table 4F-3-8-1a. 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 4F-3-8-1b. Old and Middle River Flow, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,760	-2,148	-2,440	-1,845	-2,778	-1,077	513	-1,823	-1,589	-2,499	-2,130	-3,281
20% Exceedance	-3,739	-3,287	-3,462	-3,415	-3,617	-1,289	-181	-2,213	-3,222	-4,549	-2,774	-4,276
30% Exceedance	-4,166	-4,427	-4,864	-3,645	-3,808	-1,431	-691	-2,513	-3,920	-7,199	-4,284	-5,070
40% Exceedance	-4,652	-6,030	-5,290	-3,656	-3,899	-1,627	-1,042	-2,779	-4,115	-8,734	-7,580	-5,842
50% Exceedance	-5,270	-7,005	-5,290	-4,125	-3,963	-2,326	-1,287	-2,999	-4,143	-9,326	-9,213	-6,905
60% Exceedance	-5,789	-8,369	-5,290	-4,235	-4,091	-3,436	-1,378	-3,270	-4,205	-9,878	-9,836	-7,810
70% Exceedance	-6,546	-8,872	-5,290	-4,415	-4,265	-3,771	-1,631	-3,611	-4,310	-10,520	-10,481	-9,218
80% Exceedance	-7,010	-9,160	-6,182	-4,488	-4,357	-3,776	-1,852	-3,950	-4,310	-10,968	-10,856	-10,017
90% Exceedance	-8,452	-9,495	-8,064	-4,700	-4,379	-4,173	-2,161	-3,998	-4,400	-11,271	-11,149	-10,744
Full Simulation Period Average[a]	-5,407	-6,357	-5,160	-3,429	-3,440	-2,148	-902	-2,844	-3,611	-8,175	-7,484	-7,045
Wet Water Years (32%)	-6,358	-7,314	-5,503	-2,769	-2,496	-1,245	-681	-2,915	-3,426	-9,383	-10,240	-9,391
Above Normal Water Years (9%)	-4,445	-7,091	-6,685	-4,010	-3,946	-2,127	-252	-3,171	-4,186	-10,306	-10,629	-7,421
Below Normal Water Years (20%)	-5,420	-6,794	-5,203	-3,987	-3,962	-2,120	-911	-3,224	-4,306	-10,313	-9,518	-8,014
Dry Water Years (21%)	-5,346	-6,400	-5,054	-4,009	-3,860	-2,926	-1,015	-2,753	-4,296	-8,021	-4,540	-5,471
Critical Water Years (18%)	-4,257	-3,753	-3,862	-3,018	-3,798	-2,890	-1,478	-2,236	-2,081	-2,766	-2,186	-3,448

Table 4F-3-8-1c. Old and Middle River Flow, Proposed Project plus CVP PA Sac Feather VAs 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	-486	-499	-34	286	-880	270	-782	-2,201	216	413	226	121
20% Exceedance	-74	-19	-244	230	675	1,540	-425	-1,764	407	479	510	-79
30% Exceedance	-121	-467	46	0	521	1,939	-423	-1,537	468	61	212	-39
40% Exceedance	79	-202	0	-11	430	1,782	-516	-1,393	429	50	-293	-178
50% Exceedance	62	-288	0	391	501	1,088	-534	-1,404	696	269	-116	-583
60% Exceedance	58	2	0	281	373	-12	-319	-1,542	795	187	-229	-141
70% Exceedance	-198	2	0	101	199	-329	-370	-1,613	690	255	-229	-594
80% Exceedance	347	-29	-120	120	126	414	-439	-1,545	690	139	-270	-623
90% Exceedance	49	-3	92	300	584	23	-288	-411	600	130	6	-832
Full Simulation Period Average[a]	-68	-107	25	139	303	676	-409	-1,399	526	267	-4	-356
Wet Water Years (32%)	-73	-48	-51	101	44	152	-4	-822	550	-40	-330	-1,002
Above Normal Water Years (9%)	244	-264	33	173	385	1,265	483	-833	634	-380	-539	-731
Below Normal Water Years (20%)	209	-66	-69	180	339	1,546	-1,427	-2,639	536	458	274	280
Dry Water Years (21%)	-200	-139	103	88	561	976	-248	-1,734	563	614	273	-79
Critical Water Years (18%)	-369	-144	170	204	379	-3	-633	-937	377	520	210	-48

[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.

Table 4F-3-8-2a. 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 4F-3-8-2b. Old and Middle River Flow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-3,013	-2,131	-2,299	-2,203	-2,689	-1,077	508	-1,785	-1,603	-2,297	-2,110	-3,185
20% Exceedance	-3,775	-3,287	-3,487	-3,436	-3,617	-1,293	-227	-2,167	-3,572	-4,588	-2,762	-4,278
30% Exceedance	-4,154	-4,498	-5,143	-3,645	-3,808	-1,445	-644	-2,407	-3,936	-7,201	-4,263	-5,086
40% Exceedance	-4,693	-6,031	-5,290	-3,669	-3,899	-1,655	-774	-2,767	-4,115	-8,784	-7,399	-5,847
50% Exceedance	-5,419	-7,008	-5,290	-4,125	-3,963	-2,475	-1,202	-3,021	-4,143	-9,397	-9,213	-6,932
60% Exceedance	-5,841	-8,369	-5,290	-4,235	-4,091	-3,493	-1,349	-3,250	-4,205	-9,974	-9,837	-7,888
70% Exceedance	-6,543	-8,873	-5,290	-4,419	-4,265	-3,771	-1,615	-3,619	-4,310	-10,522	-10,486	-9,222
80% Exceedance	-6,926	-9,160	-6,522	-4,520	-4,357	-3,781	-1,852	-3,950	-4,310	-10,972	-10,859	-9,967
90% Exceedance	-8,454	-9,496	-8,381	-4,700	-4,379	-4,173	-2,125	-3,998	-4,400	-11,276	-11,155	-10,745
Full Simulation Period Average[a]	-5,455	-6,312	-5,218	-3,469	-3,433	-2,193	-874	-2,828	-3,630	-8,166	-7,495	-7,006
Wet Water Years (32%)	-6,342	-7,310	-5,519	-2,770	-2,493	-1,255	-679	-2,913	-3,427	-9,385	-10,251	-9,395
Above Normal Water Years (9%)	-4,522	-6,916	-6,950	-4,010	-3,946	-2,139	-243	-3,162	-4,186	-10,309	-10,634	-7,422
Below Normal Water Years (20%)	-5,610	-6,824	-5,213	-4,000	-3,974	-2,138	-970	-3,185	-4,306	-10,421	-9,544	-8,051
Dry Water Years (21%)	-5,392	-6,414	-5,095	-4,018	-3,860	-2,925	-1,014	-2,756	-4,283	-8,002	-4,548	-5,498
Critical Water Years (18%)	-4,246	-3,550	-3,969	-3,210	-3,751	-3,092	-1,267	-2,198	-2,199	-2,611	-2,188	-3,149

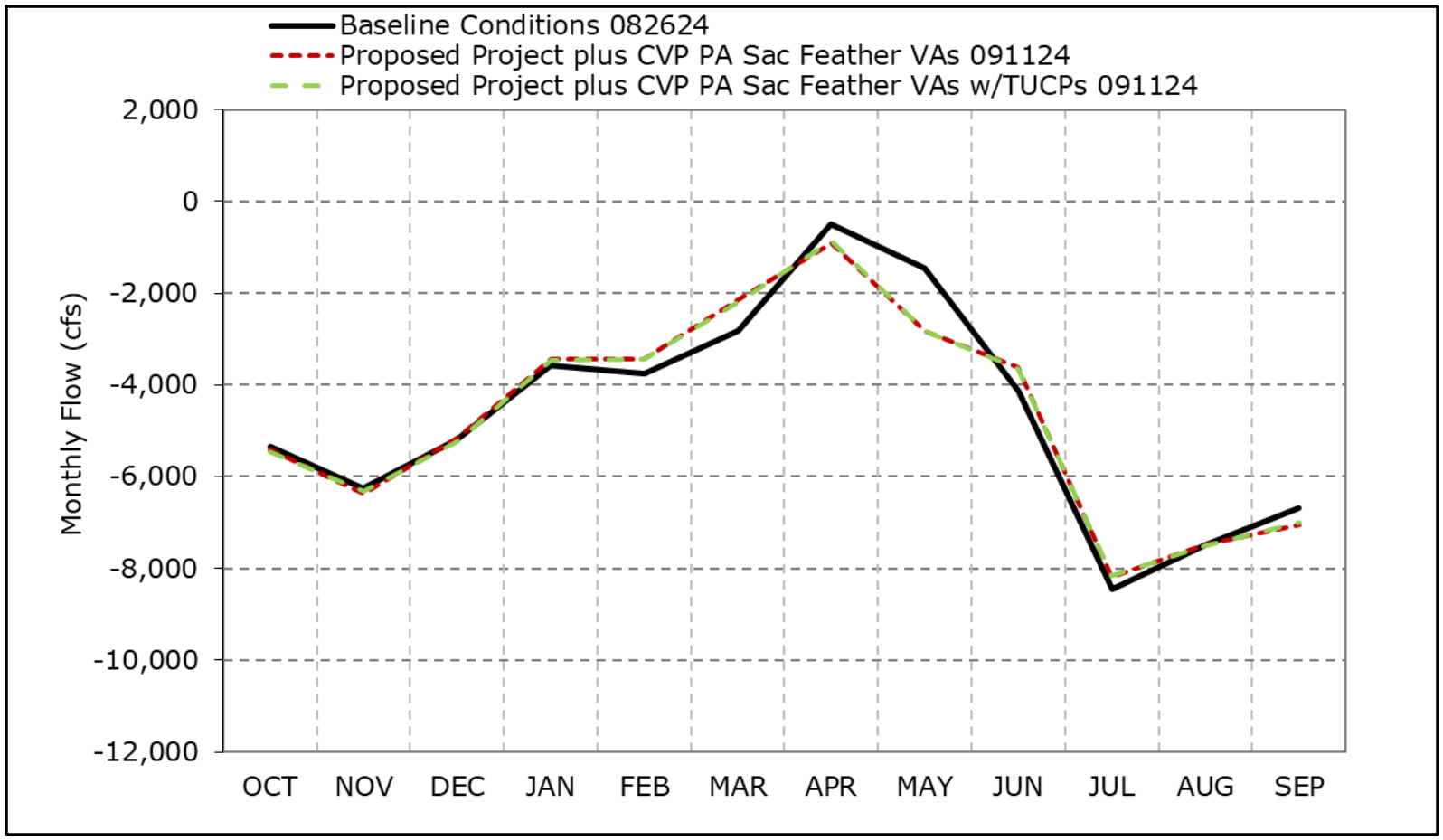
Table 4F-3-8-2c. Old and Middle River Flow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-740	-483	107	-72	-791	270	-787	-2,163	202	615	245	218
20% Exceedance	-110	-19	-270	209	675	1,536	-470	-1,718	58	440	522	-81
30% Exceedance	-108	-538	-233	0	521	1,925	-376	-1,431	453	60	234	-55
40% Exceedance	38	-203	0	-24	430	1,754	-248	-1,381	429	-1	-112	-184
50% Exceedance	-87	-290	0	391	501	938	-449	-1,426	696	198	-116	-610
60% Exceedance	6	1	0	281	373	-68	-290	-1,522	795	90	-230	-219
70% Exceedance	-195	1	0	97	199	-329	-353	-1,620	690	253	-234	-598
80% Exceedance	431	-29	-461	88	126	410	-438	-1,545	690	136	-274	-573
90% Exceedance	47	-3	-225	300	584	23	-251	-411	600	126	0	-834
Full Simulation Period Average[a]	-116	-63	-34	100	310	632	-381	-1,384	508	276	-15	-316
Wet Water Years (32%)	-57	-44	-67	101	47	143	-2	-821	549	-42	-341	-1,005
Above Normal Water Years (9%)	167	-90	-232	173	385	1,252	492	-824	634	-383	-544	-732
Below Normal Water Years (20%)	19	-96	-79	167	326	1,527	-1,485	-2,600	536	349	248	243
Dry Water Years (21%)	-246	-153	62	78	561	977	-247	-1,737	576	632	264	-106
Critical Water Years (18%)	-358	60	63	12	426	-205	-423	-899	260	676	208	251

[a] Based on the 100-year simulation period.

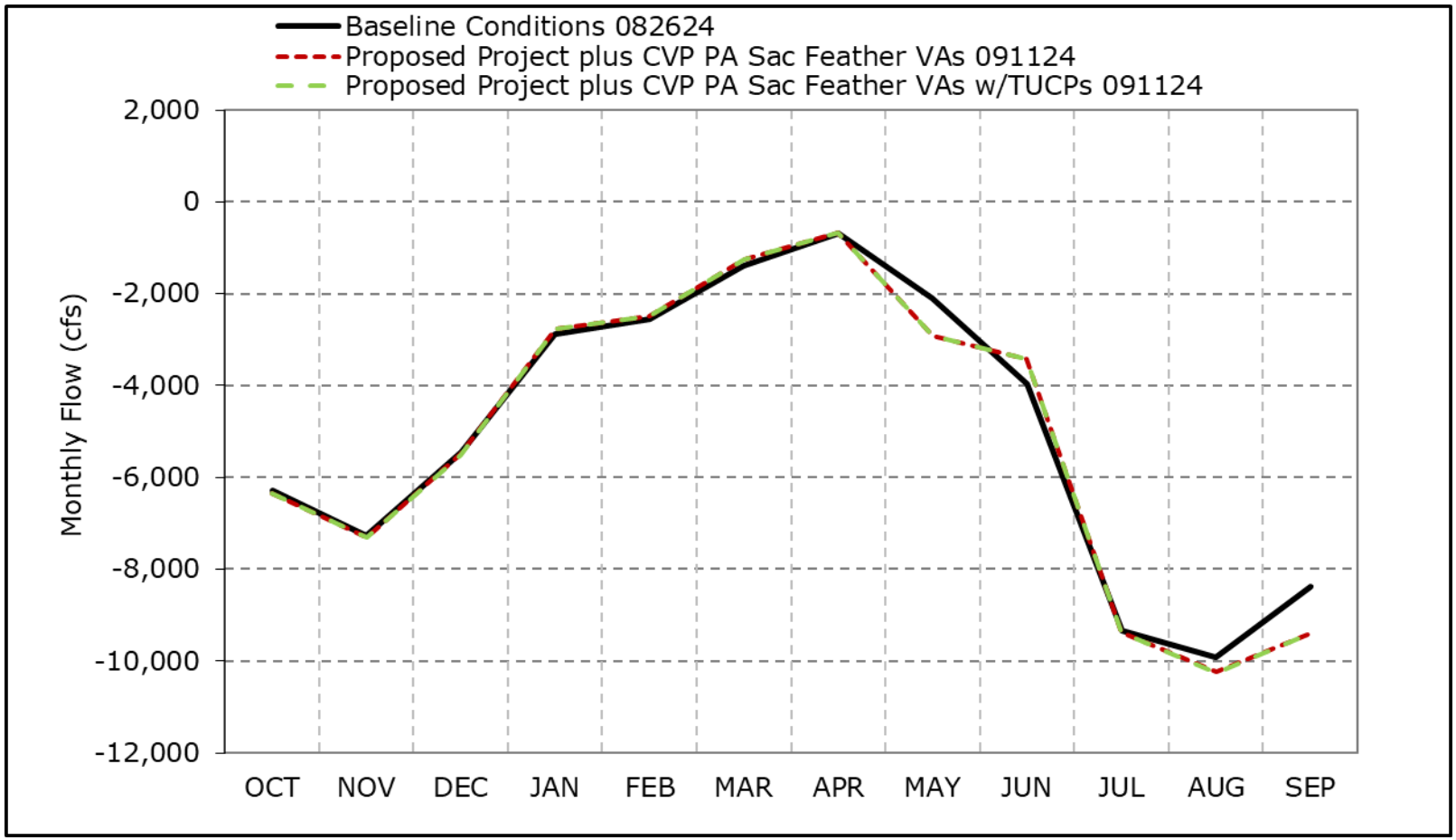
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-8a. Old and Middle River Flow, Long-Term Average Flow



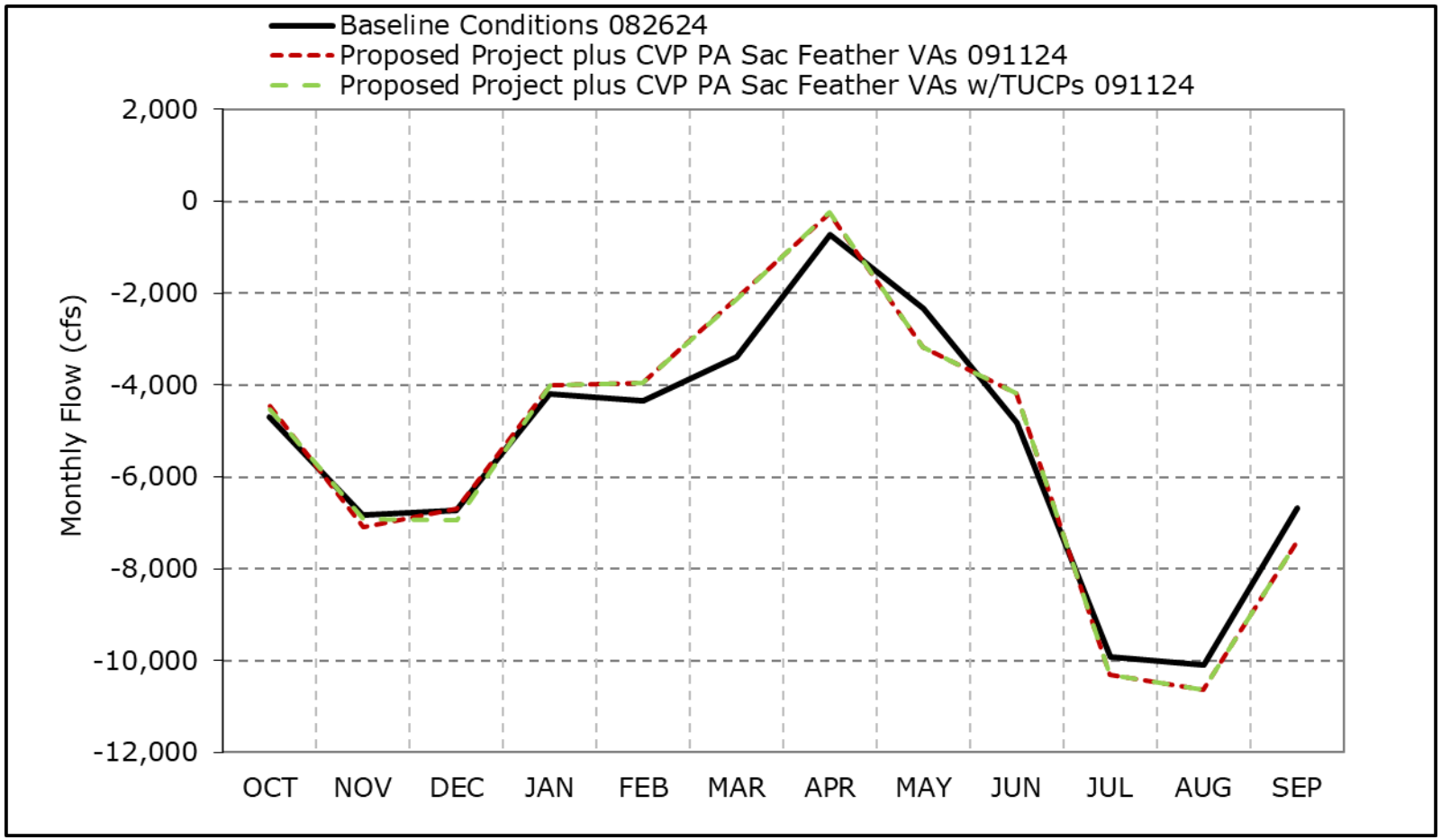
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8b. Old and Middle River Flow, Wet Year Average Flow



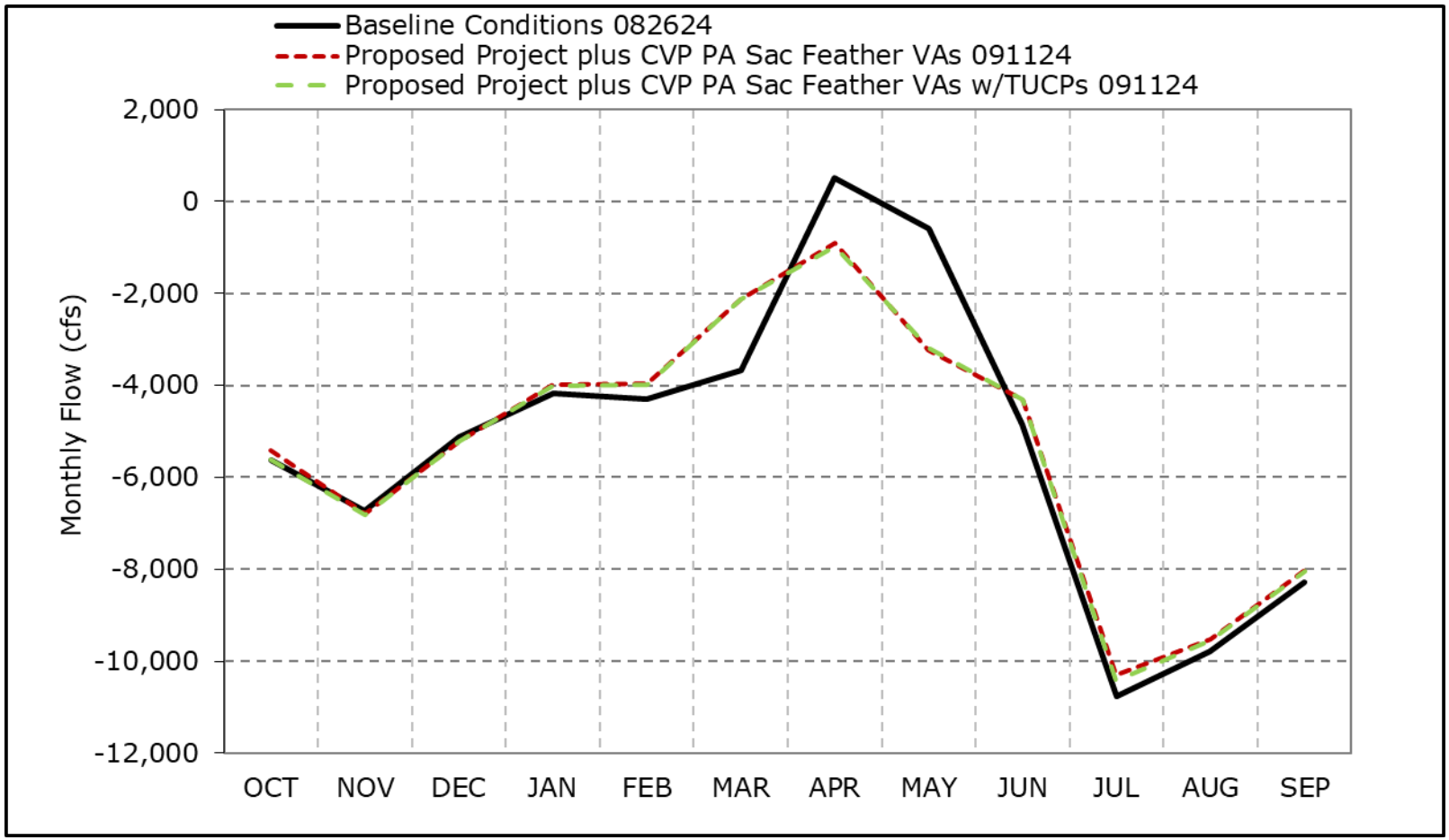
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8c. Old and Middle River Flow, Above Normal Year Average Flow



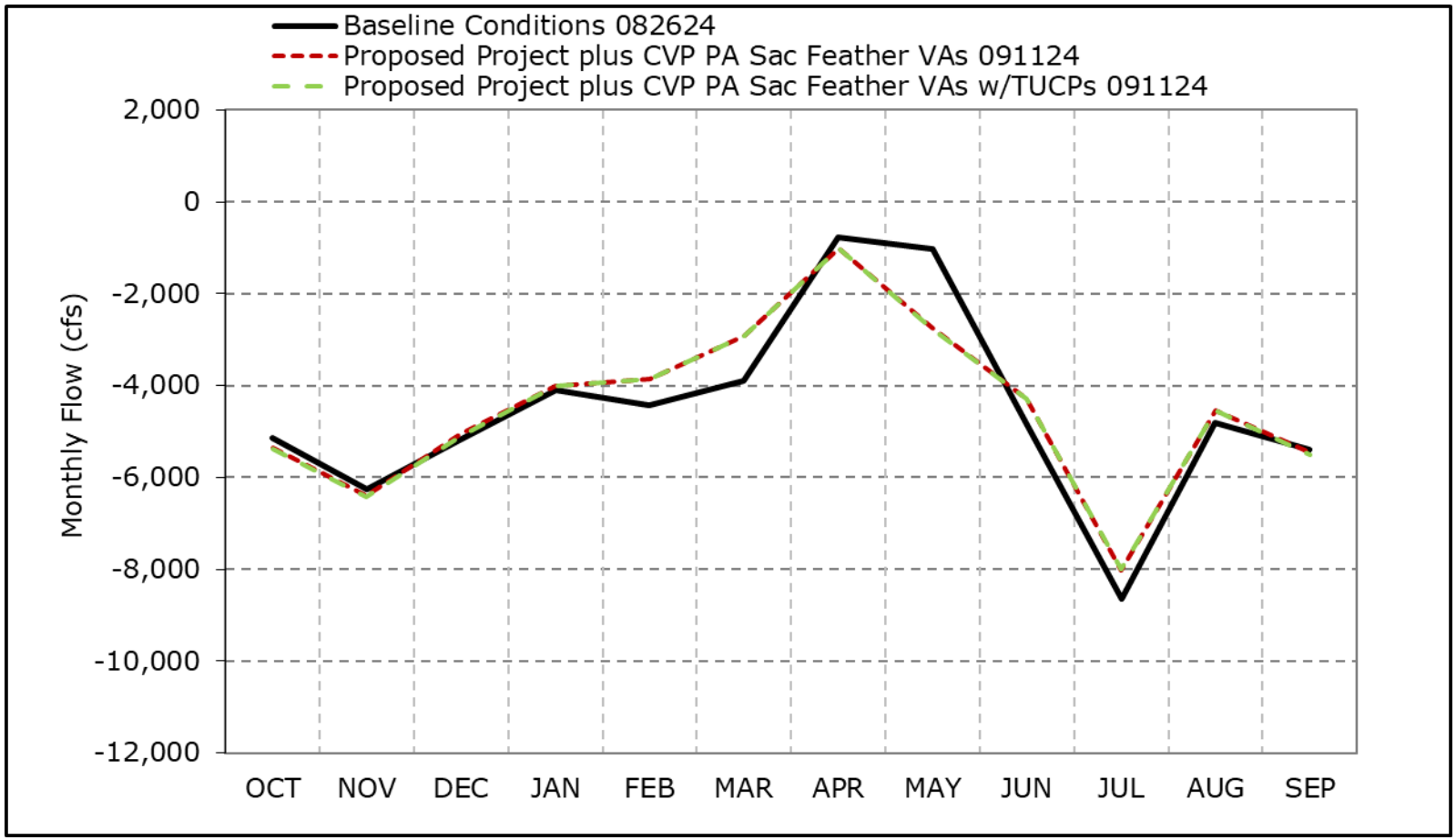
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8d. Old and Middle River Flow, Below Normal Year Average Flow



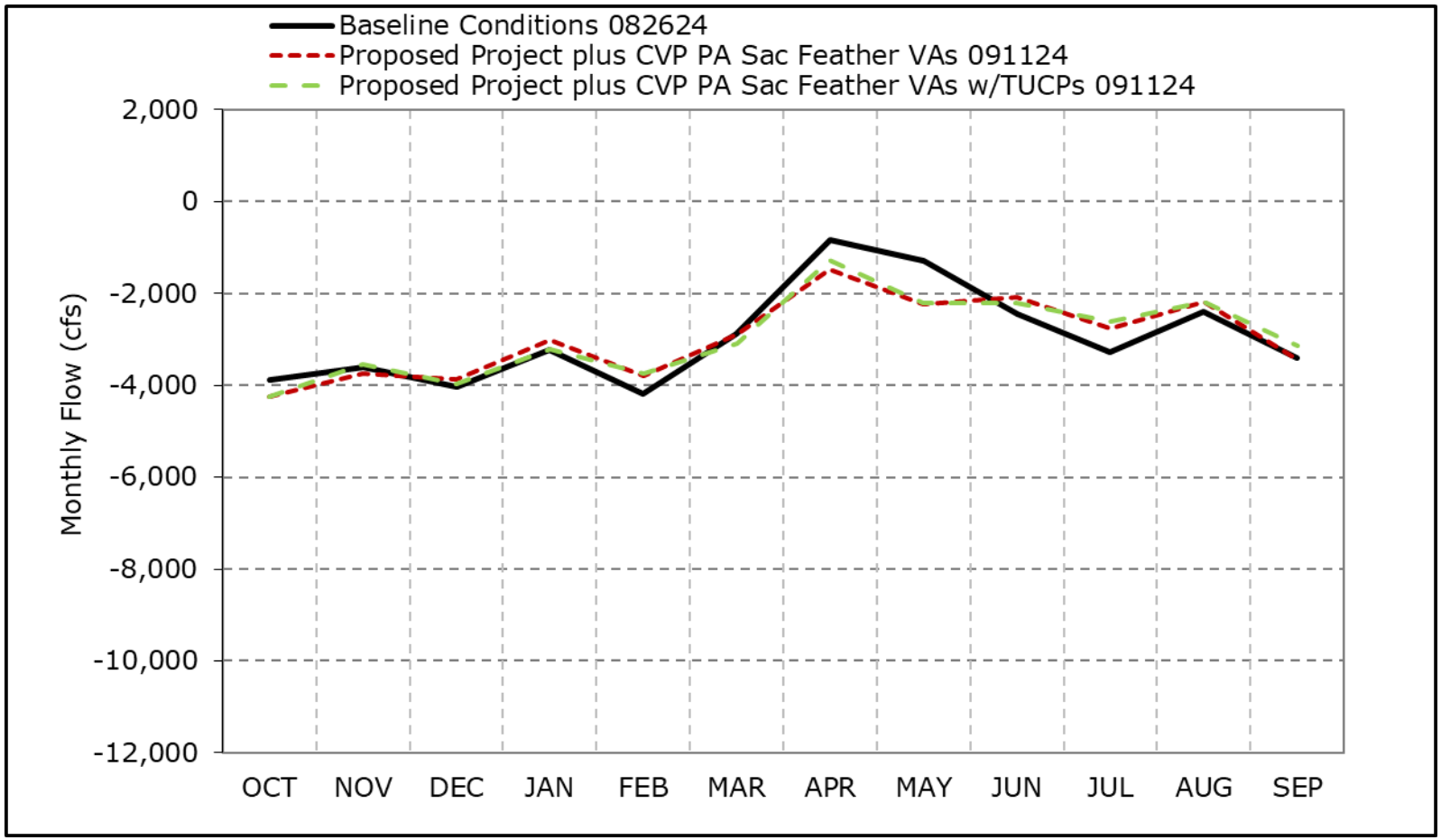
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8e. Old and Middle River Flow, Dry Year Average Flow



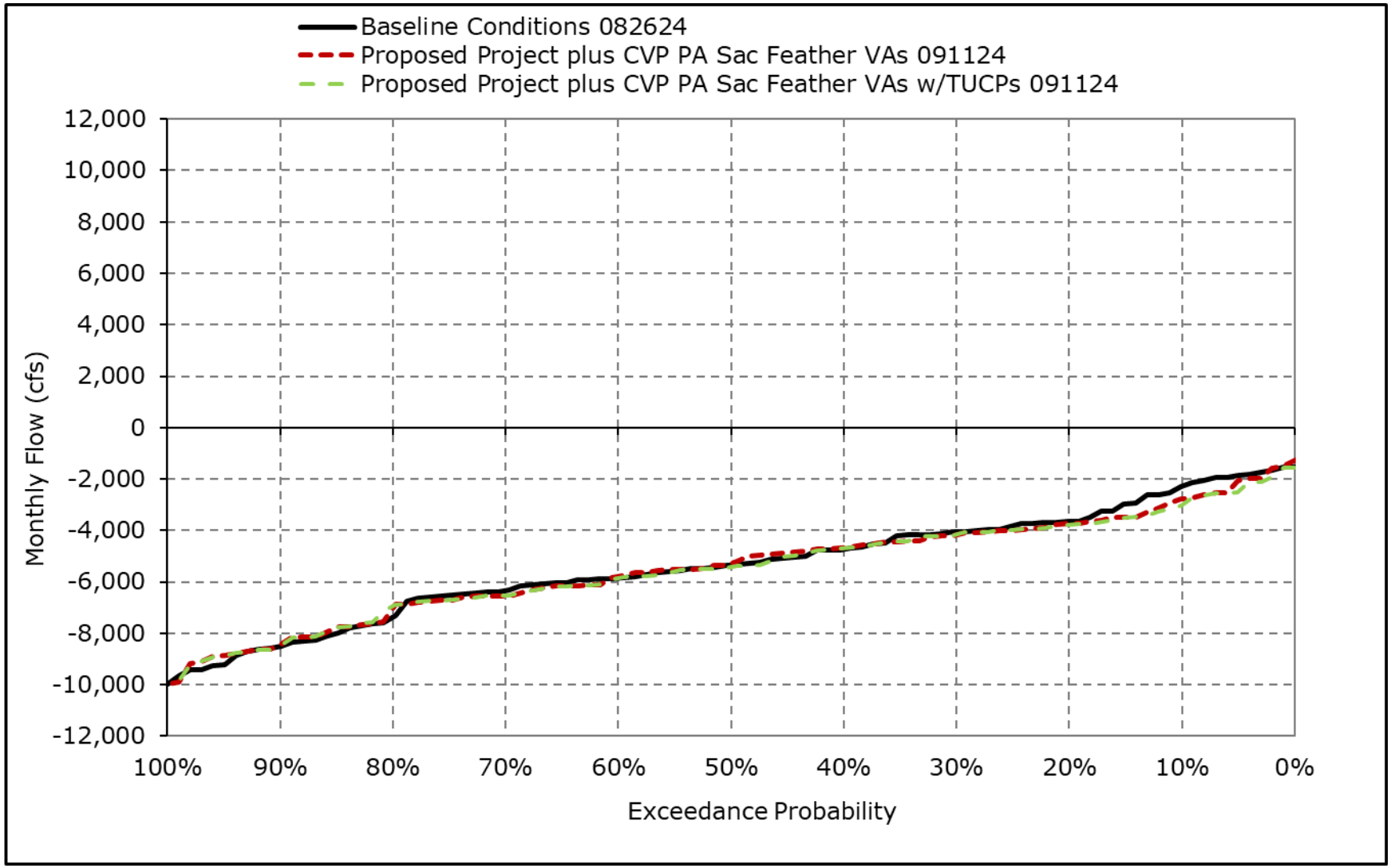
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8f. Old and Middle River Flow, Critical Year Average Flow



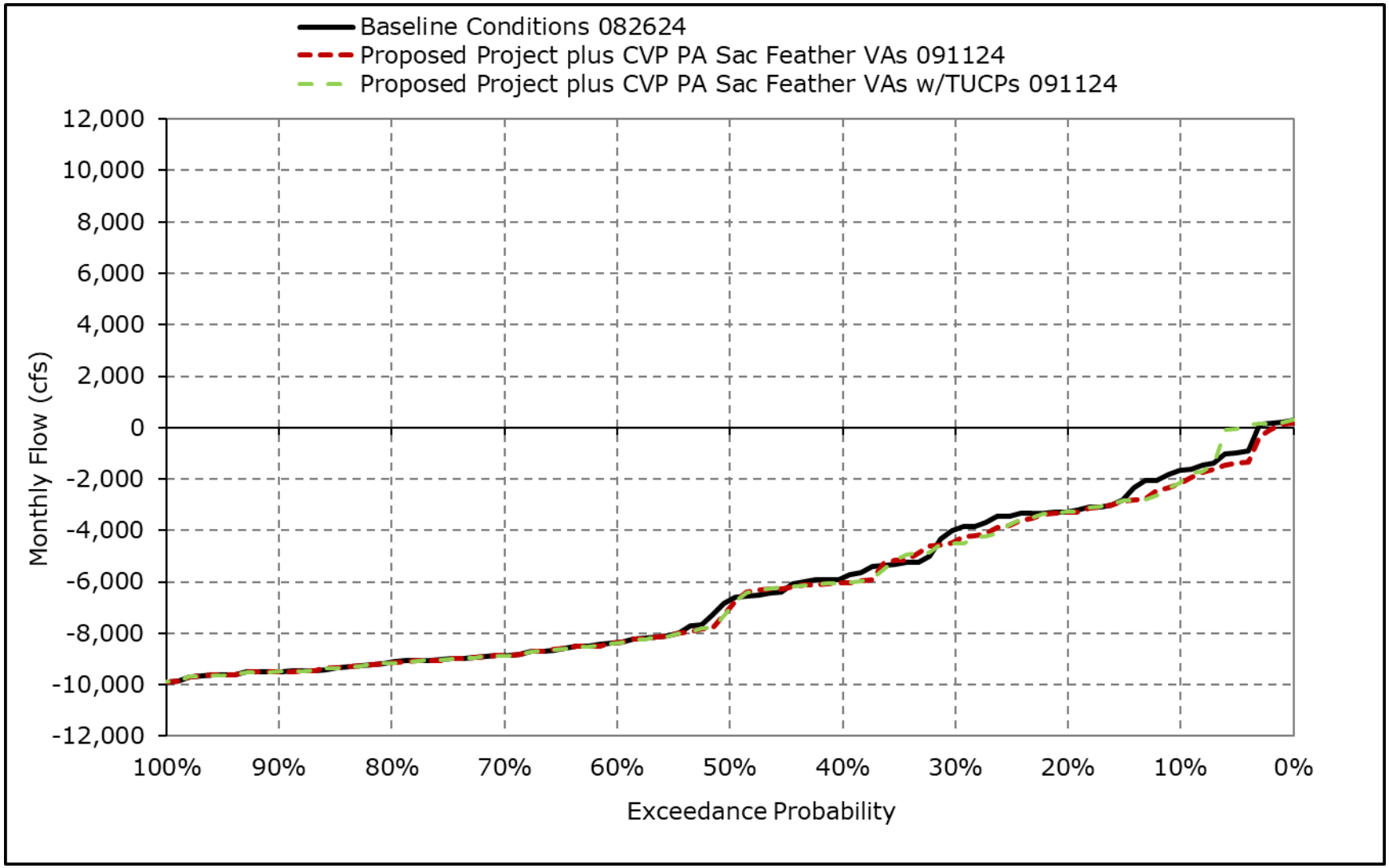
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8g. Old and Middle River Flow, October



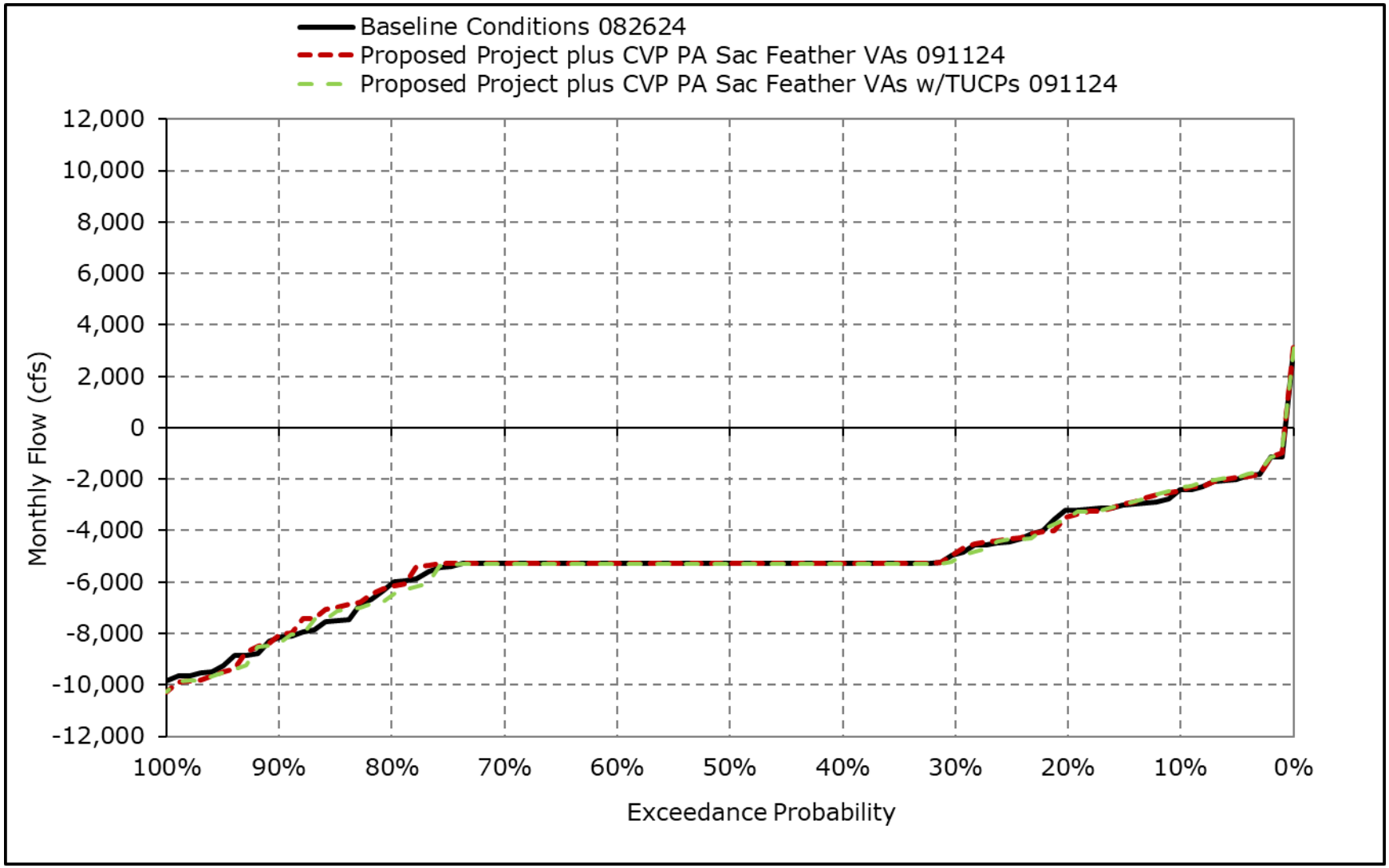
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8h. Old and Middle River Flow, November



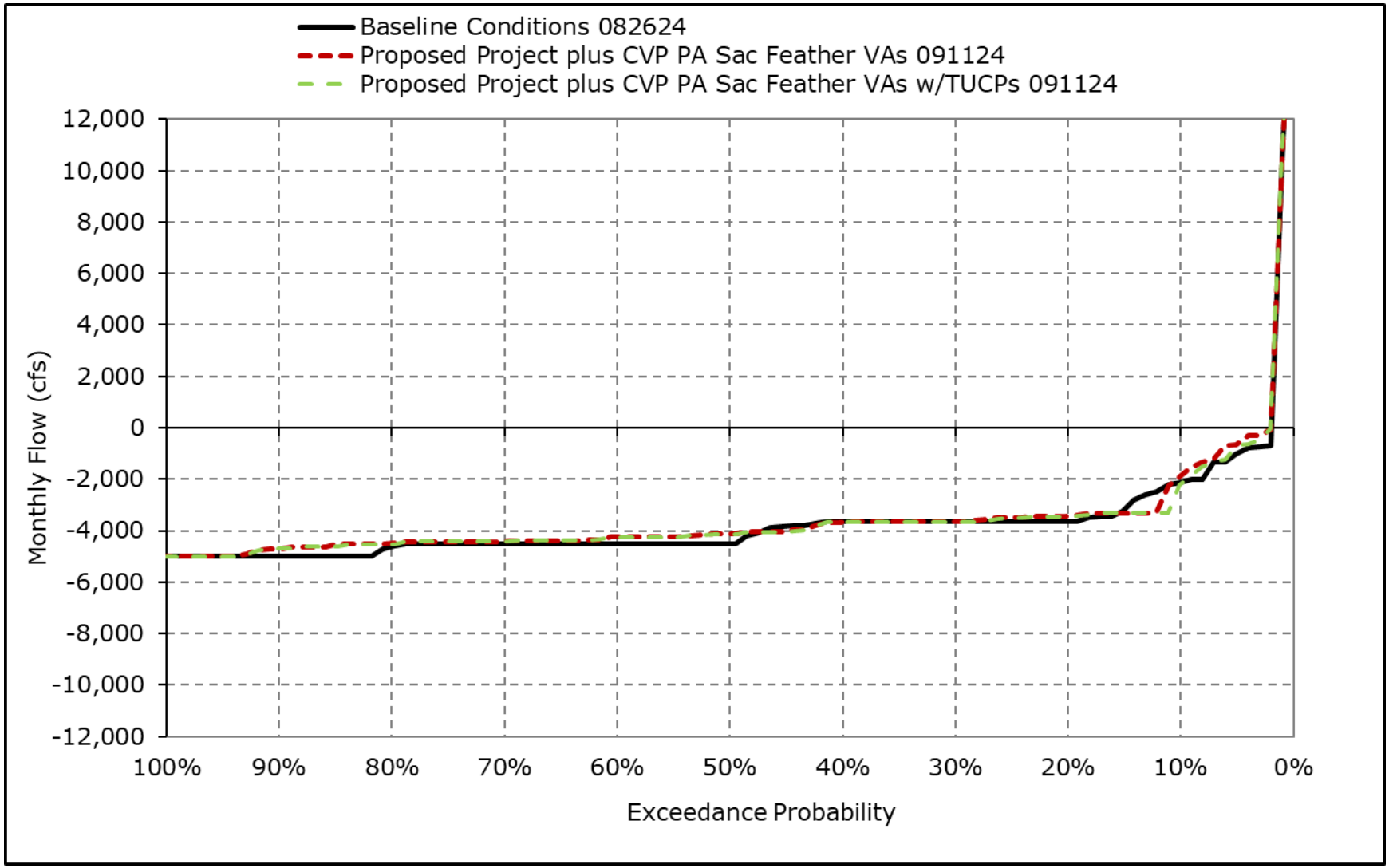
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8i. Old and Middle River Flow, December



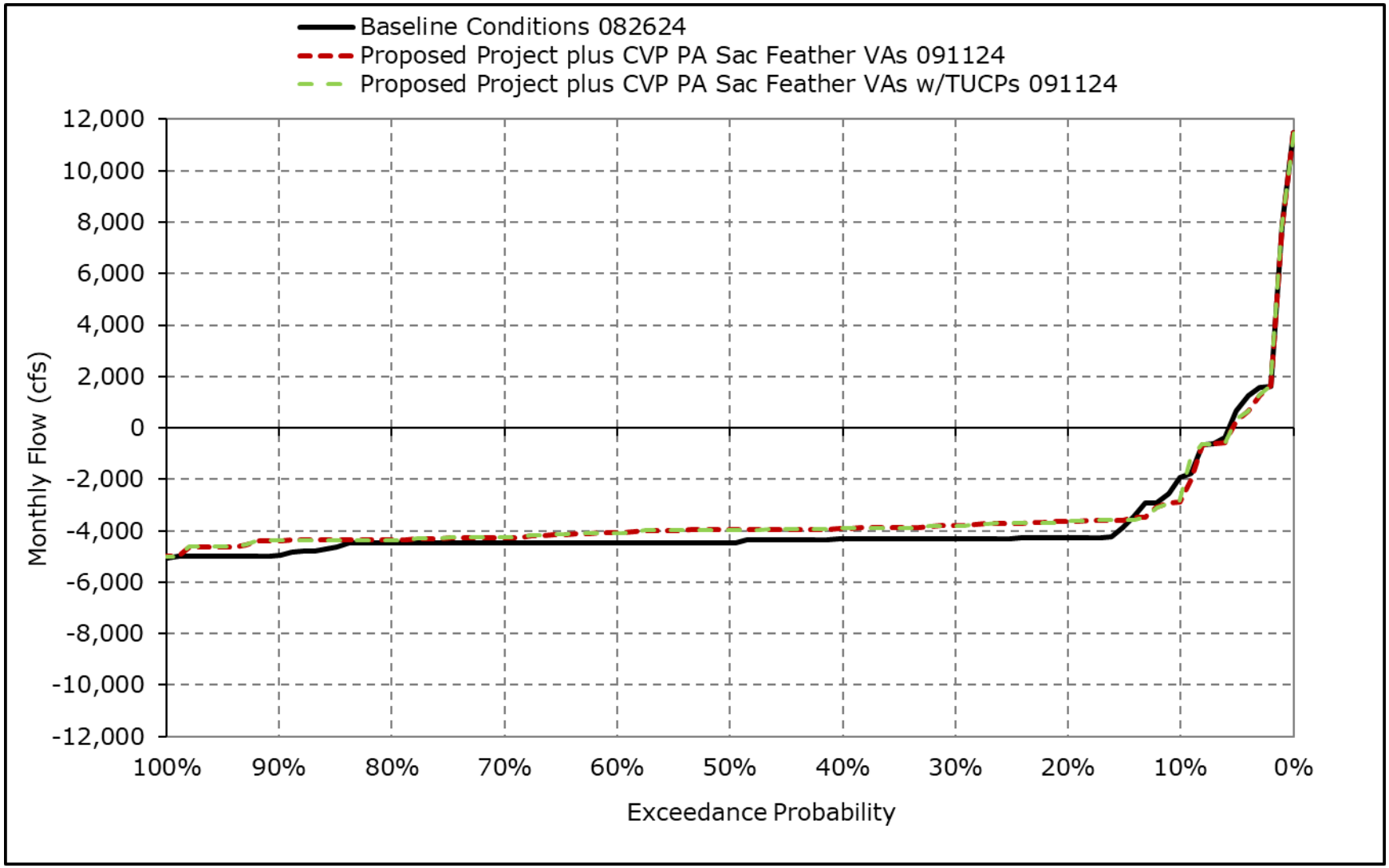
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8j. Old and Middle River Flow, January



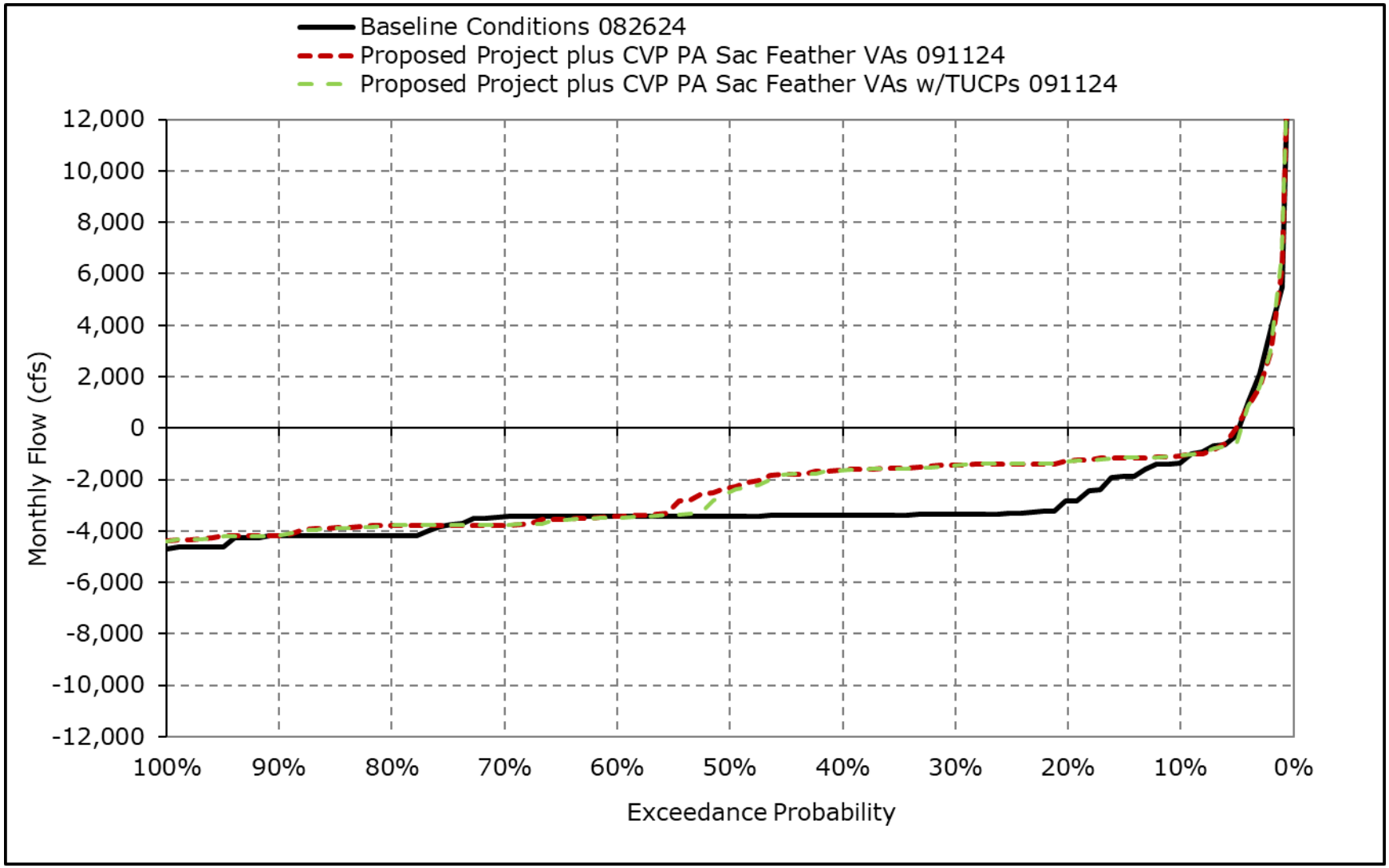
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8k. Old and Middle River Flow, February



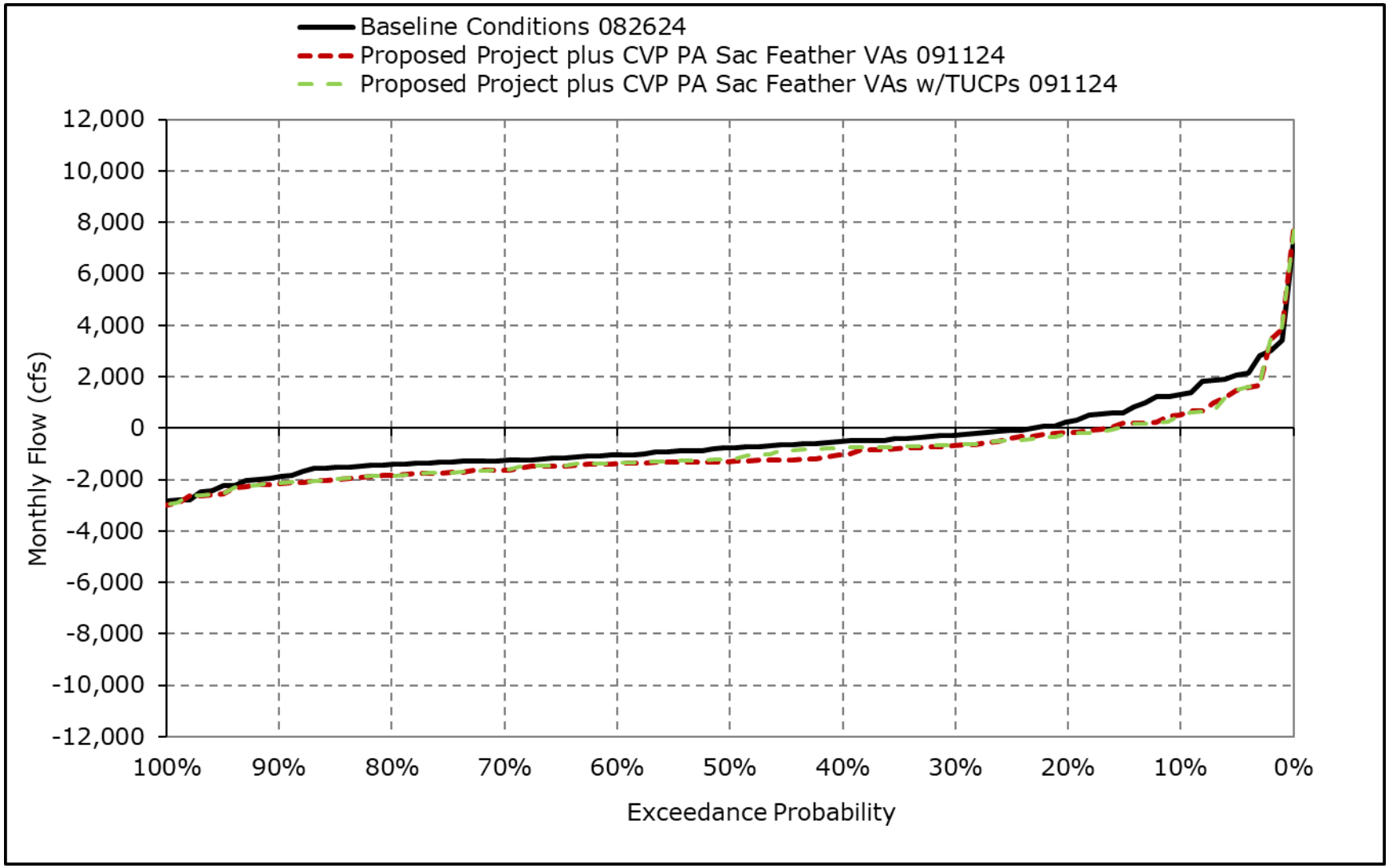
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8l. Old and Middle River Flow, March



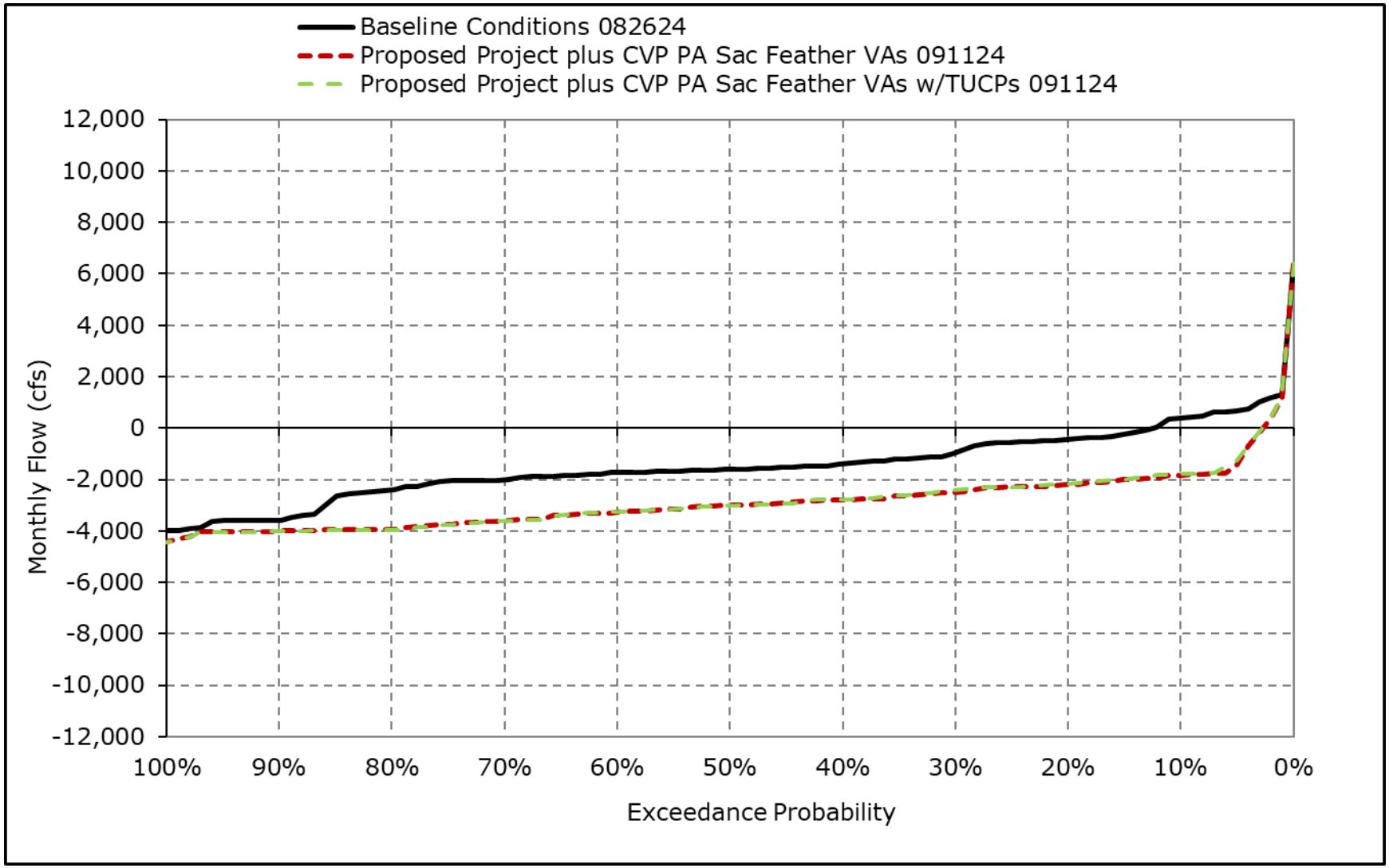
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8m. Old and Middle River Flow, April



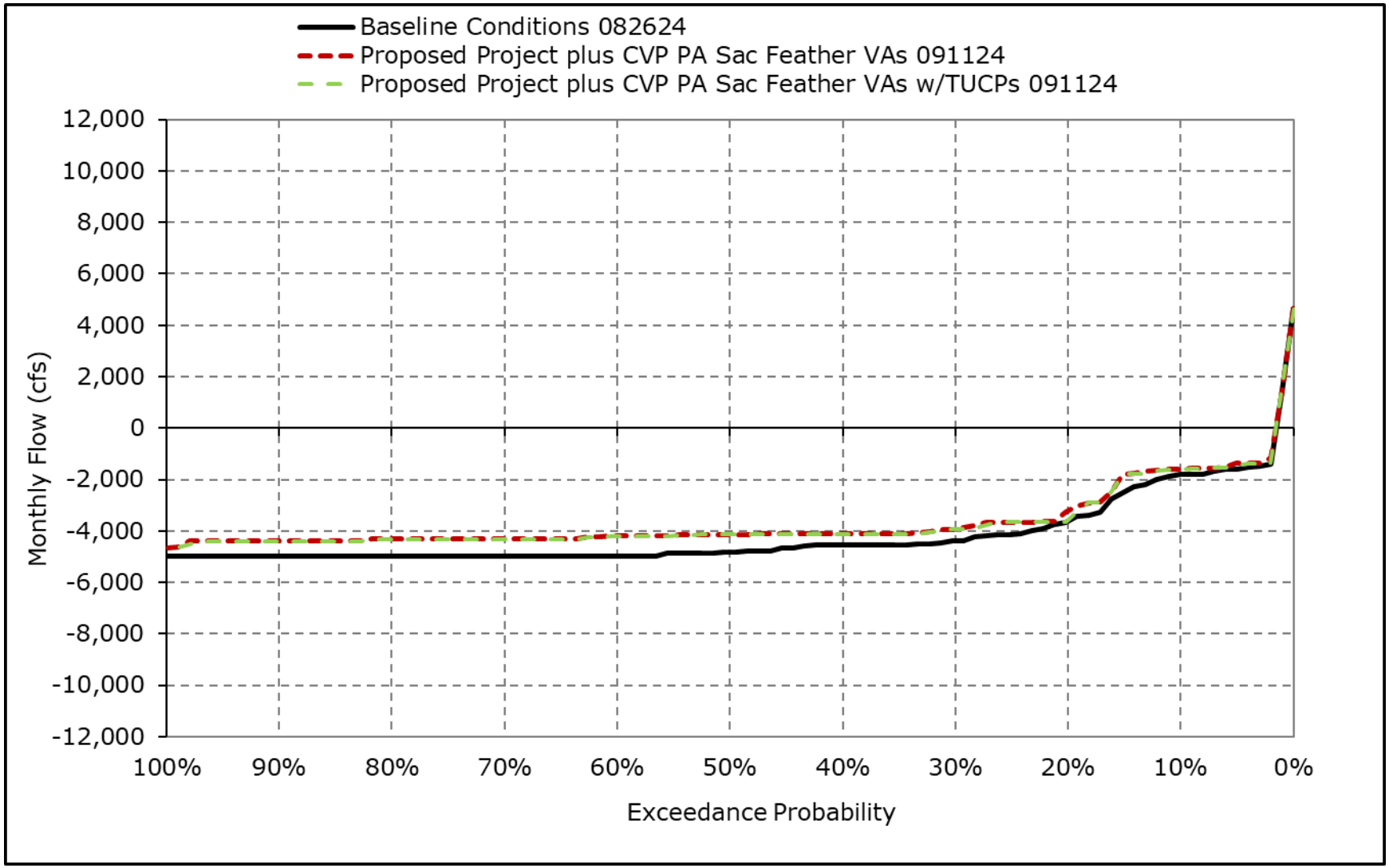
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8n. Old and Middle River Flow, May



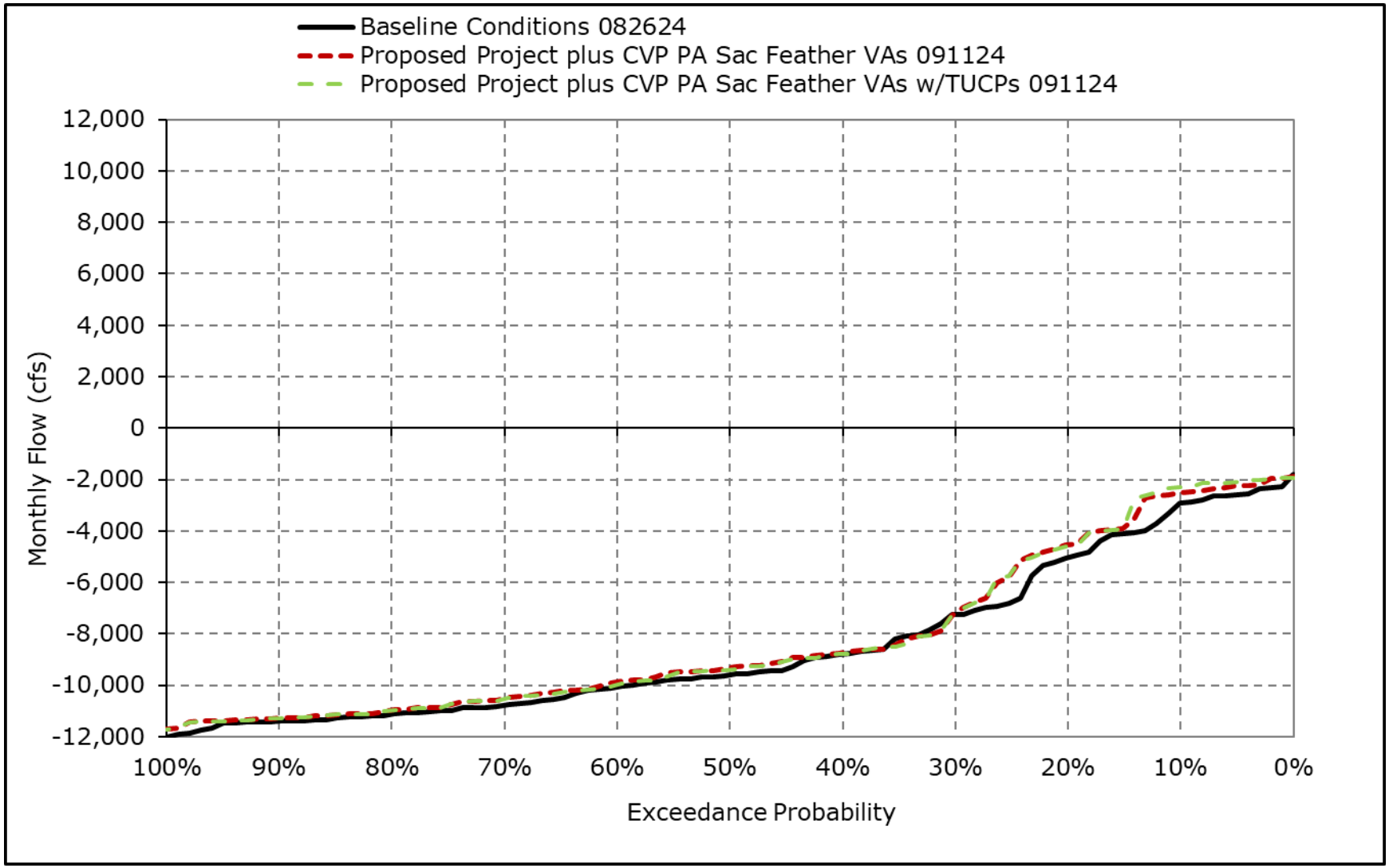
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8o. Old and Middle River Flow, June



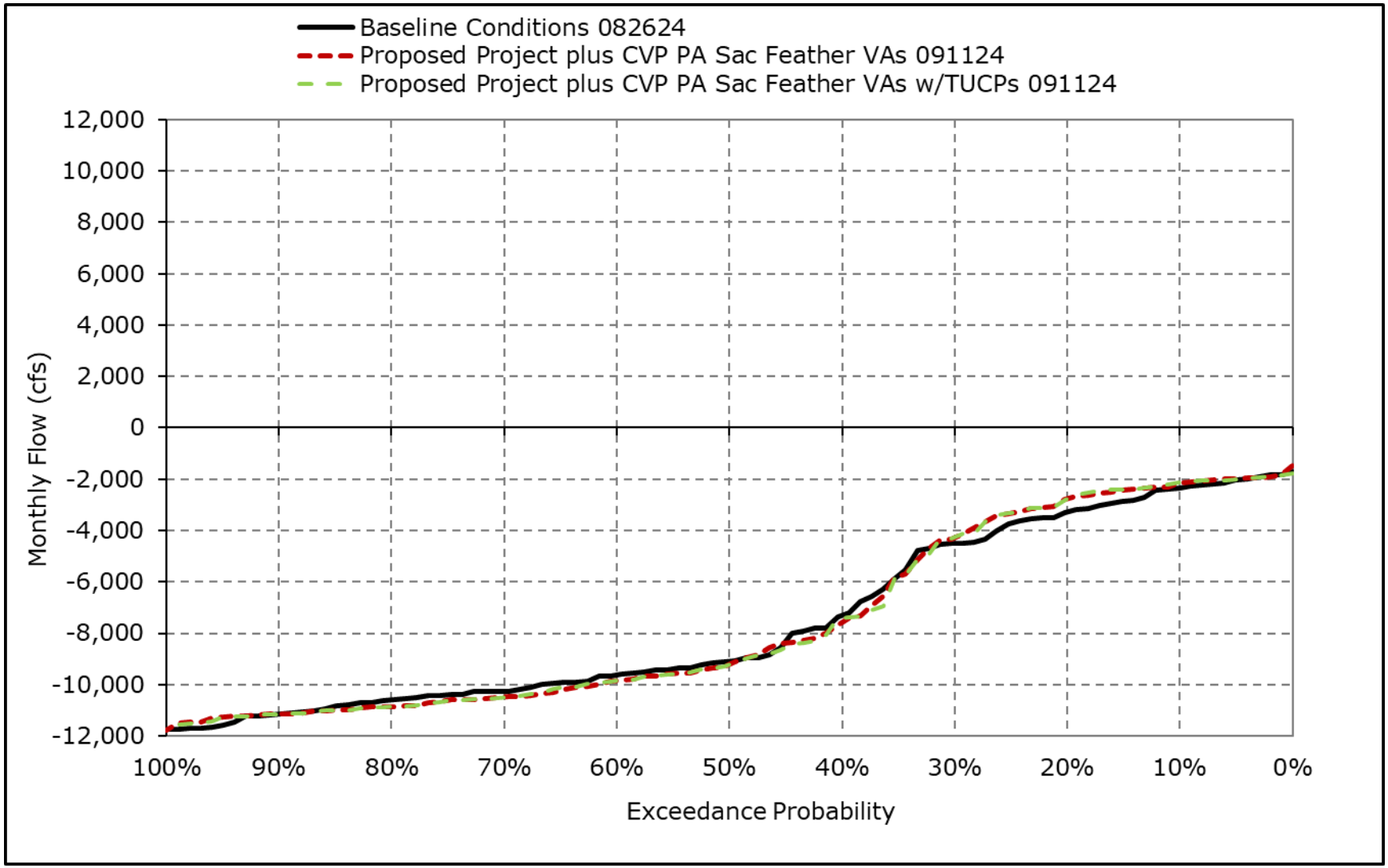
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8p. Old and Middle River Flow, July



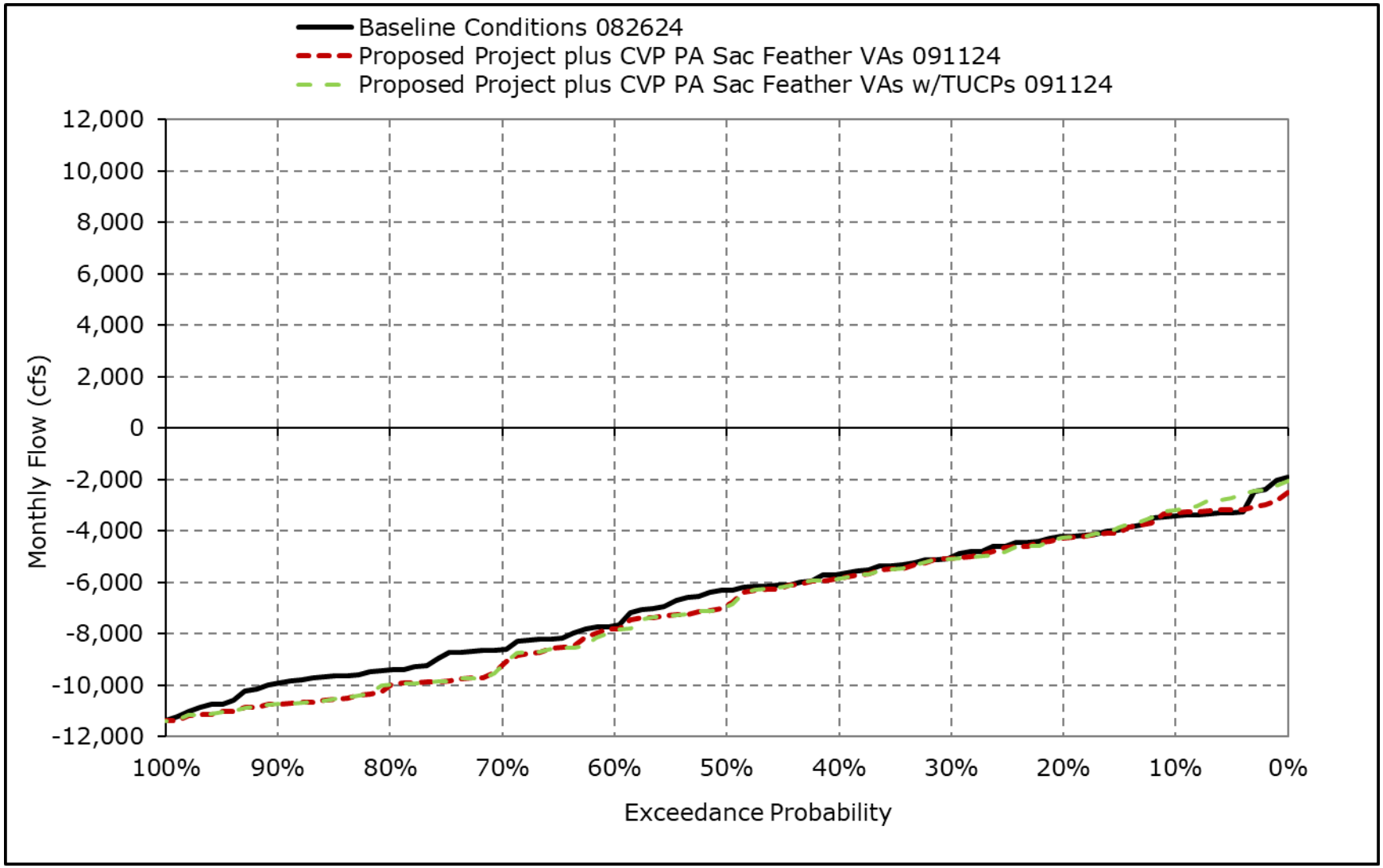
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-8q. Old and Middle River Flow, August



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

Figure 4F-3-8r. Old and Middle River Flow, September



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

Table 4F-3-9-1a. 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 4F-3-9-1b. Qwest, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,820	695	7,608	17,867	20,885	20,763	17,439	13,247	11,349	2,040	1,674	1,382
20% Exceedance	1,158	-50	2,758	12,000	13,400	15,502	13,394	6,458	6,054	1,653	1,441	841
30% Exceedance	953	-551	983	5,083	10,482	10,062	9,320	4,585	3,727	712	993	253
40% Exceedance	699	-1,304	553	3,652	6,626	8,573	7,631	3,417	2,808	81	-161	-63
50% Exceedance	534	-1,906	-162	2,417	4,472	4,960	6,163	2,274	2,297	-1,145	-1,554	-332
60% Exceedance	296	-2,568	-730	1,007	2,953	4,144	4,386	1,506	1,923	-1,767	-2,508	-676
70% Exceedance	-123	-3,275	-1,894	-106	1,693	2,999	3,360	1,330	1,366	-2,446	-2,896	-1,083
80% Exceedance	-820	-3,672	-3,059	-1,006	637	1,972	2,407	1,067	1,146	-2,939	-3,366	-1,215
90% Exceedance	-1,607	-4,115	-4,710	-1,927	-337	649	1,827	698	865	-3,267	-3,811	-1,841
Full Simulation Period Average[a]	327	-1,618	858	6,031	8,669	9,253	8,422	4,926	4,163	-463	-1,118	-251
Wet Water Years (32%)	-28	-1,530	4,427	15,818	18,981	18,978	16,026	10,759	8,581	1,026	-1,771	2
Above Normal Water Years (9%)	993	-2,619	-1,389	6,402	8,980	10,252	9,121	4,756	3,692	-1,759	-3,162	1,151
Below Normal Water Years (20%)	376	-1,995	-879	2,035	5,756	7,226	6,673	3,031	2,180	-2,490	-3,012	-1,863
Dry Water Years (21%)	386	-2,035	-959	-211	2,303	2,880	3,709	1,364	1,183	-1,972	171	-536
Critical Water Years (18%)	500	-368	-312	170	843	1,153	1,998	902	2,222	1,552	1,664	723

Table 4F-3-9-1c. Qwest, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	268	-71	95	-161	-252	-166	448	-1,527	369	187	123	-679
20% Exceedance	40	-124	56	125	89	1,245	260	-2,234	634	205	257	-77
30% Exceedance	64	-388	-123	232	212	329	-1,349	-2,129	273	234	180	-335
40% Exceedance	-17	-5	57	262	494	1,378	-650	-2,090	580	300	-234	-191
50% Exceedance	43	-188	45	604	470	667	-170	-2,227	424	-43	-597	-192
60% Exceedance	110	60	173	-30	751	1,472	-762	-2,151	698	8	-263	-315
70% Exceedance	32	-23	151	41	372	880	-295	-1,041	616	144	-333	-430
80% Exceedance	-242	2	108	127	508	506	-311	-983	578	109	-299	-50
90% Exceedance	-58	-57	455	11	309	247	-411	-992	524	210	12	172
Full Simulation Period Average[a]	39	-40	82	176	350	741	-349	-1,436	532	150	-69	-198
Wet Water Years (32%)	35	32	13	123	38	157	18	-895	604	-79	-359	-812
Above Normal Water Years (9%)	255	-216	180	204	444	1,365	792	-754	627	-406	-615	-243
Below Normal Water Years (20%)	159	-48	-77	242	439	1,714	-1,355	-2,745	596	250	139	230
Dry Water Years (21%)	-51	-110	154	106	618	1,079	-164	-1,720	502	410	93	-28
Critical Water Years (18%)	-90	10	247	268	447	-6	-670	-952	319	419	302	243

[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.

Table 4F-3-9-2a. 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 4F-3-9-2b. Qwest, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,805	716	7,608	17,860	20,881	20,752	17,433	13,246	11,348	1,901	1,754	1,796
20% Exceedance	1,167	-51	2,767	12,272	13,491	15,494	13,219	6,352	6,055	1,617	1,440	988
30% Exceedance	901	-646	952	5,086	10,468	10,061	9,110	4,585	3,301	712	991	344
40% Exceedance	621	-1,257	552	3,652	6,689	8,571	7,630	3,467	2,519	37	-159	-91
50% Exceedance	499	-1,902	-31	2,380	4,606	4,960	6,162	2,267	2,096	-1,163	-1,593	-334
60% Exceedance	193	-2,573	-1,091	953	2,955	4,147	4,361	1,651	1,912	-1,866	-2,522	-675
70% Exceedance	-151	-3,275	-2,018	-190	1,563	2,979	3,339	1,352	1,348	-2,449	-2,896	-1,095
80% Exceedance	-811	-3,673	-3,392	-1,074	856	1,566	2,578	1,048	1,121	-2,945	-3,356	-1,236
90% Exceedance	-1,609	-4,119	-5,086	-1,927	-338	519	1,859	703	843	-3,268	-3,817	-1,920
Full Simulation Period Average[a]	293	-1,586	771	5,990	8,691	9,207	8,412	4,947	4,101	-491	-1,131	-205
Wet Water Years (32%)	-21	-1,525	4,411	15,829	19,000	18,972	16,028	10,760	8,579	1,024	-1,773	1
Above Normal Water Years (9%)	924	-2,473	-1,784	6,438	9,011	10,327	9,158	4,745	3,692	-1,761	-3,166	1,151
Below Normal Water Years (20%)	292	-2,022	-888	2,016	5,755	7,214	6,617	3,083	2,192	-2,565	-3,030	-1,895
Dry Water Years (21%)	333	-2,041	-1,041	-221	2,302	2,878	3,686	1,389	1,191	-1,954	172	-551
Critical Water Years (18%)	491	-235	-466	-61	919	886	2,010	937	1,861	1,465	1,616	1,033

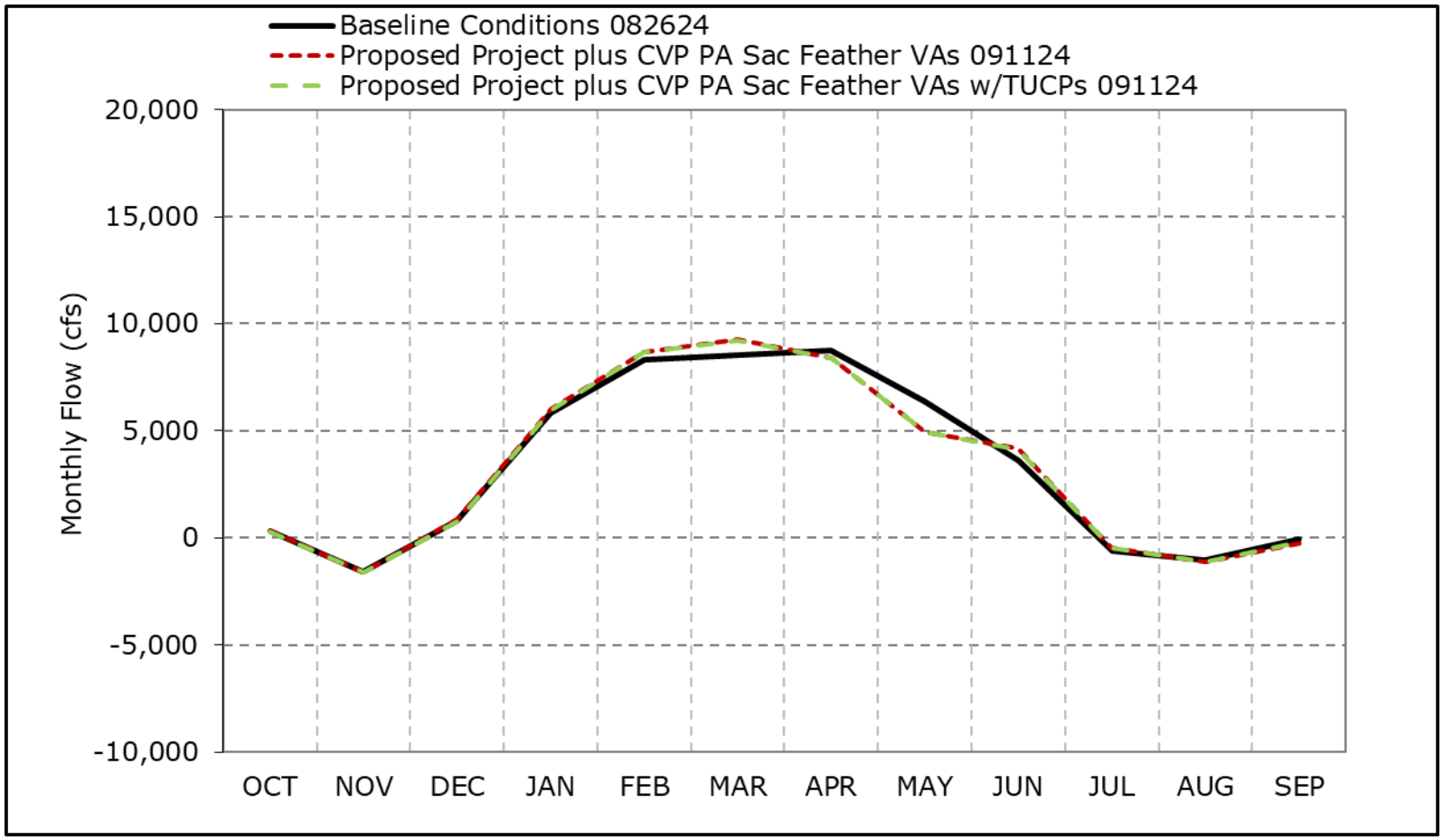
Table 4F-3-9-2c. Qwest, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	253	-49	95	-169	-256	-178	441	-1,528	368	48	203	-266
20% Exceedance	49	-125	65	396	181	1,238	84	-2,340	635	169	257	71
30% Exceedance	12	-483	-153	235	198	328	-1,560	-2,128	-153	234	178	-244
40% Exceedance	-95	43	56	262	557	1,376	-650	-2,040	291	256	-233	-220
50% Exceedance	8	-185	177	567	603	667	-170	-2,234	224	-61	-636	-194
60% Exceedance	7	56	-188	-84	752	1,476	-786	-2,005	687	-90	-276	-314
70% Exceedance	4	-23	27	-43	242	860	-315	-1,020	599	140	-333	-442
80% Exceedance	-233	2	-225	60	726	100	-139	-1,002	554	104	-290	-72
90% Exceedance	-60	-60	78	11	309	117	-378	-986	502	209	5	93
Full Simulation Period Average[a]	6	-8	-6	135	372	695	-359	-1,414	470	122	-82	-152
Wet Water Years (32%)	42	37	-3	133	57	151	20	-894	603	-82	-362	-813
Above Normal Water Years (9%)	186	-70	-215	240	475	1,440	828	-764	627	-409	-619	-244
Below Normal Water Years (20%)	76	-75	-86	223	438	1,702	-1,412	-2,692	608	174	121	199
Dry Water Years (21%)	-104	-116	71	95	617	1,077	-187	-1,695	509	428	94	-43
Critical Water Years (18%)	-99	143	93	36	523	-274	-657	-917	-42	332	255	553

[a] Based on the 100-year simulation period.

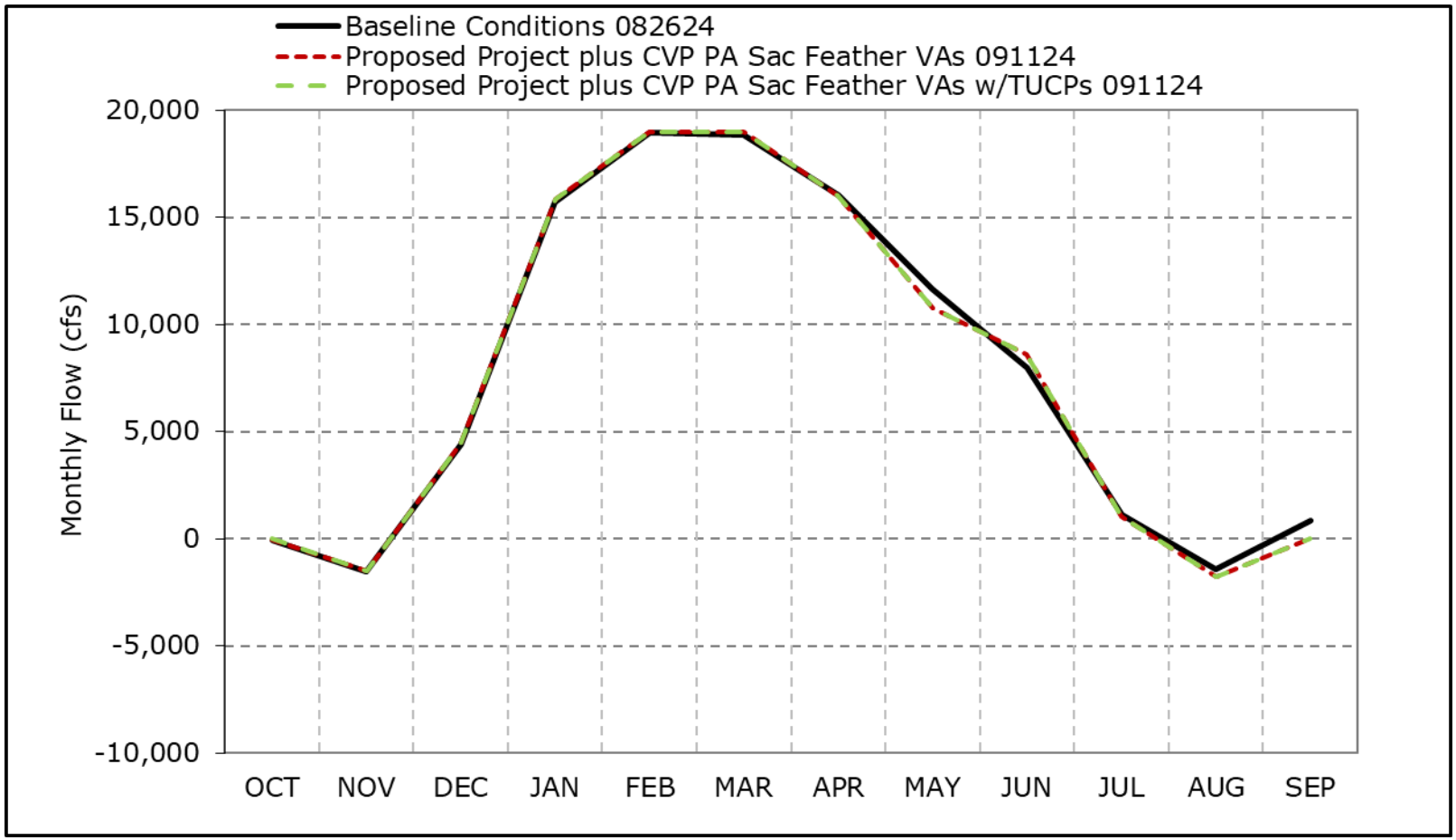
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-9a. Qwest, Long-Term Average Flow



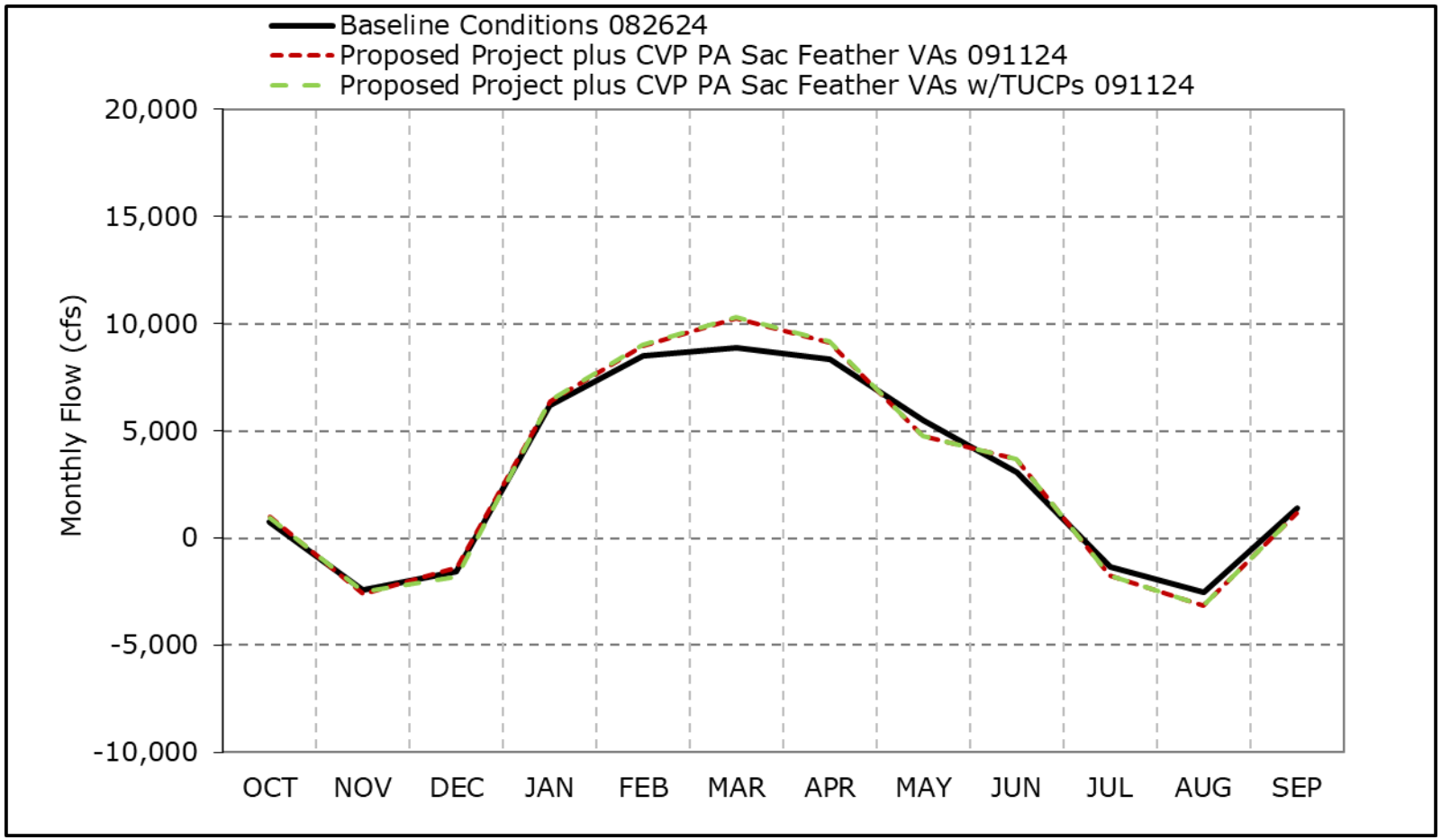
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9b. Qwest, Wet Year Average Flow



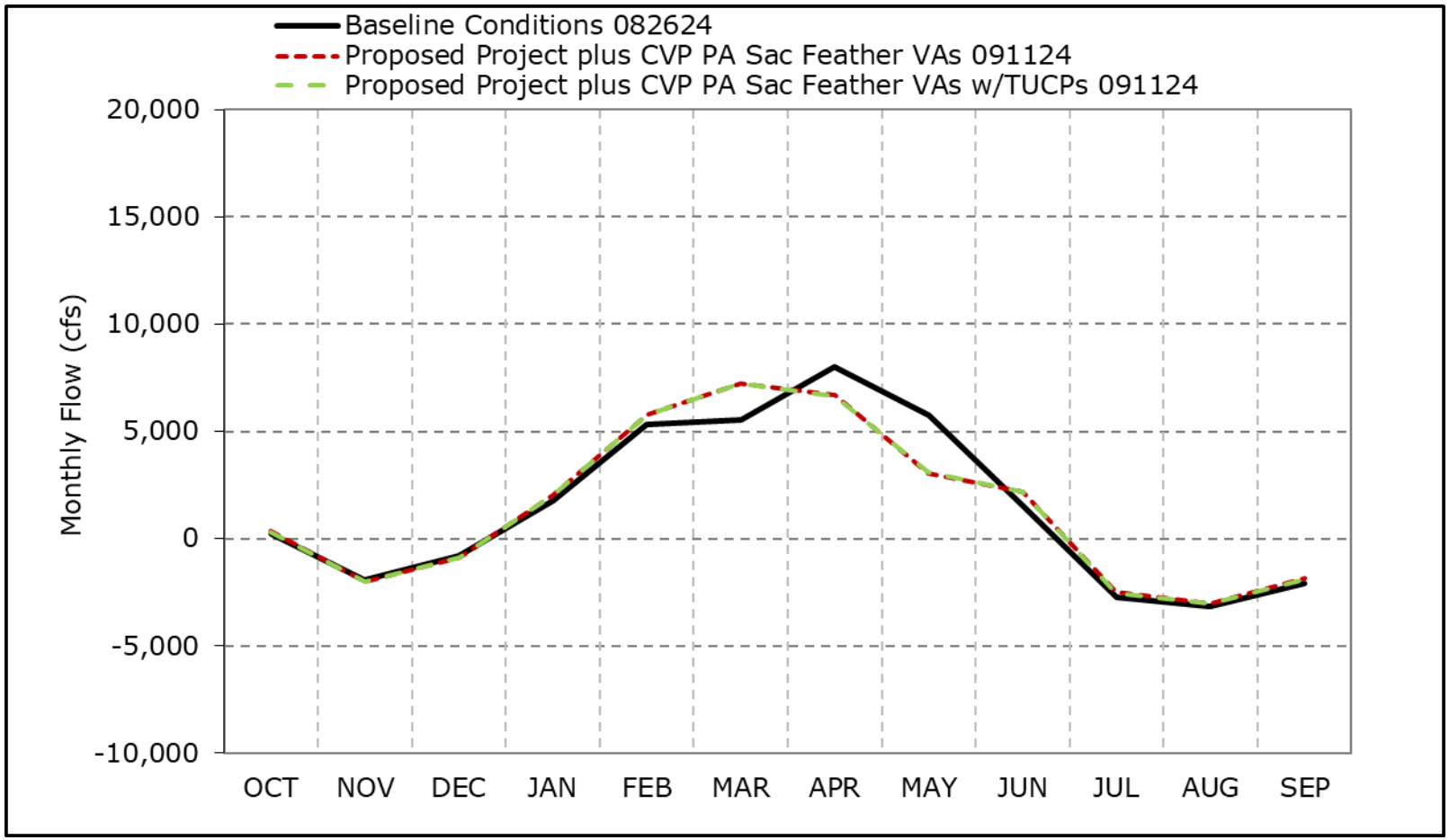
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9c. Qwest, Above Normal Year Average Flow



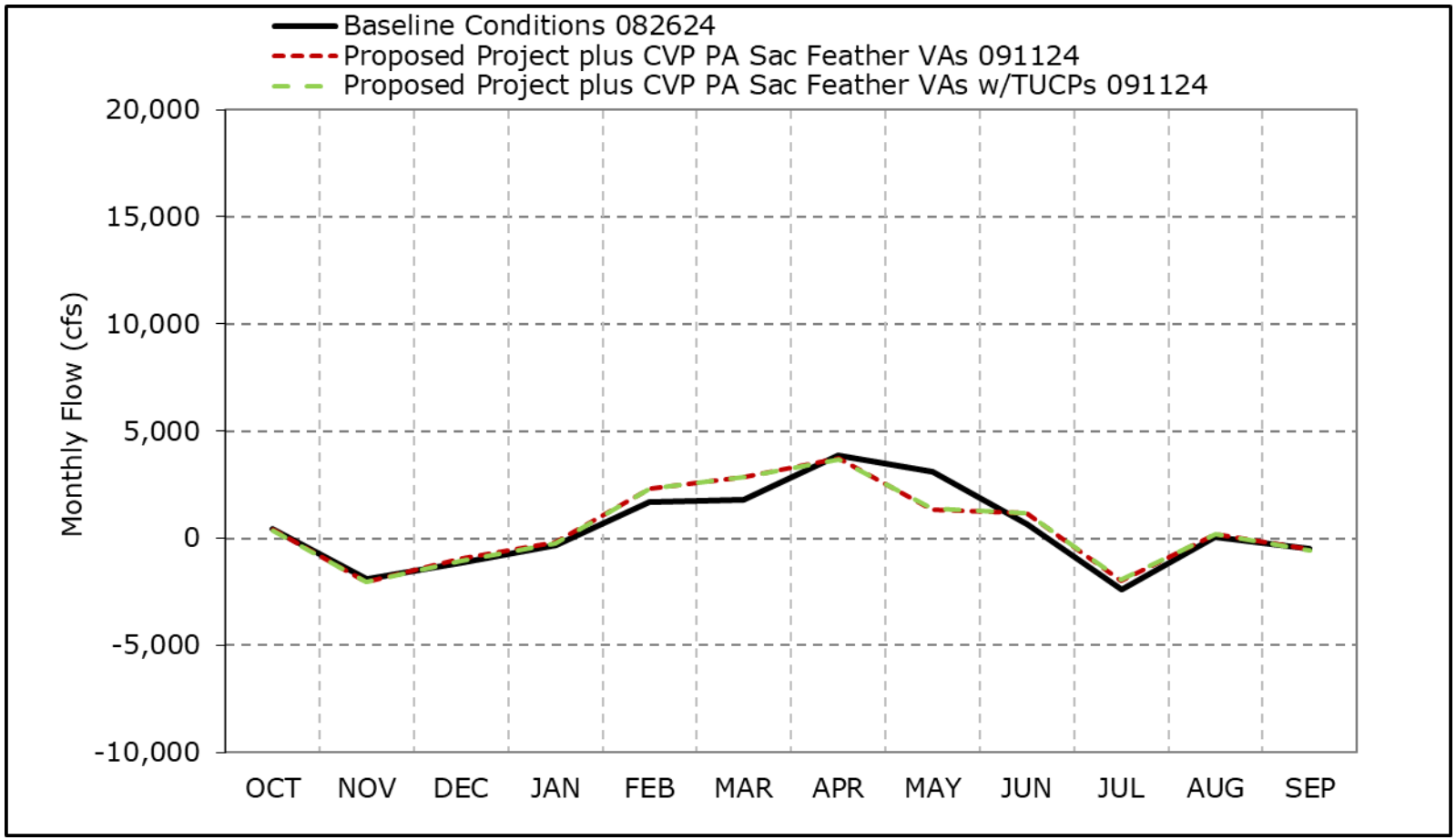
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9d. Qwest, Below Normal Year Average Flow



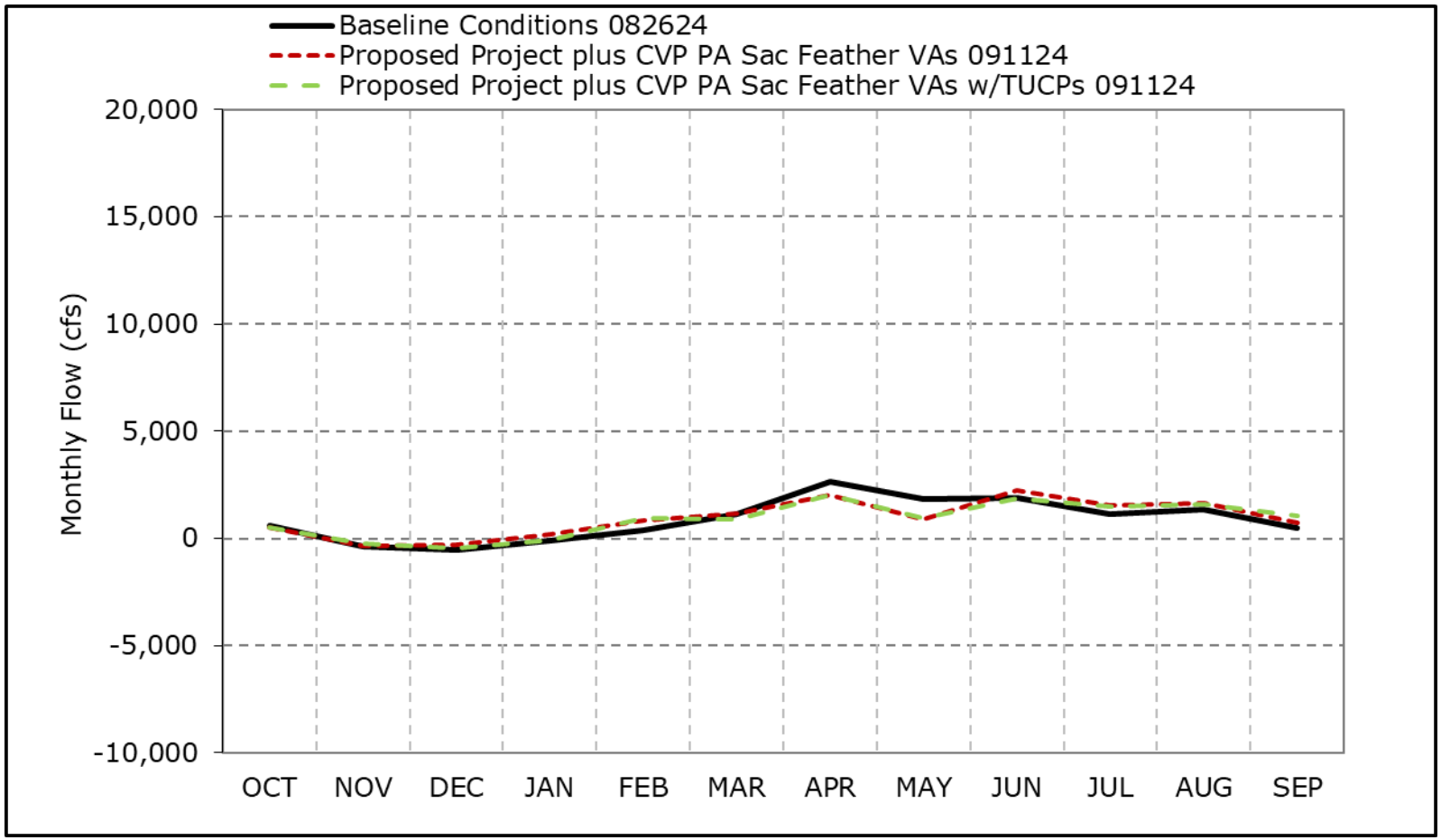
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9e. Qwest, Dry Year Average Flow



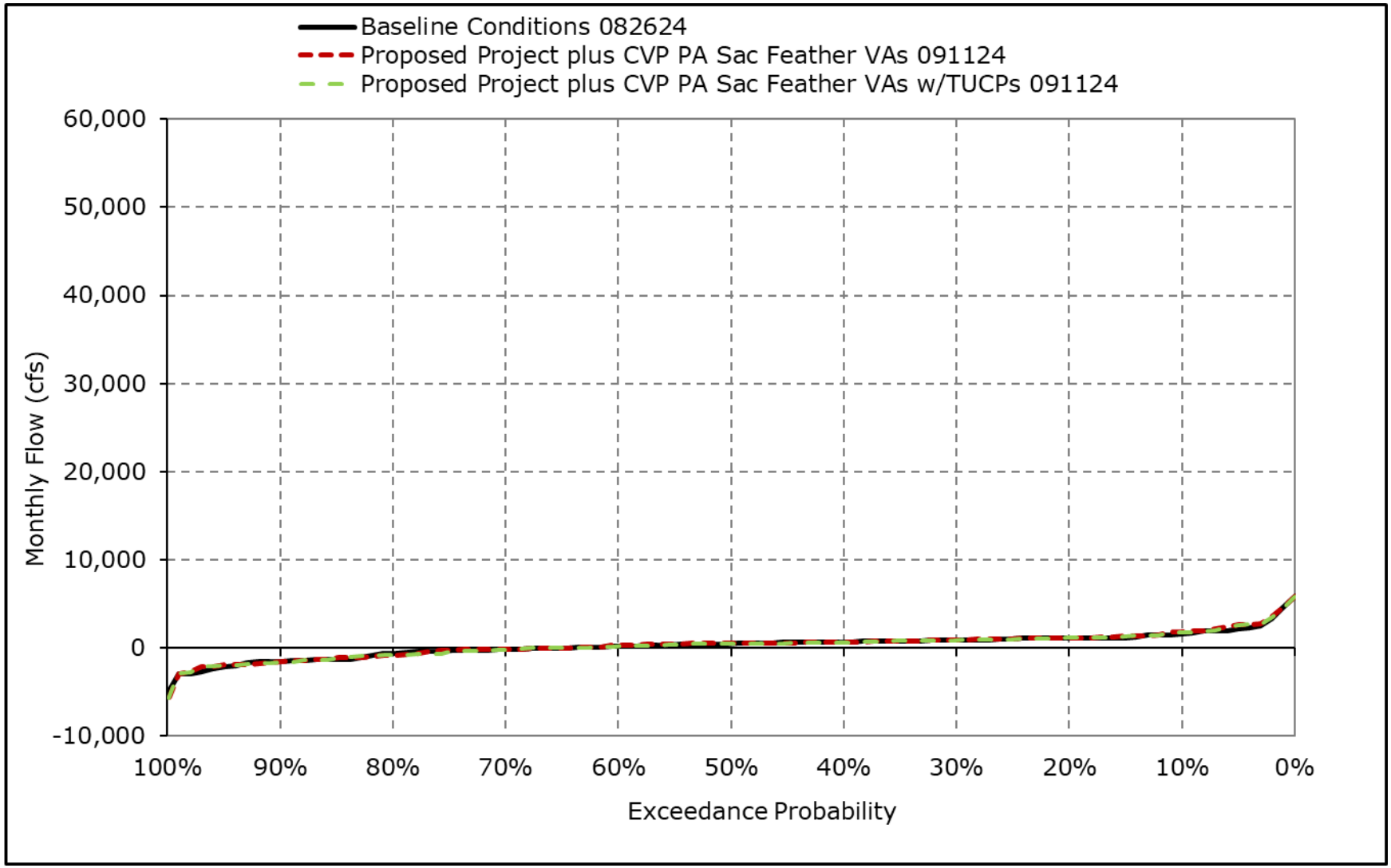
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9f. Qwest, Critical Year Average Flow



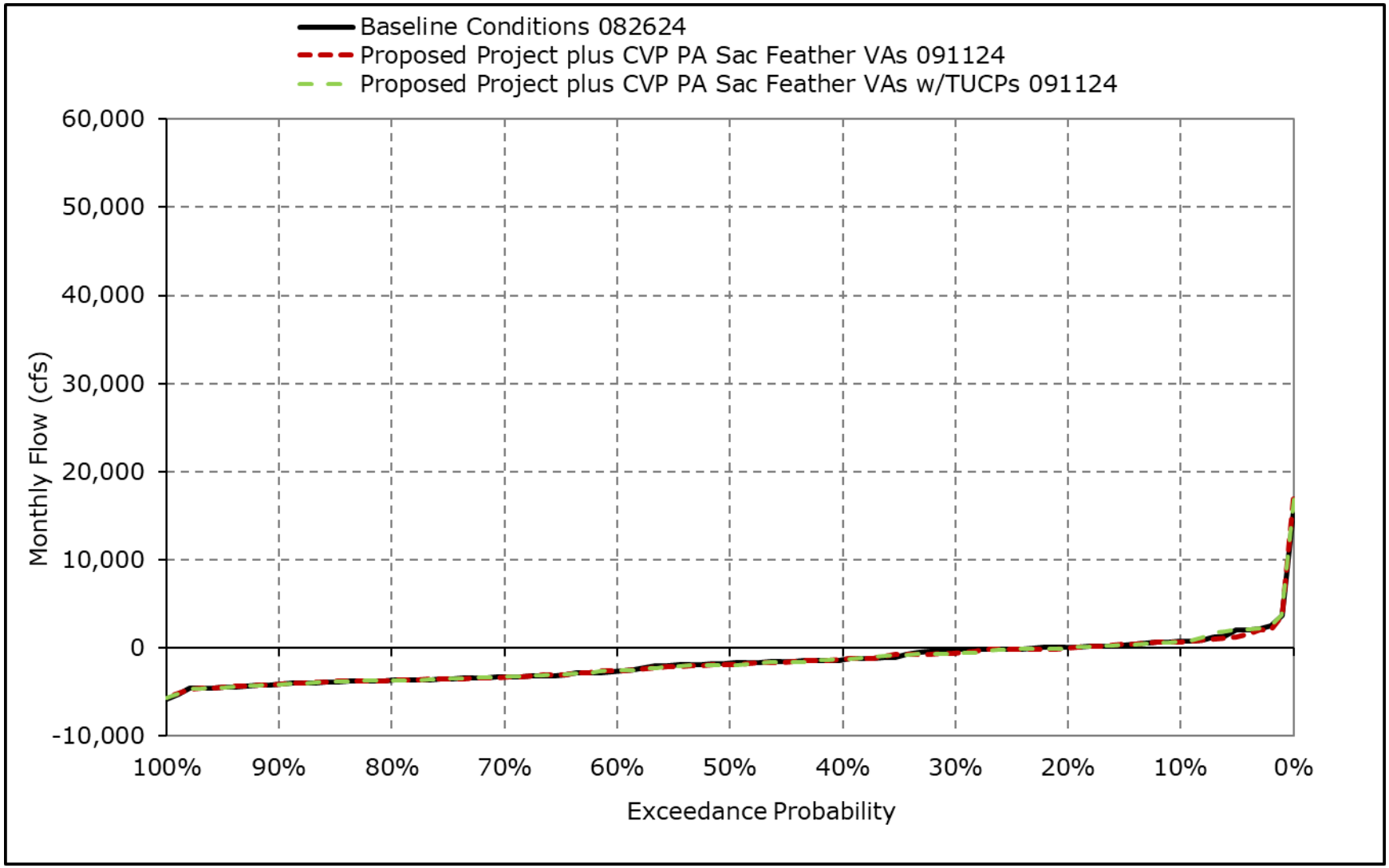
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9g. Qwest, October



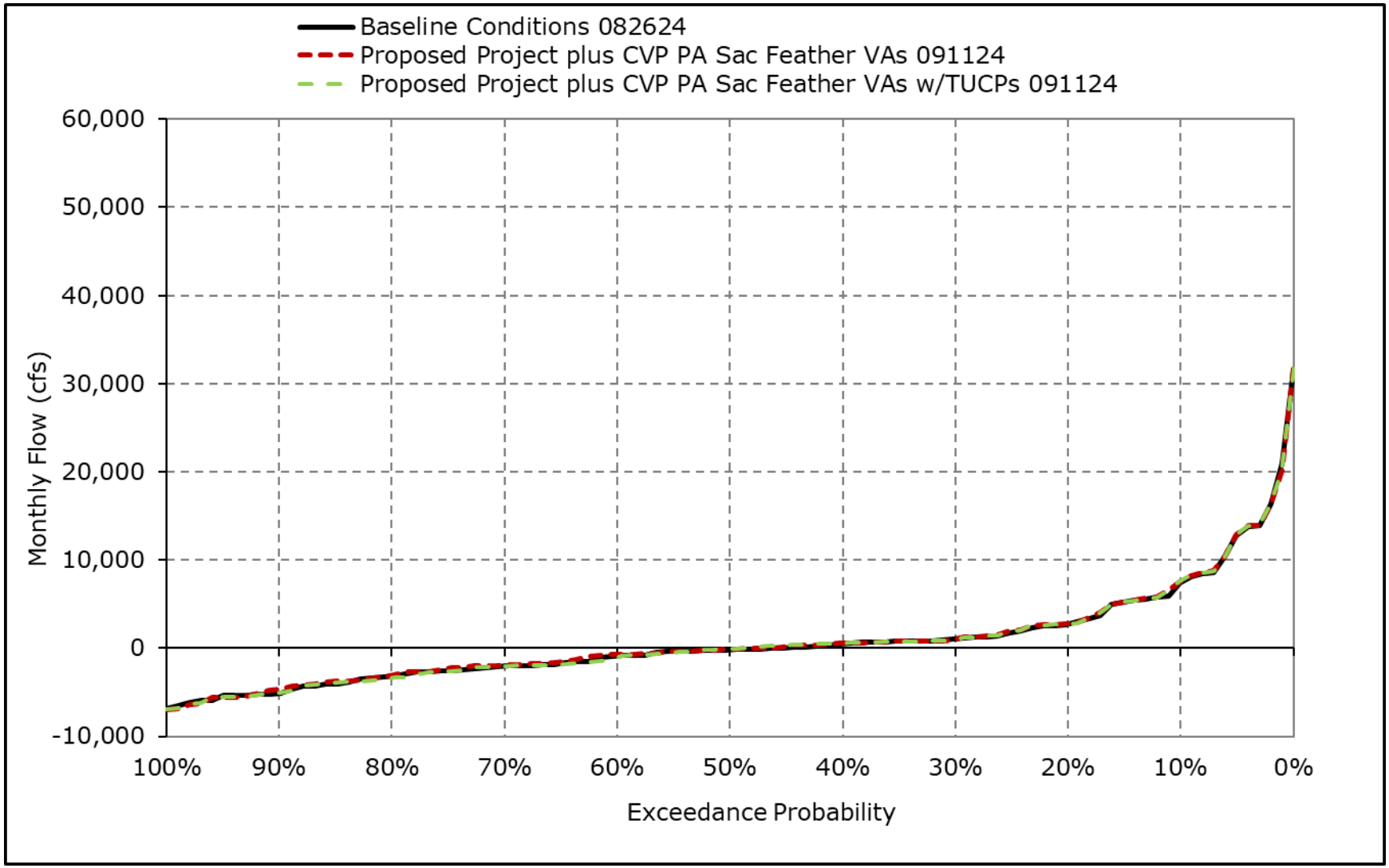
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9h. Qwest, November



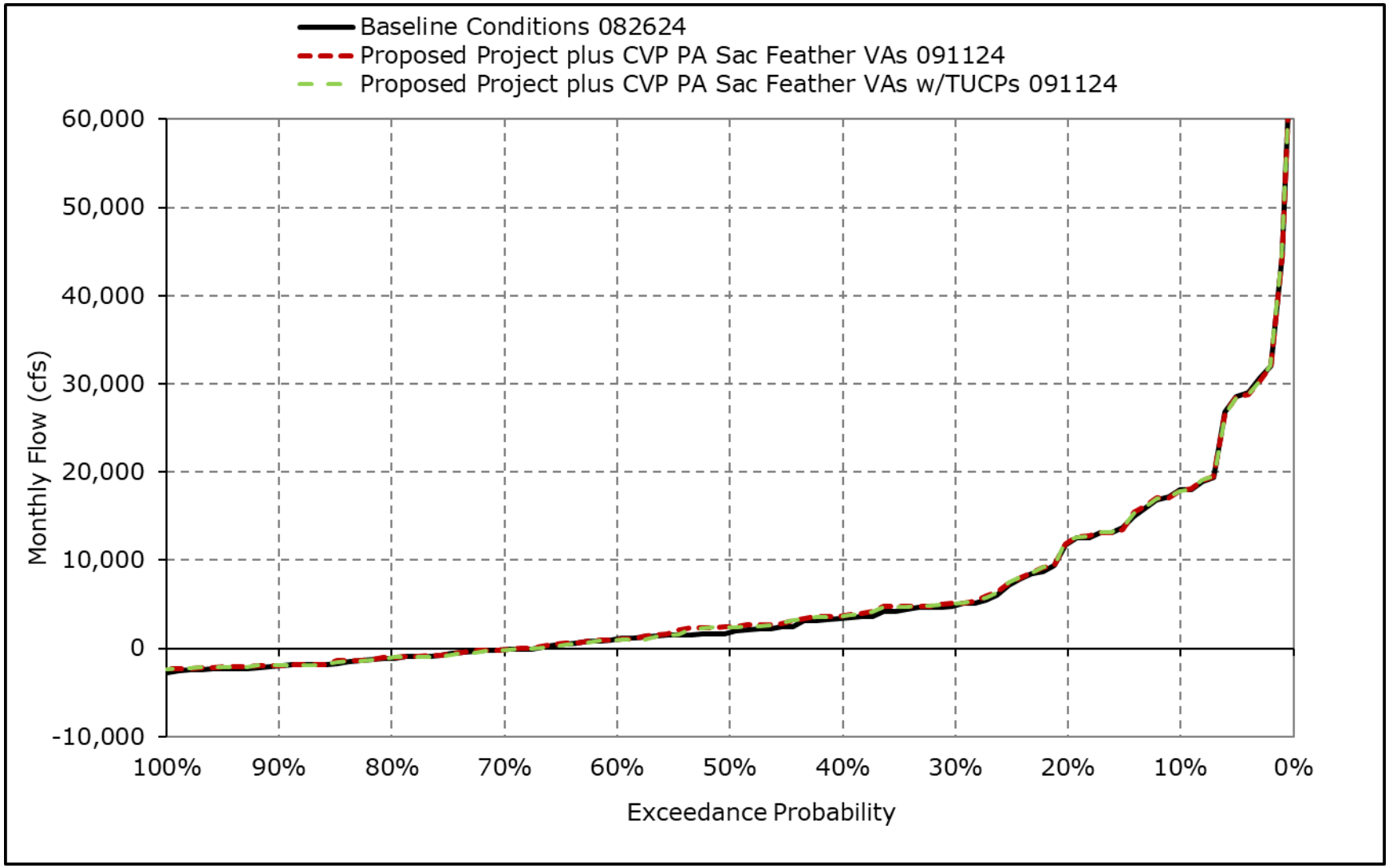
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9i. Qwest, December



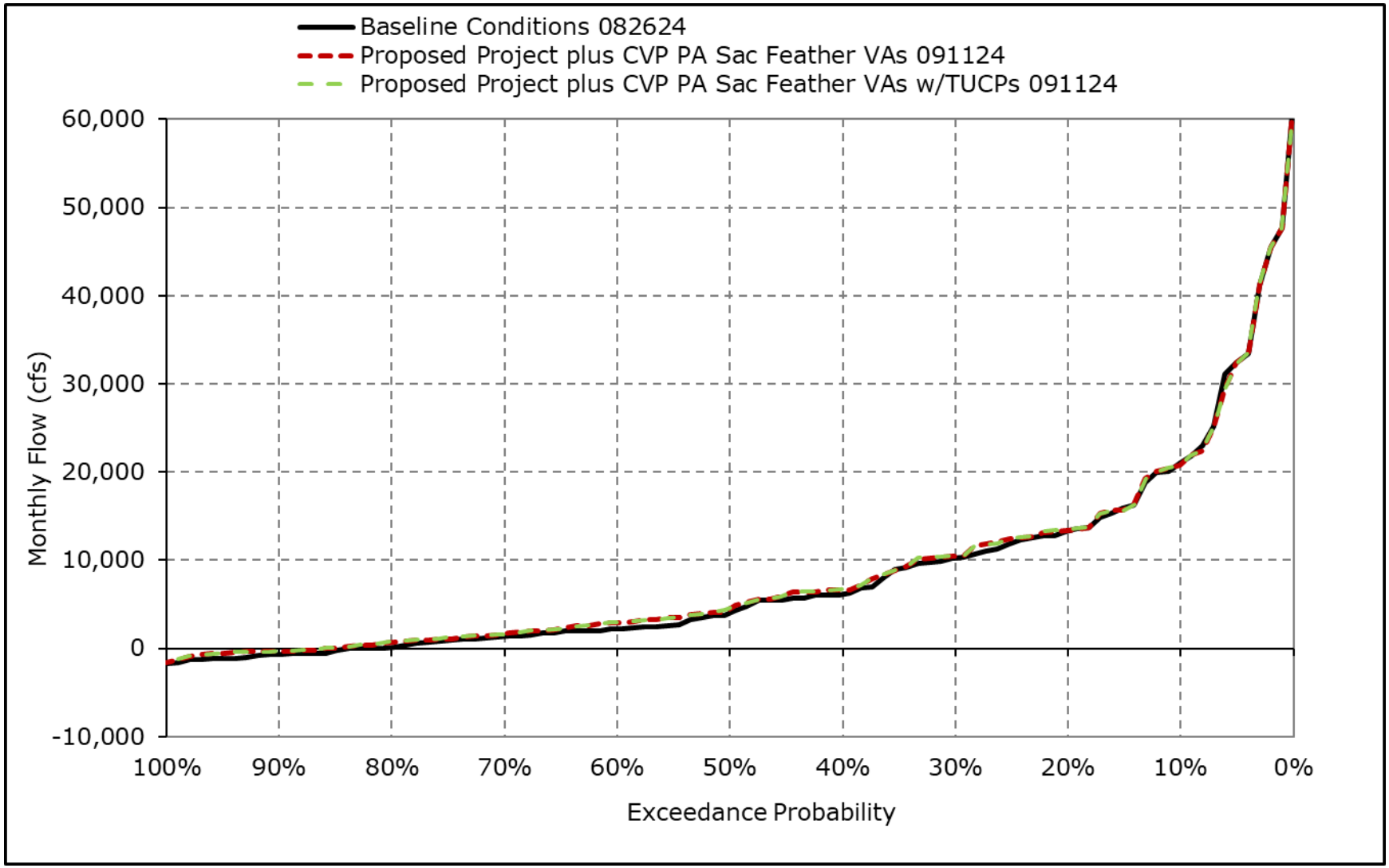
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9j. Qwest, January



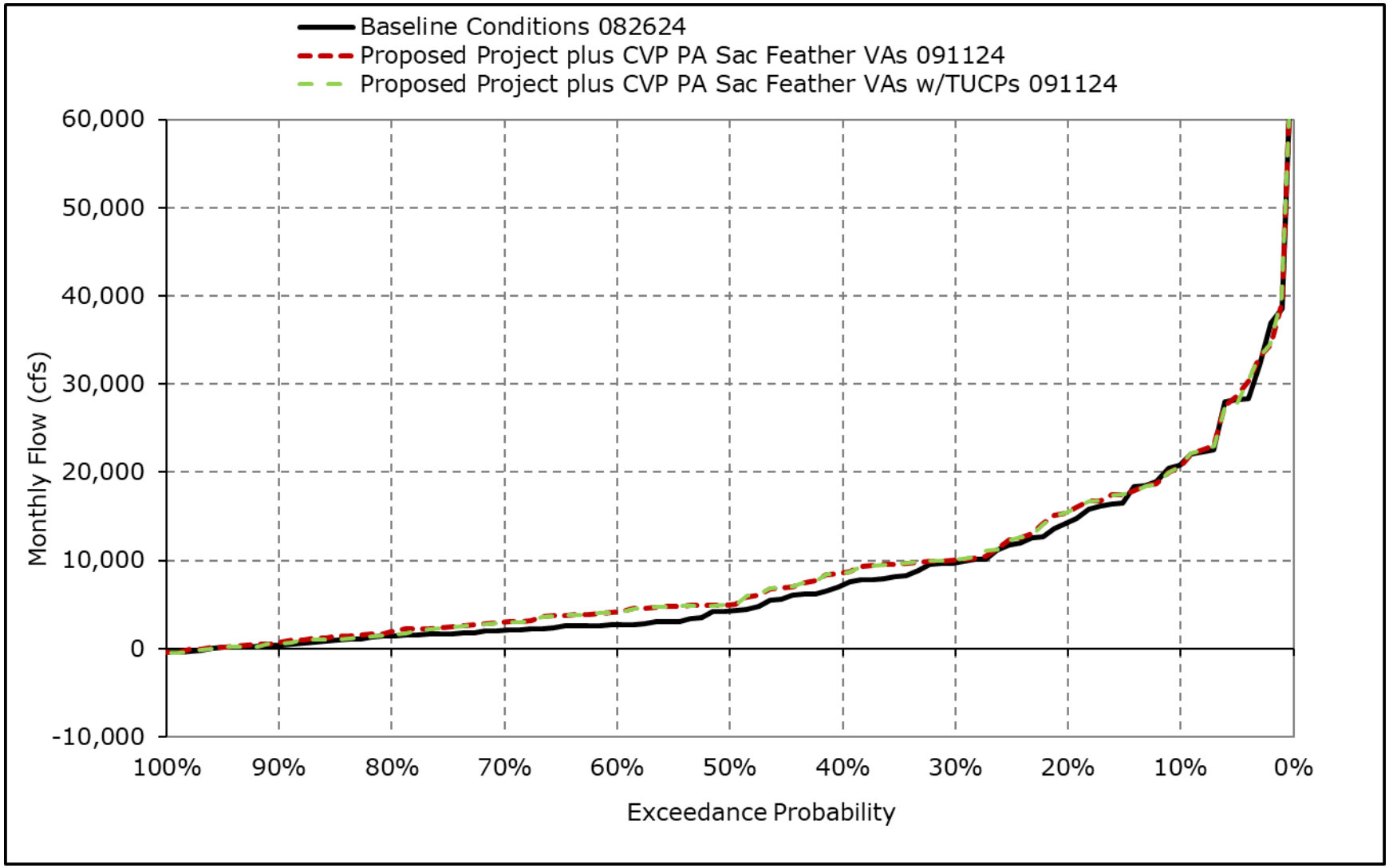
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9k. Qwest, February



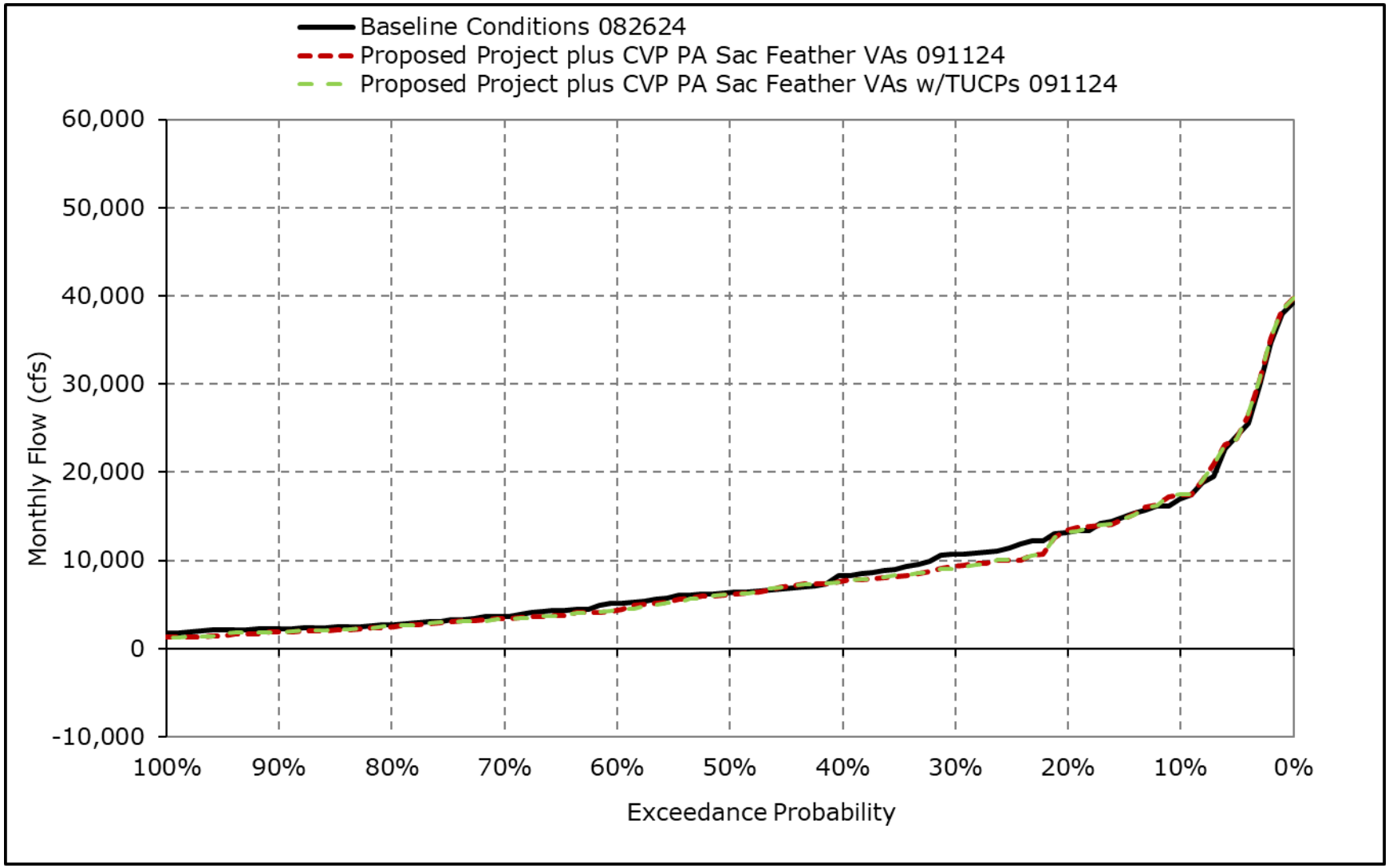
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9l. Qwest, March



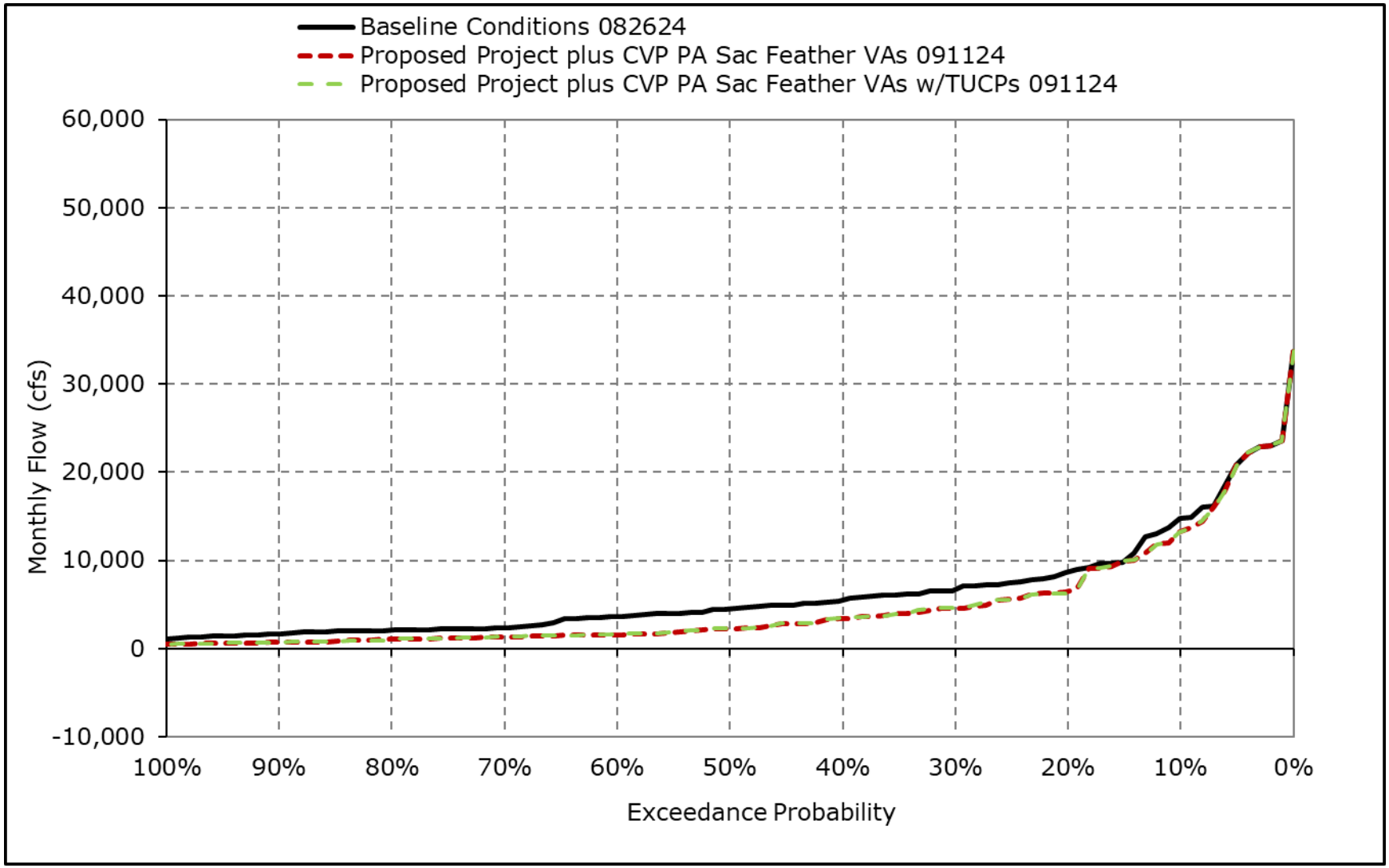
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9m. Qwest, April



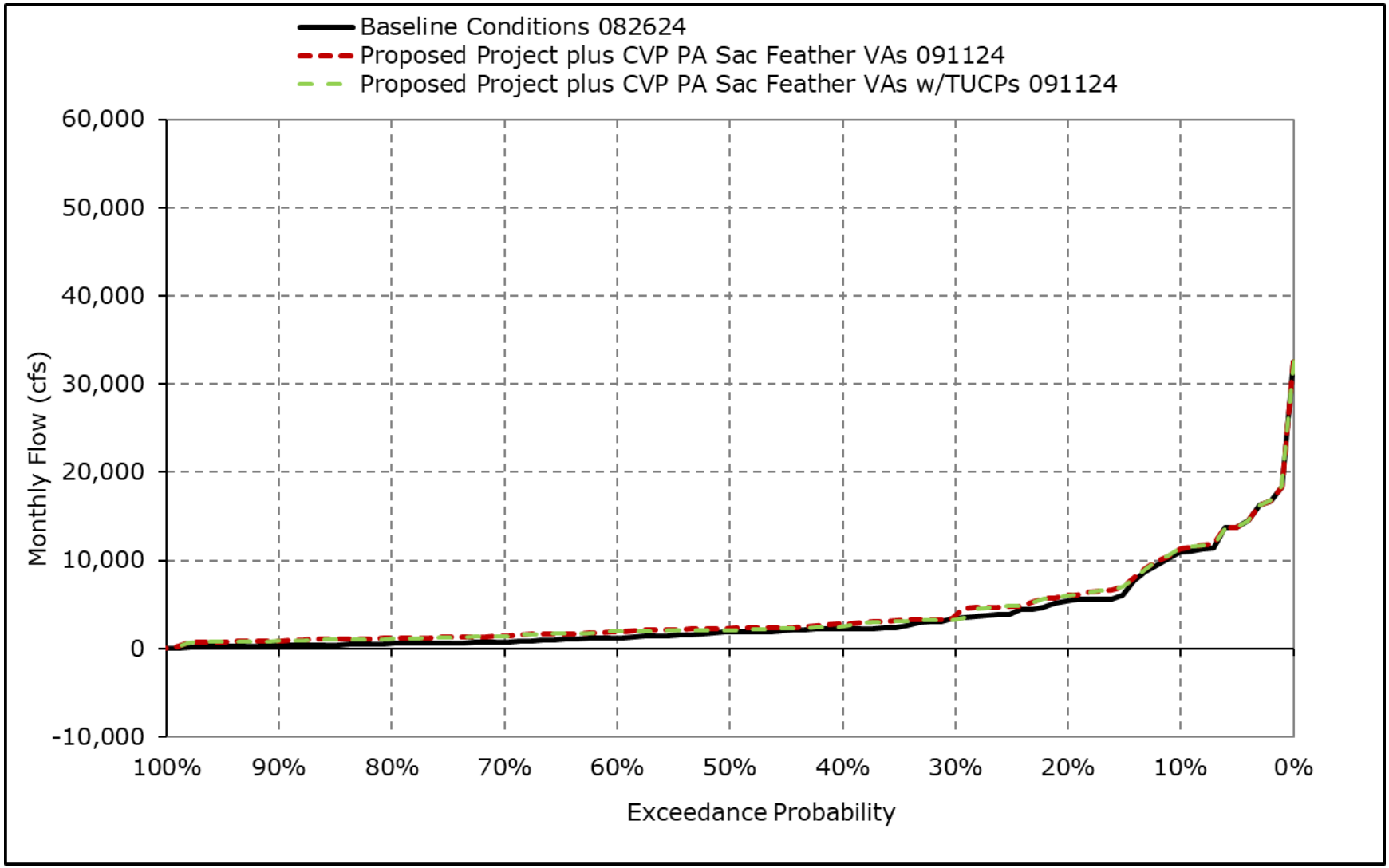
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9n. Qwest, May



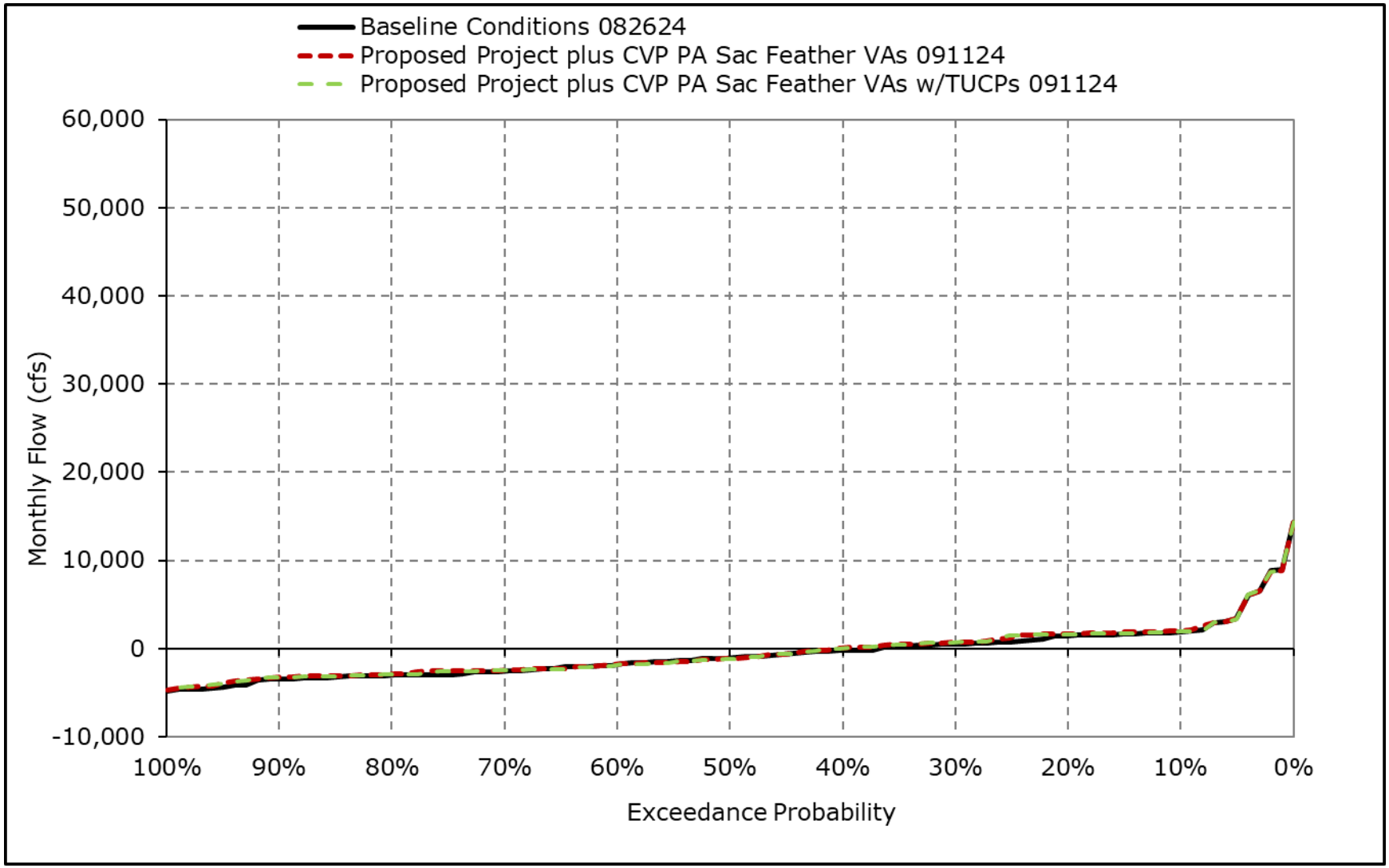
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9o. Qwest, June



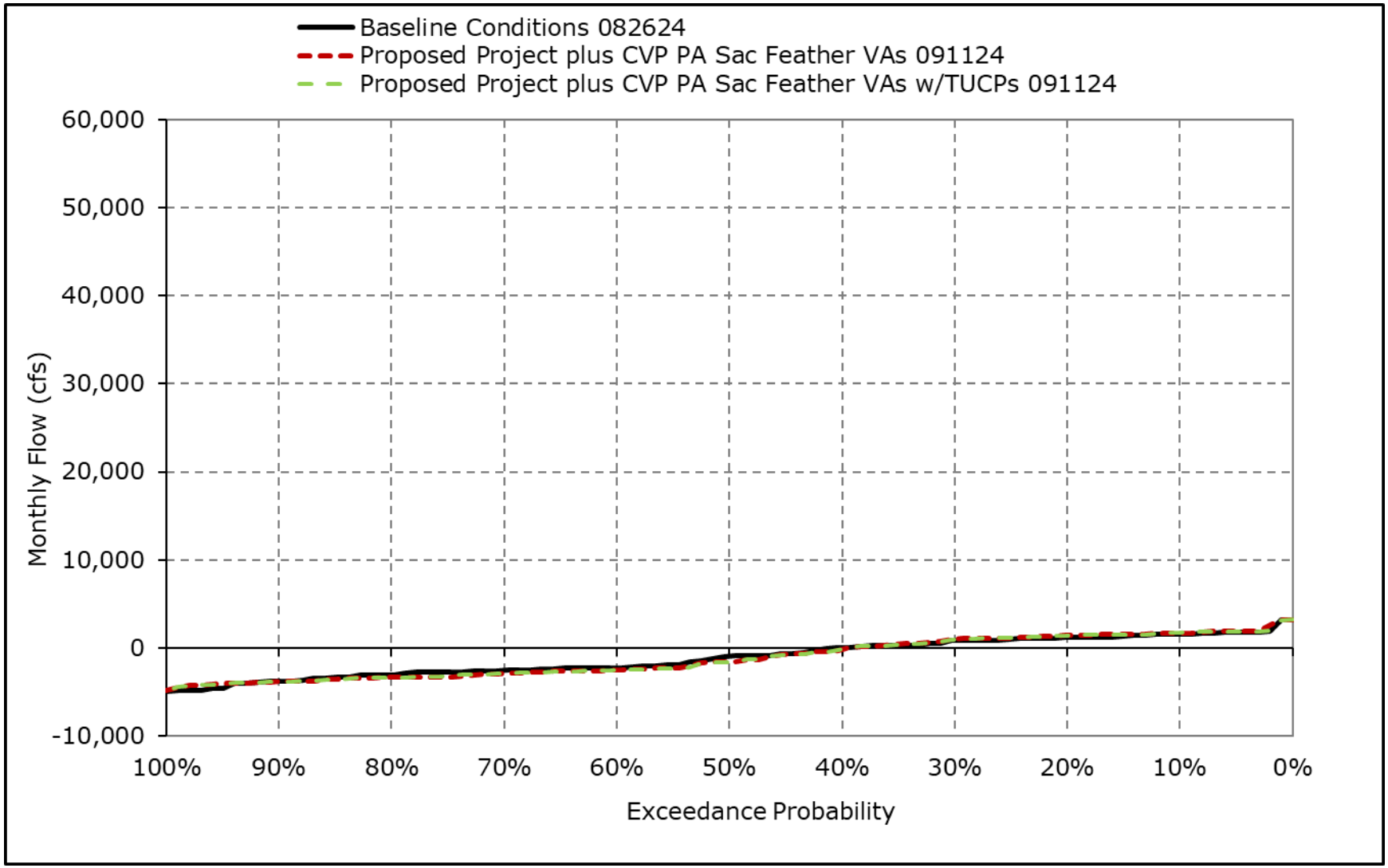
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9p. Qwest, July



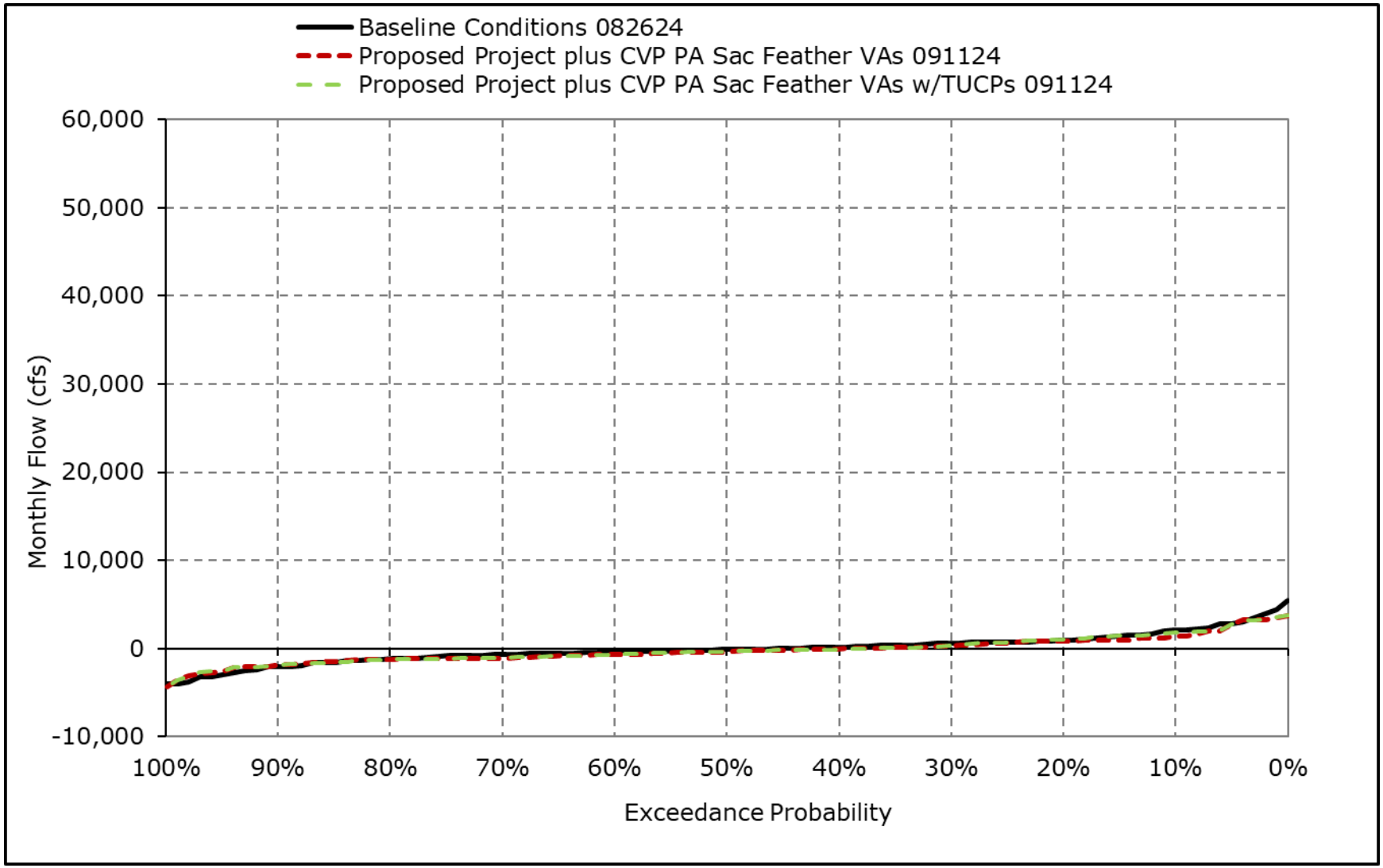
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-9q. Qwest, August



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

Figure 4F-3-9r. Qwest, September



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

Table 4F-3-10-1a. 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 4F-3-10-1b. Delta Outflow, Proposed Project plus CVP PA Sac Feather VAs 091124, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,594	13,484	60,373	113,897	126,907	115,616	67,685	53,146	31,319	10,398	6,023	10,999
20% Exceedance	8,128	7,630	36,578	72,910	82,178	69,405	48,124	35,805	21,376	9,178	5,532	10,315
30% Exceedance	7,897	6,564	19,908	40,031	60,788	53,235	30,444	23,204	13,184	8,998	5,369	10,044
40% Exceedance	7,813	6,078	12,630	29,068	45,383	41,153	25,771	16,644	9,516	8,191	5,126	8,921
50% Exceedance	5,069	5,853	9,172	21,272	33,341	28,864	20,649	12,858	7,426	8,025	4,004	4,155
60% Exceedance	4,108	5,446	7,745	15,731	24,078	23,151	14,786	11,428	7,103	6,522	4,000	3,341
70% Exceedance	4,000	5,054	6,904	13,217	18,948	18,141	12,524	9,988	7,100	5,021	3,503	3,031
80% Exceedance	4,000	4,771	5,830	9,441	13,460	14,779	11,161	9,253	6,758	5,000	3,500	3,016
90% Exceedance	3,000	4,503	5,247	7,662	10,415	9,419	9,069	5,954	4,017	4,000	3,004	3,003
Full Simulation Period Average[a]	6,388	7,879	21,365	42,945	53,522	47,970	30,605	21,894	14,400	7,852	4,837	6,547
Wet Water Years (32%)	7,786	11,229	40,581	89,863	106,284	93,622	58,876	40,732	27,630	11,509	6,889	10,970
Above Normal Water Years (9%)	6,567	6,349	16,724	52,089	54,616	55,278	30,939	24,379	15,126	9,336	5,645	11,137
Below Normal Water Years (20%)	6,405	6,495	13,159	22,617	36,022	33,100	22,061	16,764	8,938	7,774	4,081	3,904
Dry Water Years (21%)	5,767	6,841	12,705	13,644	23,028	20,585	13,955	10,578	7,145	5,015	3,610	3,391
Critical Water Years (18%)	4,521	5,436	8,742	11,732	14,199	11,625	9,097	6,063	5,050	4,004	3,058	3,007

Table 4F-3-10-1c. Delta Outflow, Proposed Project plus CVP PA Sac Feather VAs 091124 minus Baseline Conditions 082624, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	156	-140	1,362	1,372	-1,378	2,149	-107	-344	895	-1,163	-994	686
20% Exceedance	3	10	3,718	266	118	-389	395	-145	864	-521	-658	159
30% Exceedance	-72	41	-208	931	1,005	1,233	92	-1,200	1,000	-55	-290	44
40% Exceedance	403	36	201	825	2,342	-149	1,062	-2,239	780	-321	-363	-153
50% Exceedance	235	144	473	657	2,750	748	1,646	-2,224	149	-79	-441	92
60% Exceedance	-2	-112	165	466	492	1,072	-347	-792	3	0	0	-21
70% Exceedance	0	-68	175	1,071	1,038	599	254	-639	244	-57	-476	31
80% Exceedance	0	-11	-101	452	501	1,750	326	-82	677	0	0	16
90% Exceedance	0	3	121	-32	206	-207	-482	-774	17	0	4	3
Full Simulation Period Average[a]	36	14	362	507	710	835	177	-961	413	-175	-281	26
Wet Water Years (32%)	41	130	591	652	687	265	110	-866	594	-159	-353	-253
Above Normal Water Years (9%)	182	-435	254	293	576	1,326	1,928	-97	481	-410	-694	883
Below Normal Water Years (20%)	74	11	191	545	921	1,792	-163	-1,939	600	-279	-204	60
Dry Water Years (21%)	-30	24	170	171	692	1,247	440	-801	241	-150	-331	70
Critical Water Years (18%)	-8	25	424	709	605	61	-509	-662	51	0	25	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.

Table 4F-3-10-2a. 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 4F-3-10-2b. Delta Outflow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,594	13,484	60,381	114,555	127,059	115,630	67,655	53,149	31,333	10,396	6,031	10,999
20% Exceedance	8,128	7,751	36,582	75,187	82,178	69,398	48,381	35,796	21,377	9,178	5,532	10,315
30% Exceedance	7,897	6,797	19,906	39,631	60,726	54,832	30,448	23,209	13,187	8,998	5,369	10,045
40% Exceedance	7,813	6,227	12,561	29,068	44,686	41,156	25,774	16,855	9,611	8,191	5,126	8,916
50% Exceedance	4,977	5,902	8,838	21,351	33,908	28,864	20,635	12,860	7,385	8,025	4,004	4,174
60% Exceedance	4,108	5,610	7,535	15,880	24,080	23,176	14,785	11,654	7,100	6,522	4,000	3,668
70% Exceedance	4,000	5,161	6,839	12,532	18,949	18,143	12,238	10,040	7,100	5,021	3,503	3,417
80% Exceedance	4,000	4,782	5,839	9,083	13,808	14,778	10,574	9,253	6,543	5,000	3,500	3,031
90% Exceedance	3,000	4,502	5,270	7,589	10,423	8,627	8,120	6,000	4,000	3,902	3,000	3,016
Full Simulation Period Average[a]	6,378	7,977	21,321	42,926	53,630	48,004	30,343	21,933	14,249	7,752	4,829	6,613
Wet Water Years (32%)	7,775	11,236	40,573	89,939	106,304	93,621	58,883	40,735	27,631	11,508	6,890	10,975
Above Normal Water Years (9%)	6,567	6,817	16,430	52,387	54,925	56,658	31,177	24,394	15,132	9,337	5,646	11,137
Below Normal Water Years (20%)	6,389	6,507	13,181	22,575	36,143	33,153	22,041	16,883	8,973	7,776	4,075	3,912
Dry Water Years (21%)	5,752	6,884	12,672	13,649	23,055	20,575	13,793	10,639	7,145	5,015	3,607	3,412
Critical Water Years (18%)	4,520	5,675	8,677	11,388	14,438	11,080	7,720	6,064	4,166	3,449	3,021	3,333

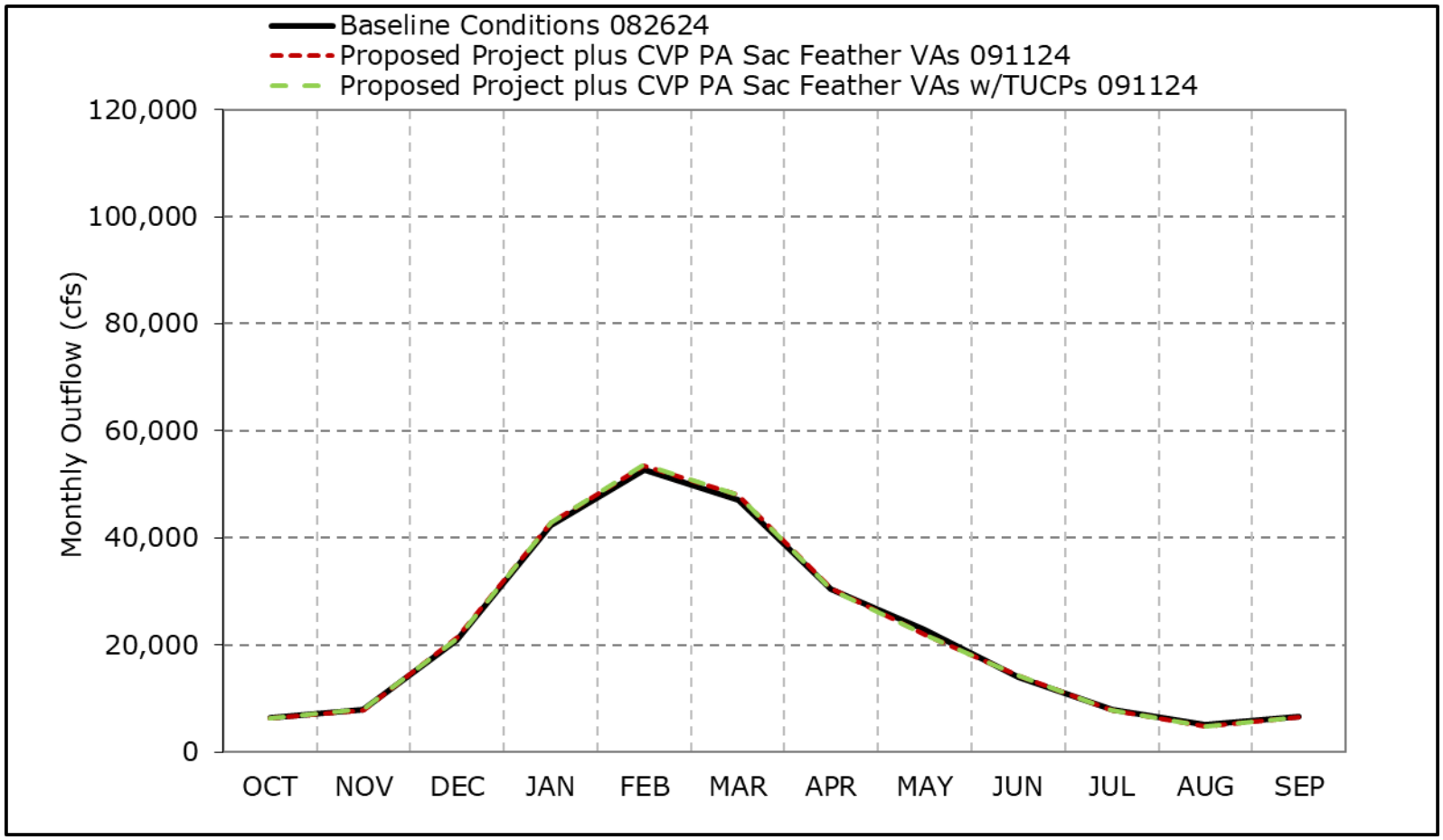
Table 4F-3-10-2c. Delta Outflow, Proposed Project plus CVP PA Sac Feather VAs w/TUCPs 091124 minus Baseline Conditions 082624, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	156	-140	1,370	2,030	-1,225	2,163	-136	-342	908	-1,165	-986	686
20% Exceedance	3	131	3,722	2,544	118	-396	652	-154	865	-521	-658	159
30% Exceedance	-72	274	-210	531	943	2,830	95	-1,196	1,003	-55	-290	45
40% Exceedance	403	185	132	825	1,645	-147	1,064	-2,028	875	-321	-362	-159
50% Exceedance	144	193	139	736	3,317	749	1,632	-2,222	108	-79	-441	112
60% Exceedance	-2	53	-45	616	494	1,097	-347	-567	0	0	0	306
70% Exceedance	0	40	111	385	1,039	601	-32	-587	244	-57	-476	417
80% Exceedance	0	0	-92	94	849	1,749	-261	-82	462	0	0	31
90% Exceedance	0	2	144	-105	214	-998	-1,431	-727	0	-98	0	16
Full Simulation Period Average[a]	26	113	319	489	817	869	-85	-922	262	-275	-289	92
Wet Water Years (32%)	30	137	583	727	707	263	117	-864	595	-160	-352	-248
Above Normal Water Years (9%)	182	33	-40	591	885	2,706	2,166	-82	488	-408	-693	883
Below Normal Water Years (20%)	58	22	212	503	1,042	1,845	-183	-1,820	635	-276	-210	67
Dry Water Years (21%)	-45	67	136	176	719	1,237	279	-741	241	-150	-334	91
Critical Water Years (18%)	-10	263	359	365	844	-484	-1,886	-661	-834	-555	-12	331

[a] Based on the 100-year simulation period.

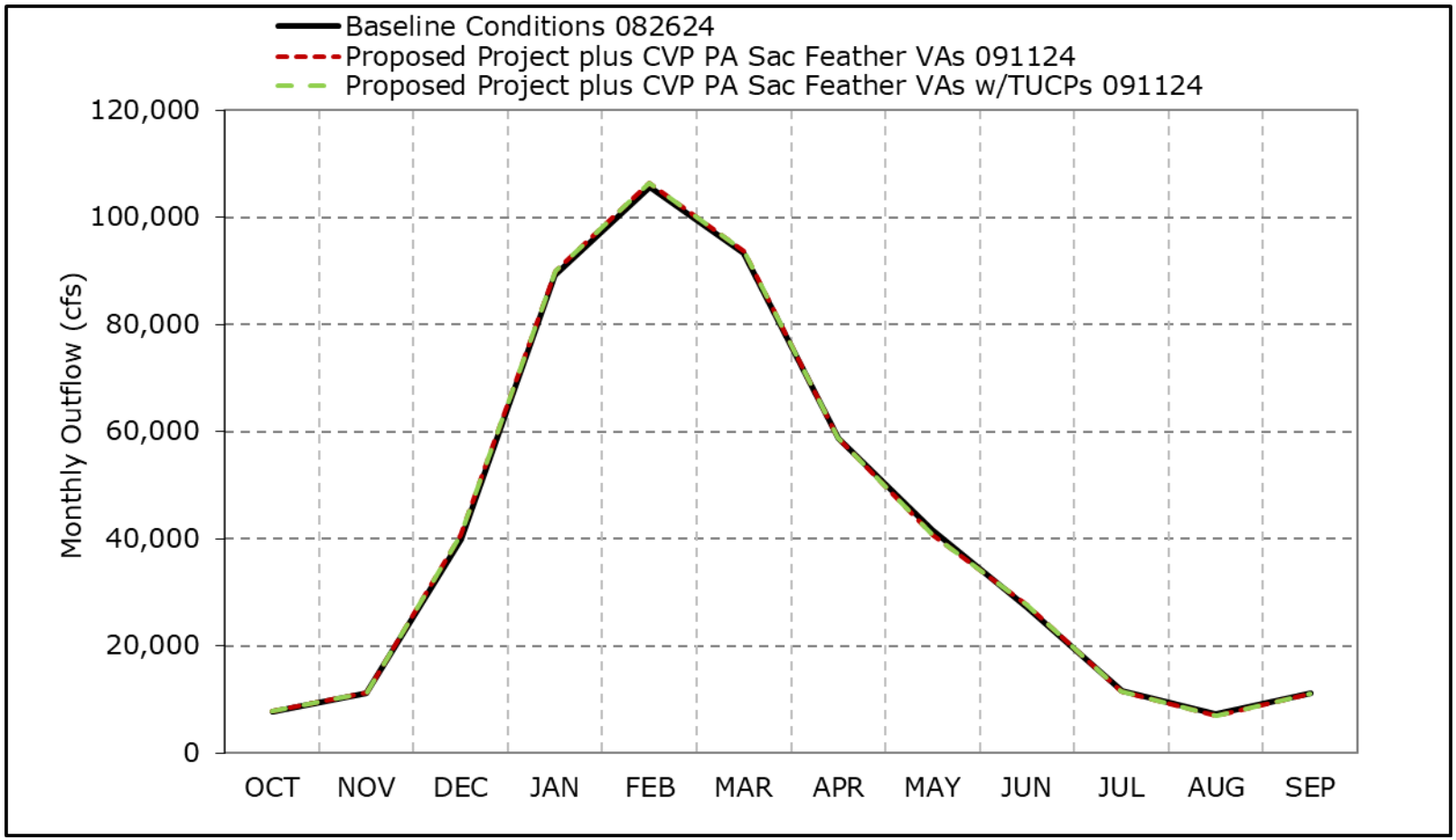
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

Figure 4F-3-10a. Delta Outflow, Long-Term Average Outflow



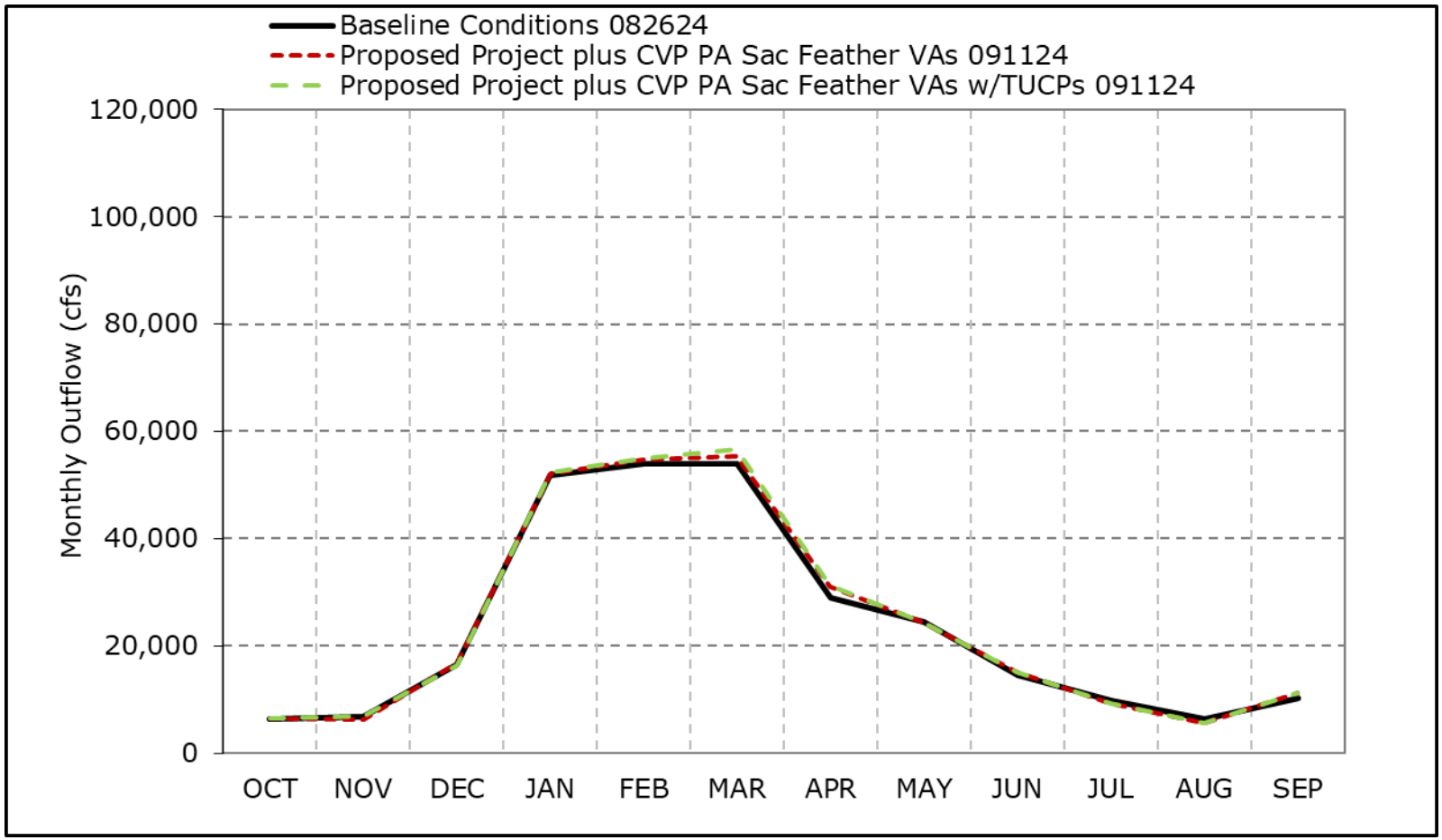
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10b. Delta Outflow, Wet Year Average Outflow



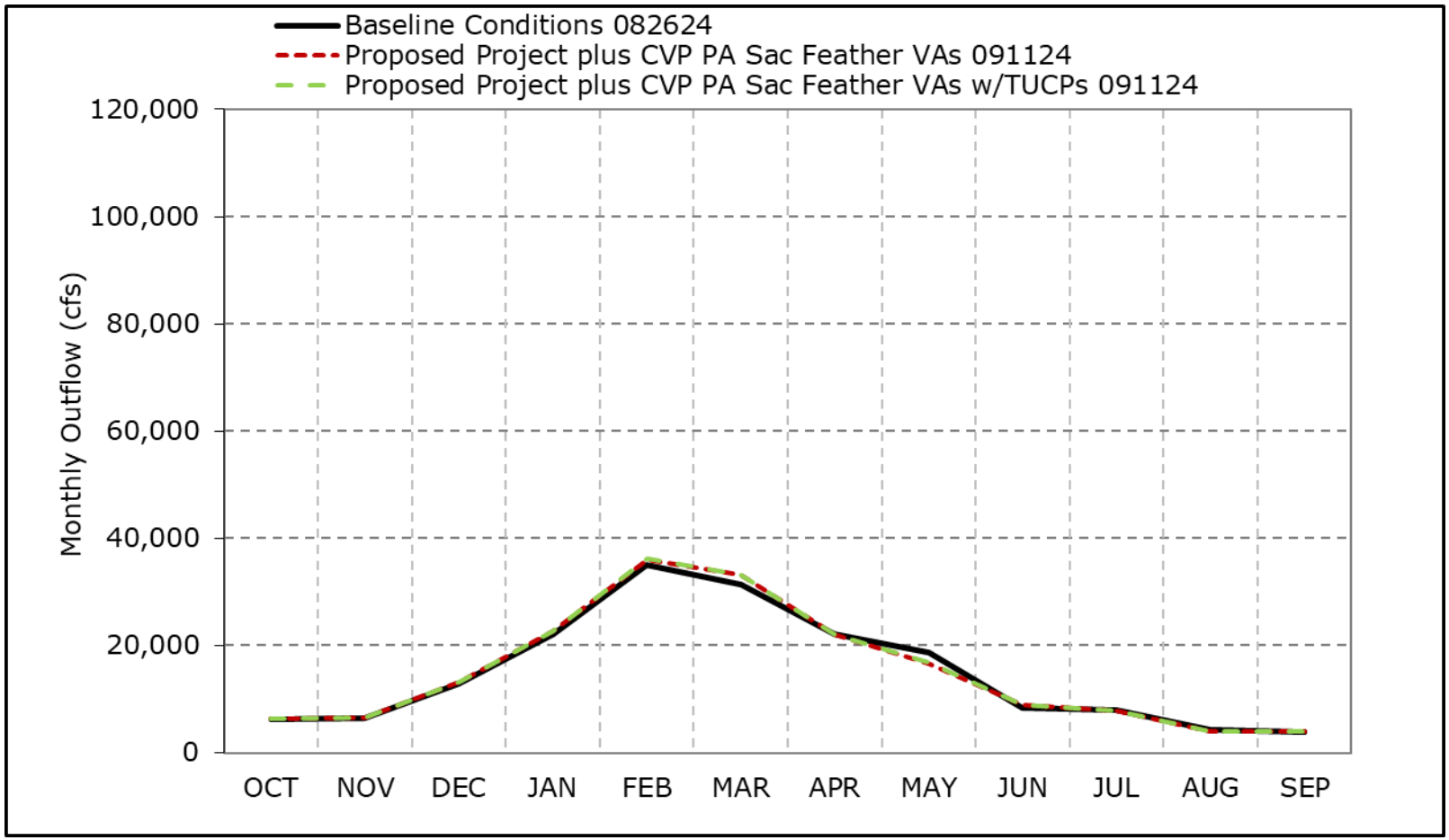
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10c. Delta Outflow, Above Normal Year Average Outflow



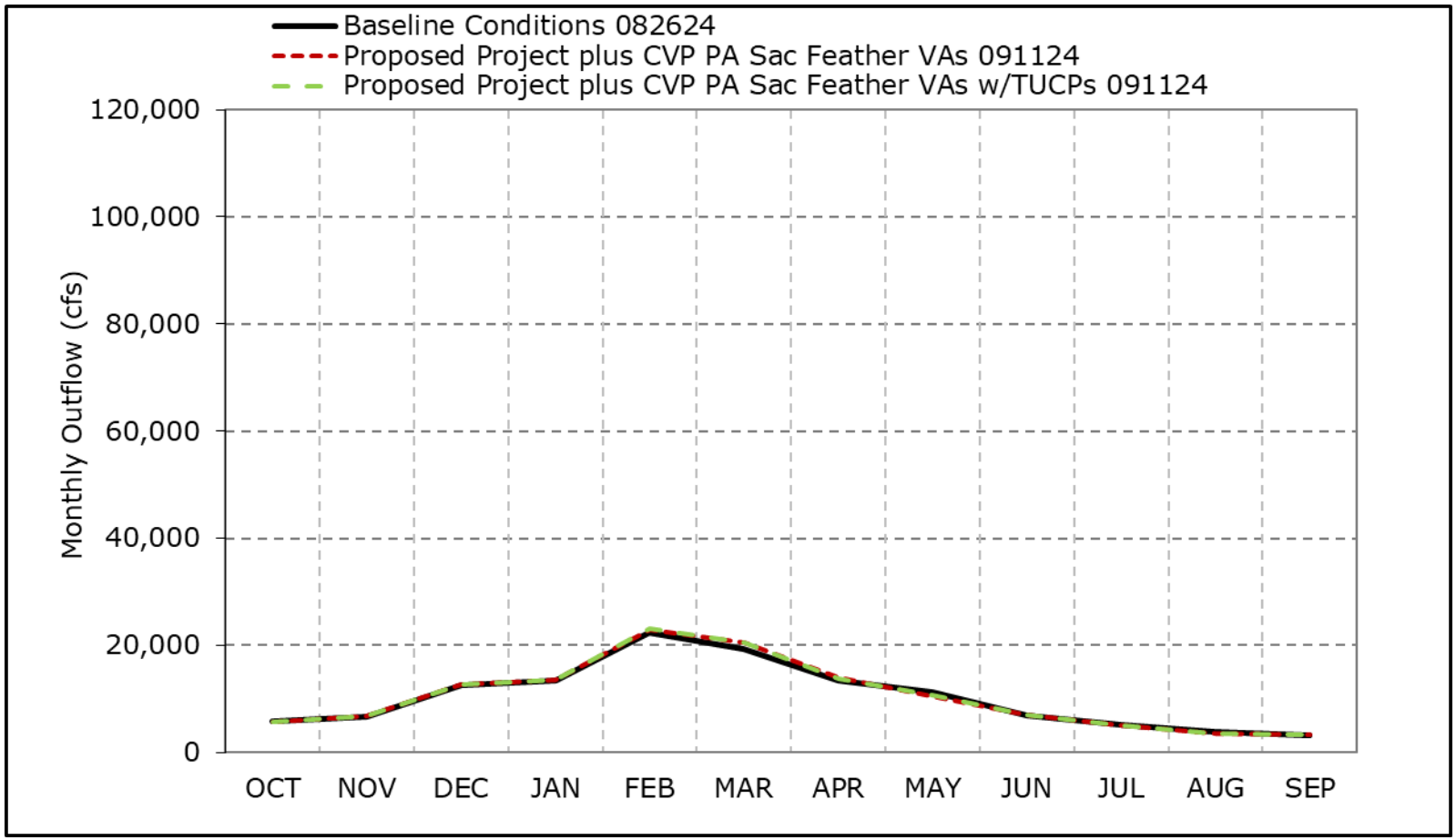
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10d. Delta Outflow, Below Normal Year Average Outflow



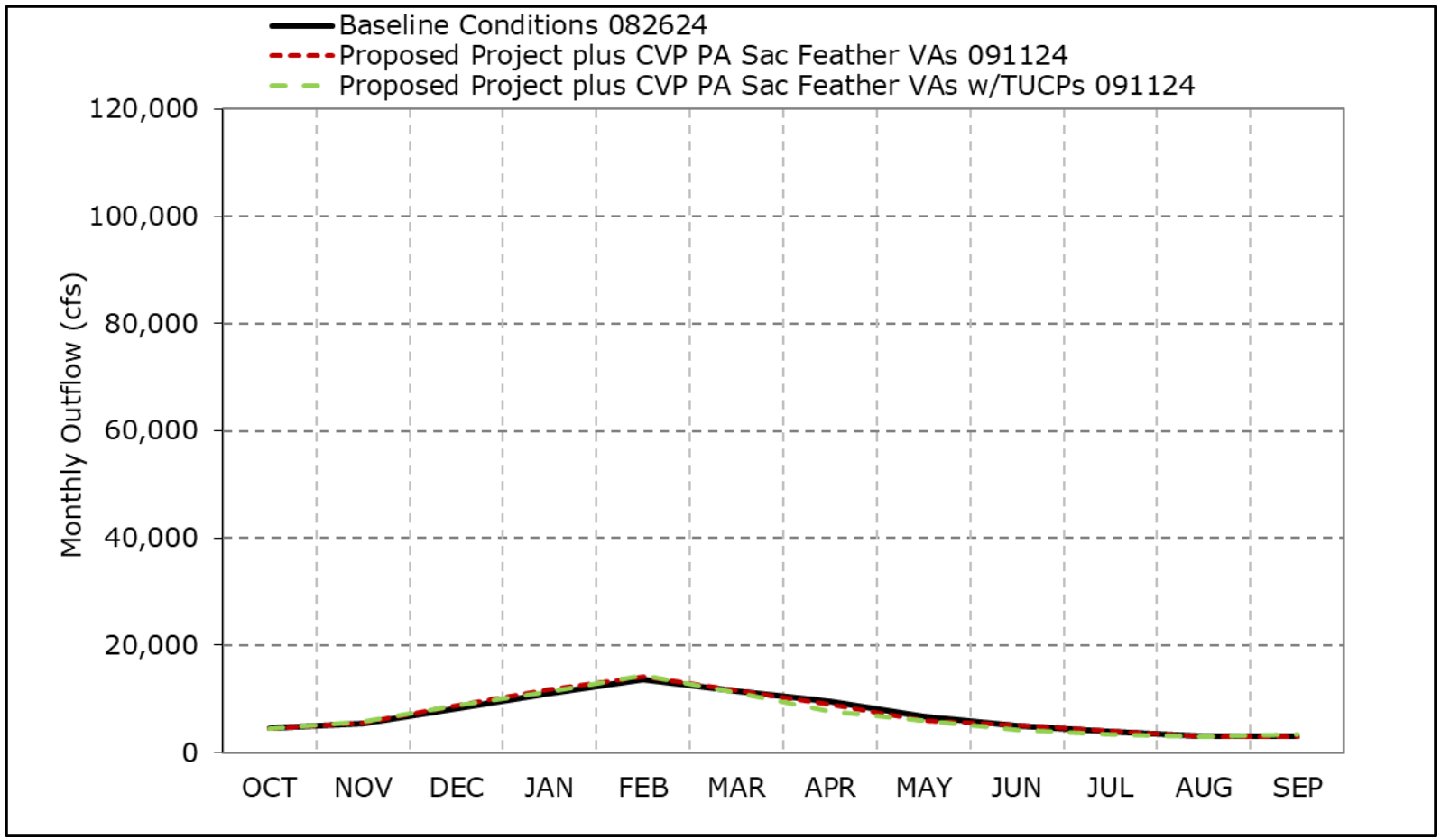
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10e. Delta Outflow, Dry Year Average Outflow



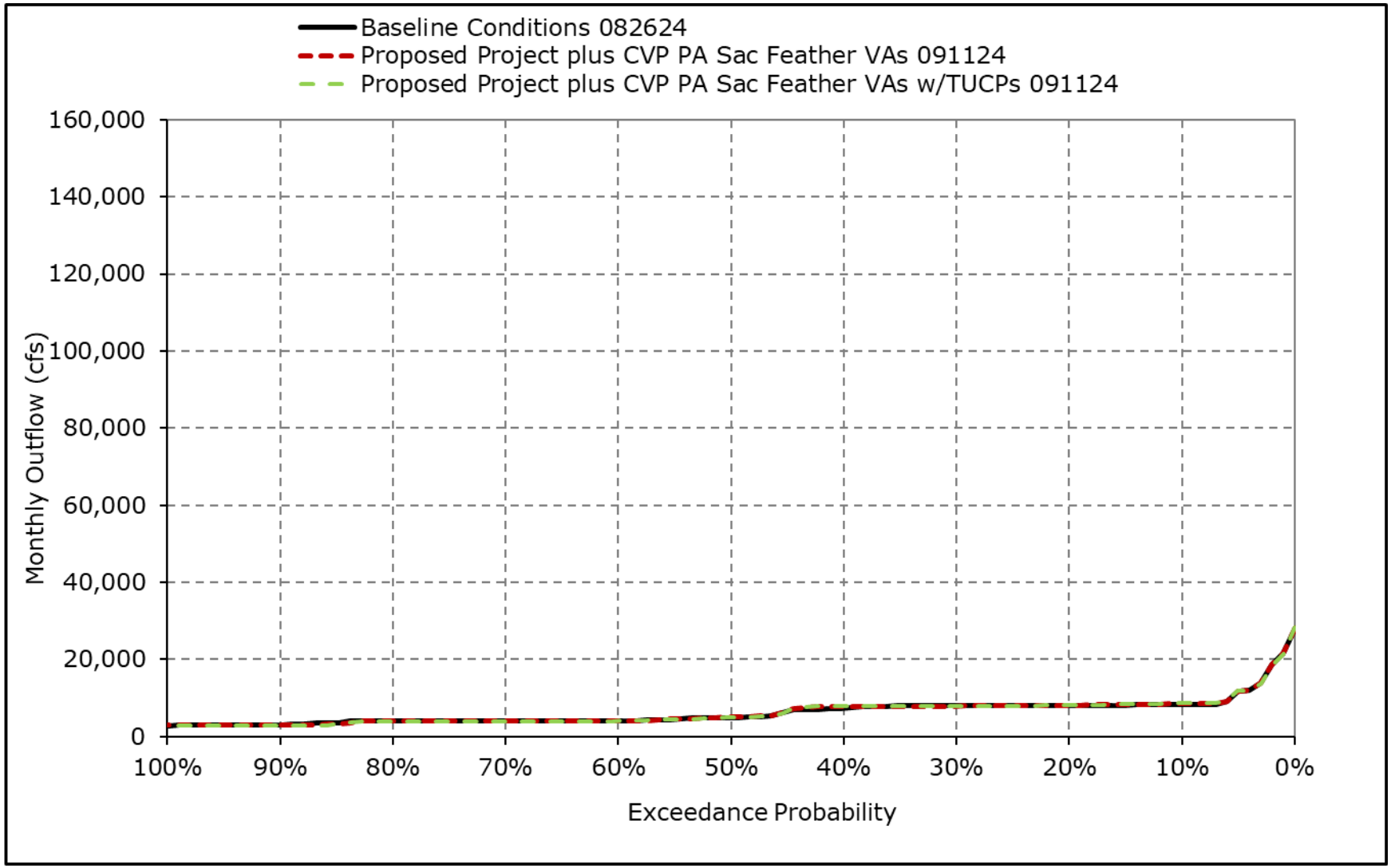
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10f. Delta Outflow, Critical Year Average Outflow



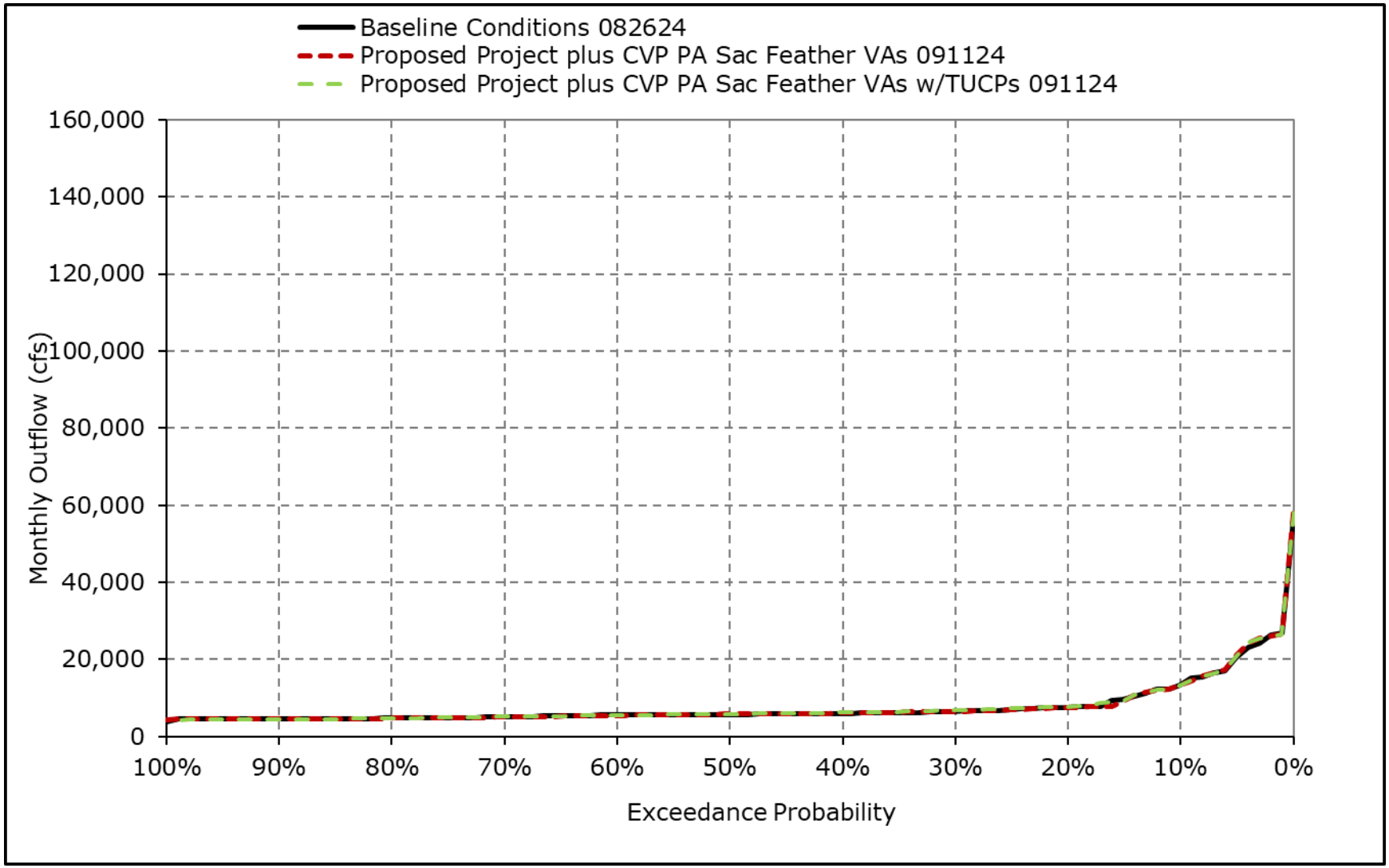
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10g. Delta Outflow, October



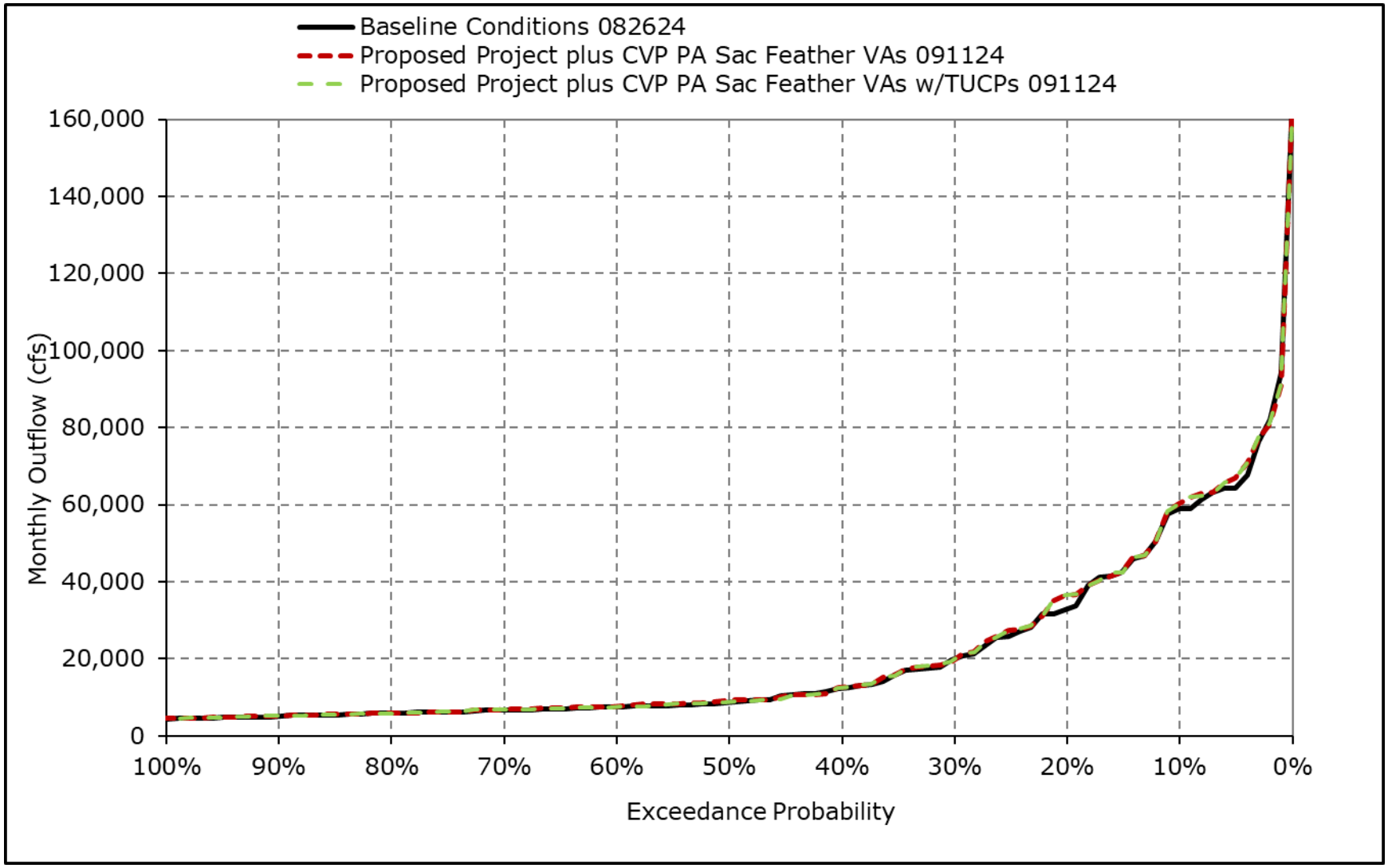
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10h. Delta Outflow, November



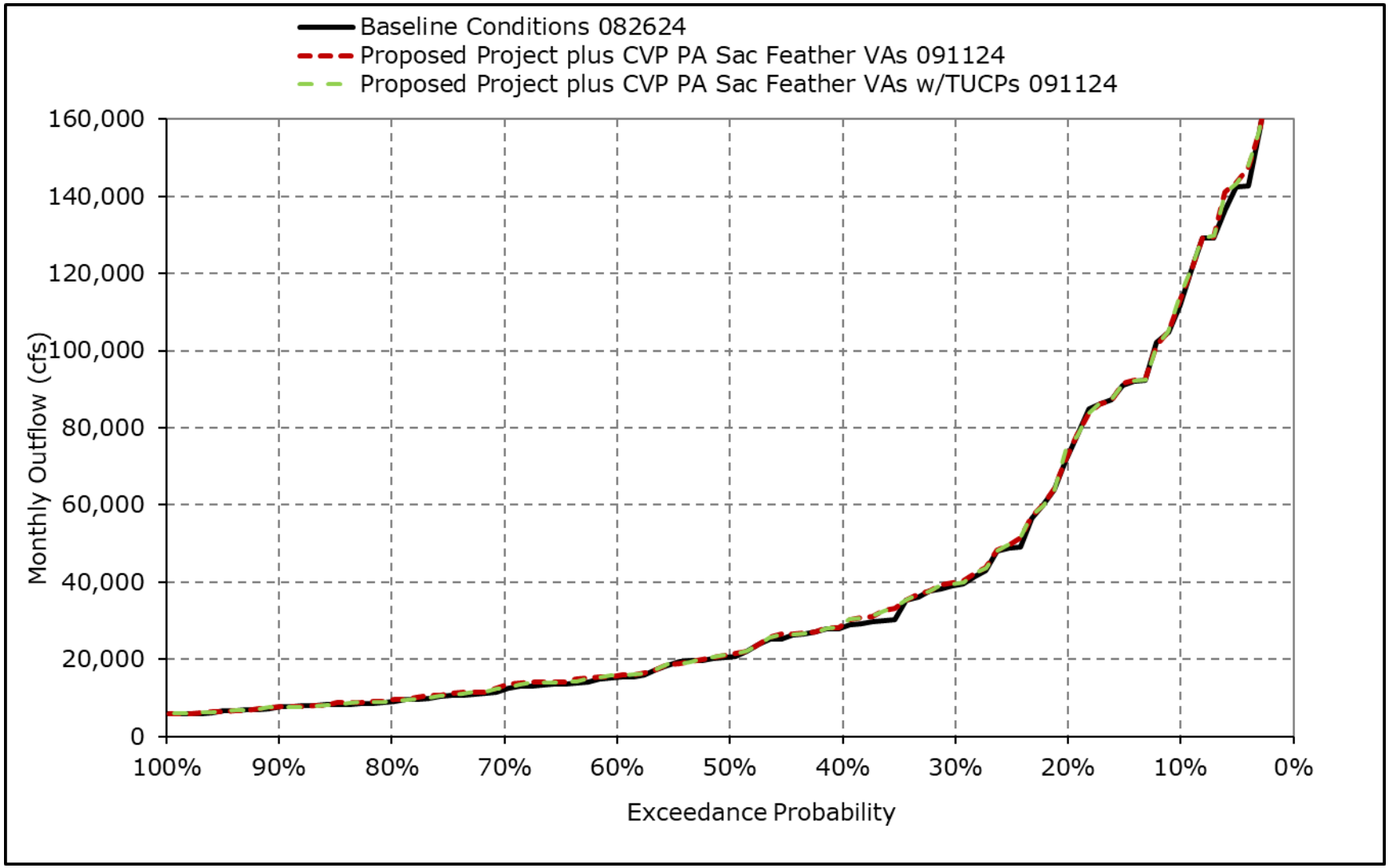
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10i. Delta Outflow, December



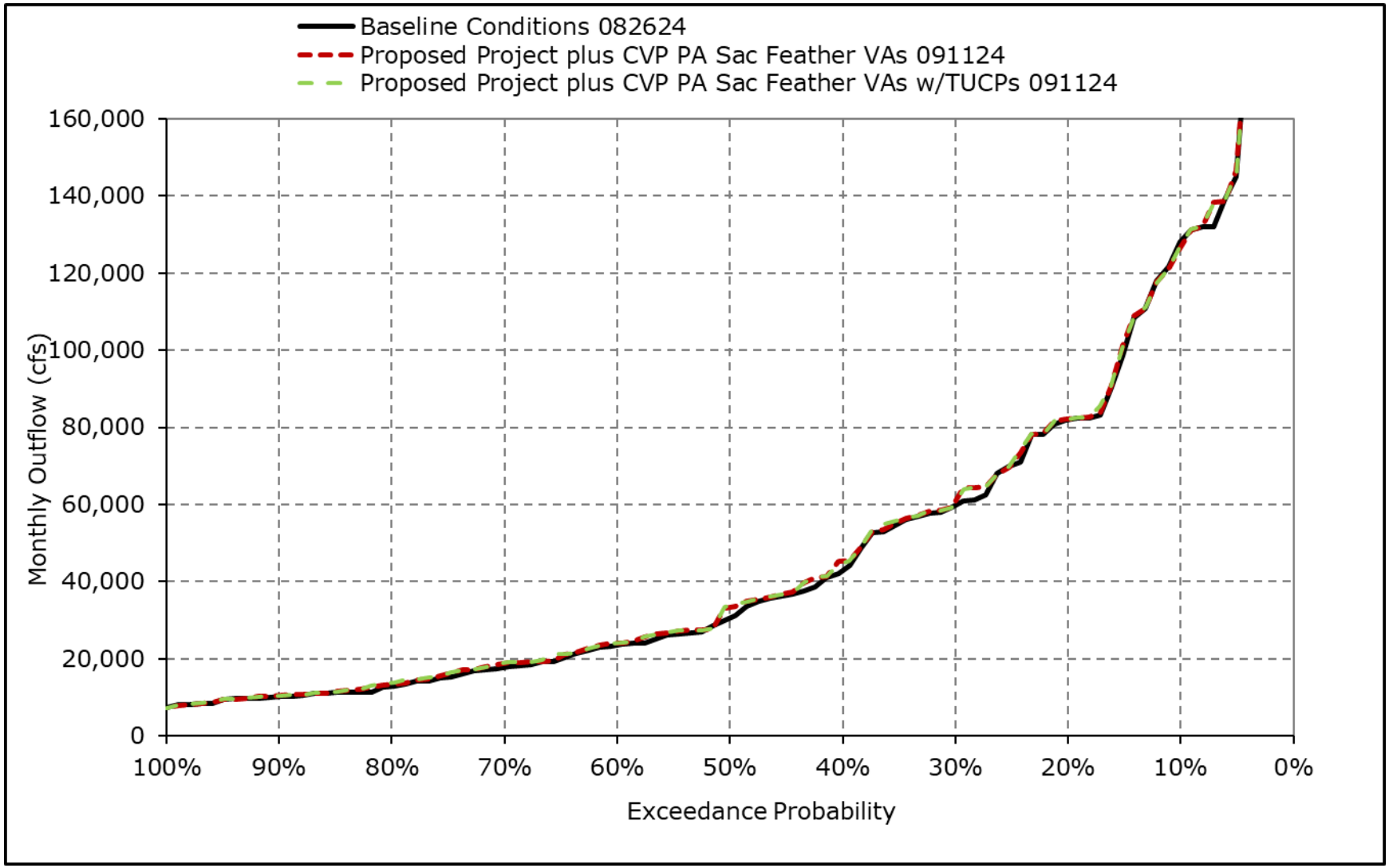
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10j. Delta Outflow, January



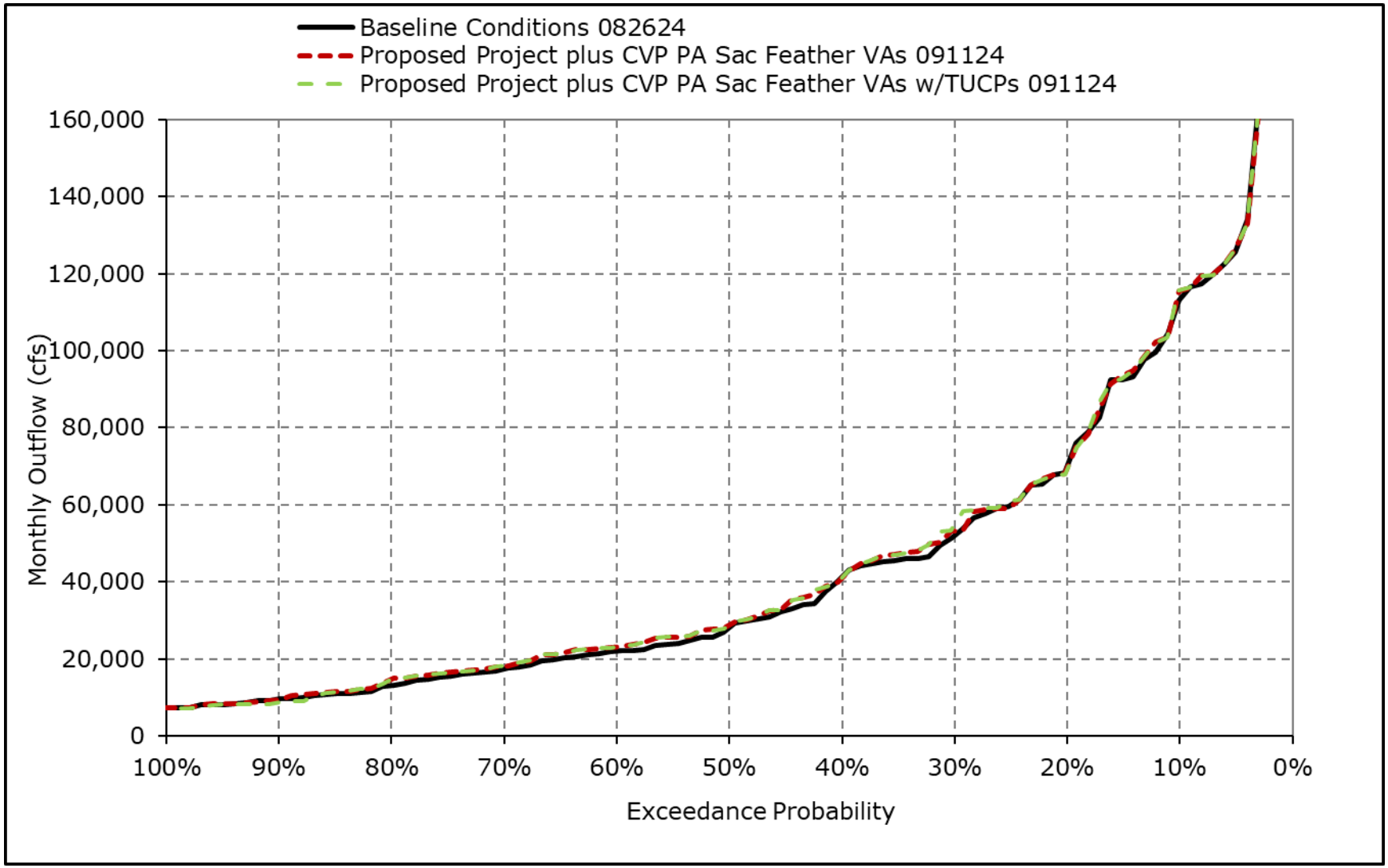
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10k. Delta Outflow, February



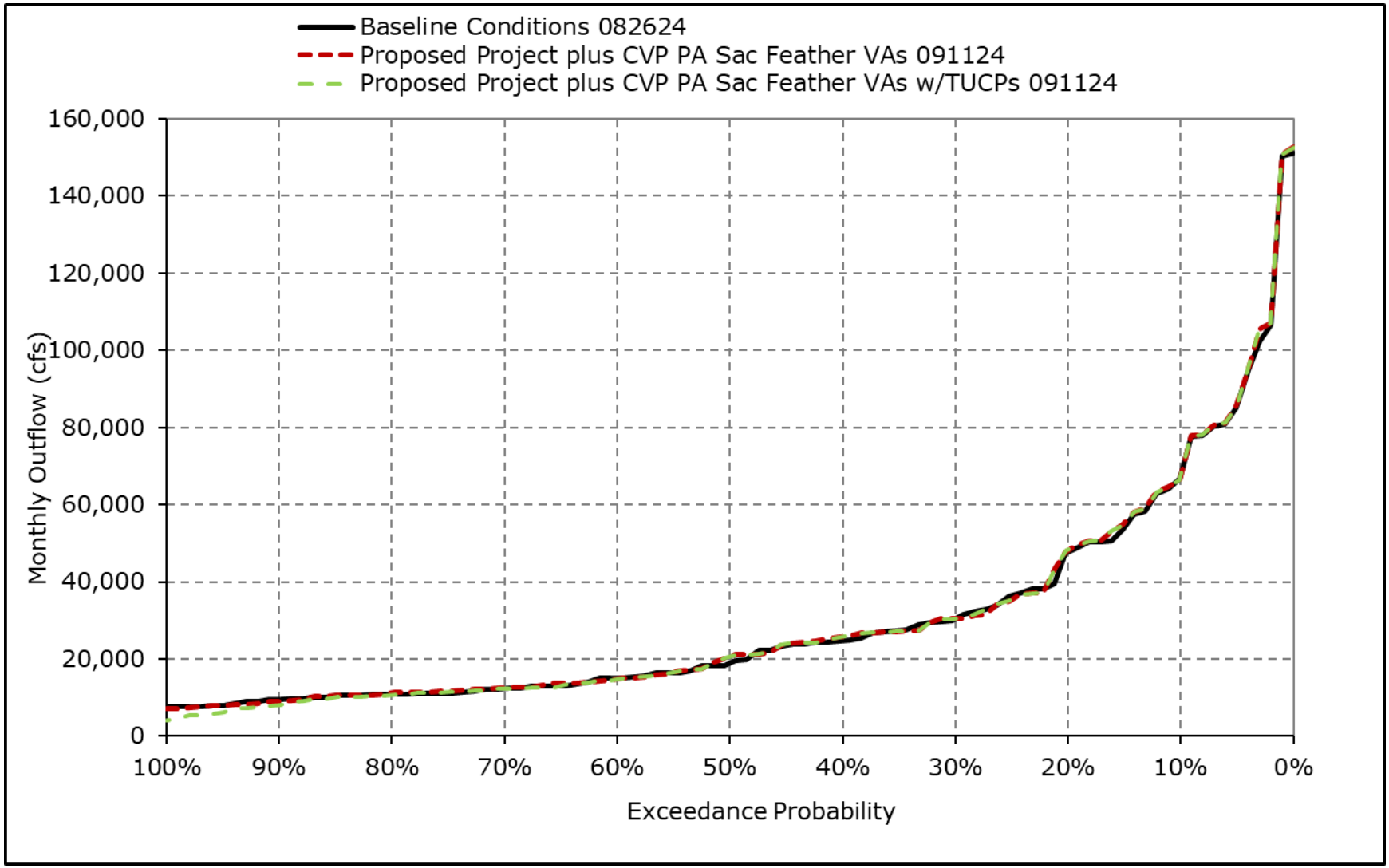
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10l. Delta Outflow, March



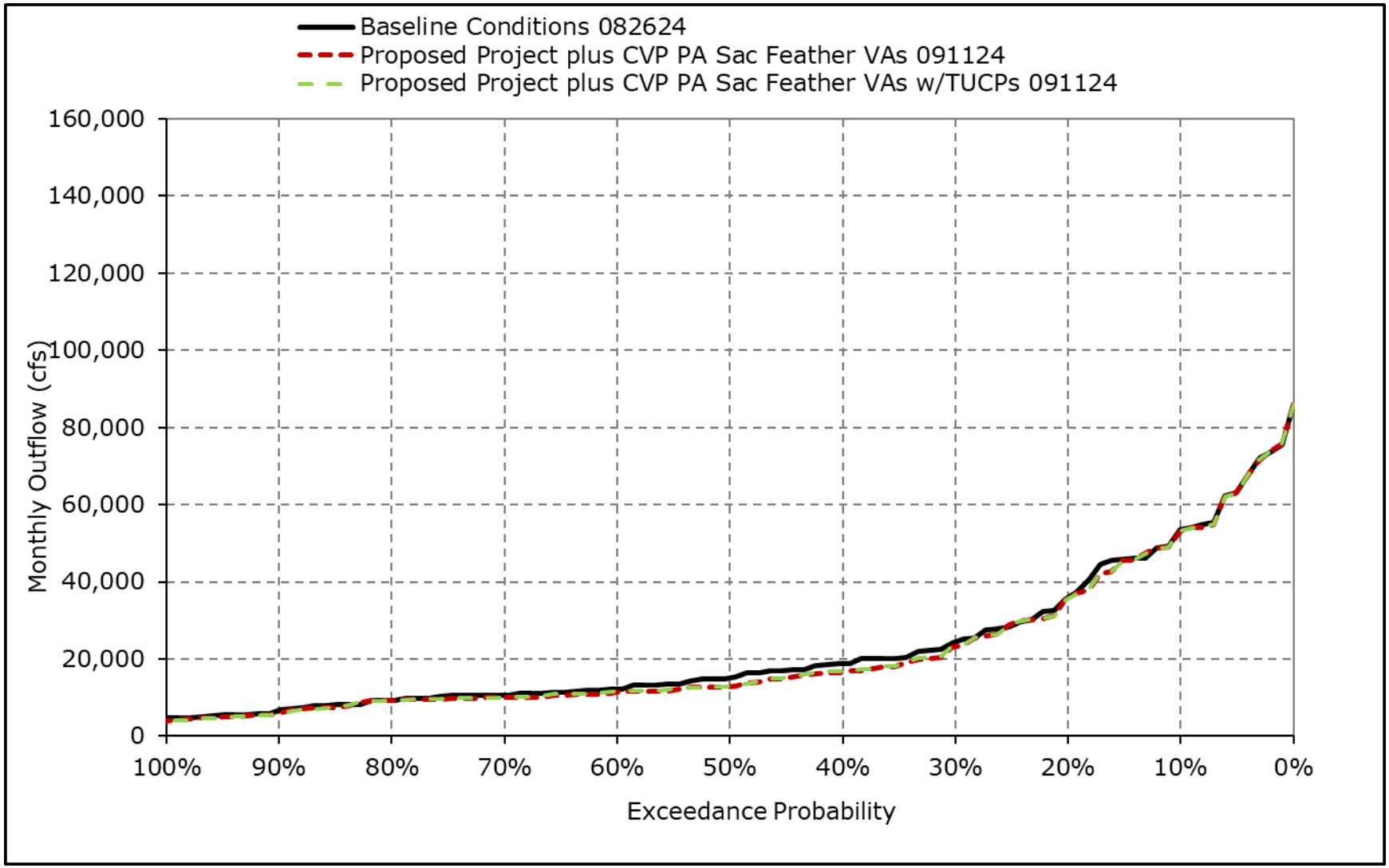
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10m. Delta Outflow, April



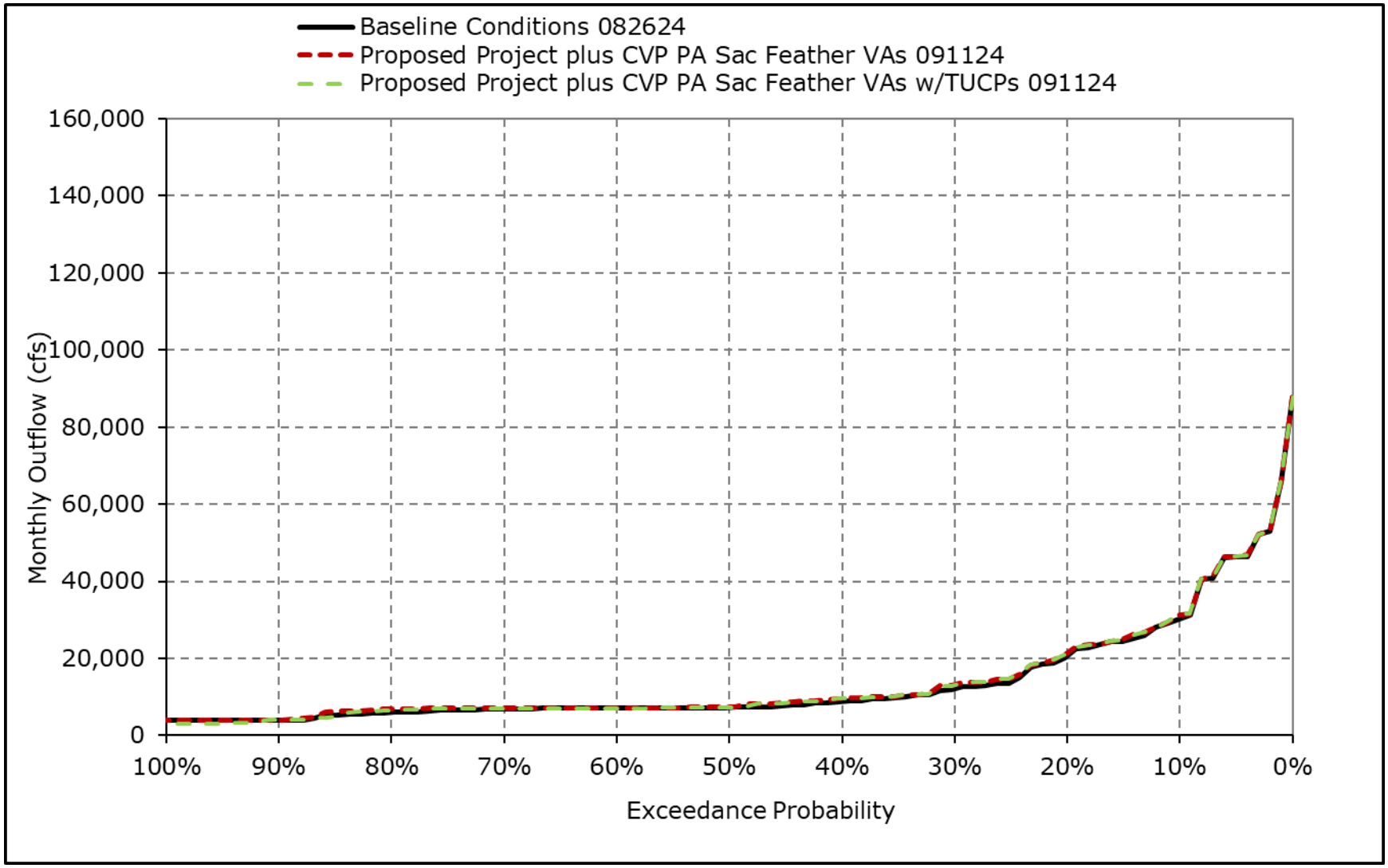
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10n. Delta Outflow, May



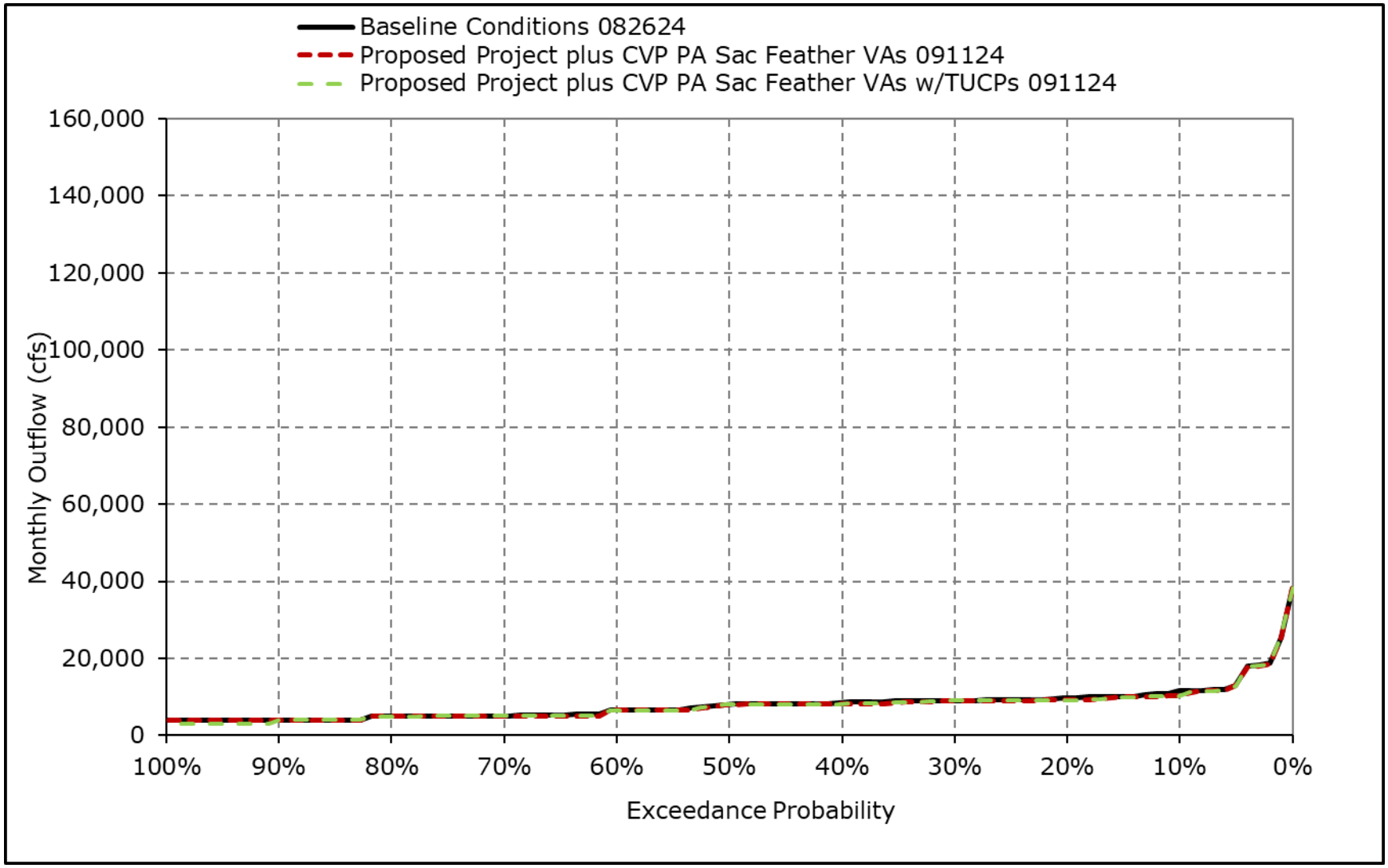
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10o. Delta Outflow, June



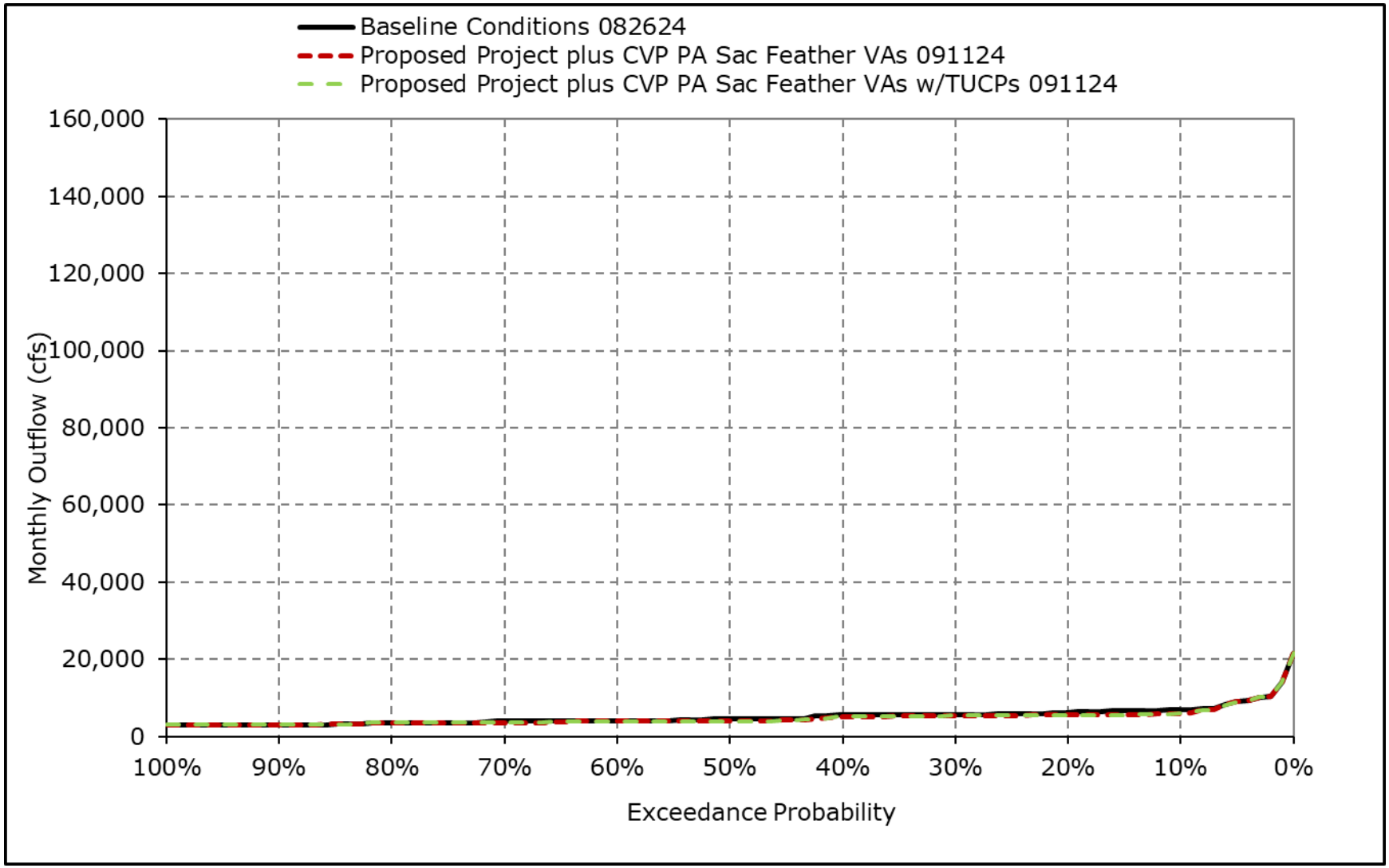
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10p. Delta Outflow, July



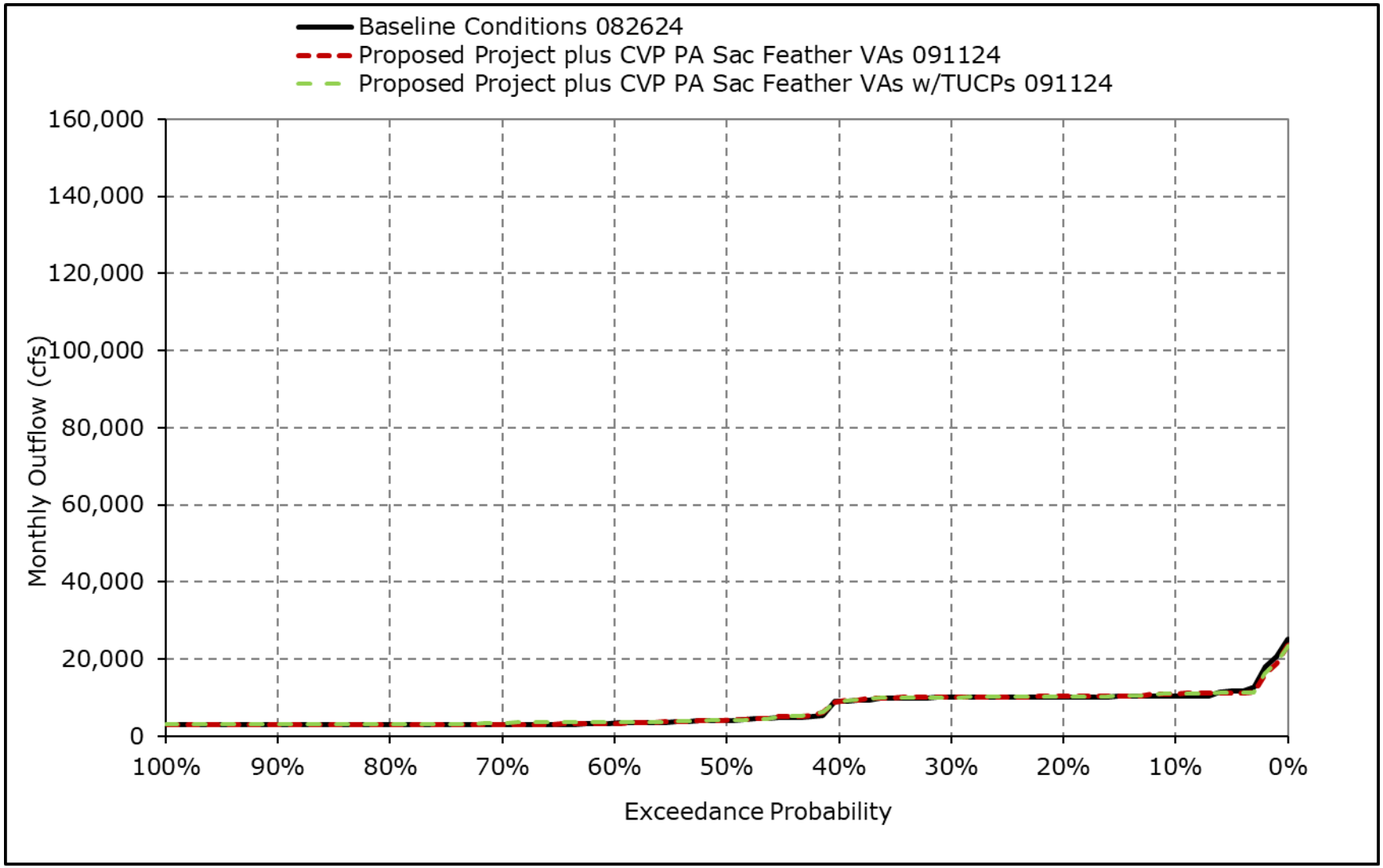
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4F-3-10q. Delta Outflow, August



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

Figure 4F-3-10r. Delta Outflow, September



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