

**Attachment 2a: Flow Results (CalSim 3)**

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## Appendix 4B

# Attachment 2a: Flow Results (CalSim 3)

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

- Baseline Conditions (072623)
- Proposed Project (021624)

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

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 4B-2-1-1a. Sacramento River Flow at Freeport, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	16,196	22,668	50,582	62,214	69,285	66,057	52,817	43,734	28,119	23,225	19,009	20,418
20% Exceedance	14,637	15,480	33,102	52,191	60,224	52,942	36,878	33,438	21,690	22,003	18,537	19,645
30% Exceedance	13,893	14,234	24,039	33,881	49,423	41,421	25,296	22,717	16,292	20,495	18,138	18,072
40% Exceedance	13,081	13,601	17,930	26,536	36,465	32,485	19,553	16,923	14,175	20,007	17,695	16,481
50% Exceedance	11,597	13,069	15,197	21,787	27,763	24,123	16,388	15,146	13,647	19,305	17,092	15,706
60% Exceedance	9,780	11,728	14,385	19,529	21,649	21,542	12,485	12,887	13,256	18,745	15,517	13,675
70% Exceedance	8,655	10,397	12,553	14,590	18,874	18,964	11,338	11,432	12,613	17,408	12,915	10,880
80% Exceedance	7,427	8,132	10,246	12,494	16,132	14,895	10,802	10,688	11,446	15,329	10,950	9,797
90% Exceedance	6,645	7,018	9,279	11,126	13,156	12,289	9,622	8,853	10,139	10,847	8,922	8,737
Full Simulation Period Average <sup>a</sup>	11,760	14,105	22,554	29,749	35,952	32,689	23,345	20,582	17,142	18,462	15,296	14,835
Wet Water Years (30%)	14,238	19,275	38,326	49,611	58,955	51,700	41,478	34,789	25,726	19,747	17,661	19,574
Above Normal Water Years (11%)	10,754	12,798	19,238	40,840	44,381	44,719	25,970	23,271	18,576	21,240	18,936	18,945
Below Normal Water Years (21%)	12,008	13,863	16,409	22,233	28,831	26,880	17,525	17,000	13,942	21,195	17,505	14,947
Dry Water Years (22%)	11,242	12,156	16,120	16,110	21,943	20,280	12,680	11,993	13,111	18,418	13,073	10,808
Critical Water Years (16%)	8,193	8,304	12,175	13,504	15,633	13,458	9,842	8,603	9,802	10,616	8,518	8,516

**Table 4B-2-1-1b. Sacramento River Flow at Freeport, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,592	21,569	50,820	62,213	69,267	66,212	52,820	43,738	28,109	23,096	18,594	21,863
20% Exceedance	14,603	15,548	33,205	52,038	60,228	53,021	36,898	33,464	21,678	21,809	18,264	20,884
30% Exceedance	13,884	14,237	24,044	34,292	49,054	41,209	25,697	22,778	16,225	20,429	18,037	18,939
40% Exceedance	13,137	13,618	17,898	26,495	36,465	32,606	19,769	17,020	13,897	20,029	17,516	17,467
50% Exceedance	11,375	13,118	15,474	21,822	27,390	24,333	16,593	15,142	13,196	19,234	16,943	15,710
60% Exceedance	9,695	11,906	14,267	19,494	21,651	21,723	12,876	12,671	12,931	18,585	15,380	12,645
70% Exceedance	8,674	10,297	12,523	14,718	18,271	19,212	11,345	11,429	12,399	17,484	13,083	10,856
80% Exceedance	7,469	8,137	10,466	12,364	16,132	14,852	10,860	10,818	11,661	15,070	11,087	9,823
90% Exceedance	6,726	7,024	9,364	11,057	13,123	12,389	9,564	9,254	9,831	10,547	8,576	8,737
Full Simulation Period Average <sup>a</sup>	11,760	14,120	22,598	29,733	35,919	32,792	23,495	20,646	17,018	18,371	15,147	15,316
Wet Water Years (30%)	14,178	19,333	38,325	49,620	58,946	51,704	41,478	34,790	25,757	19,704	17,613	20,557
Above Normal Water Years (11%)	10,839	12,876	19,295	40,836	44,348	44,896	26,201	23,470	18,535	21,031	18,416	20,658
Below Normal Water Years (21%)	12,046	13,704	16,624	22,278	28,645	27,027	17,917	16,918	13,889	20,976	17,280	14,902
Dry Water Years (22%)	11,218	12,232	15,913	15,964	21,854	20,572	12,881	12,229	12,655	18,397	12,965	10,837
Critical Water Years (16%)	8,233	8,346	12,414	13,529	15,836	13,381	9,834	8,650	9,696	10,591	8,479	8,522

**Table 4B-2-1-1c. Sacramento River Flow at Freeport, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-603	-1,099	239	-1	-18	155	3	4	-10	-130	-415	1,446
20% Exceedance	-34	67	103	-153	4	79	20	26	-12	-194	-273	1,239
30% Exceedance	-9	3	5	412	-369	-212	401	61	-67	-66	-101	867
40% Exceedance	56	17	-32	-40	0	121	216	97	-278	21	-179	986
50% Exceedance	-222	49	276	36	-372	210	205	-4	-451	-71	-149	5
60% Exceedance	-84	178	-118	-35	3	181	391	-216	-325	-159	-137	-1,030
70% Exceedance	19	-101	-30	127	-603	248	7	-2	-213	76	168	-24
80% Exceedance	42	5	220	-130	1	-43	58	130	214	-260	137	26
90% Exceedance	80	6	85	-70	-32	101	-58	401	-307	-300	-346	0
Full Simulation Period Average <sup>a</sup>	0	16	44	-16	-33	103	151	64	-124	-91	-149	481
Wet Water Years (30%)	-61	58	-1	9	-9	4	-1	1	32	-44	-48	983
Above Normal Water Years (11%)	85	78	57	-4	-33	177	231	198	-41	-210	-520	1,714
Below Normal Water Years (21%)	38	-160	215	45	-186	146	392	-82	-54	-220	-225	-45
Dry Water Years (22%)	-24	76	-207	-146	-89	292	201	235	-456	-21	-108	29
Critical Water Years (16%)	40	42	239	25	202	-77	-8	47	-106	-25	-39	6

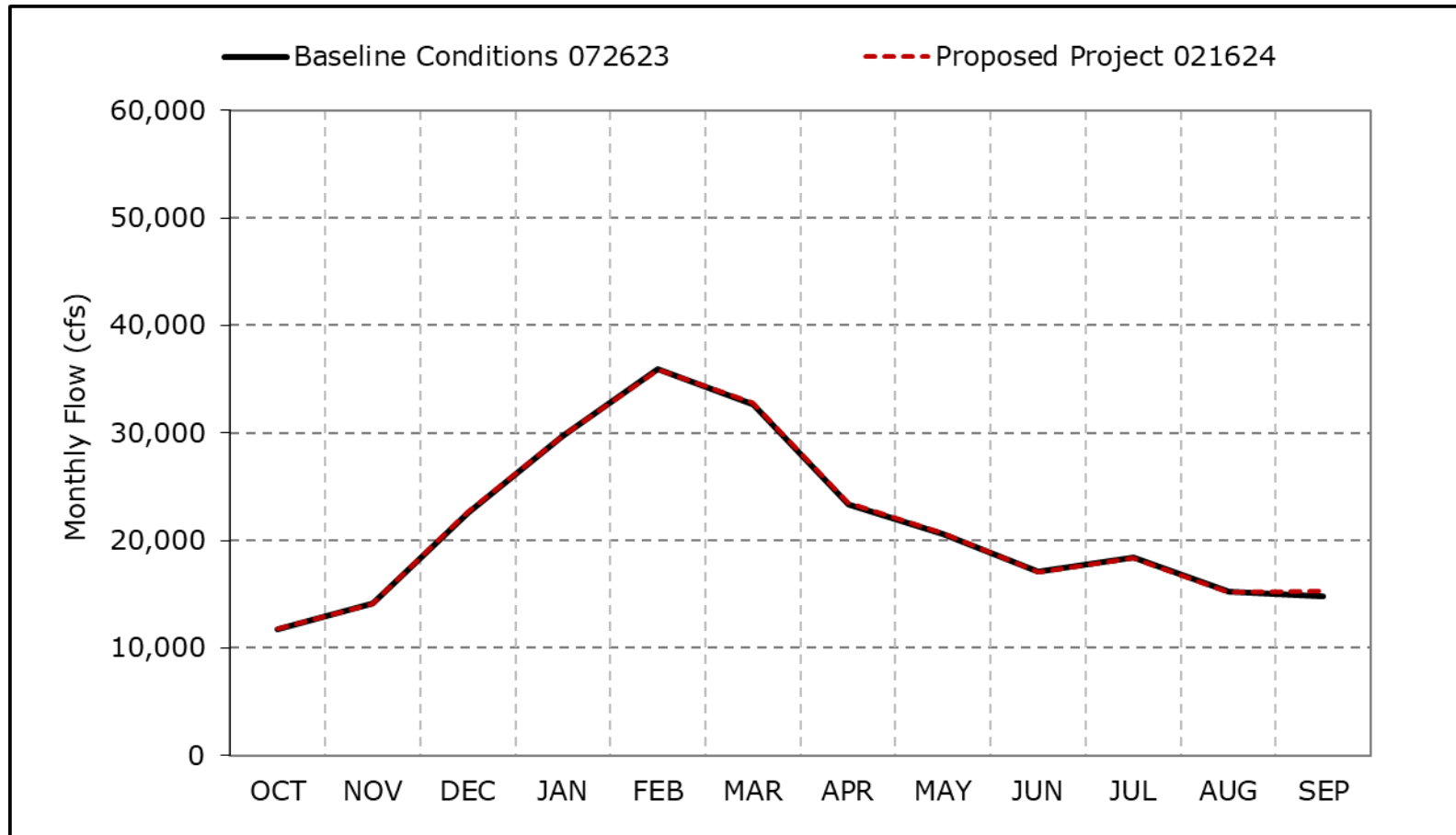
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-1a. Sacramento River Flow at Freeport, Long-Term Average Flow**

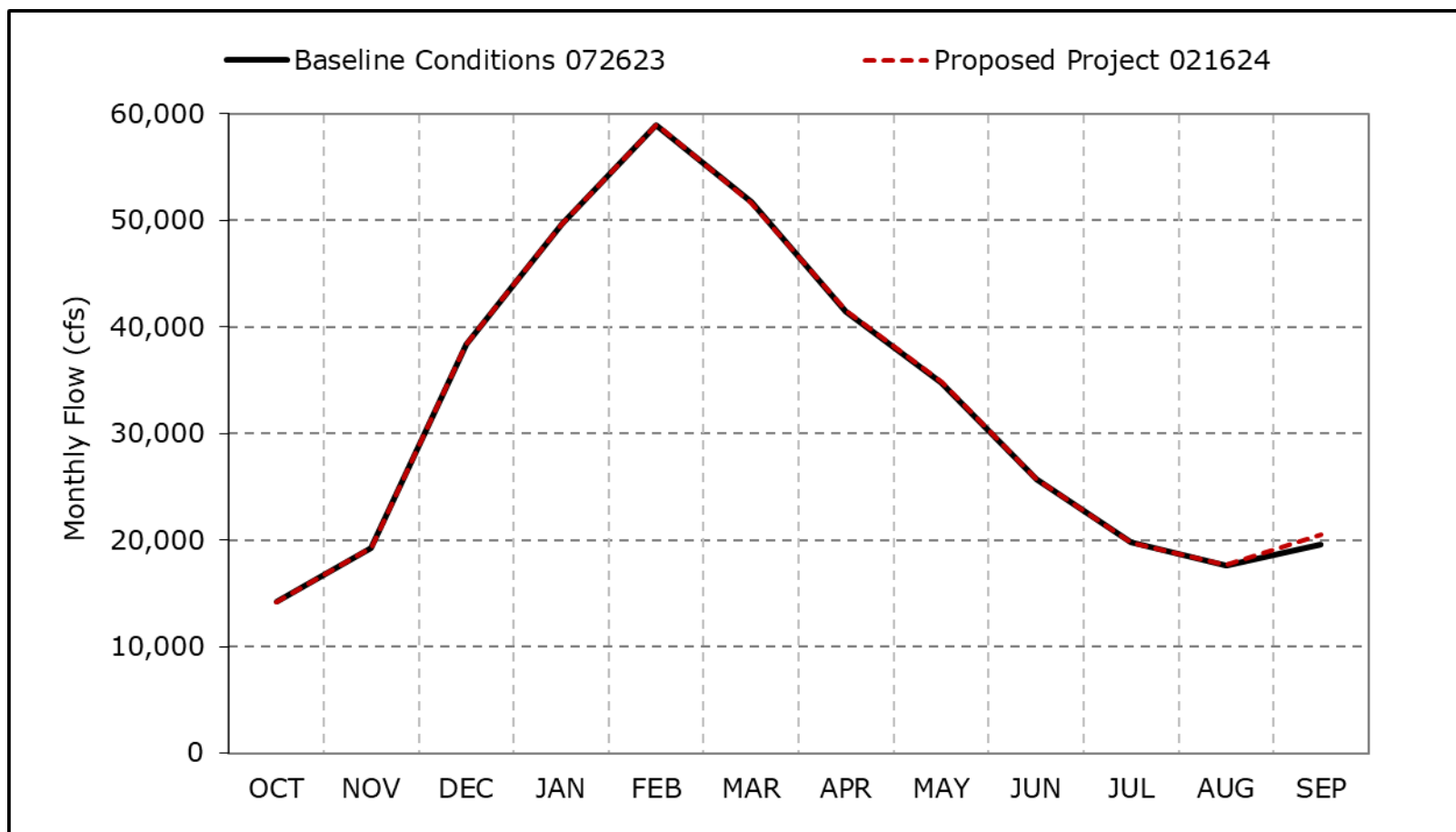


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

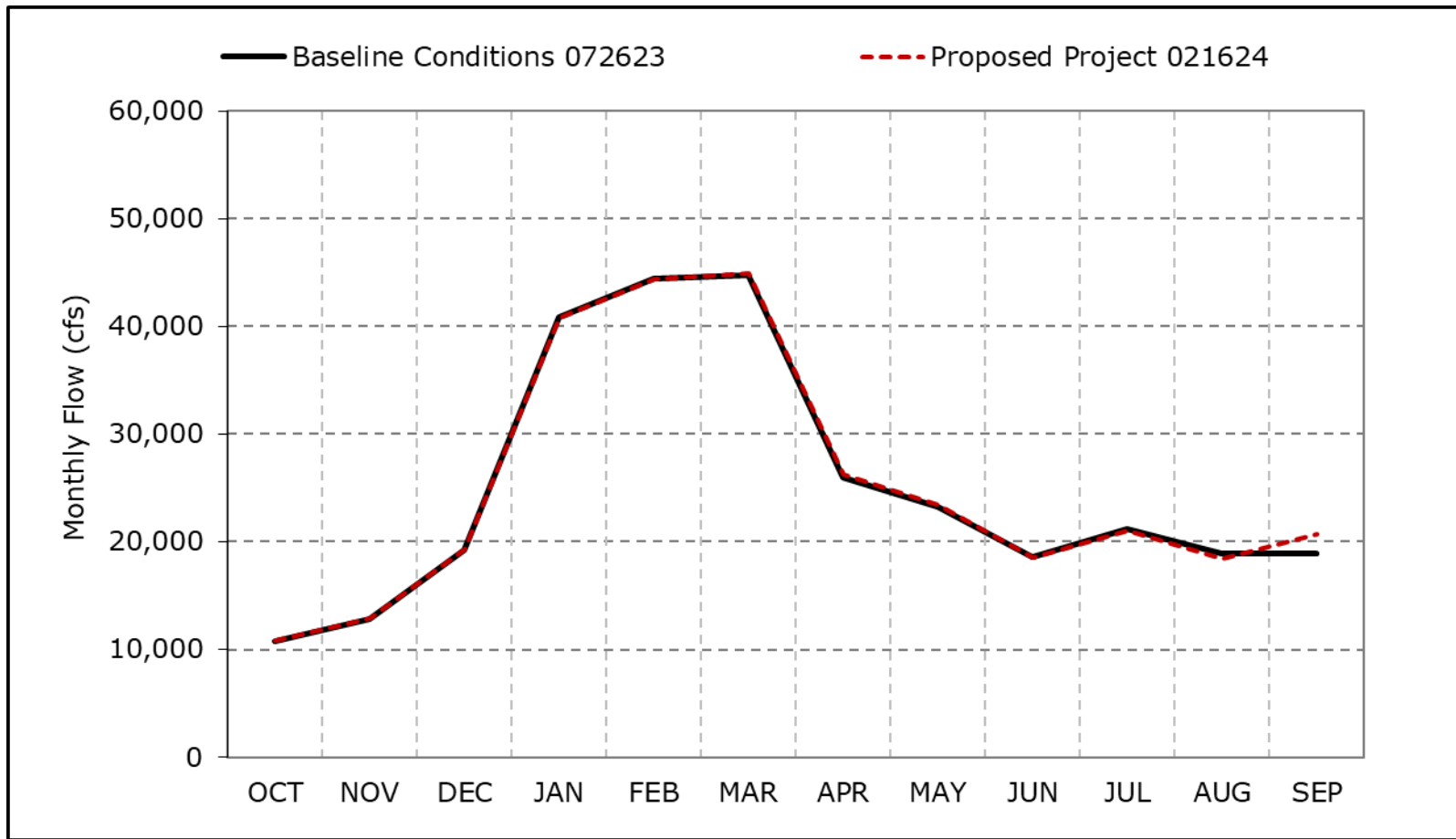


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

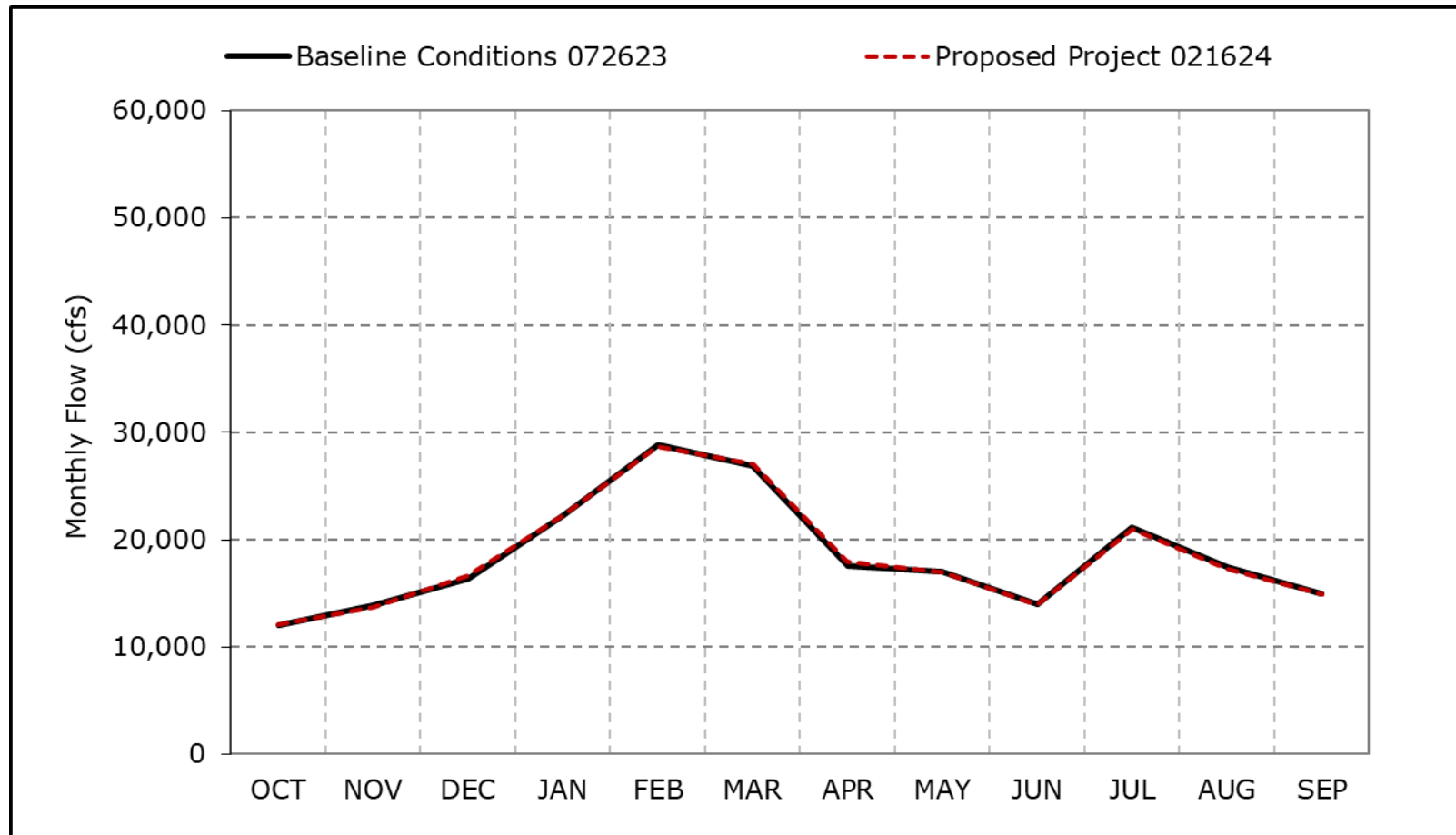


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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

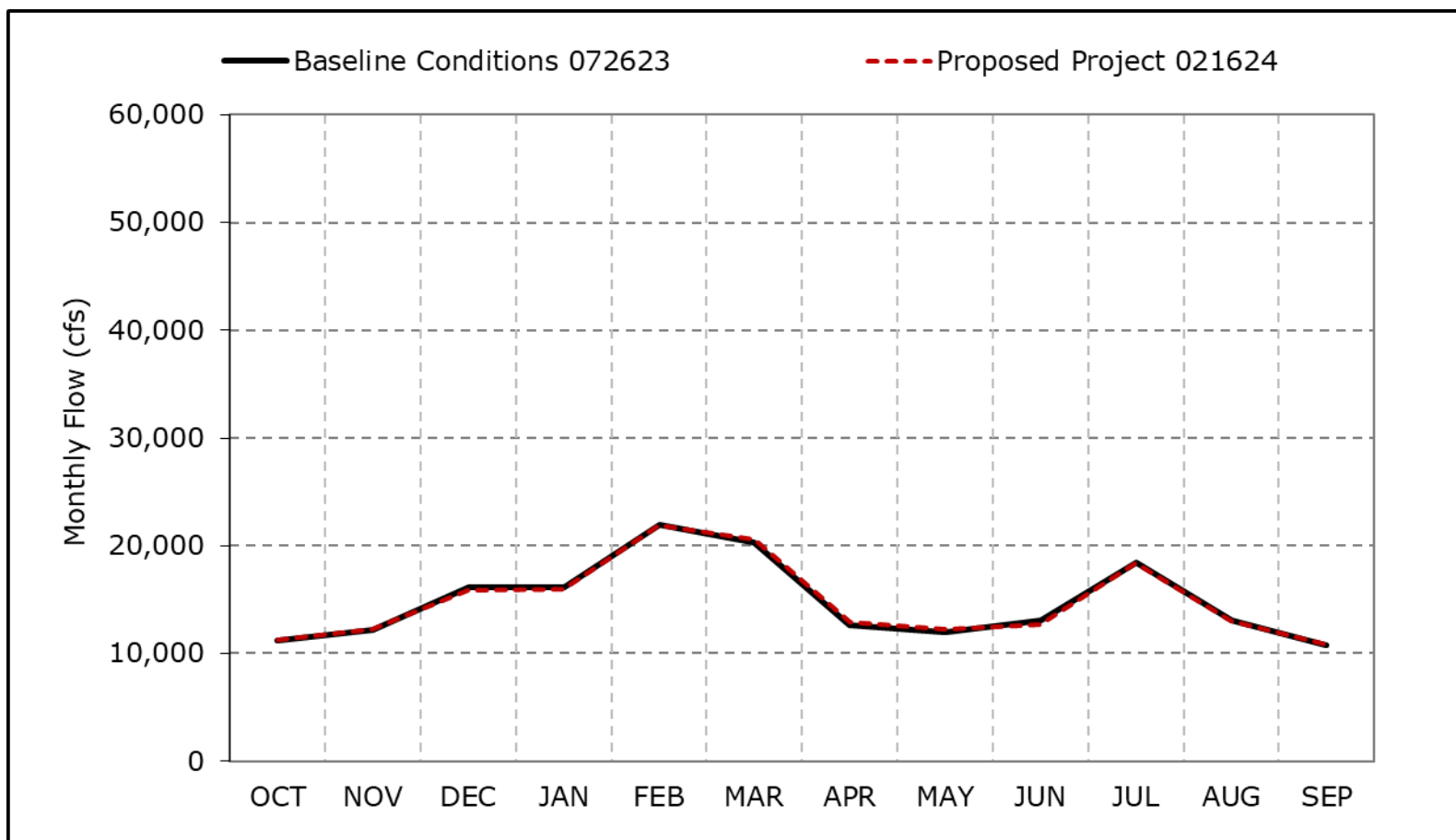


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

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



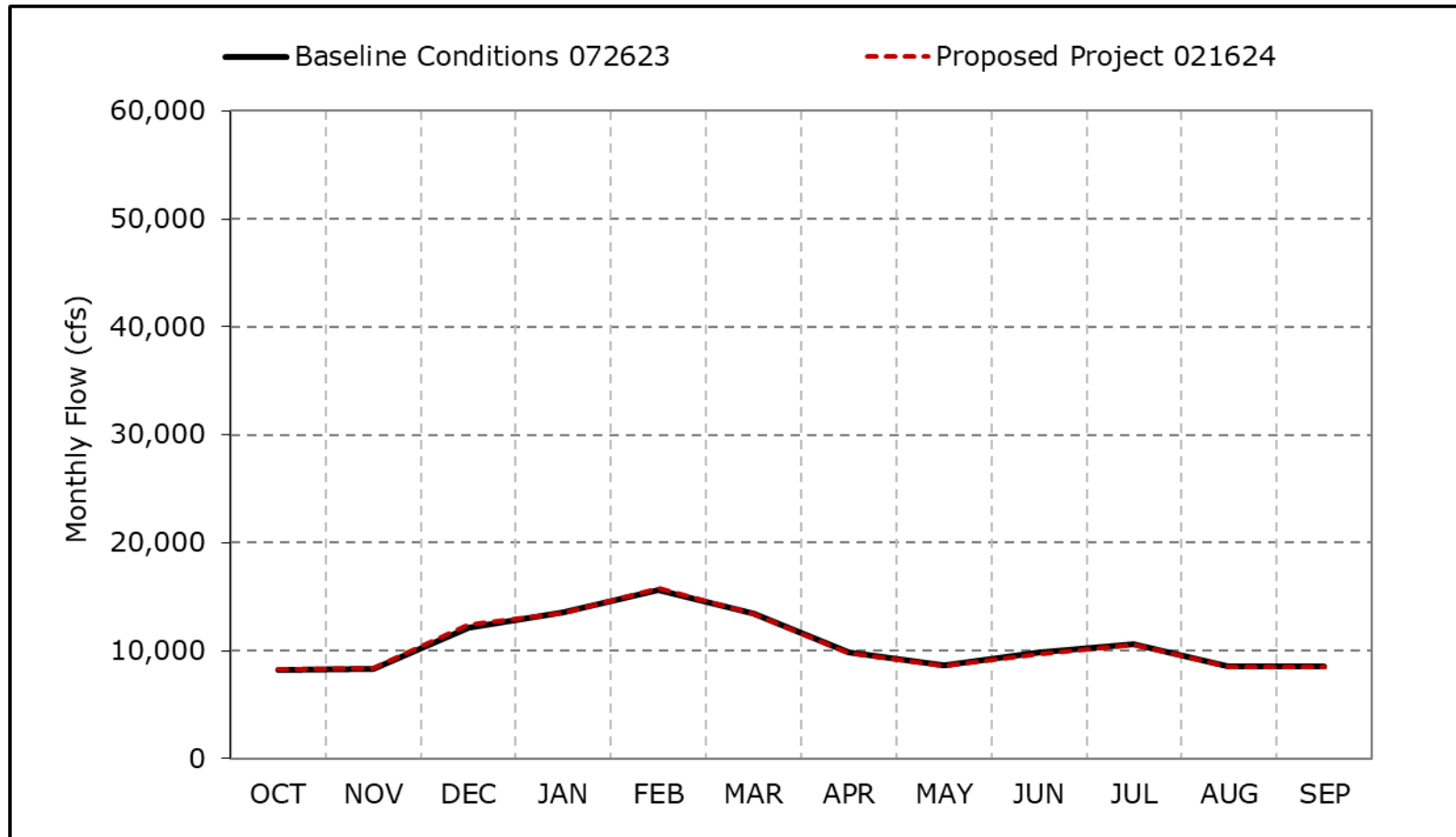
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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



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

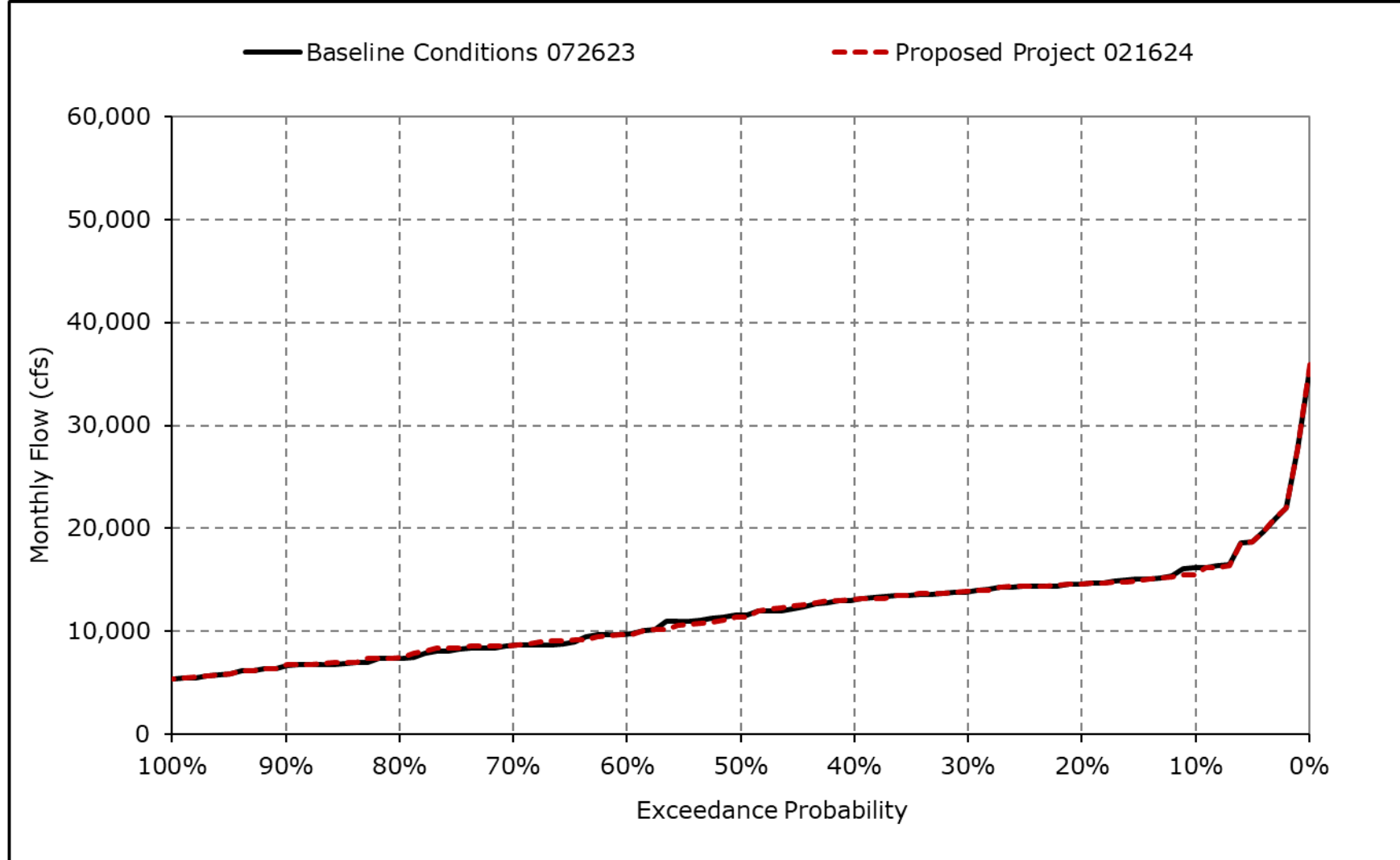


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

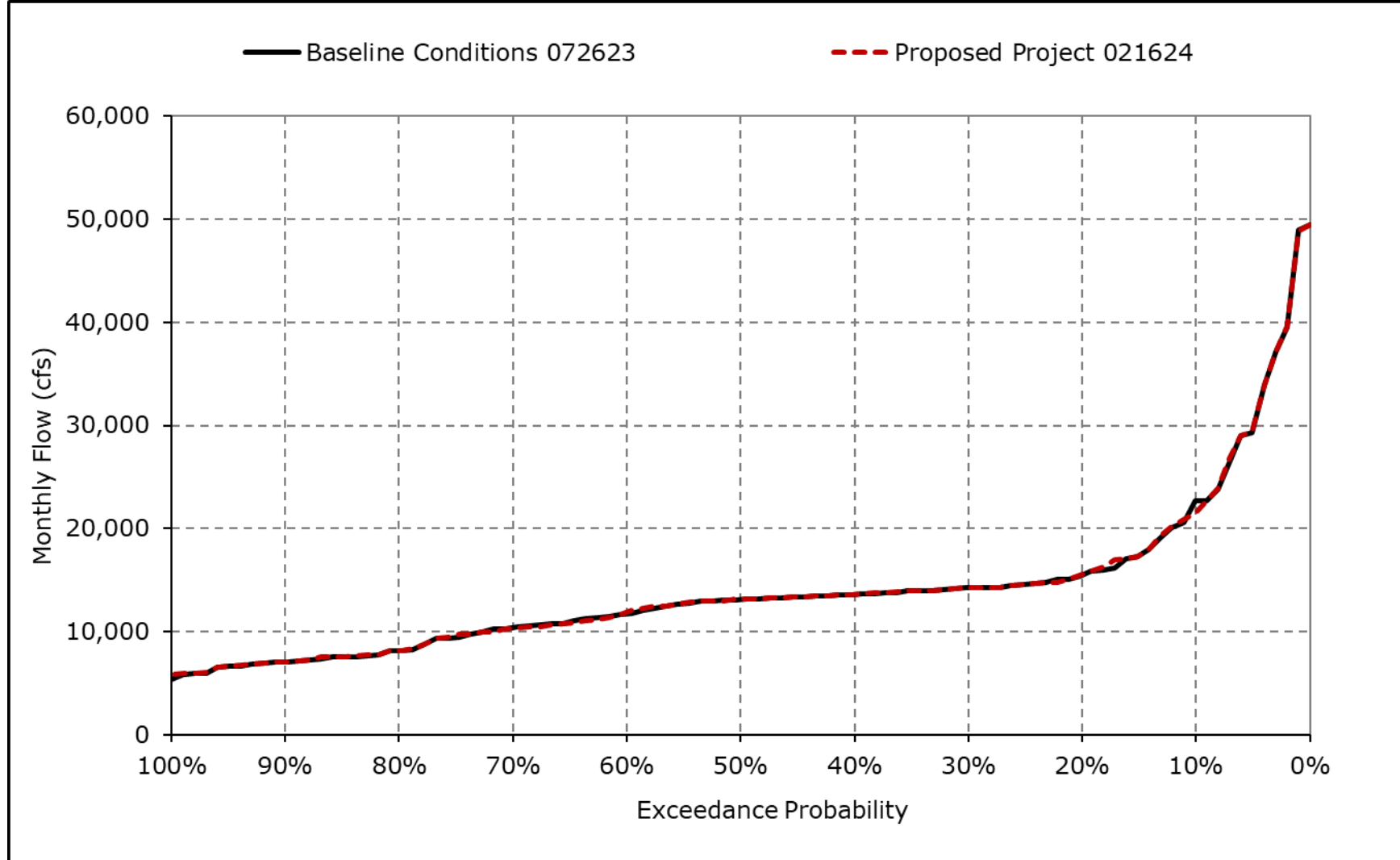
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



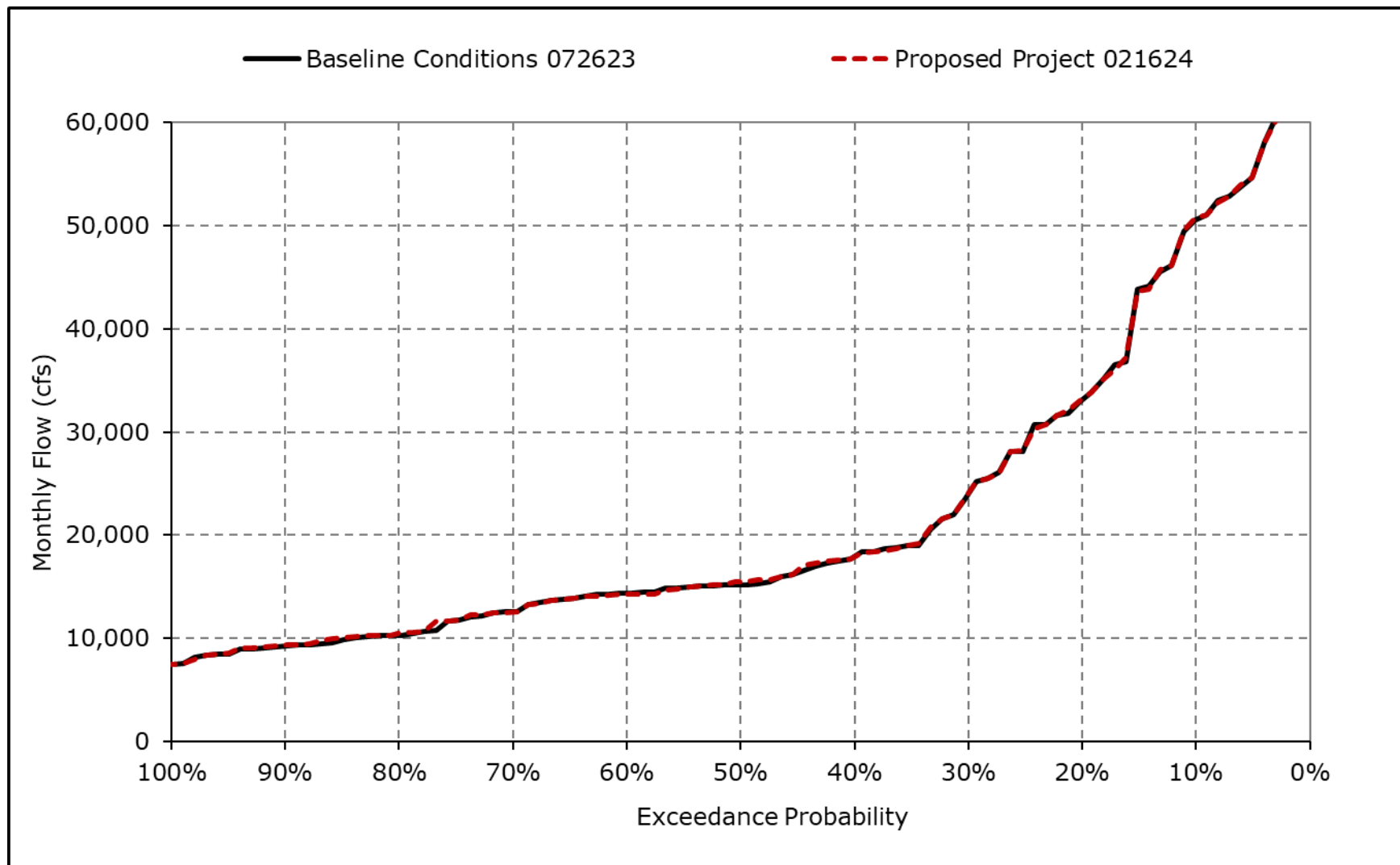
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



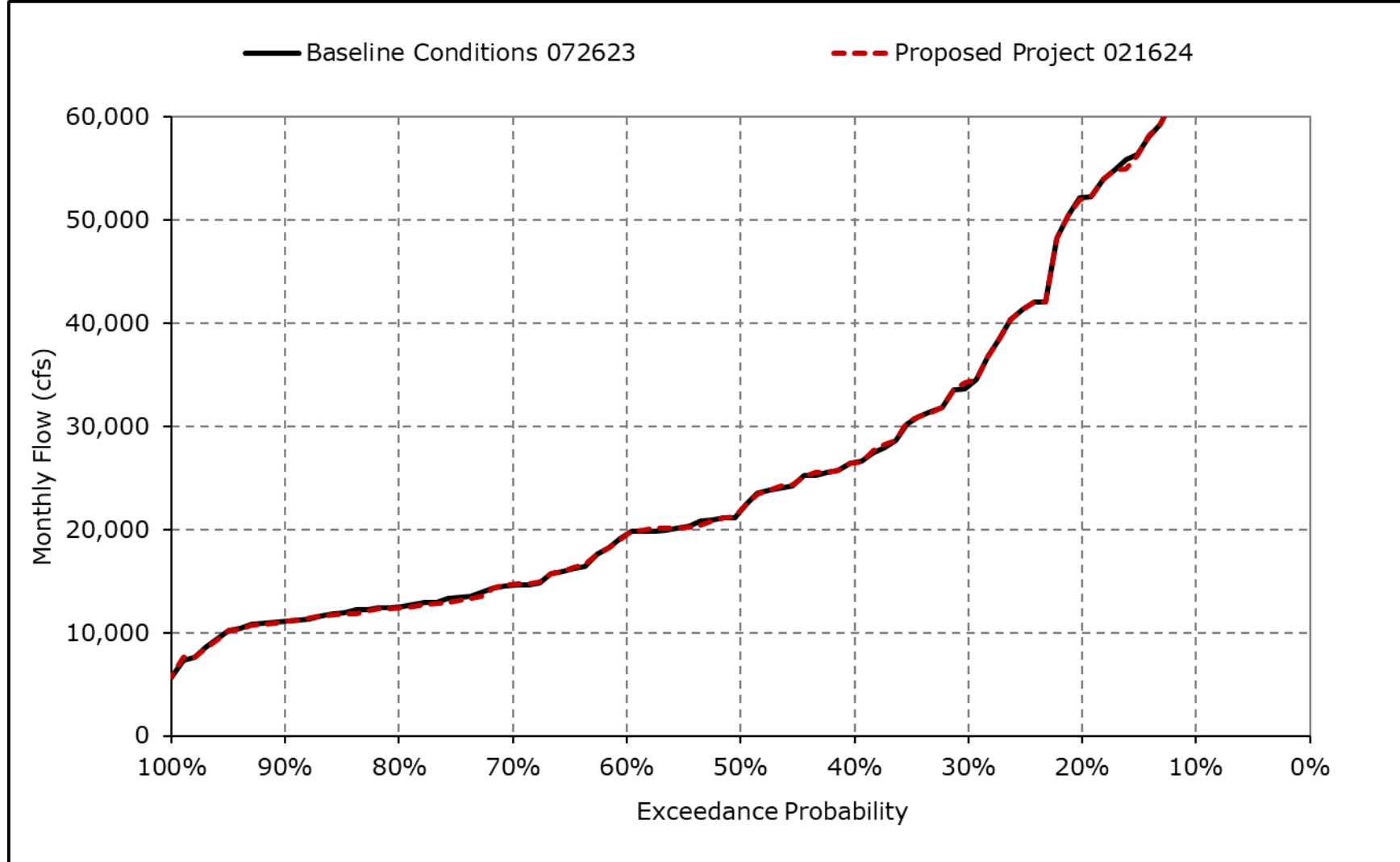
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



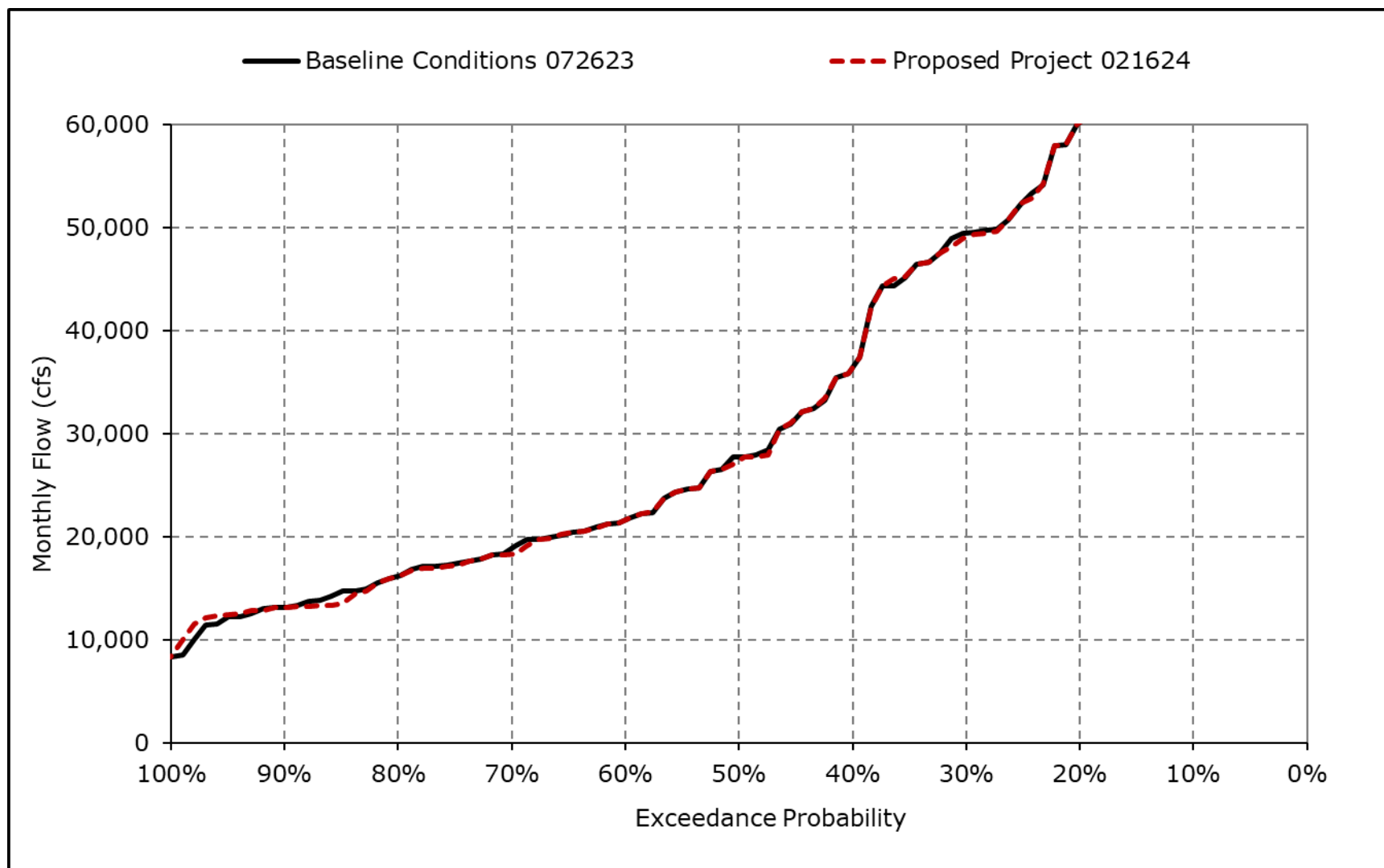
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



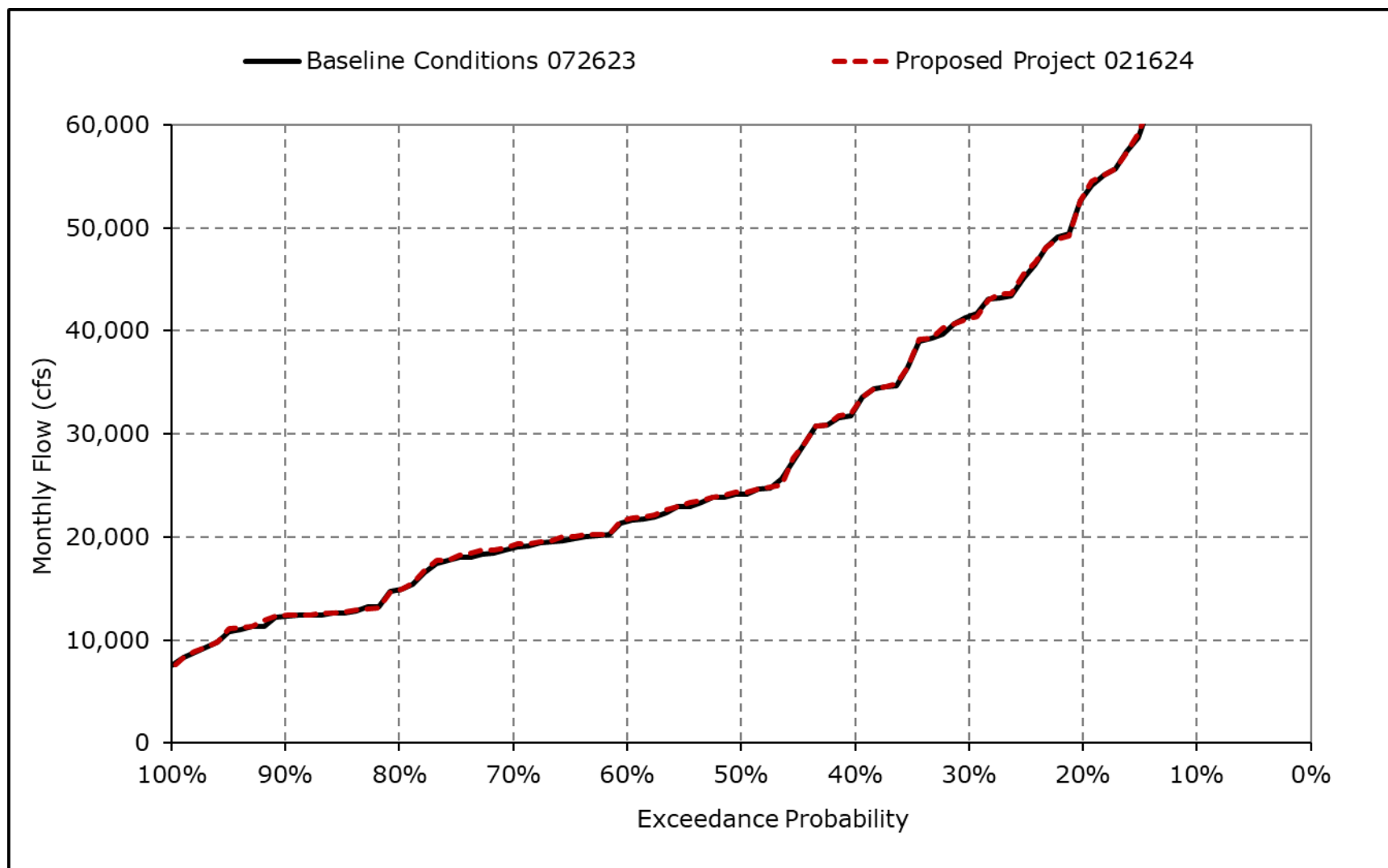
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



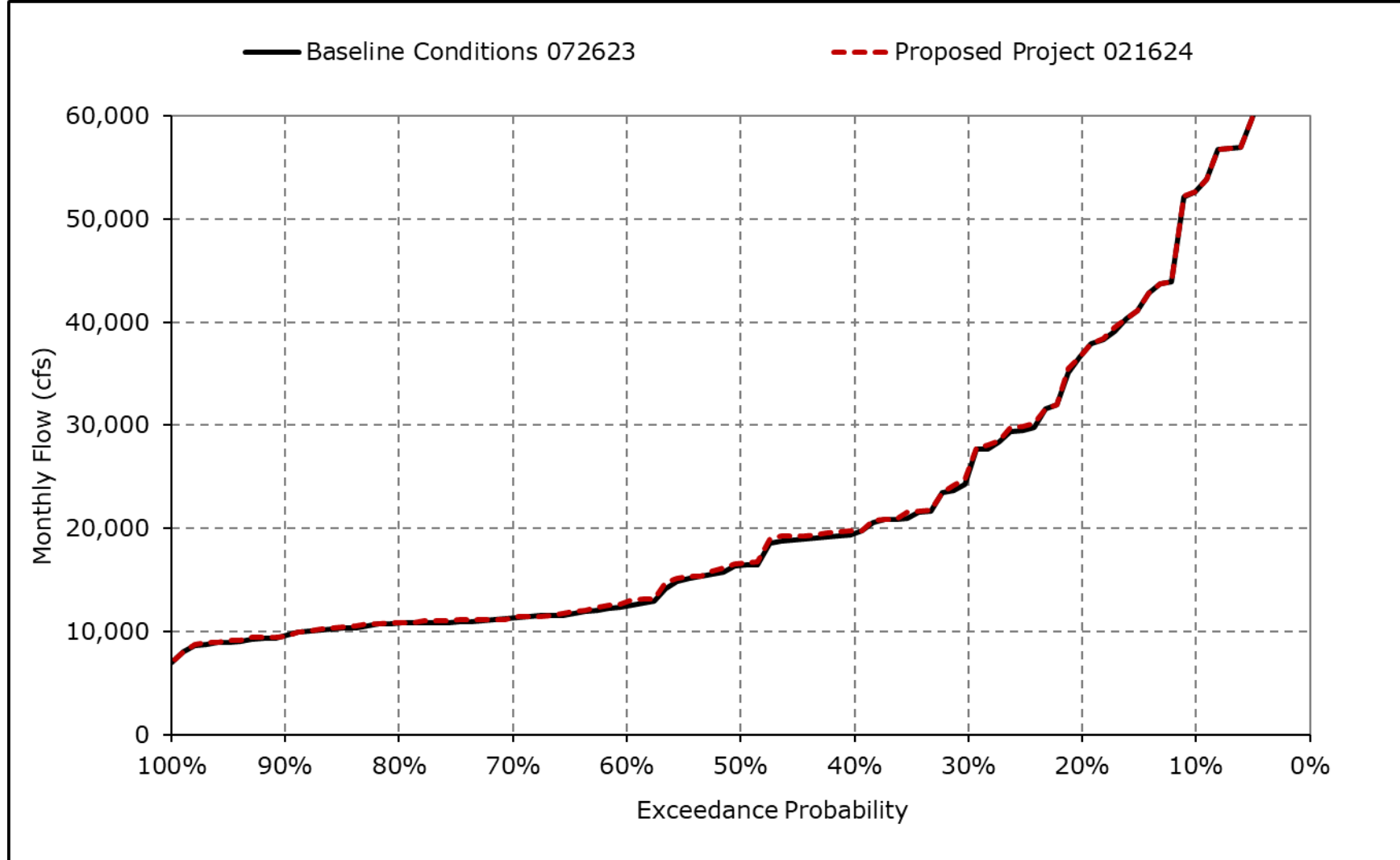
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

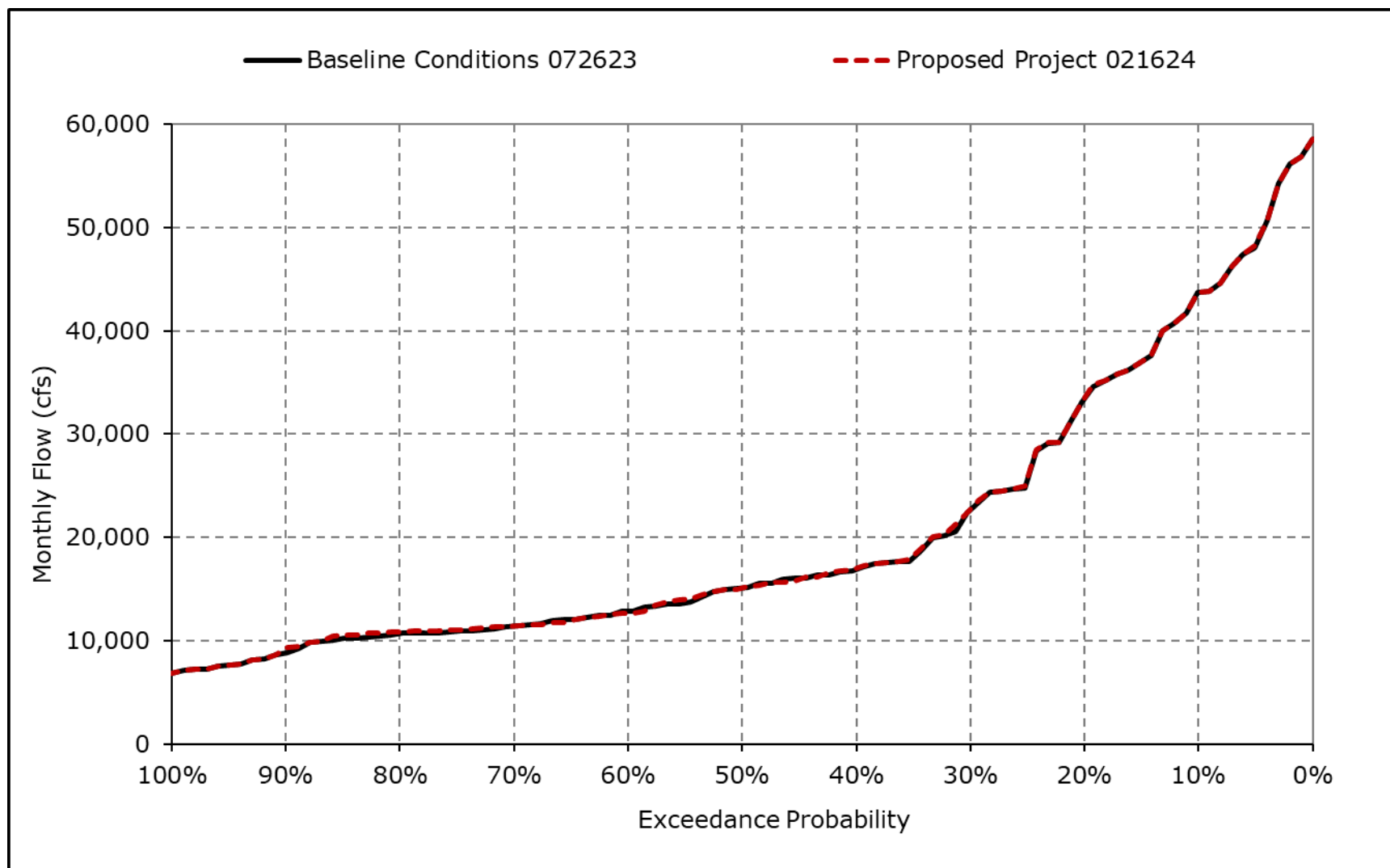
**Figure 4B-2-1m. Sacramento River Flow at Freeport, April**



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

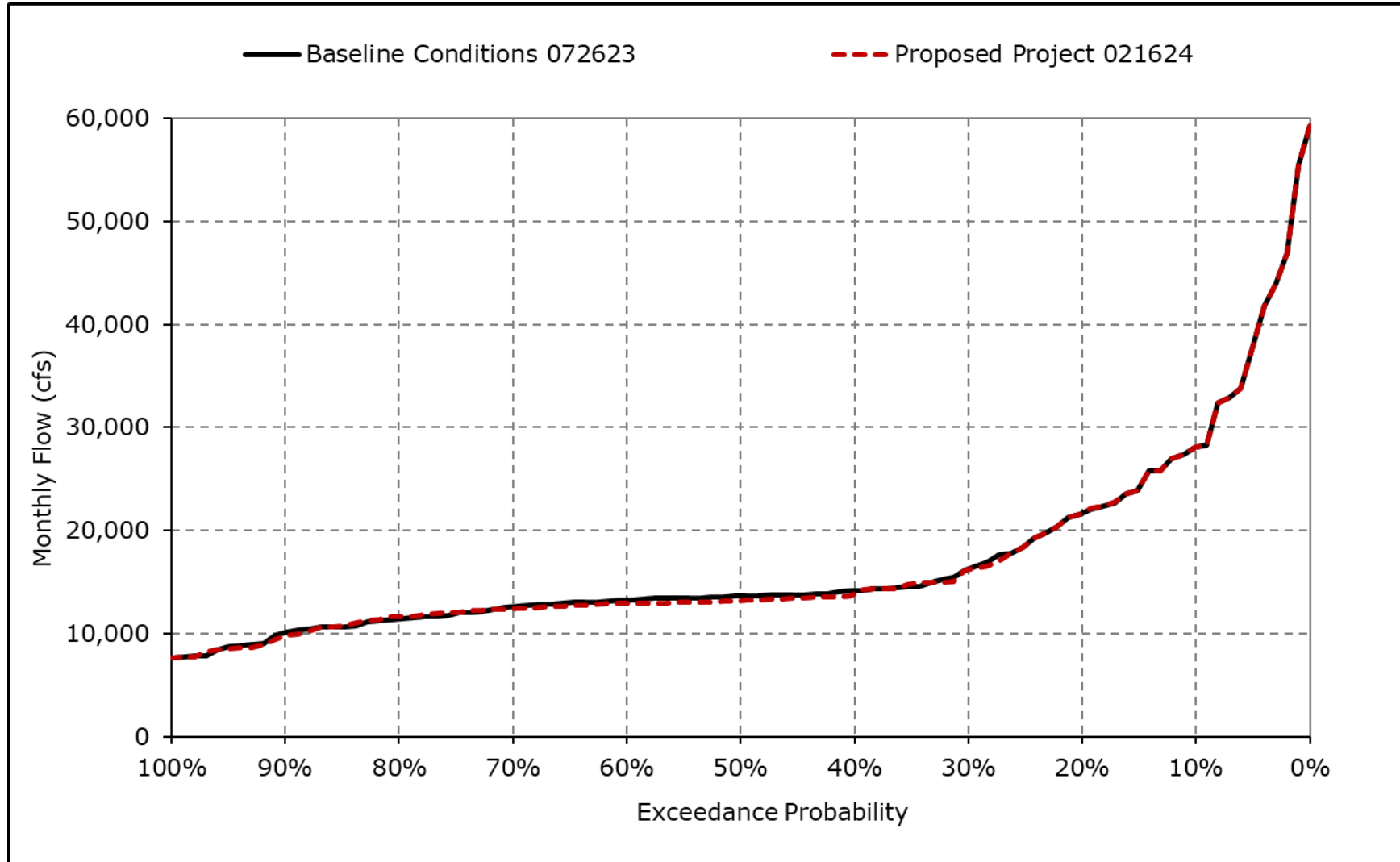


**Figure 4B-2-1n. Sacramento River Flow at Freeport, May**



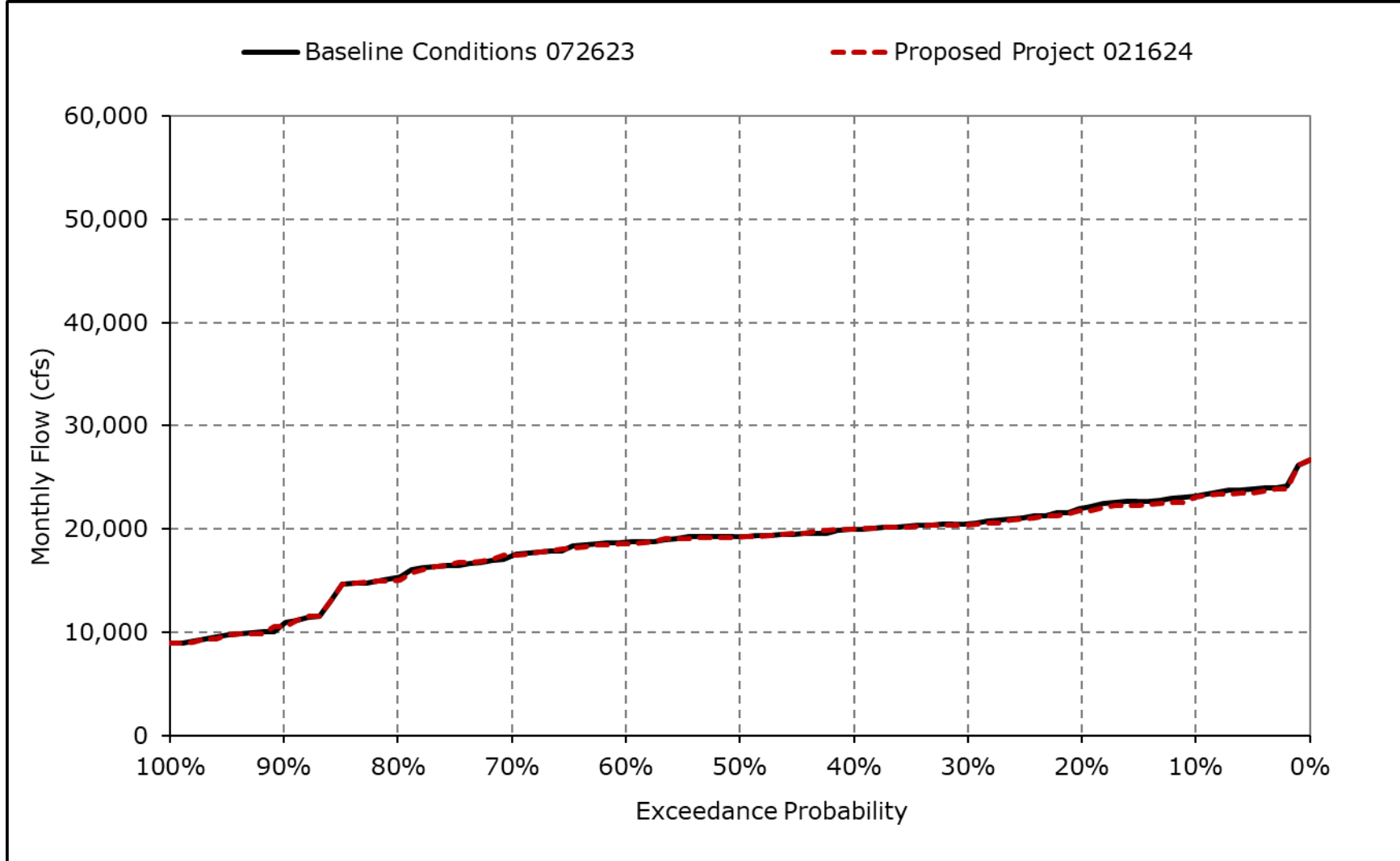
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



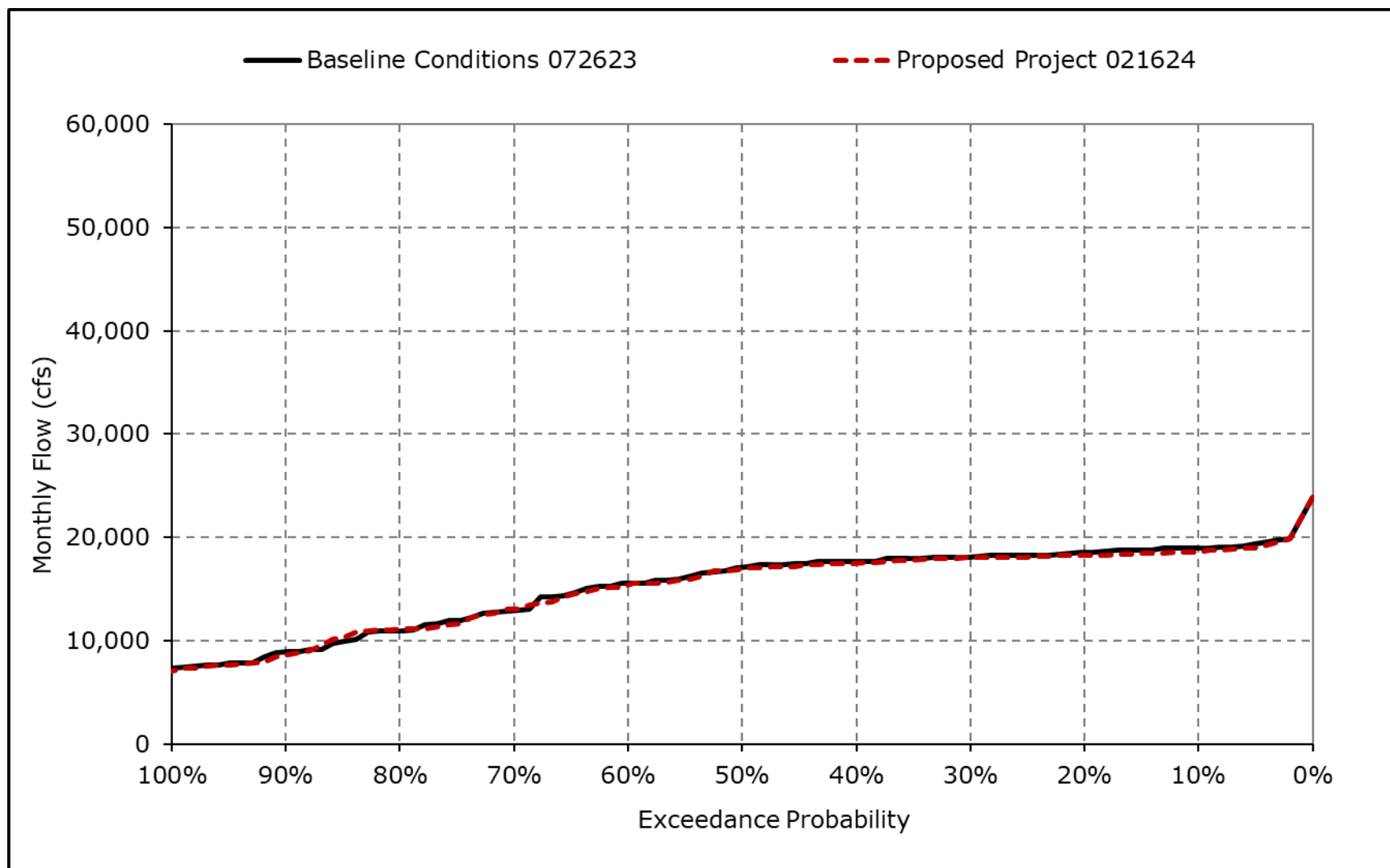
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



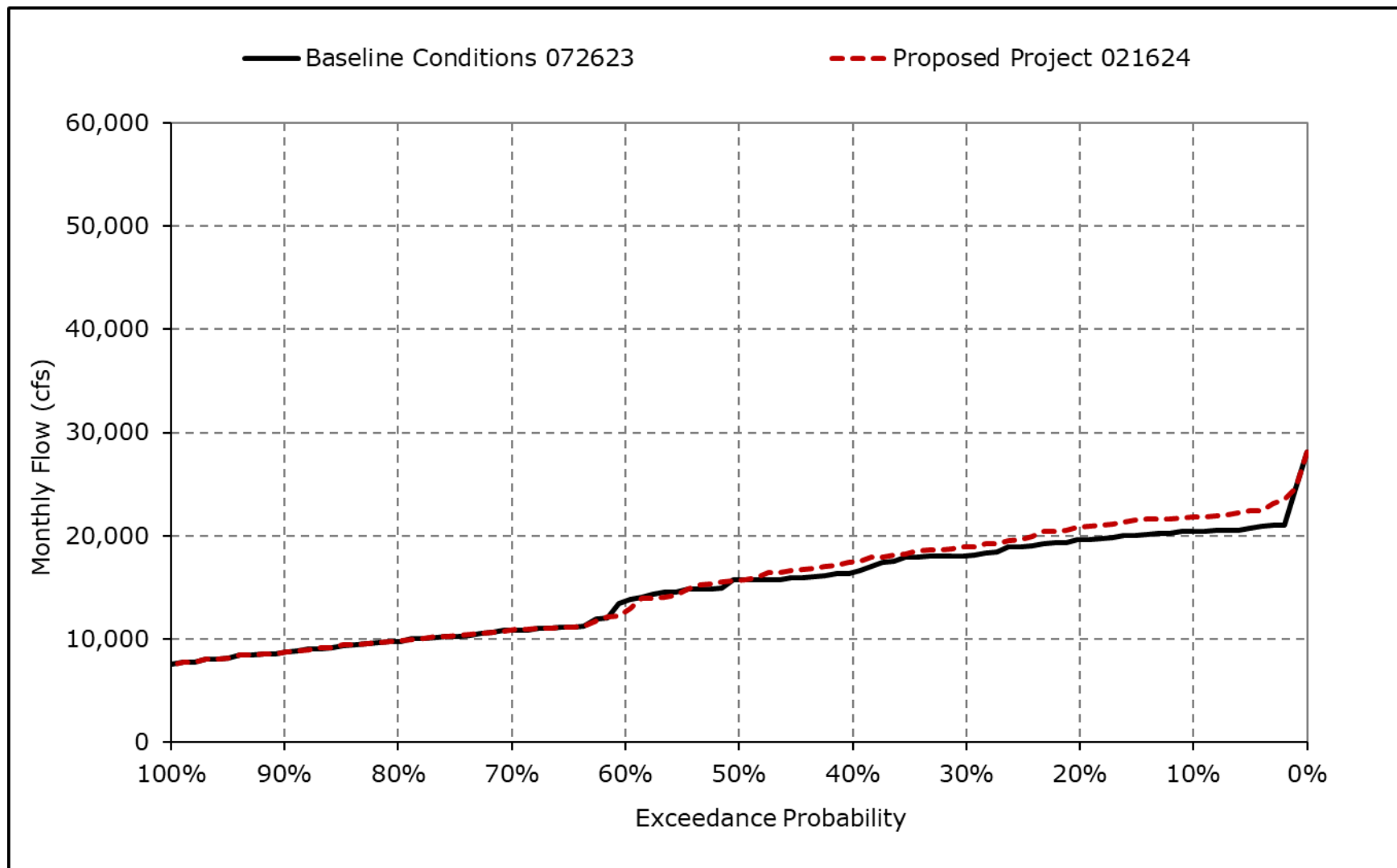
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

**Table 4B-2-2-1a. Georgiana Slough Flow, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,259	4,174	8,139	9,789	10,793	10,329	8,442	7,157	4,942	4,247	3,653	3,855
20% Exceedance	3,040	3,148	5,668	8,367	9,504	8,467	6,195	5,694	4,031	4,074	3,585	3,745
30% Exceedance	2,934	2,972	4,371	5,769	7,982	6,834	4,548	4,179	3,267	3,861	3,530	3,524
40% Exceedance	2,820	2,891	3,508	4,732	6,147	5,572	3,734	3,359	2,967	3,791	3,467	3,298
50% Exceedance	2,612	2,813	3,116	4,065	4,913	4,392	3,285	3,107	2,893	3,693	3,383	3,189
60% Exceedance	2,353	2,618	2,998	3,736	4,047	4,022	2,732	2,787	2,836	3,613	3,159	2,902
70% Exceedance	2,195	2,430	2,749	3,028	3,649	3,658	2,570	2,580	2,745	3,424	2,790	2,505
80% Exceedance	2,021	2,116	2,415	2,729	3,265	3,080	2,494	2,474	2,580	3,130	2,513	2,352
90% Exceedance	1,910	1,950	2,279	2,540	2,838	2,716	2,328	2,218	2,395	2,497	2,226	2,202
Full Simulation Period Average <sup>a</sup>	2,633	2,958	4,161	5,181	6,071	5,602	4,272	3,876	3,387	3,573	3,128	3,065
Wet Water Years (30%)	2,985	3,693	6,397	7,998	9,329	8,295	6,840	5,887	4,602	3,755	3,463	3,736
Above Normal Water Years (11%)	2,491	2,773	3,692	6,757	7,267	7,305	4,643	4,257	3,590	3,966	3,643	3,647
Below Normal Water Years (21%)	2,668	2,924	3,288	4,115	5,063	4,780	3,448	3,370	2,934	3,960	3,440	3,081
Dry Water Years (22%)	2,559	2,680	3,248	3,246	4,086	3,845	2,762	2,661	2,816	3,567	2,813	2,495
Critical Water Years (16%)	2,128	2,134	2,689	2,877	3,193	2,879	2,359	2,181	2,348	2,462	2,168	2,170

**Table 4B-2-2-1b. Georgiana Slough Flow, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,174	4,014	8,172	9,789	10,791	10,351	8,442	7,157	4,941	4,228	3,595	4,059
20% Exceedance	3,036	3,157	5,683	8,356	9,504	8,478	6,198	5,698	4,030	4,047	3,549	3,922
30% Exceedance	2,933	2,972	4,372	5,827	7,922	6,811	4,605	4,188	3,258	3,852	3,516	3,645
40% Exceedance	2,828	2,887	3,501	4,726	6,147	5,589	3,765	3,372	2,928	3,794	3,442	3,437
50% Exceedance	2,578	2,815	3,151	4,070	4,859	4,422	3,314	3,107	2,830	3,682	3,361	3,189
60% Exceedance	2,340	2,649	2,979	3,728	4,048	4,047	2,787	2,756	2,790	3,591	3,140	2,754
70% Exceedance	2,198	2,422	2,744	3,047	3,569	3,693	2,570	2,580	2,716	3,435	2,815	2,501
80% Exceedance	2,028	2,116	2,441	2,718	3,265	3,078	2,504	2,495	2,610	3,093	2,531	2,355
90% Exceedance	1,920	1,951	2,285	2,530	2,834	2,725	2,320	2,272	2,352	2,451	2,178	2,202
Full Simulation Period Average <sup>a</sup>	2,633	2,960	4,167	5,179	6,066	5,617	4,293	3,886	3,369	3,560	3,107	3,133
Wet Water Years (30%)	2,976	3,701	6,397	7,999	9,328	8,296	6,840	5,887	4,606	3,749	3,456	3,875
Above Normal Water Years (11%)	2,503	2,784	3,700	6,756	7,262	7,330	4,676	4,285	3,584	3,937	3,570	3,889
Below Normal Water Years (21%)	2,674	2,901	3,319	4,122	5,037	4,801	3,503	3,358	2,926	3,929	3,408	3,075
Dry Water Years (22%)	2,556	2,691	3,219	3,225	4,074	3,886	2,791	2,694	2,751	3,564	2,798	2,499
Critical Water Years (16%)	2,133	2,140	2,723	2,881	3,222	2,868	2,358	2,188	2,333	2,459	2,162	2,171

**Table 4B-2-2-1c. Georgiana Slough Flow, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-85	-160	34	0	-3	21	0	1	-1	-18	-58	203
20% Exceedance	-5	10	15	-12	1	11	3	4	-2	-27	-37	176
30% Exceedance	-1	0	1	58	-60	-23	57	9	-9	-8	-13	121
40% Exceedance	7	-4	-6	-6	0	17	31	13	-39	3	-25	140
50% Exceedance	-33	2	35	5	-54	30	29	-1	-63	-11	-22	1
60% Exceedance	-12	32	-18	-7	0	26	54	-31	-45	-21	-19	-147
70% Exceedance	3	-8	-5	19	-79	35	0	0	-29	11	25	-3
80% Exceedance	7	1	26	-10	0	-2	10	21	30	-37	19	3
90% Exceedance	11	1	7	-10	-4	10	-8	54	-43	-46	-48	0
Full Simulation Period Average <sup>a</sup>	0	2	6	-2	-5	15	21	9	-17	-13	-21	68
Wet Water Years (30%)	-9	8	0	1	-1	1	0	0	4	-6	-7	139
Above Normal Water Years (11%)	12	11	8	-1	-5	25	33	28	-6	-30	-74	242
Below Normal Water Years (21%)	5	-23	30	6	-26	21	55	-12	-8	-31	-32	-6
Dry Water Years (22%)	-3	11	-29	-21	-13	41	28	33	-65	-3	-15	4
Critical Water Years (16%)	6	6	34	4	29	-11	-1	7	-15	-4	-6	1

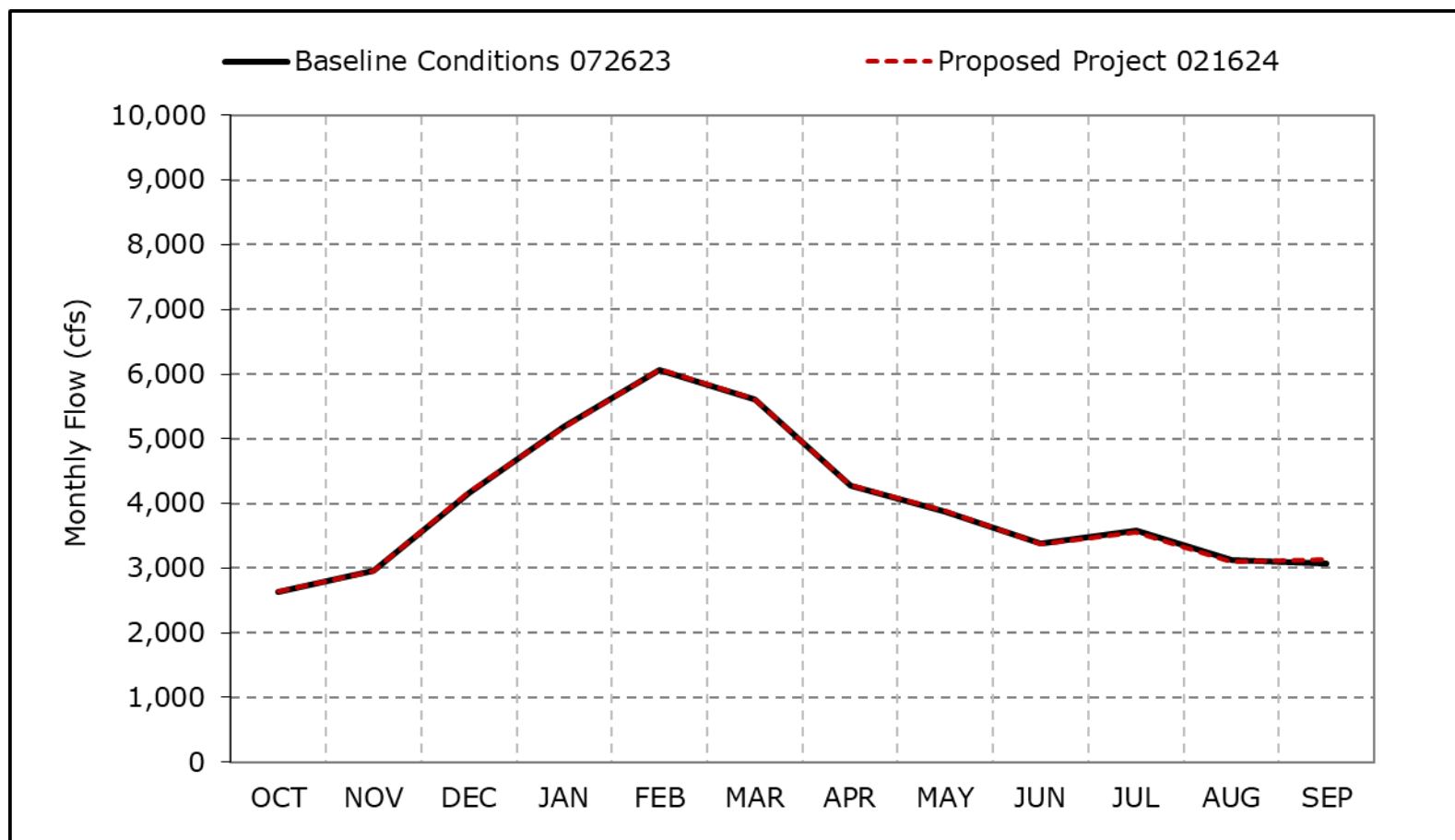
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-2a. Georgiana Slough Flow, Long-Term Average Flow**

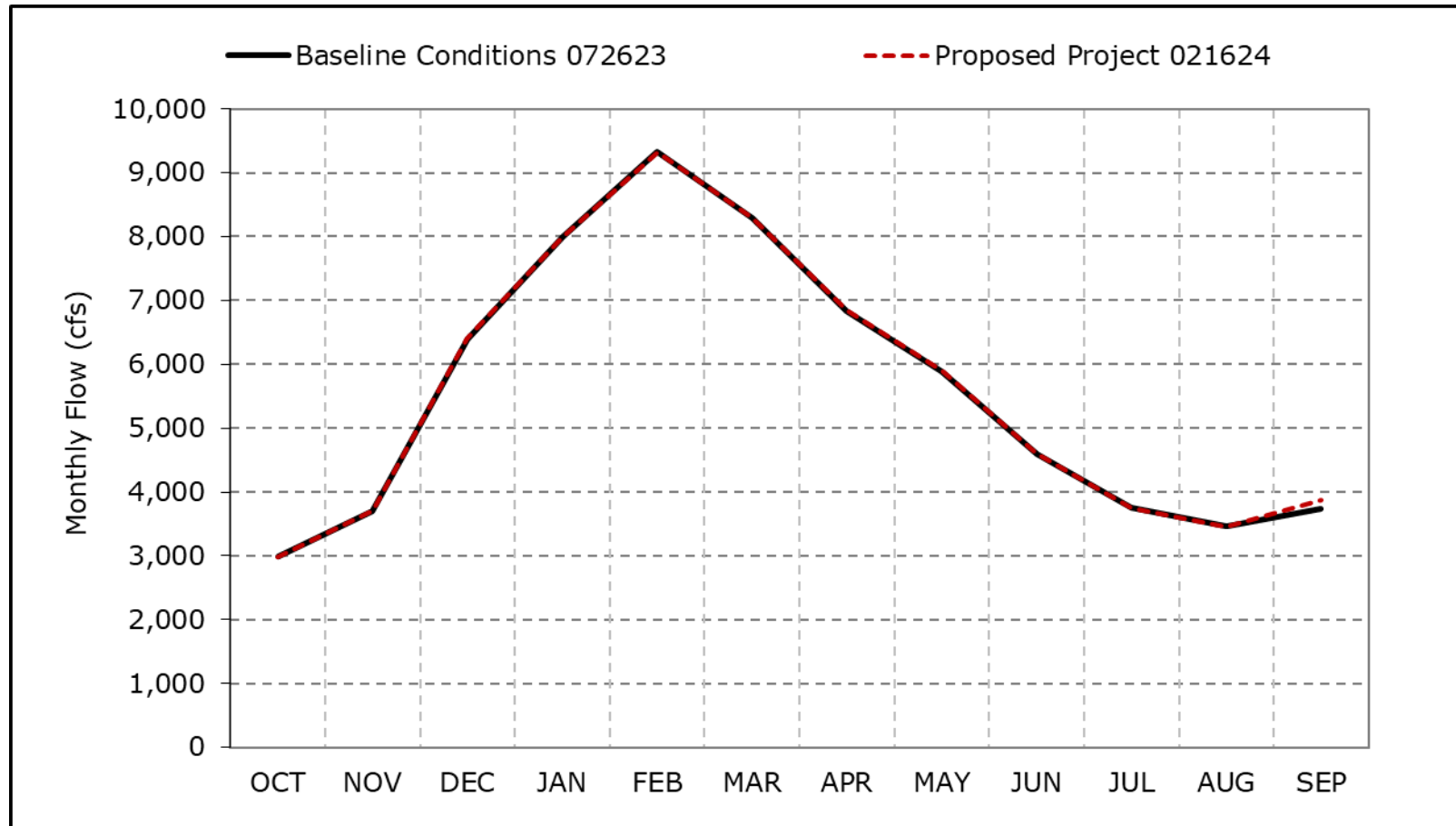


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-2b. Georgiana Slough Flow, Wet Year Average Flow**



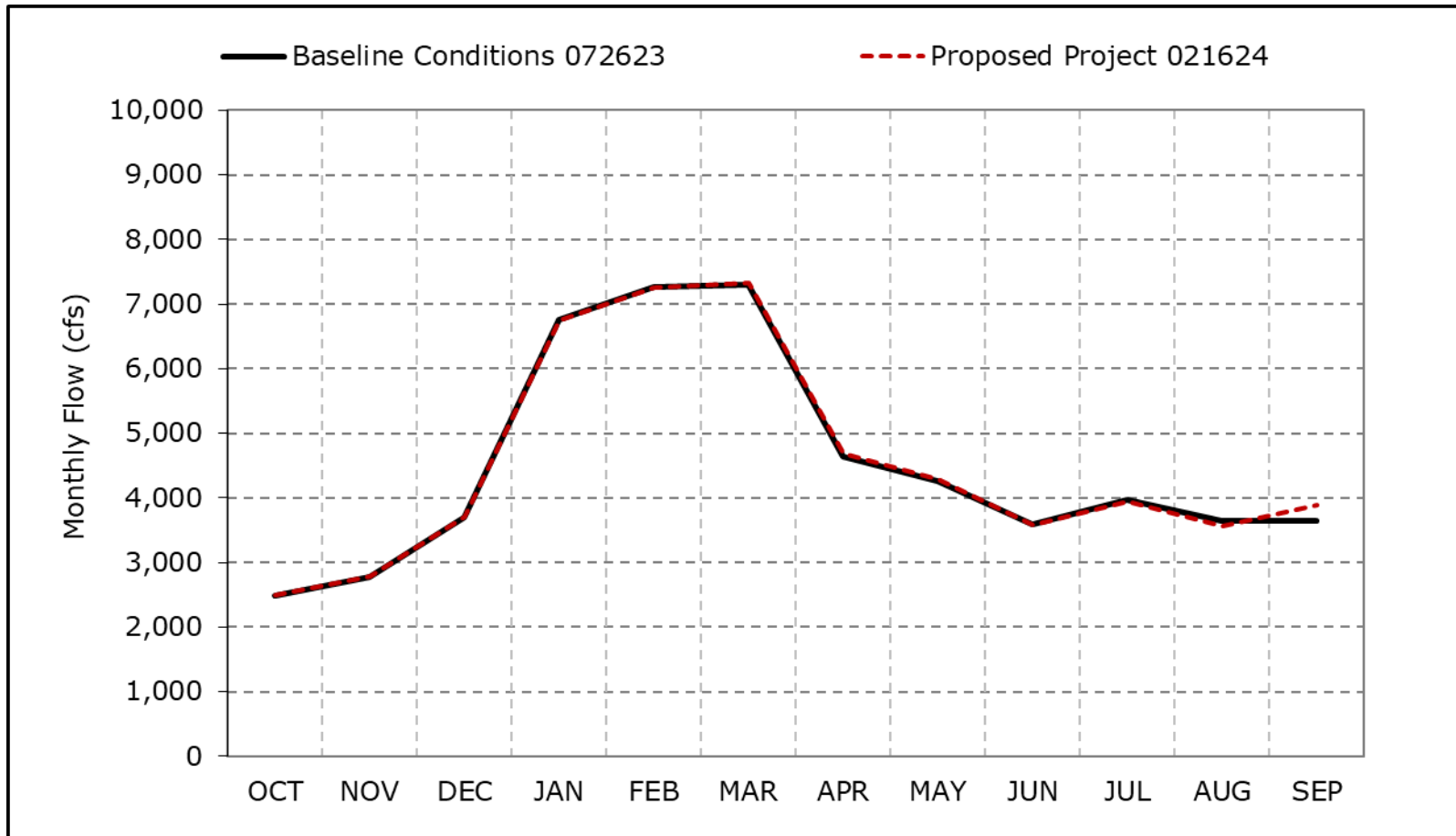
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-2c. Georgiana Slough Flow, Above Normal Year Average Flow**

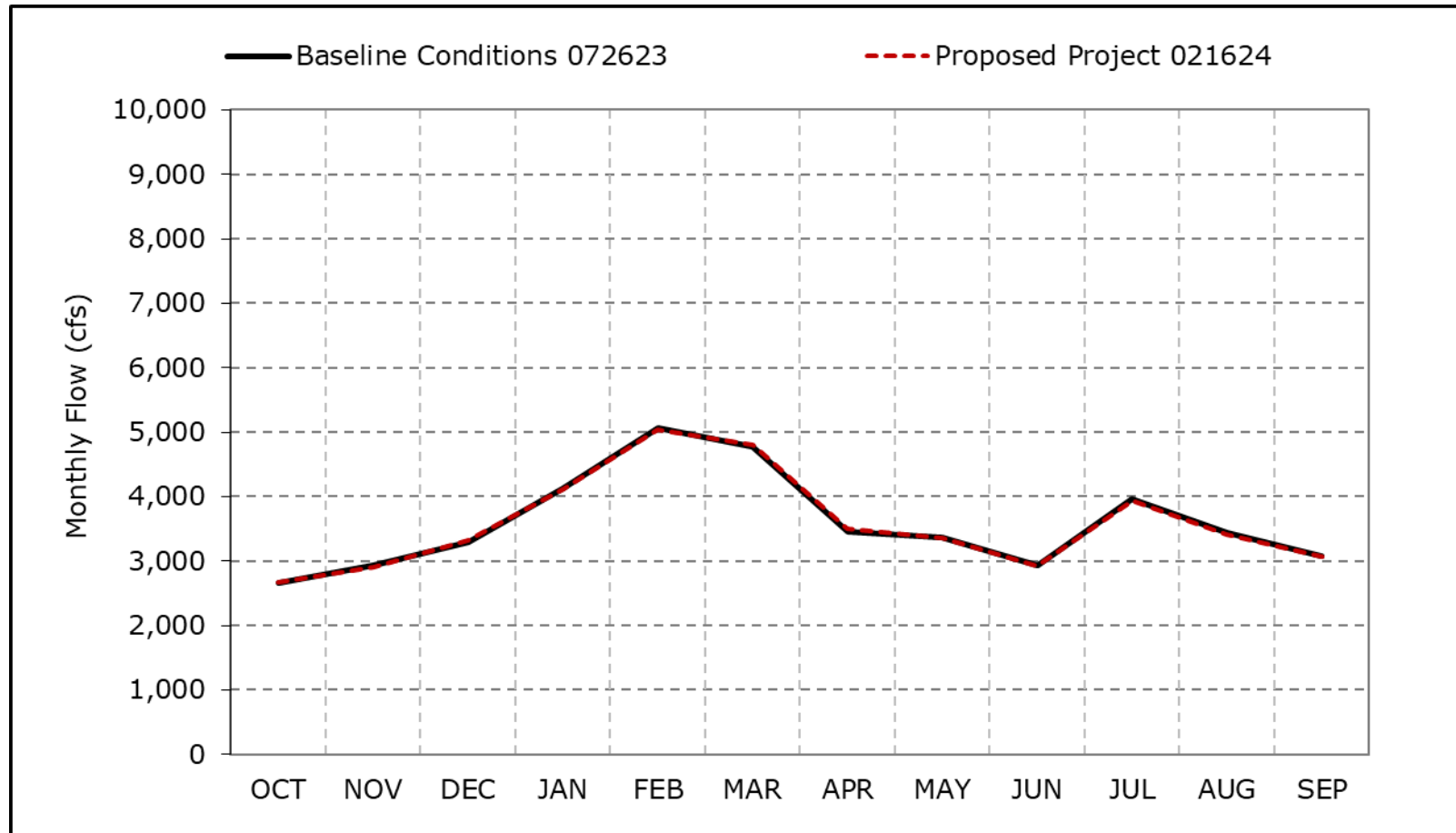


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-2d. Georgiana Slough Flow, Below Normal Year Average Flow**

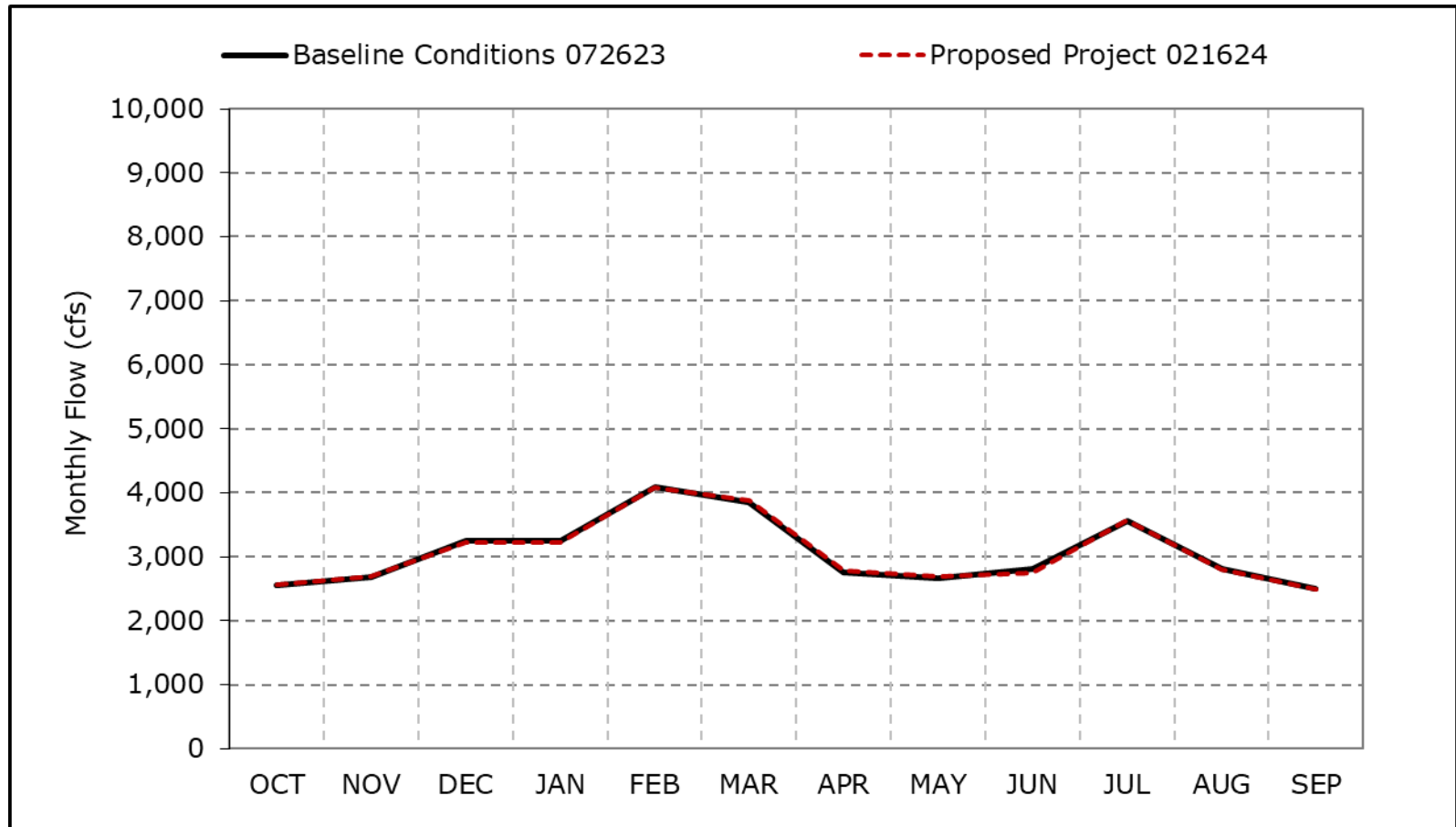


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-2e. Georgiana Slough Flow, Dry Year Average Flow**

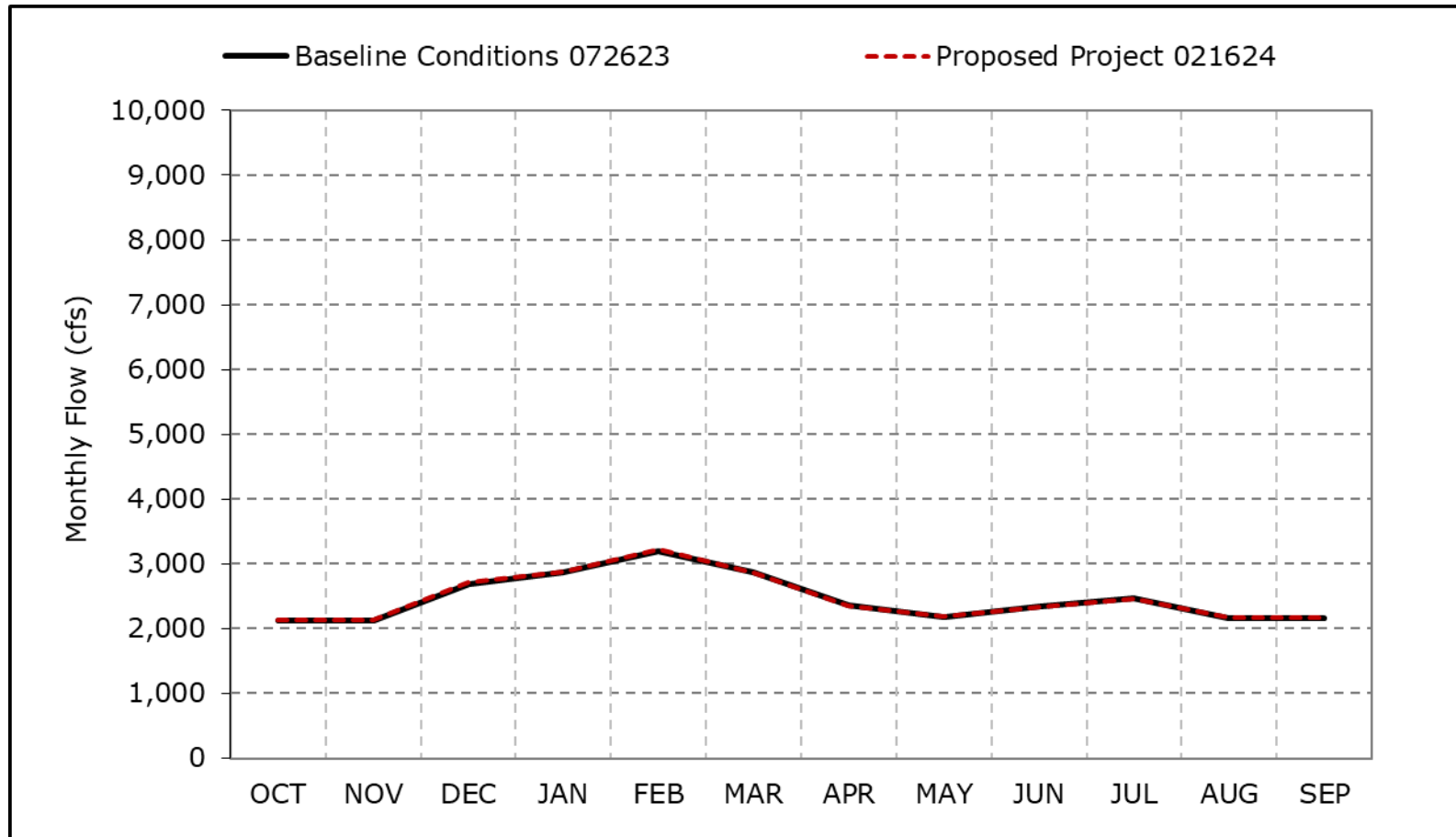


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-2f. Georgiana Slough Flow, Critical Year Average Flow**

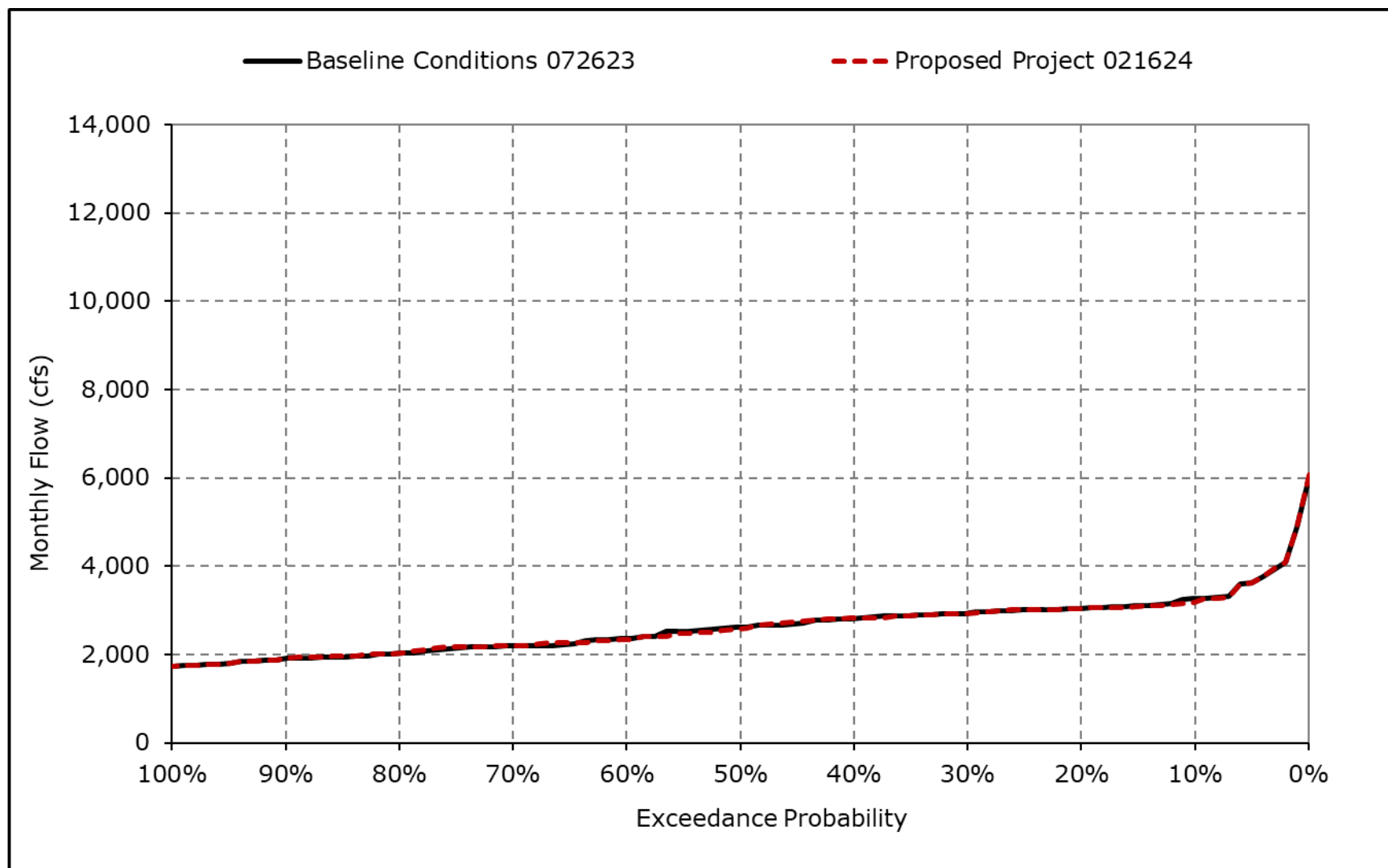


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

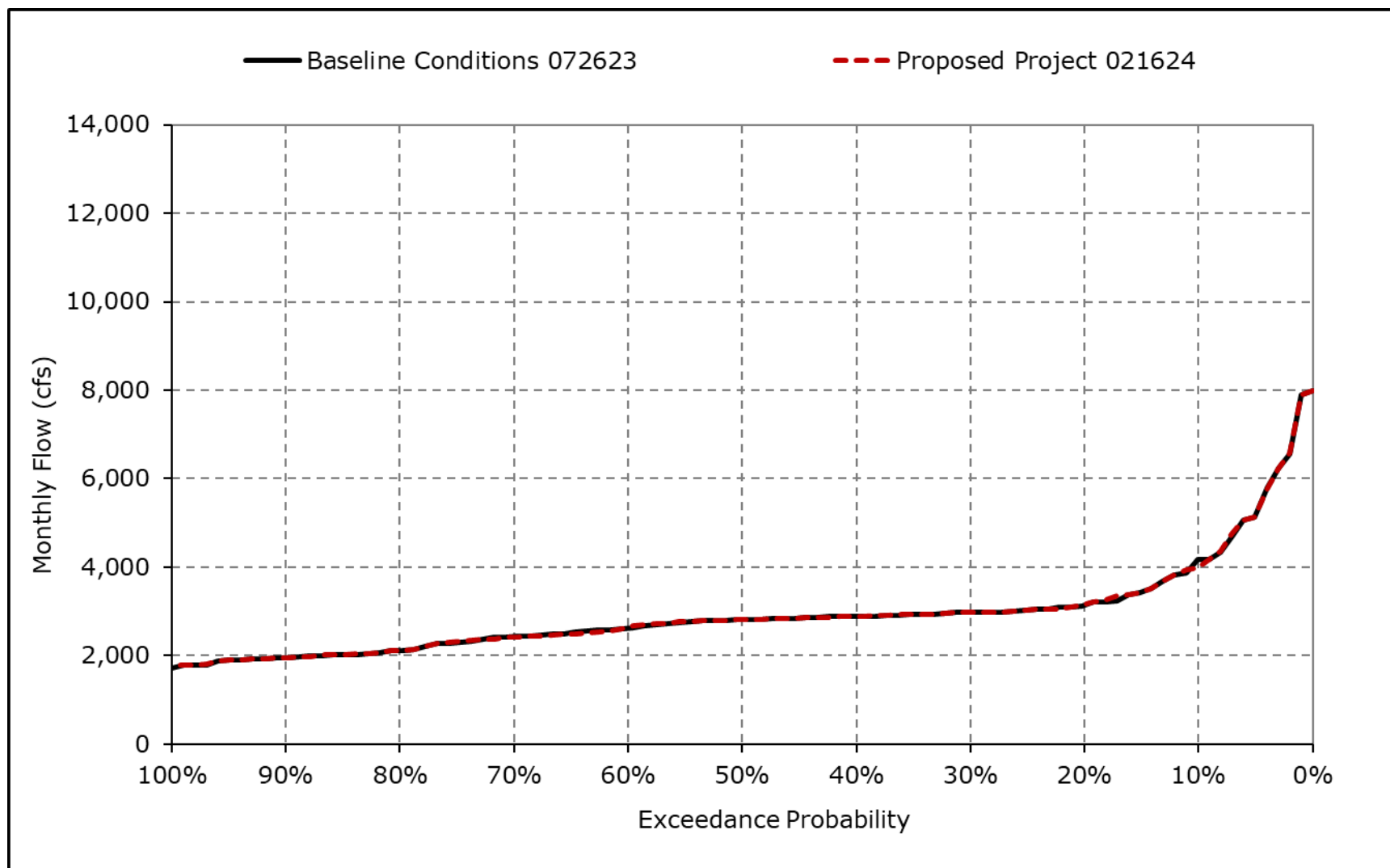
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2g. Georgiana Slough Flow, October**



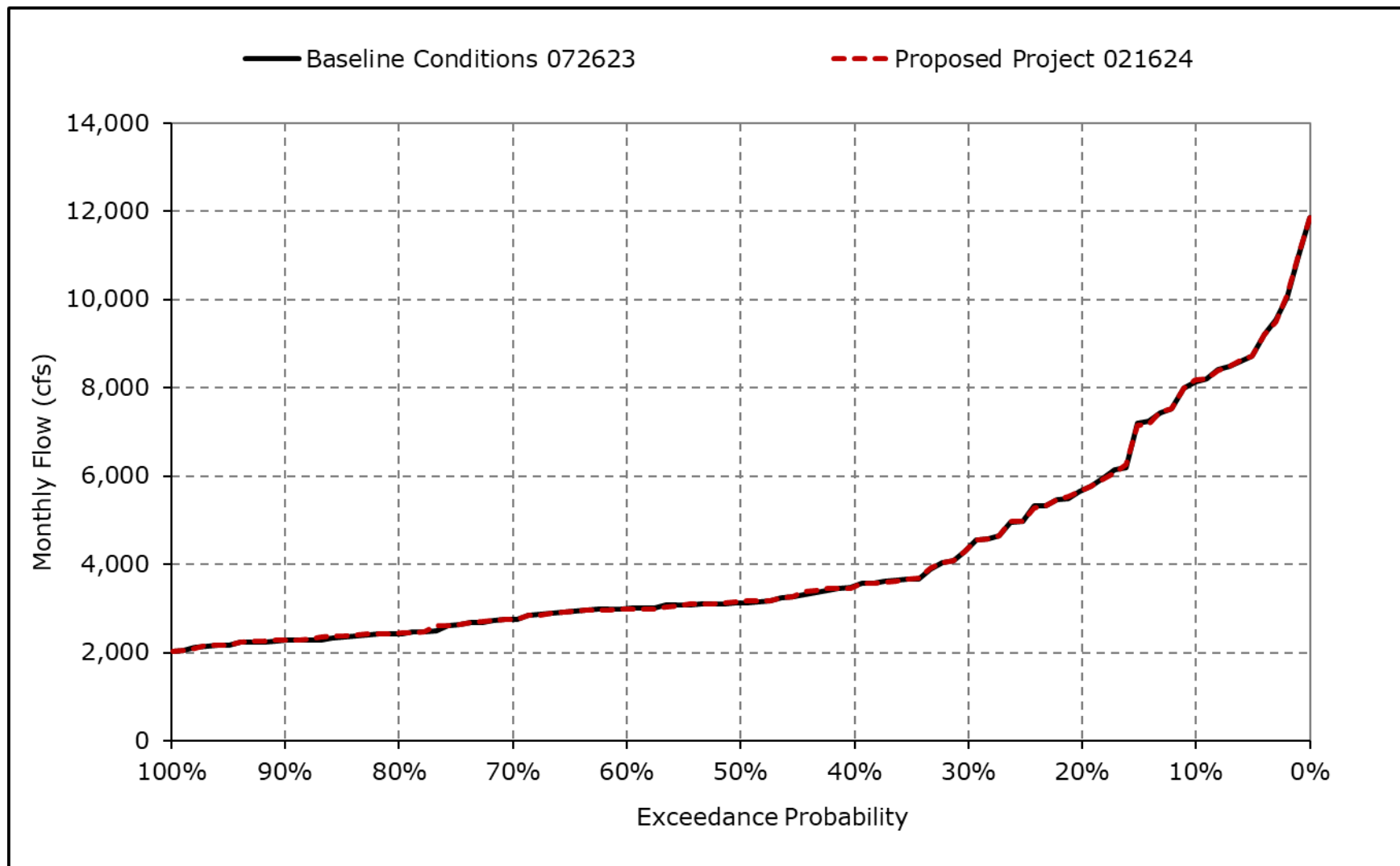
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2h. Georgiana Slough Flow, November**



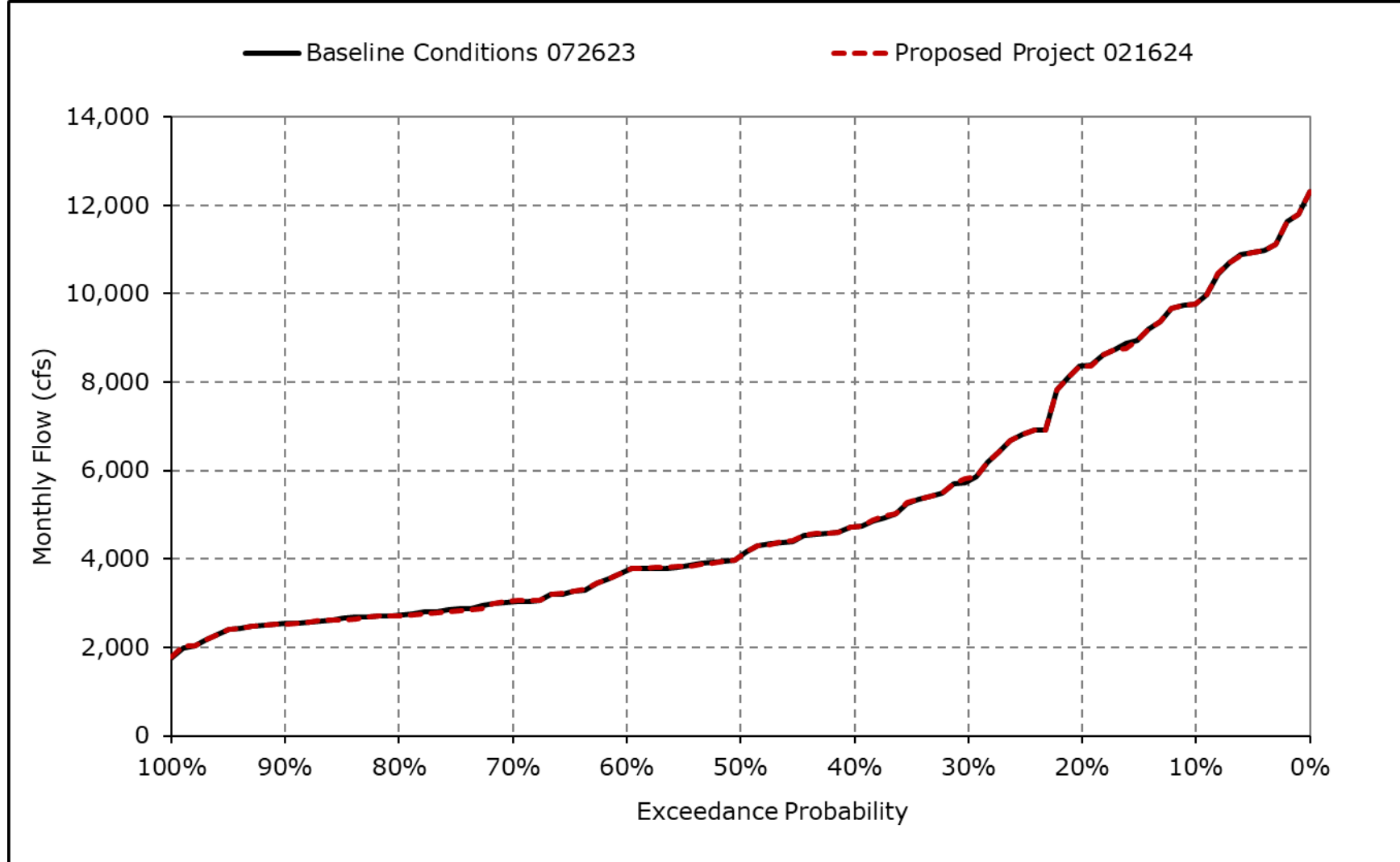
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2i. Georgiana Slough Flow, December**



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

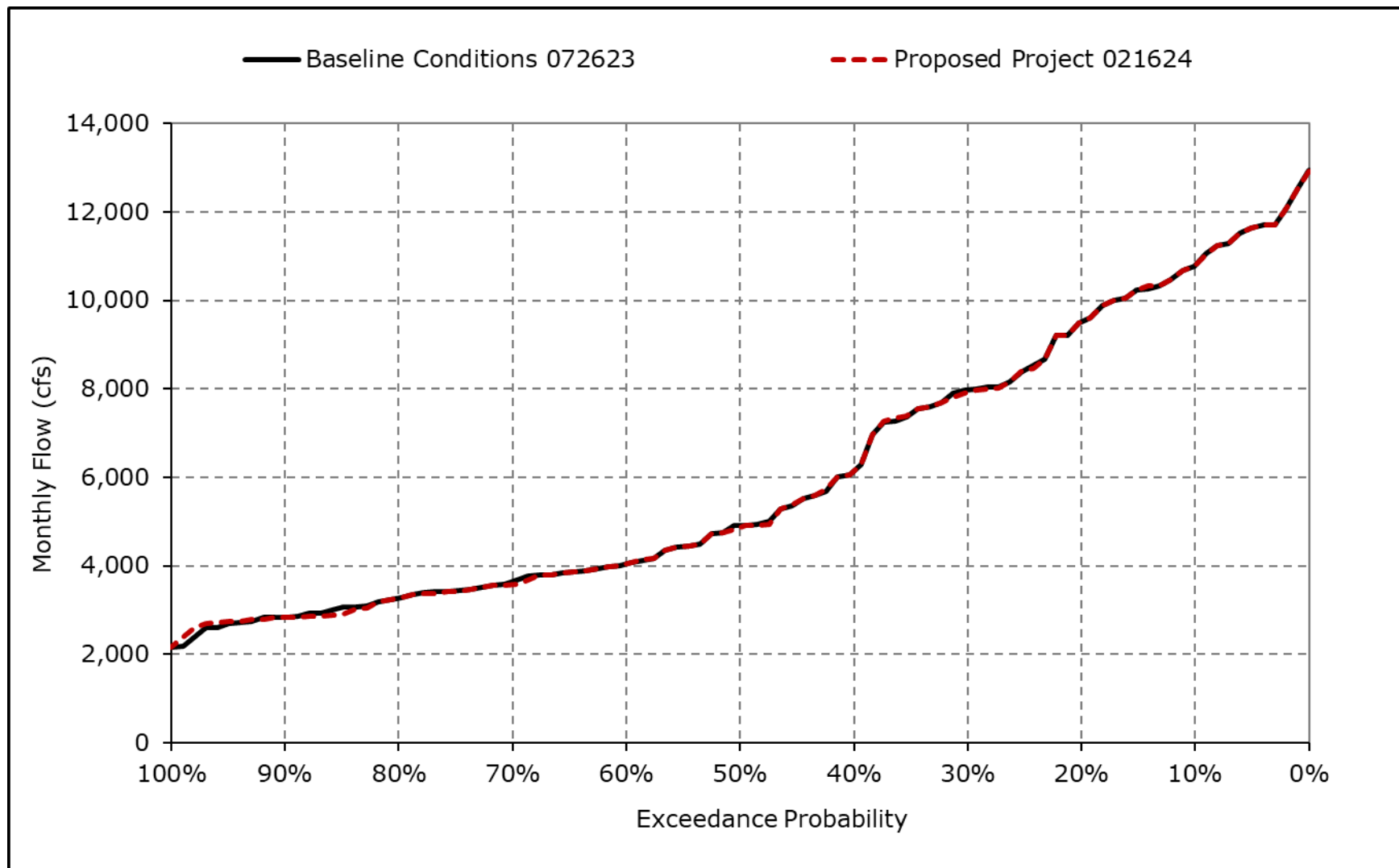
**Figure 4B-2-2j. Georgiana Slough Flow, January**



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

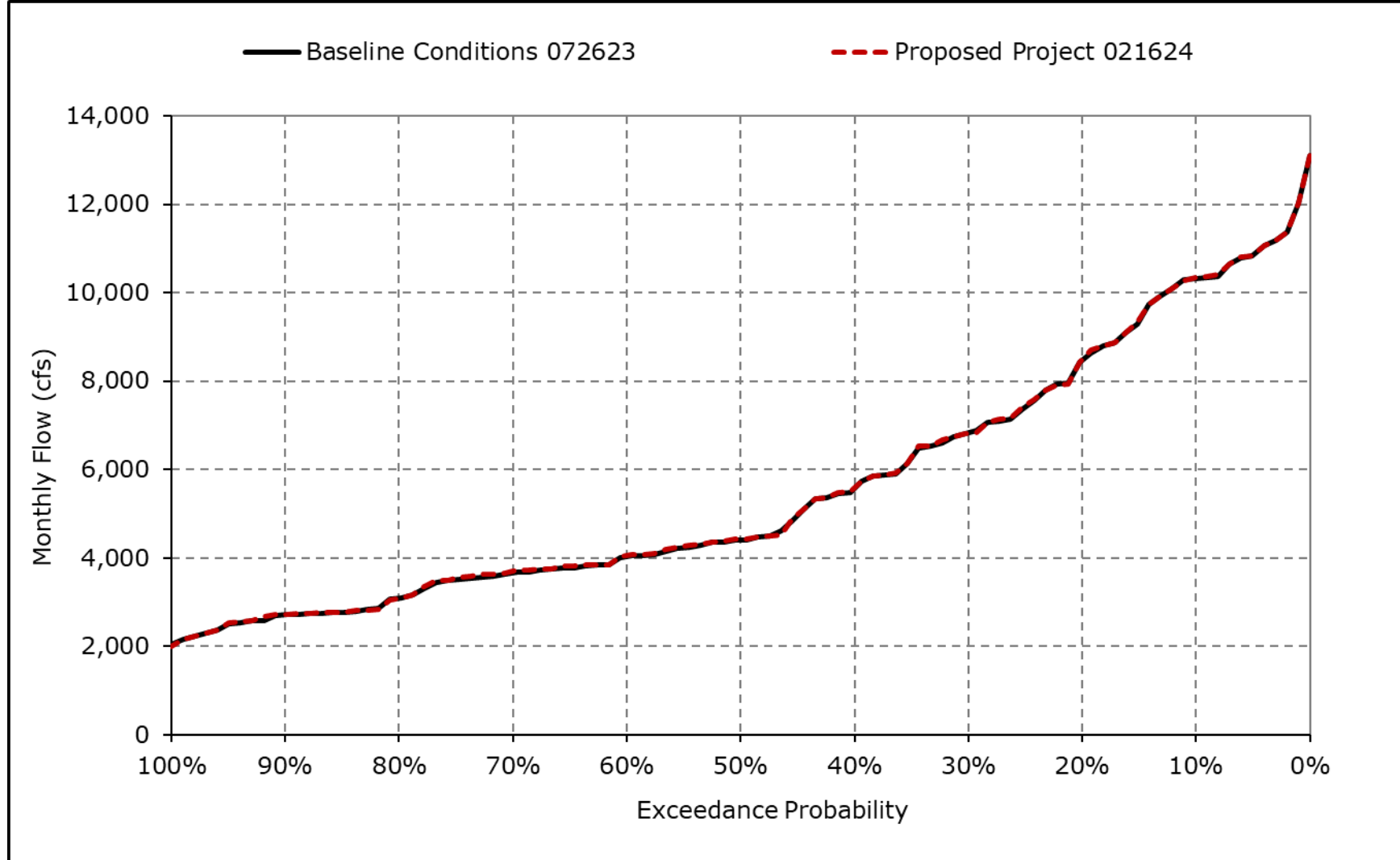


**Figure 4B-2-2k. Georgiana Slough Flow, February**



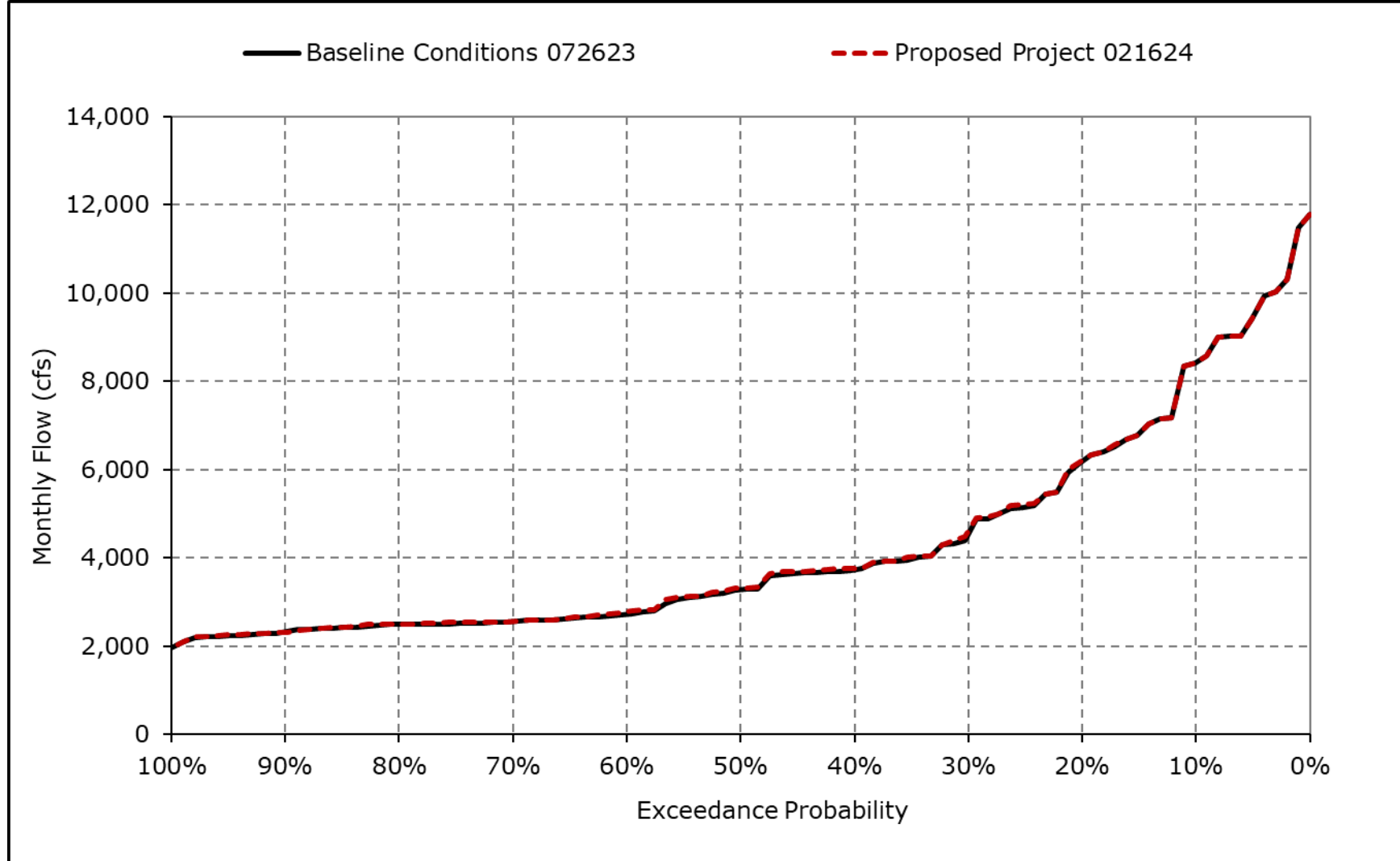
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2I. Georgiana Slough Flow, March**



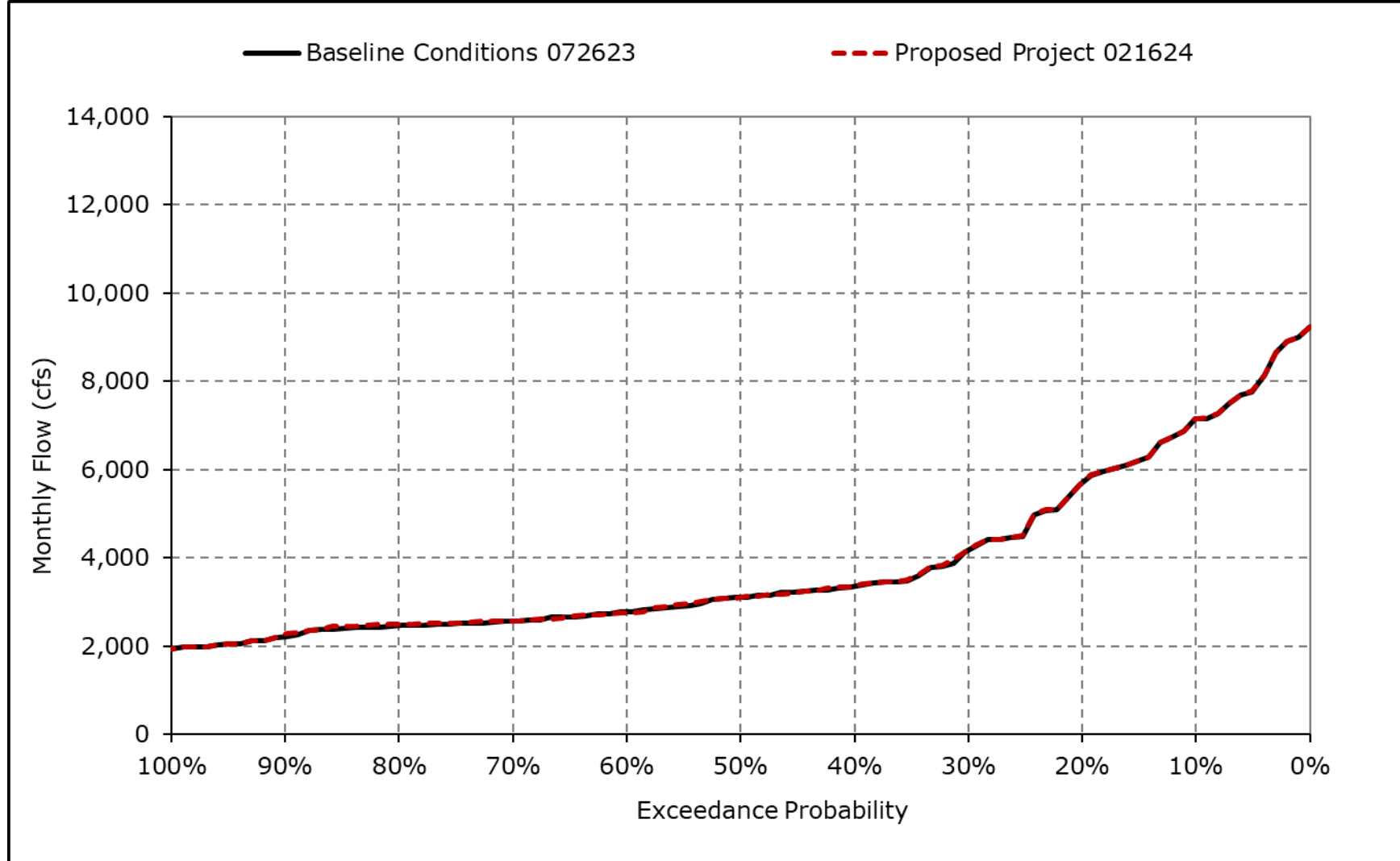
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2m. Georgiana Slough Flow, April**



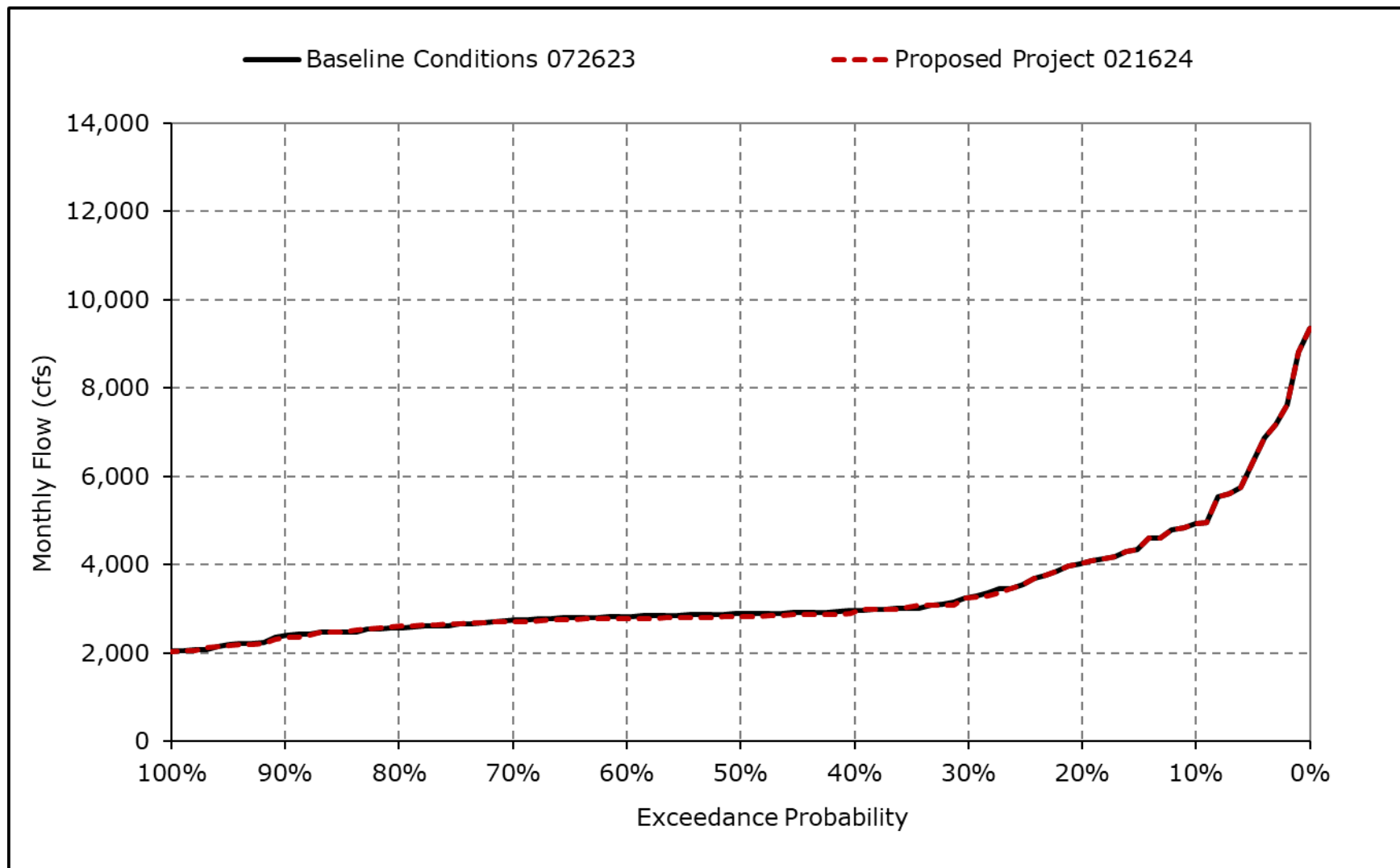
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2n. Georgiana Slough Flow, May**



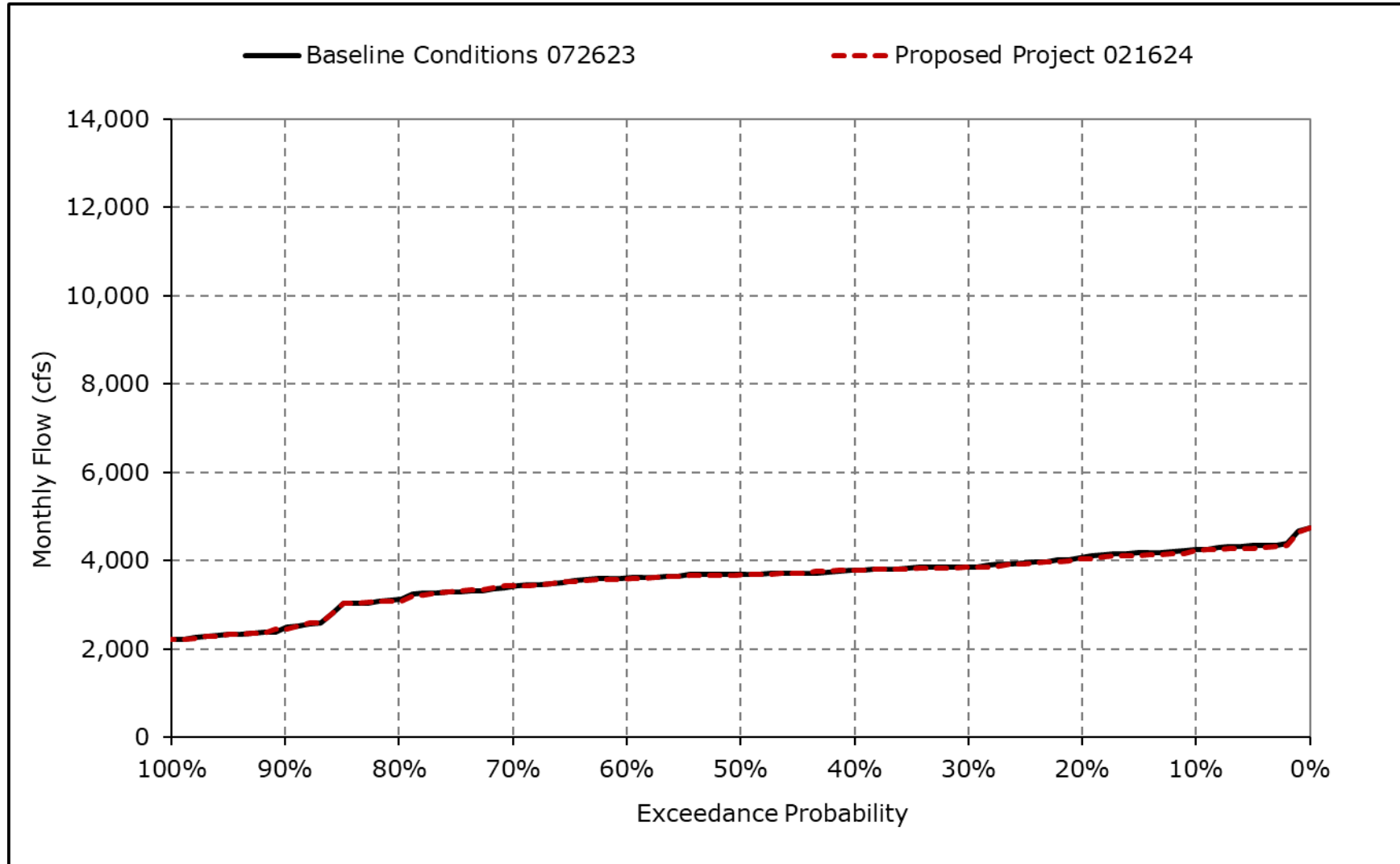
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2o. Georgiana Slough Flow, June**



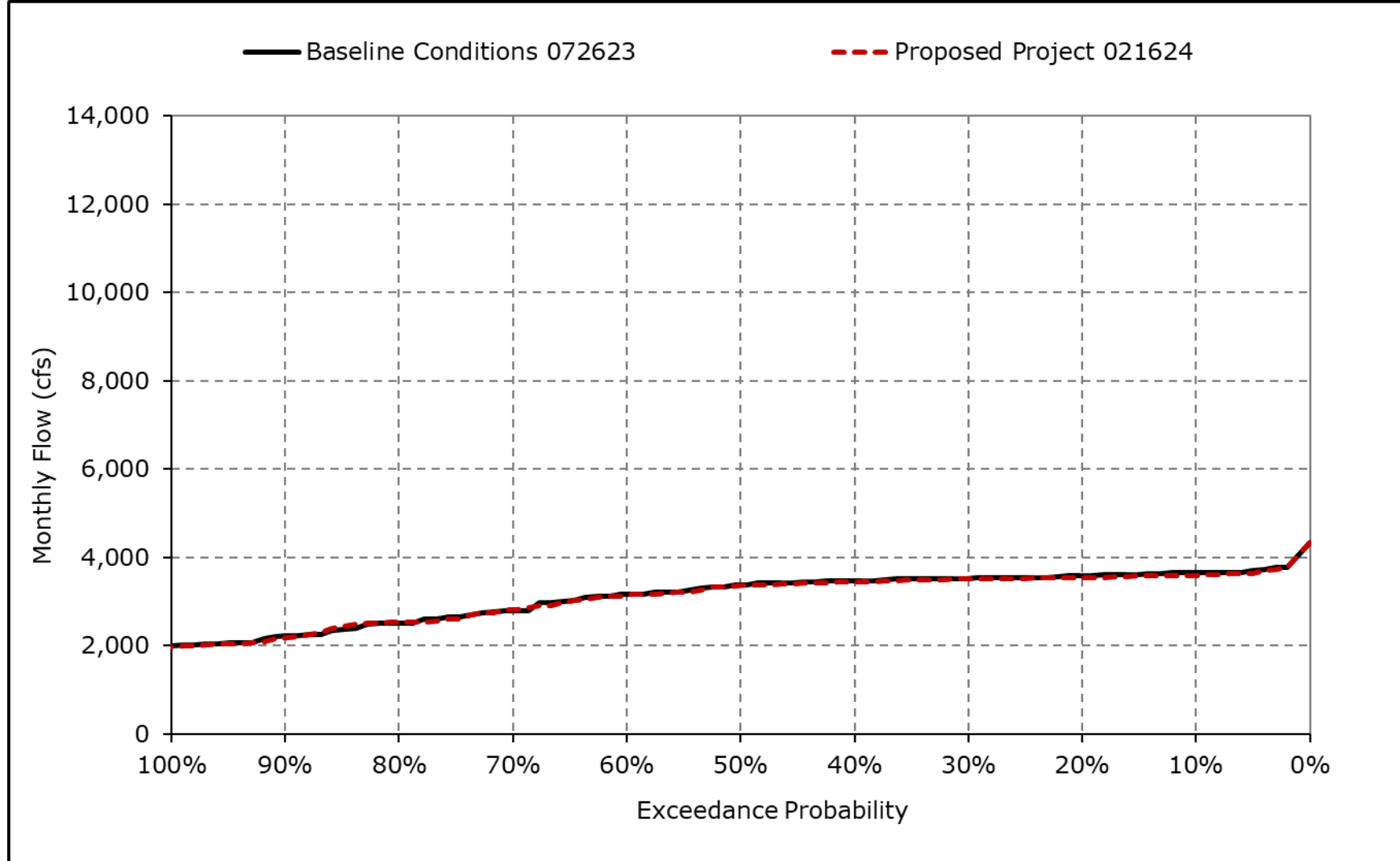
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2p. Georgiana Slough Flow, July**



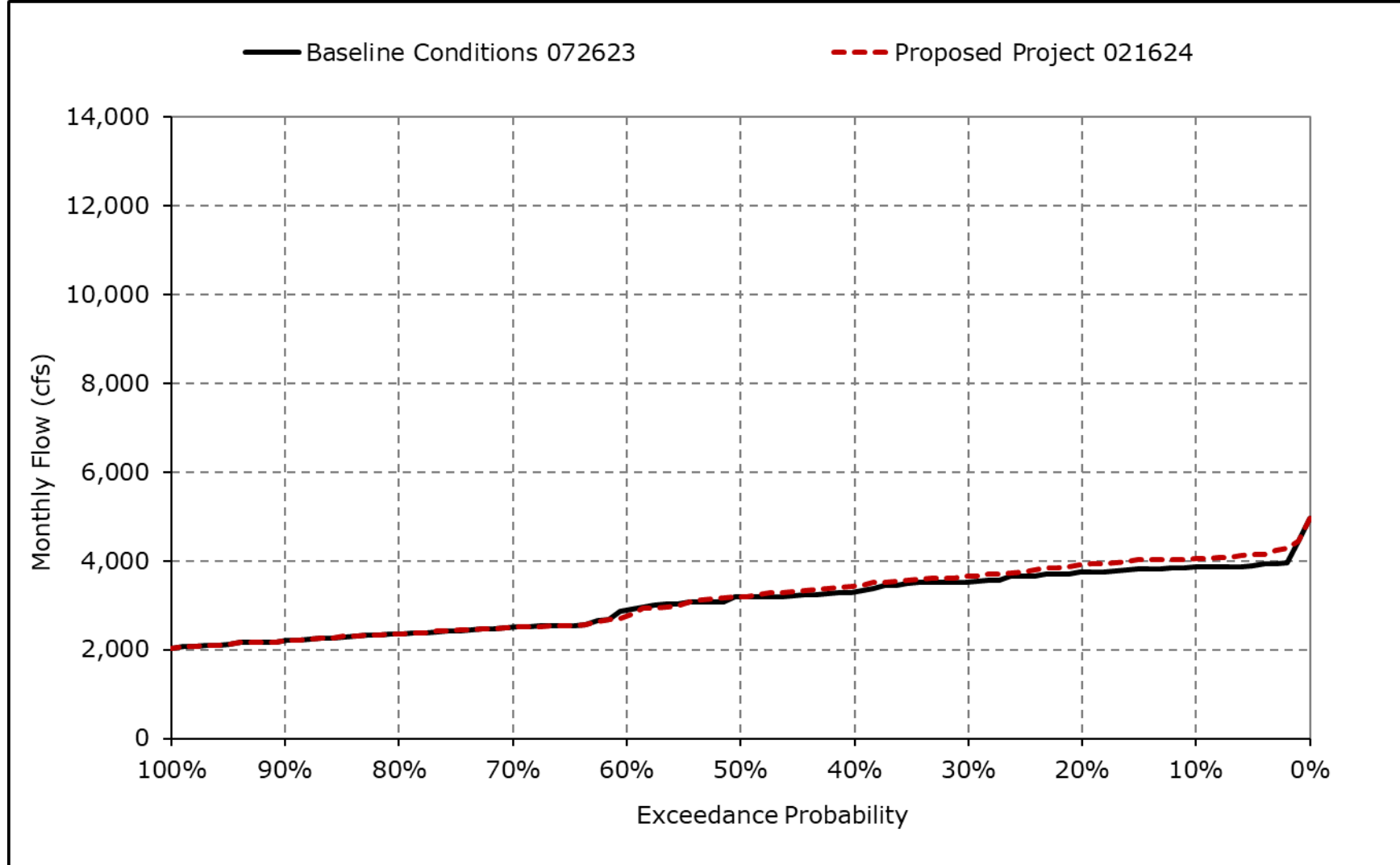
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-2q. Georgiana Slough Flow, August**



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

**Figure 4B-2-2r. Georgiana Slough Flow, September**



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



**Table 4B-2-3-1a. Yolo Bypass Flow, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	199	893	11,248	30,814	47,187	23,638	3,224	1,122	504	283	214	284
20% Exceedance	121	374	6,404	12,535	15,757	7,736	1,803	602	357	267	201	264
30% Exceedance	108	278	1,583	4,990	9,616	4,156	1,029	514	293	262	196	259
40% Exceedance	89	191	893	2,777	6,135	2,718	677	427	257	256	194	249
50% Exceedance	82	138	435	1,743	2,685	1,338	378	311	249	252	190	240
60% Exceedance	70	120	277	861	1,737	783	275	265	241	247	188	224
70% Exceedance	62	104	166	408	686	491	247	243	235	243	185	206
80% Exceedance	54	90	114	245	391	271	231	225	221	235	181	198
90% Exceedance	46	79	93	138	205	130	212	193	189	219	171	175
Full Simulation Period Average <sup>a</sup>	162	672	4,203	10,108	14,343	8,478	2,155	632	328	254	194	238
Wet Water Years (30%)	321	1,641	11,242	27,356	36,979	22,537	5,979	1,182	536	300	226	281
Above Normal Water Years (11%)	96	288	2,041	10,797	14,279	9,717	1,101	627	284	245	188	236
Below Normal Water Years (21%)	112	407	1,247	2,016	5,054	1,886	606	555	270	215	176	232
Dry Water Years (22%)	96	186	1,008	779	2,145	888	349	273	214	252	184	224
Critical Water Years (16%)	65	134	764	744	908	351	224	199	206	230	175	187

**Table 4B-2-3-1b. Yolo Bypass Flow, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	200	893	11,270	30,828	47,409	23,527	3,224	1,113	504	283	224	284
20% Exceedance	121	372	6,385	12,332	15,755	7,637	1,804	602	357	267	204	266
30% Exceedance	108	272	1,583	5,004	9,541	4,158	1,029	514	293	262	198	260
40% Exceedance	89	192	879	2,774	6,277	2,712	677	427	257	256	195	250
50% Exceedance	82	138	453	1,752	2,685	1,339	378	311	249	253	191	242
60% Exceedance	71	120	278	861	1,721	784	275	264	242	247	189	226
70% Exceedance	63	104	162	409	686	488	247	243	235	244	186	214
80% Exceedance	55	90	114	238	393	271	231	225	221	235	181	201
90% Exceedance	46	79	93	138	205	130	212	193	183	222	173	179
Full Simulation Period Average <sup>a</sup>	164	669	4,207	10,114	14,309	8,461	2,146	631	328	255	210	241
Wet Water Years (30%)	325	1,629	11,252	27,365	36,958	22,520	5,950	1,181	535	300	227	281
Above Normal Water Years (11%)	99	290	2,049	10,820	14,216	9,627	1,102	627	284	248	188	236
Below Normal Water Years (21%)	112	405	1,248	2,019	4,971	1,880	605	552	270	216	181	233
Dry Water Years (22%)	96	187	1,008	776	2,129	886	349	273	212	252	184	232
Critical Water Years (16%)	66	136	765	745	907	351	223	199	206	230	265	190

**Table 4B-2-3-1c. Yolo Bypass Flow, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	0	0	22	15	222	-110	0	-9	0	0	10	0
20% Exceedance	0	-2	-19	-203	-2	-99	1	0	0	0	4	2
30% Exceedance	0	-6	0	14	-75	2	0	1	0	0	2	1
40% Exceedance	0	1	-15	-4	142	-6	0	0	0	1	1	2
50% Exceedance	0	-1	17	9	-1	0	0	0	0	1	1	1
60% Exceedance	0	0	0	0	-16	1	1	0	1	0	1	2
70% Exceedance	0	0	-4	1	0	-3	0	0	0	1	1	9
80% Exceedance	1	0	0	-7	1	0	0	0	0	0	0	3
90% Exceedance	0	0	0	0	0	1	0	0	-6	4	2	4
Full Simulation Period Average <sup>a</sup>	2	-3	4	5	-34	-17	-9	-1	0	1	16	2
Wet Water Years (30%)	5	-12	10	9	-21	-17	-29	-2	-1	0	1	0
Above Normal Water Years (11%)	3	2	8	23	-63	-90	1	0	0	2	0	0
Below Normal Water Years (21%)	1	-2	1	3	-83	-5	-1	-2	0	1	5	1
Dry Water Years (22%)	0	1	0	-3	-16	-2	0	0	-1	0	0	7
Critical Water Years (16%)	1	2	1	1	0	0	0	0	0	0	90	3

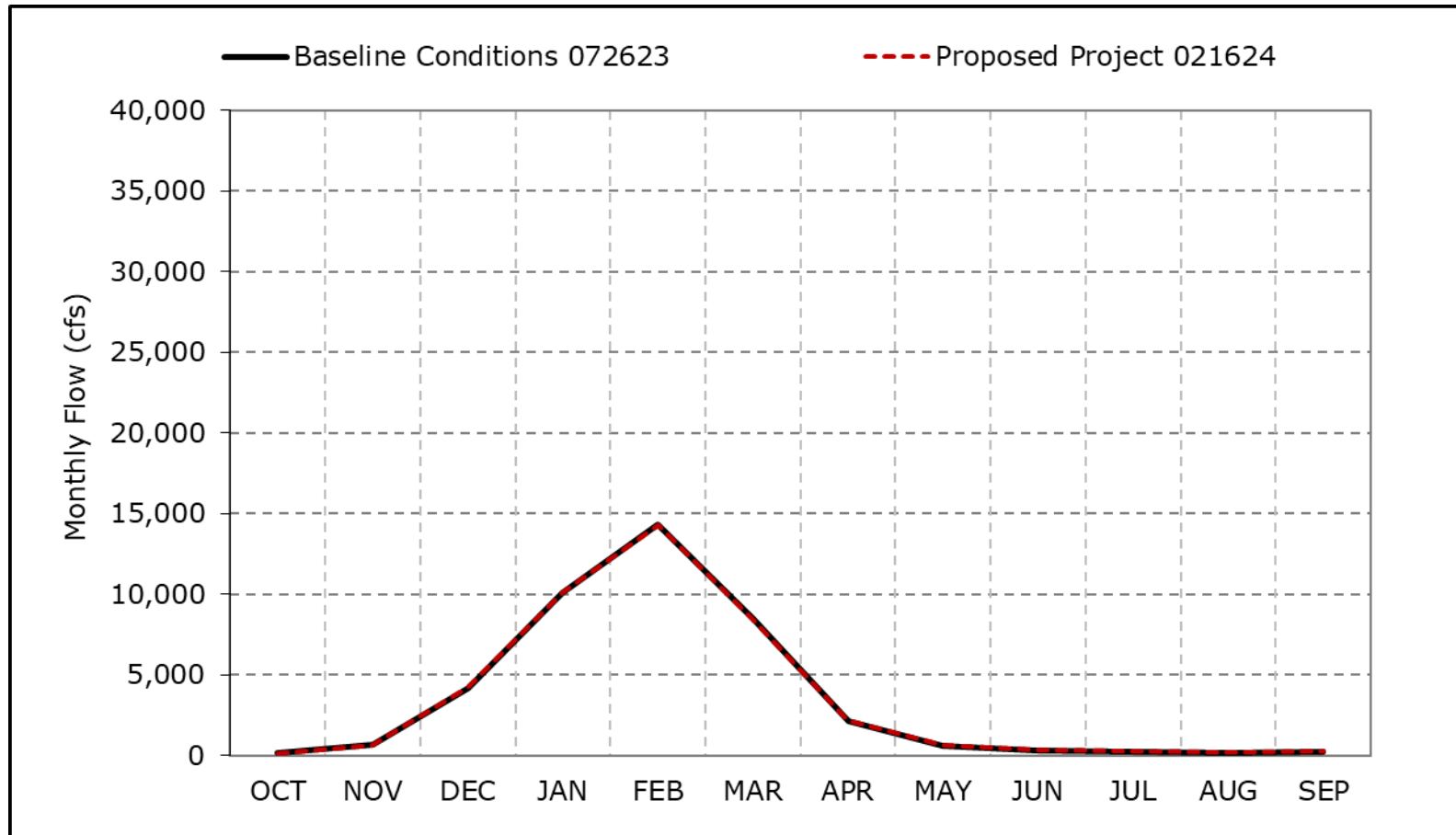
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-3a. Yolo Bypass Flow, Long-Term Average Flow**

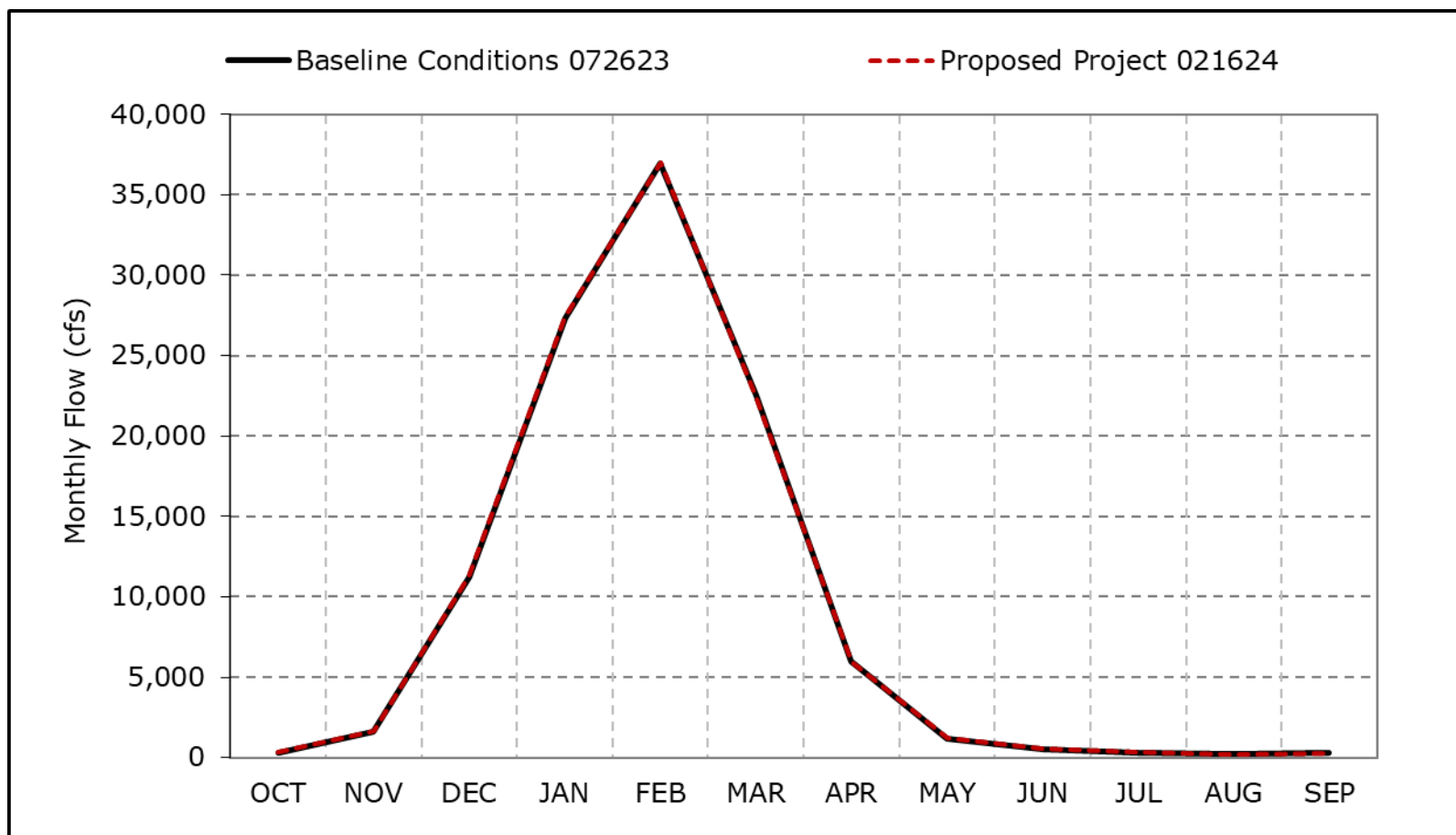


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-3b. Yolo Bypass Flow, Wet Year Average Flow**

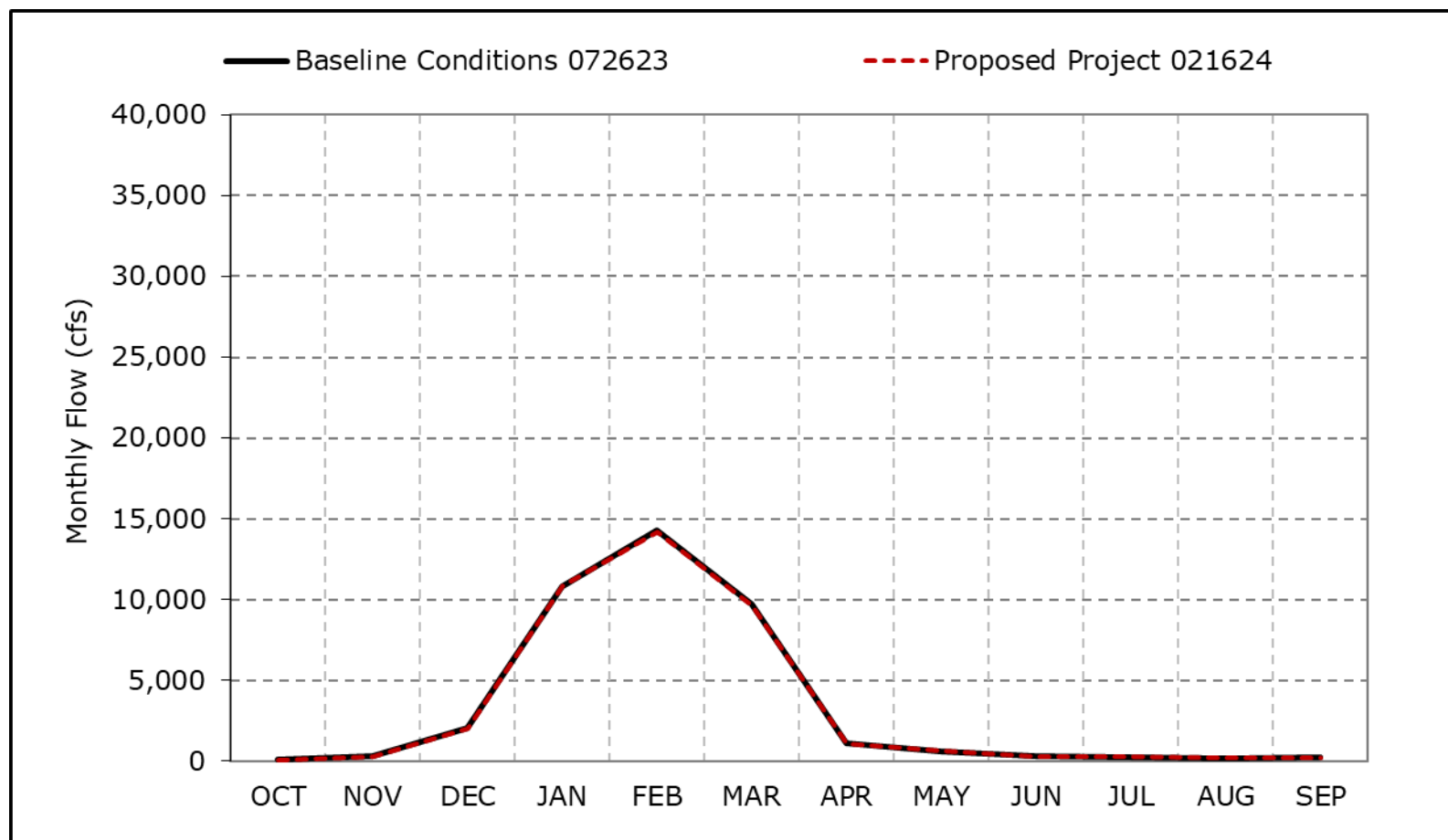


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-3c. Yolo Bypass Flow, Above Normal Year Average Flow**

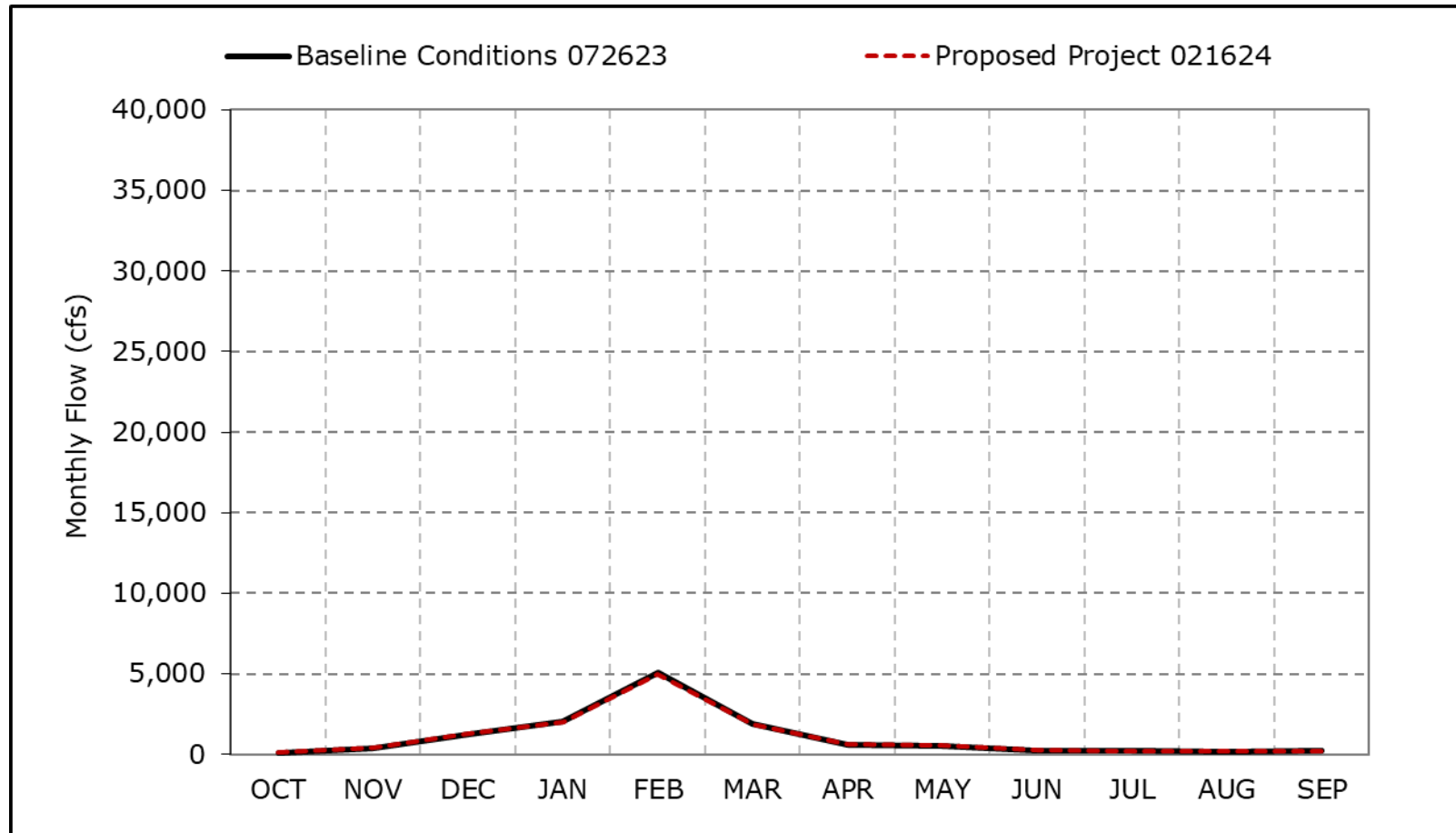


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-3d. Yolo Bypass Flow, Below Normal Year Average Flow**

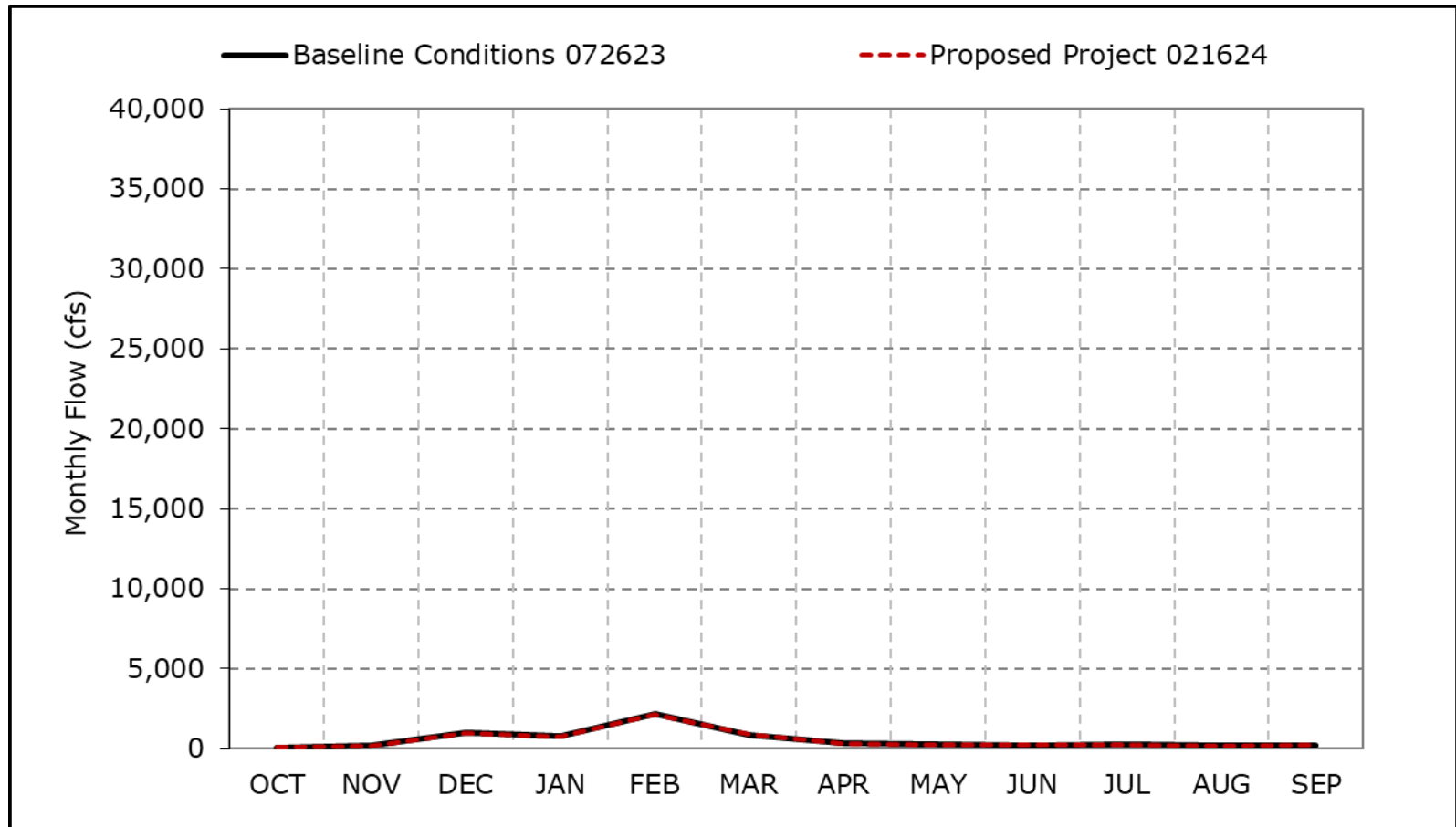


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-3e. Yolo Bypass Flow, Dry Year Average Flow**

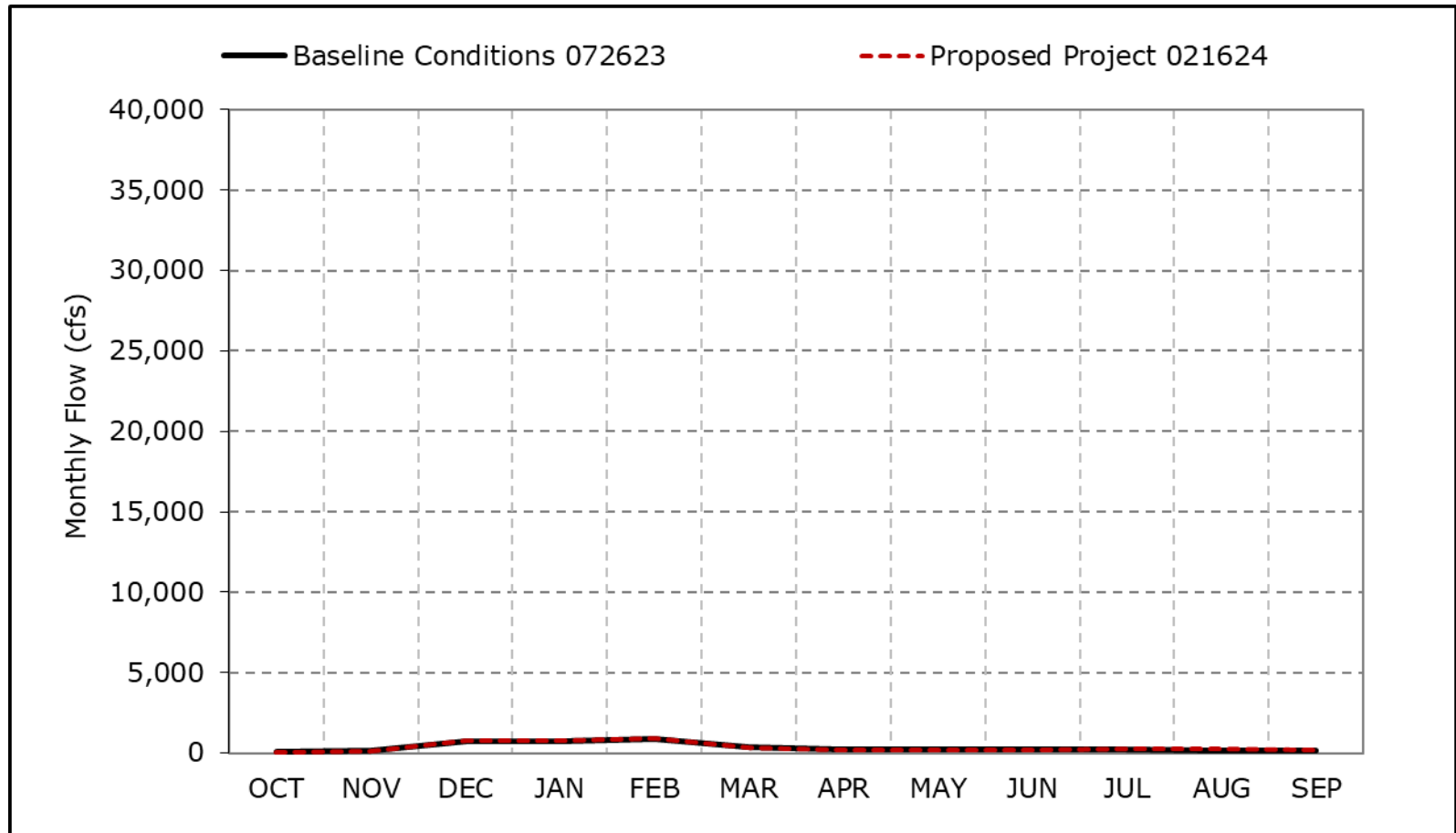


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-3f. Yolo Bypass Flow, Critical Year Average Flow**

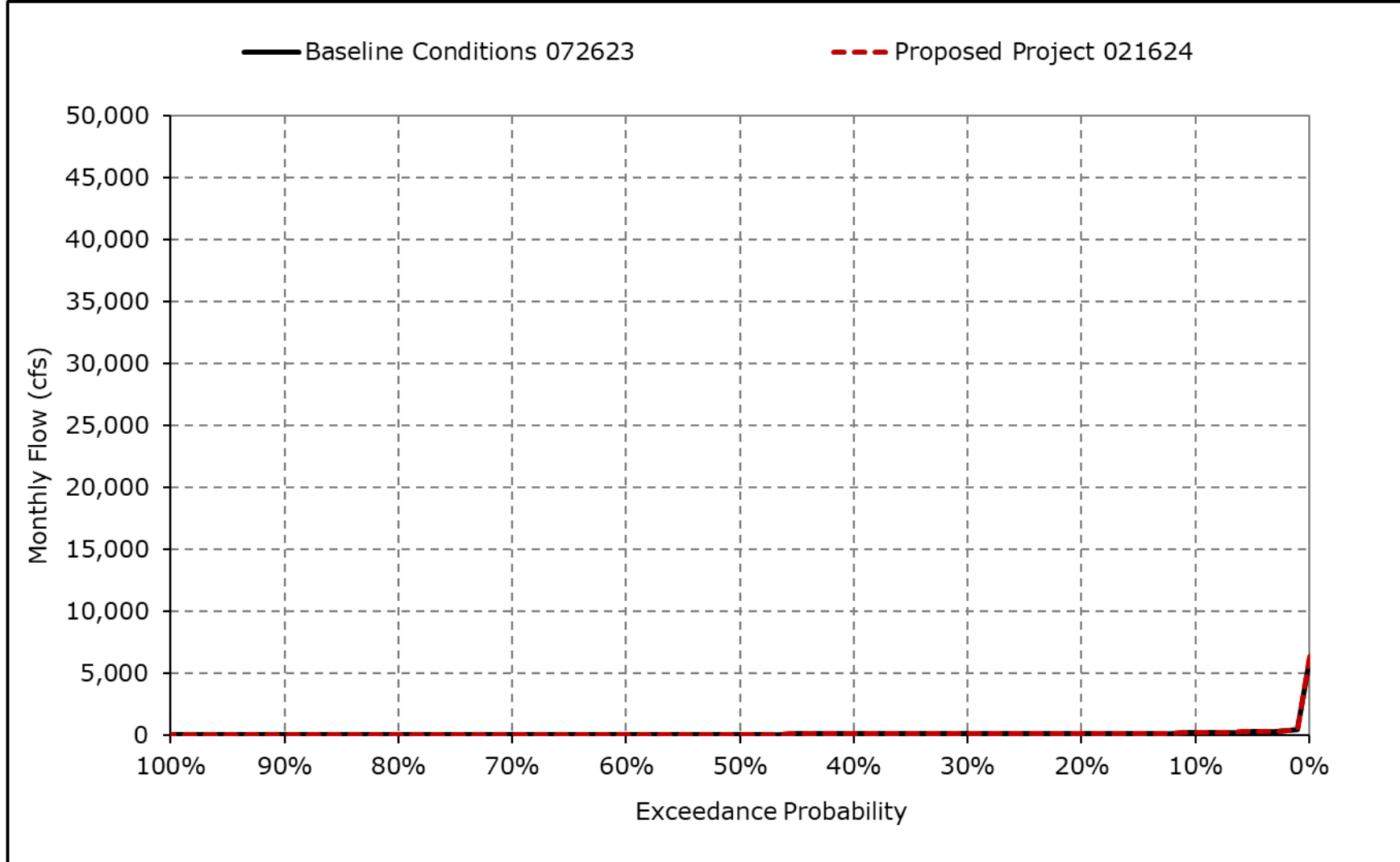


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

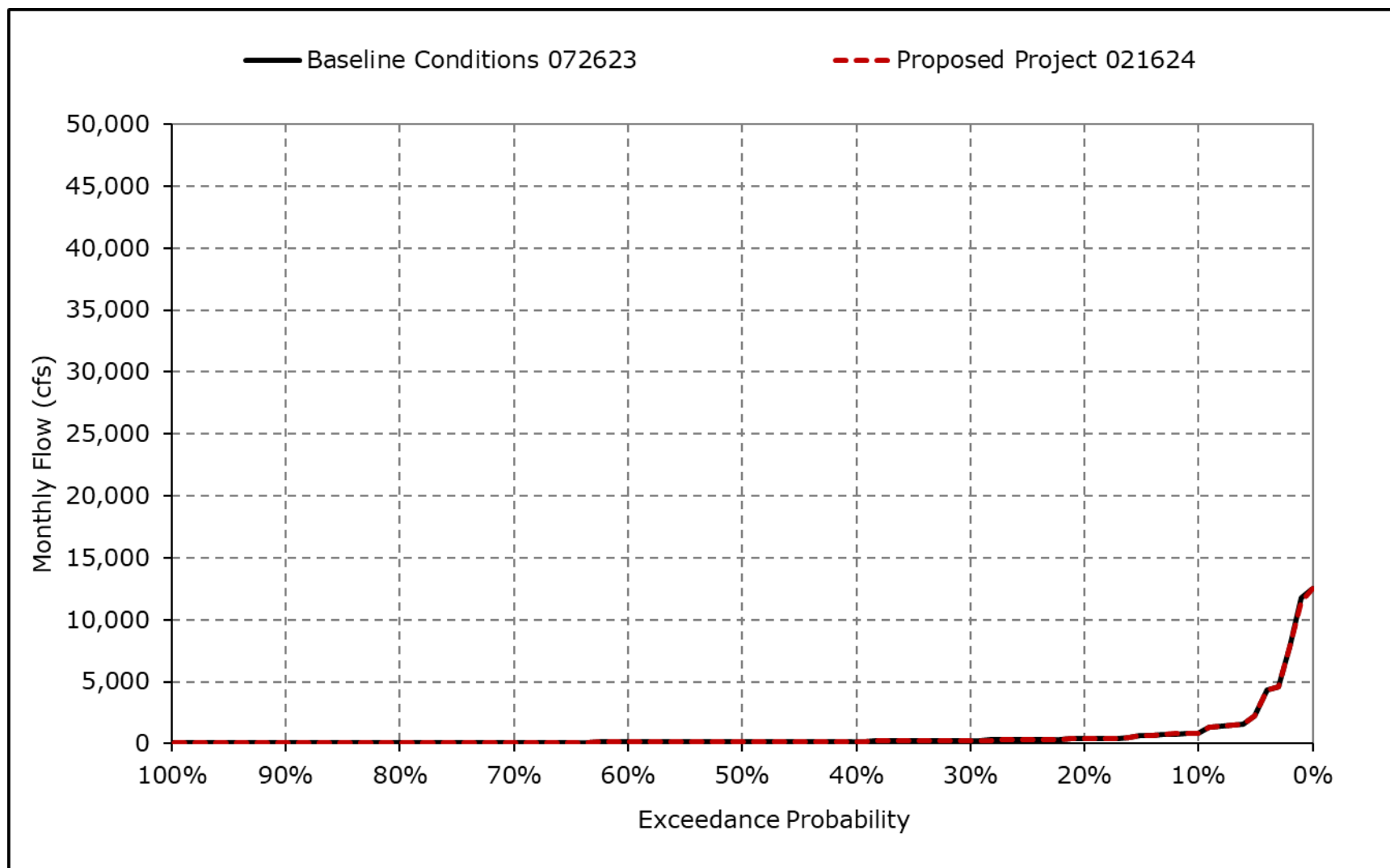
**Figure 4B-2-3g. Yolo Bypass Flow, October**



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

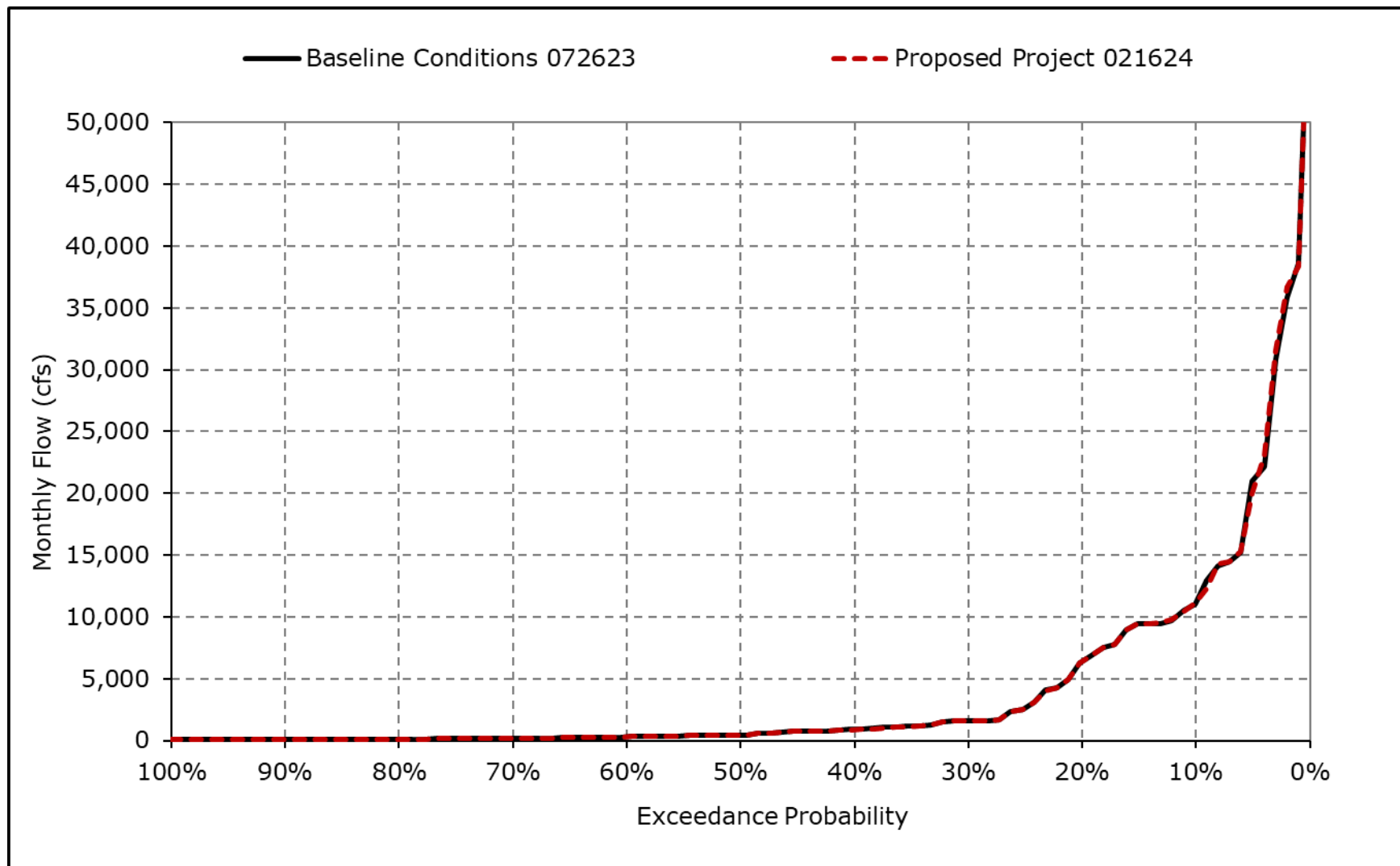


**Figure 4B-2-3h. Yolo Bypass Flow, November**



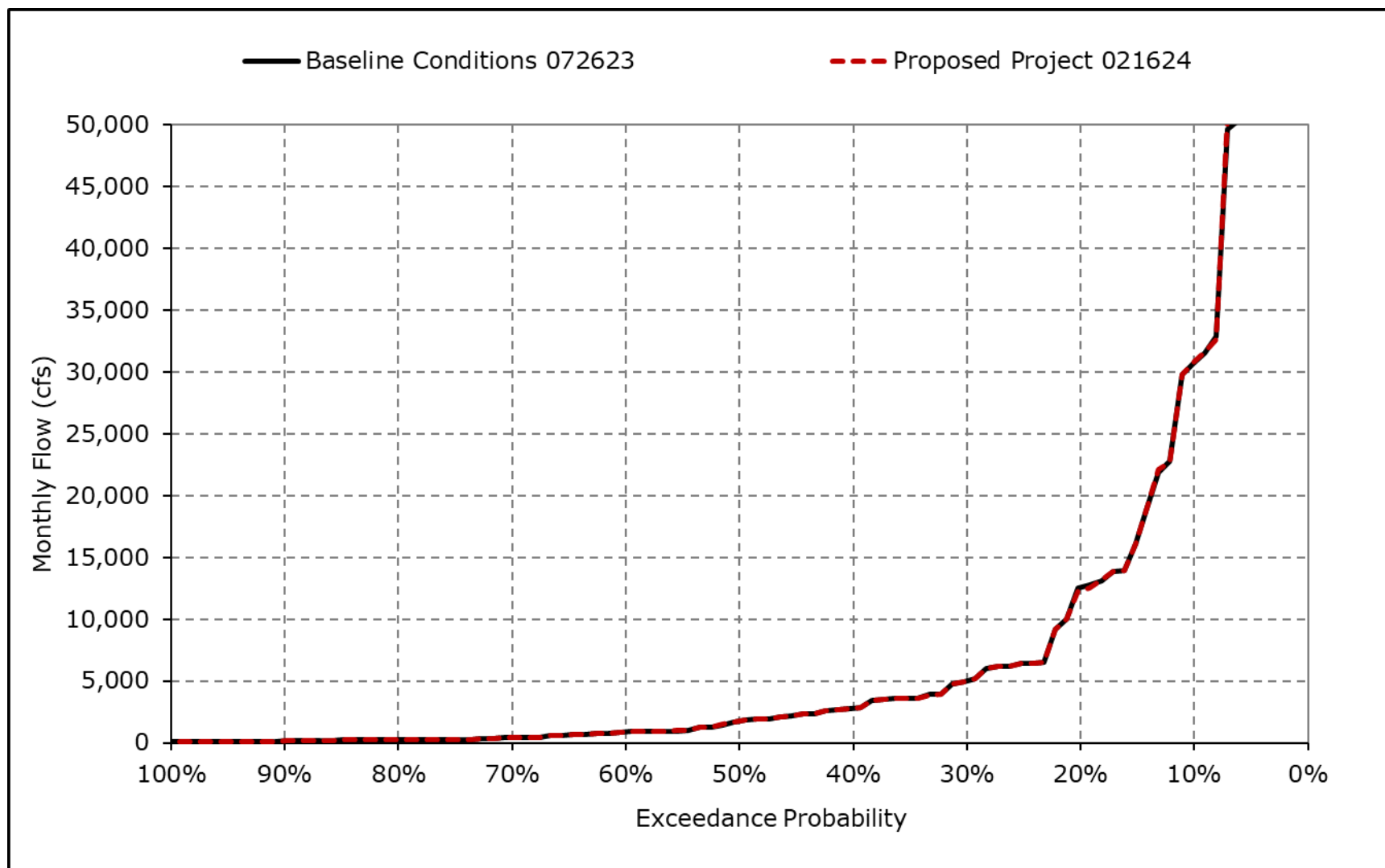
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



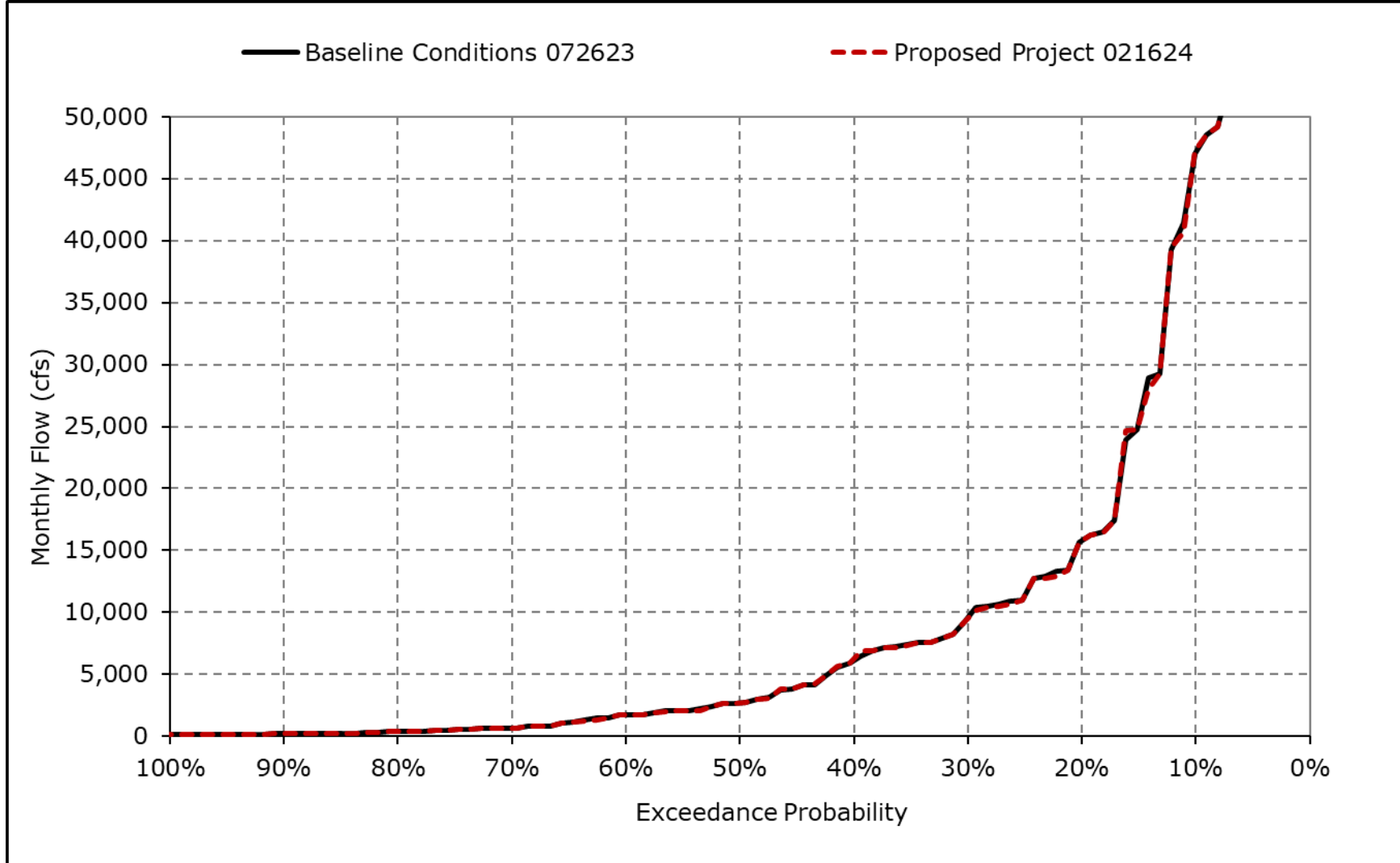
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



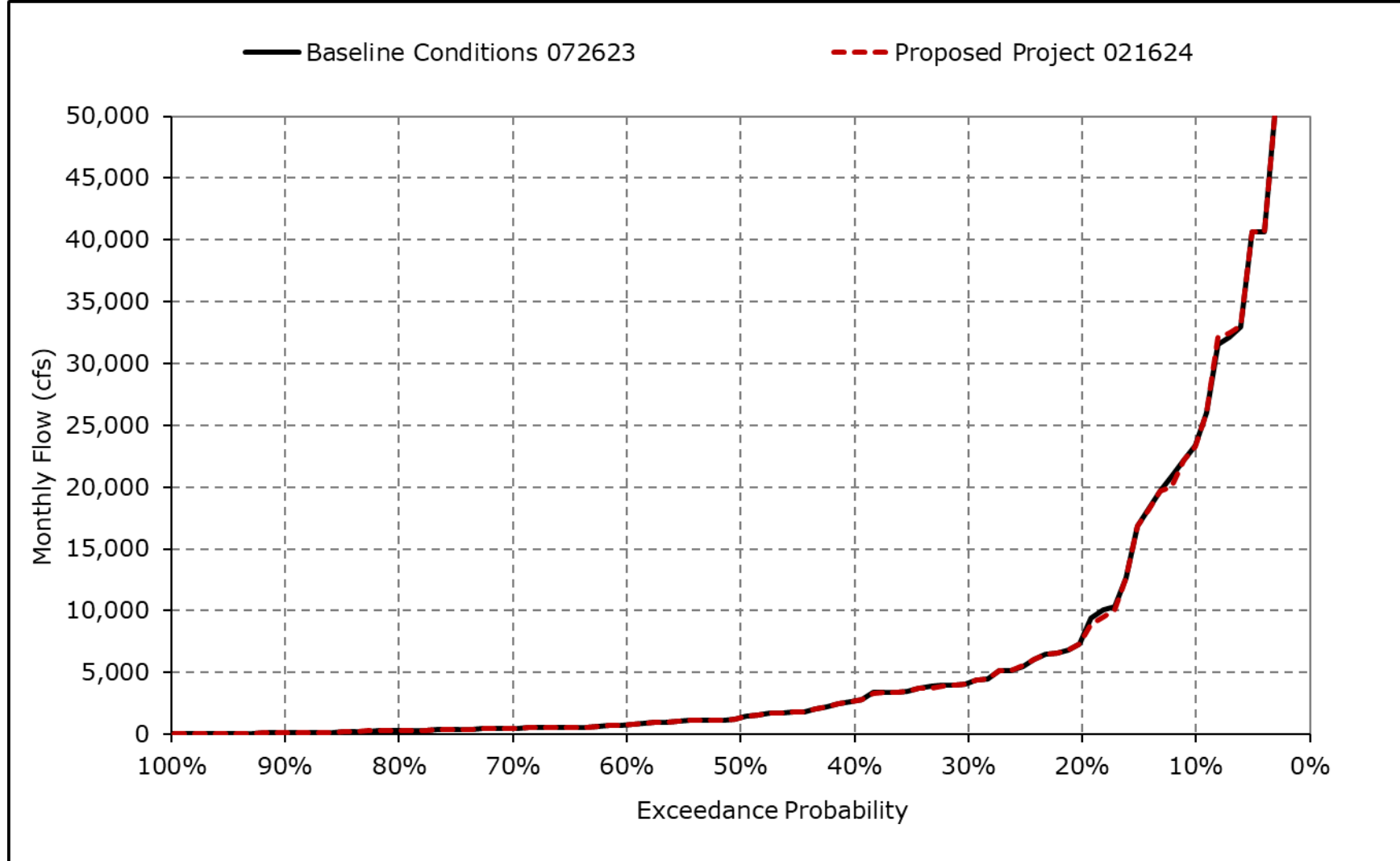
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



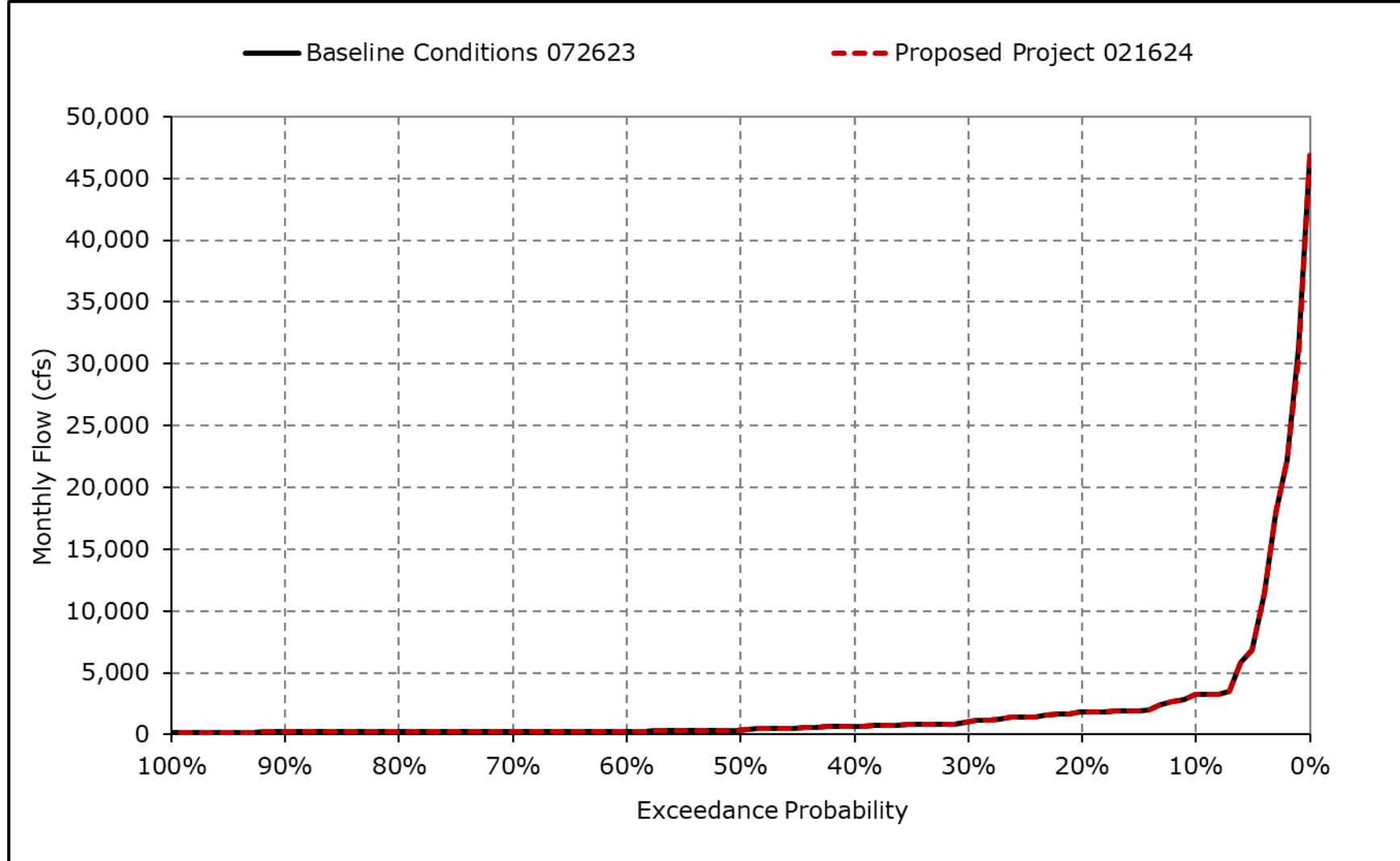
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



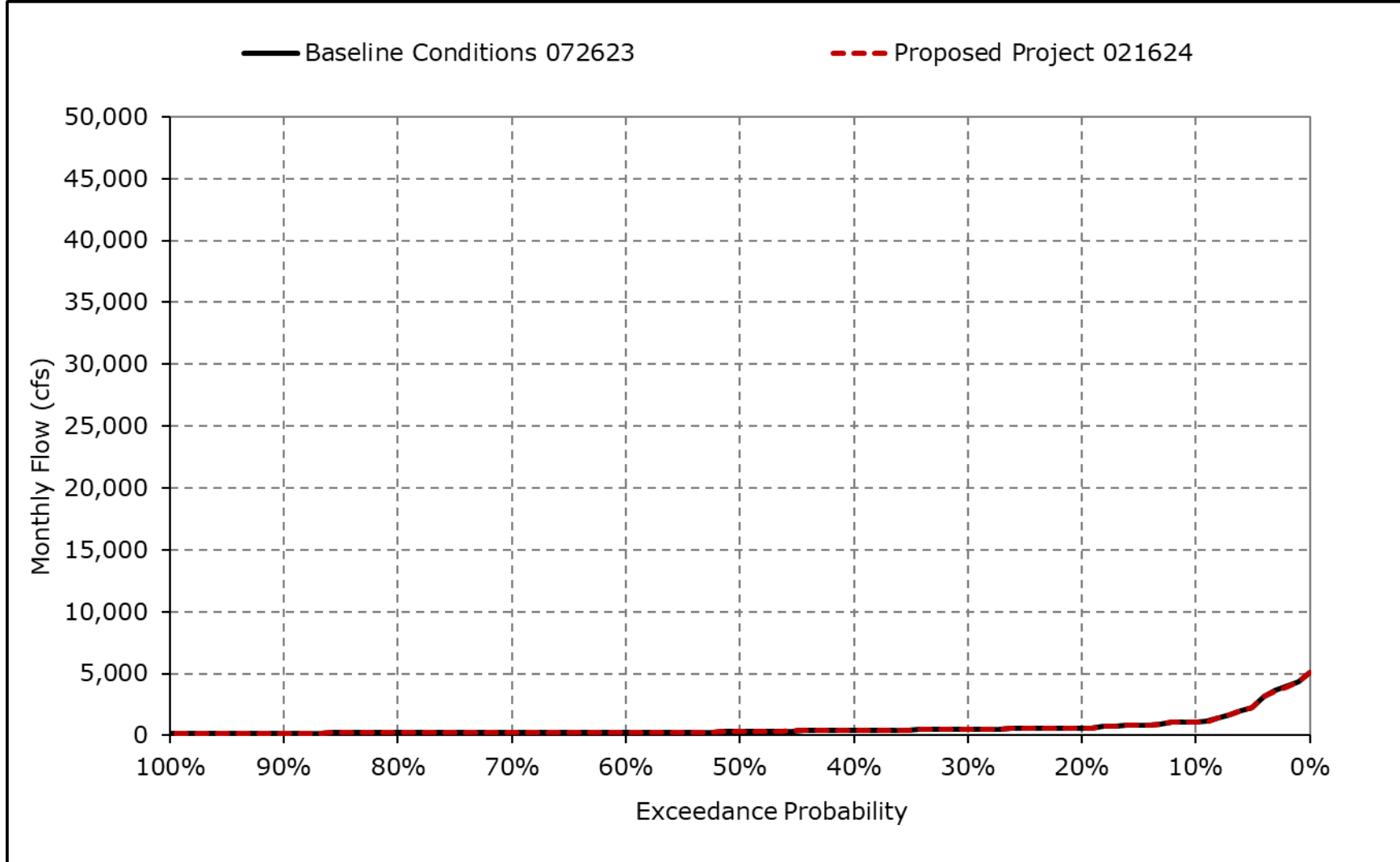
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



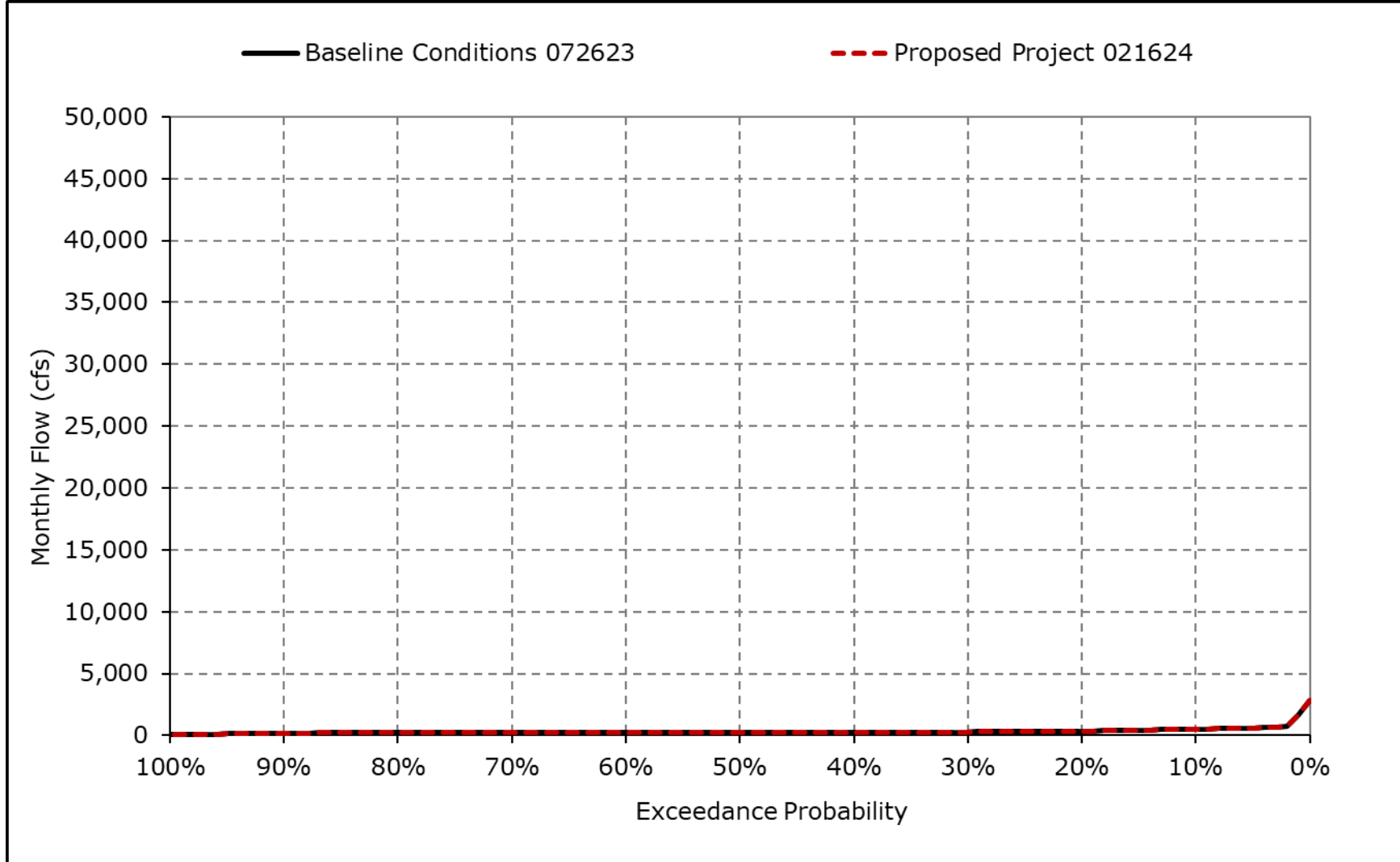
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

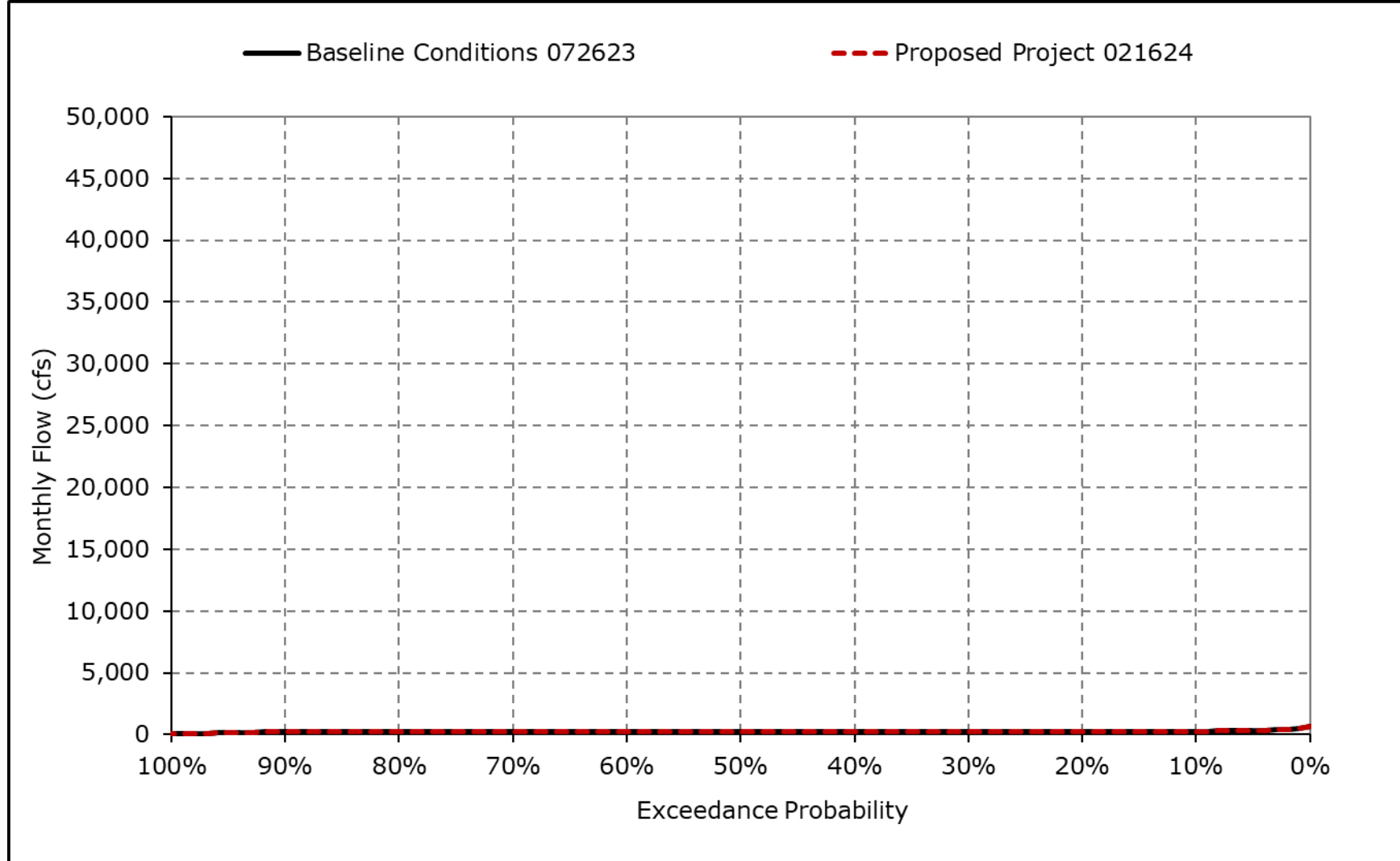
**Figure 4B-2-3o. Yolo Bypass Flow, June**



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

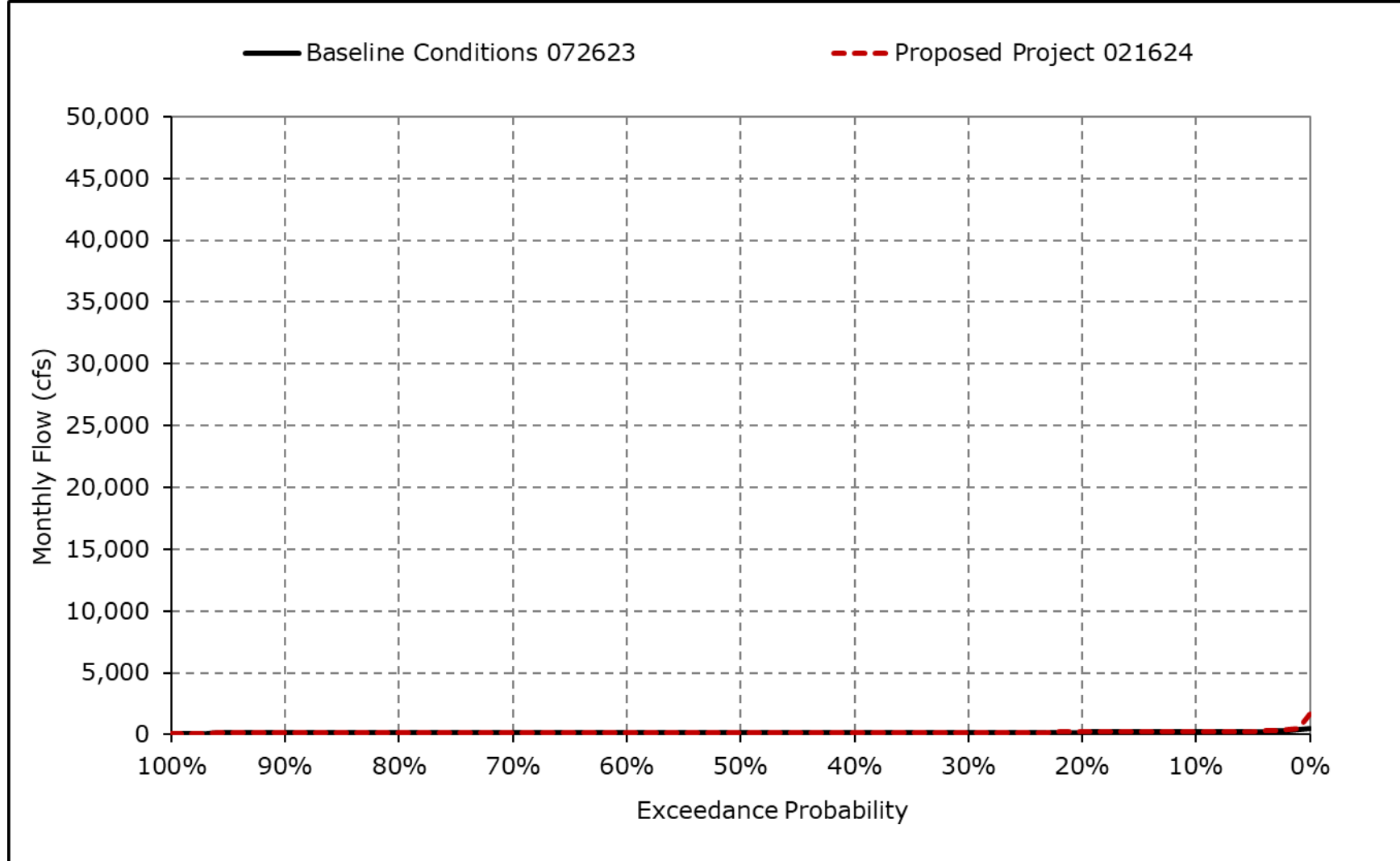


**Figure 4B-2-3p. Yolo Bypass Flow, July**



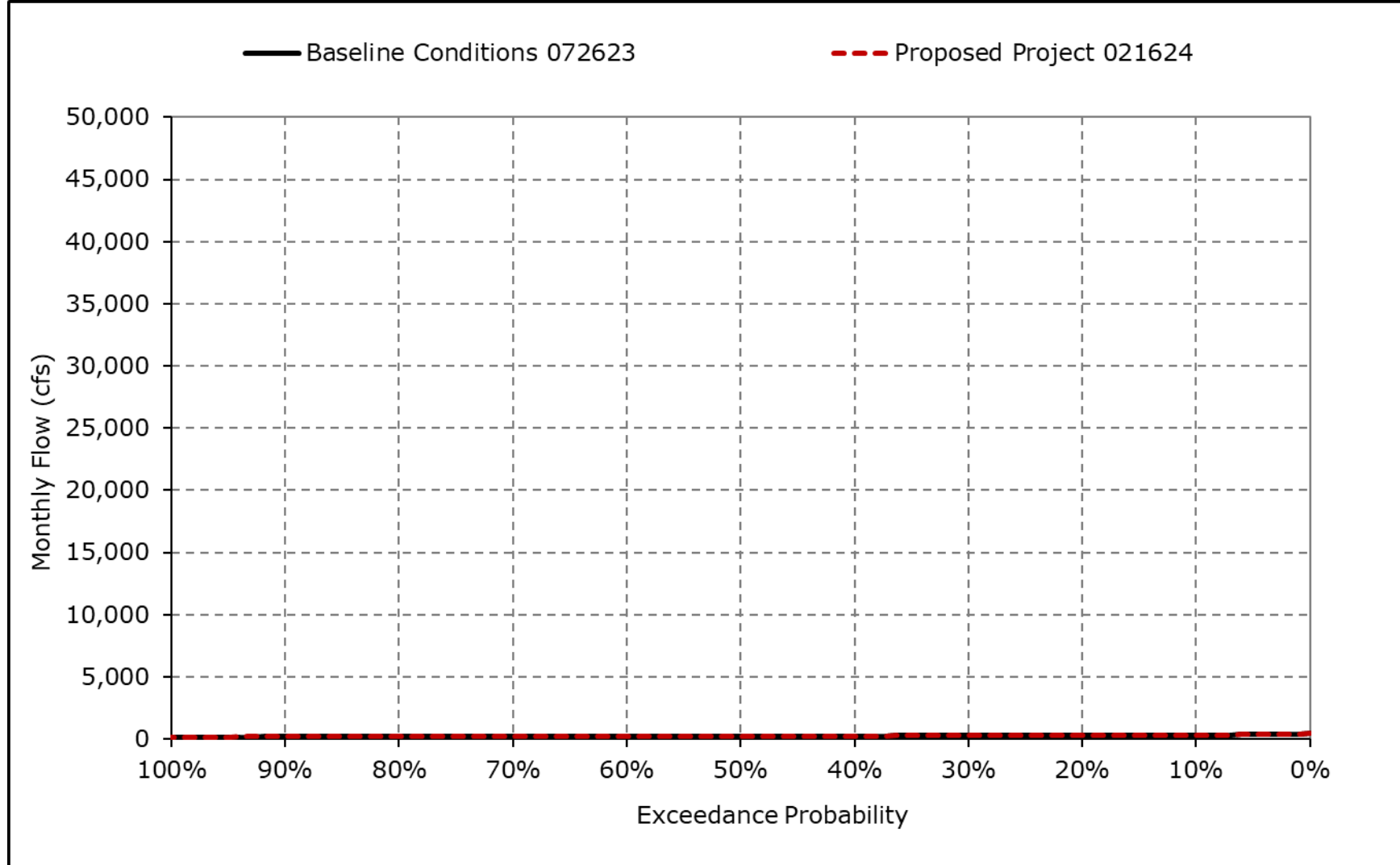
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

**Table 4B-2-4-1a. Sacramento River Flow at Rio Vista, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,861	18,707	55,859	83,054	104,269	80,142	45,999	37,715	22,467	13,424	10,721	12,138
20% Exceedance	9,381	10,374	35,909	58,749	65,788	52,113	33,080	27,545	13,452	12,584	10,412	11,638
30% Exceedance	8,753	9,200	20,594	32,224	50,459	38,900	21,675	18,206	9,347	11,604	10,155	10,600
40% Exceedance	7,595	8,505	15,328	25,619	36,789	29,456	16,301	13,270	7,825	11,236	9,867	9,626
50% Exceedance	6,426	8,134	12,461	19,723	26,716	21,371	12,905	11,633	7,383	10,828	9,469	8,946
60% Exceedance	5,558	7,255	11,329	16,090	19,766	18,379	9,494	9,552	7,143	10,420	8,360	7,715
70% Exceedance	4,827	6,264	10,309	11,175	15,995	15,595	8,308	8,188	6,716	9,517	6,585	5,592
80% Exceedance	4,302	5,033	7,824	9,458	13,715	12,069	7,871	7,525	5,990	8,143	5,359	4,846
90% Exceedance	3,771	4,243	6,747	8,310	10,347	9,688	6,840	6,196	4,993	5,214	3,966	4,142
Full Simulation Period Average <sup>a</sup>	7,450	10,276	22,695	34,804	44,732	35,640	20,718	16,536	10,905	10,362	8,254	8,389
Wet Water Years (30%)	9,782	15,803	43,638	69,505	87,316	66,213	40,282	29,288	18,715	11,484	9,865	11,762
Above Normal Water Years (11%)	6,456	9,201	17,843	45,601	52,221	47,275	21,923	18,804	12,294	12,100	10,727	11,116
Below Normal Water Years (21%)	7,361	9,567	14,215	20,107	29,258	23,996	14,121	13,386	7,662	12,059	9,729	8,441
Dry Water Years (22%)	6,827	7,767	13,761	13,316	20,308	17,270	9,687	8,788	7,073	10,190	6,718	5,580
Critical Water Years (16%)	4,735	5,034	10,178	11,151	13,633	10,853	7,036	5,853	4,833	5,073	3,711	3,986

**Table 4B-2-4-1b. Sacramento River Flow at Rio Vista, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	10,425	19,020	55,850	83,076	104,528	79,431	46,001	37,715	22,459	13,332	10,536	13,059
20% Exceedance	9,412	10,602	35,826	58,608	65,774	51,852	33,098	27,533	13,431	12,476	10,258	12,455
30% Exceedance	8,789	9,051	20,609	32,565	50,451	38,934	21,962	18,259	9,299	11,553	10,098	11,084
40% Exceedance	7,550	8,519	15,276	25,575	36,790	29,455	16,513	13,450	7,681	11,267	9,788	10,109
50% Exceedance	6,200	8,135	12,662	19,953	26,667	21,078	13,114	11,633	7,209	10,757	9,340	8,970
60% Exceedance	5,225	7,371	11,323	16,049	19,751	18,460	9,656	9,292	6,887	10,331	8,299	6,859
70% Exceedance	4,637	5,891	10,299	11,339	15,998	15,797	8,298	8,332	6,555	9,568	6,730	5,576
80% Exceedance	4,294	4,950	7,819	9,425	13,446	12,105	8,012	7,746	6,045	7,968	5,365	4,869
90% Exceedance	3,772	4,248	6,833	8,298	10,305	9,646	6,843	6,417	4,780	4,972	3,843	4,143
Full Simulation Period Average <sup>a</sup>	7,424	10,257	22,737	34,795	44,670	35,711	20,838	16,590	10,819	10,300	8,168	8,716
Wet Water Years (30%)	9,745	15,835	43,647	69,522	87,287	66,199	40,253	29,287	18,737	11,455	9,833	12,425
Above Normal Water Years (11%)	6,520	9,203	17,900	45,621	52,129	47,337	22,122	18,977	12,263	11,959	10,376	12,271
Below Normal Water Years (21%)	7,304	9,450	14,400	20,148	29,016	24,117	14,457	13,314	7,624	11,911	9,578	8,412
Dry Water Years (22%)	6,749	7,821	13,583	13,187	20,215	17,518	9,858	8,991	6,754	10,175	6,644	5,609
Critical Water Years (16%)	4,781	4,930	10,384	11,171	13,805	10,787	7,029	5,893	4,760	5,055	3,774	3,992

**Table 4B-2-4-1c. Sacramento River Flow at Rio Vista, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-436	313	-9	22	258	-711	2	0	-9	-93	-185	921
20% Exceedance	31	229	-83	-142	-14	-261	18	-12	-22	-108	-155	818
30% Exceedance	36	-149	16	341	-8	34	287	53	-48	-51	-57	485
40% Exceedance	-45	14	-52	-44	0	0	212	181	-144	31	-79	483
50% Exceedance	-226	1	200	231	-49	-294	209	-1	-174	-70	-129	24
60% Exceedance	-332	117	-6	-41	-14	81	162	-260	-256	-89	-61	-856
70% Exceedance	-190	-373	-10	165	3	201	-9	144	-160	51	146	-16
80% Exceedance	-7	-83	-4	-33	-269	35	140	221	55	-175	6	23
90% Exceedance	1	5	86	-12	-41	-43	3	222	-213	-242	-124	0
Full Simulation Period Average <sup>a</sup>	-26	-19	42	-9	-63	72	120	55	-87	-62	-86	327
Wet Water Years (30%)	-38	32	10	17	-29	-14	-30	-1	22	-30	-31	663
Above Normal Water Years (11%)	64	2	57	20	-92	62	199	173	-31	-141	-351	1,155
Below Normal Water Years (21%)	-57	-117	185	42	-243	120	335	-73	-38	-148	-152	-29
Dry Water Years (22%)	-78	54	-178	-129	-93	248	171	203	-319	-15	-73	29
Critical Water Years (16%)	45	-104	206	21	172	-66	-7	40	-74	-18	63	7

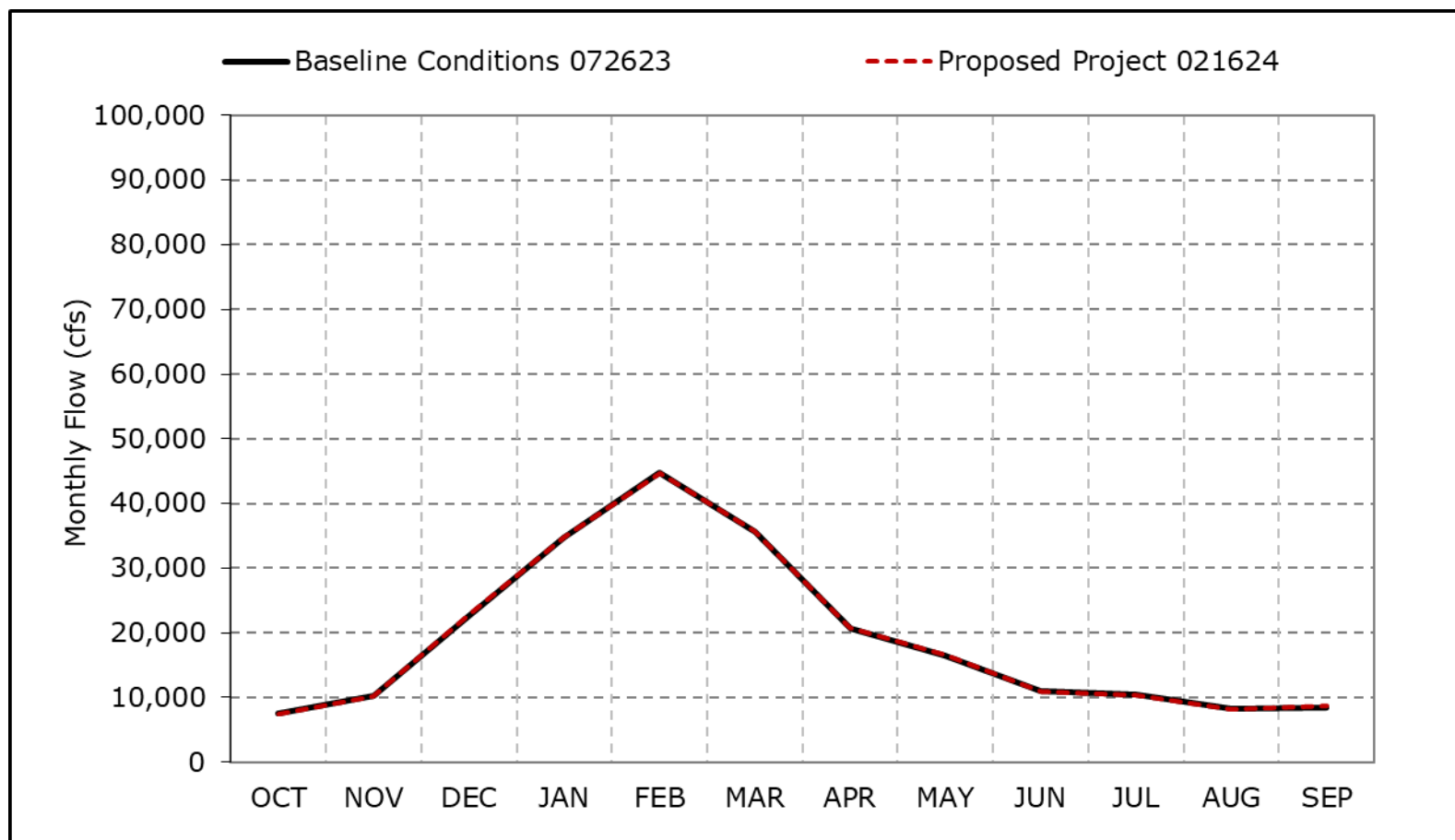
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-4a. Sacramento River Flow at Rio Vista, Long-Term Average Flow**

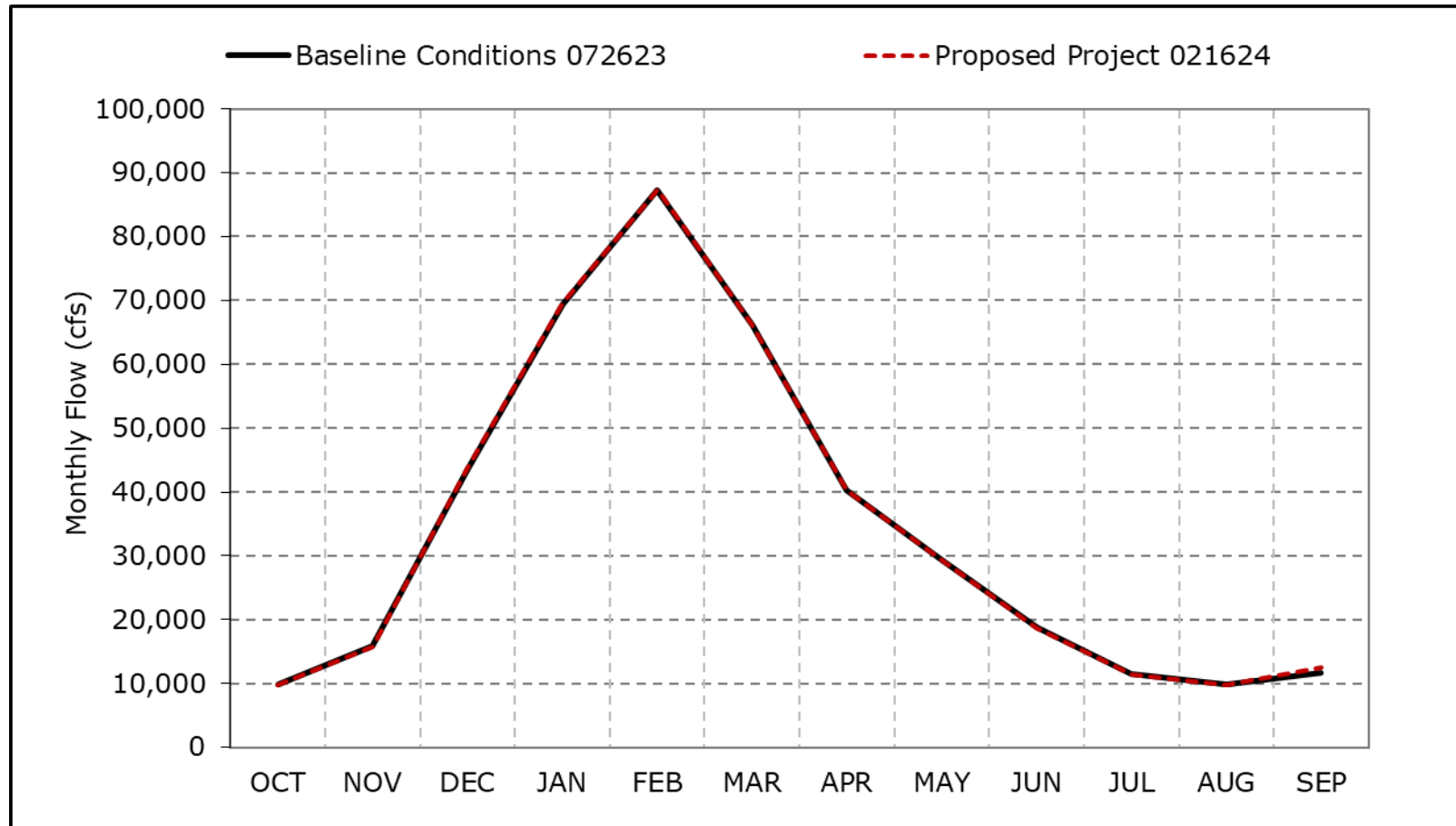


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-4b. Sacramento River Flow at Rio Vista, Wet Year Average Flow**

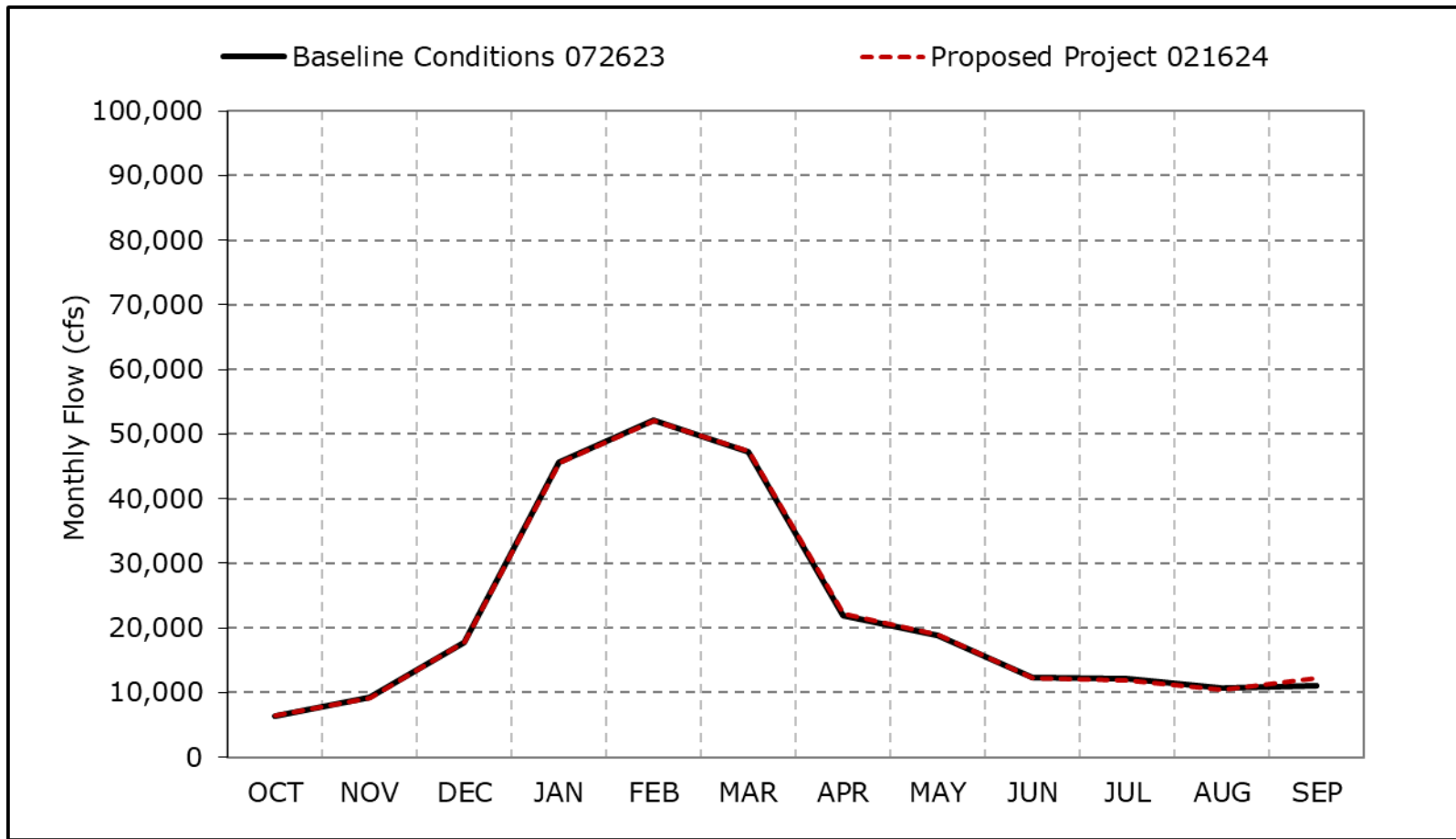


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-4c. Sacramento River Flow at Rio Vista, Above Normal Year Average Flow**

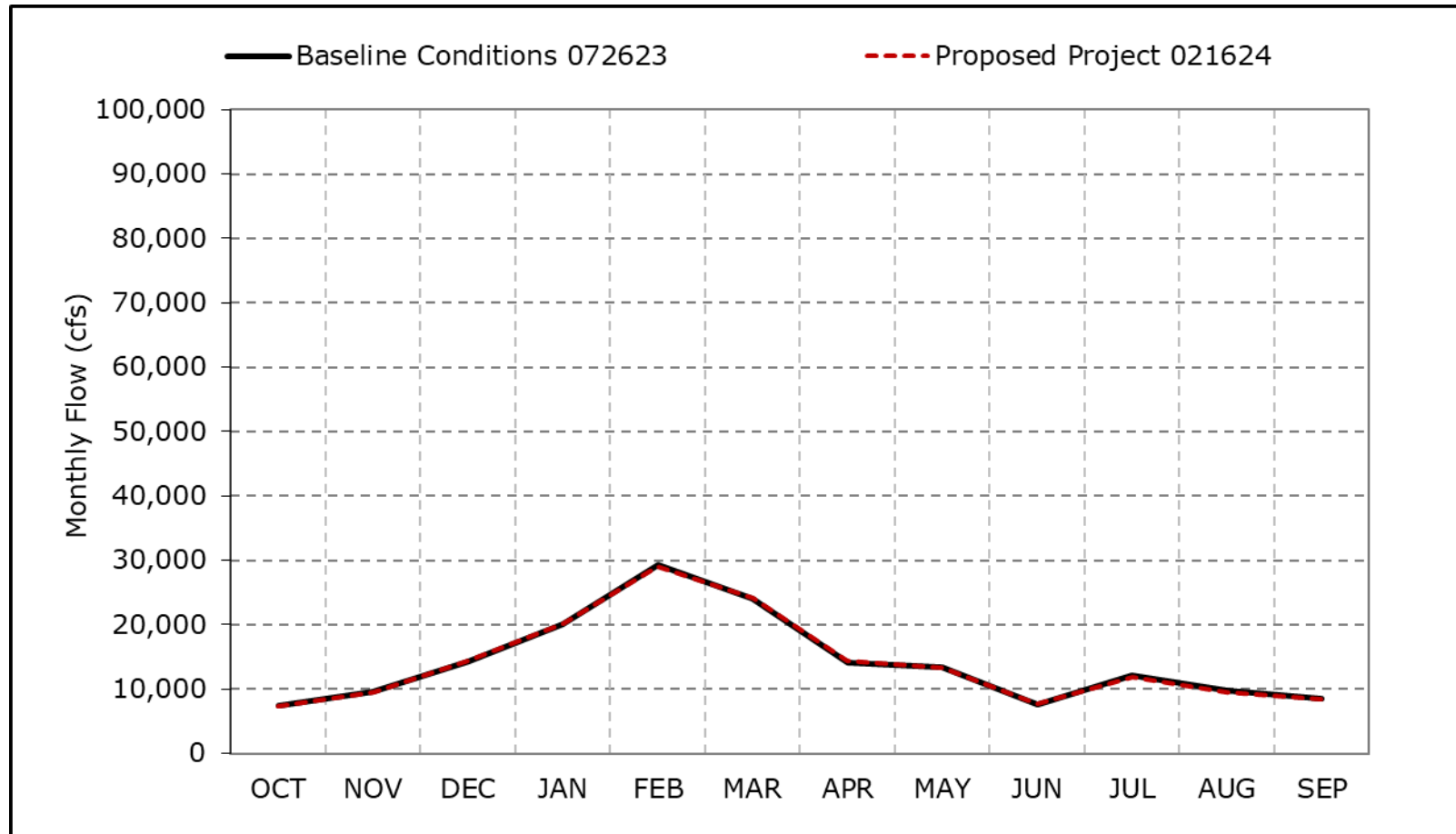


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-4d. Sacramento River Flow at Rio Vista, Below Normal Year Average Flow**



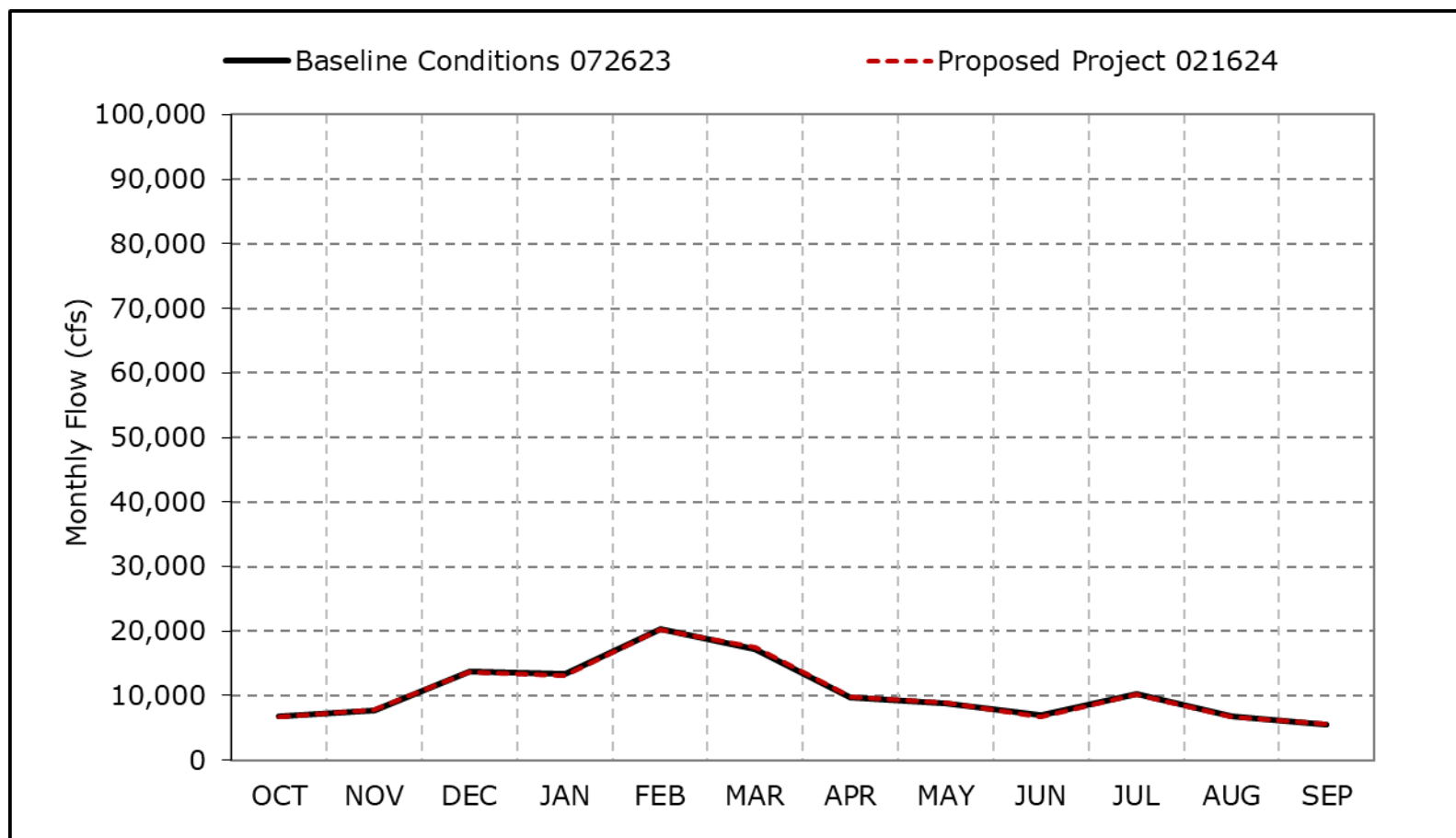
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-4e. Sacramento River Flow at Rio Vista, Dry Year Average Flow**

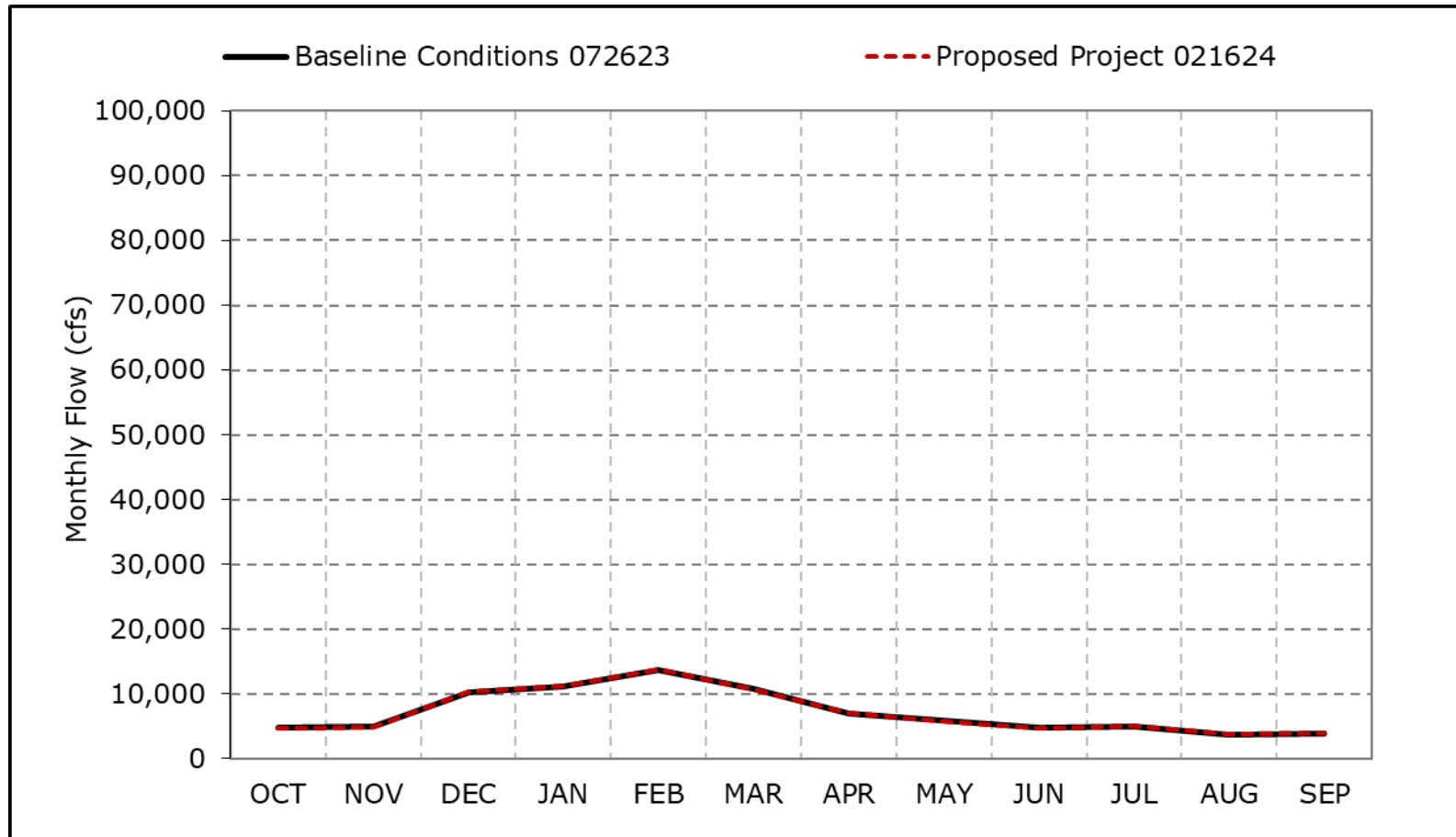


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-4f. Sacramento River Flow at Rio Vista, Critical Year Average Flow**

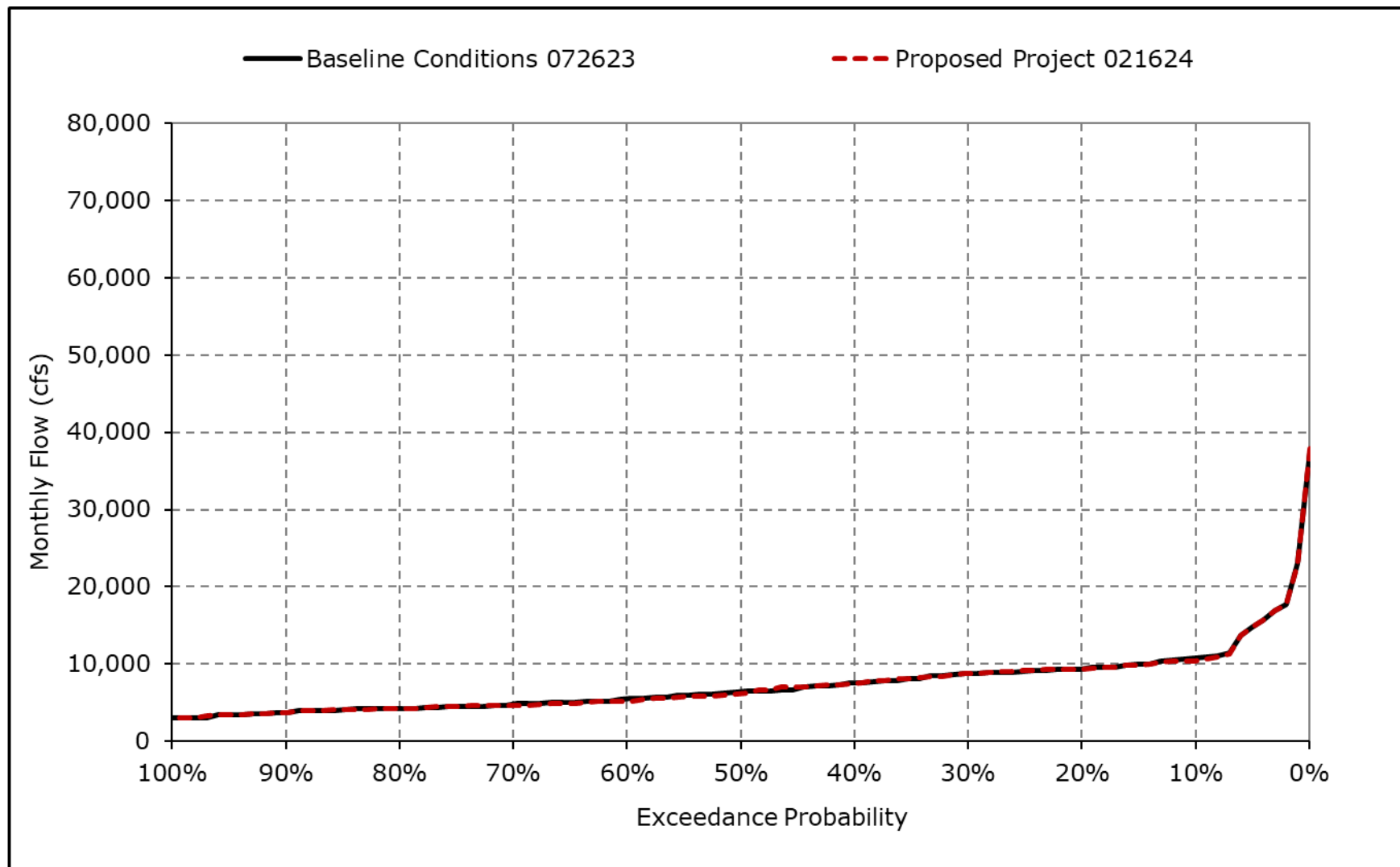


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

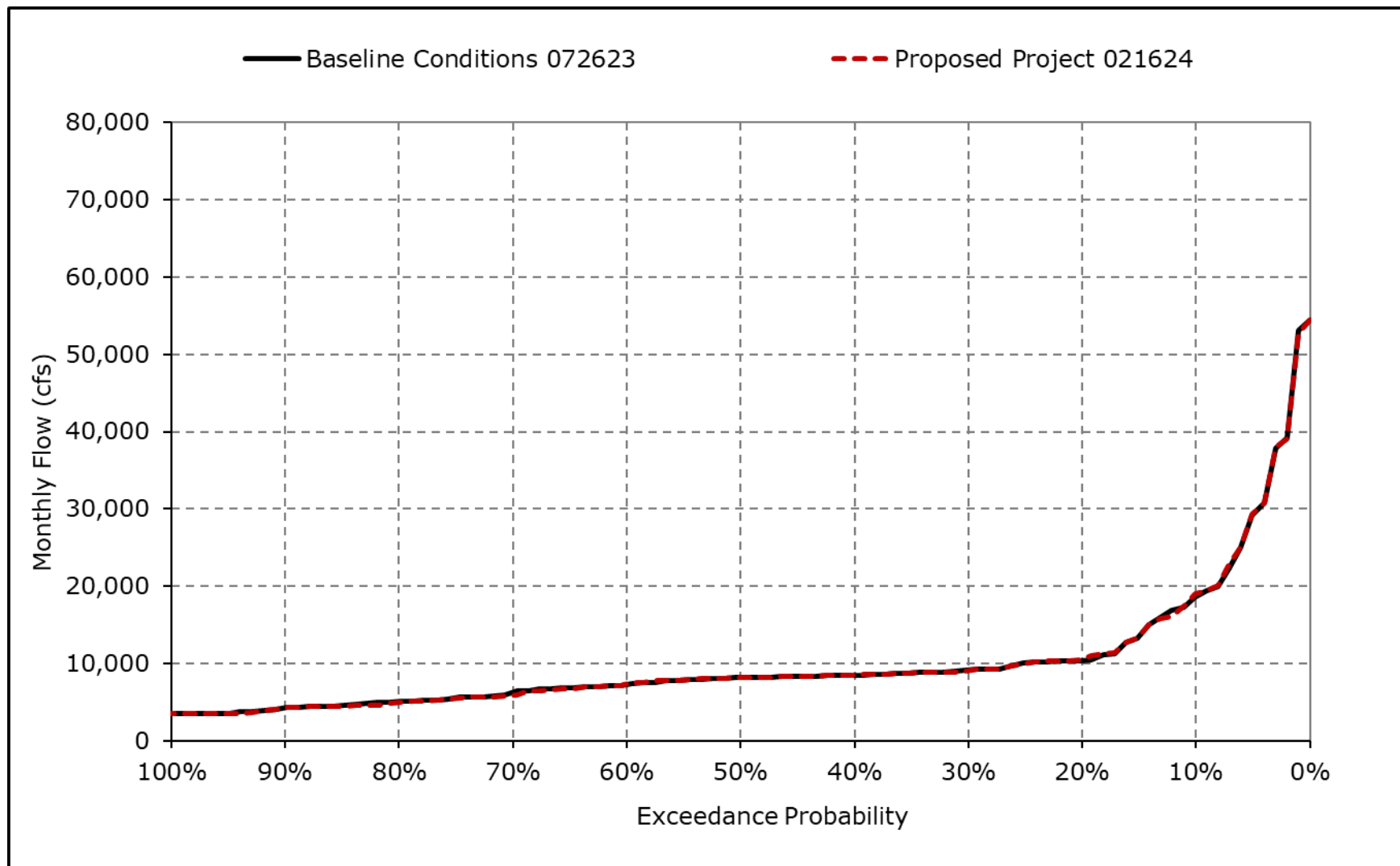
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4g. Sacramento River Flow at Rio Vista, October**



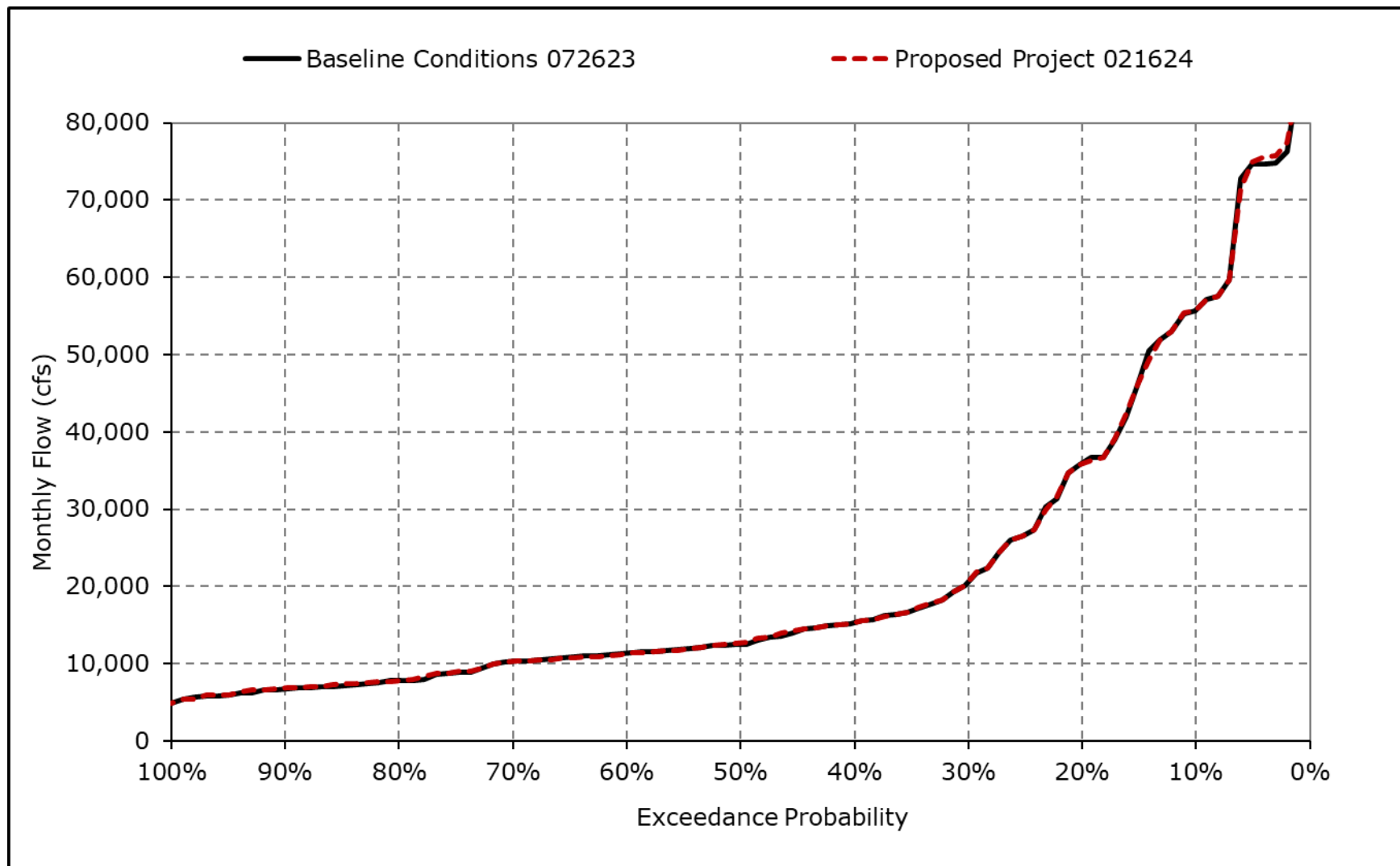
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4h. Sacramento River Flow at Rio Vista, November**



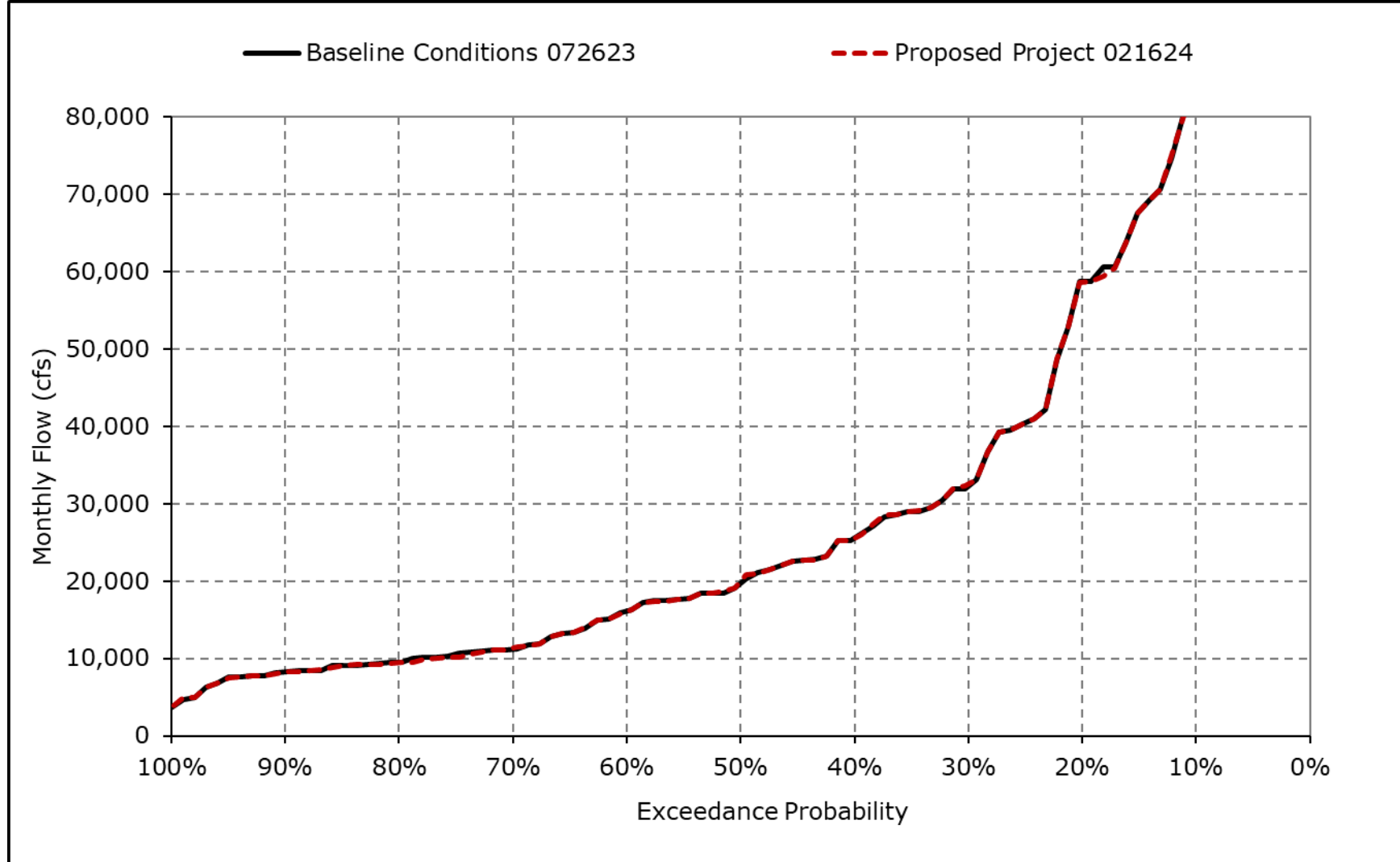
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4i. Sacramento River Flow at Rio Vista, December**



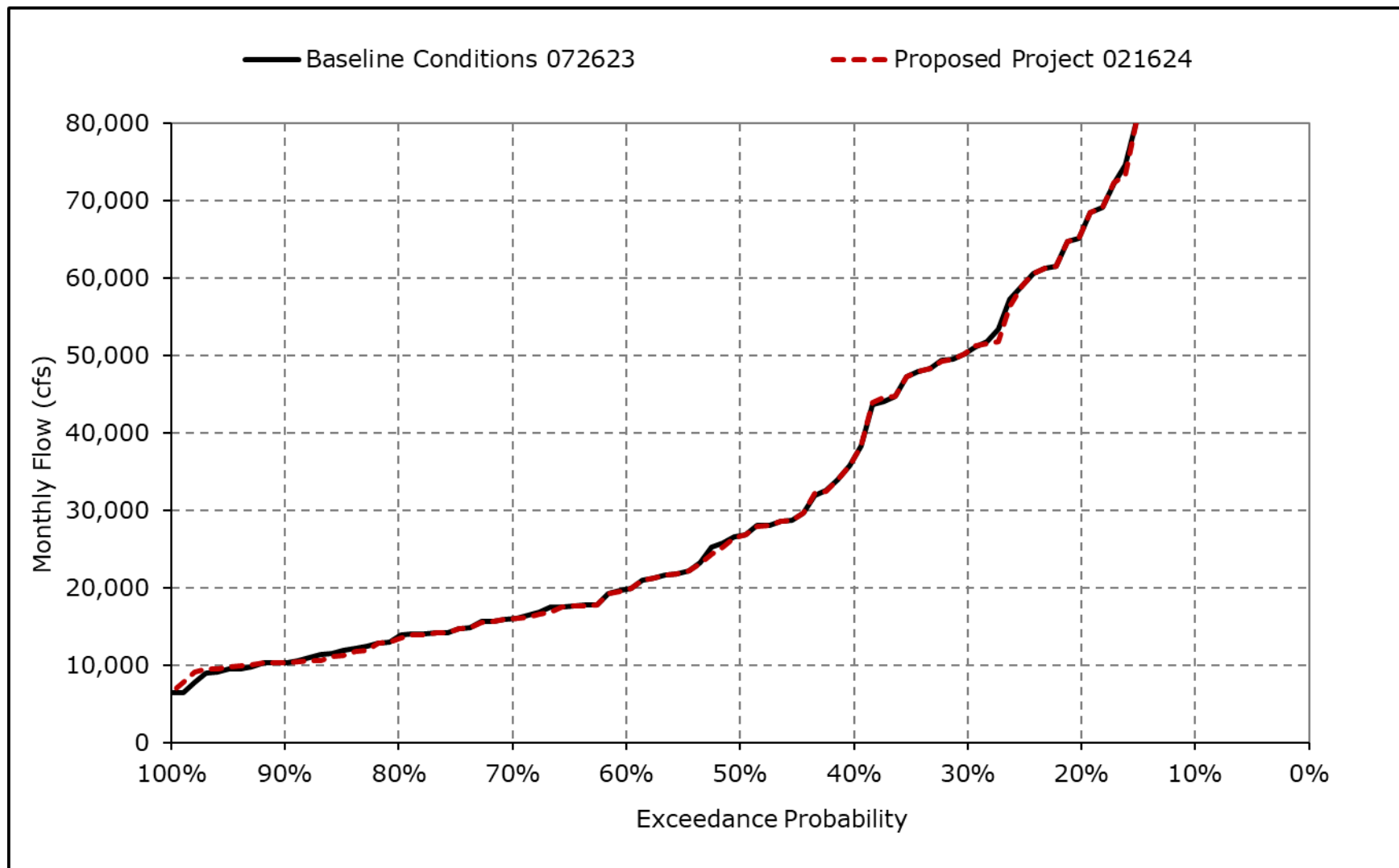
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4j. Sacramento River Flow at Rio Vista, January**



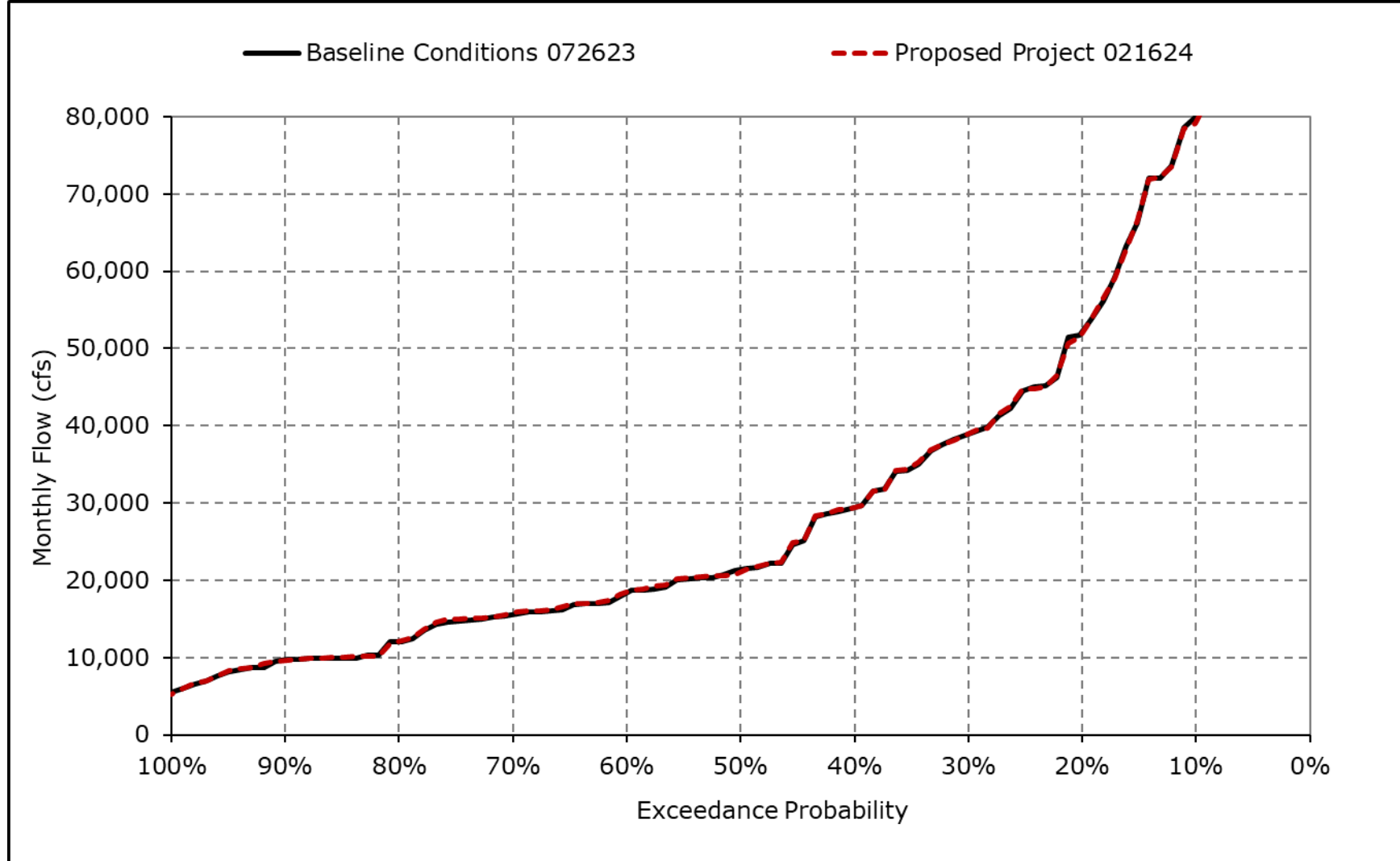
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4k. Sacramento River Flow at Rio Vista, February**



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

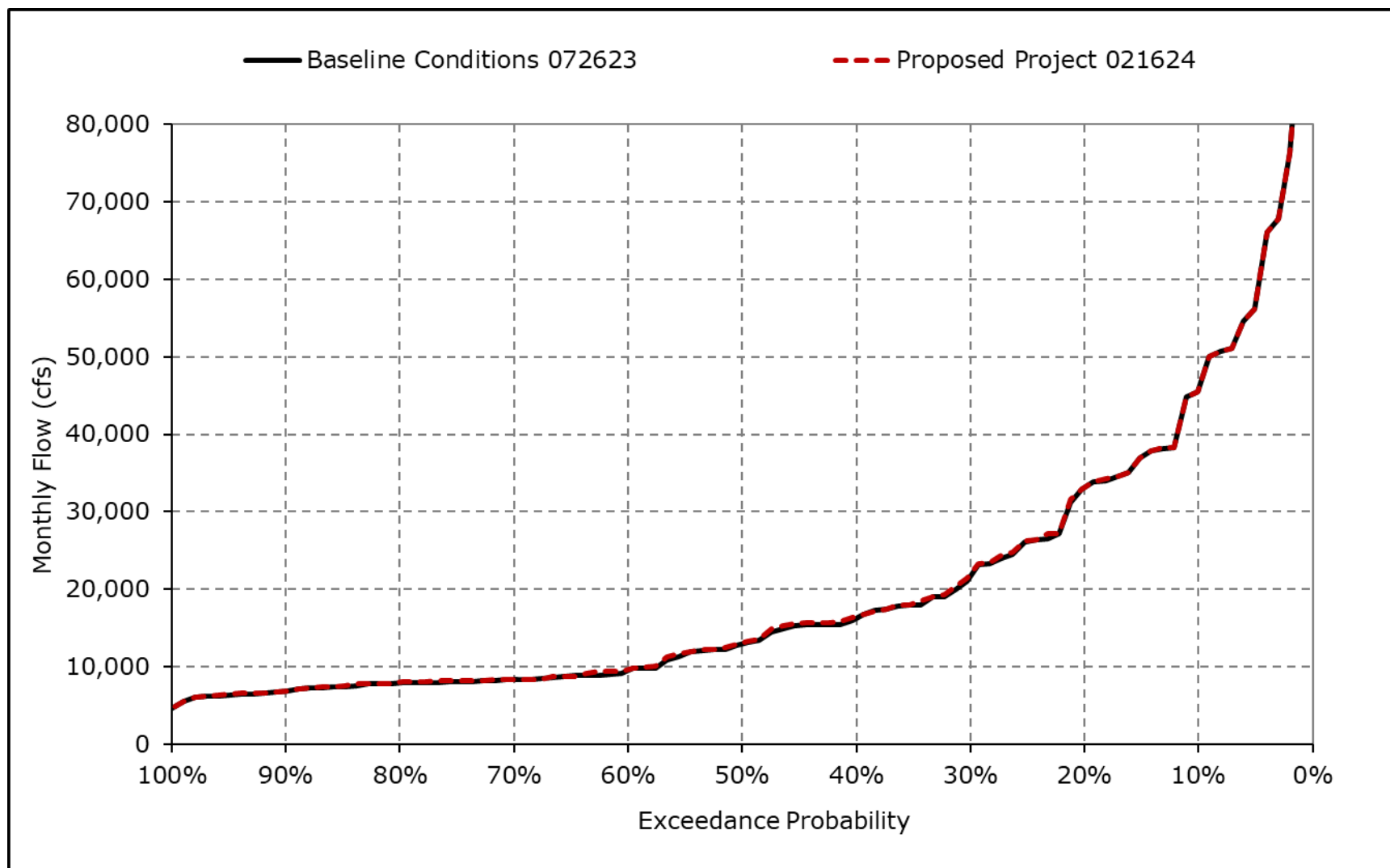
**Figure 4B-2-4I. Sacramento River Flow at Rio Vista, March**



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

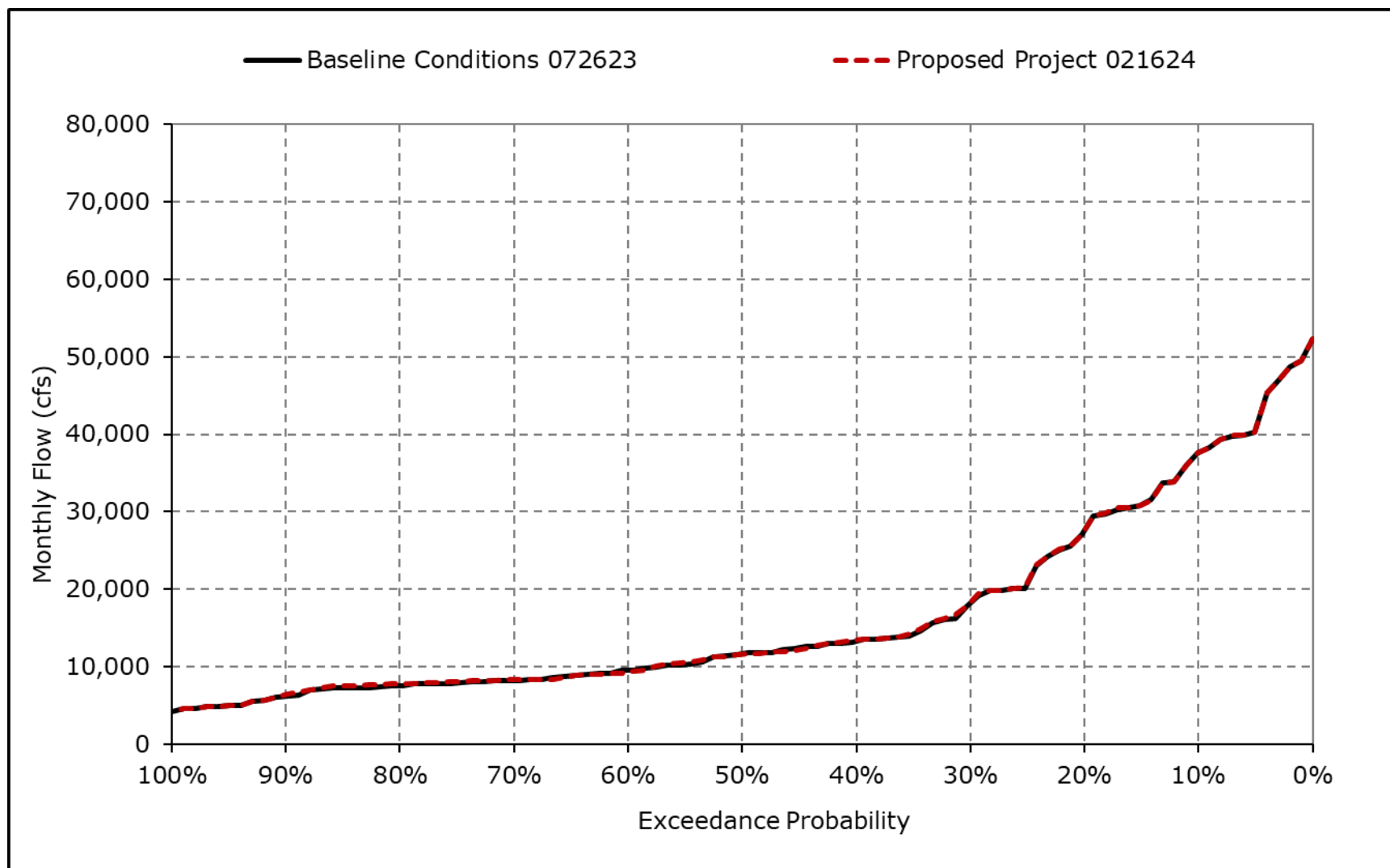


**Figure 4B-2-4m. Sacramento River Flow at Rio Vista, April**



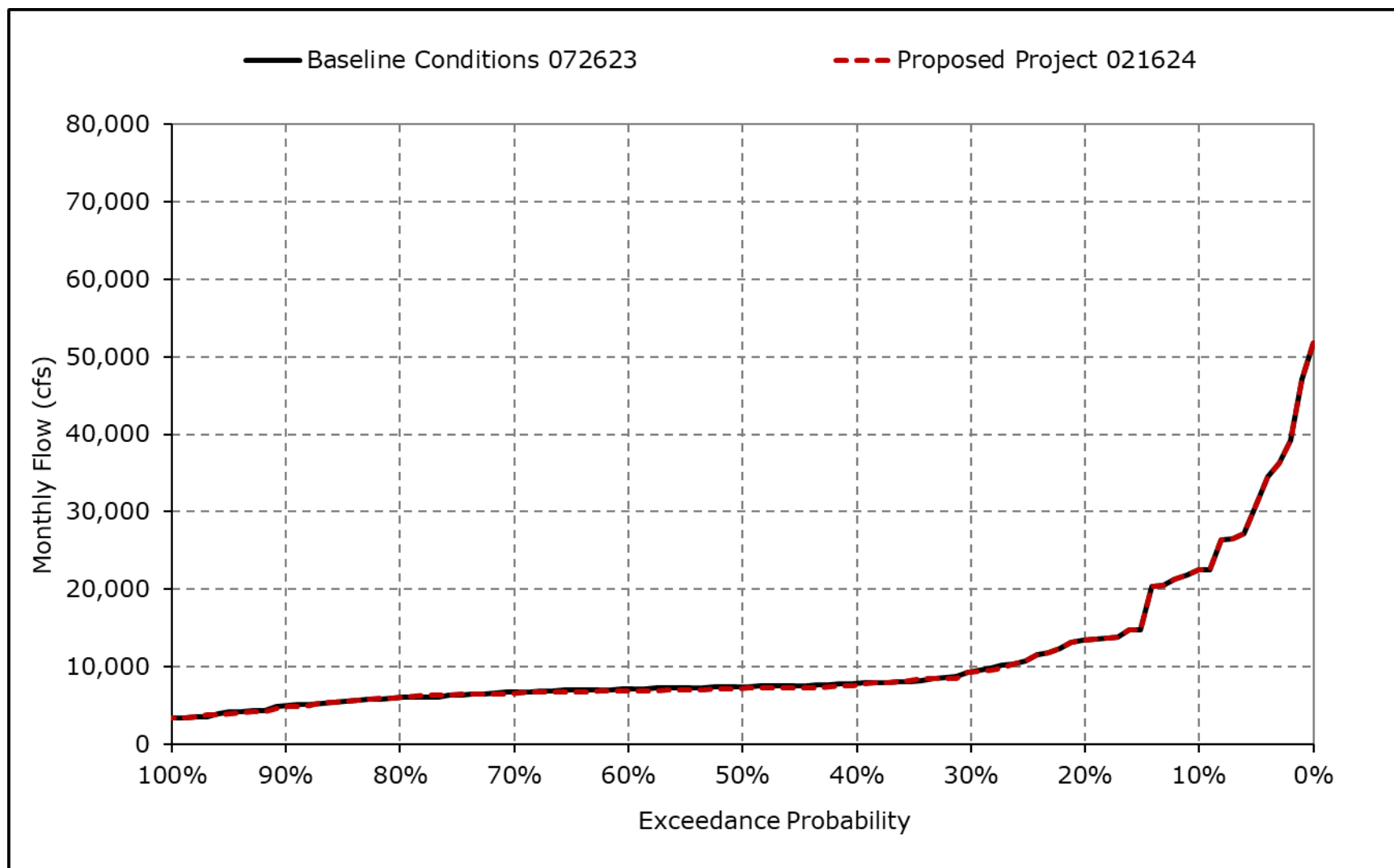
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4n. Sacramento River Flow at Rio Vista, May**



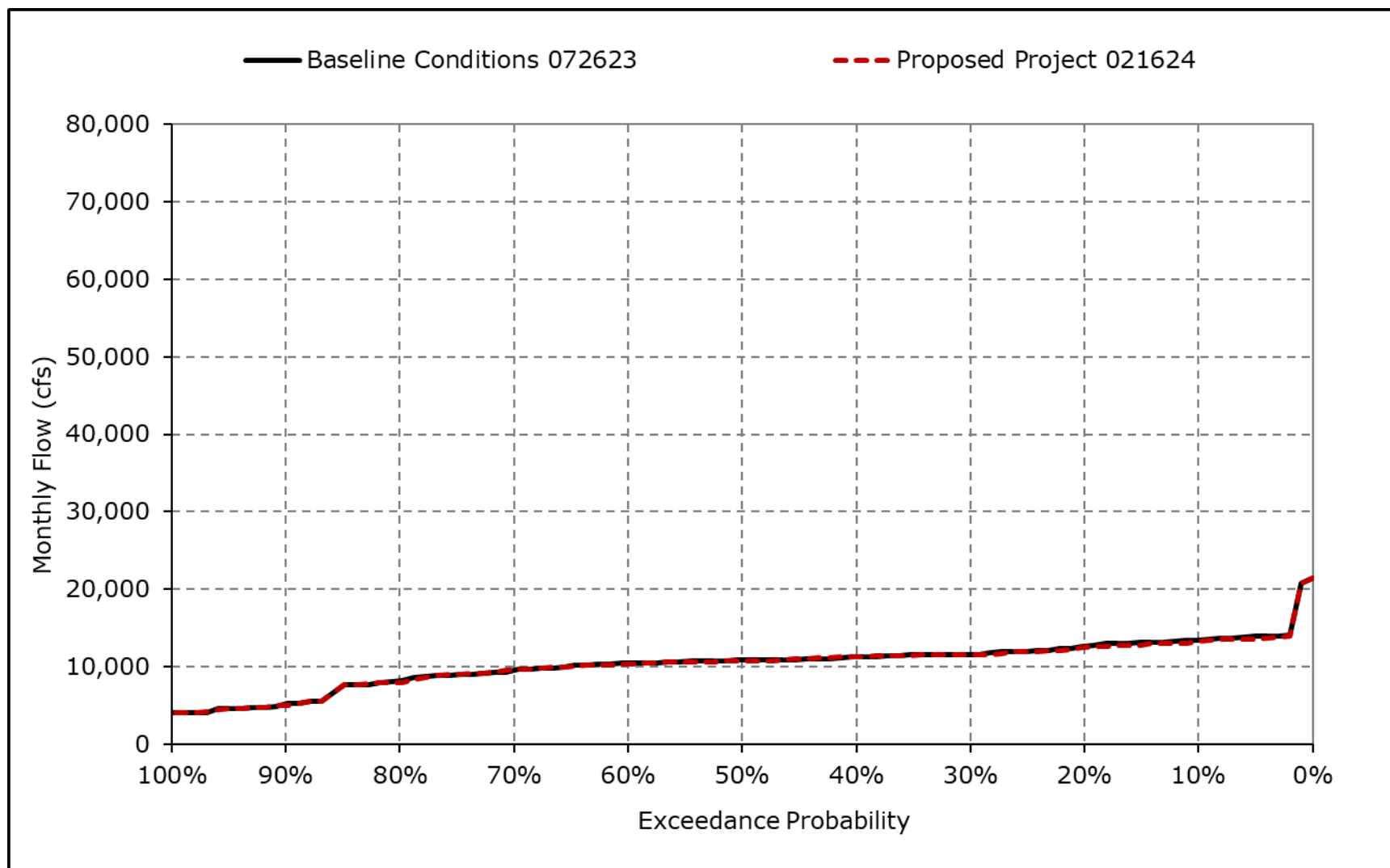
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4o. Sacramento River Flow at Rio Vista, June**



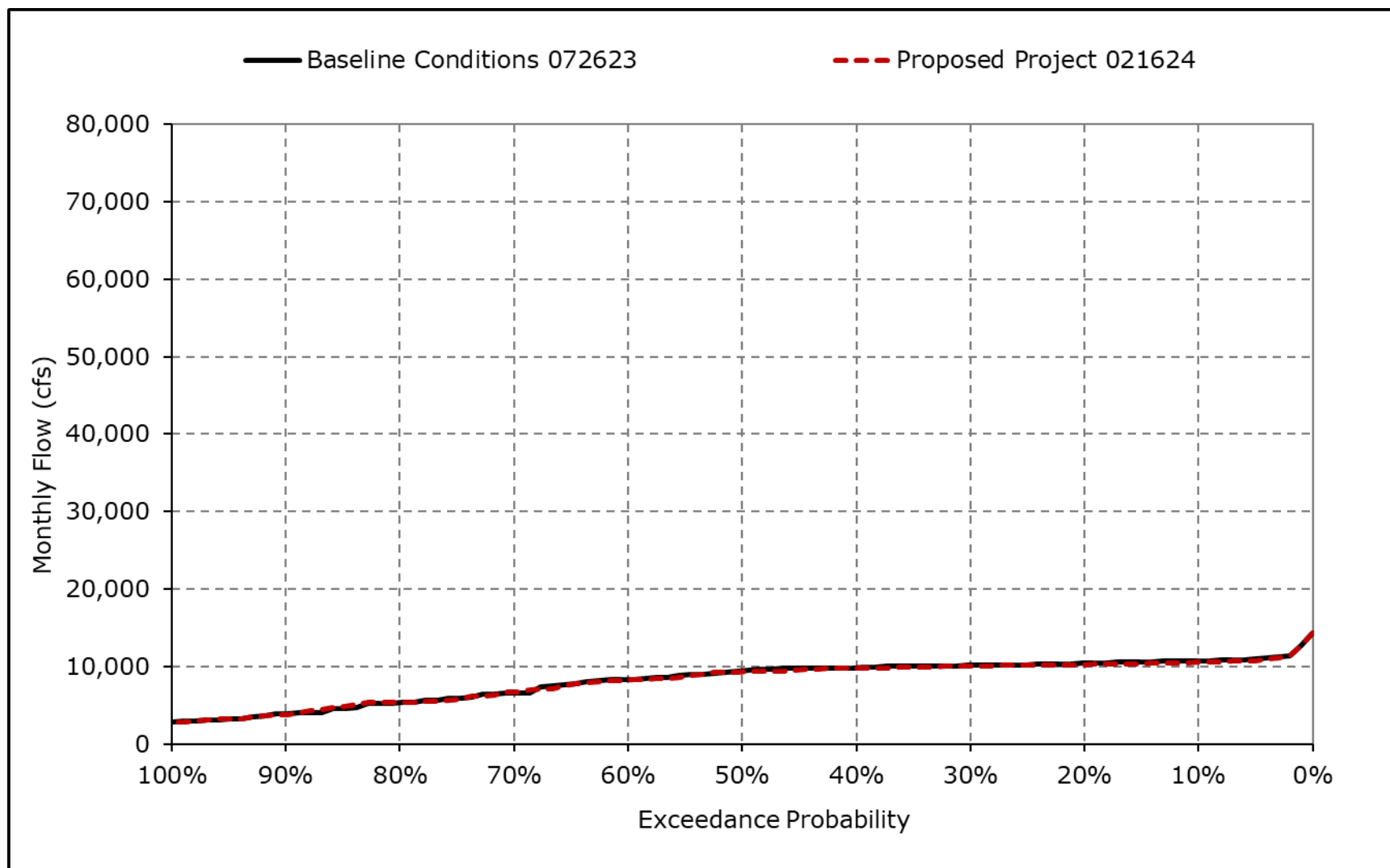
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4p. Sacramento River Flow at Rio Vista, July**



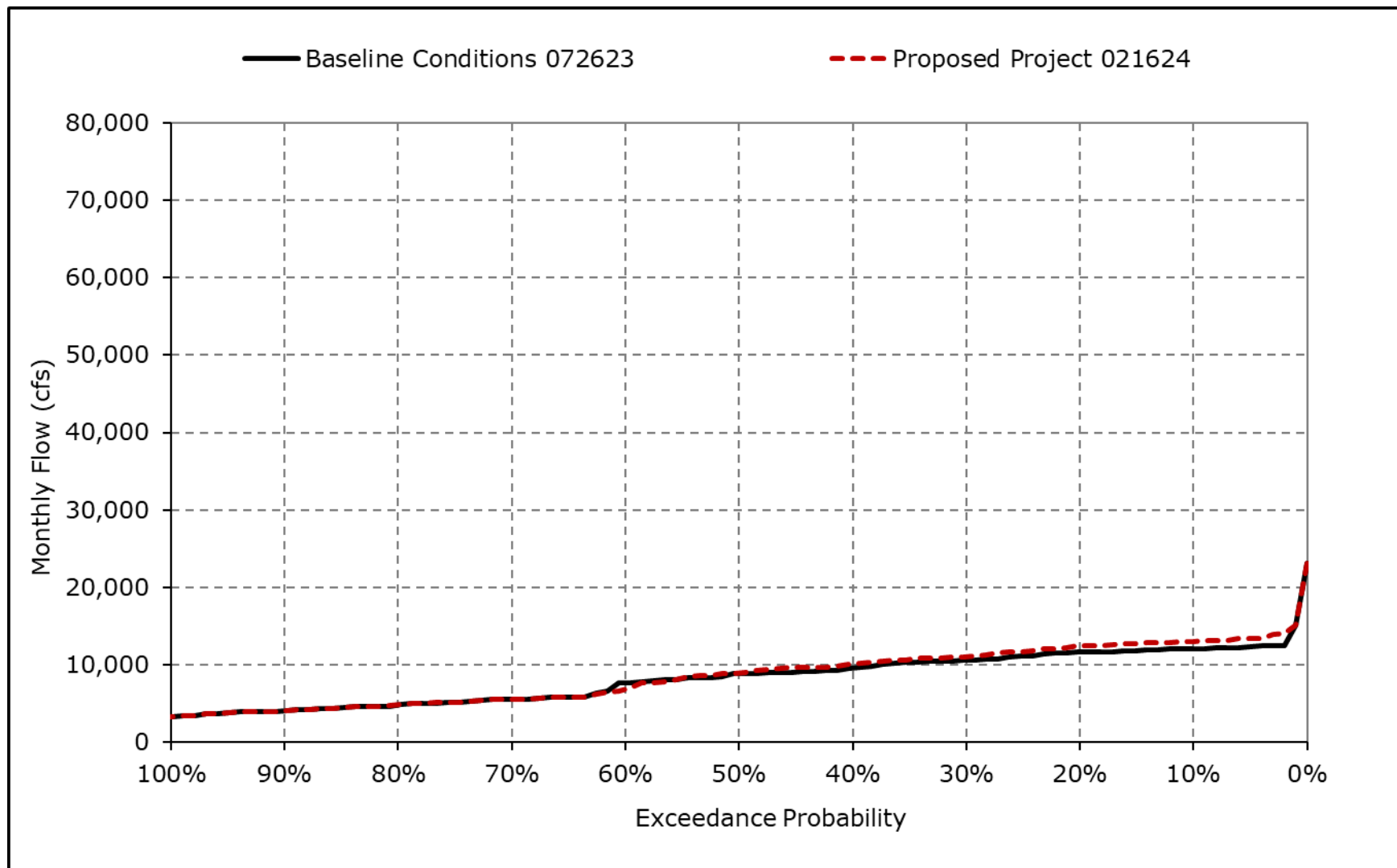
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-4q. Sacramento River Flow at Rio Vista, August**



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

**Figure 4B-2-4r. Sacramento River Flow at Rio Vista, September**



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

**Table 4B-2-5-1a. San Joaquin River at Vernalis, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,748	2,796	4,108	7,320	11,298	13,137	13,821	10,637	11,503	5,775	4,630	3,534
20% Exceedance	3,372	2,400	2,730	4,318	8,170	7,858	9,100	6,668	5,422	3,338	2,283	1,991
30% Exceedance	3,010	2,331	2,244	3,331	5,266	6,555	7,648	5,435	3,346	2,133	1,716	1,611
40% Exceedance	2,126	2,107	1,927	2,723	3,905	4,557	5,879	4,354	2,593	1,793	1,570	1,480
50% Exceedance	1,865	1,881	1,778	2,224	3,121	2,992	4,243	3,517	2,057	1,505	1,464	1,386
60% Exceedance	1,748	1,583	1,643	2,064	2,445	2,623	3,318	2,732	1,790	1,340	1,255	1,279
70% Exceedance	1,706	1,474	1,534	1,907	2,240	2,322	2,948	2,444	1,645	1,203	1,116	1,190
80% Exceedance	1,560	1,392	1,353	1,763	2,086	2,121	2,606	2,093	1,438	972	932	995
90% Exceedance	1,408	1,303	1,242	1,655	1,880	2,026	2,226	1,689	1,200	746	763	888
Full Simulation Period Average <sup>a</sup>	2,393	2,102	2,624	3,927	5,554	5,791	6,414	5,138	4,254	2,515	1,915	1,692
Wet Water Years (30%)	2,751	2,689	4,508	7,549	10,551	11,407	11,918	9,664	9,017	5,129	3,551	2,751
Above Normal Water Years (11%)	2,189	1,944	2,062	3,596	6,027	5,884	6,777	5,170	3,981	2,325	1,761	1,661
Below Normal Water Years (21%)	2,607	2,134	2,018	2,527	4,114	4,179	5,216	4,162	2,695	1,697	1,427	1,410
Dry Water Years (22%)	2,310	1,820	1,731	1,990	2,317	2,311	2,817	2,338	1,574	1,142	1,114	1,156
Critical Water Years (16%)	1,694	1,457	1,501	1,865	2,204	2,100	2,363	1,763	1,240	704	698	833

**Table 4B-2-5-1b. San Joaquin River at Vernalis, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,745	2,793	4,107	7,318	11,295	13,141	13,786	10,634	11,498	5,771	4,627	3,532
20% Exceedance	3,369	2,400	2,728	4,316	8,167	7,854	9,100	6,667	5,419	3,338	2,280	1,990
30% Exceedance	3,006	2,327	2,232	3,329	5,263	6,552	7,645	5,432	3,344	2,125	1,714	1,596
40% Exceedance	2,124	2,105	1,924	2,719	3,903	4,554	5,874	4,352	2,590	1,790	1,556	1,476
50% Exceedance	1,864	1,878	1,776	2,221	3,117	2,988	4,241	3,513	2,057	1,499	1,463	1,383
60% Exceedance	1,744	1,579	1,641	2,063	2,440	2,621	3,316	2,726	1,785	1,325	1,246	1,265
70% Exceedance	1,677	1,466	1,529	1,904	2,240	2,318	2,946	2,442	1,639	1,196	1,090	1,154
80% Exceedance	1,566	1,373	1,352	1,761	2,080	2,120	2,601	2,087	1,434	964	924	993
90% Exceedance	1,428	1,314	1,253	1,654	1,876	2,022	2,224	1,686	1,187	738	760	872
Full Simulation Period Average <sup>a</sup>	2,390	2,099	2,618	3,922	5,552	5,788	6,411	5,133	4,249	2,508	1,904	1,684
Wet Water Years (30%)	2,743	2,685	4,502	7,544	10,547	11,402	11,912	9,655	9,012	5,125	3,547	2,748
Above Normal Water Years (11%)	2,181	1,937	2,055	3,591	6,030	5,881	6,785	5,167	3,978	2,322	1,760	1,659
Below Normal Water Years (21%)	2,606	2,132	2,016	2,524	4,111	4,176	5,212	4,158	2,691	1,688	1,415	1,402
Dry Water Years (22%)	2,306	1,814	1,723	1,984	2,312	2,308	2,812	2,333	1,569	1,129	1,082	1,140
Critical Water Years (16%)	1,701	1,462	1,496	1,861	2,200	2,097	2,361	1,761	1,235	699	693	827

**Table 4B-2-5-1c. San Joaquin River at Vernalis, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-3	-3	0	-2	-3	3	-35	-4	-5	-4	-3	-2
20% Exceedance	-4	0	-3	-2	-2	-3	0	-2	-4	1	-3	-1
30% Exceedance	-3	-4	-12	-2	-3	-3	-3	-3	-3	-7	-2	-15
40% Exceedance	-3	-2	-3	-5	-2	-3	-5	-3	-3	-3	-14	-4
50% Exceedance	-2	-4	-2	-3	-4	-4	-2	-5	1	-6	-1	-3
60% Exceedance	-4	-4	-2	-1	-5	-2	-2	-6	-6	-15	-10	-14
70% Exceedance	-29	-7	-5	-3	0	-4	-1	-2	-6	-7	-26	-35
80% Exceedance	5	-19	-1	-3	-6	-1	-4	-6	-4	-8	-8	-2
90% Exceedance	20	11	11	-1	-4	-3	-2	-3	-13	-8	-3	-16
Full Simulation Period Average <sup>a</sup>	-3	-3	-6	-5	-3	-4	-3	-5	-5	-7	-11	-8
Wet Water Years (30%)	-8	-4	-6	-4	-3	-5	-6	-9	-5	-4	-4	-3
Above Normal Water Years (11%)	-8	-7	-7	-5	3	-3	7	-3	-3	-3	-1	-2
Below Normal Water Years (21%)	-1	-2	-2	-3	-3	-4	-4	-4	-4	-9	-11	-8
Dry Water Years (22%)	-5	-6	-8	-7	-5	-3	-4	-5	-6	-12	-32	-16
Critical Water Years (16%)	7	5	-5	-4	-4	-3	-2	-2	-4	-5	-5	-6

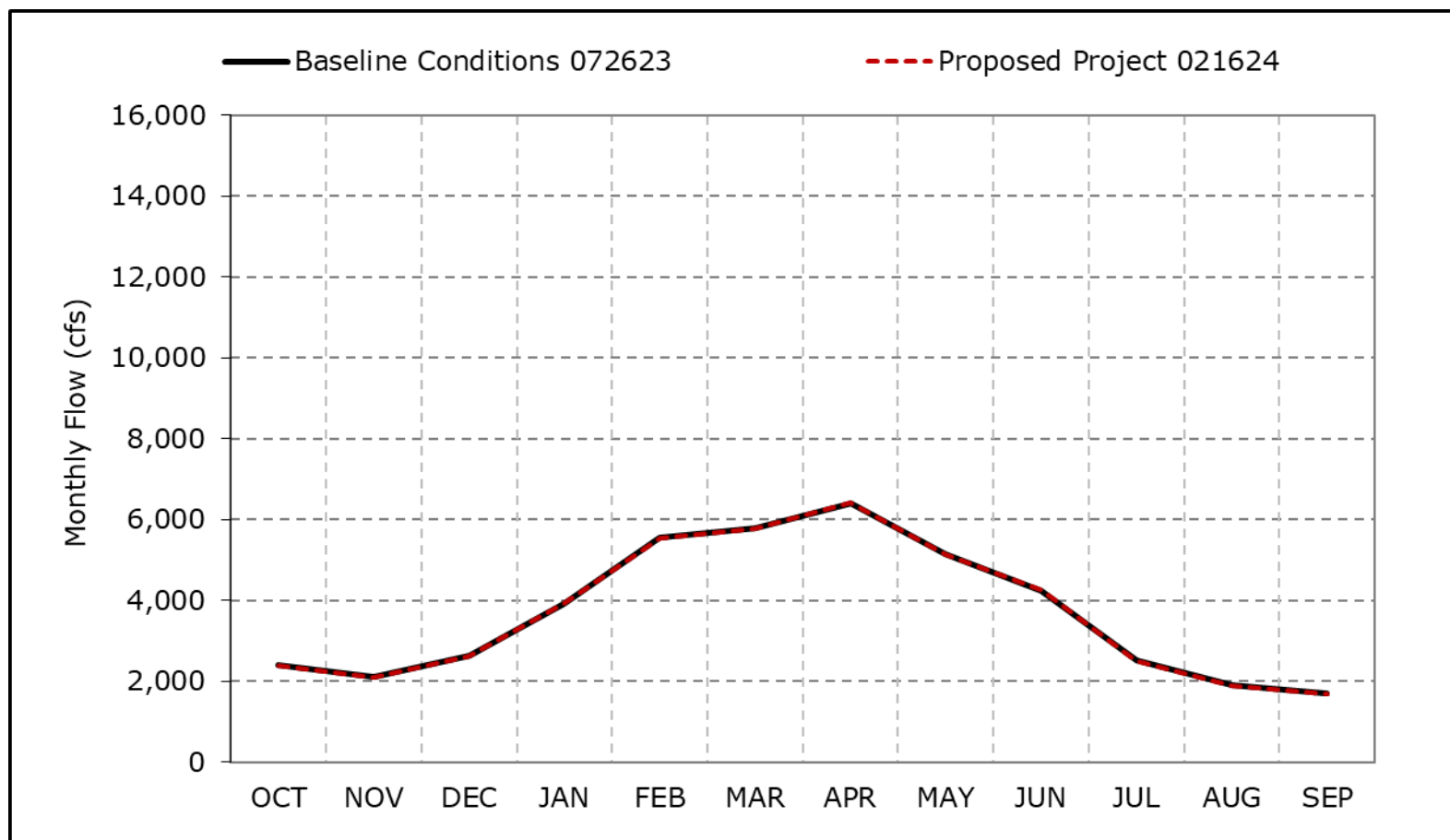
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-5a. San Joaquin River at Vernalis, Long-Term Average Flow**



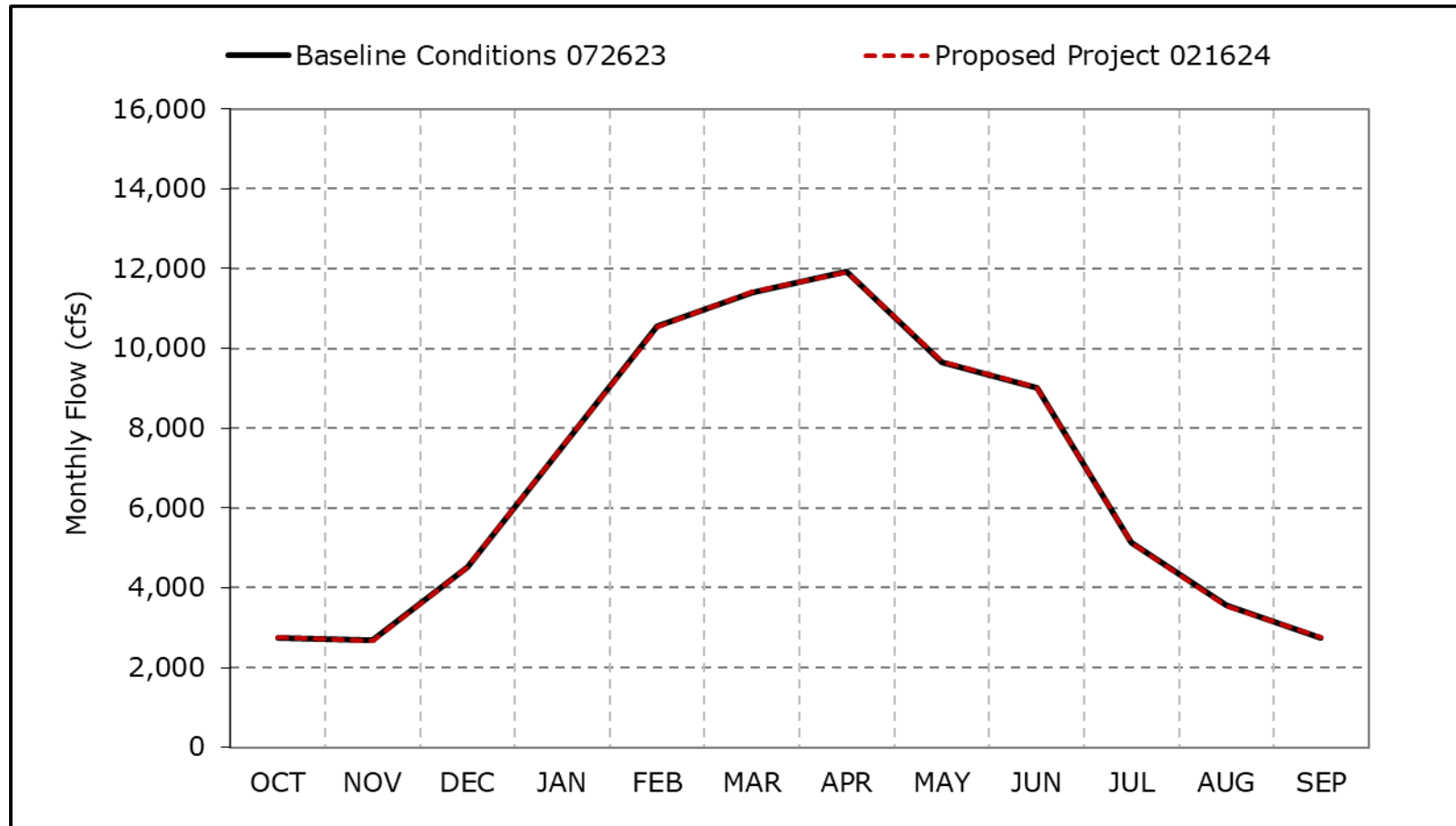
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-5b. San Joaquin River at Vernalis, Wet Year Average Flow**

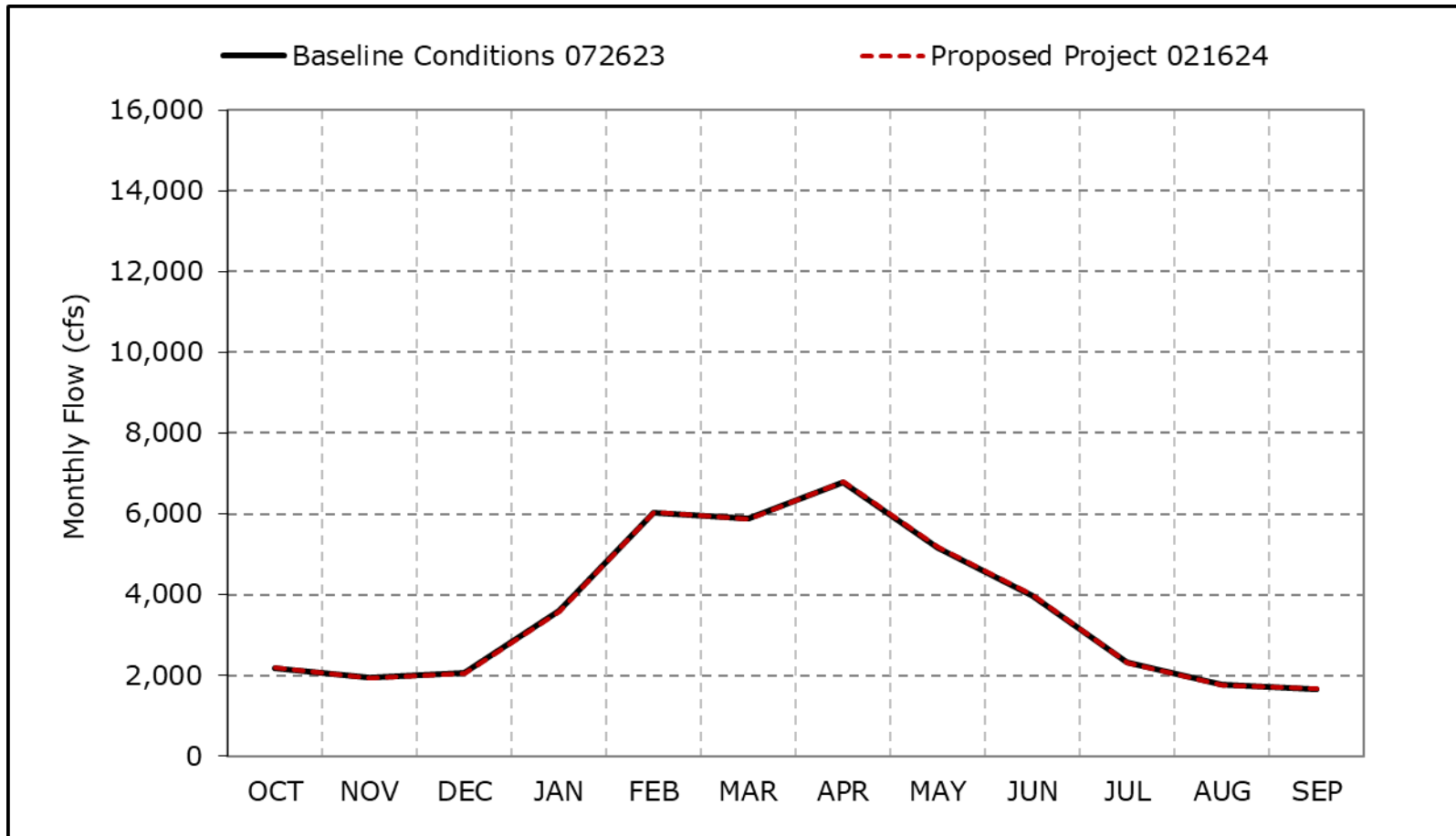


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-5c. San Joaquin River at Vernalis, Above Normal Year Average Flow**

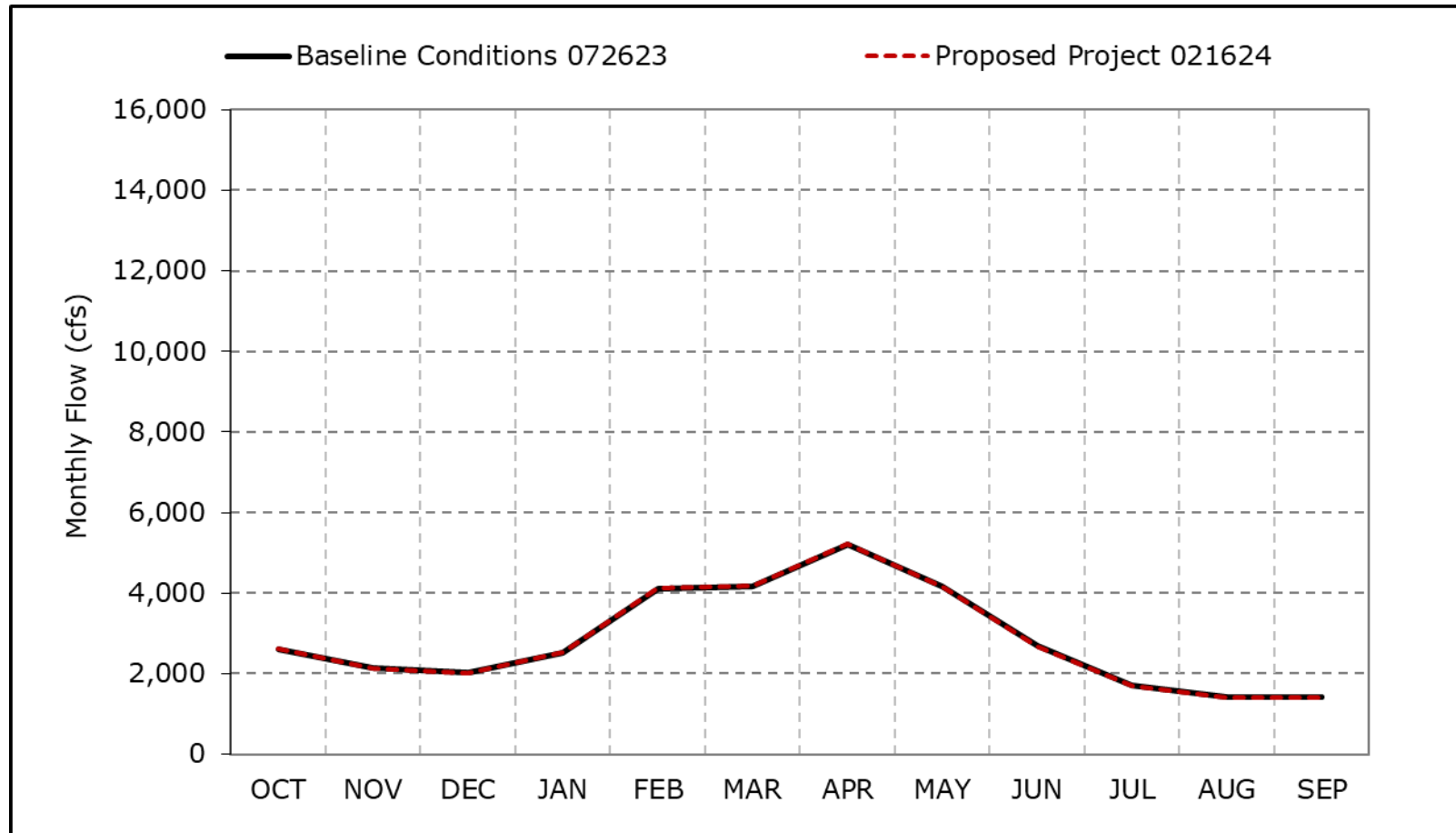


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-5d. San Joaquin River at Vernalis, Below Normal Year Average Flow**

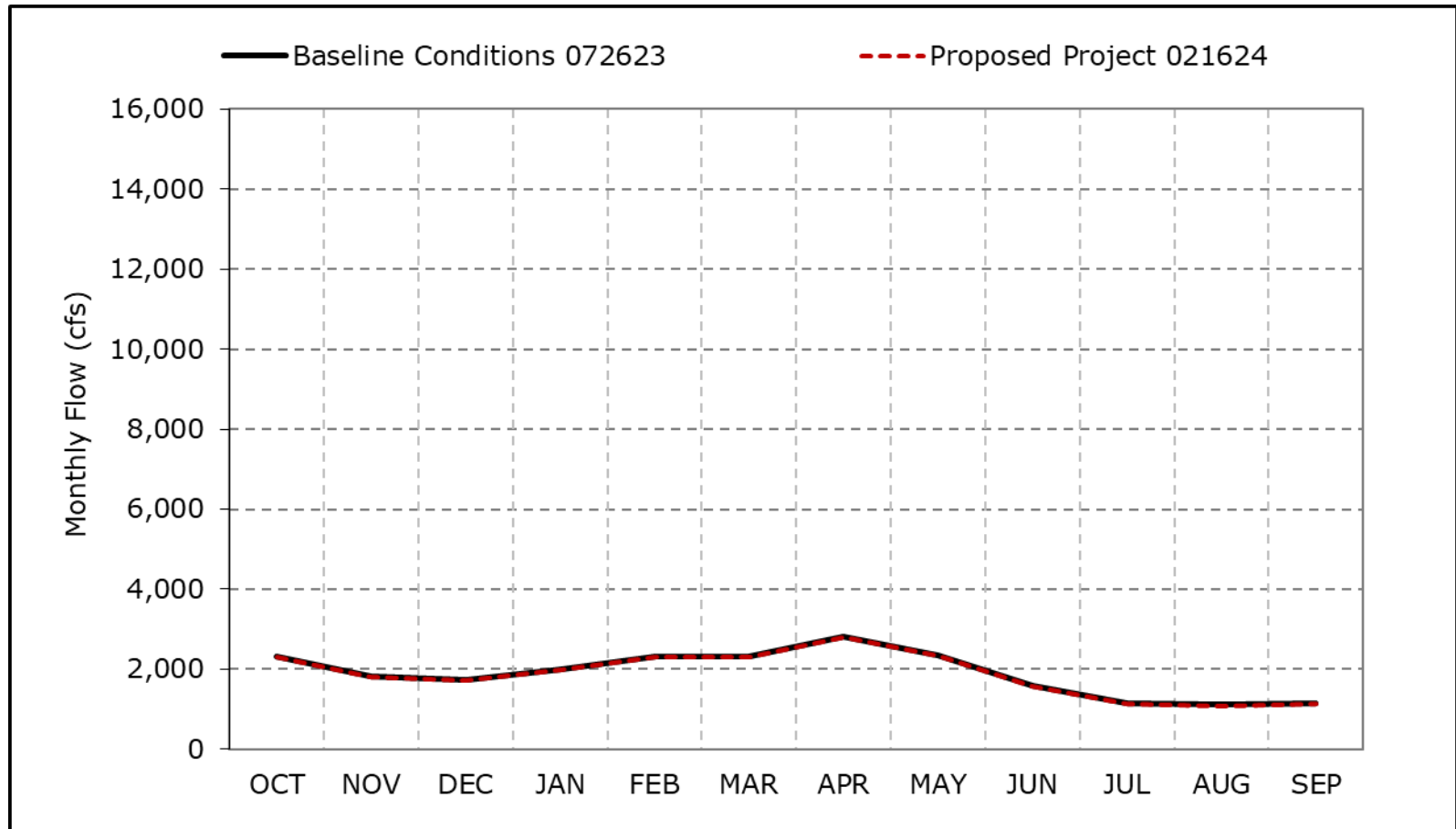


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-5e. San Joaquin River at Vernalis, Dry Year Average Flow**

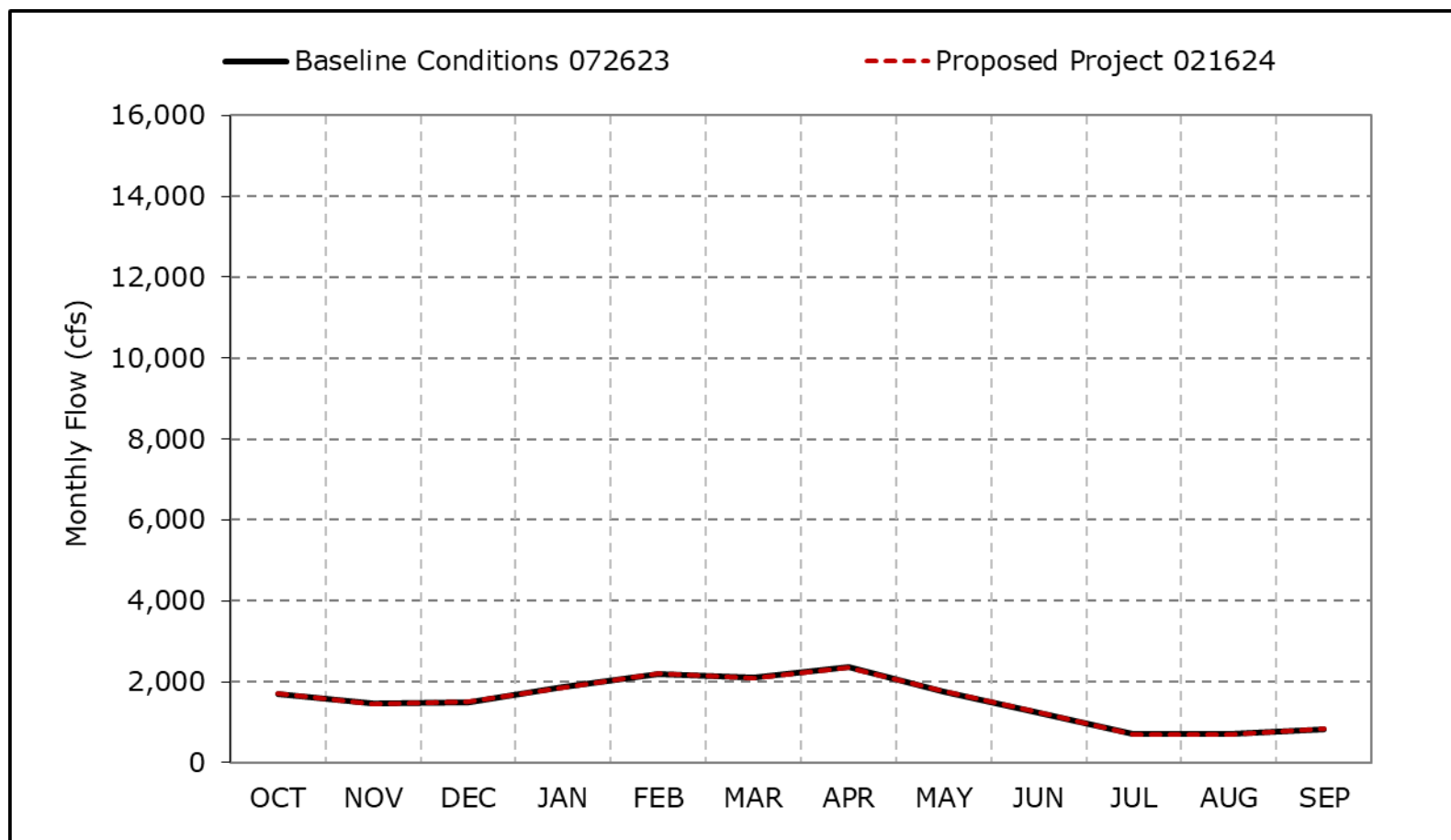


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-5f. San Joaquin River at Vernalis, Critical Year Average Flow**

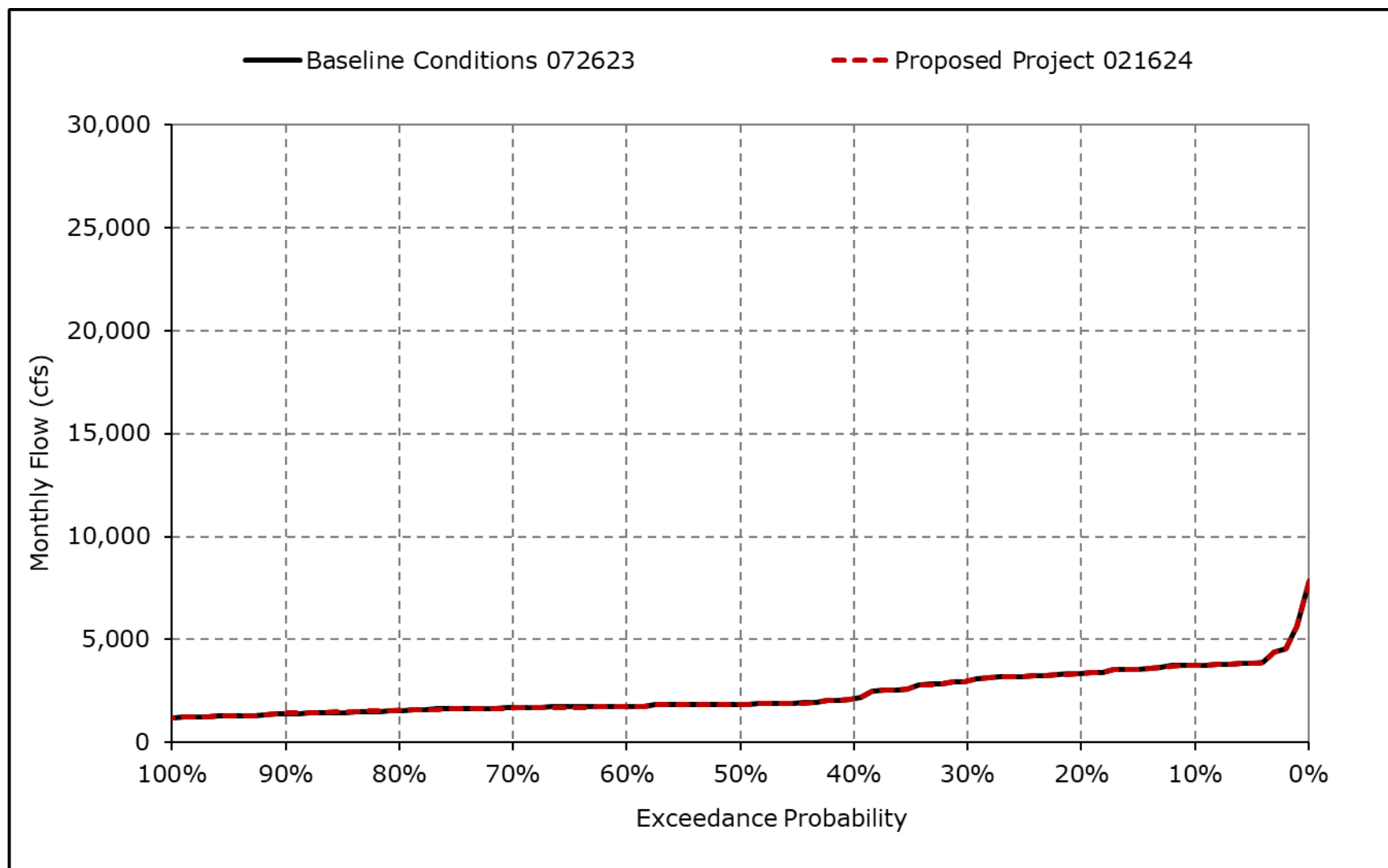


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

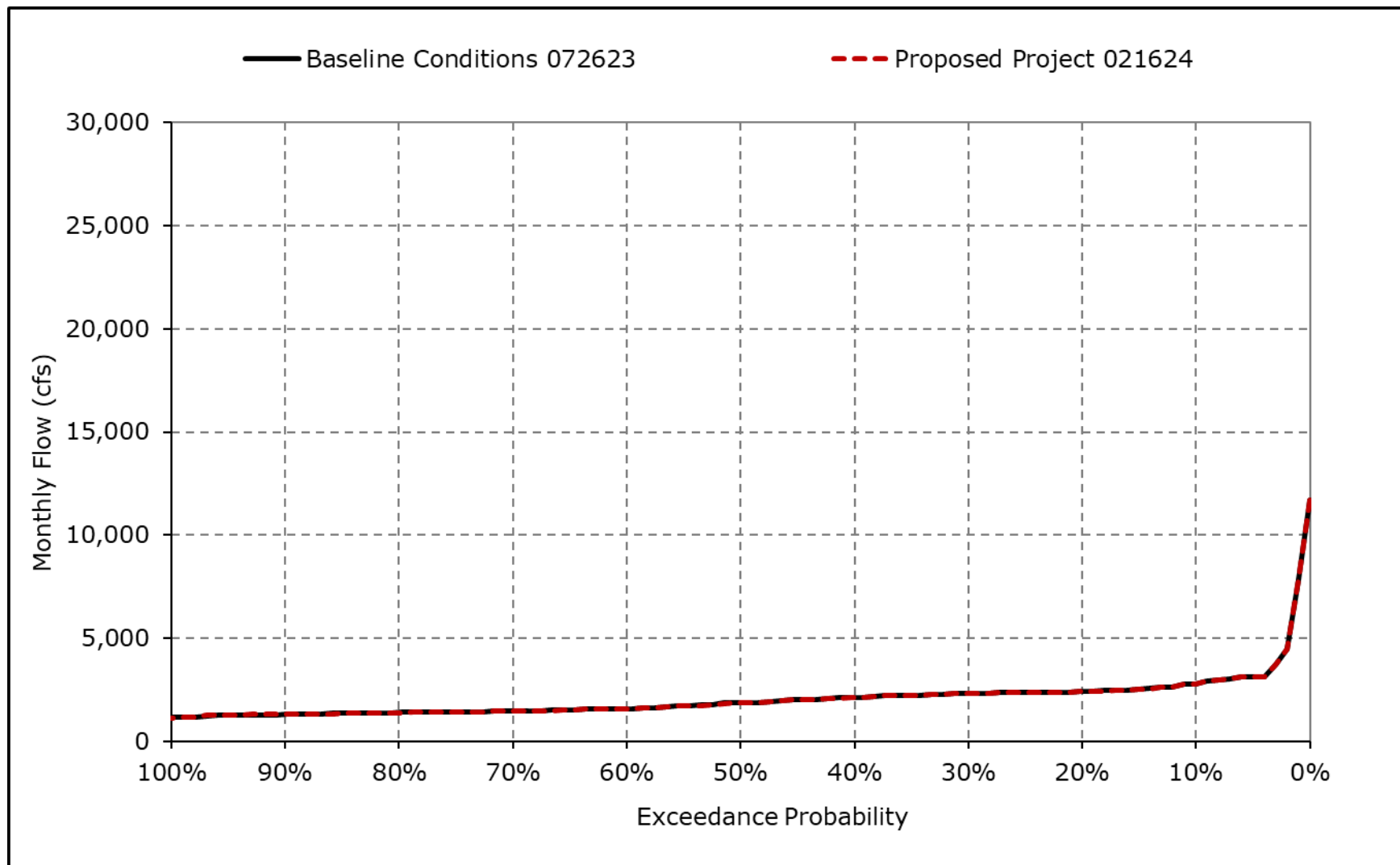
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5g. San Joaquin River at Vernalis, October**



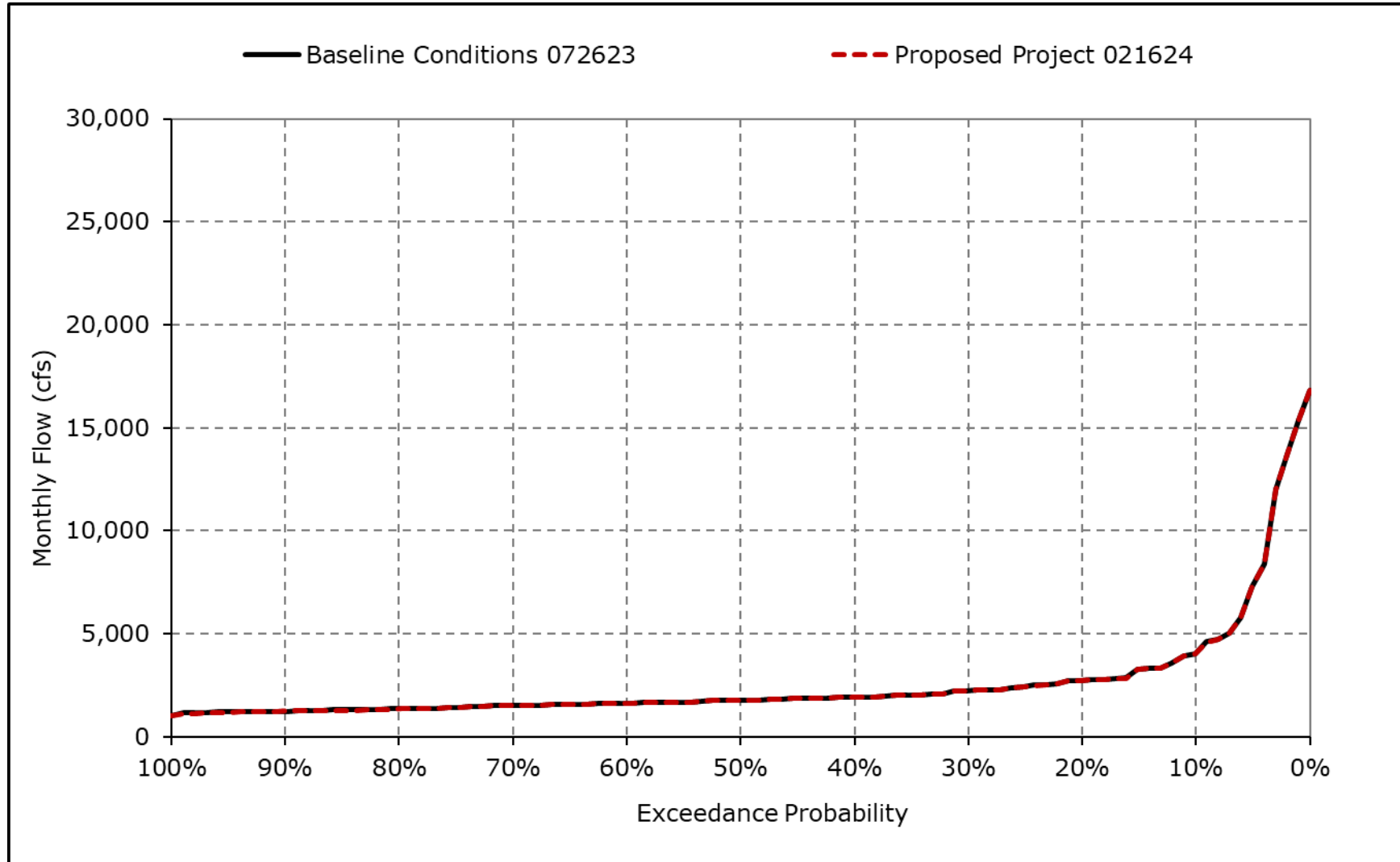
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5h. San Joaquin River at Vernalis, November**



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

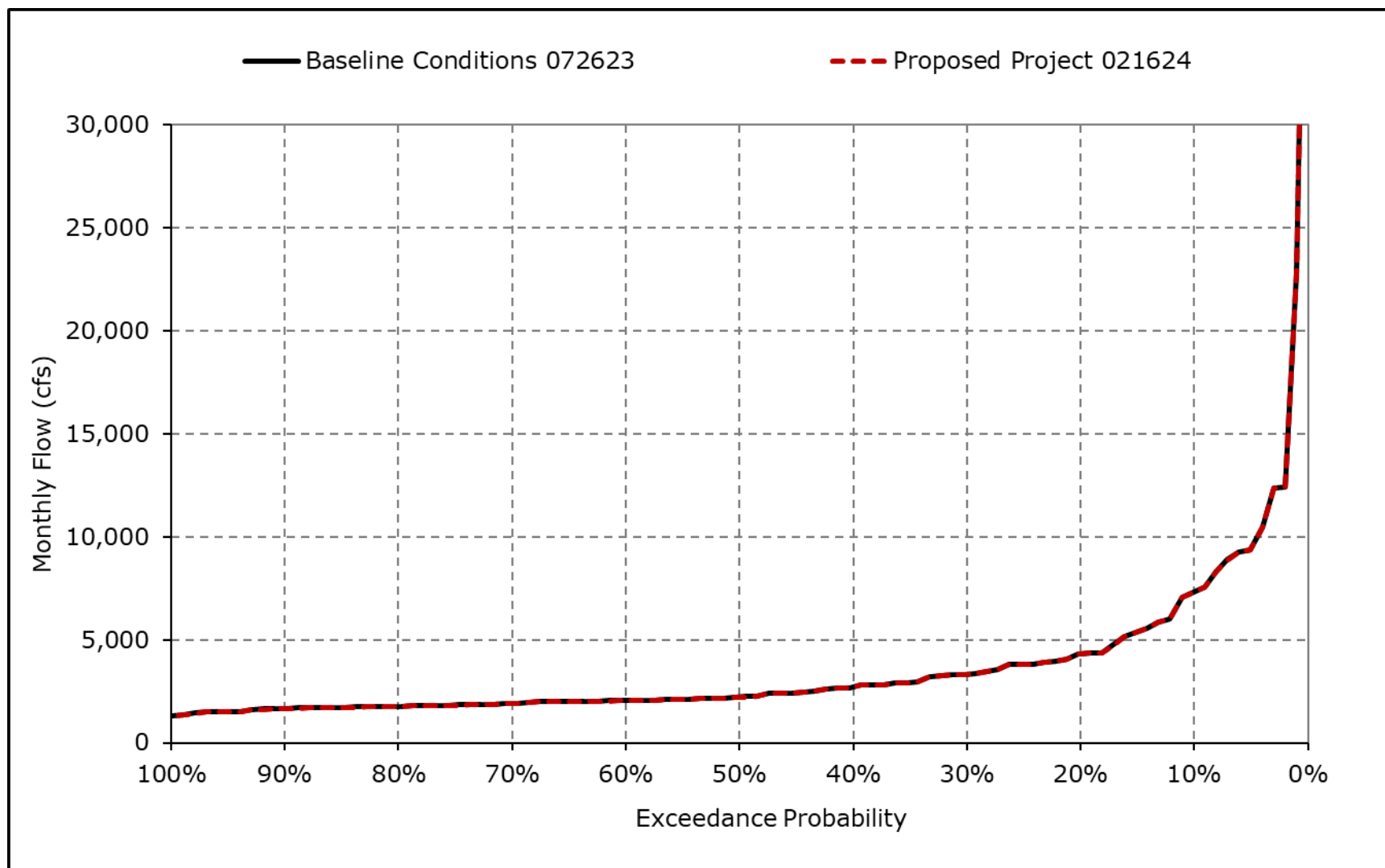
**Figure 4B-2-5i. San Joaquin River at Vernalis, December**



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

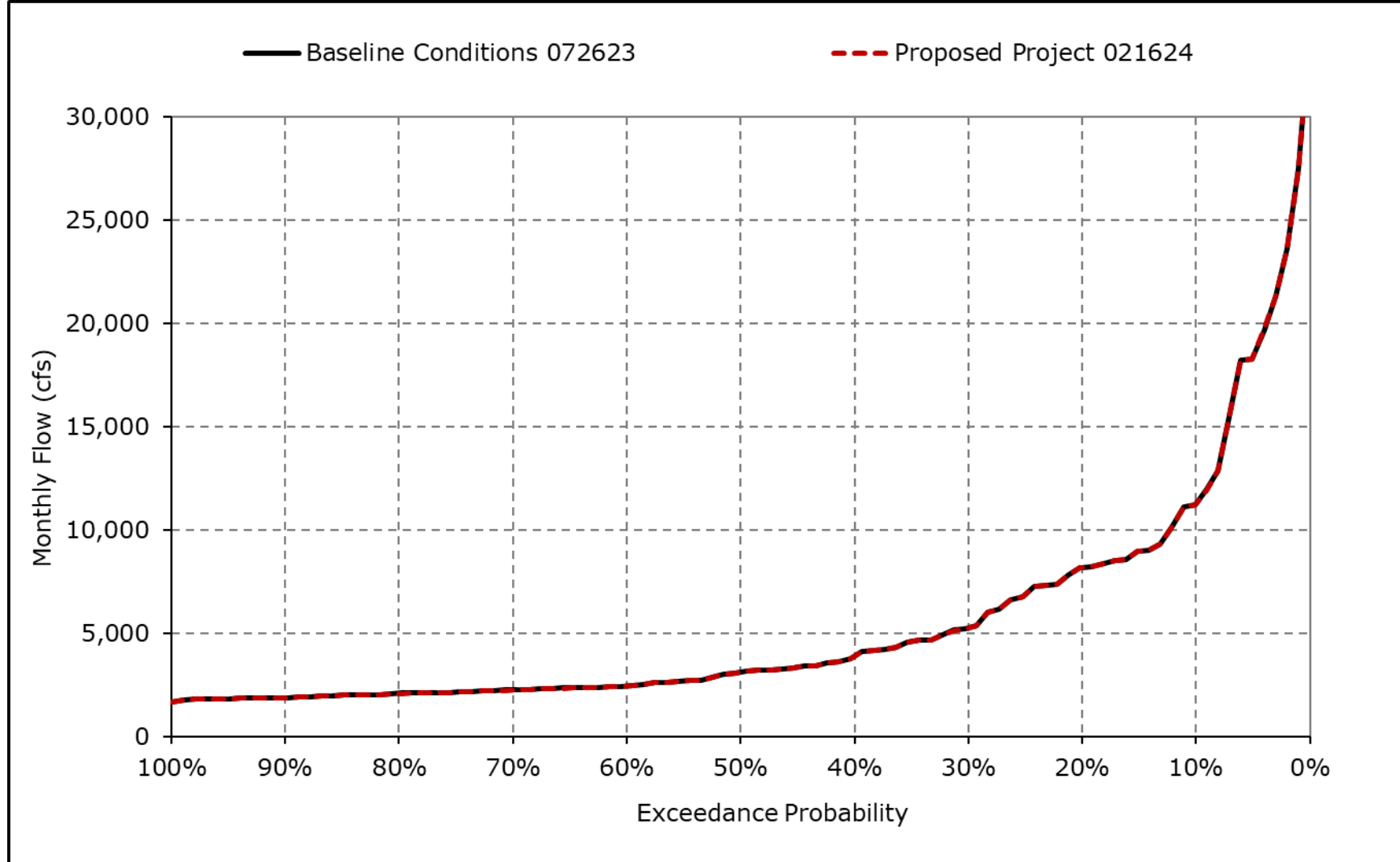


**Figure 4B-2-5j. San Joaquin River at Vernalis, January**



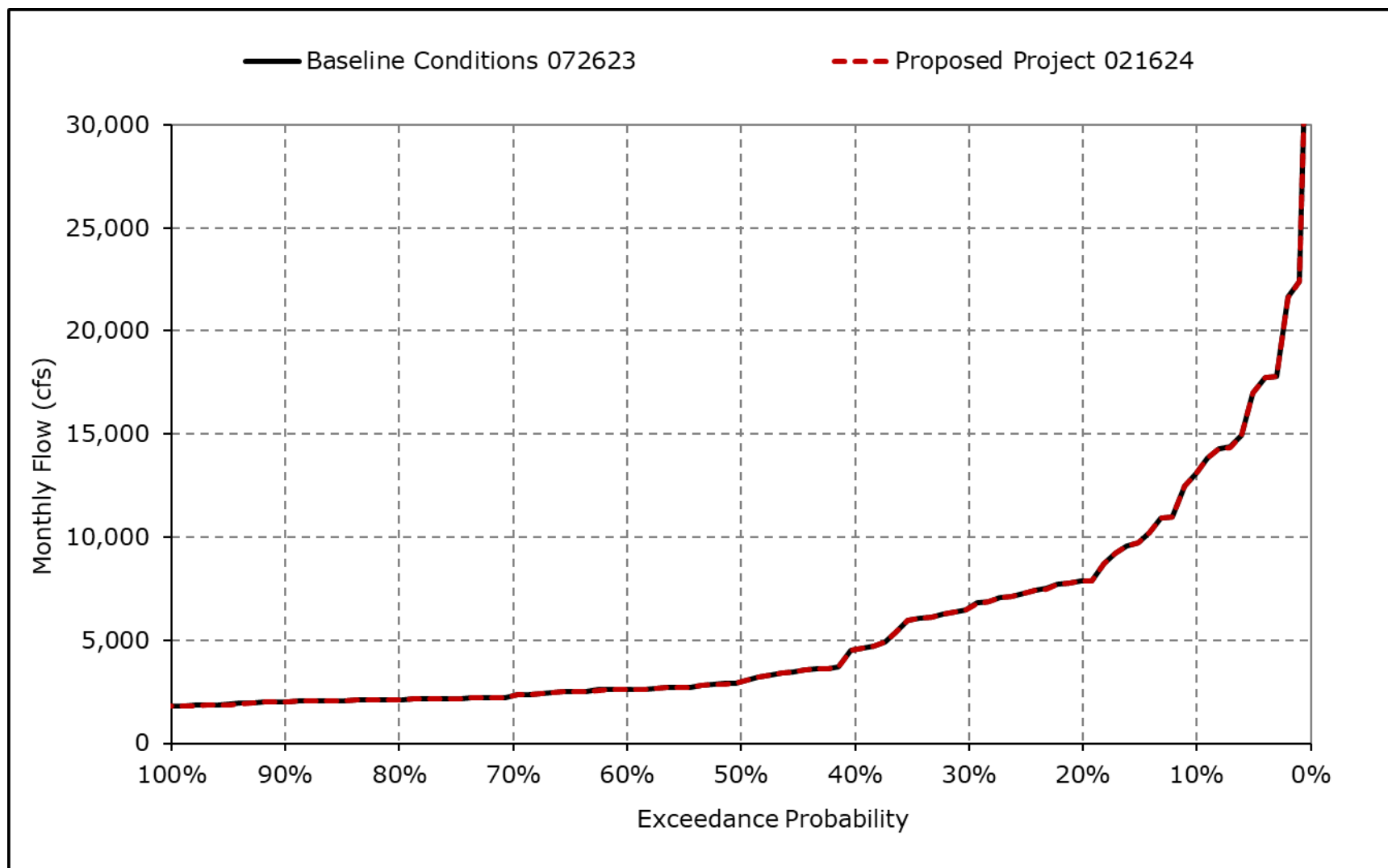
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5k. San Joaquin River at Vernalis, February**



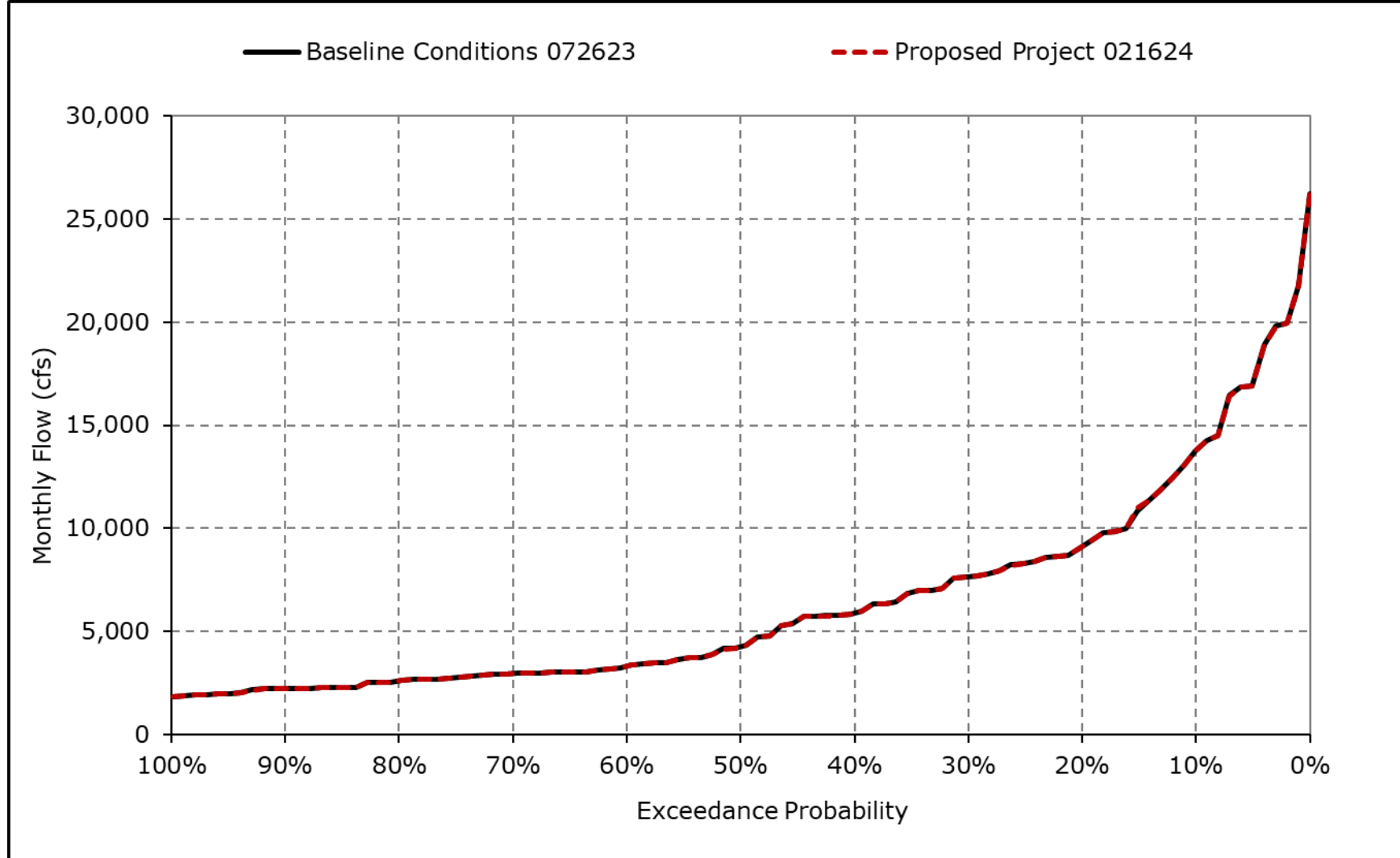
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5I. San Joaquin River at Vernalis, March**



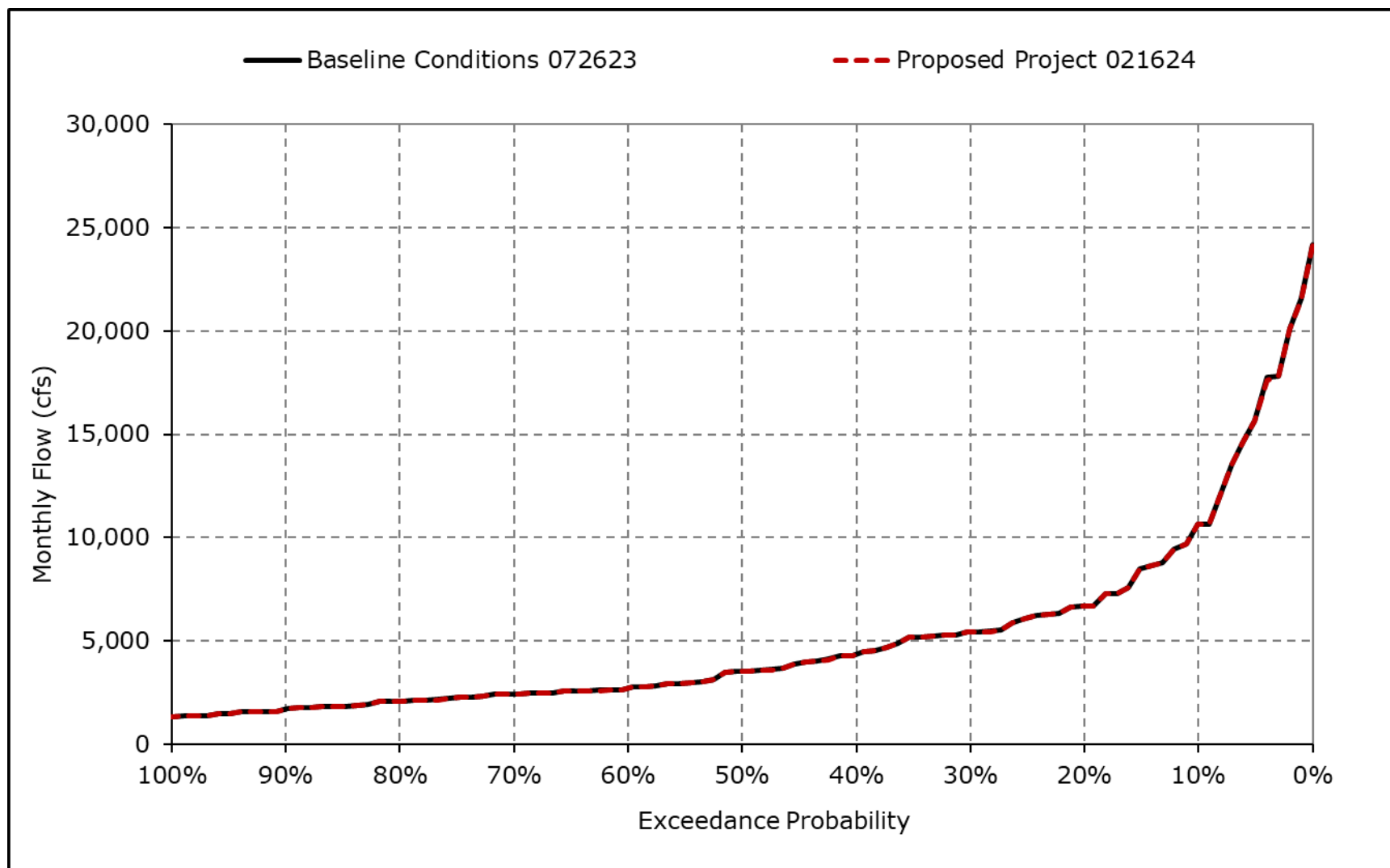
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5m. San Joaquin River at Vernalis, April**



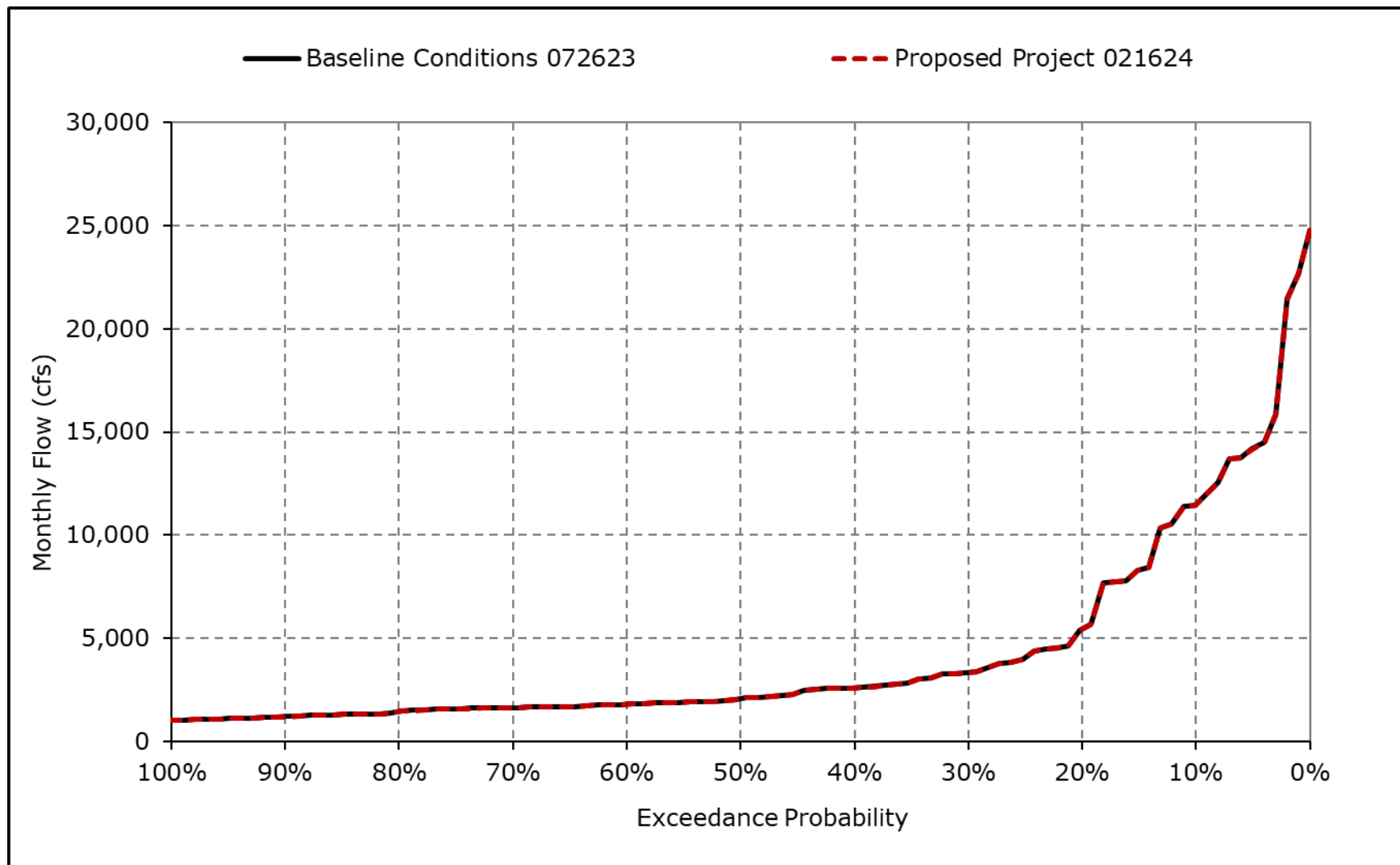
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5n. San Joaquin River at Vernalis, May**



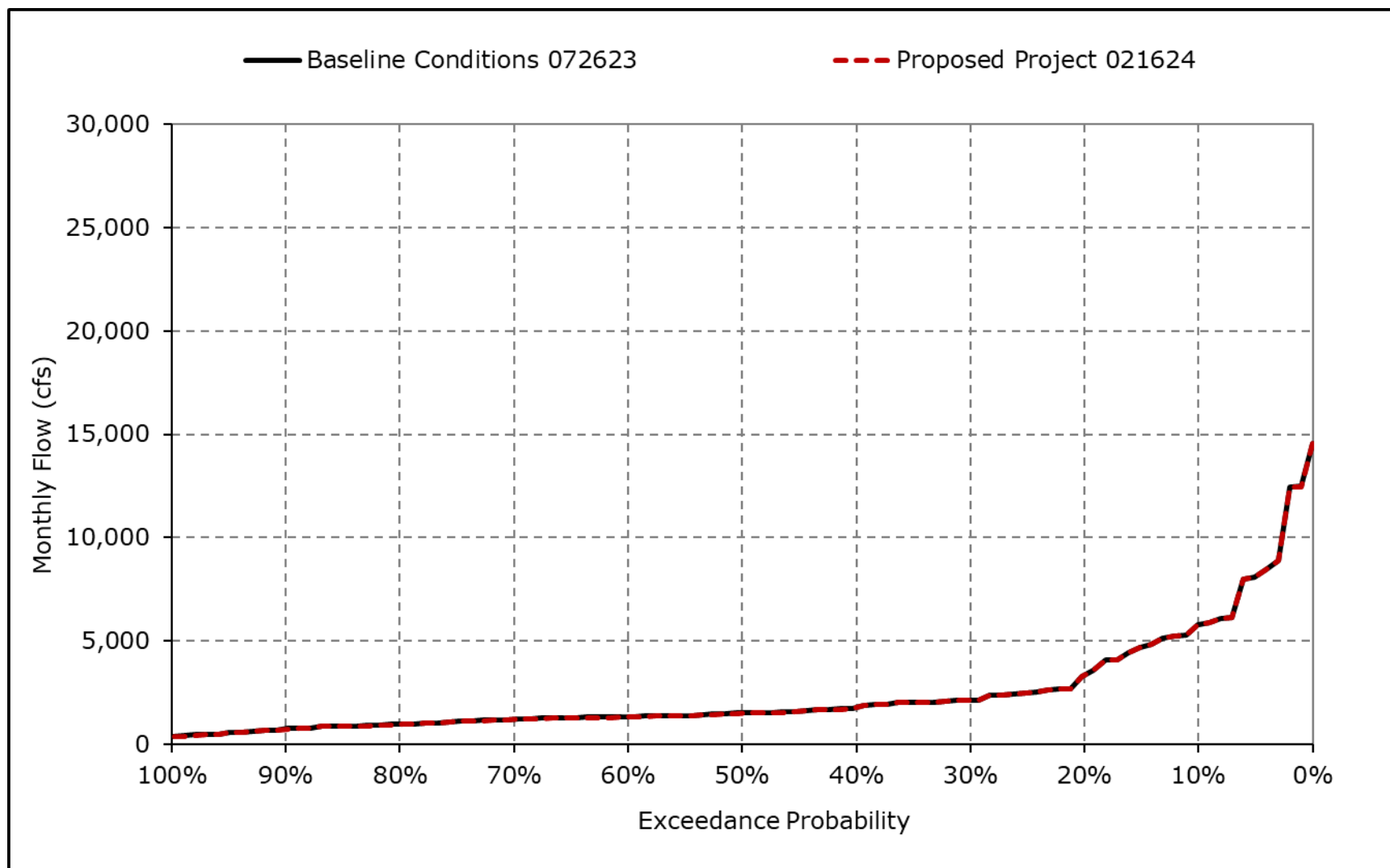
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5o. San Joaquin River at Vernalis, June**



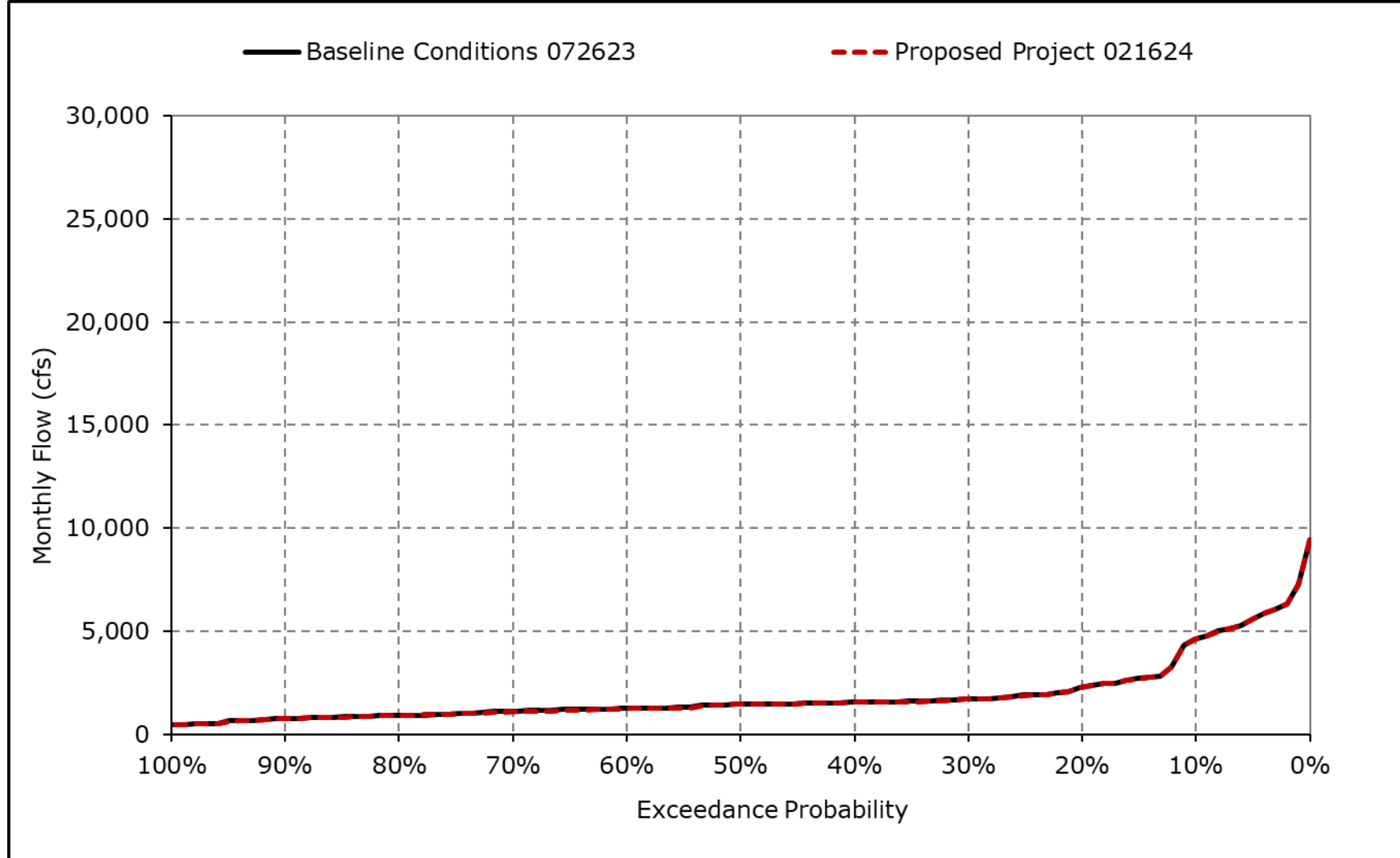
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-5p. San Joaquin River at Vernalis, July**



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

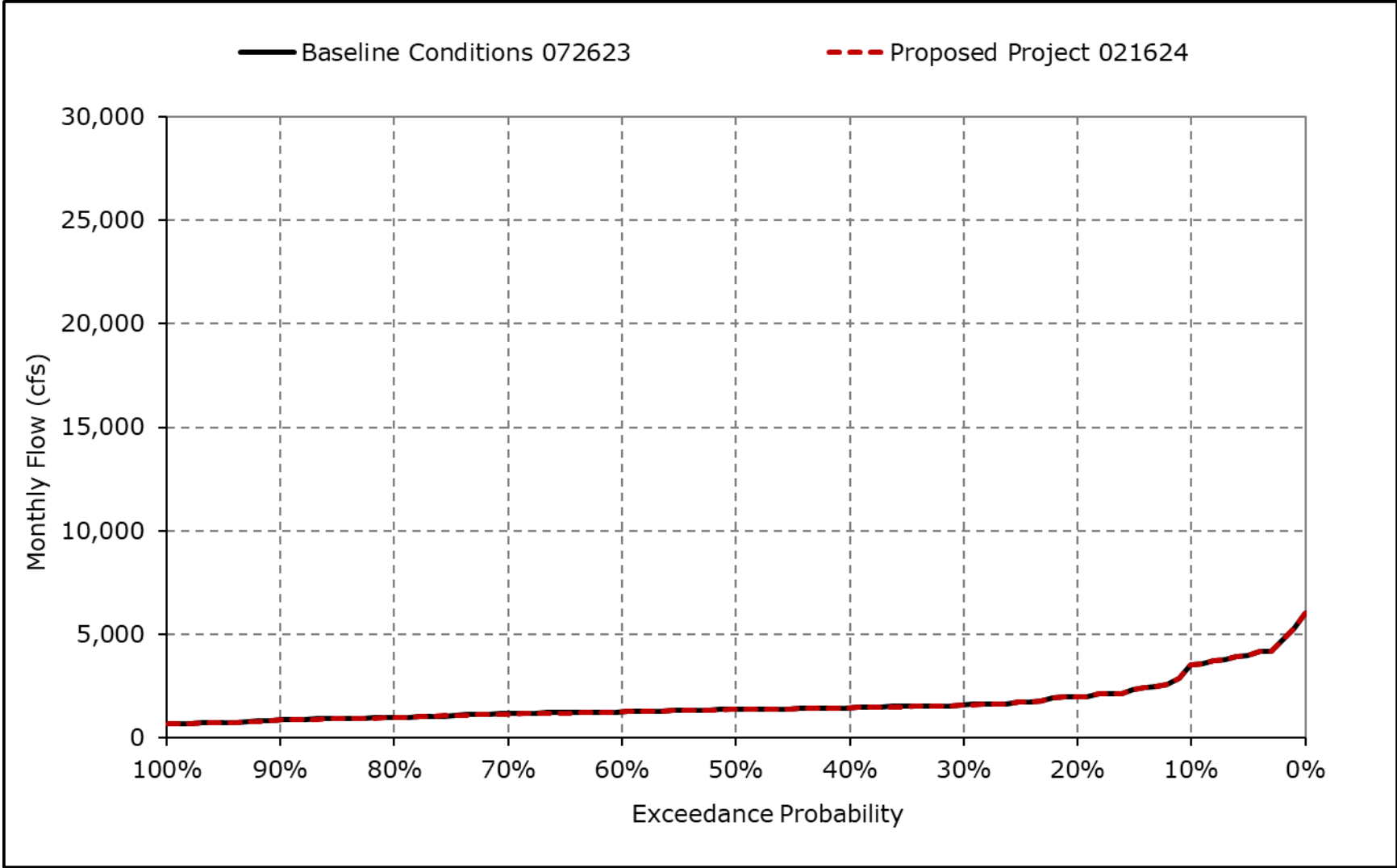
**Figure 4B-2-5q. San Joaquin River at Vernalis, August**



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



Figure 4B-2-5r. San Joaquin River at Vernalis, September



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

**Table 4B-2-6-1a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,748	2,796	4,108	7,320	11,298	13,137	13,821	10,637	11,503	5,775	4,630	3,534
20% Exceedance	3,372	2,400	2,730	4,318	8,170	7,858	9,100	6,668	5,422	3,338	2,283	1,991
30% Exceedance	3,010	2,331	2,244	3,331	5,266	6,555	7,648	5,435	3,346	2,133	1,716	1,611
40% Exceedance	2,126	2,107	1,927	2,723	3,905	4,557	5,879	4,354	2,593	1,793	1,570	1,480
50% Exceedance	1,865	1,881	1,778	2,224	3,121	2,992	4,243	3,517	2,057	1,505	1,464	1,386
60% Exceedance	1,748	1,583	1,643	2,064	2,445	2,623	3,318	2,732	1,790	1,340	1,255	1,279
70% Exceedance	1,706	1,474	1,534	1,907	2,240	2,322	2,948	2,444	1,645	1,203	1,116	1,190
80% Exceedance	1,560	1,392	1,353	1,763	2,086	2,121	2,606	2,093	1,438	972	932	995
90% Exceedance	1,408	1,303	1,242	1,655	1,880	2,026	2,226	1,689	1,200	746	763	888
Full Simulation Period Average <sup>a</sup>	2,393	2,102	2,624	3,927	5,554	5,791	6,414	5,138	4,254	2,515	1,915	1,692
Wet Water Years (25%)	2,519	2,215	3,874	7,879	11,656	13,000	13,353	11,037	10,639	5,903	3,982	3,050
Above Normal Water Years (17%)	2,554	2,688	3,560	4,320	6,432	5,711	7,119	5,289	3,780	2,293	1,724	1,612
Below Normal Water Years (14%)	2,477	2,147	2,333	2,469	3,795	3,817	4,966	3,949	2,218	1,477	1,393	1,314
Dry Water Years (16%)	2,658	2,079	1,833	2,191	2,421	2,663	3,182	2,607	1,726	1,259	1,179	1,191
Critical Water Years (28%)	1,989	1,637	1,537	1,881	2,244	2,180	2,362	1,820	1,302	860	868	1,002

**Table 4B-2-6-1b. San Joaquin River at Vernalis (60-20-20), Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,745	2,793	4,107	7,318	11,295	13,141	13,786	10,634	11,498	5,771	4,627	3,532
20% Exceedance	3,369	2,400	2,728	4,316	8,167	7,854	9,100	6,667	5,419	3,338	2,280	1,990
30% Exceedance	3,006	2,327	2,232	3,329	5,263	6,552	7,645	5,432	3,344	2,125	1,714	1,596
40% Exceedance	2,124	2,105	1,924	2,719	3,903	4,554	5,874	4,352	2,590	1,790	1,556	1,476
50% Exceedance	1,864	1,878	1,776	2,221	3,117	2,988	4,241	3,513	2,057	1,499	1,463	1,383
60% Exceedance	1,744	1,579	1,641	2,063	2,440	2,621	3,316	2,726	1,785	1,325	1,246	1,265
70% Exceedance	1,677	1,466	1,529	1,904	2,240	2,318	2,946	2,442	1,639	1,196	1,090	1,154
80% Exceedance	1,566	1,373	1,352	1,761	2,080	2,120	2,601	2,087	1,434	964	924	993
90% Exceedance	1,428	1,314	1,253	1,654	1,876	2,022	2,224	1,686	1,187	738	760	872
Full Simulation Period Average <sup>a</sup>	2,390	2,099	2,618	3,922	5,552	5,788	6,411	5,133	4,249	2,508	1,904	1,684
Wet Water Years (25%)	2,515	2,212	3,867	7,874	11,655	12,994	13,351	11,028	10,634	5,899	3,979	3,047
Above Normal Water Years (17%)	2,545	2,683	3,556	4,318	6,430	5,708	7,114	5,284	3,777	2,290	1,719	1,608
Below Normal Water Years (14%)	2,472	2,142	2,330	2,466	3,792	3,815	4,964	3,947	2,214	1,471	1,388	1,310
Dry Water Years (16%)	2,651	2,072	1,829	2,188	2,418	2,659	3,178	2,603	1,721	1,241	1,150	1,170
Critical Water Years (28%)	1,993	1,638	1,530	1,874	2,239	2,176	2,359	1,816	1,297	854	852	994

**Table 4B-2-6-1c. San Joaquin River at Vernalis (60-20-20), Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-3	-3	0	-2	-3	3	-35	-4	-5	-4	-3	-2
20% Exceedance	-4	0	-3	-2	-2	-3	0	-2	-4	1	-3	-1
30% Exceedance	-3	-4	-12	-2	-3	-3	-3	-3	-3	-7	-2	-15
40% Exceedance	-3	-2	-3	-5	-2	-3	-5	-3	-3	-3	-14	-4
50% Exceedance	-2	-4	-2	-3	-4	-4	-2	-5	1	-6	-1	-3
60% Exceedance	-4	-4	-2	-1	-5	-2	-2	-6	-6	-15	-10	-14
70% Exceedance	-29	-7	-5	-3	0	-4	-1	-2	-6	-7	-26	-35
80% Exceedance	5	-19	-1	-3	-6	-1	-4	-6	-4	-8	-8	-2
90% Exceedance	20	11	11	-1	-4	-3	-2	-3	-13	-8	-3	-16
Full Simulation Period Average <sup>a</sup>	-3	-3	-6	-5	-3	-4	-3	-5	-5	-7	-11	-8
Wet Water Years (25%)	-4	-3	-6	-6	-1	-6	-1	-9	-6	-4	-3	-3
Above Normal Water Years (17%)	-9	-6	-4	-3	-3	-3	-4	-5	-3	-3	-5	-3
Below Normal Water Years (14%)	-5	-4	-4	-3	-2	-2	-2	-2	-3	-6	-5	-4
Dry Water Years (16%)	-7	-6	-4	-3	-3	-3	-4	-5	-5	-17	-29	-21
Critical Water Years (28%)	4	1	-7	-7	-5	-4	-4	-4	-5	-6	-16	-8

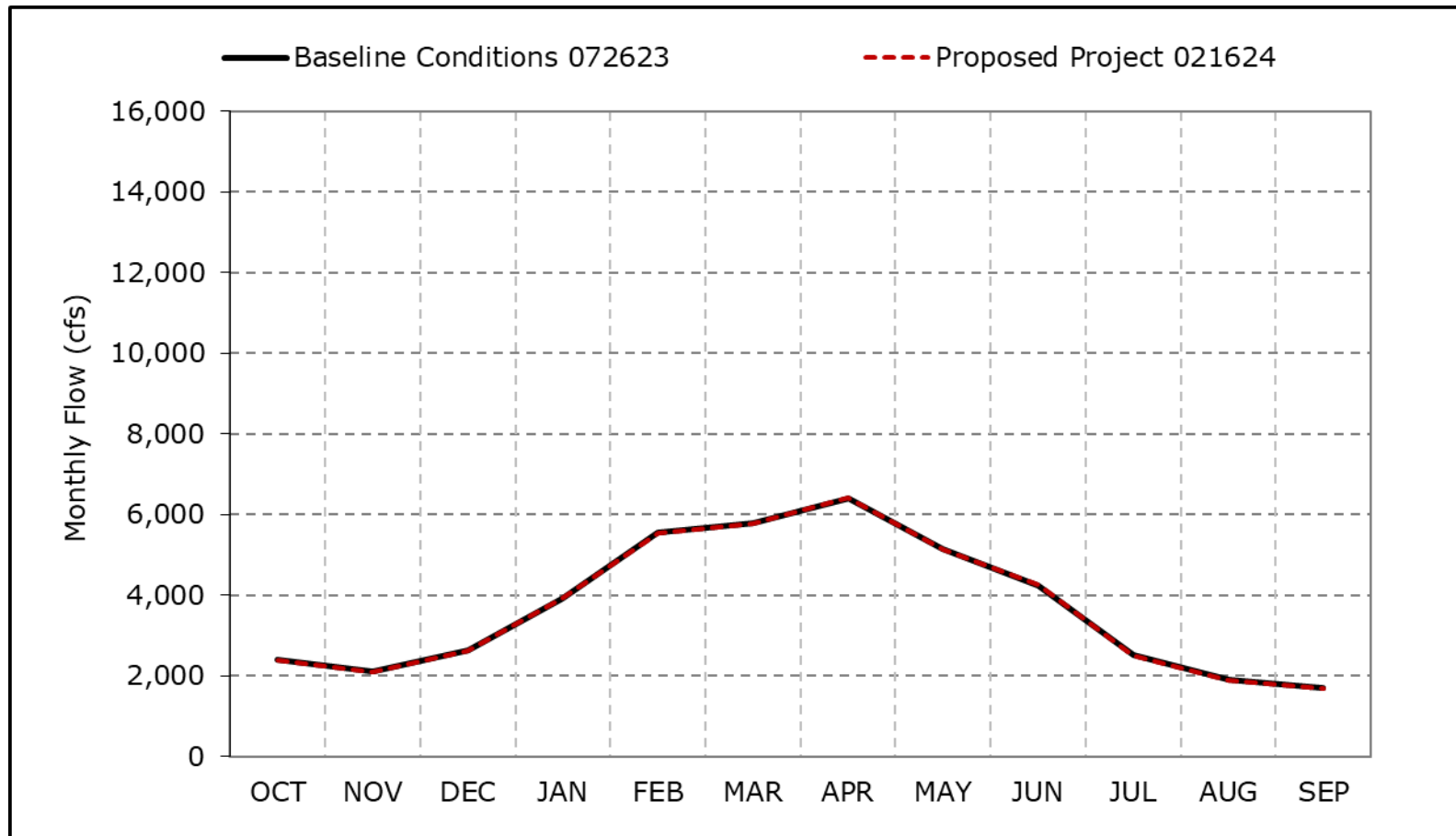
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-6a. San Joaquin River at Vernalis (60-20-20), Long-Term Average Flow**

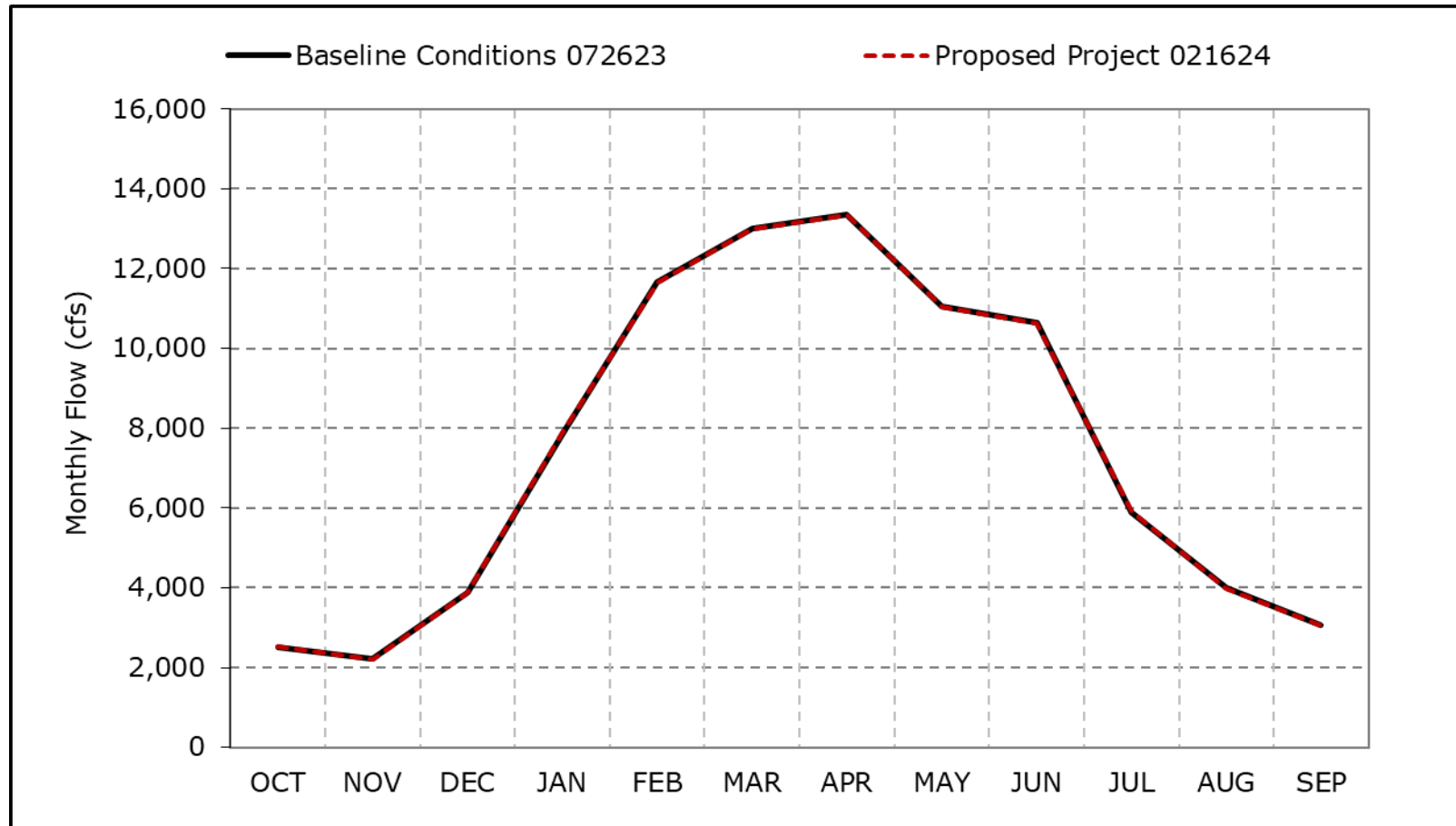


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-6b. San Joaquin River at Vernalis (60-20-20), Wet Year Average Flow**

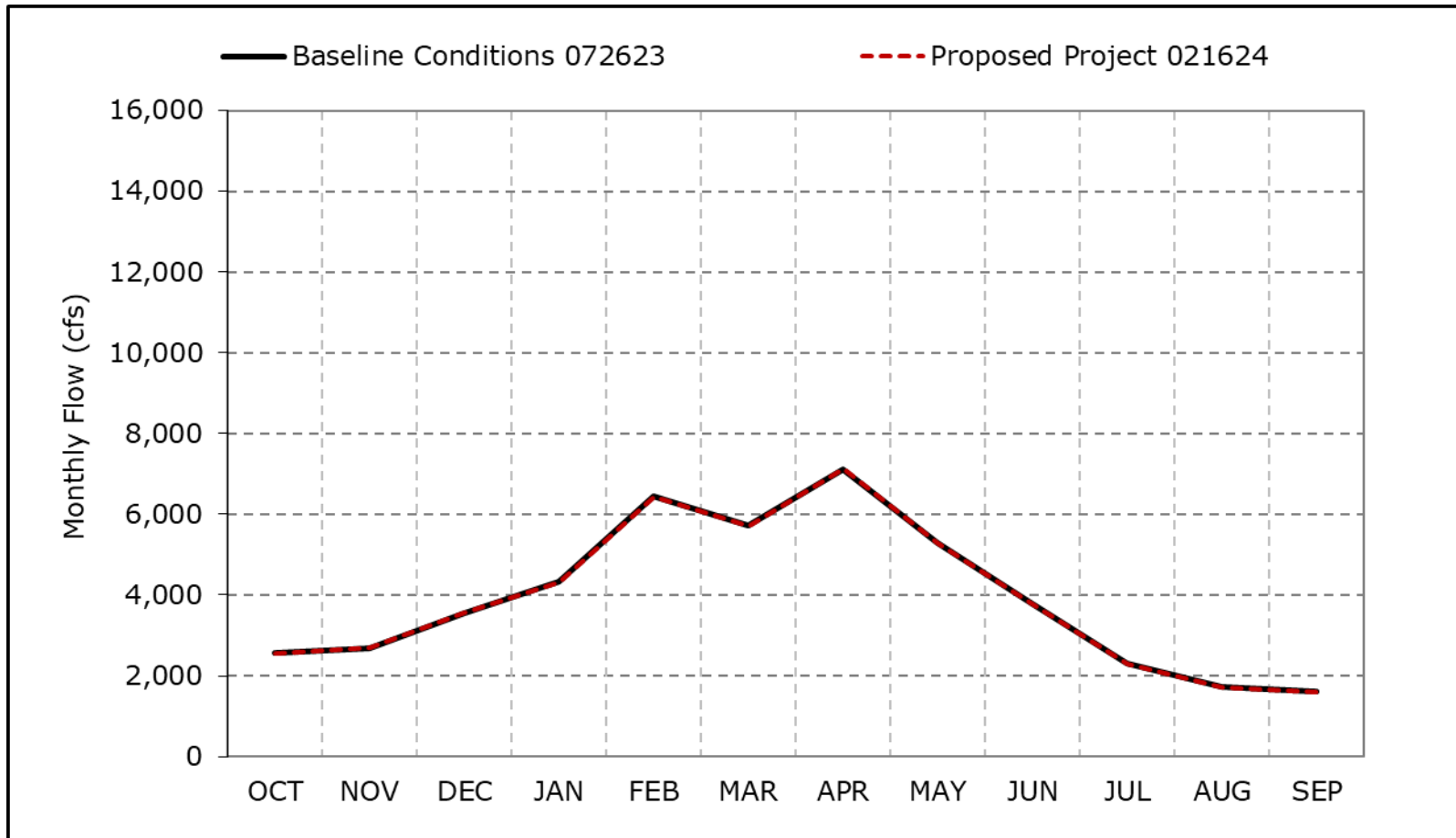


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-6c. San Joaquin River at Vernalis (60-20-20), Above Normal Year Average Flow**

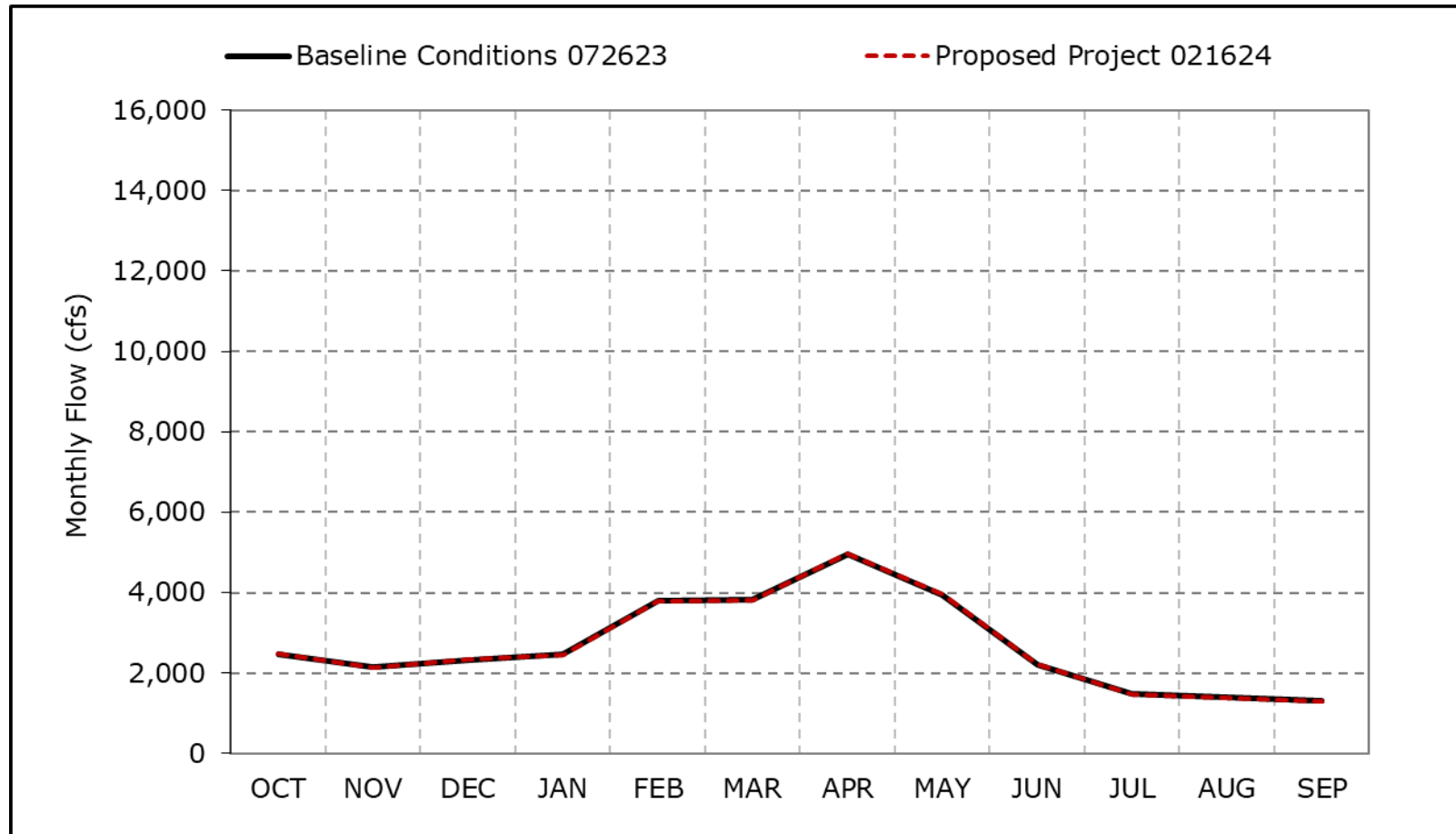


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-6d. San Joaquin River at Vernalis (60-20-20), Below Normal Year Average Flow**

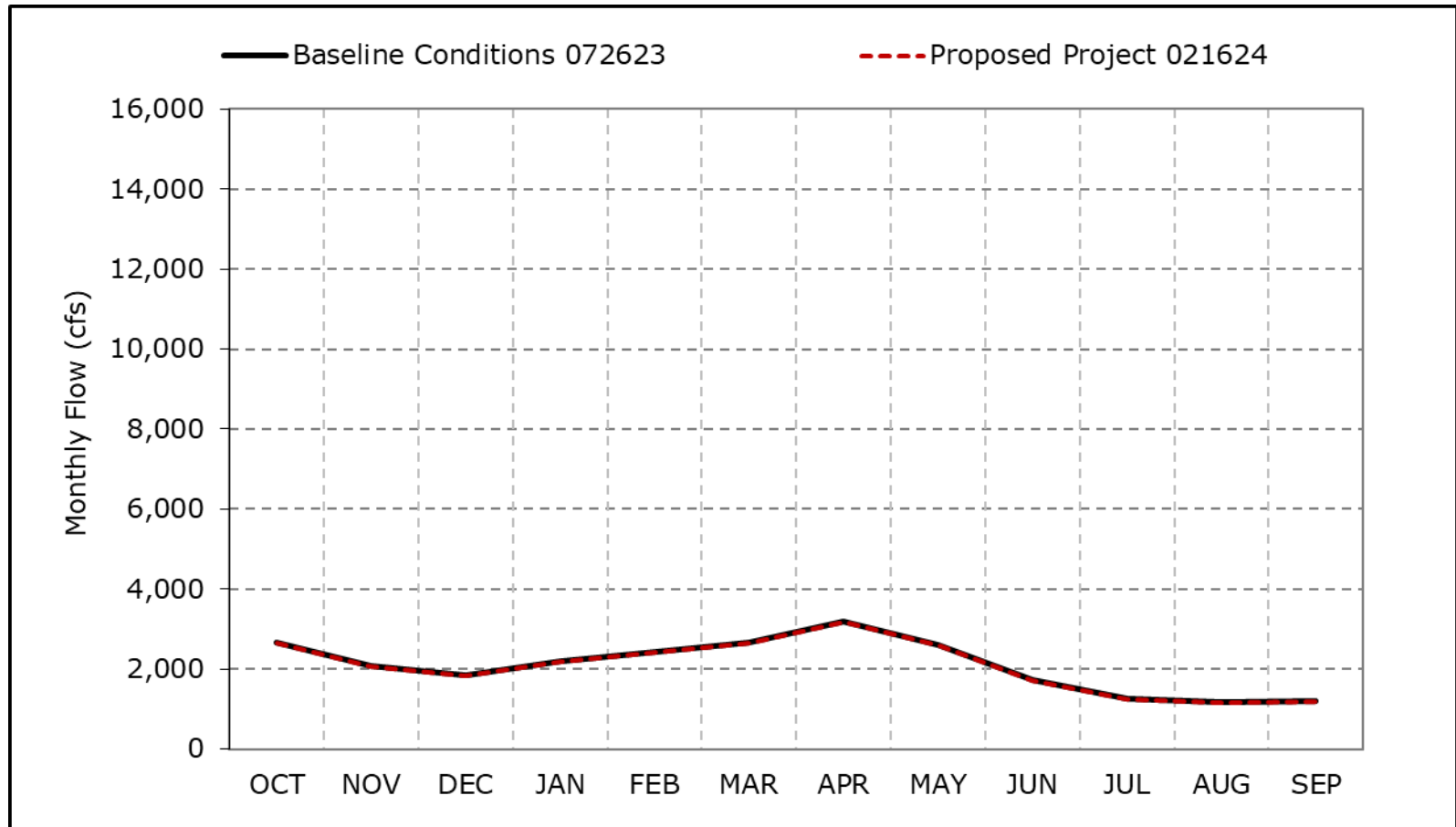


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-6e. San Joaquin River at Vernalis (60-20-20), Dry Year Average Flow**

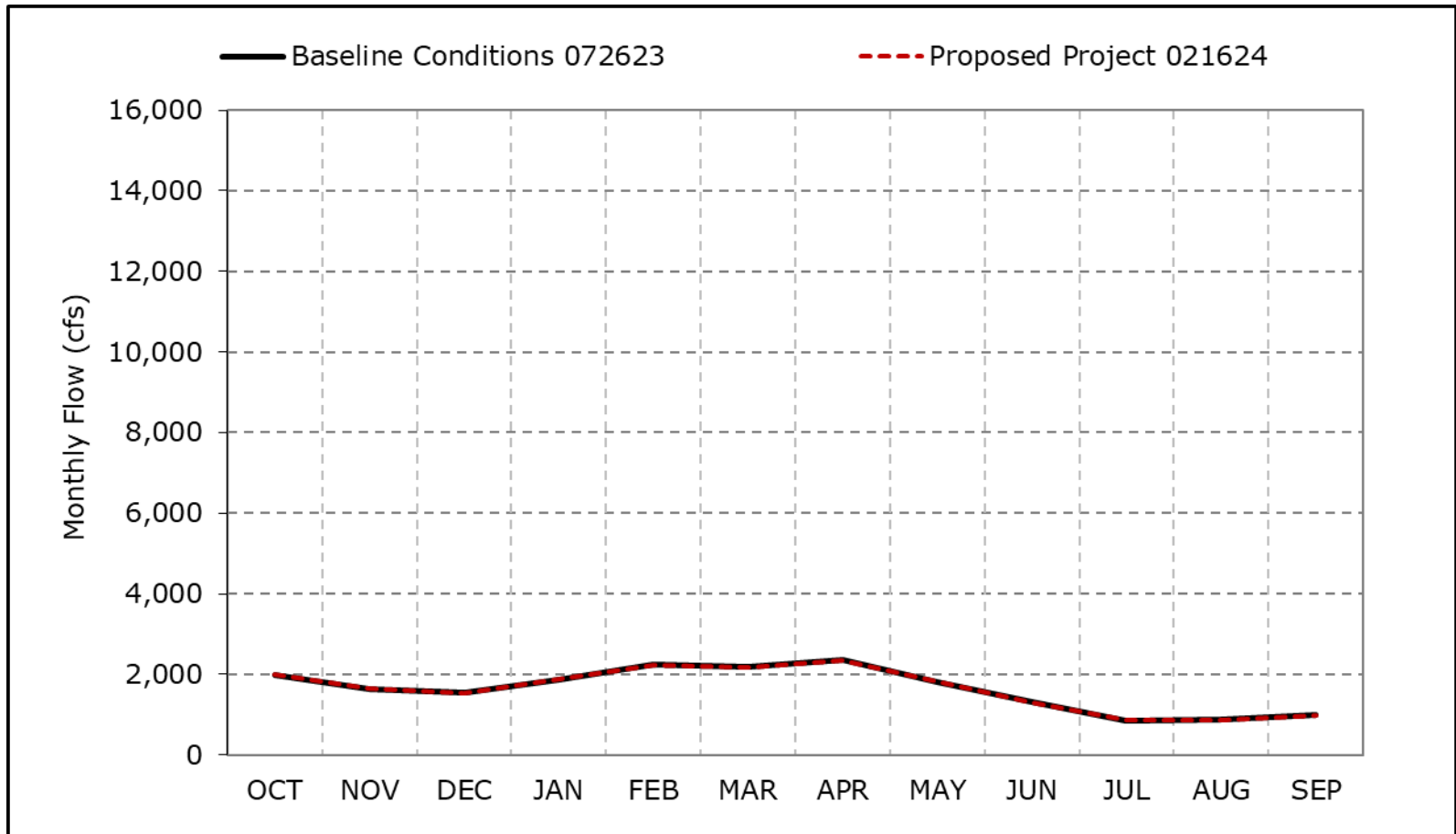


\*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-6f. 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 4B-2-7-1a. Mokelumne River below Cosumnes, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	550	860	2,789	5,263	5,950	4,740	4,337	4,100	2,255	876	753	863
20% Exceedance	407	587	1,594	3,281	3,651	3,431	2,626	2,189	1,566	770	712	836
30% Exceedance	372	444	839	1,697	2,739	2,359	2,164	1,562	1,203	638	662	798
40% Exceedance	343	409	636	1,286	1,969	1,718	1,700	1,131	627	583	629	753
50% Exceedance	329	388	531	913	1,330	1,401	1,391	894	460	104	280	666
60% Exceedance	312	375	470	687	1,033	1,174	1,041	630	323	82	70	78
70% Exceedance	273	345	425	546	806	1,021	804	489	168	73	62	64
80% Exceedance	230	297	387	469	630	796	641	396	97	59	48	51
90% Exceedance	214	241	305	393	482	545	383	198	75	49	38	44
Full Simulation Period Average <sup>a</sup>	371	600	1,278	2,024	2,486	2,222	1,930	1,501	854	442	371	460
Wet Water Years (30%)	492	1,069	2,741	4,311	4,830	4,089	3,660	3,183	1,871	977	728	848
Above Normal Water Years (11%)	313	404	712	2,612	2,894	2,430	1,825	1,427	937	513	544	689
Below Normal Water Years (21%)	365	492	826	1,053	1,776	1,800	1,682	1,038	574	289	300	415
Dry Water Years (22%)	329	389	566	655	1,011	1,126	942	549	221	111	104	142
Critical Water Years (16%)	252	286	500	488	771	639	443	313	130	48	41	71

**Table 4B-2-7-1b. Mokelumne River below Cosumnes, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	550	860	2,789	5,263	5,950	4,740	4,337	4,100	2,255	876	753	863
20% Exceedance	407	587	1,594	3,281	3,651	3,431	2,626	2,189	1,566	770	712	836
30% Exceedance	372	444	839	1,697	2,739	2,359	2,164	1,562	1,203	638	662	798
40% Exceedance	343	409	636	1,286	1,969	1,718	1,700	1,131	627	583	629	753
50% Exceedance	329	388	531	913	1,330	1,401	1,391	894	460	113	280	666
60% Exceedance	312	375	470	687	1,033	1,174	1,041	630	323	82	70	78
70% Exceedance	273	345	425	546	806	1,021	804	489	168	73	62	64
80% Exceedance	230	297	387	469	630	796	641	396	97	59	48	51
90% Exceedance	214	241	305	393	482	545	383	198	75	49	38	44
Full Simulation Period Average <sup>a</sup>	371	600	1,278	2,024	2,486	2,222	1,930	1,501	854	443	371	460
Wet Water Years (30%)	492	1,069	2,741	4,311	4,830	4,089	3,660	3,183	1,871	978	727	848
Above Normal Water Years (11%)	313	404	712	2,612	2,894	2,430	1,825	1,428	937	514	544	689
Below Normal Water Years (21%)	365	492	826	1,053	1,775	1,800	1,682	1,038	574	290	300	415
Dry Water Years (22%)	329	389	566	655	1,011	1,126	942	549	221	111	104	142
Critical Water Years (16%)	252	286	500	488	771	639	443	313	130	48	41	71

**Table 4B-2-7-1c. Mokelumne River below Cosumnes, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
20% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
30% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
40% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
50% Exceedance	0	0	0	0	0	0	0	0	0	9	0	0
60% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
70% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
80% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
90% Exceedance	0	0	0	0	0	0	0	0	0	0	0	0
Full Simulation Period Average <sup>a</sup>	0	0	0	0	0	0	0	0	0	1	0	0
Wet Water Years (30%)	0	0	0	0	0	0	0	0	0	1	-1	0
Above Normal Water Years (11%)	0	0	0	0	0	0	0	0	0	2	0	0
Below Normal Water Years (21%)	0	0	0	0	0	0	0	0	0	2	0	0
Dry Water Years (22%)	0	0	0	0	0	0	0	0	0	0	0	0
Critical Water Years (16%)	0	0	0	0	0	0	0	0	0	0	0	0

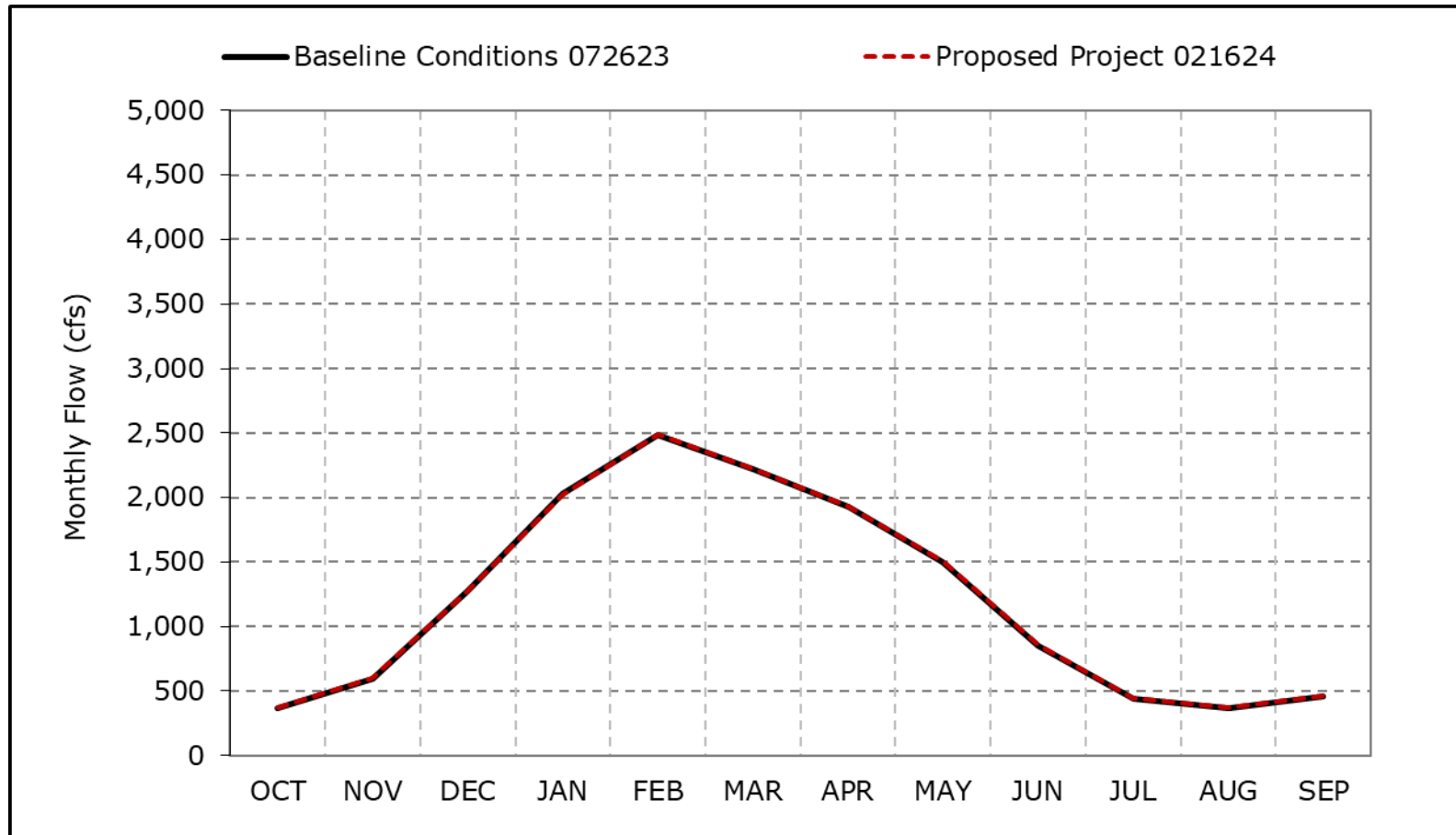
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-7a. Mokelumne River below Cosumnes, Long-Term Average Flow**

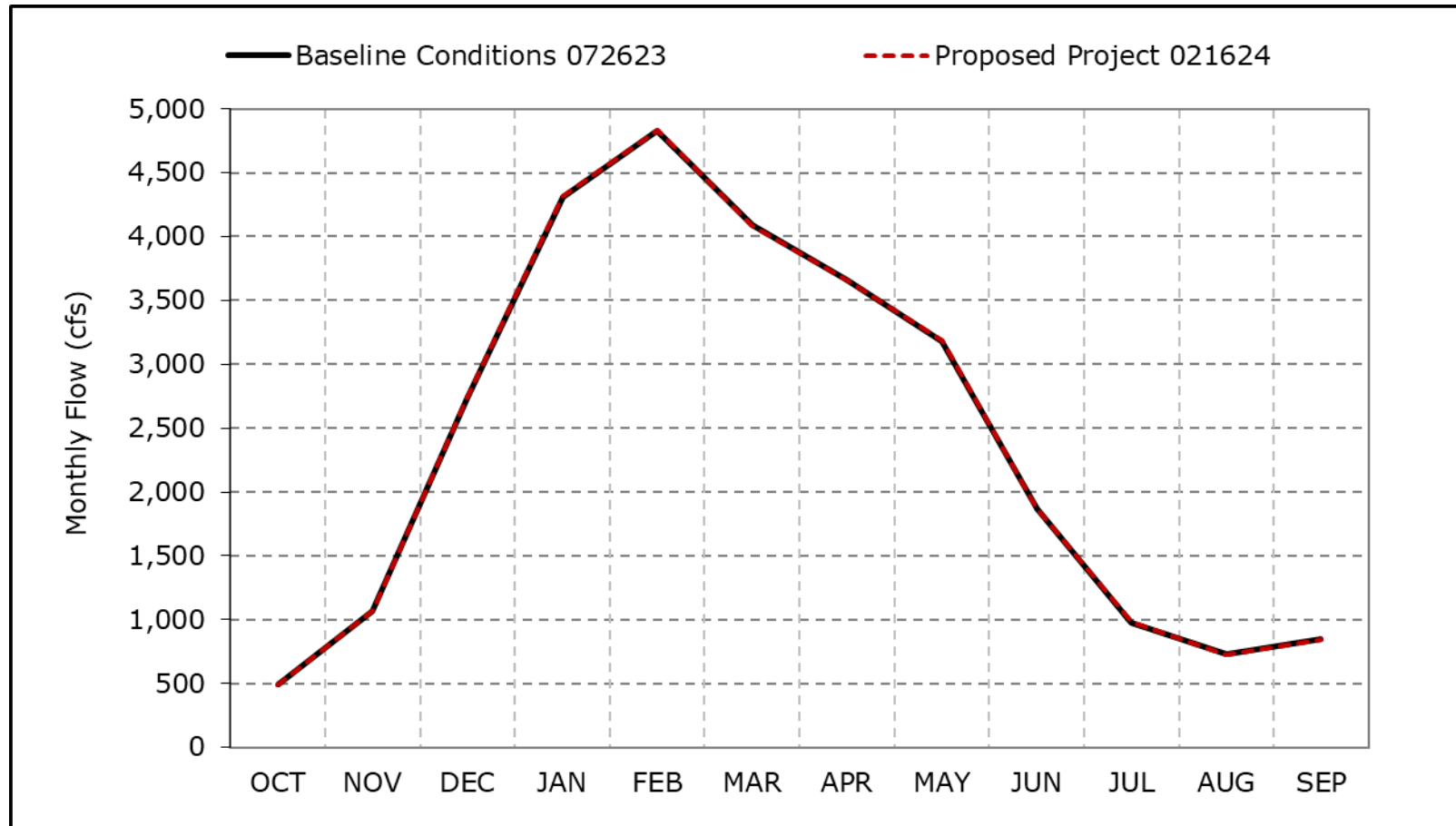


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-7b. Mokelumne River below Cosumnes, Wet Year Average Flow**

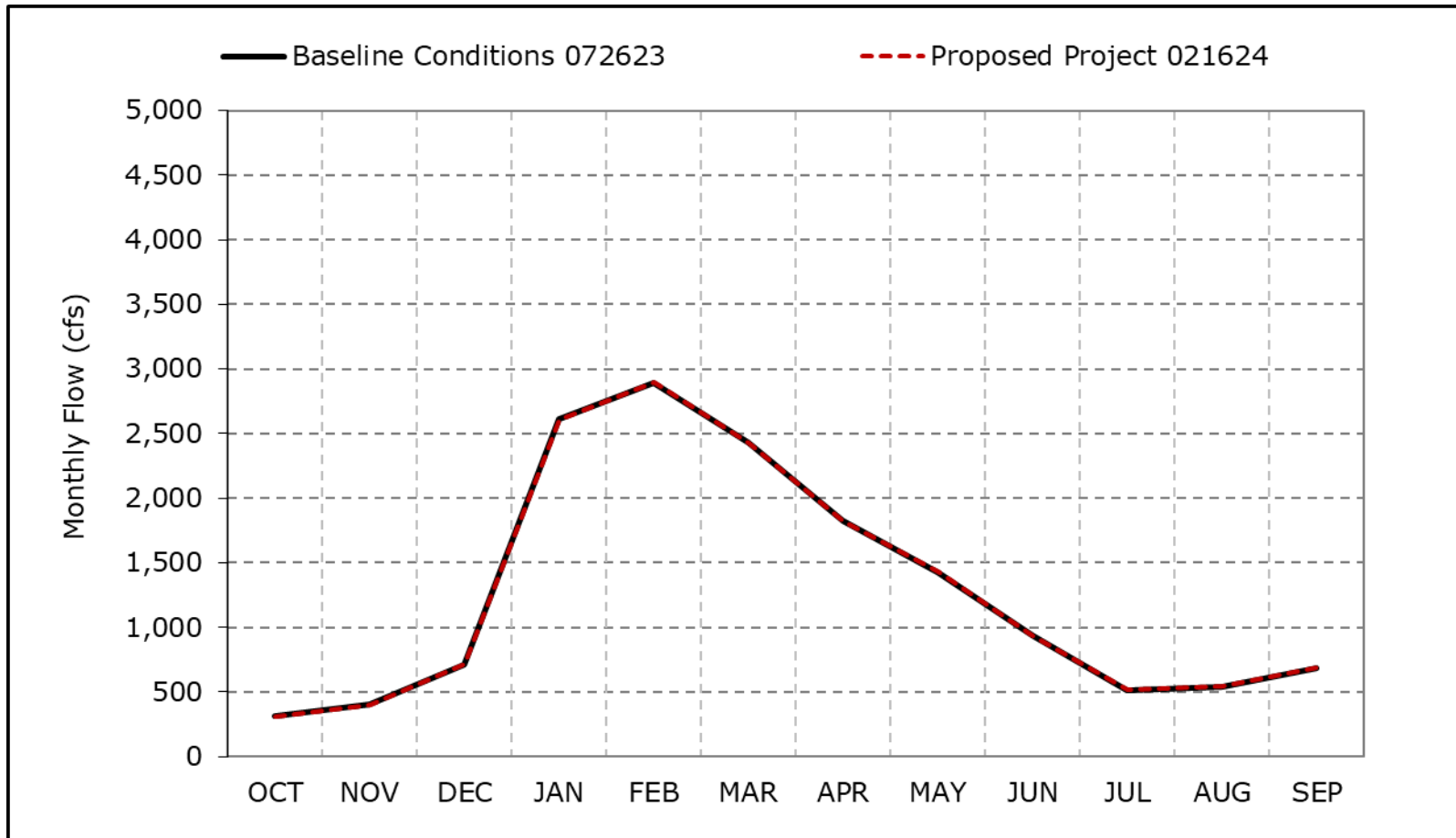


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-7c. Mokelumne River below Cosumnes, Above Normal Year Average Flow**

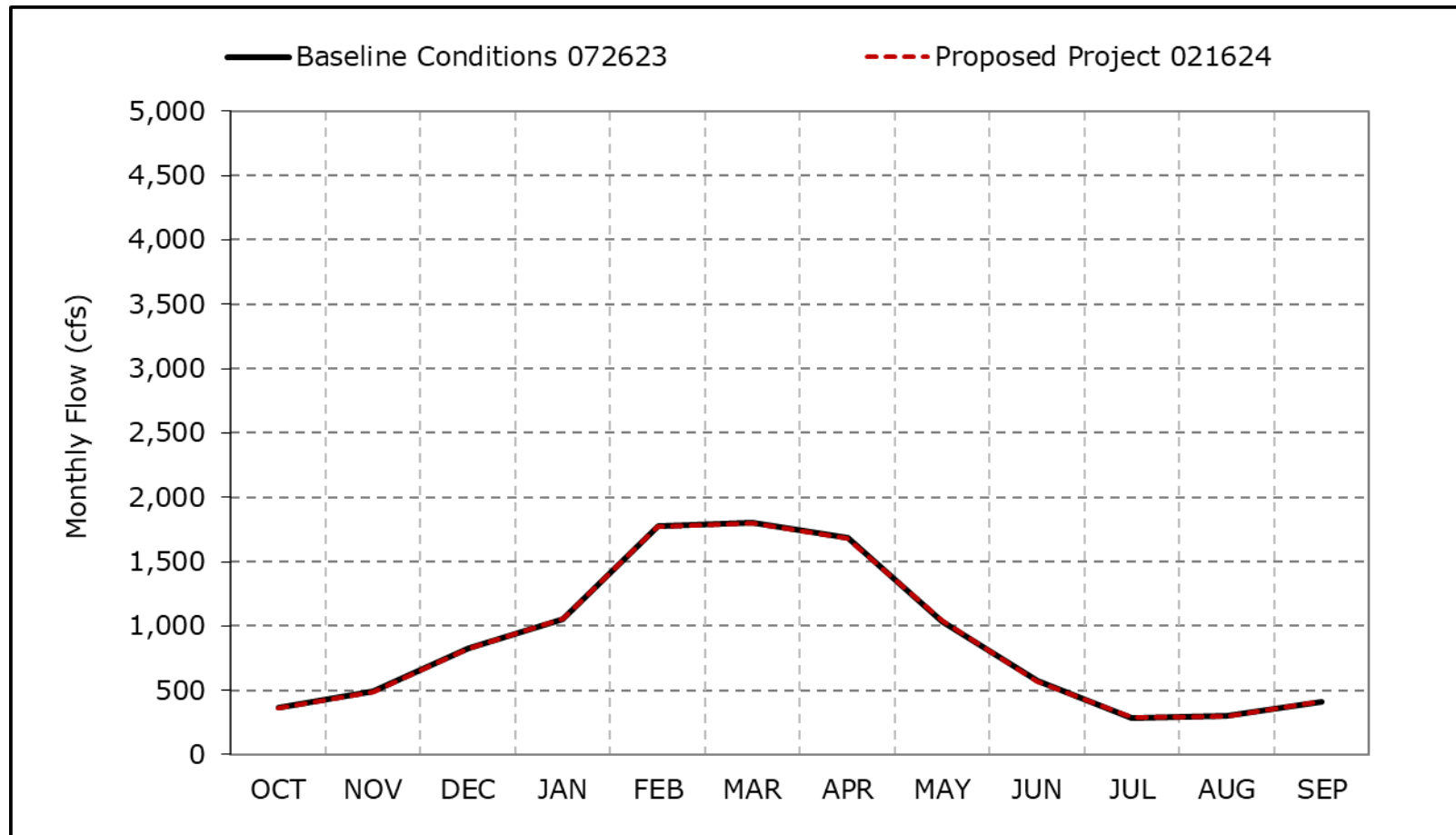


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-7d. Mokelumne River below Cosumnes, Below Normal Year Average Flow**

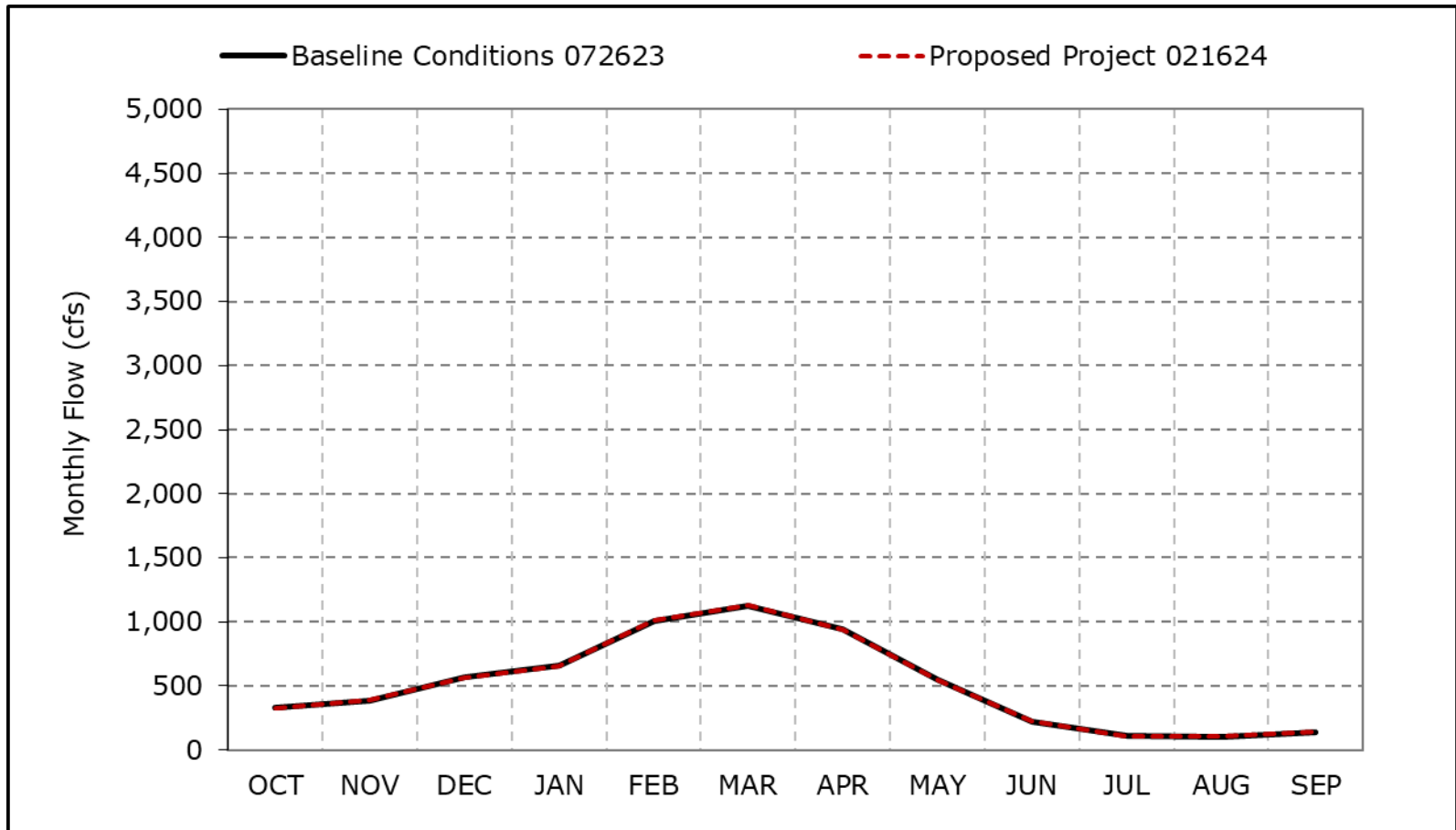


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-7e. Mokelumne River below Cosumnes, Dry Year Average Flow**

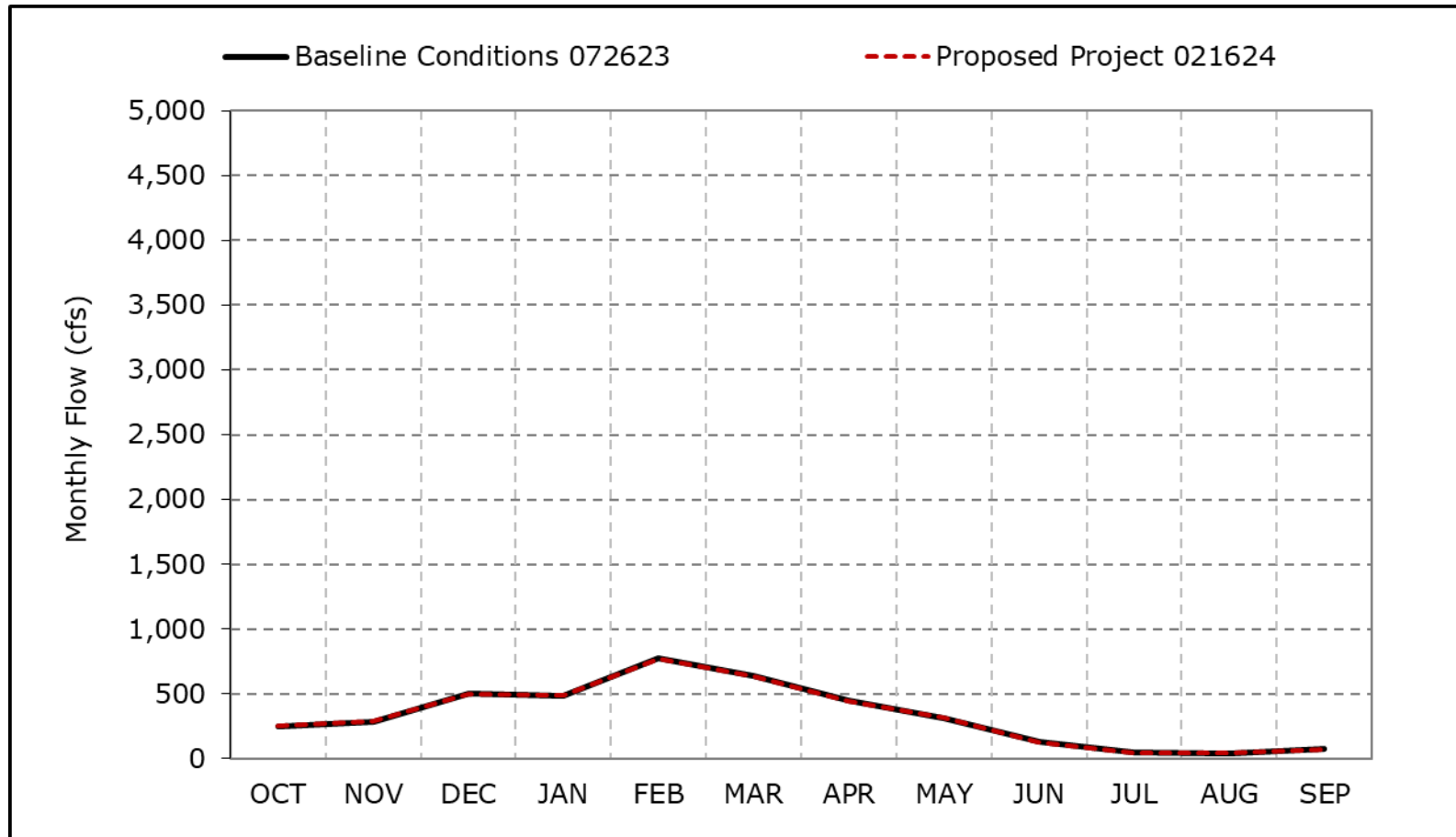


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-7f. Mokelumne River below Cosumnes, Critical Year Average Flow**

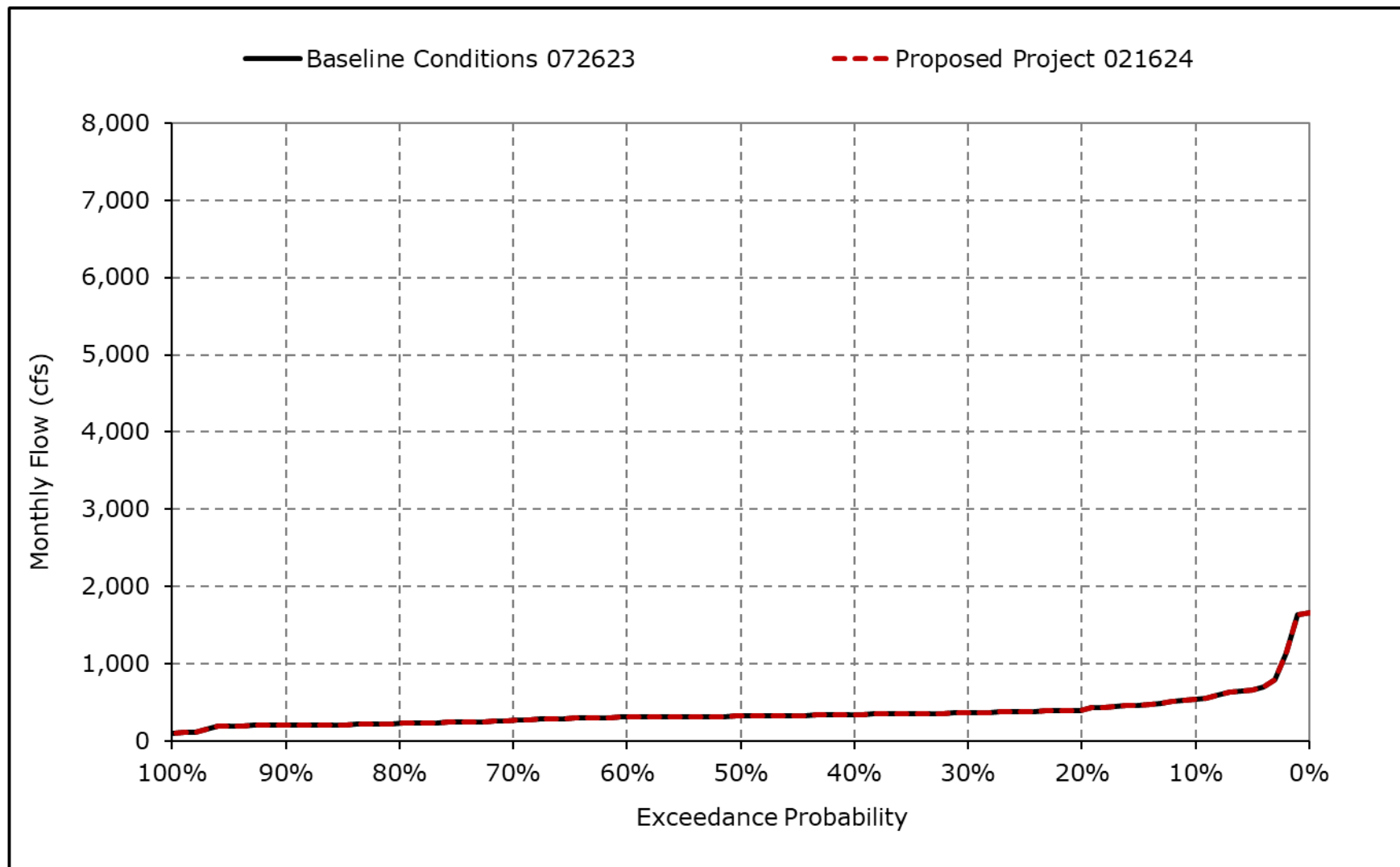


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

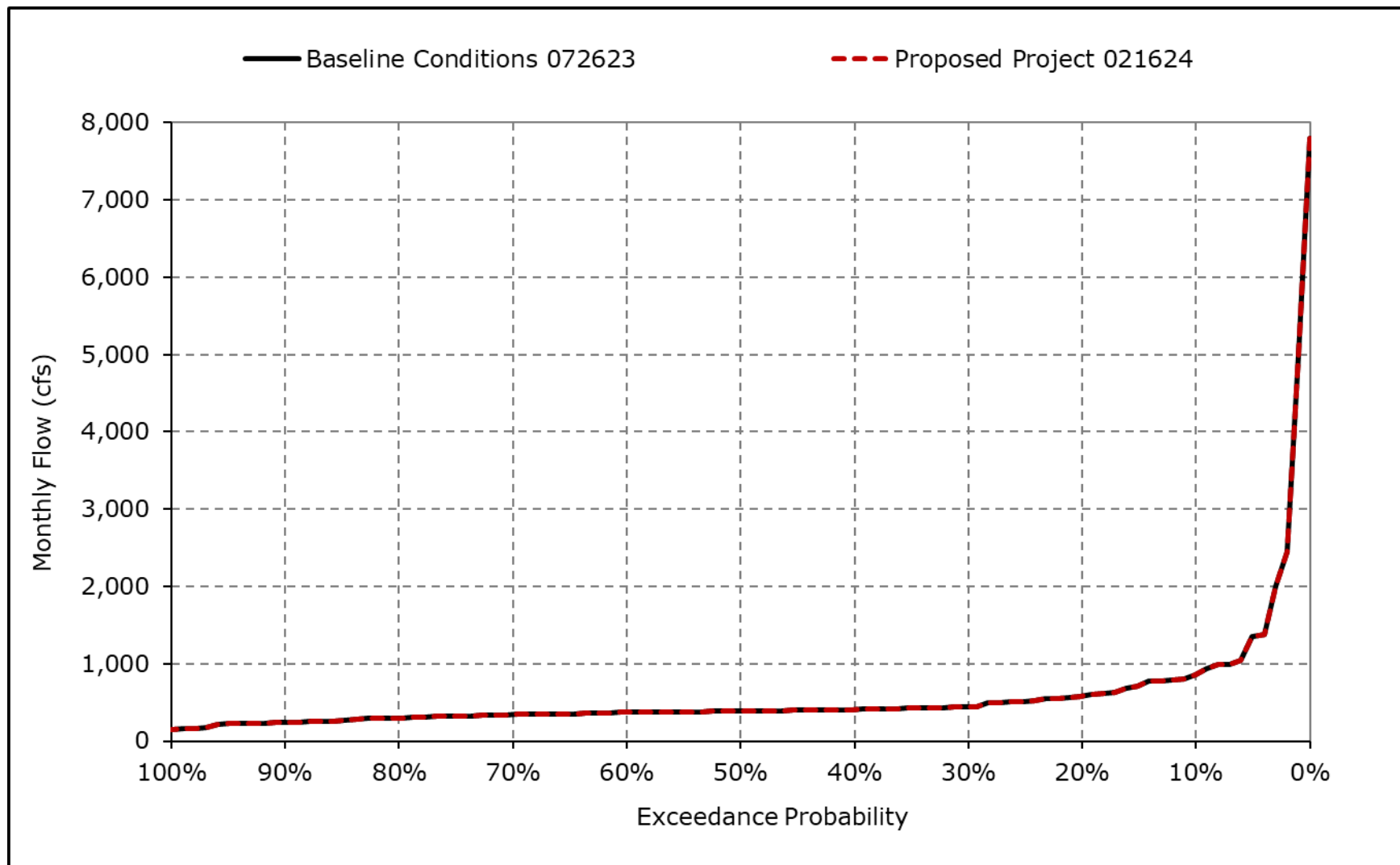
**Figure 4B-2-7g. Mokelumne River below Cosumnes, October**



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

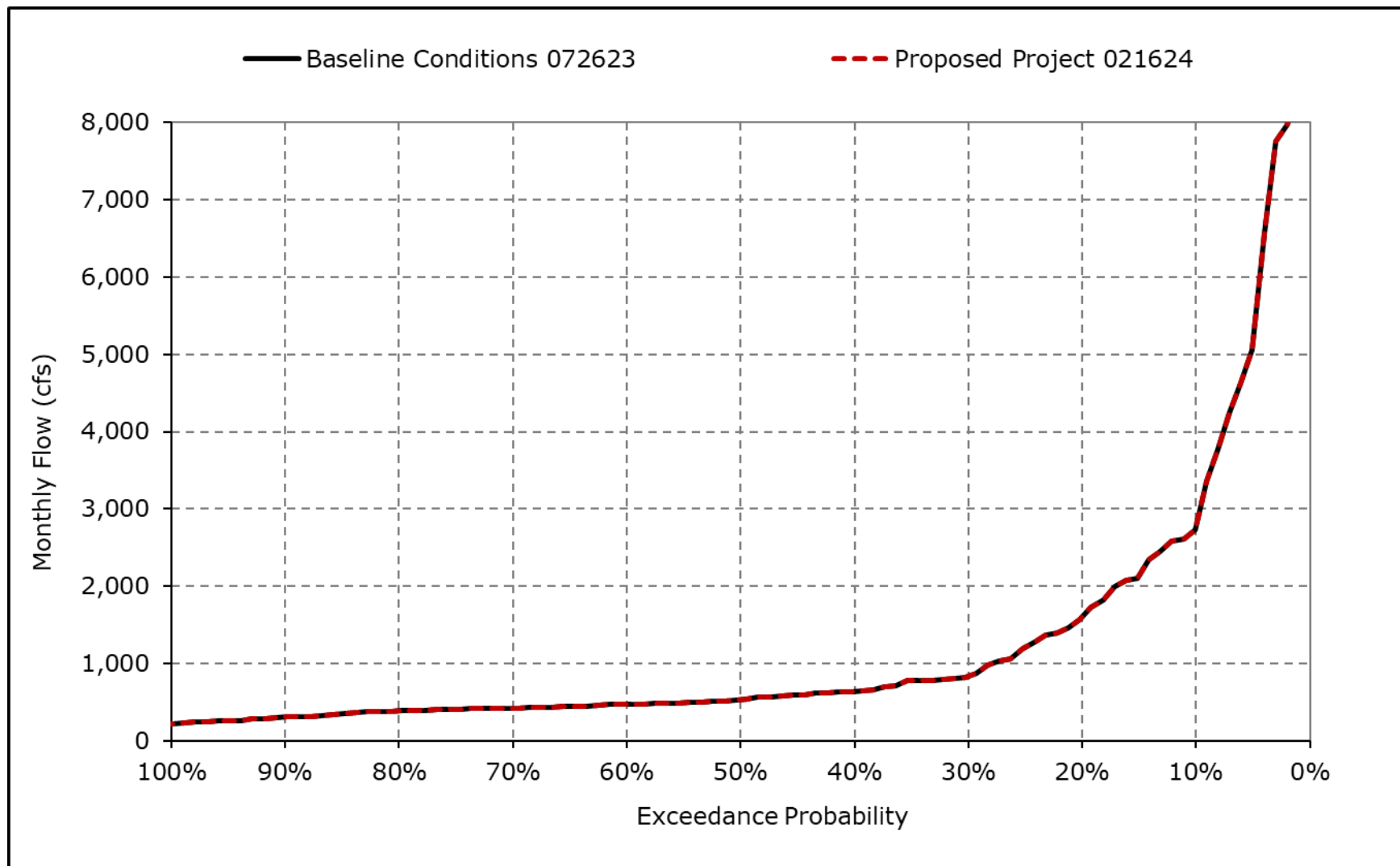


**Figure 4B-2-7h. Mokelumne River below Cosumnes, November**



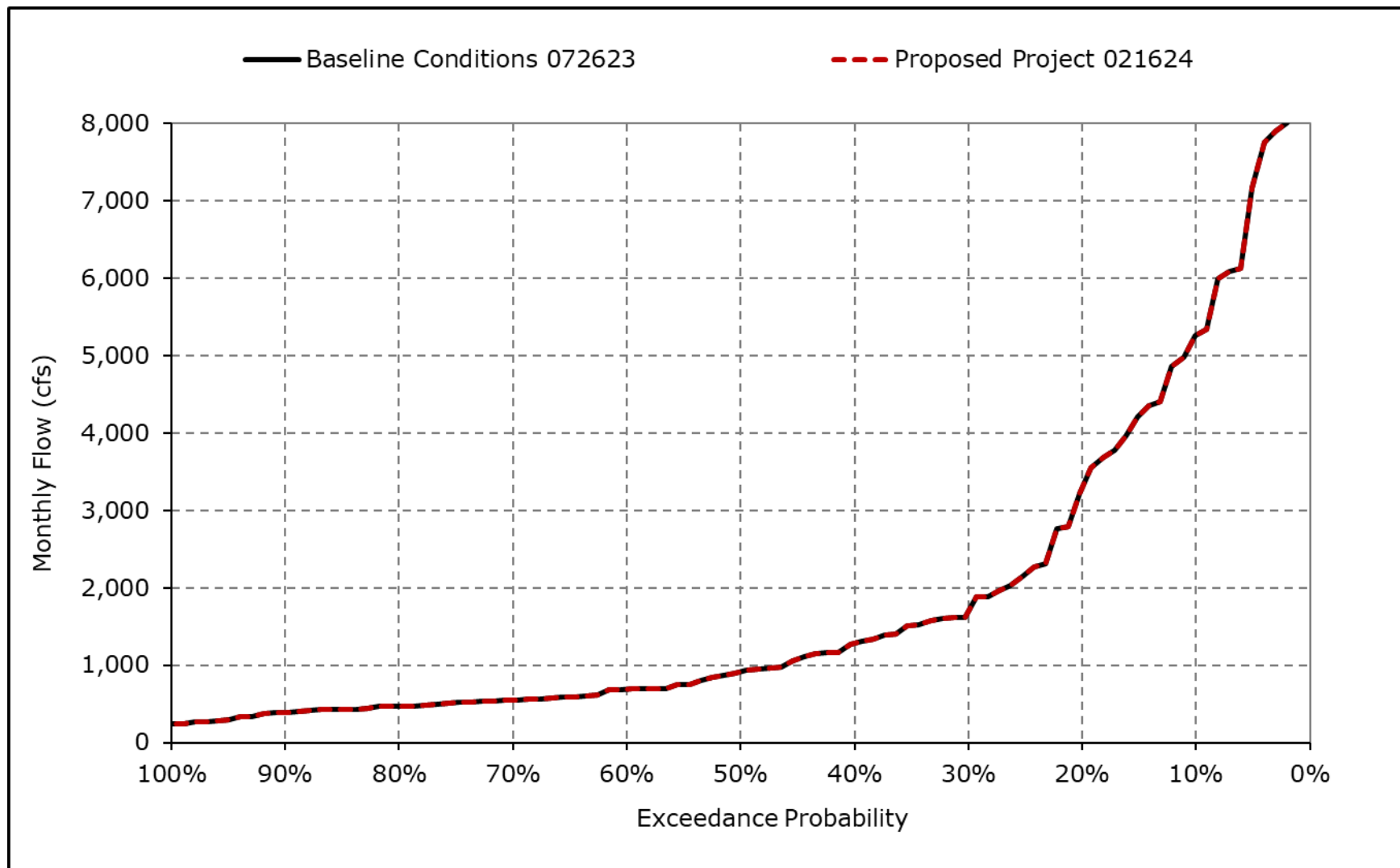
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7i. Mokelumne River below Cosumnes, December**



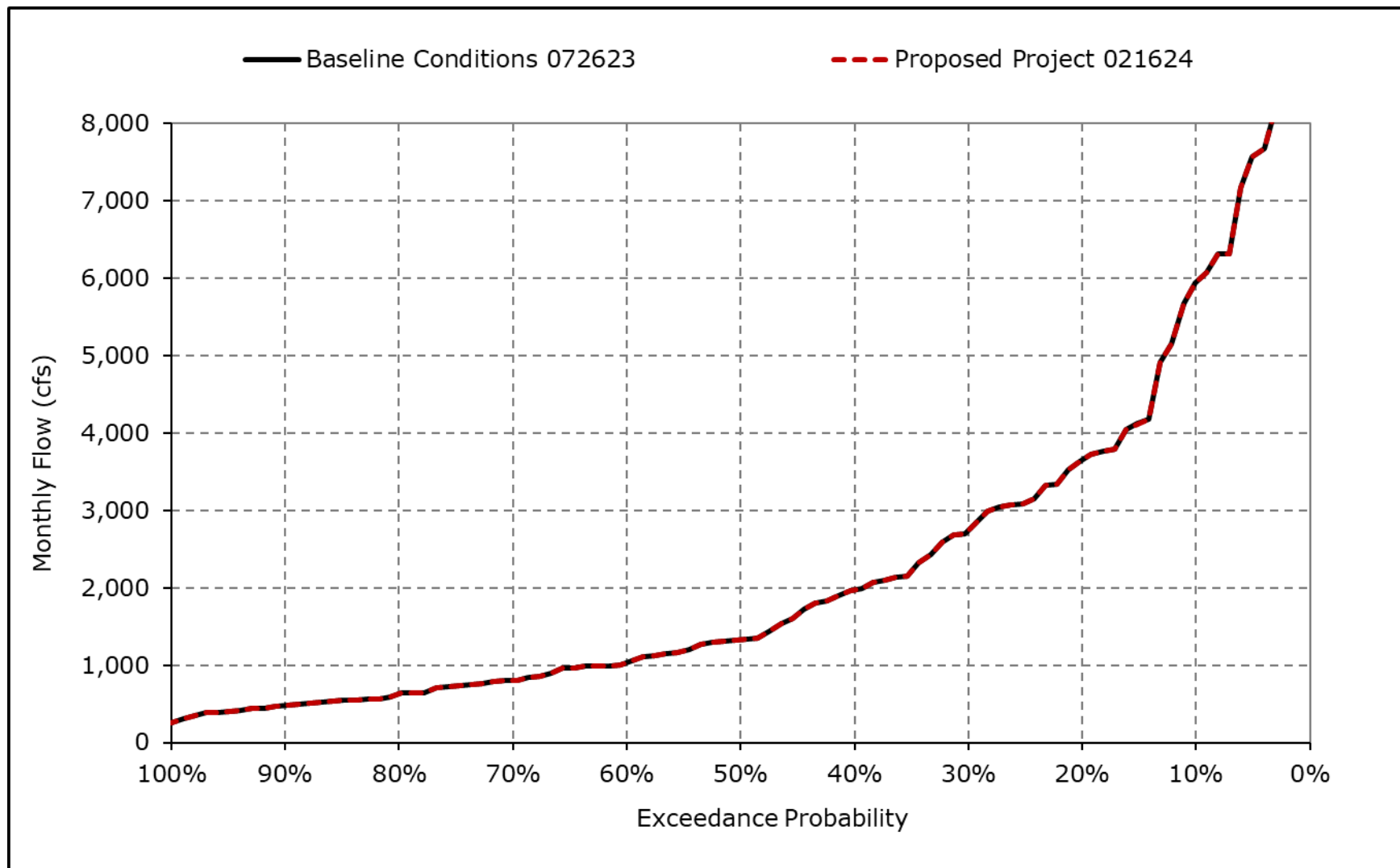
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7j. Mokelumne River below Cosumnes, January**



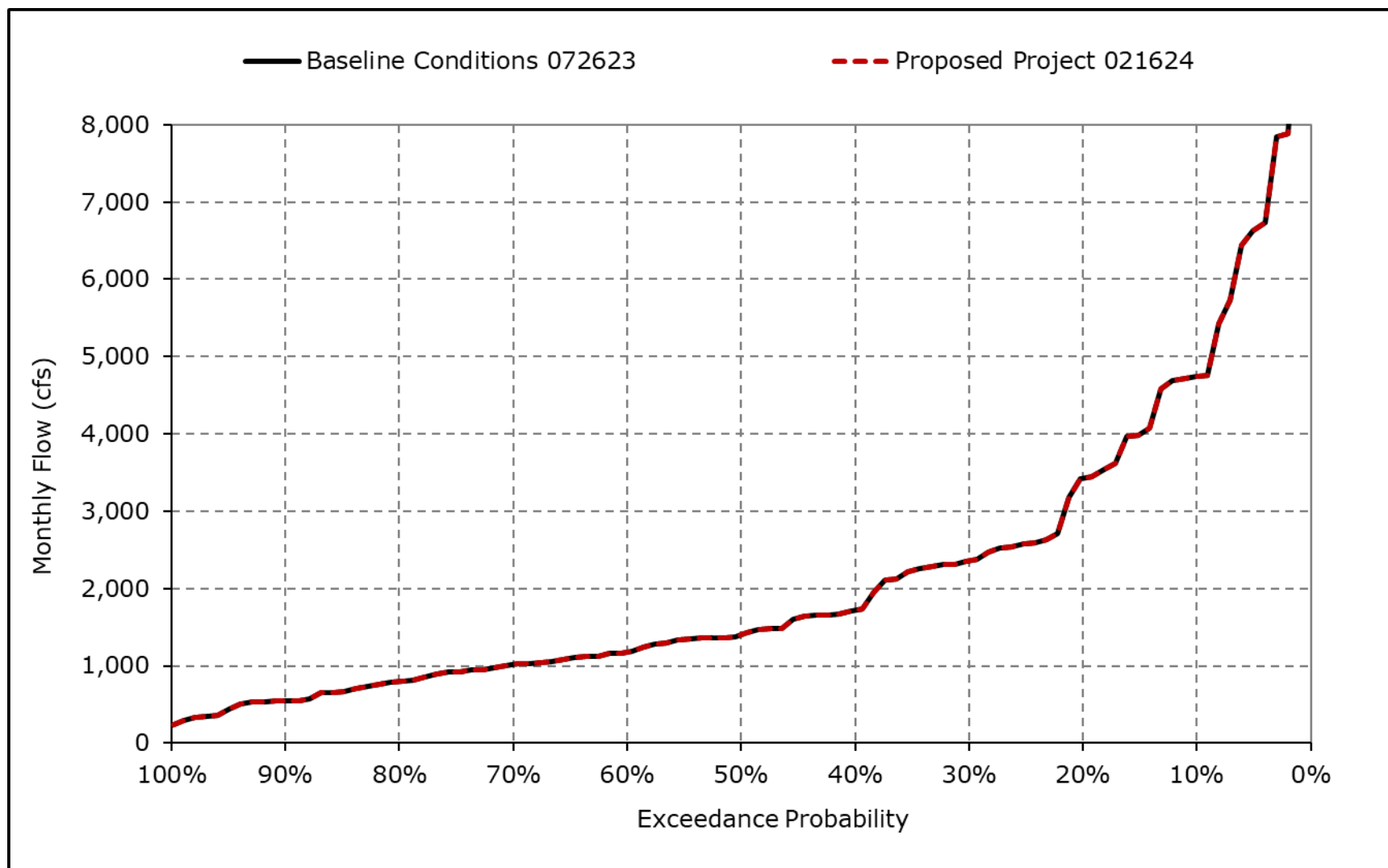
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7k. Mokelumne River below Cosumnes, February**



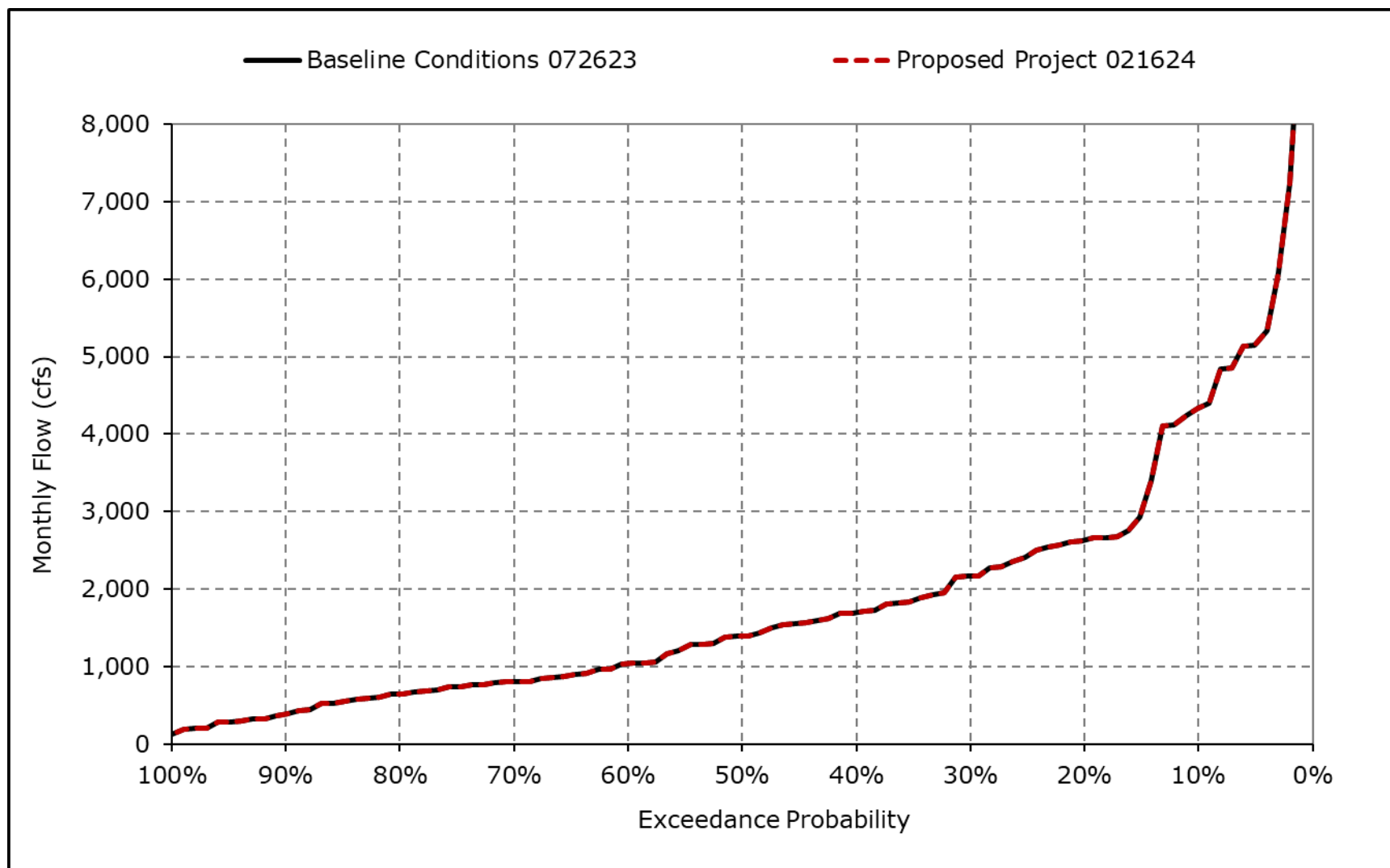
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7I. Mokelumne River below Cosumnes, March**



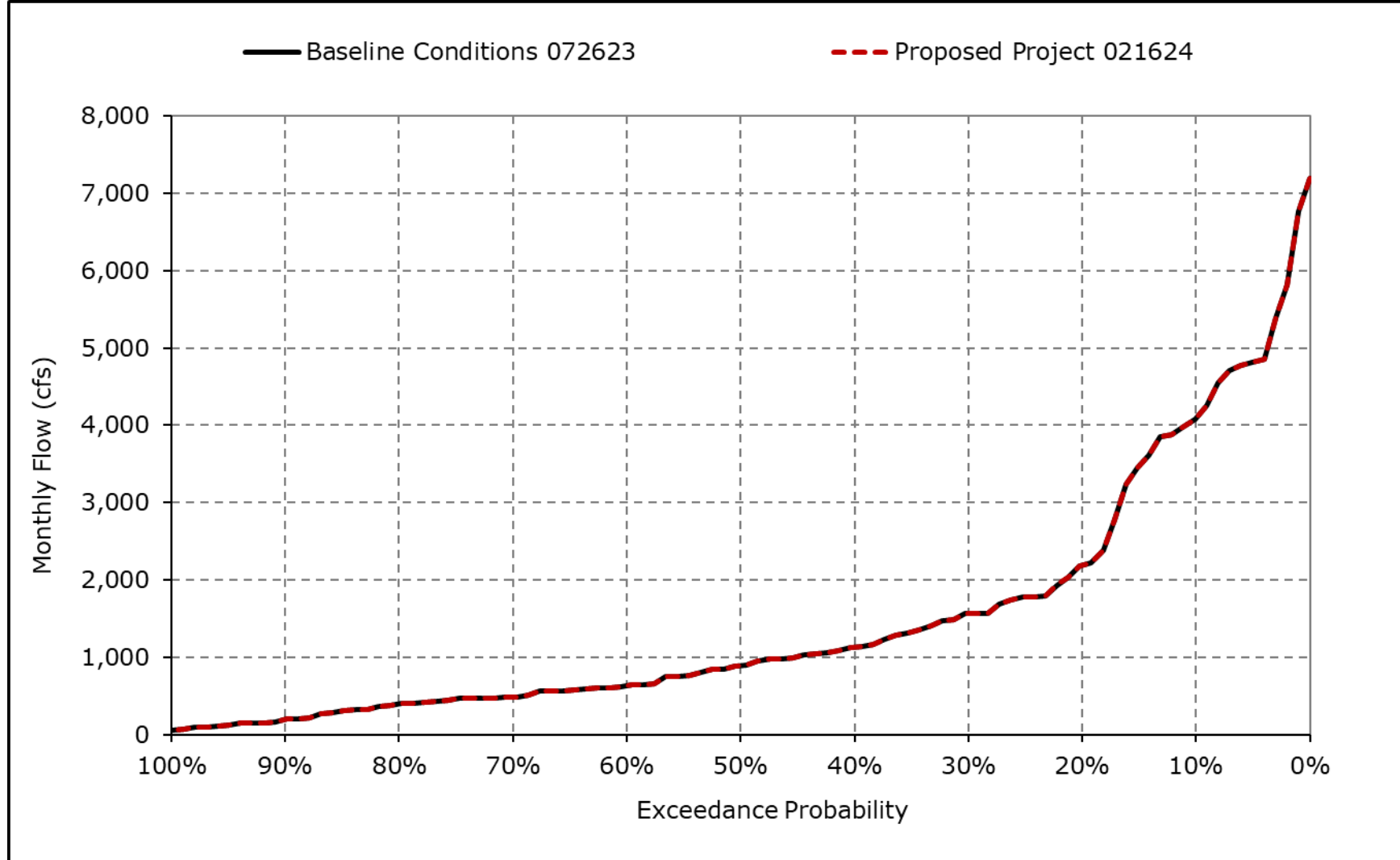
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7m. Mokelumne River below Cosumnes, April**



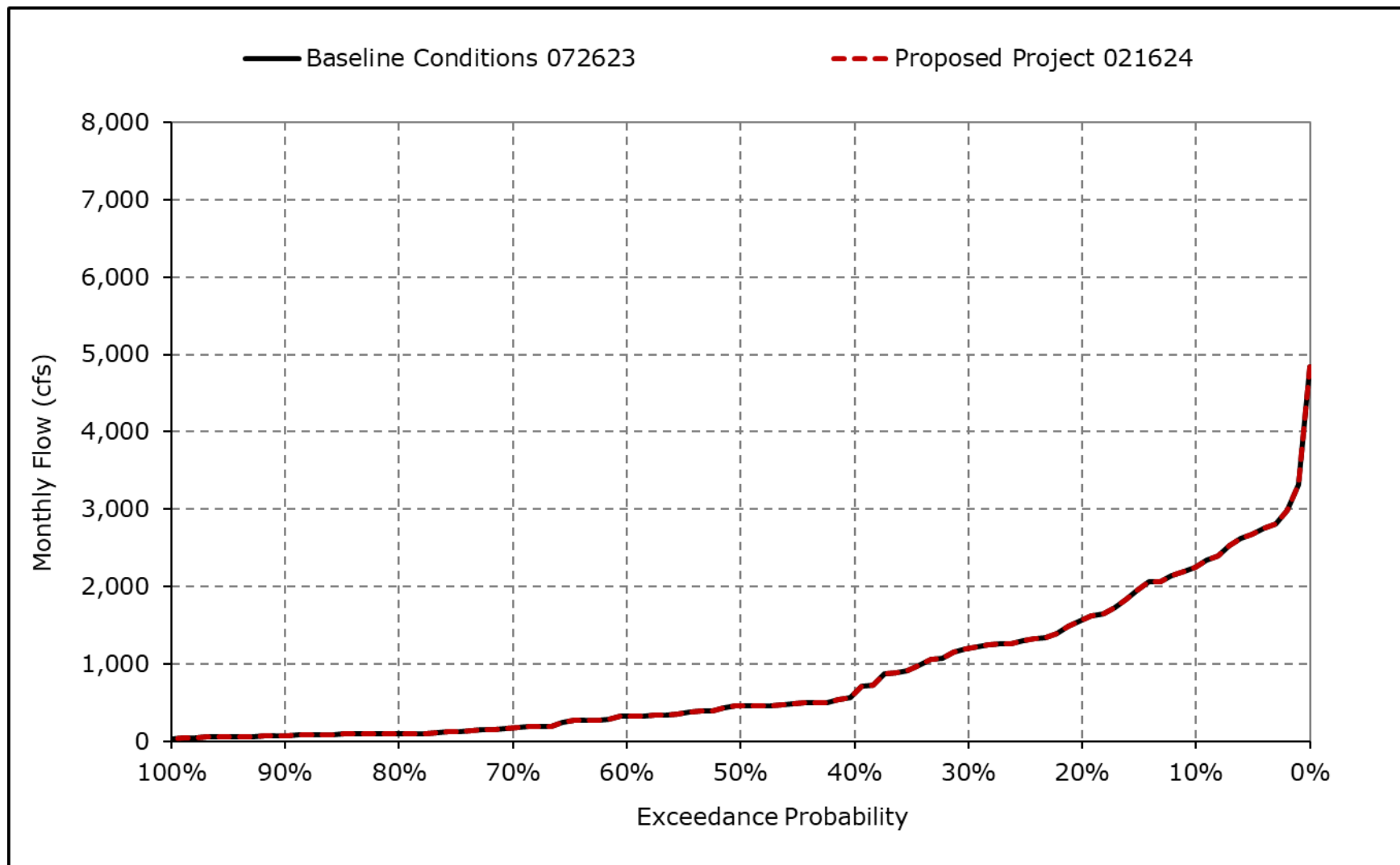
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7n. Mokelumne River below Cosumnes, May**



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

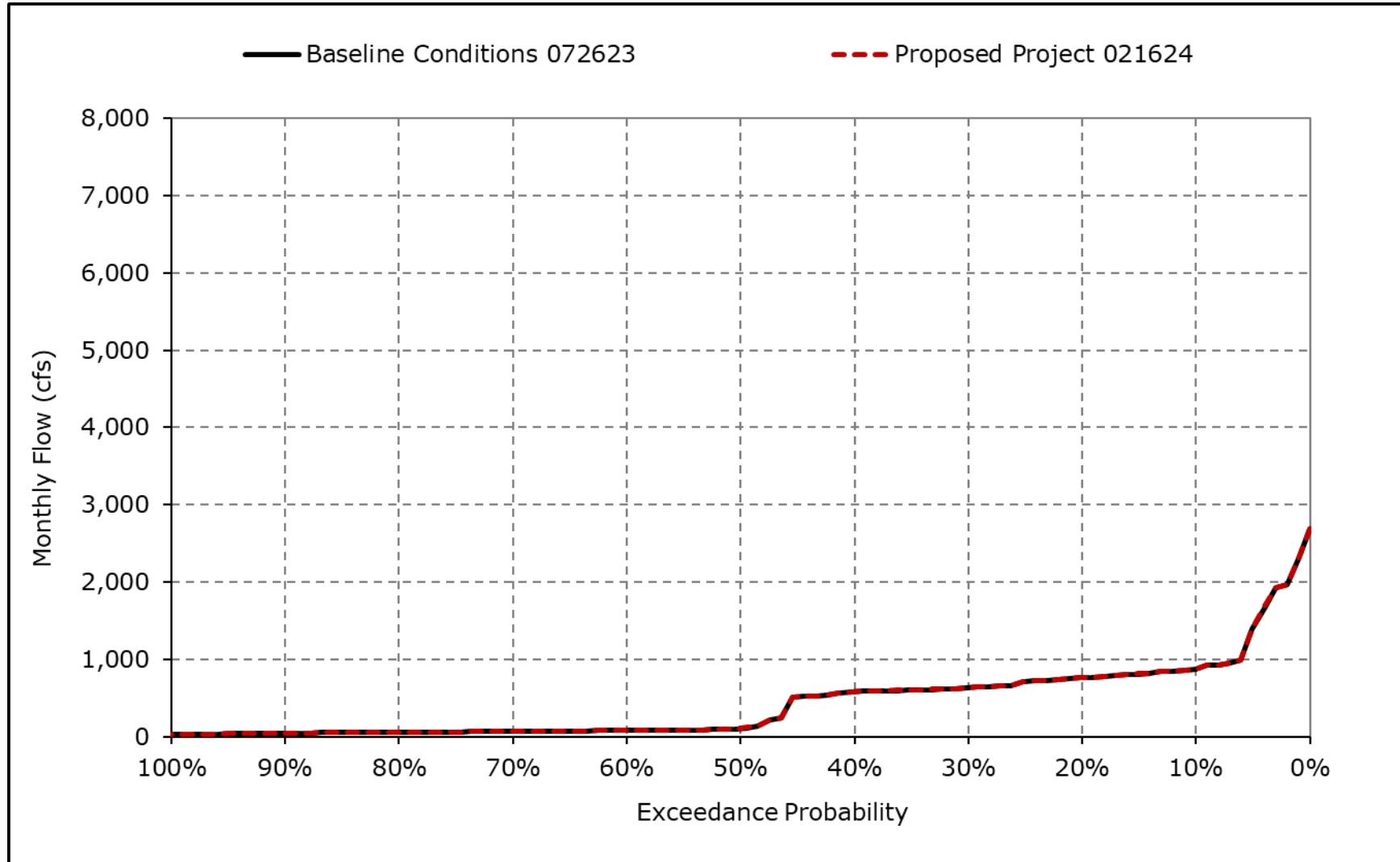
**Figure 4B-2-7o. Mokelumne River below Cosumnes, June**



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

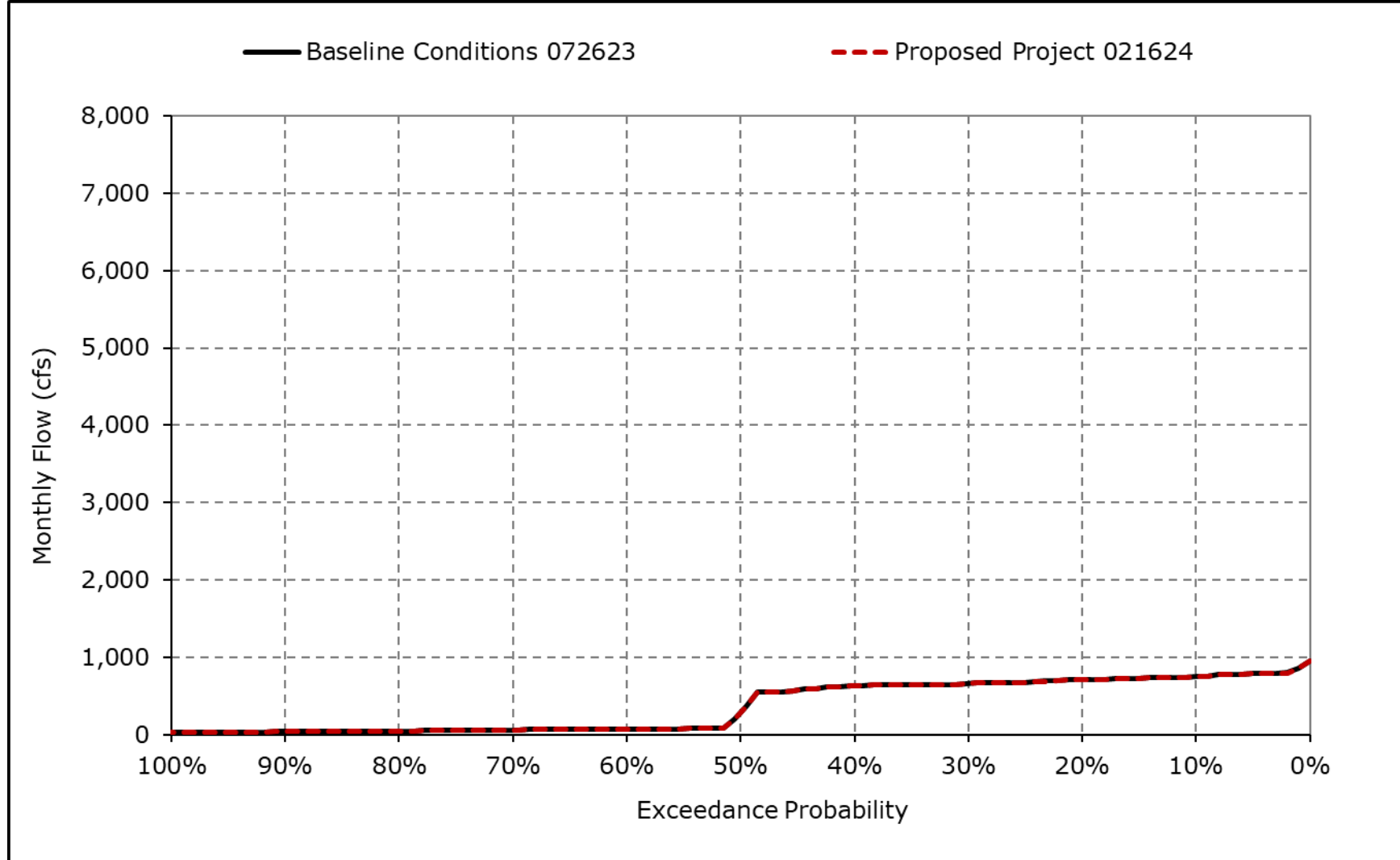


**Figure 4B-2-7p. Mokelumne River below Cosumnes, July**



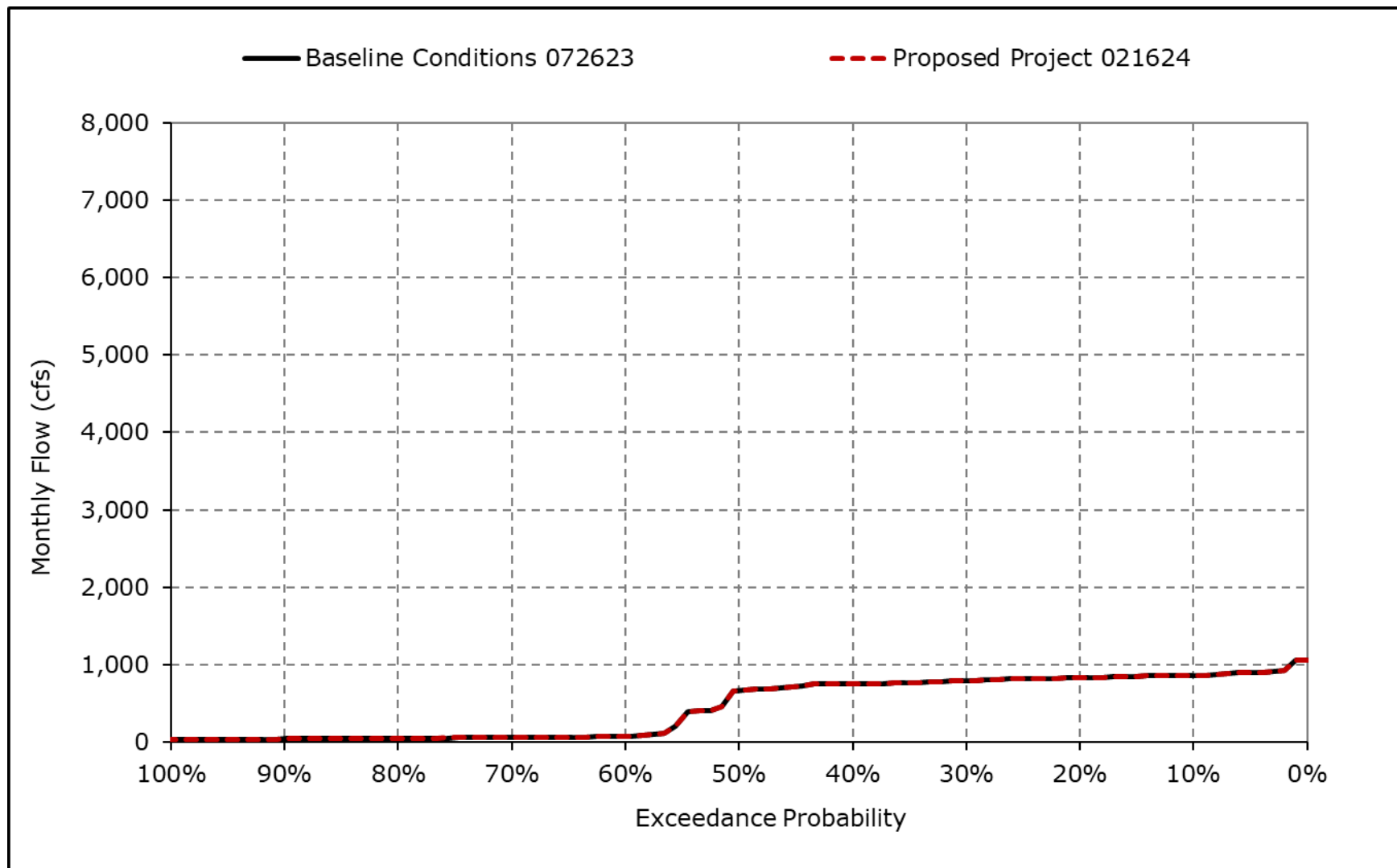
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-7q. Mokelumne River below Cosumnes, August**



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

**Figure 4B-2-7r. Mokelumne River below Cosumnes, September**



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

**Table 4B-2-8-1a. Old and Middle River Flow, Baseline Conditions 072623, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,548	-2,036	-2,941	-2,895	-2,986	-1,292	1,374	144	-2,404	-3,795	-3,266	-3,951
20% Exceedance	-3,327	-3,042	-4,396	-3,645	-4,021	-3,347	347	-391	-3,849	-7,577	-4,979	-5,137
30% Exceedance	-4,137	-4,761	-5,290	-3,645	-4,144	-3,419	-92	-823	-4,304	-9,283	-6,911	-5,569
40% Exceedance	-4,803	-5,924	-5,290	-4,124	-4,144	-3,423	-390	-1,059	-4,538	-9,778	-8,371	-6,732
50% Exceedance	-5,688	-7,819	-5,290	-4,516	-4,316	-3,425	-693	-1,463	-4,865	-10,221	-9,794	-8,068
60% Exceedance	-6,179	-8,547	-5,290	-4,516	-4,316	-3,427	-1,023	-1,650	-5,000	-10,832	-10,499	-8,746
70% Exceedance	-6,795	-8,833	-6,026	-4,516	-4,433	-3,447	-1,177	-1,894	-5,000	-11,094	-10,803	-9,355
80% Exceedance	-7,460	-9,294	-8,198	-5,000	-4,464	-3,981	-1,273	-2,038	-5,000	-11,364	-11,009	-9,572
90% Exceedance	-8,811	-9,473	-9,046	-5,000	-4,610	-3,998	-1,573	-2,887	-5,000	-11,602	-11,432	-10,107
Full Simulation Period Average <sup>a</sup>	-5,593	-6,487	-5,729	-3,842	-3,759	-2,844	-399	-1,296	-4,220	-9,234	-8,387	-7,429
Wet Water Years (30%)	-6,748	-7,677	-5,619	-3,227	-2,824	-1,567	-572	-1,815	-3,972	-9,629	-9,884	-8,746
Above Normal Water Years (11%)	-4,746	-6,678	-6,508	-4,085	-3,838	-3,066	-670	-2,267	-4,754	-10,091	-10,769	-7,756
Below Normal Water Years (21%)	-5,885	-7,064	-6,180	-4,179	-4,212	-3,617	555	-475	-4,861	-11,252	-10,868	-9,625
Dry Water Years (22%)	-5,509	-6,512	-6,282	-4,150	-4,242	-3,744	-617	-981	-4,860	-10,365	-6,670	-5,995
Critical Water Years (16%)	-3,743	-3,330	-4,050	-3,963	-4,199	-2,833	-838	-1,165	-2,598	-3,704	-3,048	-3,822

**Table 4B-2-8-1b. Old and Middle River Flow, Proposed Project 021624, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,678	-1,937	-2,876	-2,842	-2,973	-1,309	615	-694	-2,402	-3,521	-3,195	-3,951
20% Exceedance	-3,492	-3,159	-4,581	-3,492	-3,622	-2,677	130	-1,106	-3,756	-7,692	-5,492	-5,063
30% Exceedance	-4,324	-4,420	-5,290	-3,645	-3,741	-2,685	-257	-1,294	-4,301	-9,299	-7,000	-5,620
40% Exceedance	-4,799	-6,037	-5,290	-3,876	-3,982	-2,759	-665	-1,436	-4,400	-9,843	-8,993	-6,768
50% Exceedance	-5,606	-7,643	-5,290	-4,055	-4,030	-3,177	-820	-1,728	-4,400	-10,346	-9,865	-8,331
60% Exceedance	-6,145	-8,604	-5,290	-4,343	-4,188	-3,571	-968	-2,042	-4,400	-10,867	-10,733	-9,502
70% Exceedance	-6,710	-8,910	-5,906	-4,516	-4,250	-3,768	-1,157	-3,179	-4,475	-11,169	-10,955	-9,936
80% Exceedance	-7,466	-9,298	-7,818	-4,625	-4,464	-3,773	-1,401	-3,684	-4,475	-11,332	-11,143	-10,588
90% Exceedance	-8,700	-9,475	-9,386	-4,775	-4,485	-4,165	-2,333	-4,033	-4,492	-11,514	-11,467	-10,883
Full Simulation Period Average <sup>a</sup>	-5,557	-6,503	-5,754	-3,631	-3,521	-2,644	-647	-2,082	-3,892	-9,268	-8,563	-7,771
Wet Water Years (30%)	-6,629	-7,738	-5,662	-3,038	-2,870	-1,673	-759	-3,090	-3,724	-9,662	-10,181	-9,779
Above Normal Water Years (11%)	-4,744	-6,635	-6,774	-3,944	-3,475	-2,723	-1,247	-3,299	-4,289	-10,289	-11,004	-8,583
Below Normal Water Years (21%)	-5,925	-7,023	-6,270	-4,003	-3,946	-3,042	85	-1,395	-4,455	-11,193	-10,893	-9,467
Dry Water Years (22%)	-5,452	-6,557	-6,100	-3,985	-3,681	-3,447	-664	-1,256	-4,400	-10,448	-6,878	-5,875
Critical Water Years (16%)	-3,767	-3,339	-4,073	-3,555	-3,996	-2,785	-960	-1,394	-2,499	-3,678	-3,109	-3,827

**Table 4B-2-8-1c. Old and Middle River Flow, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (combined flows)(cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-130	99	64	52	13	-17	-759	-839	2	274	71	1
20% Exceedance	-165	-118	-185	153	398	671	-217	-715	93	-115	-514	73
30% Exceedance	-187	341	0	0	403	734	-165	-472	3	-16	-89	-51
40% Exceedance	4	-114	0	248	162	665	-275	-377	138	-66	-622	-36
50% Exceedance	82	176	0	461	286	248	-126	-266	465	-124	-71	-263
60% Exceedance	34	-57	0	173	128	-144	55	-392	600	-35	-233	-756
70% Exceedance	85	-77	120	0	183	-321	21	-1,286	525	-75	-153	-581
80% Exceedance	-6	-4	380	375	0	208	-128	-1,646	525	32	-134	-1,016
90% Exceedance	111	-2	-340	225	125	-167	-760	-1,145	509	88	-35	-776
Full Simulation Period Average <sup>a</sup>	36	-16	-25	210	238	200	-248	-787	328	-34	-175	-342
Wet Water Years (30%)	119	-61	-43	189	-45	-106	-187	-1,275	248	-33	-297	-1,033
Above Normal Water Years (11%)	2	44	-267	141	363	343	-577	-1,032	465	-198	-235	-827
Below Normal Water Years (21%)	-40	40	-89	175	266	576	-470	-921	406	59	-25	158
Dry Water Years (22%)	57	-46	182	165	561	297	-47	-275	460	-84	-207	120
Critical Water Years (16%)	-24	-9	-23	408	204	48	-122	-229	99	26	-61	-5

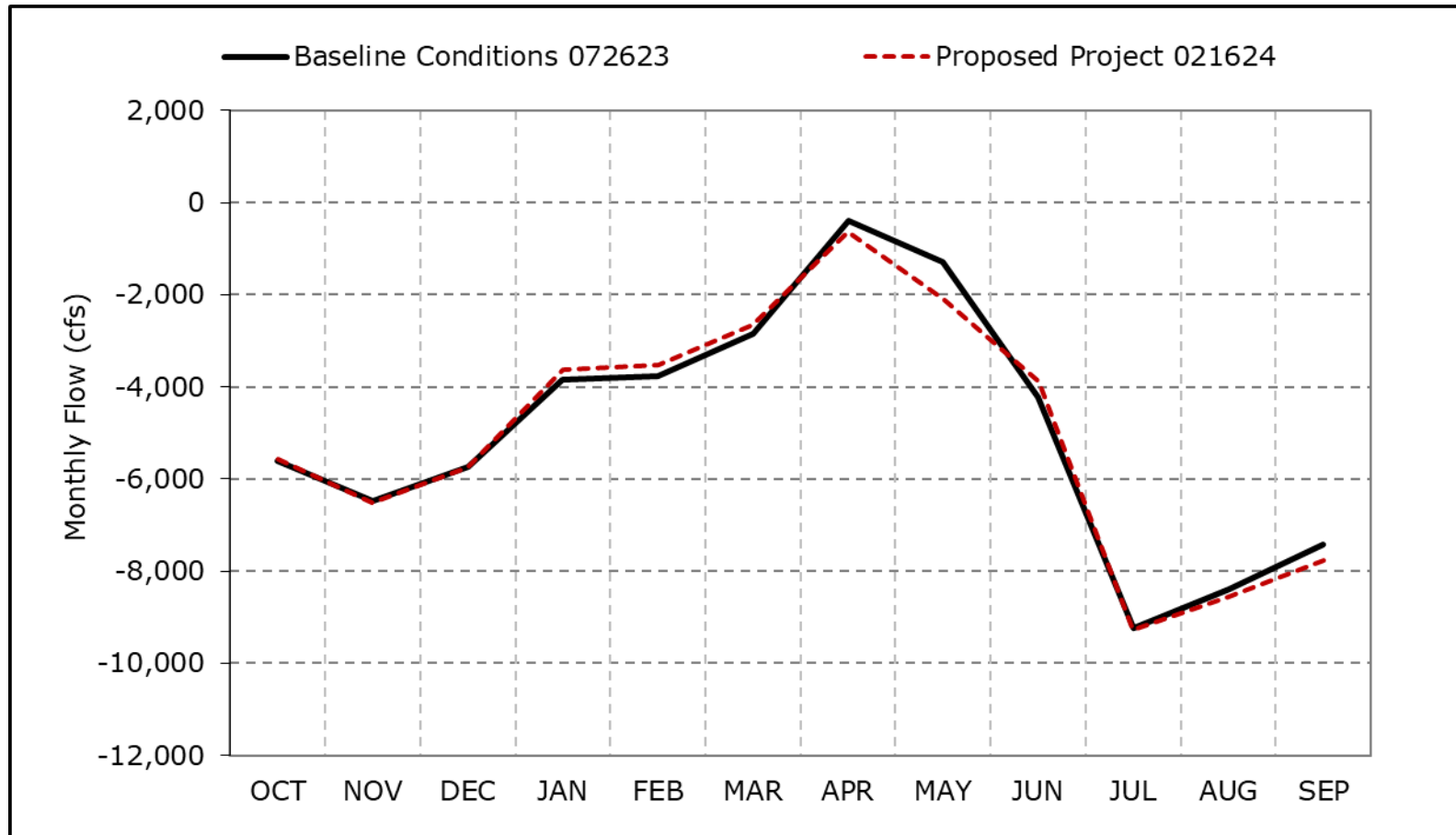
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-8a. Old and Middle River Flow, Long-Term Average Flow**

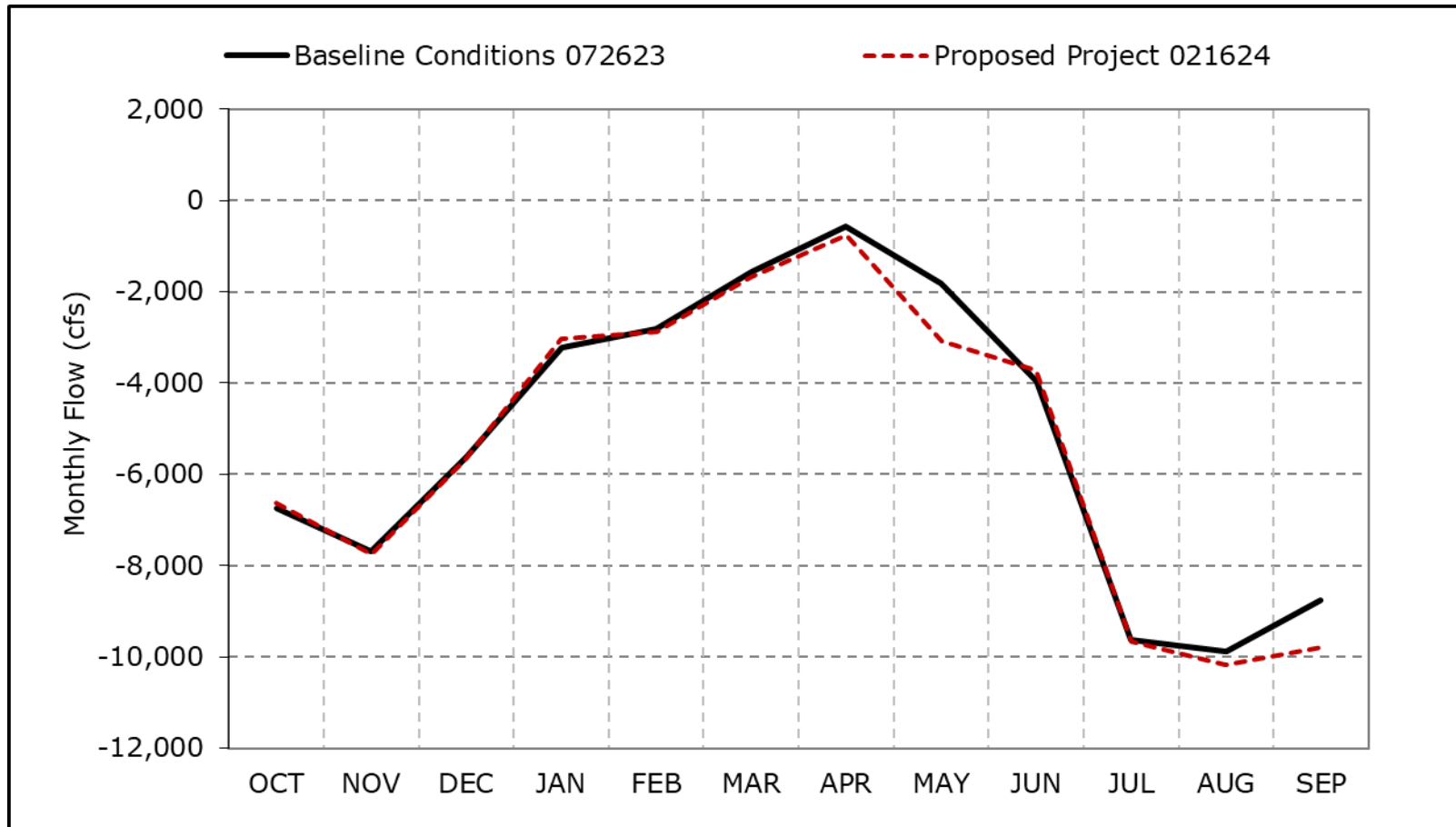


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-8b. Old and Middle River Flow, Wet Year Average Flow**

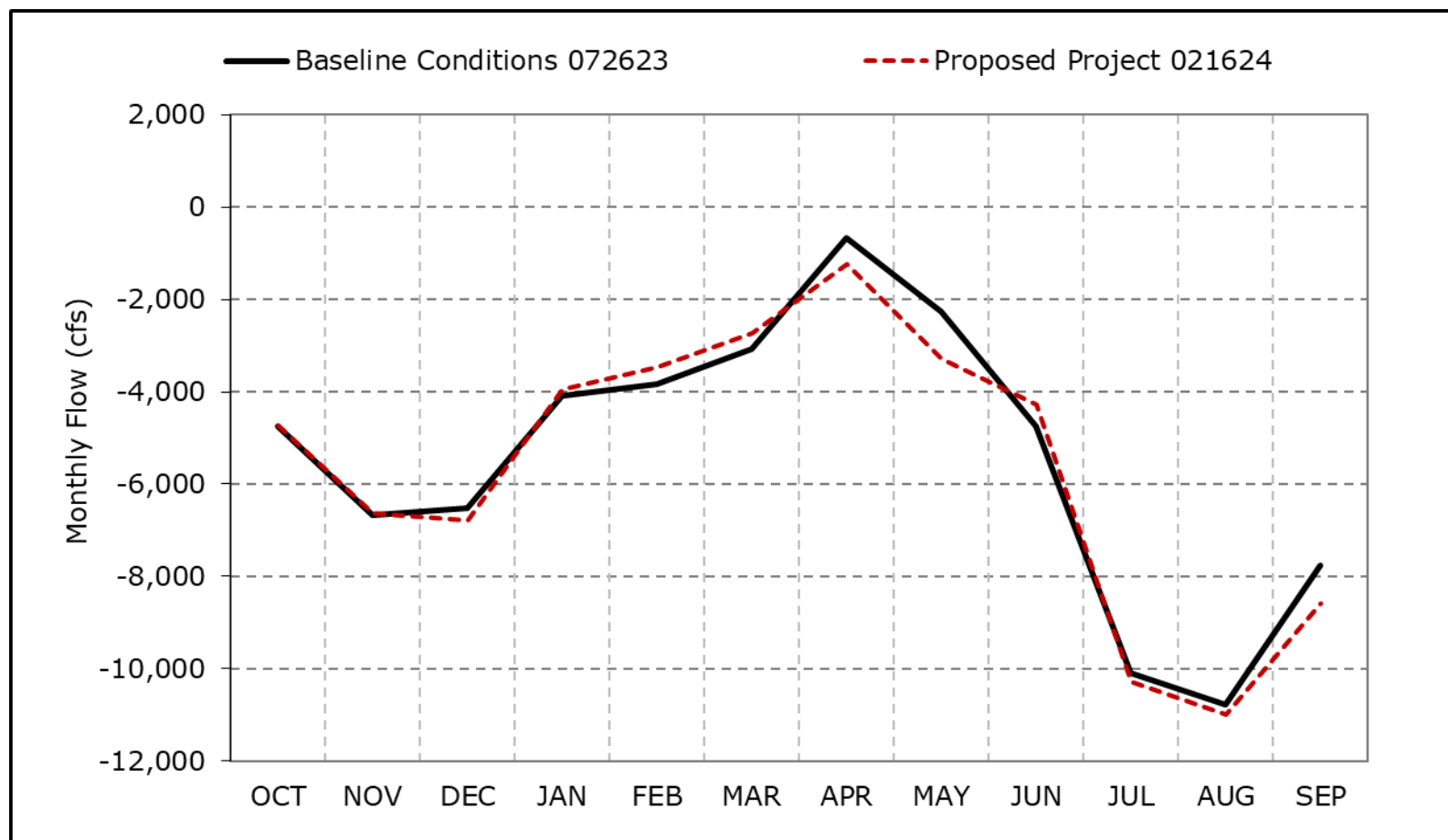


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-8c. Old and Middle River Flow, Above Normal Year Average Flow**

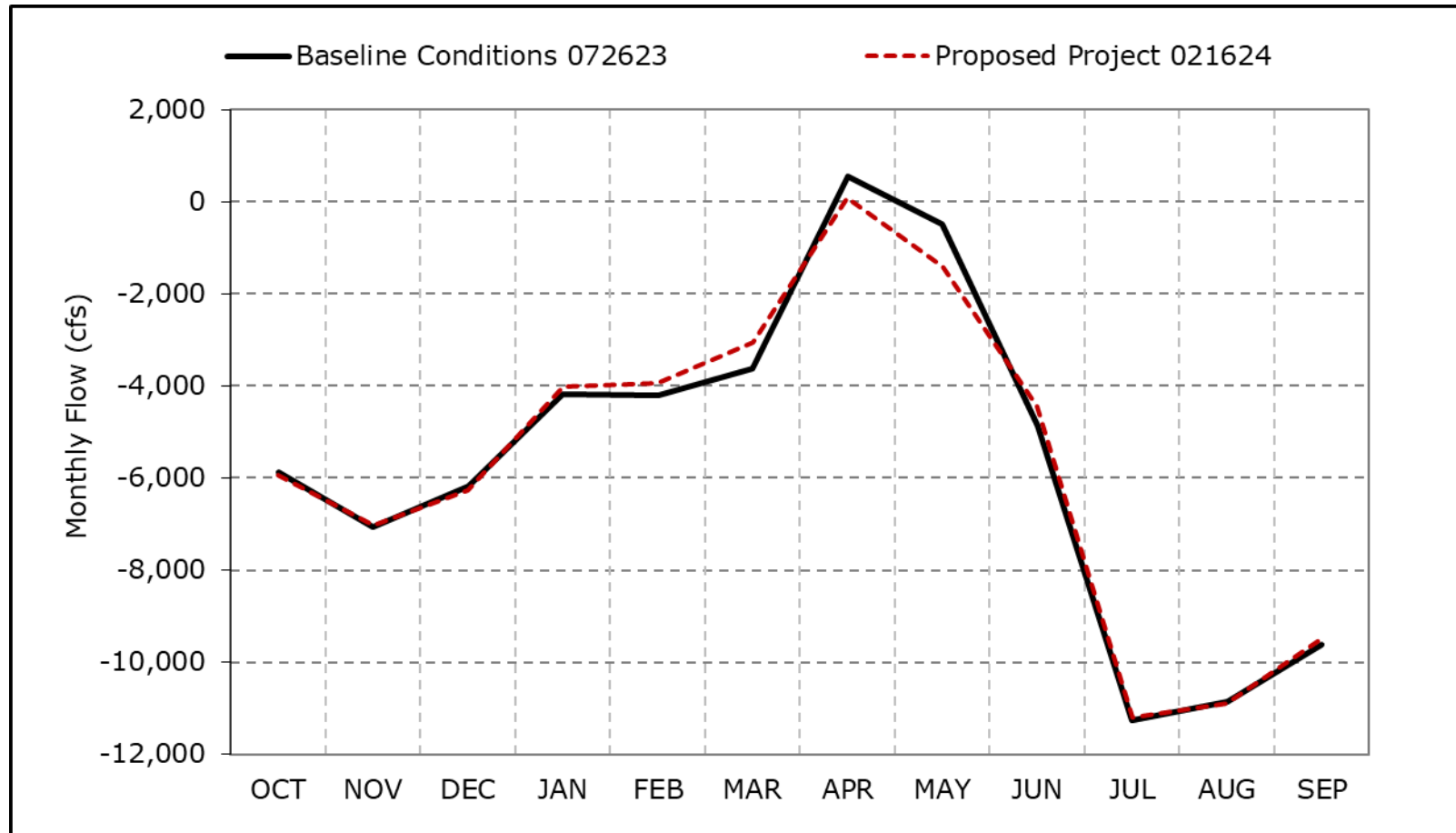


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-8d. Old and Middle River Flow, Below Normal Year Average Flow**



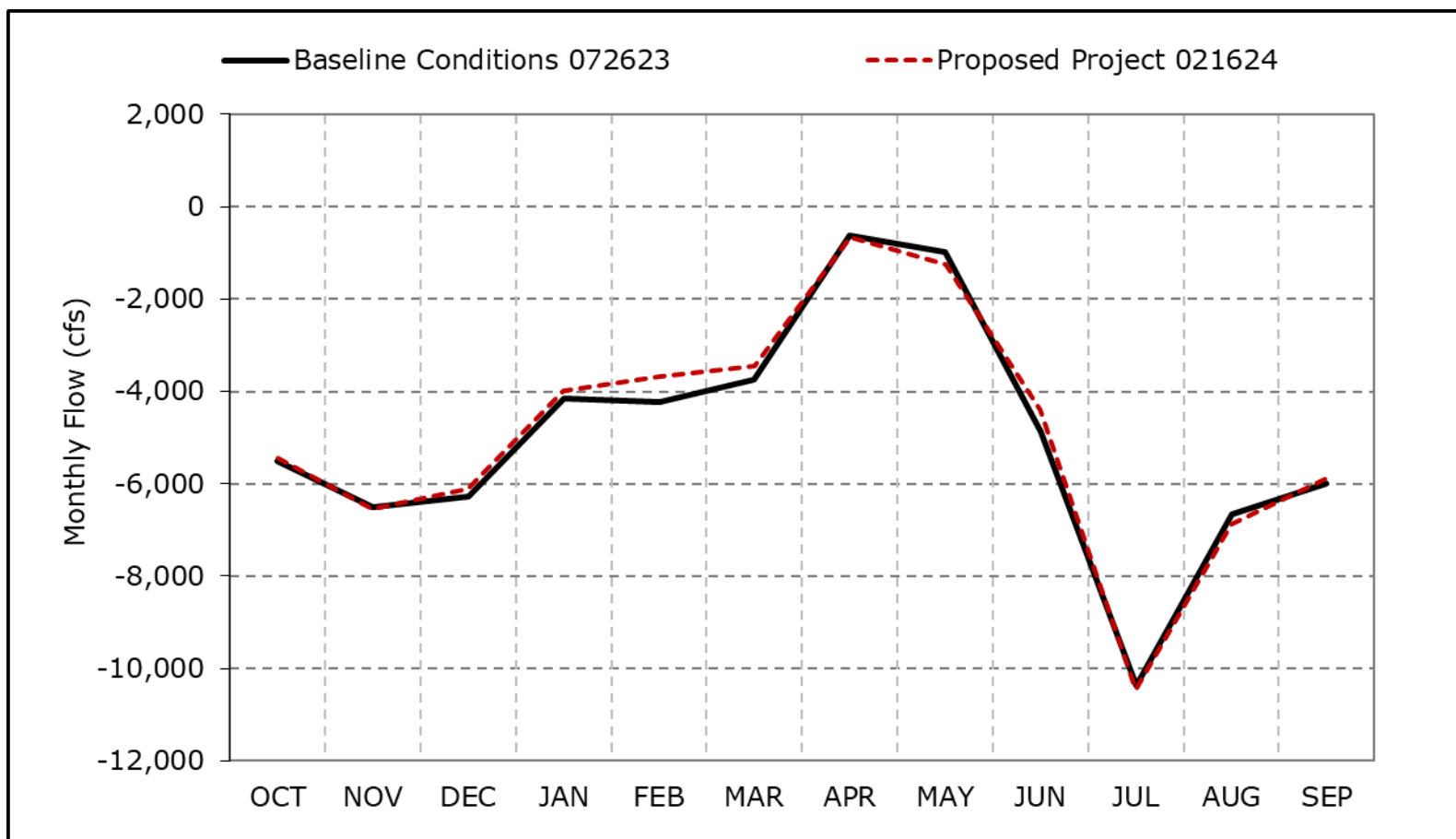
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-8e. Old and Middle River Flow, Dry Year Average Flow**

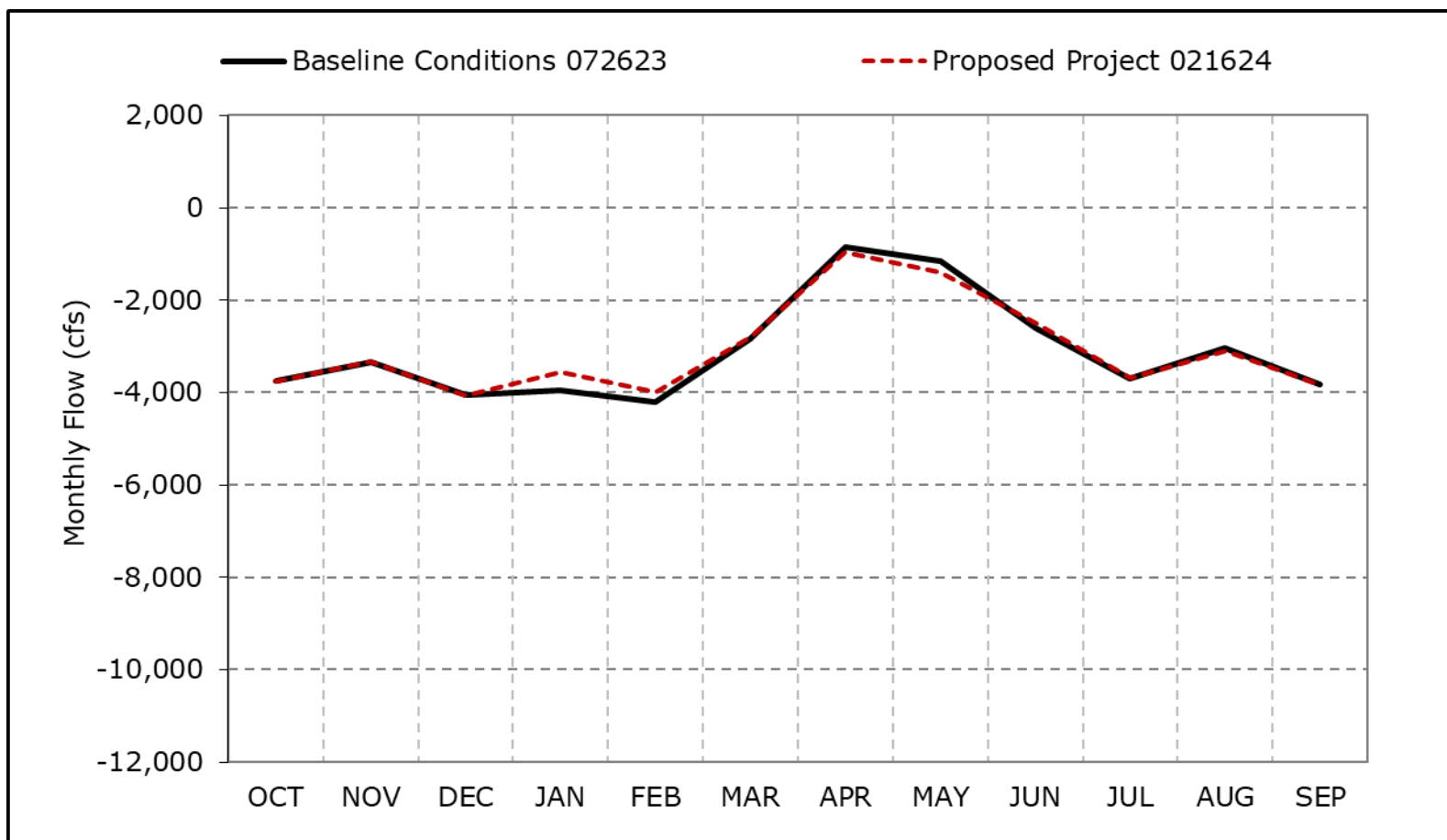


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-8f. Old and Middle River Flow, Critical Year Average Flow**

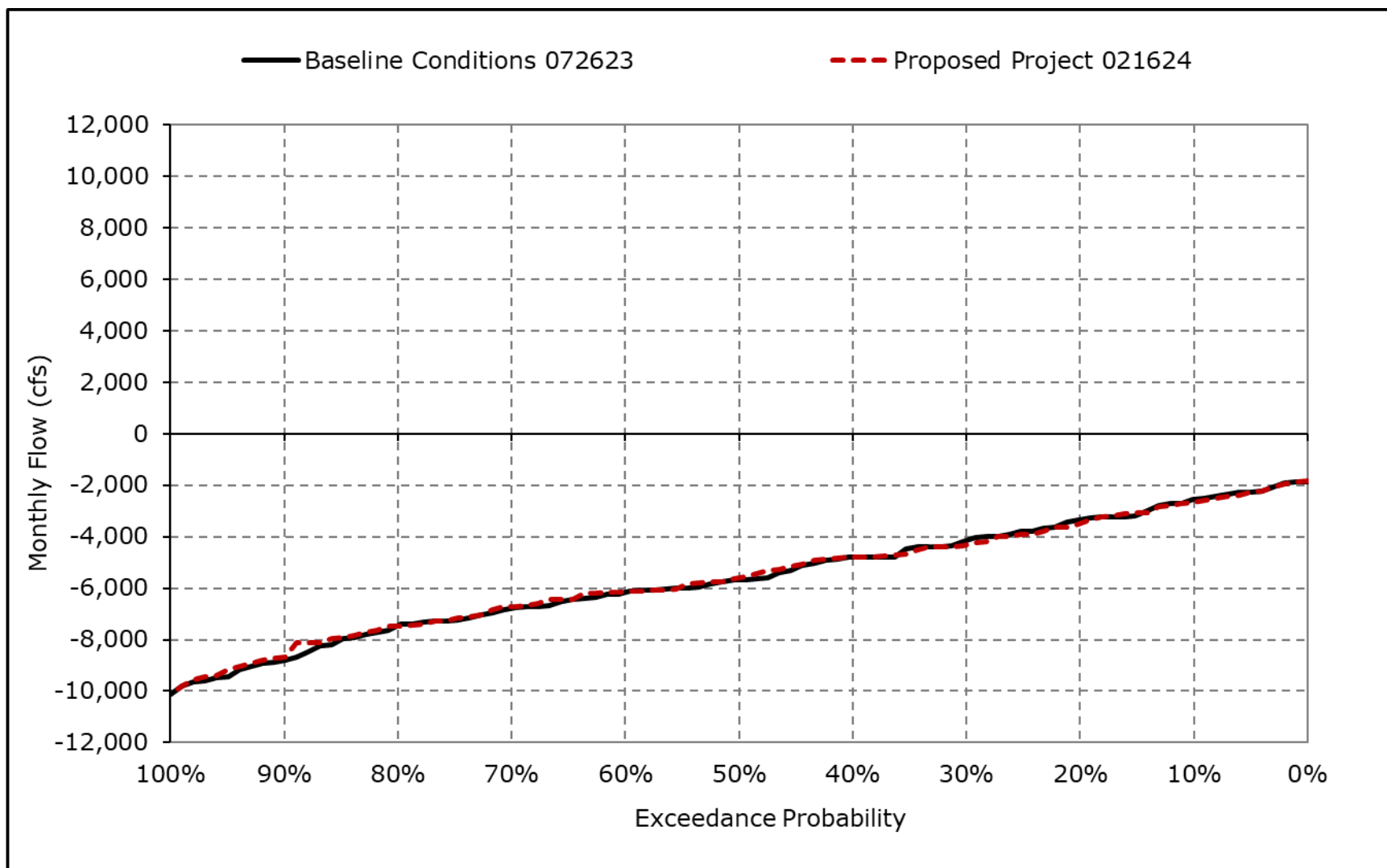


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

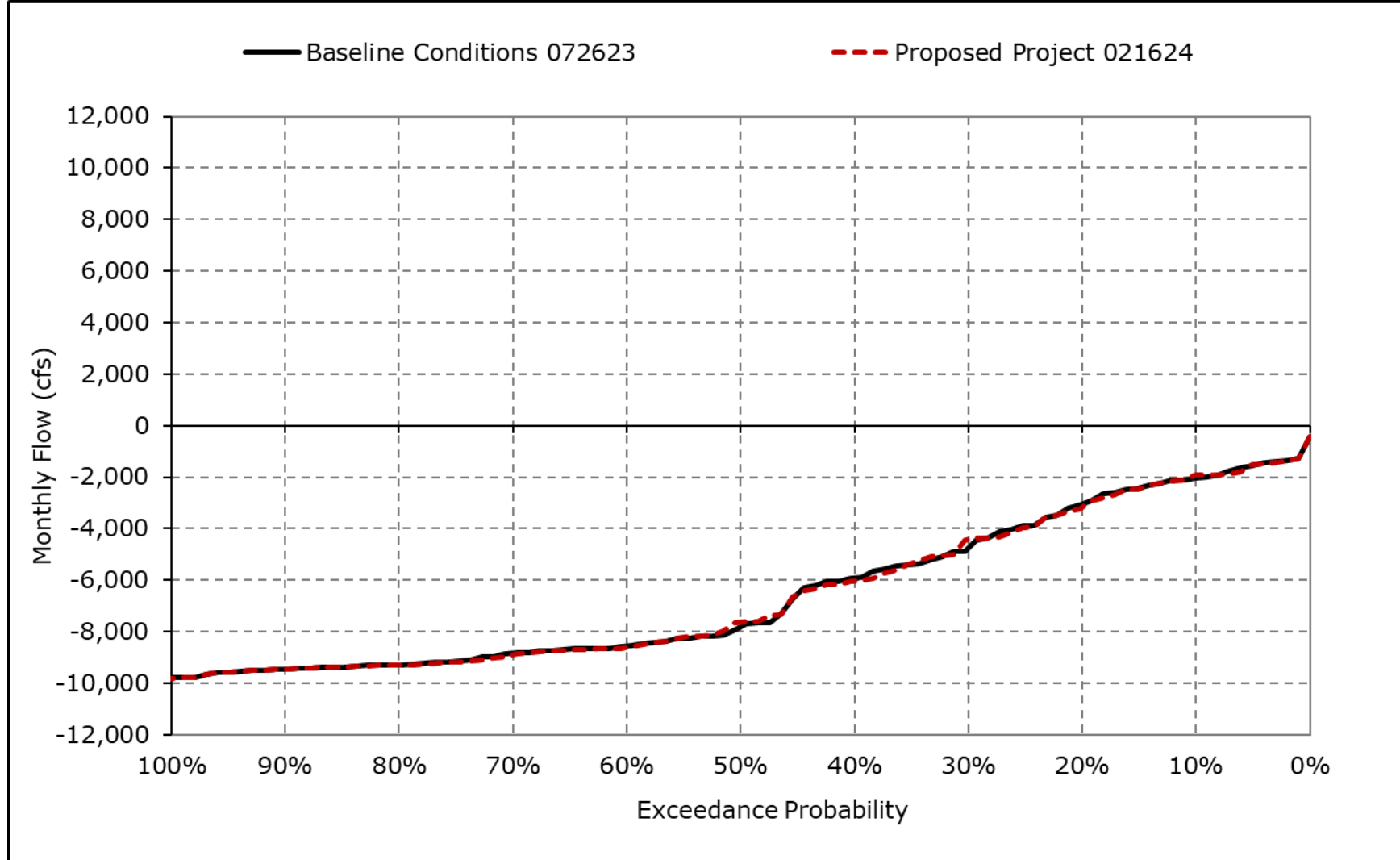
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8g. Old and Middle River Flow, October**



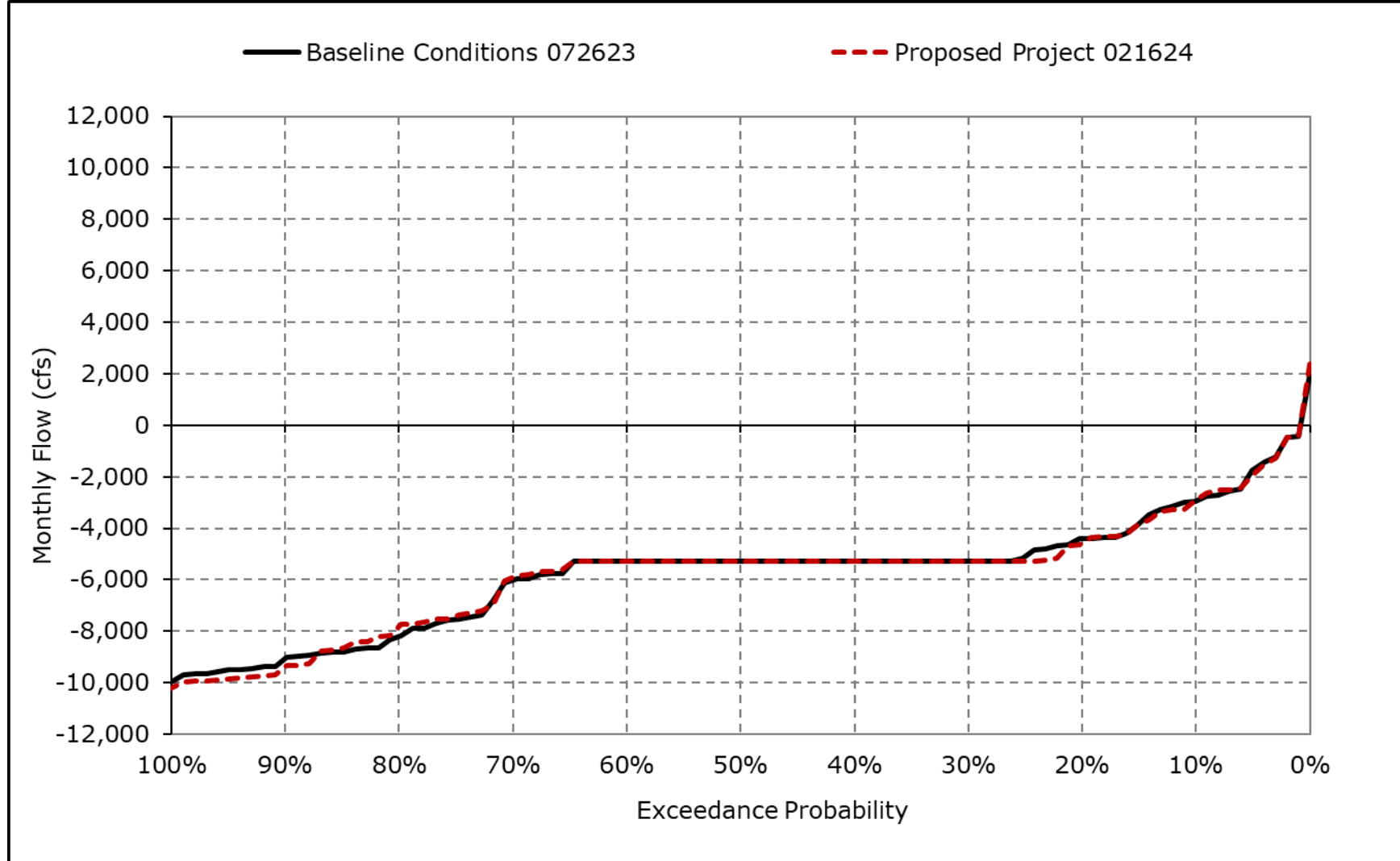
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8h. Old and Middle River Flow, November**



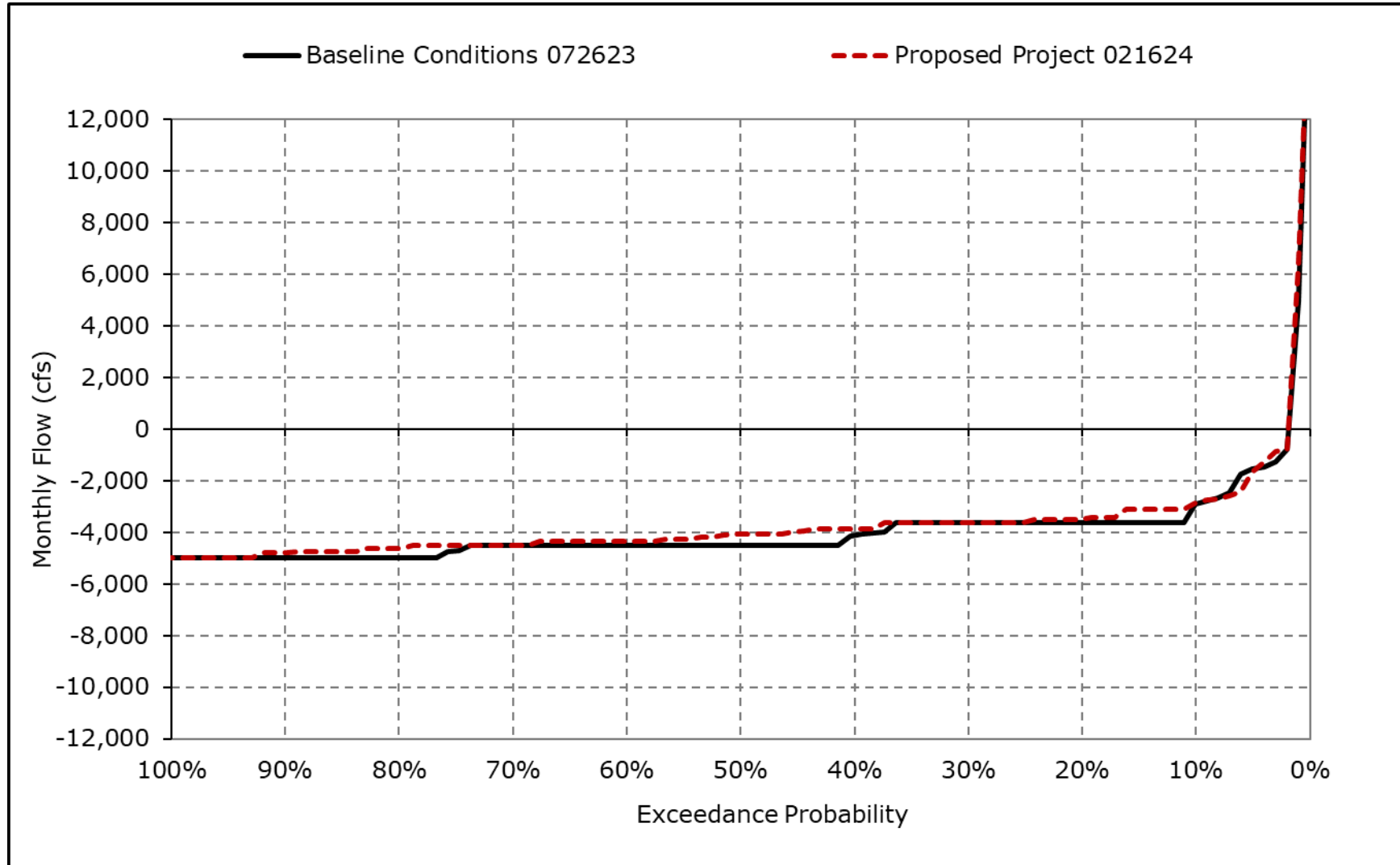
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8i. Old and Middle River Flow, December**



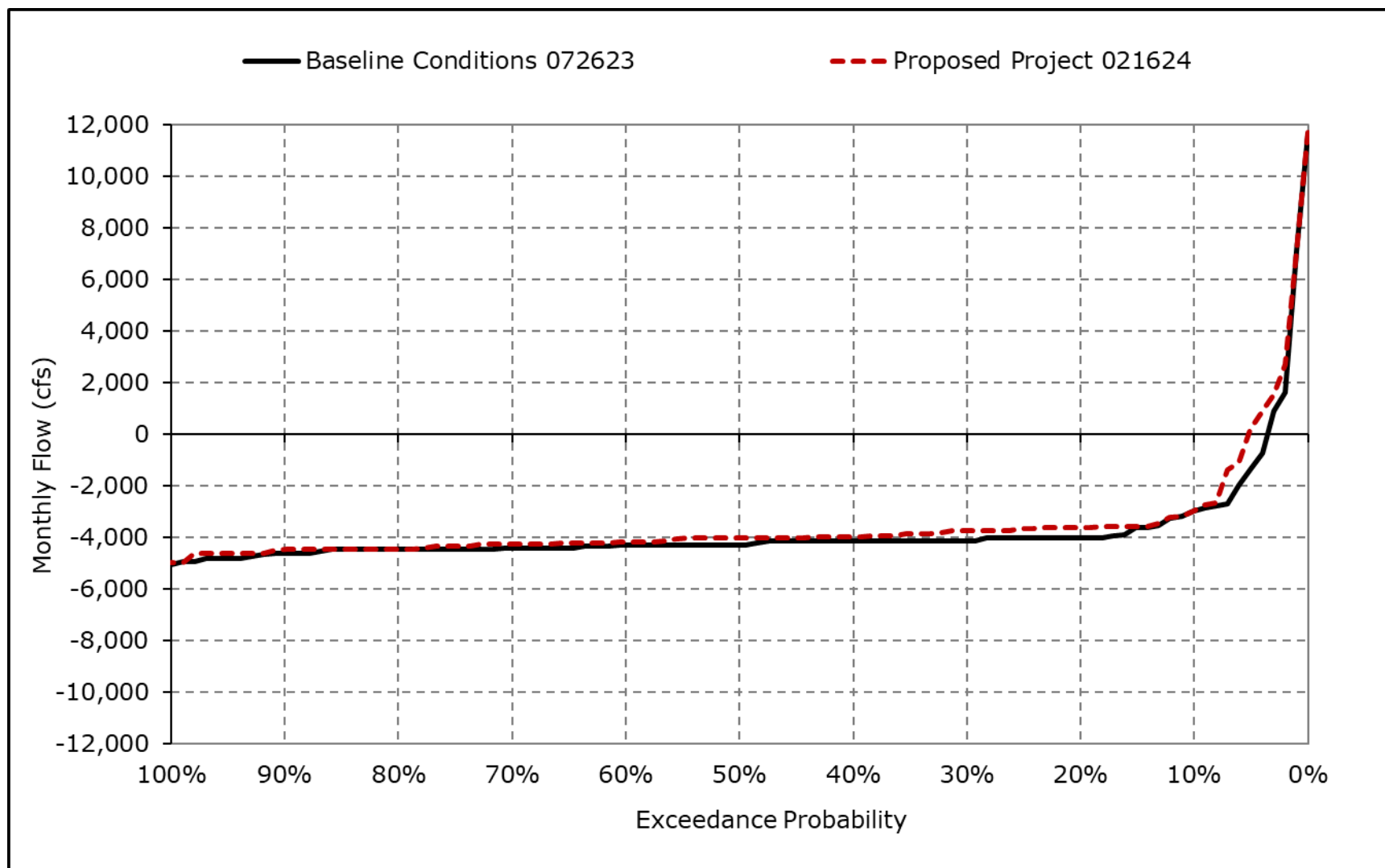
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8j. Old and Middle River Flow, January**



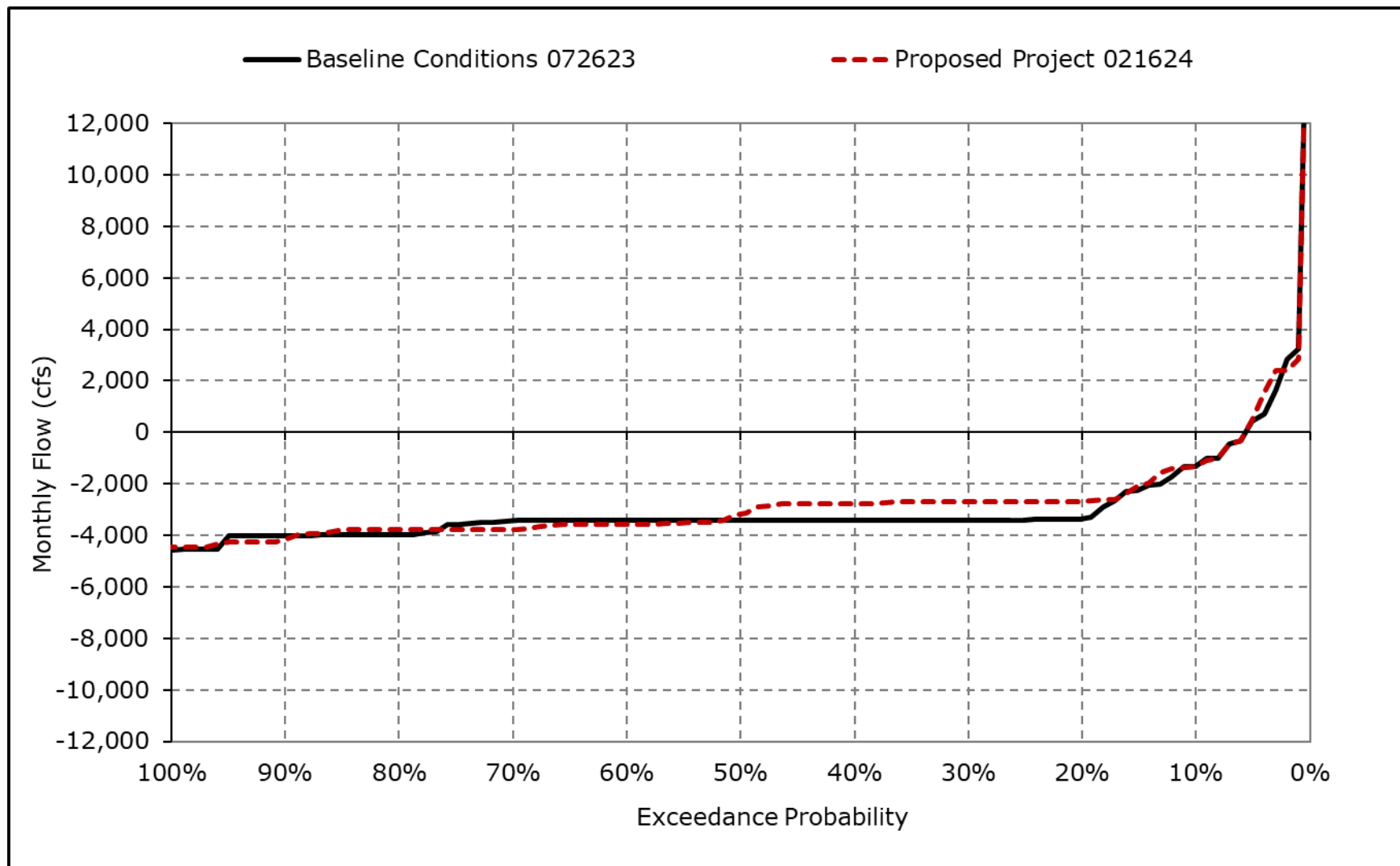
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8k. Old and Middle River Flow, February**



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

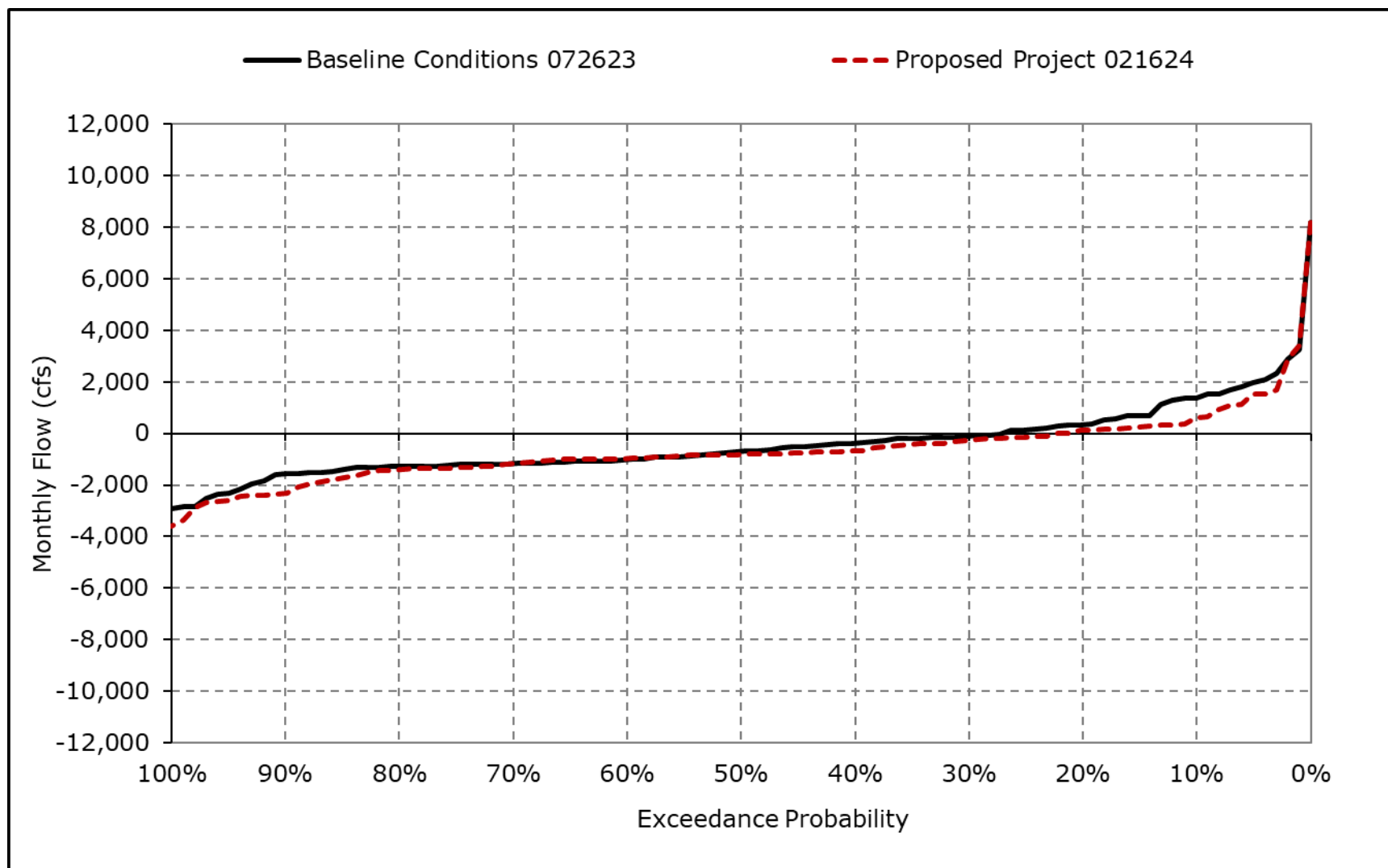
**Figure 4B-2-8I. Old and Middle River Flow, March**



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

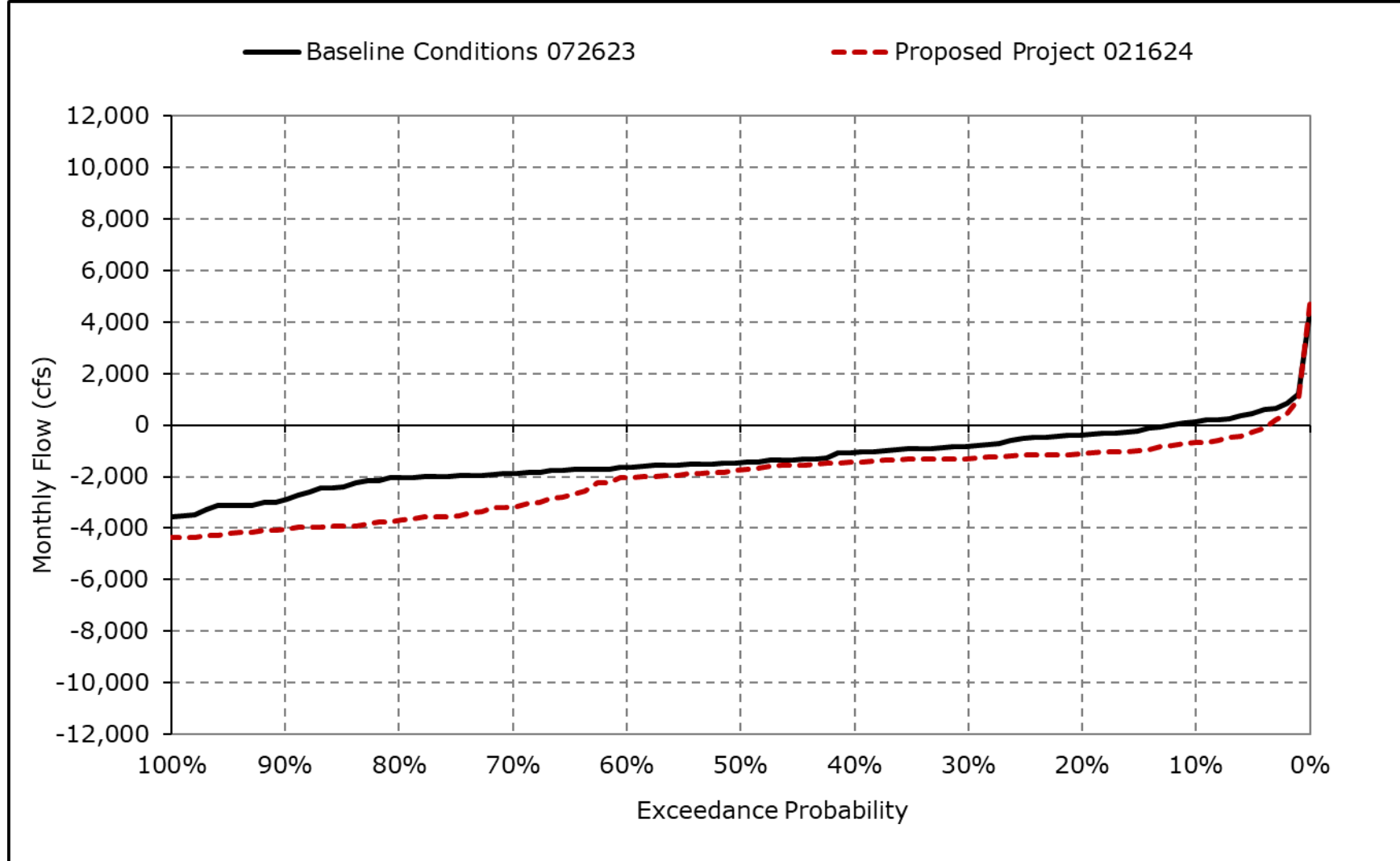


**Figure 4B-2-8m. Old and Middle River Flow, April**



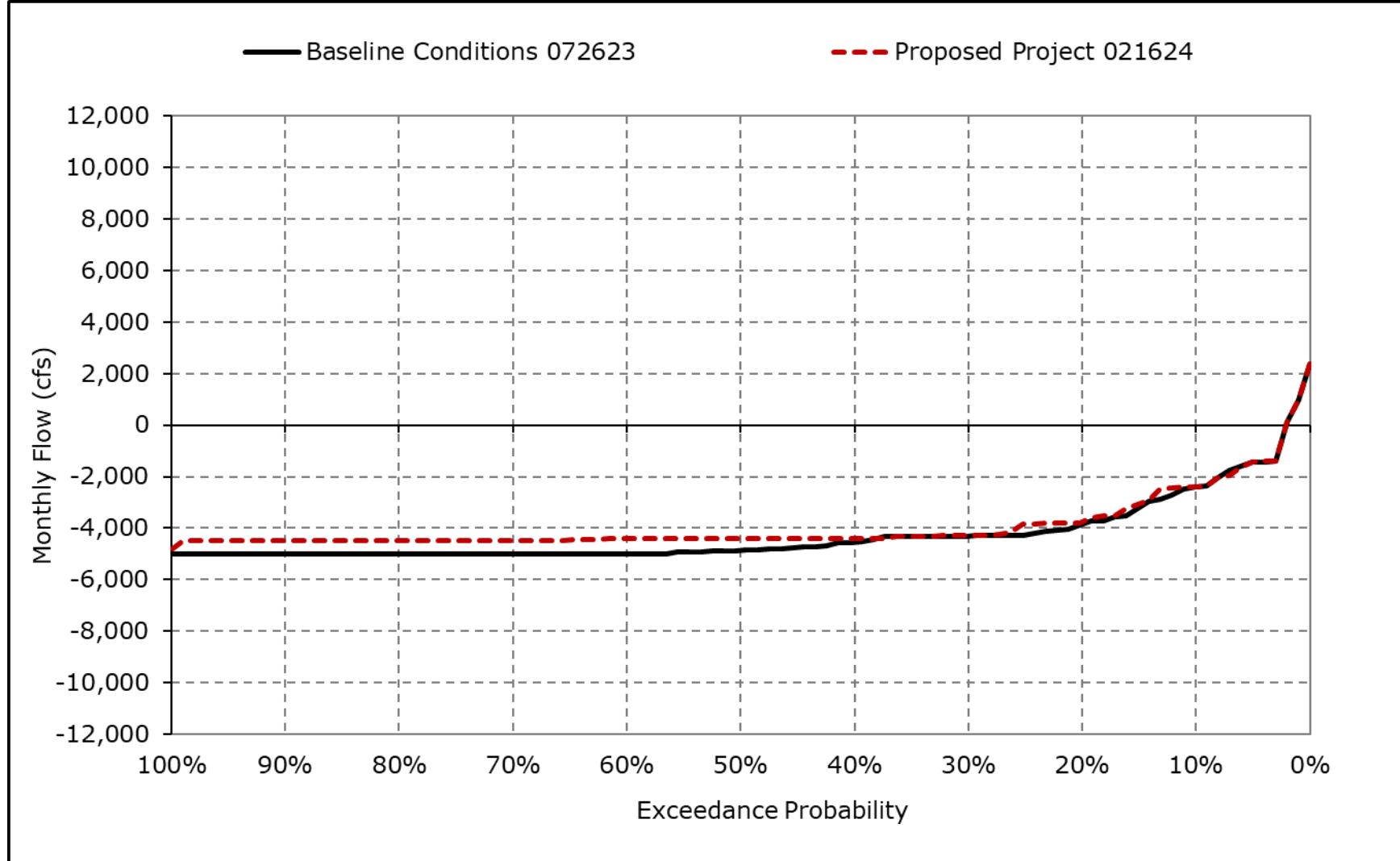
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8n. Old and Middle River Flow, May**



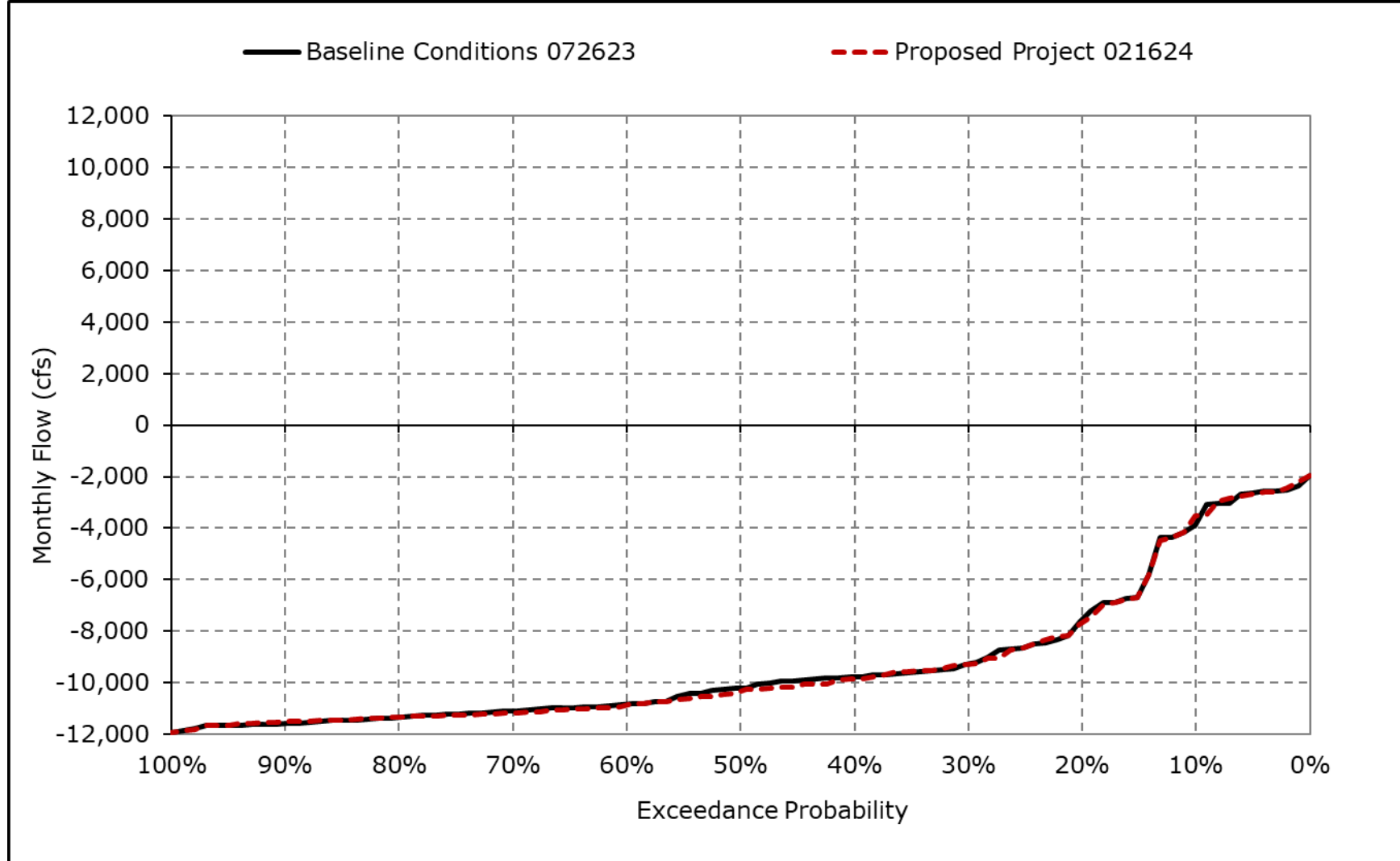
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8o. Old and Middle River Flow, June**



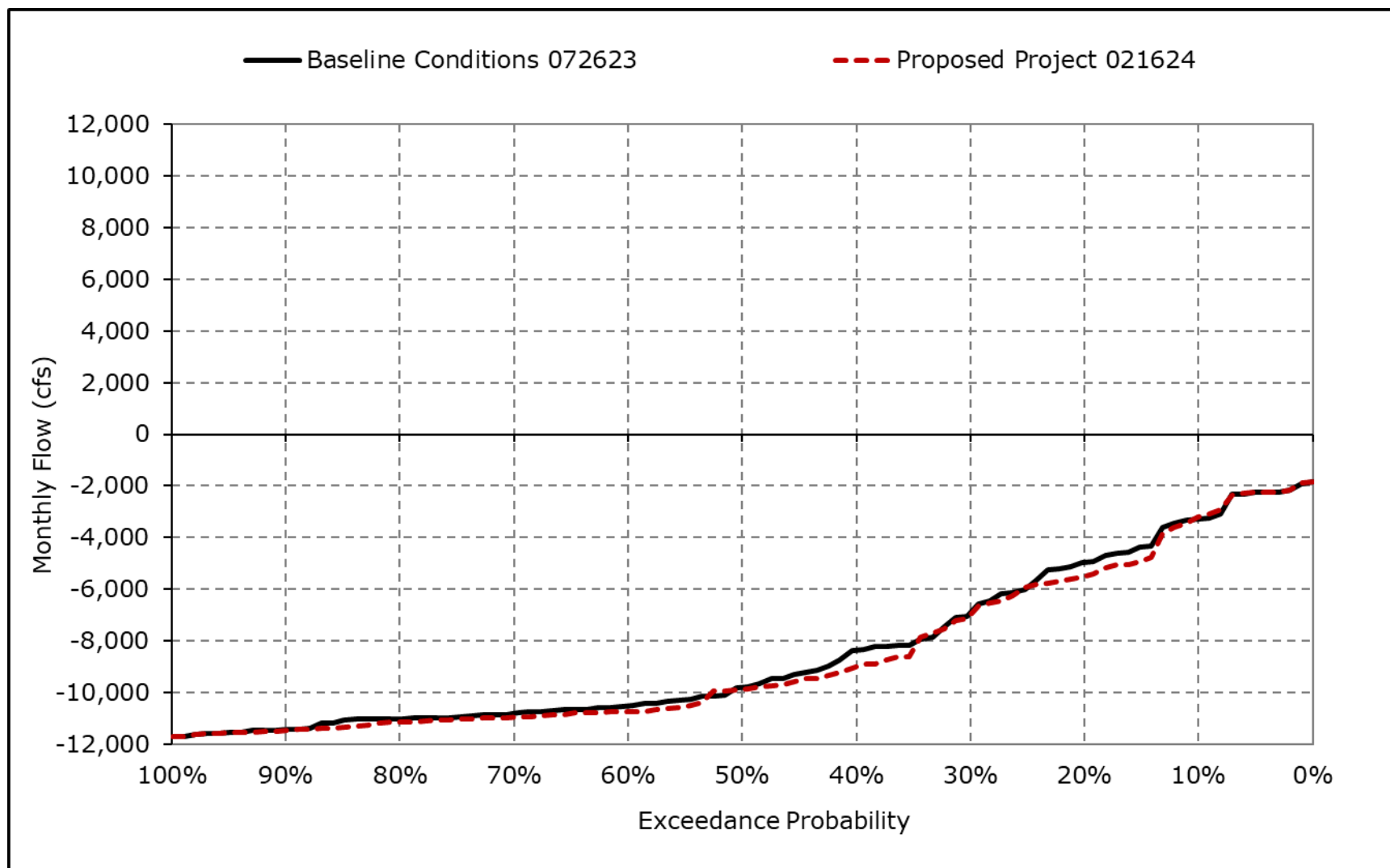
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8p. Old and Middle River Flow, July**



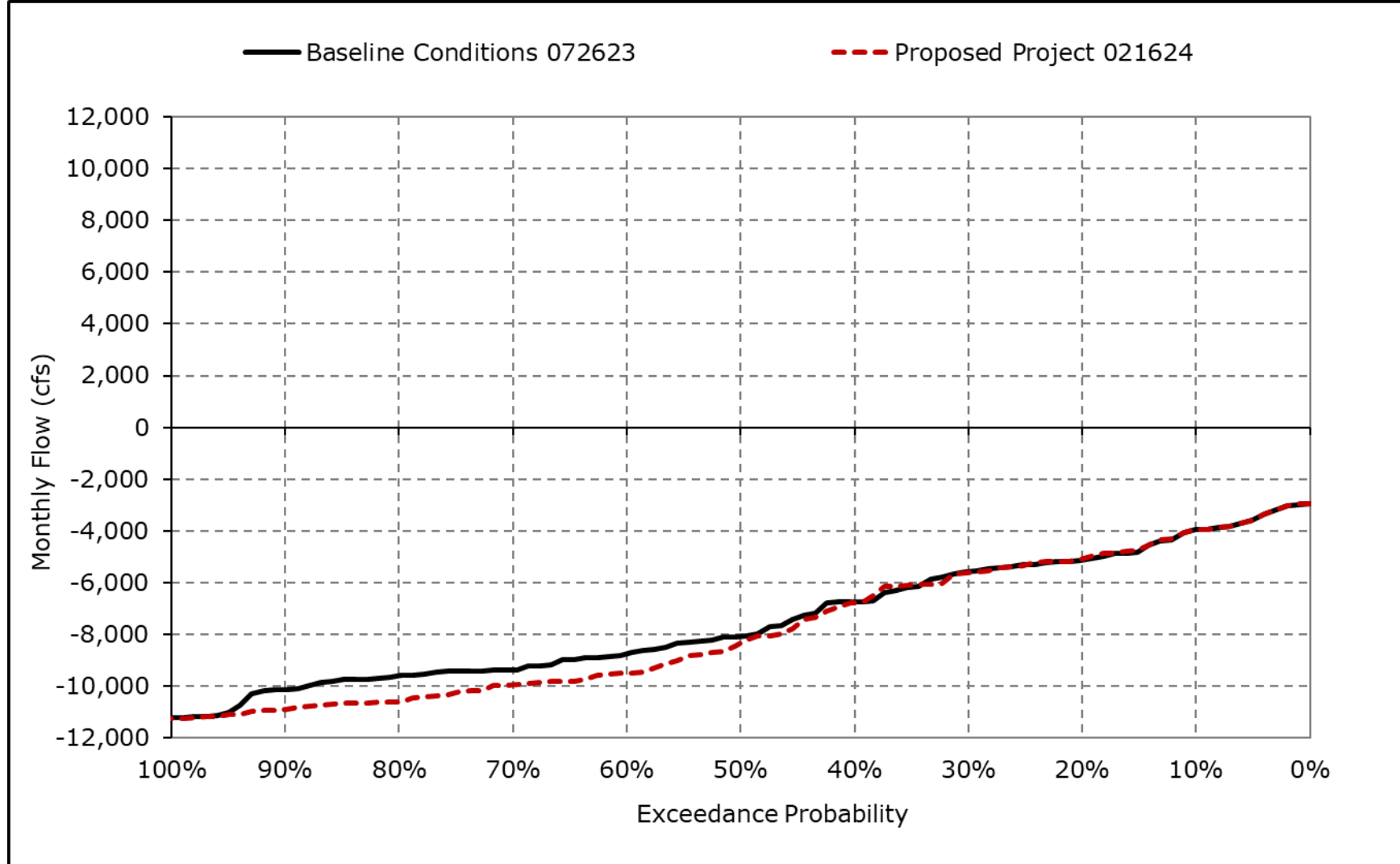
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-8q. Old and Middle River Flow, August**



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

**Figure 4B-2-8r. Old and Middle River Flow, September**



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

**Table 4B-2-9-1a. Qwest, Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,083	222	8,374	15,357	21,120	20,365	16,714	13,265	9,932	1,470	1,246	1,130
20% Exceedance	681	-101	3,818	9,939	12,835	12,922	12,354	7,973	4,464	315	465	659
30% Exceedance	540	-604	1,110	4,875	9,969	8,666	10,169	6,179	2,857	-680	-90	170
40% Exceedance	143	-1,164	-151	3,152	6,599	5,881	8,120	5,178	2,152	-1,394	-1,129	-174
50% Exceedance	-100	-1,550	-833	2,210	4,228	4,105	6,226	4,234	1,321	-1,934	-2,212	-381
60% Exceedance	-322	-2,604	-1,926	661	2,018	2,767	5,267	3,482	1,070	-2,811	-2,865	-706
70% Exceedance	-569	-3,338	-3,223	-596	1,381	2,291	3,940	2,743	704	-3,115	-3,130	-914
80% Exceedance	-1,003	-3,629	-4,729	-1,421	535	1,524	2,978	2,042	436	-3,434	-3,461	-1,938
90% Exceedance	-1,836	-4,343	-5,708	-1,977	-389	483	2,180	1,702	268	-4,257	-4,089	-3,084
Full Simulation Period Average <sup>a</sup>	-182	-1,551	563	5,056	8,088	7,787	8,521	6,064	3,286	-1,444	-1,621	-574
Wet Water Years (30%)	-691	-924	5,956	13,437	17,812	16,867	15,380	11,221	7,640	243	-1,284	372
Above Normal Water Years (11%)	432	-2,723	-1,709	7,297	10,365	9,445	8,649	5,257	2,581	-1,436	-2,943	707
Below Normal Water Years (21%)	-121	-2,002	-1,822	1,694	5,156	4,891	7,897	5,591	1,496	-3,269	-3,827	-2,976
Dry Water Years (22%)	-222	-2,115	-2,434	-166	1,918	1,996	4,004	2,980	527	-3,613	-1,168	-925
Critical Water Years (16%)	328	-554	-735	-606	624	1,388	2,603	1,811	1,751	763	927	409

**Table 4B-2-9-1b. Qwest, Proposed Project 021624, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,124	321	8,400	15,384	21,024	19,916	16,328	11,557	9,925	1,570	1,195	938
20% Exceedance	712	-89	3,814	9,934	12,904	12,771	11,204	6,728	4,972	272	-177	191
30% Exceedance	554	-546	1,139	5,108	10,128	8,969	9,368	4,855	3,273	-857	-799	-217
40% Exceedance	323	-1,187	-172	3,355	6,934	6,300	7,233	4,184	2,286	-1,617	-1,341	-372
50% Exceedance	120	-1,590	-957	2,449	4,839	4,383	5,976	3,319	1,791	-2,121	-2,526	-718
60% Exceedance	-152	-2,510	-1,799	868	2,610	3,283	4,733	2,635	1,427	-2,933	-3,084	-943
70% Exceedance	-490	-3,252	-3,091	-181	1,821	2,675	3,891	2,067	1,090	-3,290	-3,352	-1,261
80% Exceedance	-1,024	-3,642	-4,560	-1,083	790	1,466	3,062	1,753	825	-3,541	-3,743	-1,723
90% Exceedance	-1,795	-4,343	-5,678	-1,785	-135	618	2,166	1,412	662	-4,427	-4,194	-3,034
Full Simulation Period Average <sup>a</sup>	-116	-1,537	539	5,281	8,342	8,020	8,274	5,211	3,604	-1,531	-1,870	-791
Wet Water Years (30%)	-584	-978	5,905	13,642	17,759	16,750	15,172	9,818	7,919	191	-1,633	-426
Above Normal Water Years (11%)	454	-2,599	-1,997	7,448	10,749	9,844	8,057	4,152	3,074	-1,718	-3,367	369
Below Normal Water Years (21%)	-68	-2,003	-1,890	1,891	5,419	5,542	7,457	4,579	1,920	-3,320	-3,939	-2,824
Dry Water Years (22%)	-110	-2,146	-2,268	-10	2,518	2,363	3,978	2,711	885	-3,760	-1,444	-794
Critical Water Years (16%)	301	-410	-729	-158	874	1,429	2,467	1,568	1,824	780	846	402

**Table 4B-2-9-1c. Qwest, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Flow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	42	100	26	27	-96	-449	-386	-1,708	-7	100	-51	-193
20% Exceedance	31	12	-3	-5	69	-152	-1,150	-1,245	508	-43	-642	-468
30% Exceedance	14	58	29	233	160	303	-800	-1,324	416	-177	-708	-388
40% Exceedance	180	-22	-21	202	335	419	-887	-995	134	-223	-212	-198
50% Exceedance	219	-40	-124	240	610	278	-250	-916	471	-187	-314	-336
60% Exceedance	170	95	126	207	592	516	-534	-848	357	-121	-219	-237
70% Exceedance	79	86	132	415	440	384	-49	-677	386	-175	-222	-347
80% Exceedance	-20	-13	169	338	255	-59	84	-289	389	-106	-282	215
90% Exceedance	41	0	30	192	254	135	-14	-290	394	-170	-105	50
Full Simulation Period Average <sup>a</sup>	66	14	-24	226	253	233	-248	-853	317	-87	-249	-217
Wet Water Years (30%)	107	-54	-51	205	-53	-117	-208	-1,403	279	-51	-349	-799
Above Normal Water Years (11%)	22	125	-288	151	383	399	-592	-1,106	494	-283	-424	-338
Below Normal Water Years (21%)	53	-1	-68	197	262	651	-441	-1,012	423	-51	-112	152
Dry Water Years (22%)	113	-31	166	156	600	366	-26	-269	358	-148	-277	130
Critical Water Years (16%)	-27	144	6	448	250	41	-137	-244	73	17	-81	-7

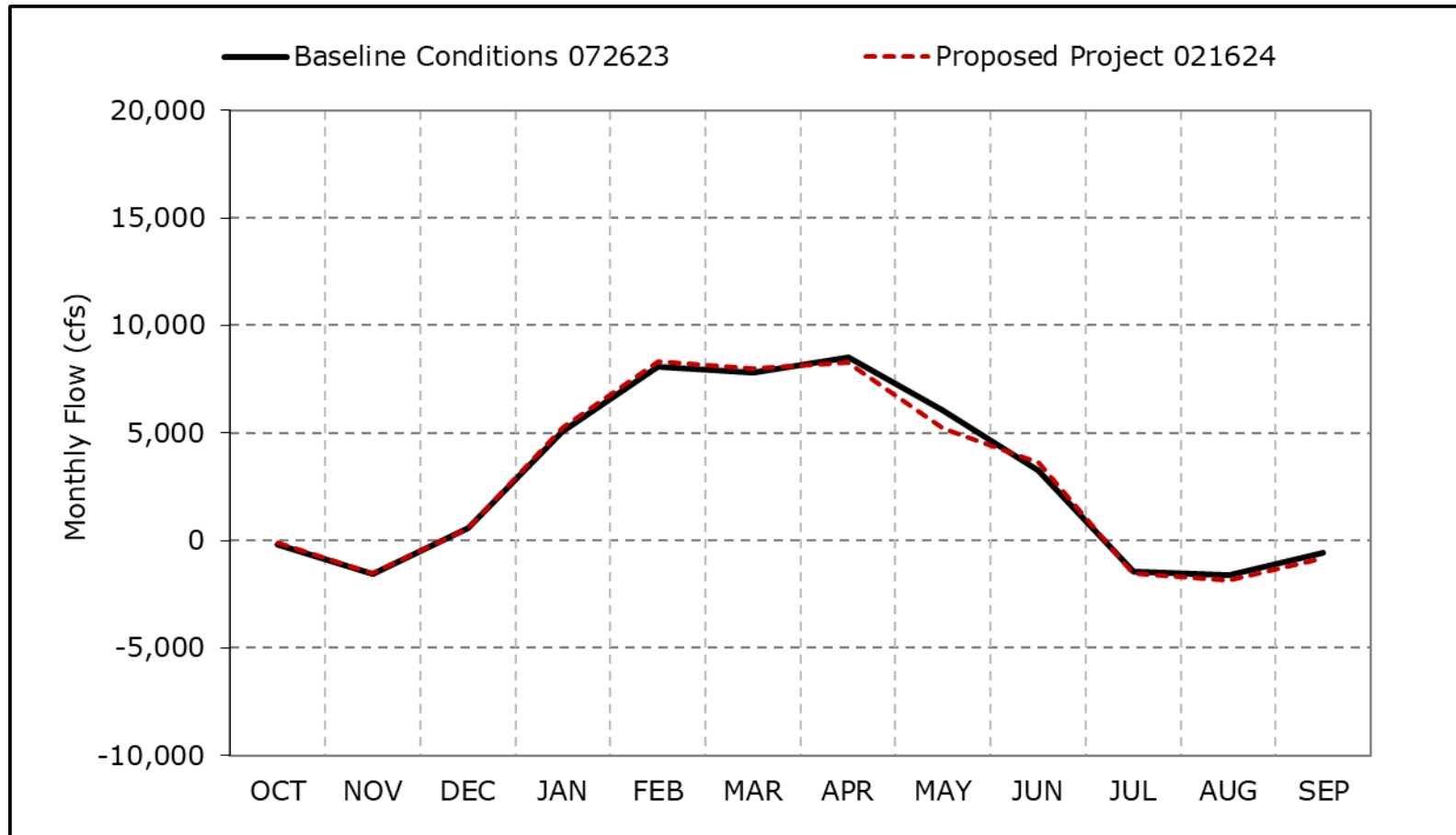
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-9a. Qwest, Long-Term Average Flow**



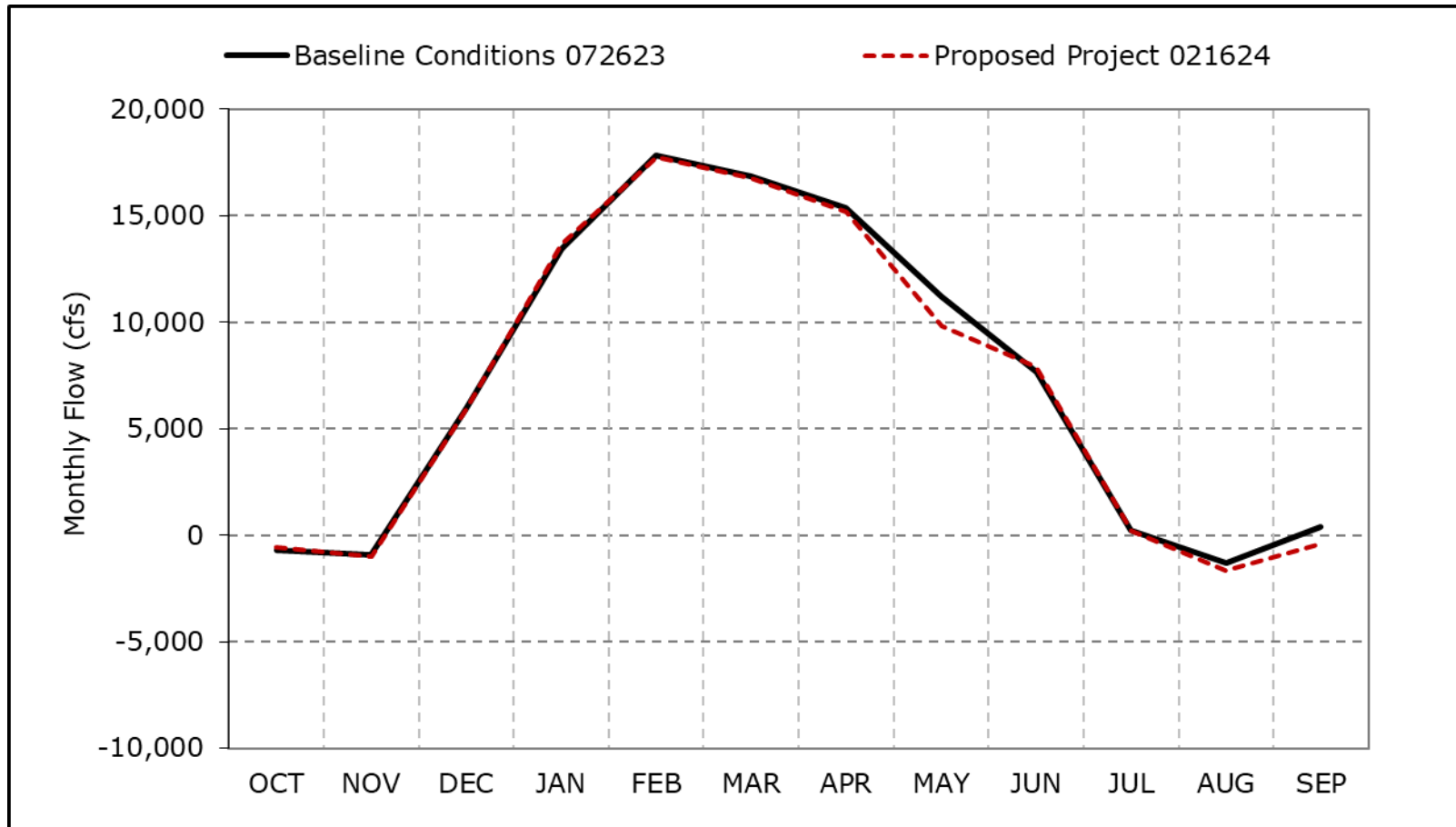
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-9b. Qwest, Wet Year Average Flow**

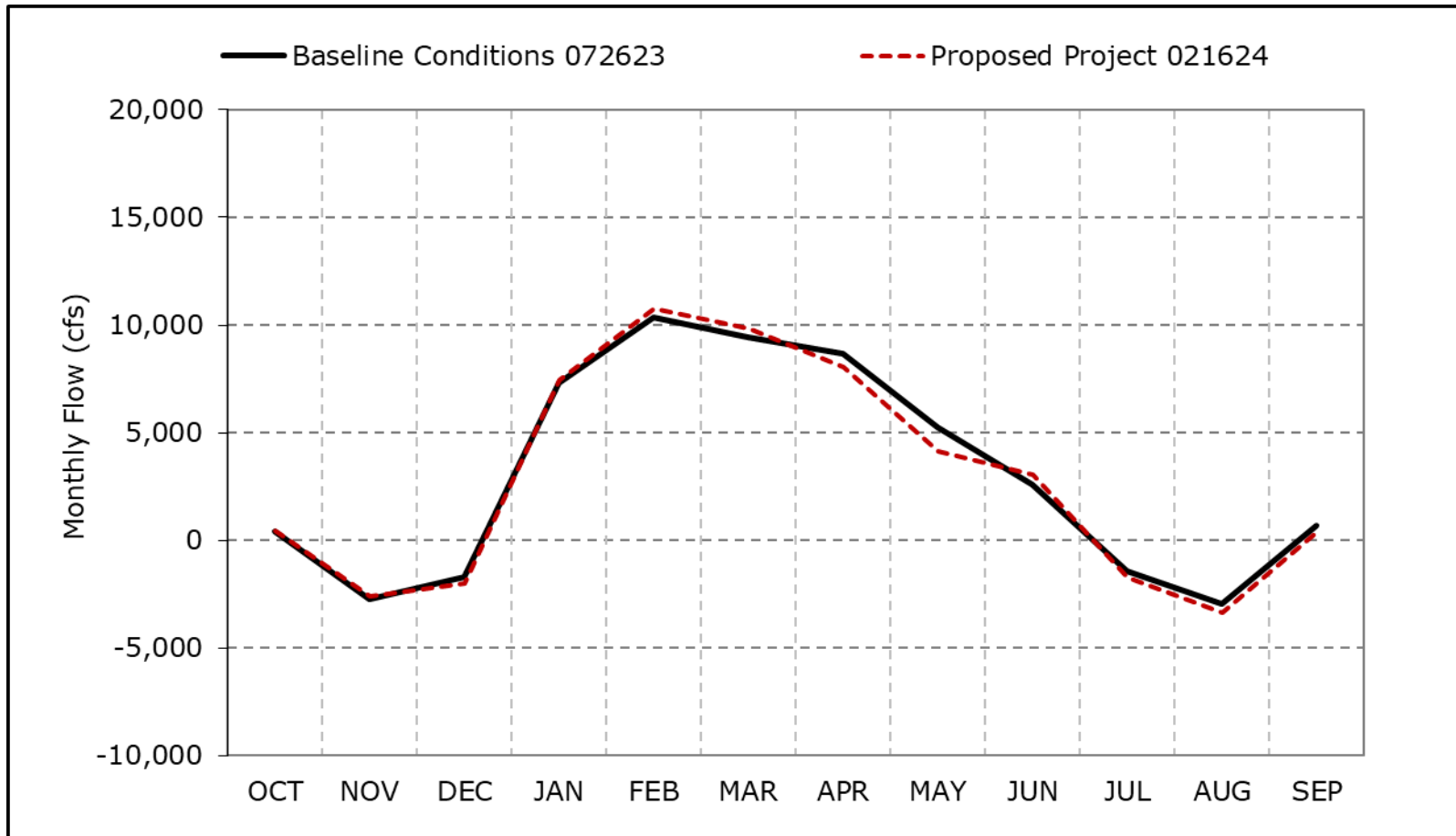


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-9c. Qwest, Above Normal Year Average Flow**

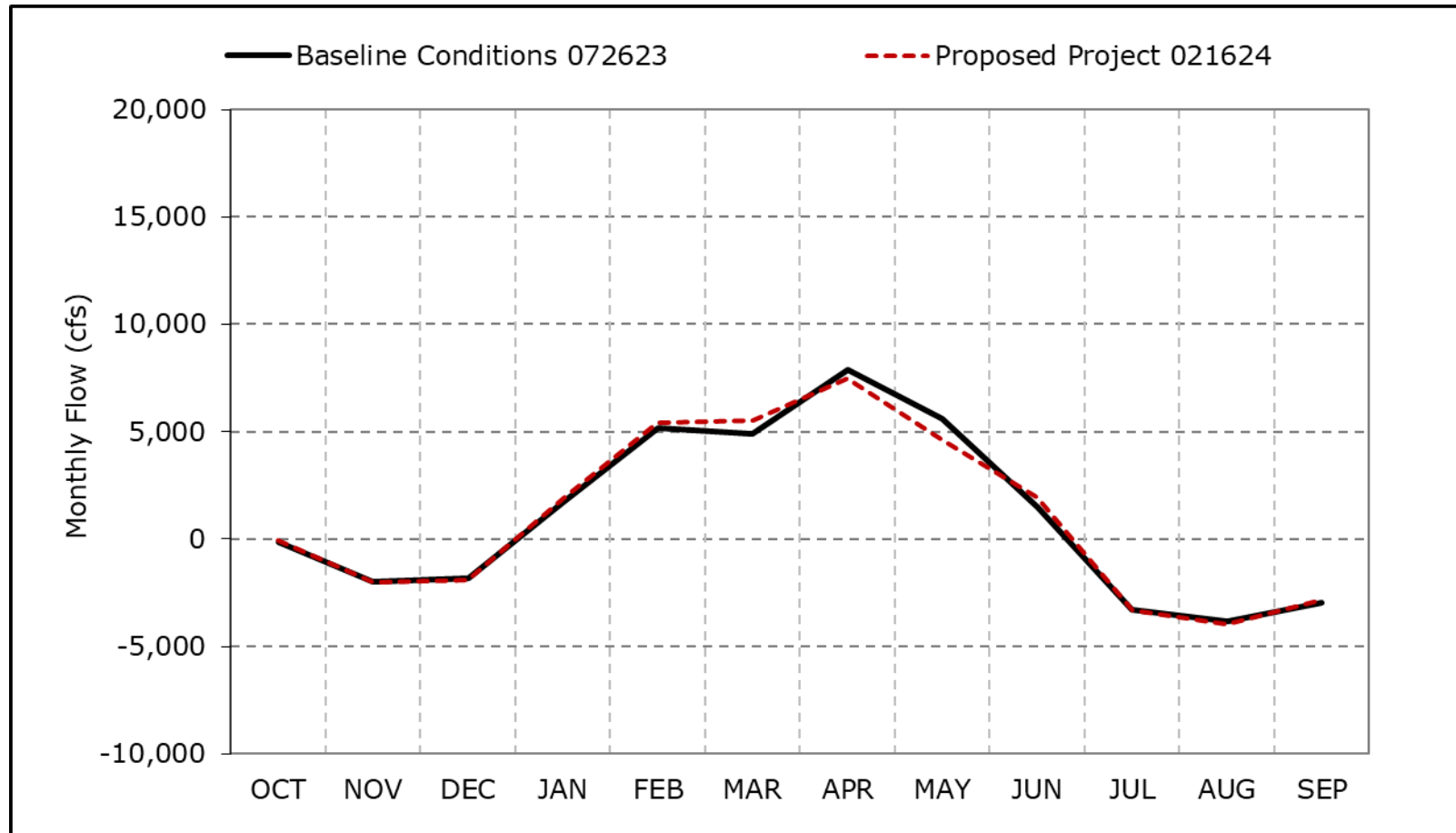


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-9d. Qwest, Below Normal Year Average Flow**

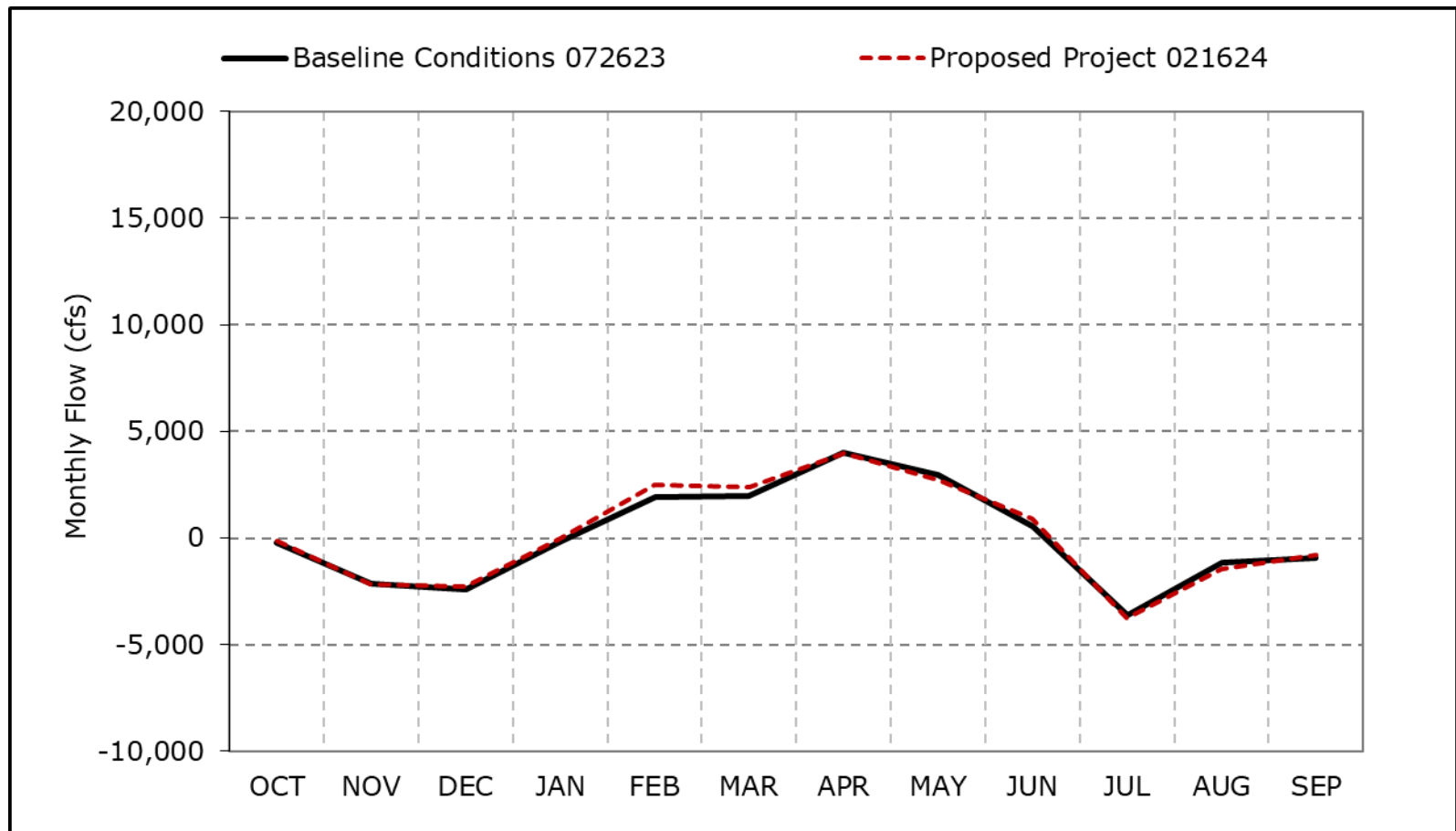


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-9e. Qwest, Dry Year Average Flow**

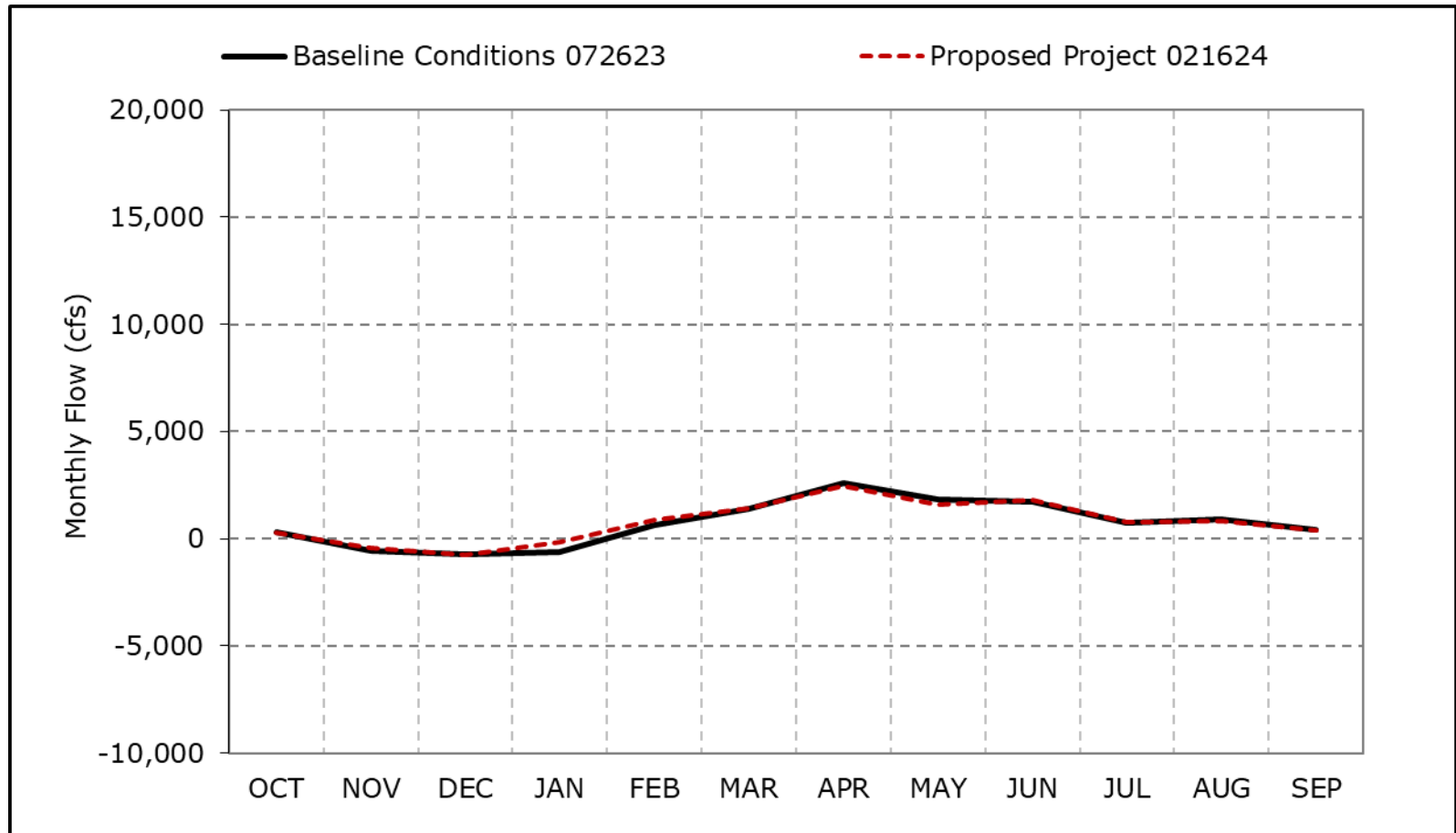


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-9f. Qwest, Critical Year Average Flow**

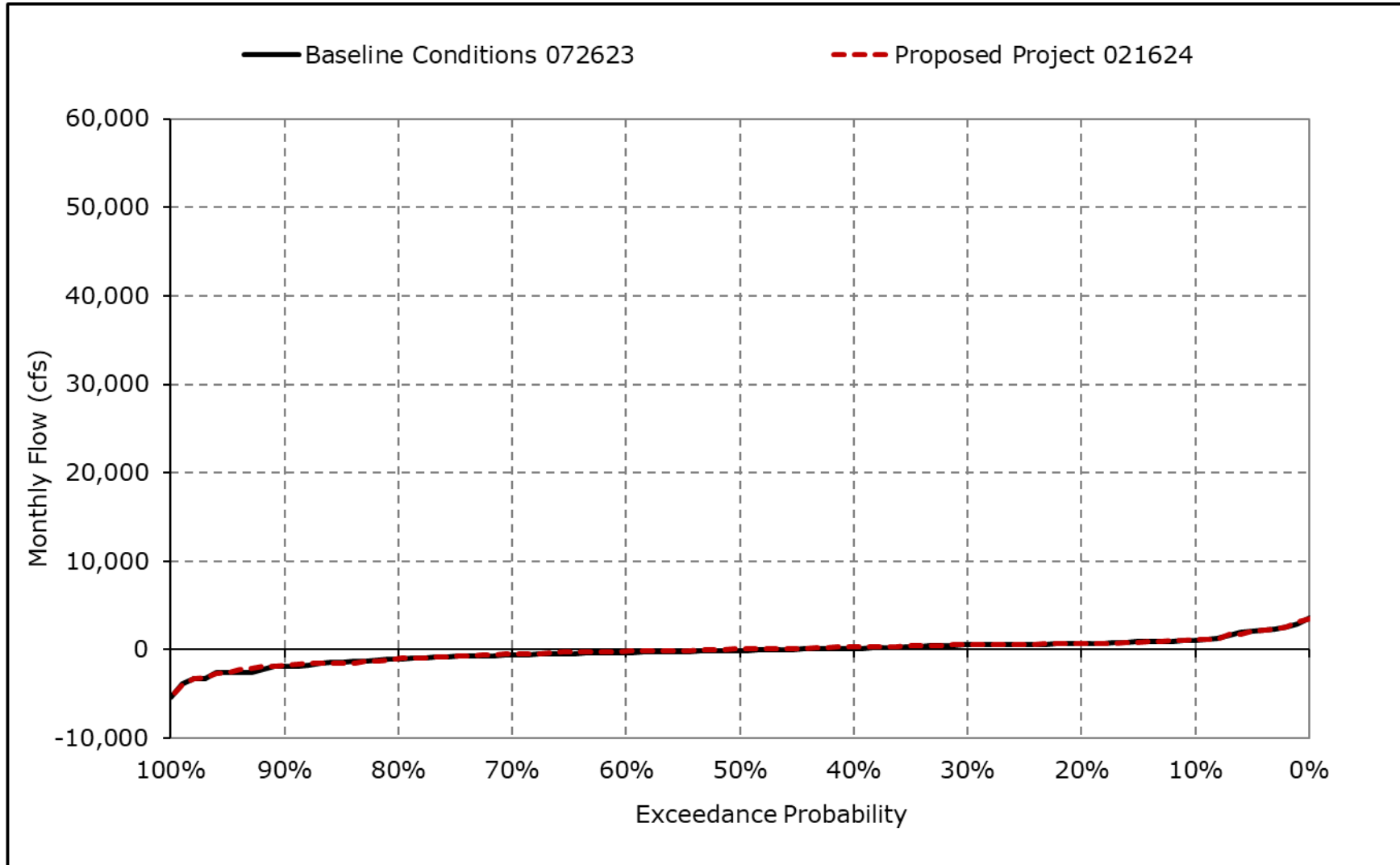


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

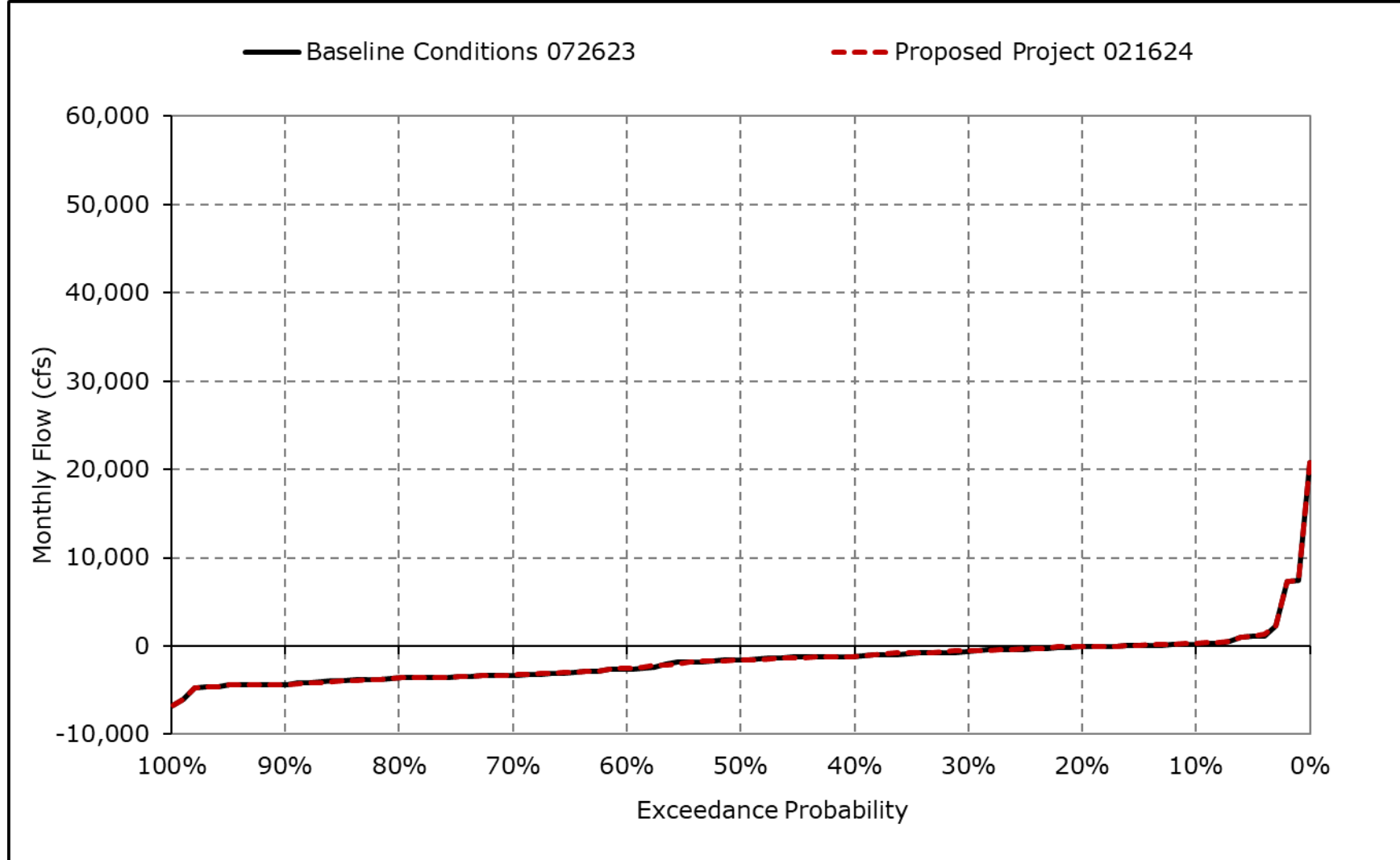
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9g. Qwest, October**



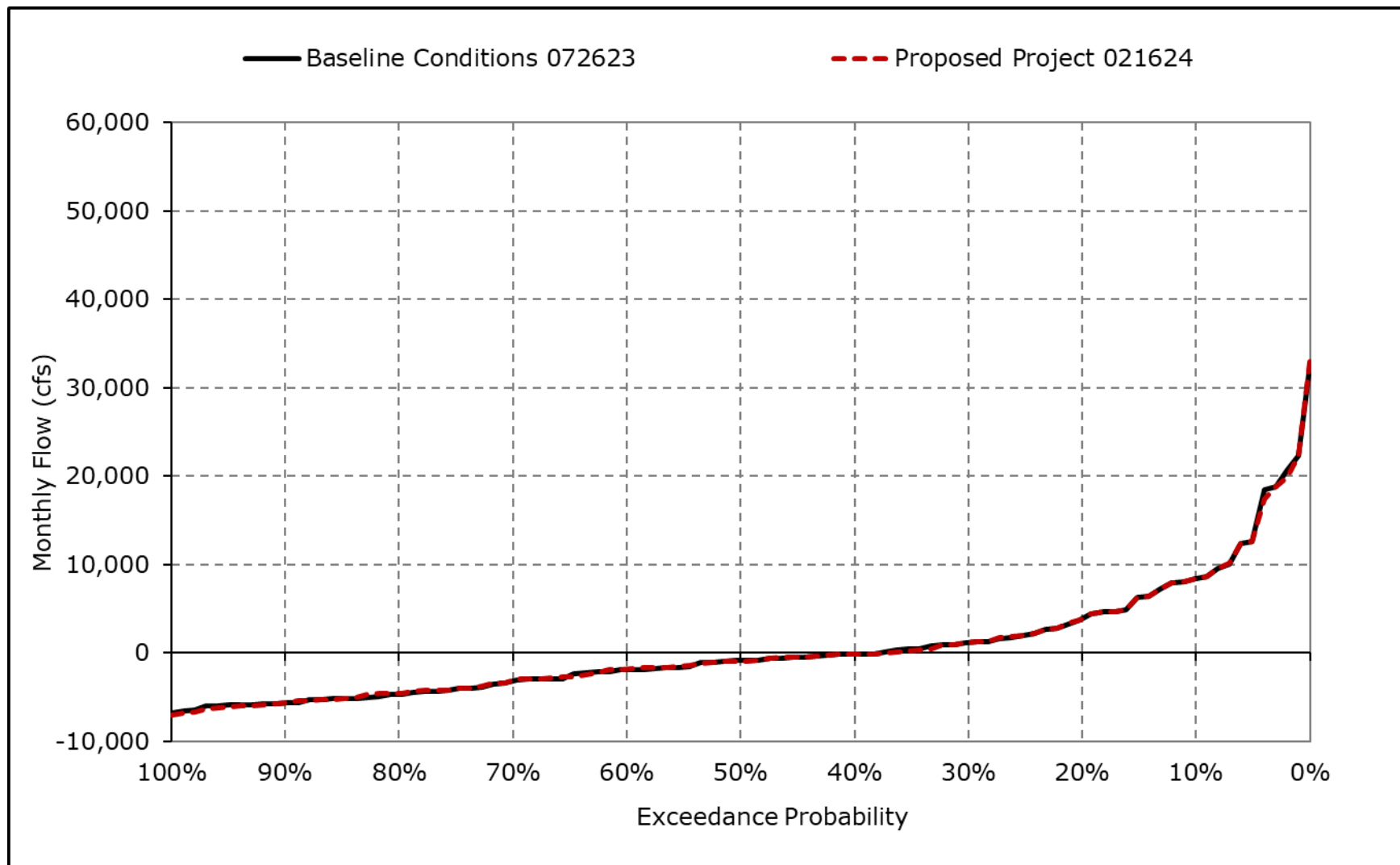
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9h. Qwest, November**



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

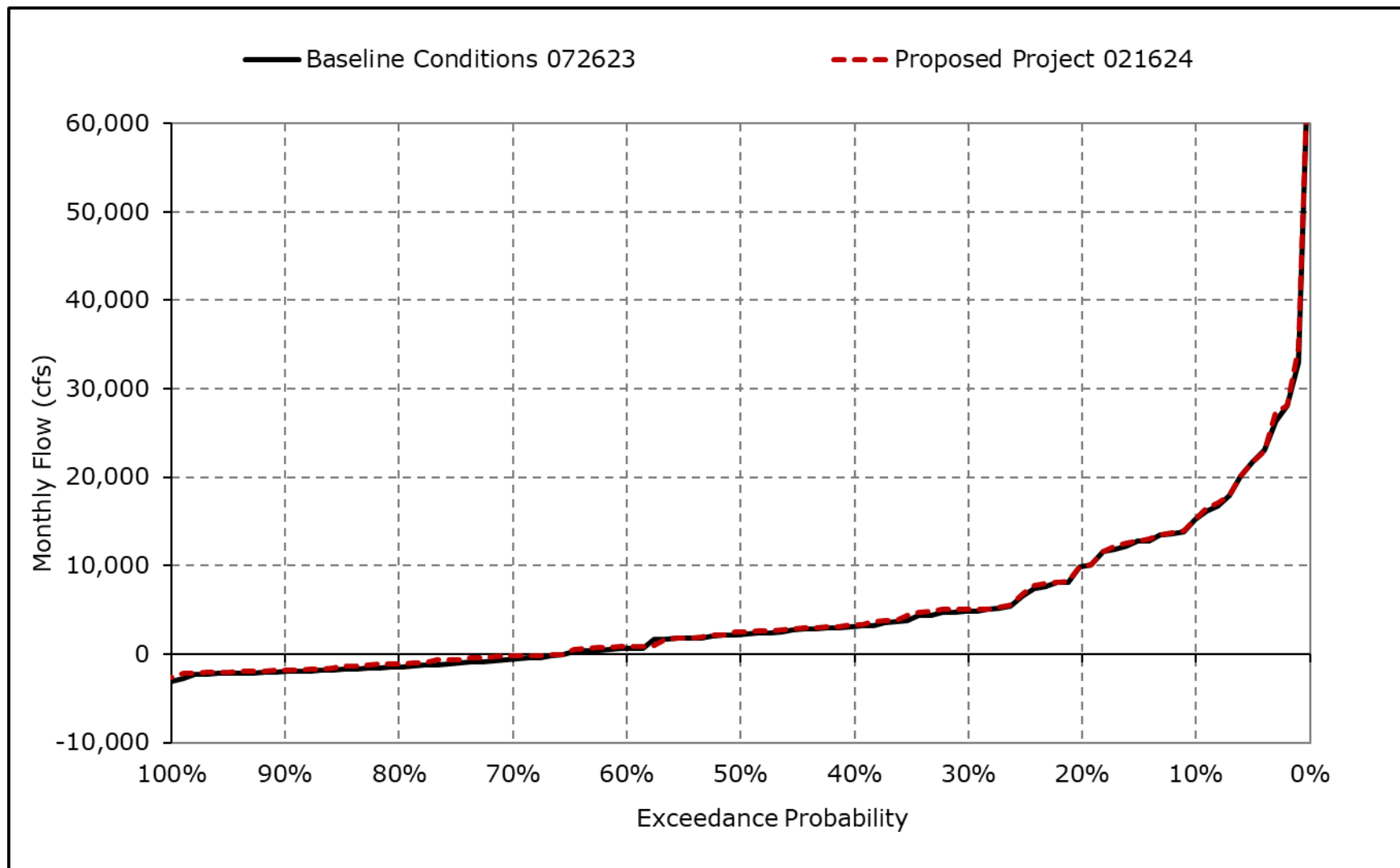
**Figure 4B-2-9i. Qwest, December**



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

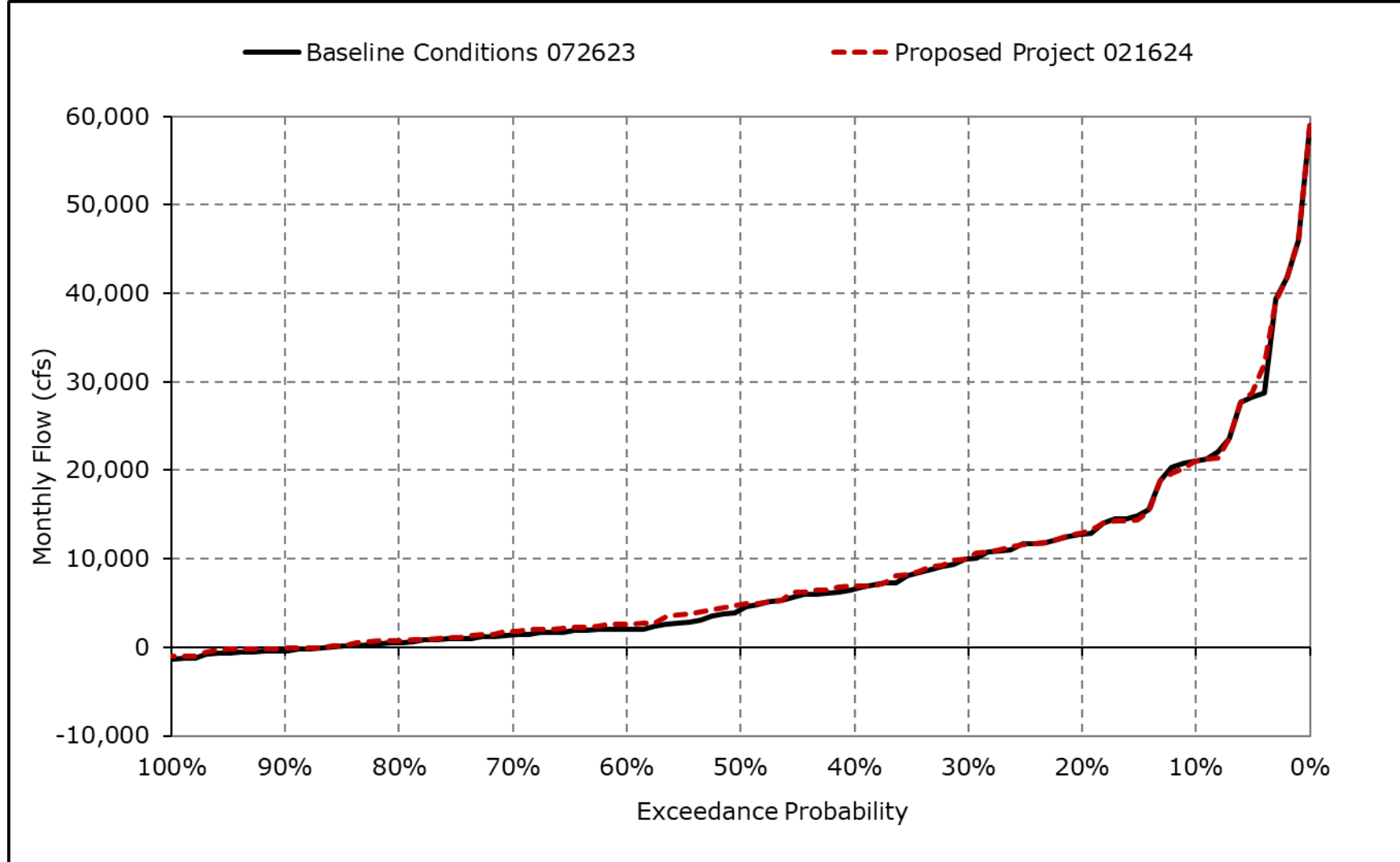


**Figure 4B-2-9j. Qwest, January**



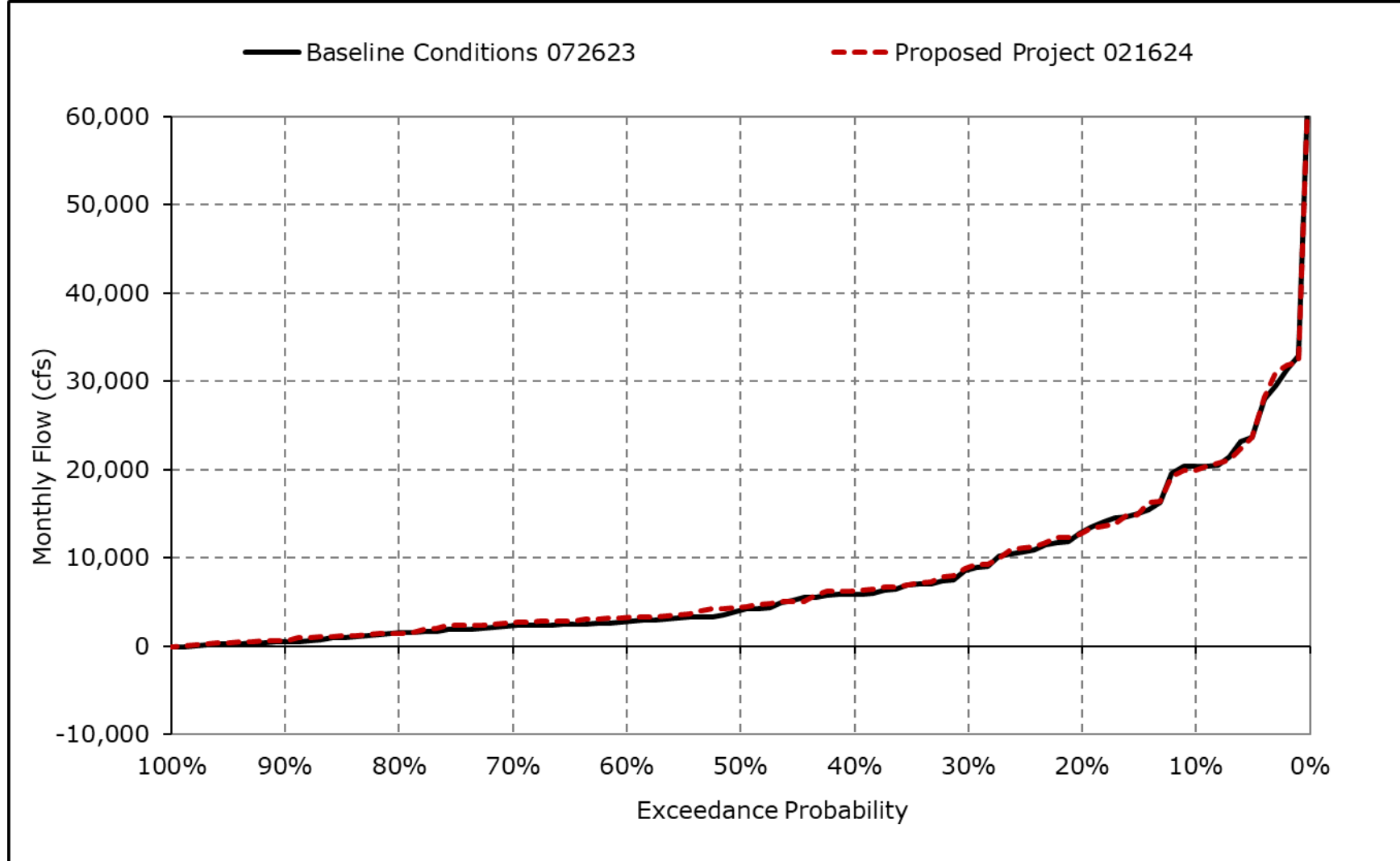
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9k. Qwest, February**



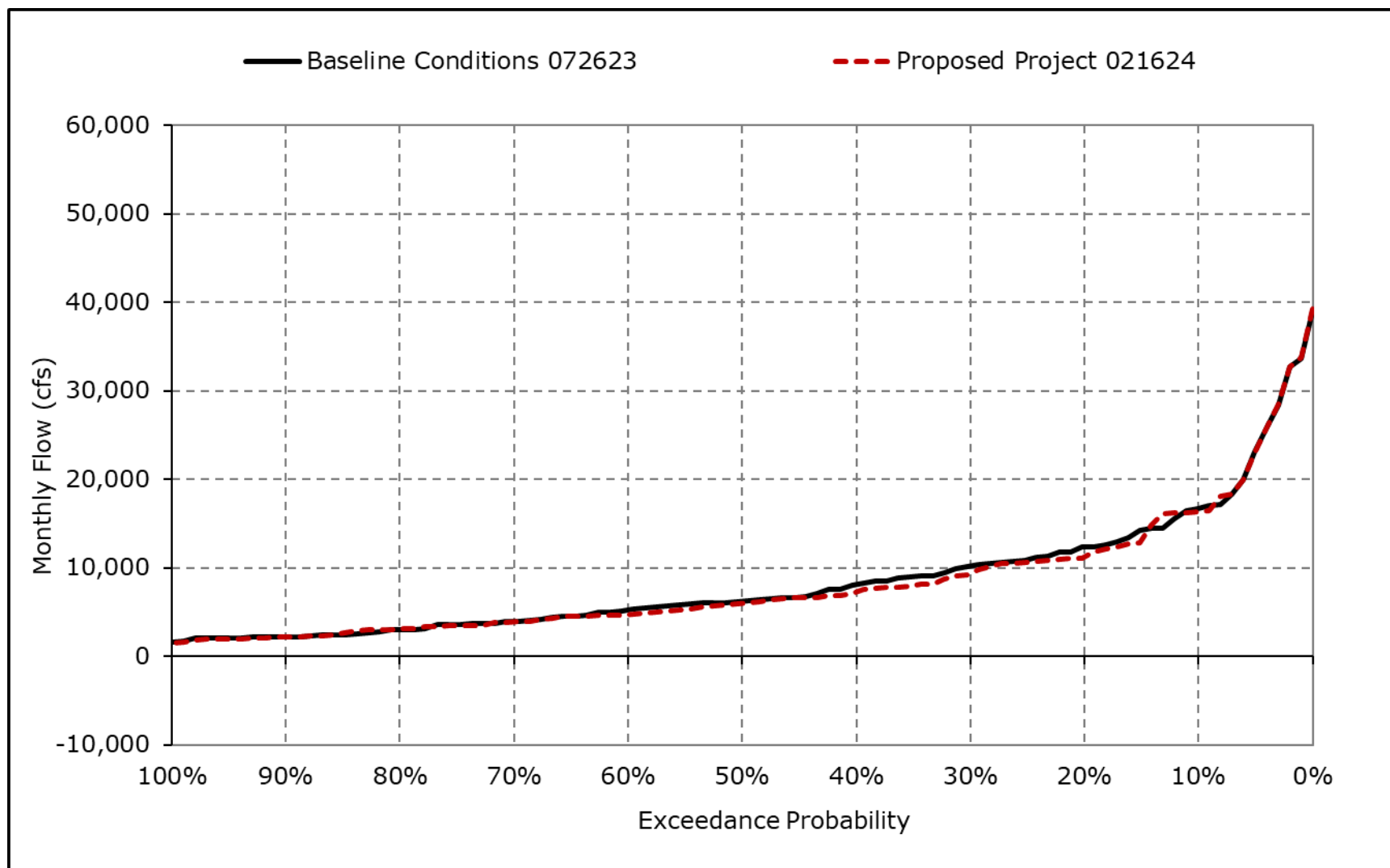
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9I. Qwest, March**



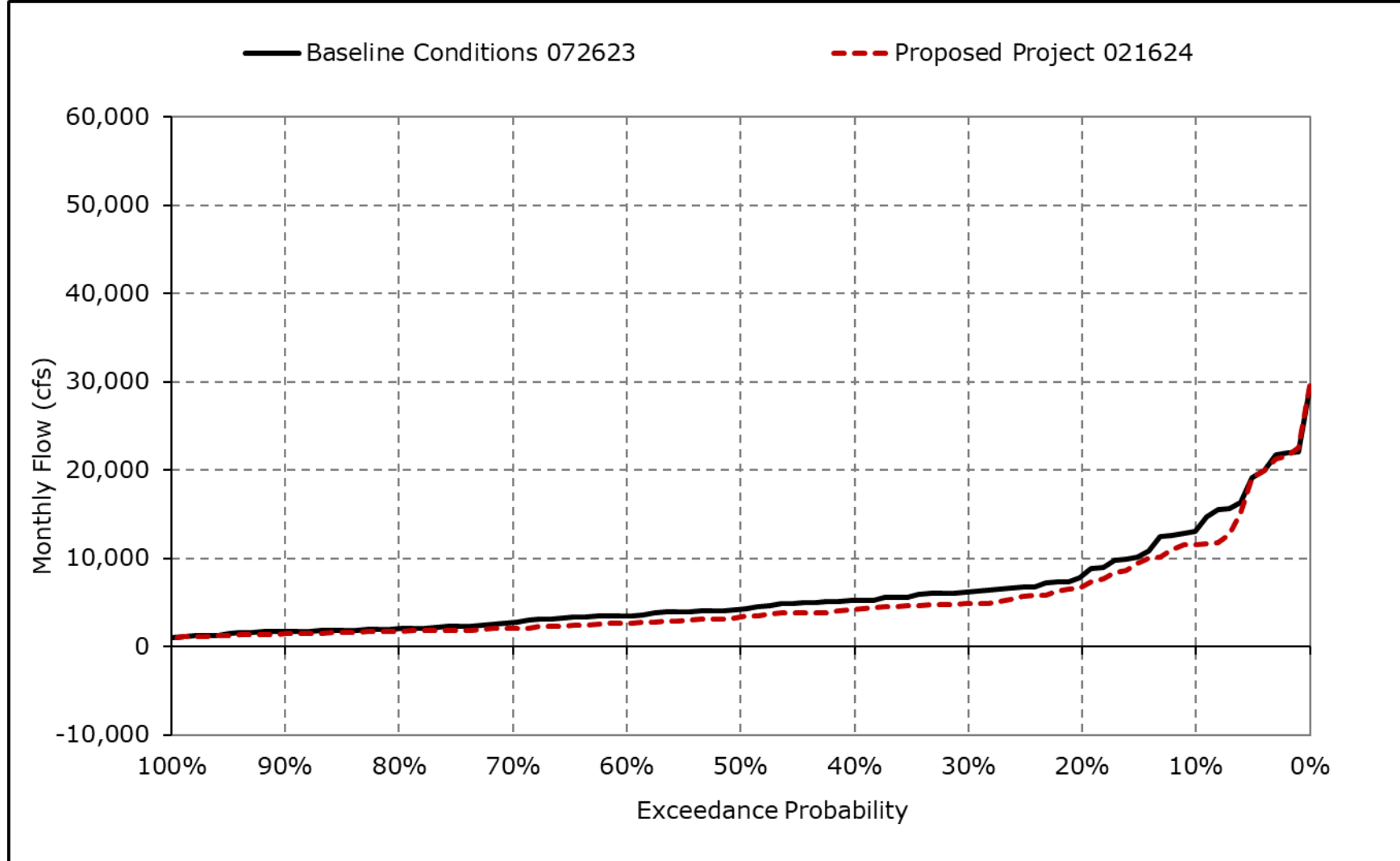
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9m. Qwest, April**



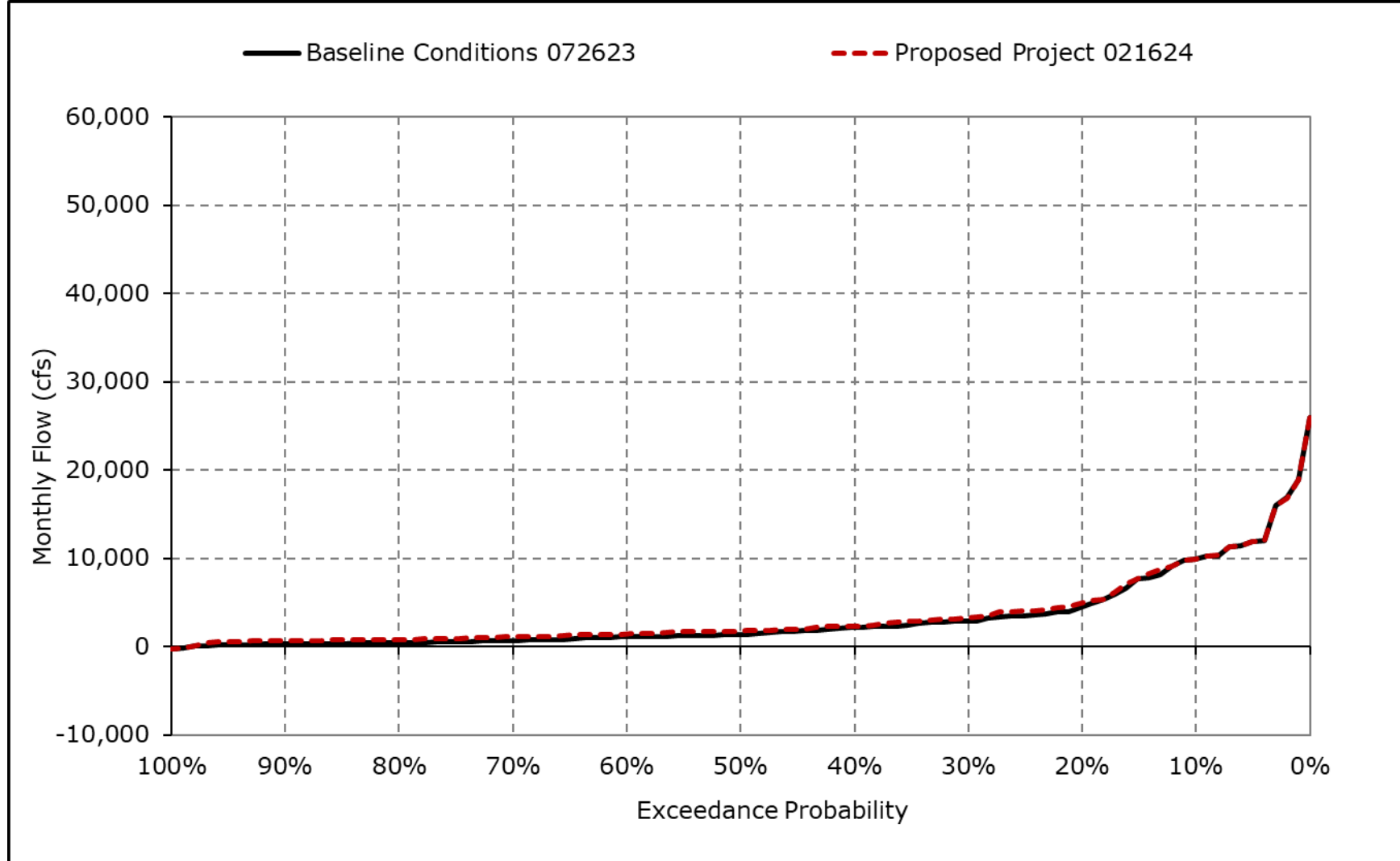
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9n. Qwest, May**



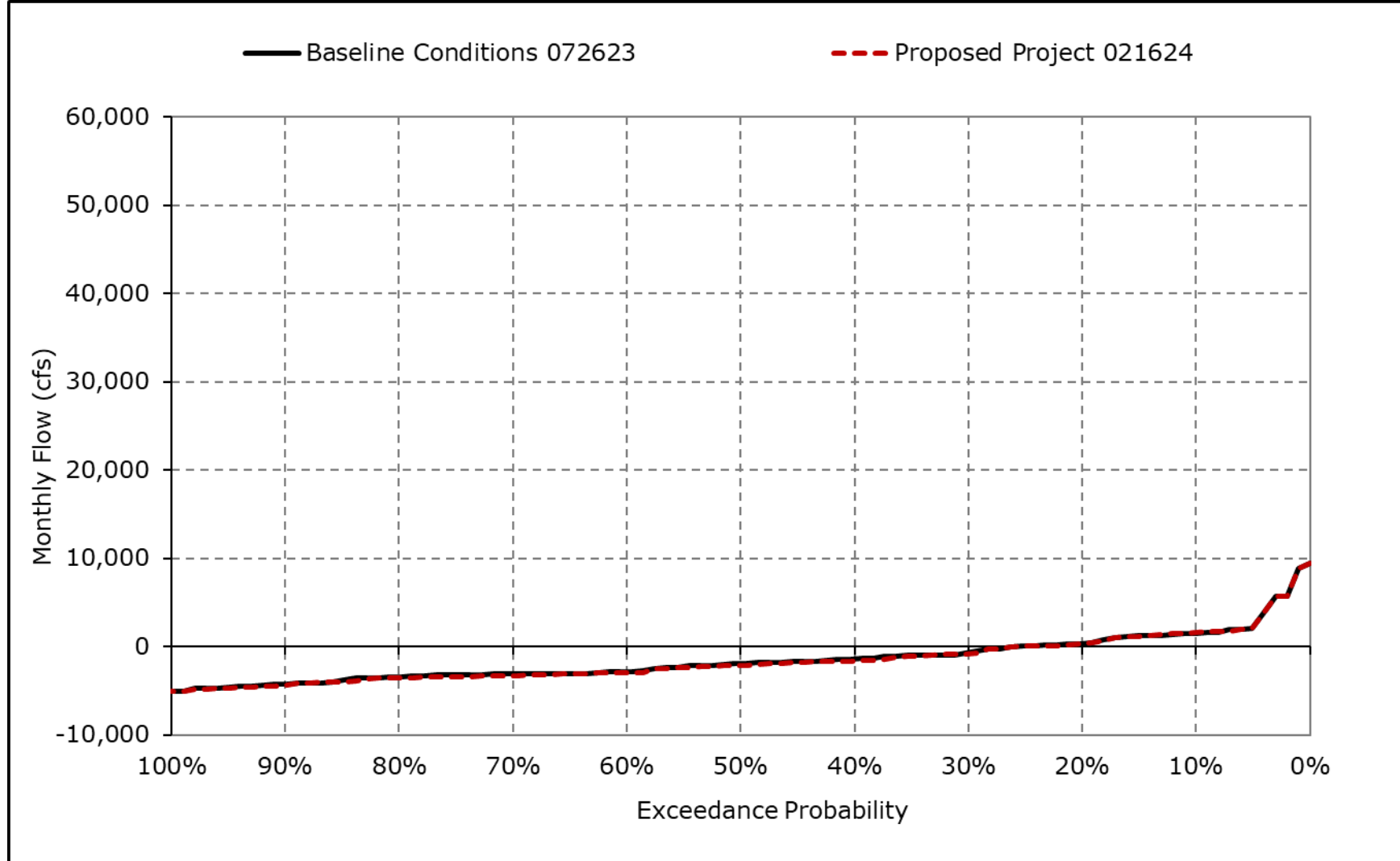
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9o. Qwest, June**



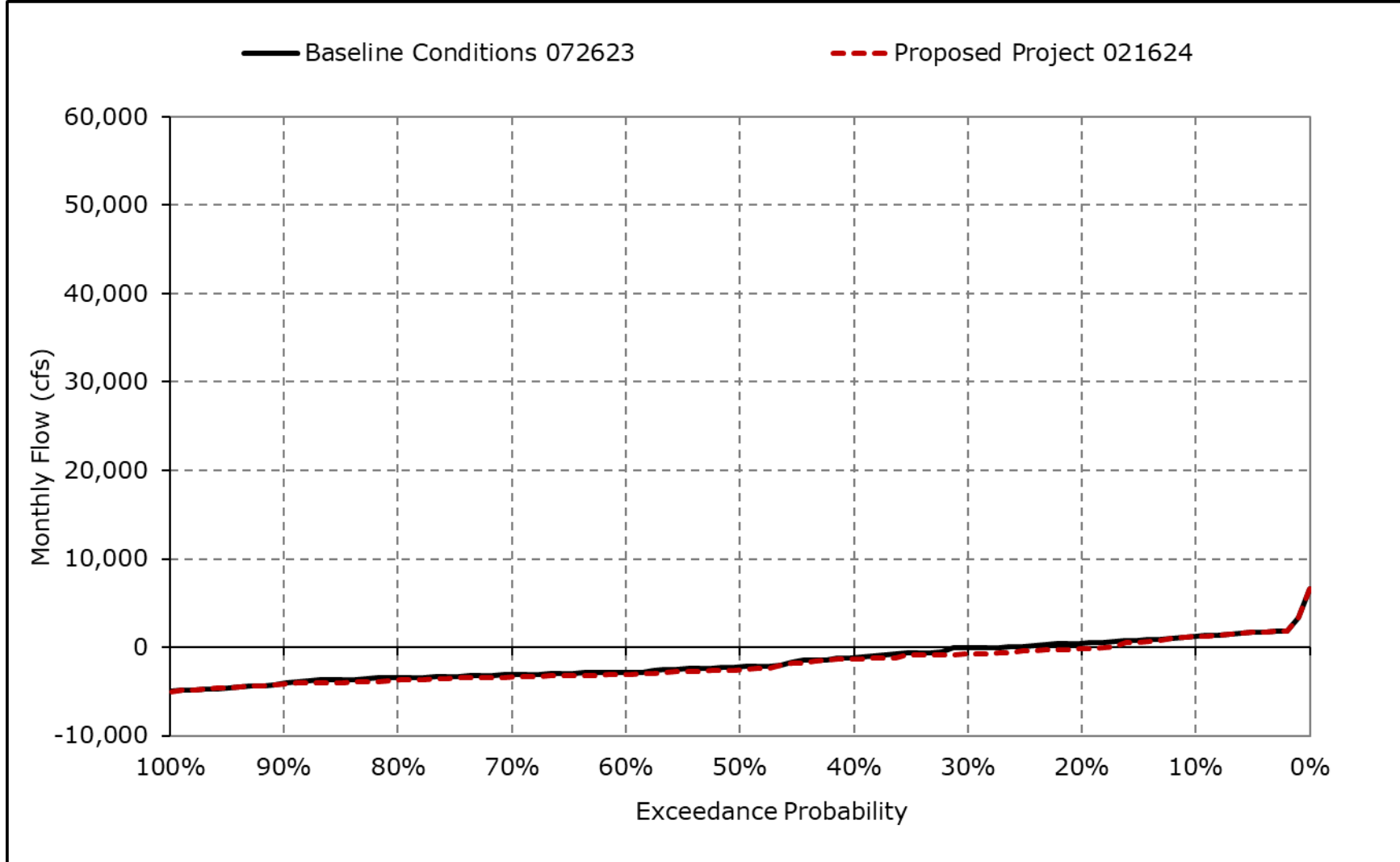
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-9p. Qwest, July**



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

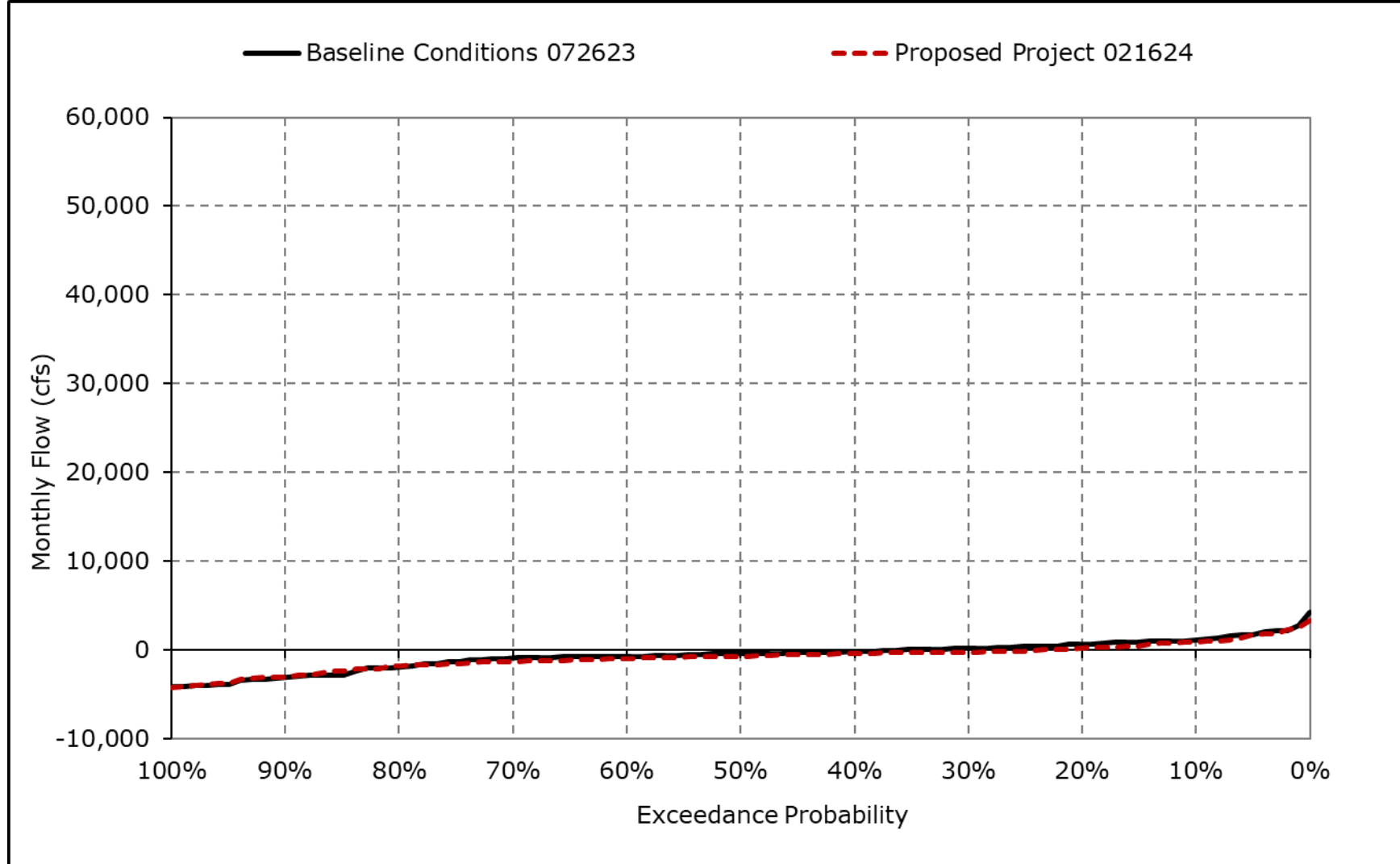
**Figure 4B-2-9q. Qwest, August**



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



**Figure 4B-2-9r. Qwest, September**



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

**Table 4B-2-10-1a. Delta Outflow, Baseline Conditions 072623, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,750	16,307	61,184	93,250	123,381	97,994	63,503	47,843	32,017	10,935	7,056	10,506
20% Exceedance	8,125	8,186	34,925	61,886	79,649	62,225	44,811	33,139	20,639	8,808	6,129	10,181
30% Exceedance	7,969	6,682	19,565	36,706	56,522	45,414	31,185	23,254	11,788	8,249	5,885	10,000
40% Exceedance	7,719	6,203	12,118	27,503	40,685	35,875	25,480	18,748	8,656	8,244	5,604	8,447
50% Exceedance	4,845	5,801	9,073	21,439	30,244	24,299	19,181	16,407	7,350	8,005	4,694	4,238
60% Exceedance	4,070	5,446	6,965	17,132	21,409	20,601	15,196	13,022	7,100	6,500	4,033	3,816
70% Exceedance	4,000	4,948	6,122	11,425	16,657	17,807	12,740	11,265	6,935	5,281	4,000	3,088
80% Exceedance	4,000	4,612	5,478	10,011	13,453	13,109	11,148	9,540	6,546	5,000	3,500	3,000
90% Exceedance	3,000	4,500	4,900	7,239	9,597	9,451	10,096	7,739	4,000	4,000	3,000	3,000
Full Simulation Period Average <sup>a</sup>	6,455	9,141	22,209	39,092	50,944	42,791	29,300	22,222	13,267	7,639	5,196	6,494
Wet Water Years (30%)	8,221	15,119	47,570	80,707	101,897	81,961	55,323	39,956	25,311	10,619	7,240	10,852
Above Normal Water Years (11%)	6,085	6,820	14,592	50,616	59,027	56,105	30,579	23,772	14,114	9,698	6,424	10,416
Below Normal Water Years (21%)	6,487	7,930	12,212	21,347	32,990	28,290	22,358	18,687	8,646	7,643	4,441	4,081
Dry Water Years (22%)	5,813	6,272	10,766	13,893	21,516	19,063	14,038	11,606	6,733	5,188	4,129	3,435
Critical Water Years (16%)	4,240	5,061	8,749	11,077	13,876	11,855	9,724	7,144	5,154	4,000	2,975	3,000

**Table 4B-2-10-1b. Delta Outflow, Proposed Project 021624, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,594	16,039	61,396	93,715	126,226	98,481	64,355	47,317	32,007	10,382	6,197	11,250
20% Exceedance	8,281	8,200	34,950	62,139	78,805	61,744	43,926	32,055	21,173	8,272	5,695	10,338
30% Exceedance	7,969	6,738	19,576	37,261	56,195	45,881	30,310	22,369	12,283	8,249	5,484	10,025
40% Exceedance	7,813	6,248	12,240	27,521	41,016	35,708	24,935	16,790	9,347	8,005	5,185	9,022
50% Exceedance	4,803	5,728	8,656	21,809	30,846	25,333	19,412	15,121	7,833	7,679	4,181	4,610
60% Exceedance	4,138	5,378	7,086	17,250	21,470	21,674	15,616	11,942	7,100	6,500	4,000	3,853
70% Exceedance	4,000	4,882	6,288	11,782	16,709	18,185	12,406	10,640	7,100	5,000	3,574	3,325
80% Exceedance	4,000	4,612	5,594	9,845	14,456	13,840	11,441	9,488	6,607	5,000	3,500	3,000
90% Exceedance	3,000	4,500	4,849	7,441	10,127	9,417	9,994	7,630	4,000	4,000	3,000	3,000
Full Simulation Period Average <sup>a</sup>	6,495	9,135	22,230	39,308	51,135	43,096	29,172	21,424	13,497	7,491	4,862	6,602
Wet Water Years (30%)	8,290	15,097	47,540	80,929	101,816	81,830	55,086	38,551	25,612	10,539	6,860	10,715
Above Normal Water Years (11%)	6,170	6,946	14,362	50,788	59,320	56,567	30,186	22,840	14,576	9,279	5,648	11,233
Below Normal Water Years (21%)	6,484	7,812	12,328	21,584	33,011	29,062	22,253	17,603	9,029	7,443	4,183	4,204
Dry Water Years (22%)	5,848	6,295	10,754	13,921	22,023	19,678	14,183	11,540	6,771	5,025	3,780	3,586
Critical Water Years (16%)	4,257	5,100	8,961	11,546	14,298	11,830	9,580	6,941	5,154	4,000	2,958	3,000

**Table 4B-2-10-1c. Delta Outflow, Proposed Project 021624 minus Baseline Conditions 072623, Monthly Outflow (cfs)**

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-156	-269	212	466	2,845	487	853	-527	-9	-553	-859	744
20% Exceedance	156	14	25	253	-844	-481	-885	-1,084	534	-537	-434	156
30% Exceedance	0	56	11	555	-328	467	-875	-885	495	0	-402	25
40% Exceedance	94	45	122	18	331	-167	-544	-1,958	691	-239	-418	576
50% Exceedance	-42	-73	-417	370	602	1,034	231	-1,286	483	-326	-513	372
60% Exceedance	68	-69	121	118	62	1,073	420	-1,080	0	0	-33	37
70% Exceedance	0	-66	166	357	52	378	-334	-624	165	-281	-426	238
80% Exceedance	0	0	116	-165	1,003	731	293	-52	61	0	0	0
90% Exceedance	0	0	-51	202	530	-34	-103	-110	0	0	0	0
Full Simulation Period Average <sup>a</sup>	40	-6	21	216	191	305	-128	-799	230	-148	-333	108
Wet Water Years (30%)	69	-21	-30	222	-82	-131	-237	-1,404	301	-80	-380	-136
Above Normal Water Years (11%)	85	126	-230	171	292	462	-392	-932	462	-418	-776	817
Below Normal Water Years (21%)	-3	-118	117	236	21	772	-105	-1,084	383	-200	-259	123
Dry Water Years (22%)	35	24	-12	27	507	615	145	-66	38	-163	-349	151
Critical Water Years (16%)	18	40	211	469	422	-25	-144	-203	0	0	-17	0

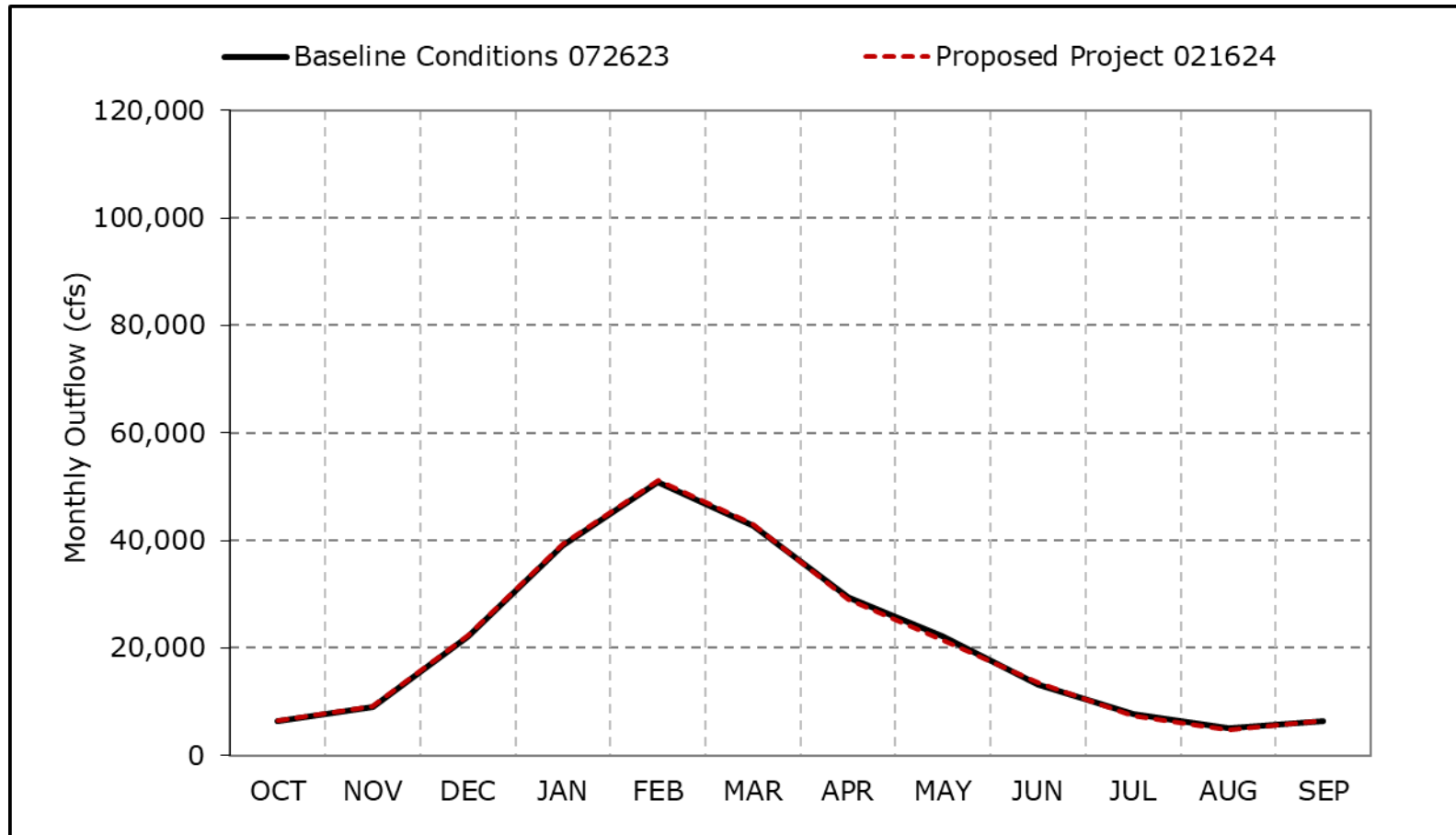
<sup>a</sup> Based on the 100-year simulation period.

\* 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 4B-2-10a. Delta Outflow, Long-Term Average Outflow**

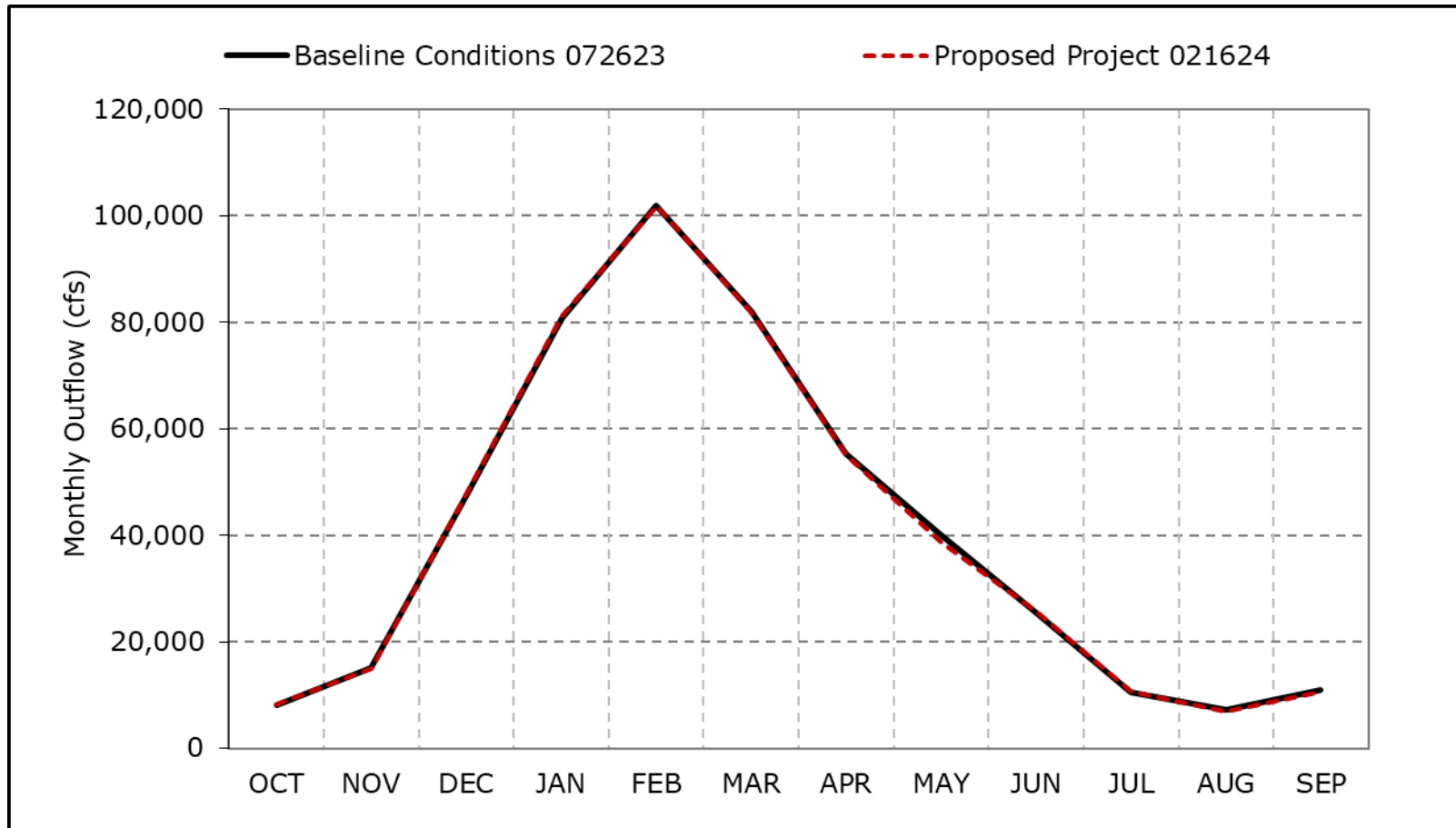


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-10b. Delta Outflow, Wet Year Average Outflow**

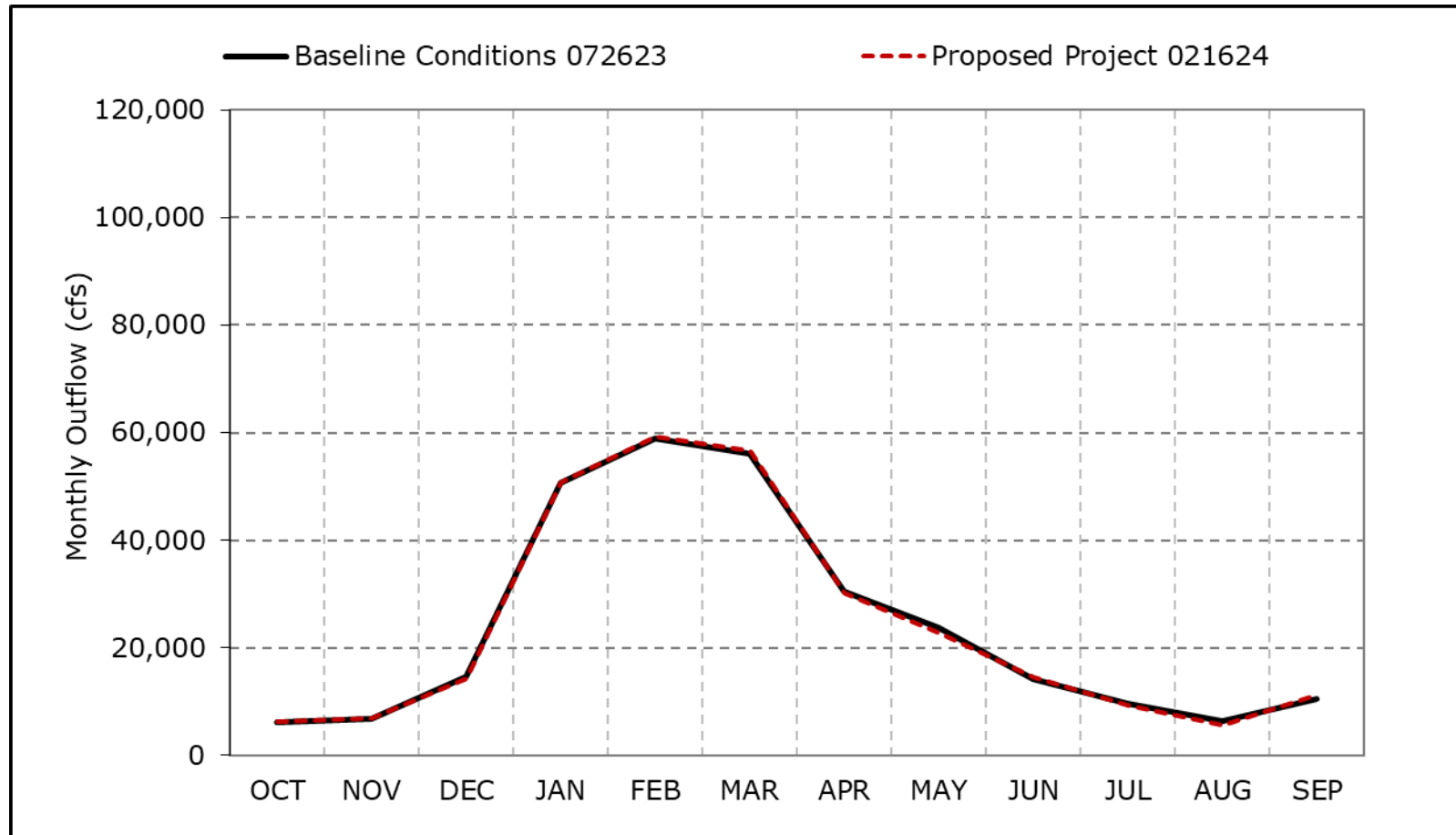


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-10c. Delta Outflow, Above Normal Year Average Outflow**

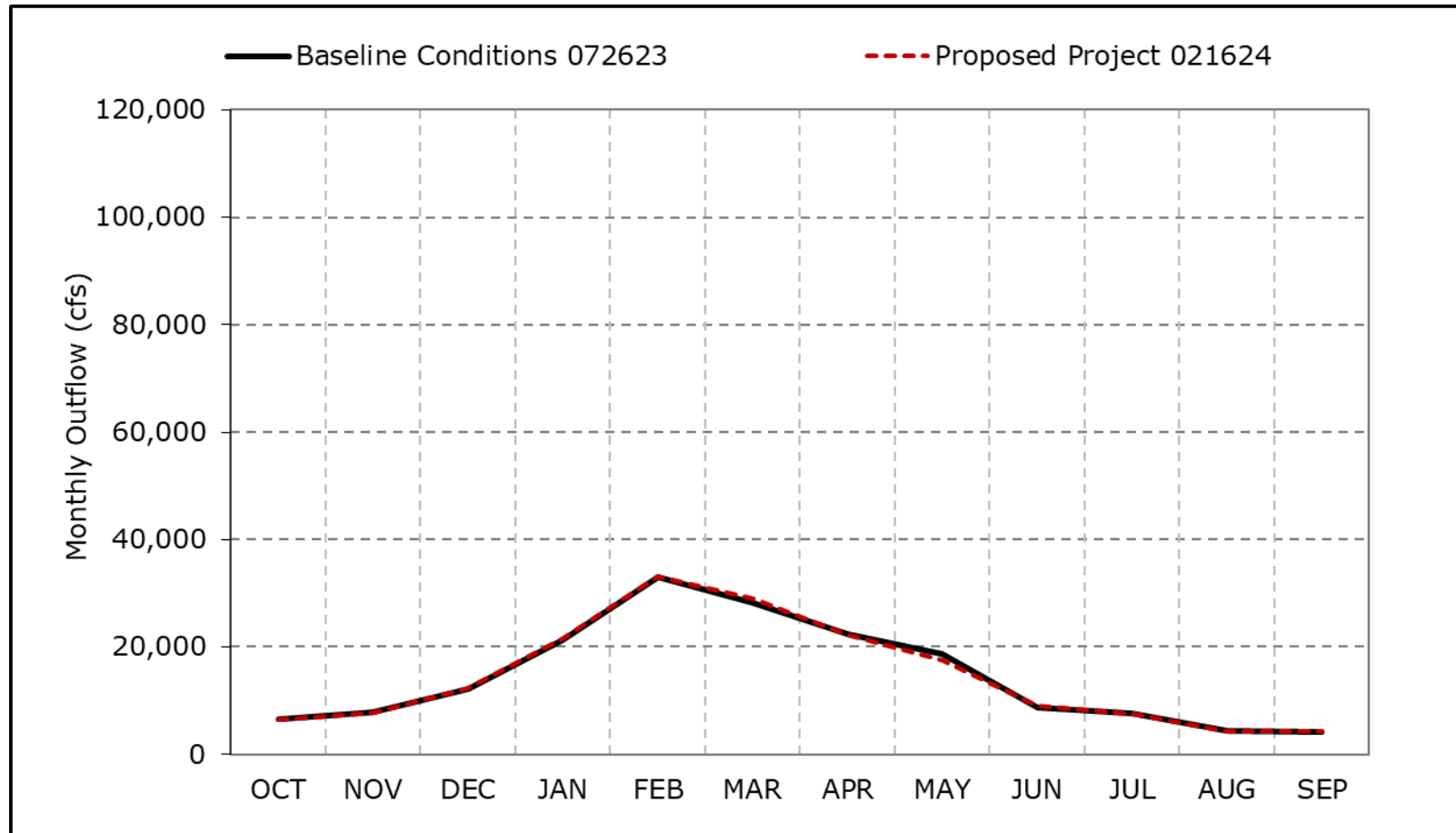


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-10d. Delta Outflow, Below Normal Year Average Outflow**

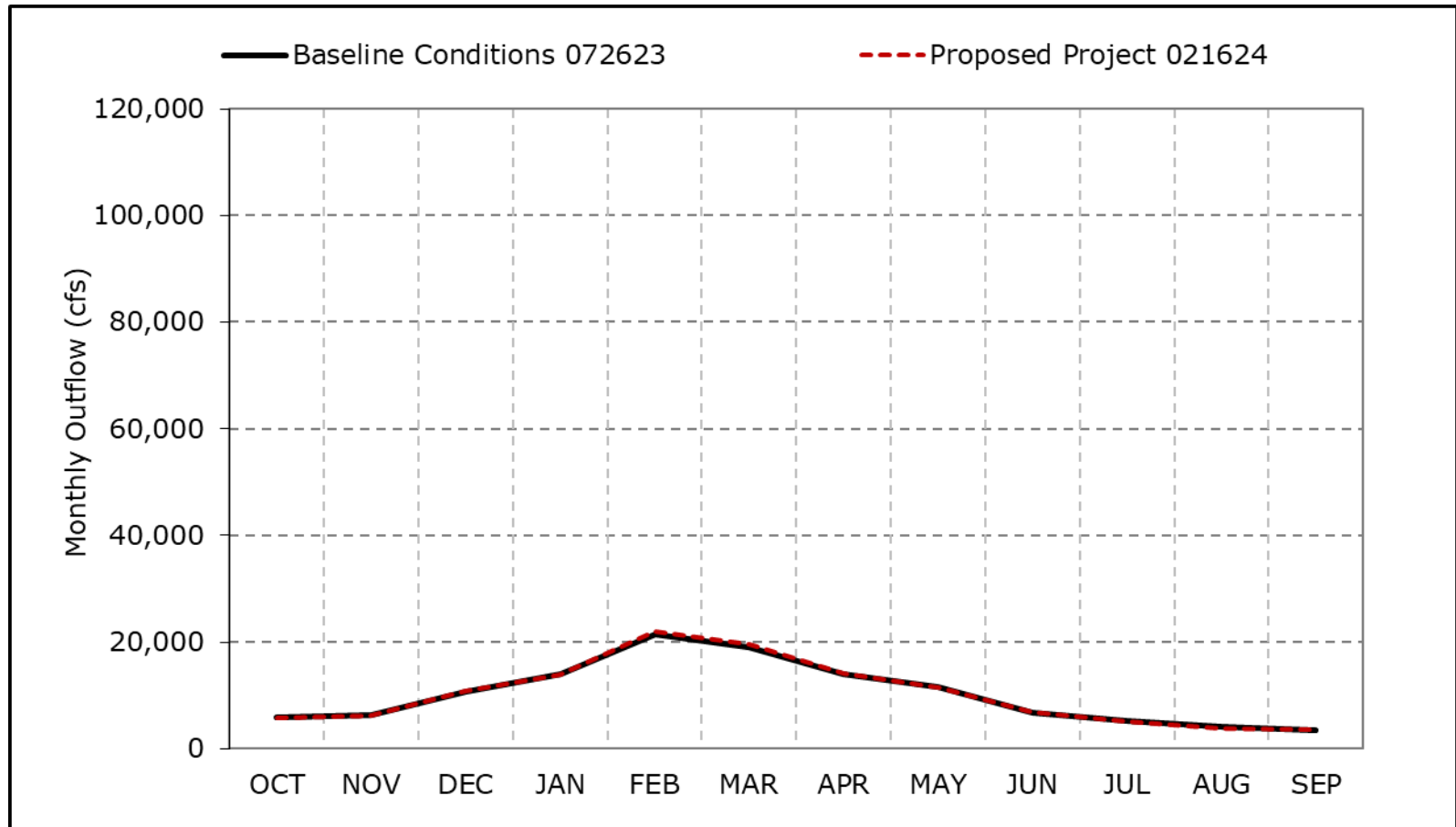


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-10e. Delta Outflow, Dry Year Average Outflow**

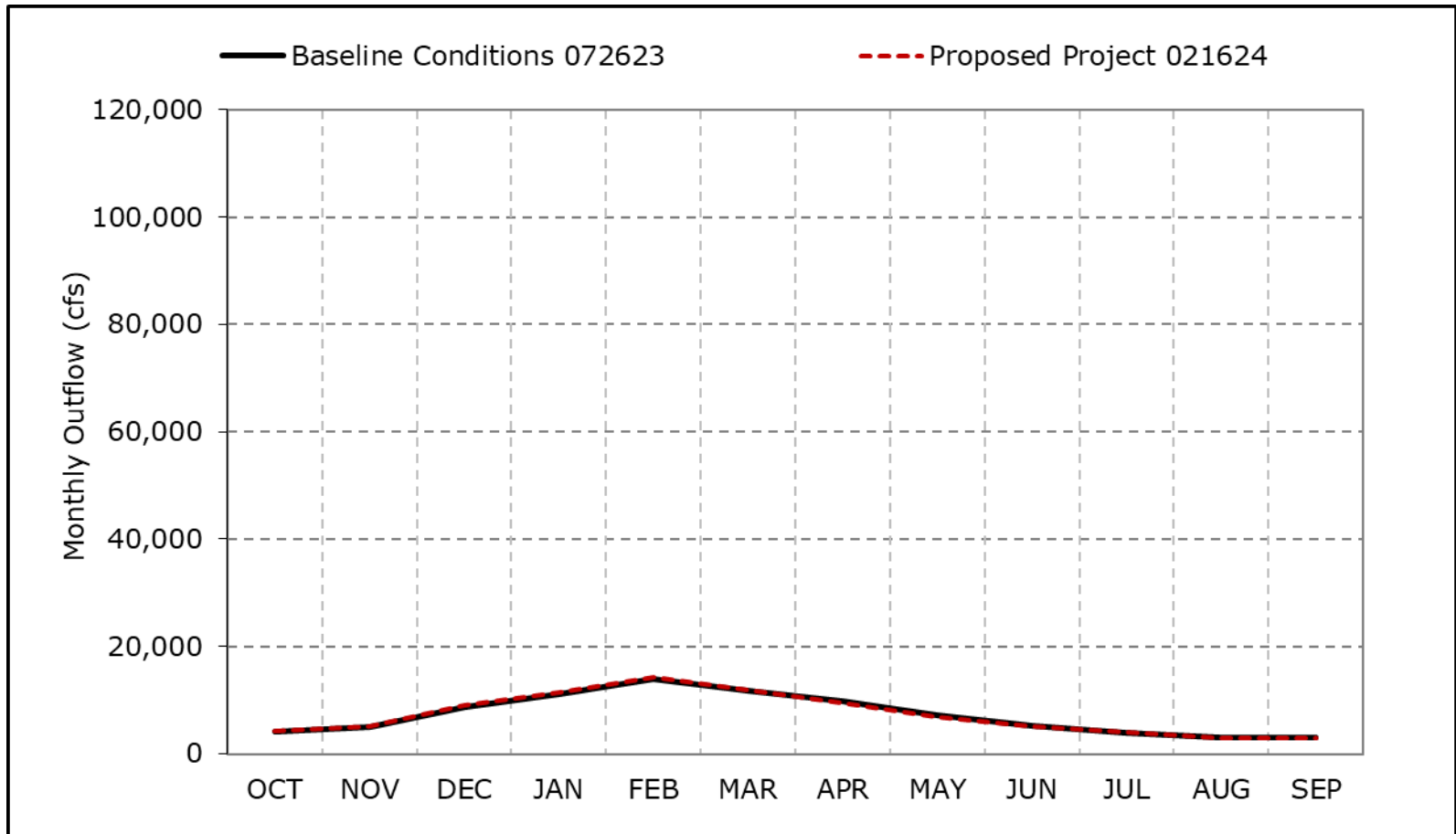


\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

\*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 4B-2-10f. Delta Outflow, Critical Year Average Outflow**



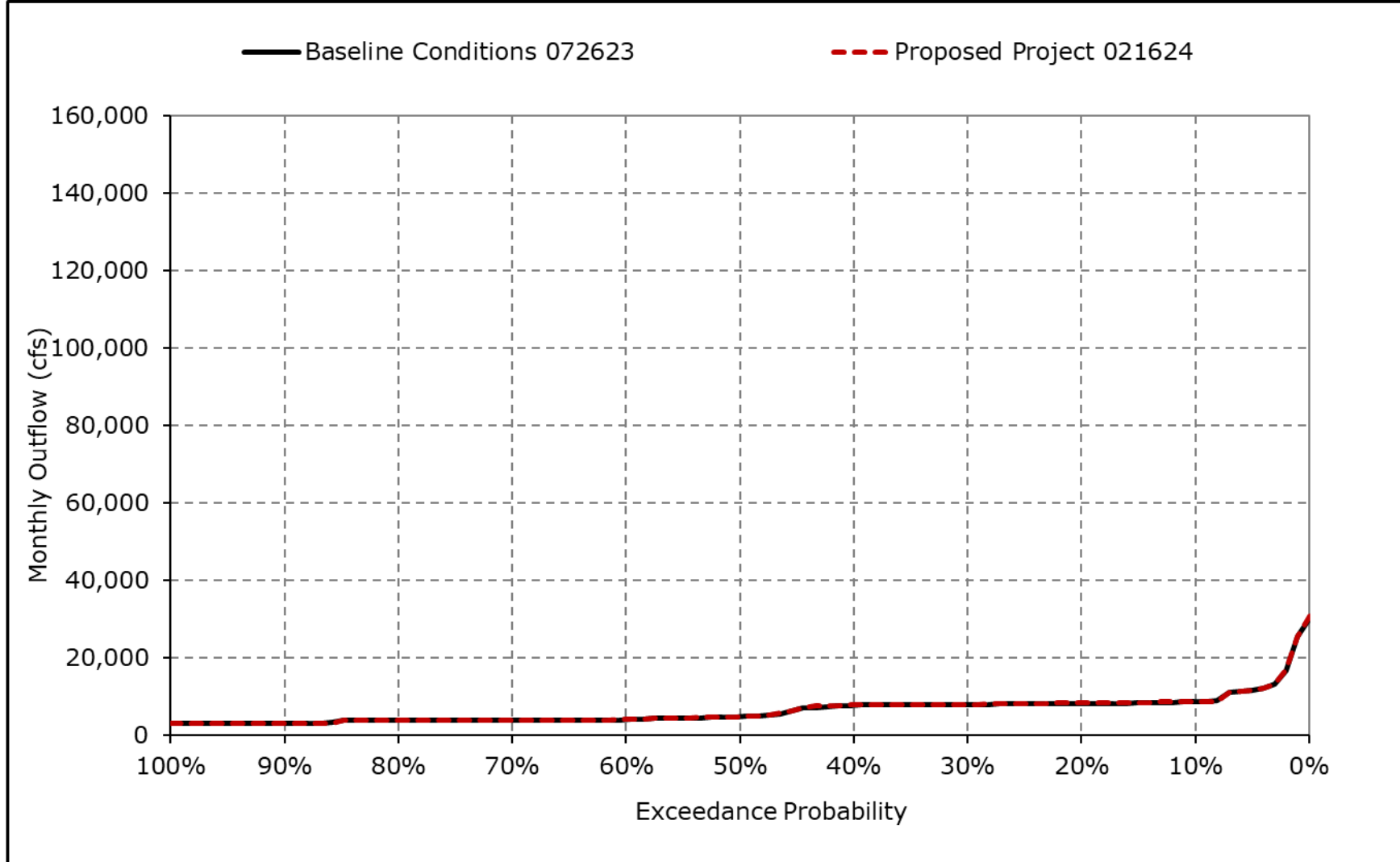
\*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).

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

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

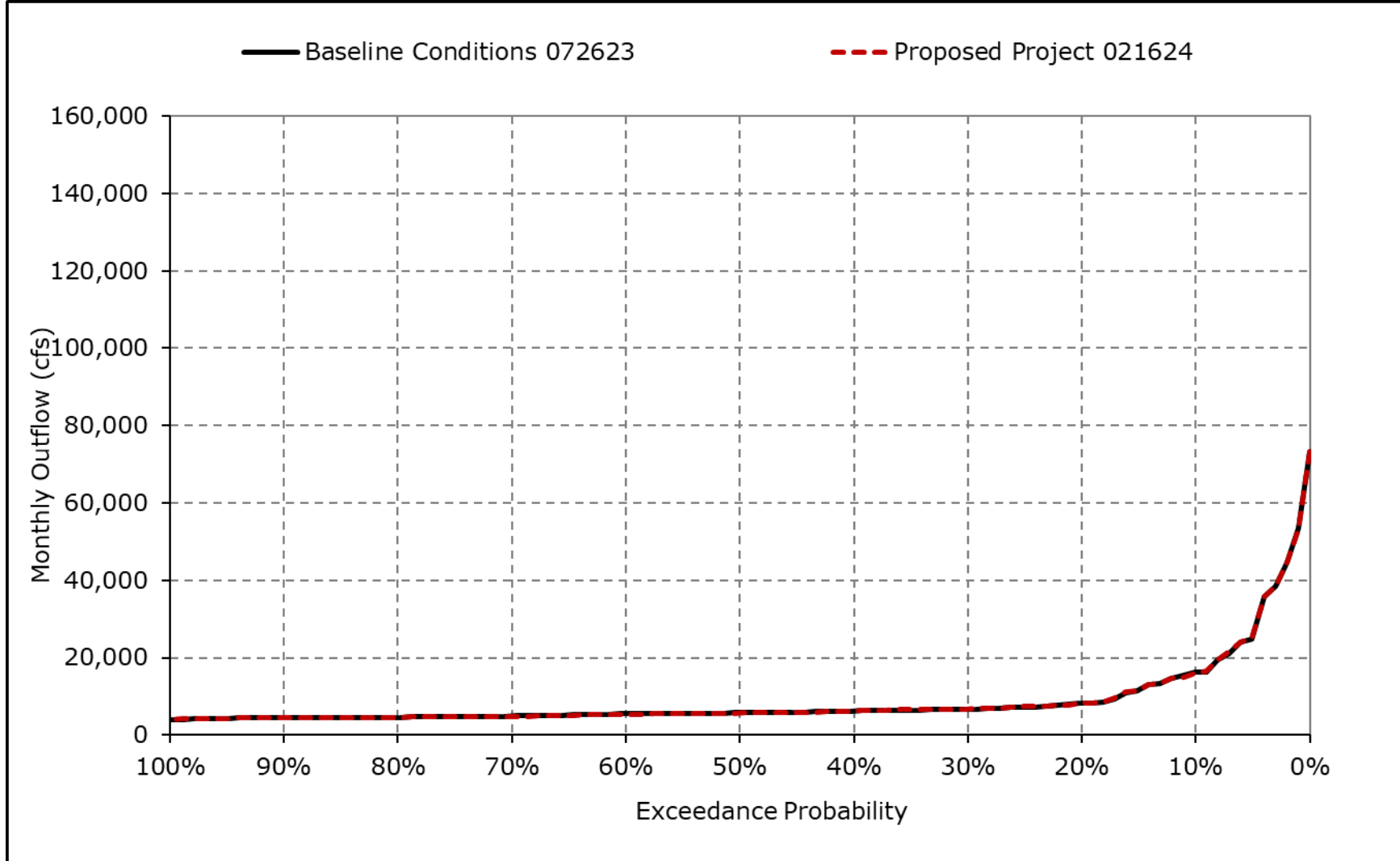


**Figure 4B-2-10g. Delta Outflow, October**



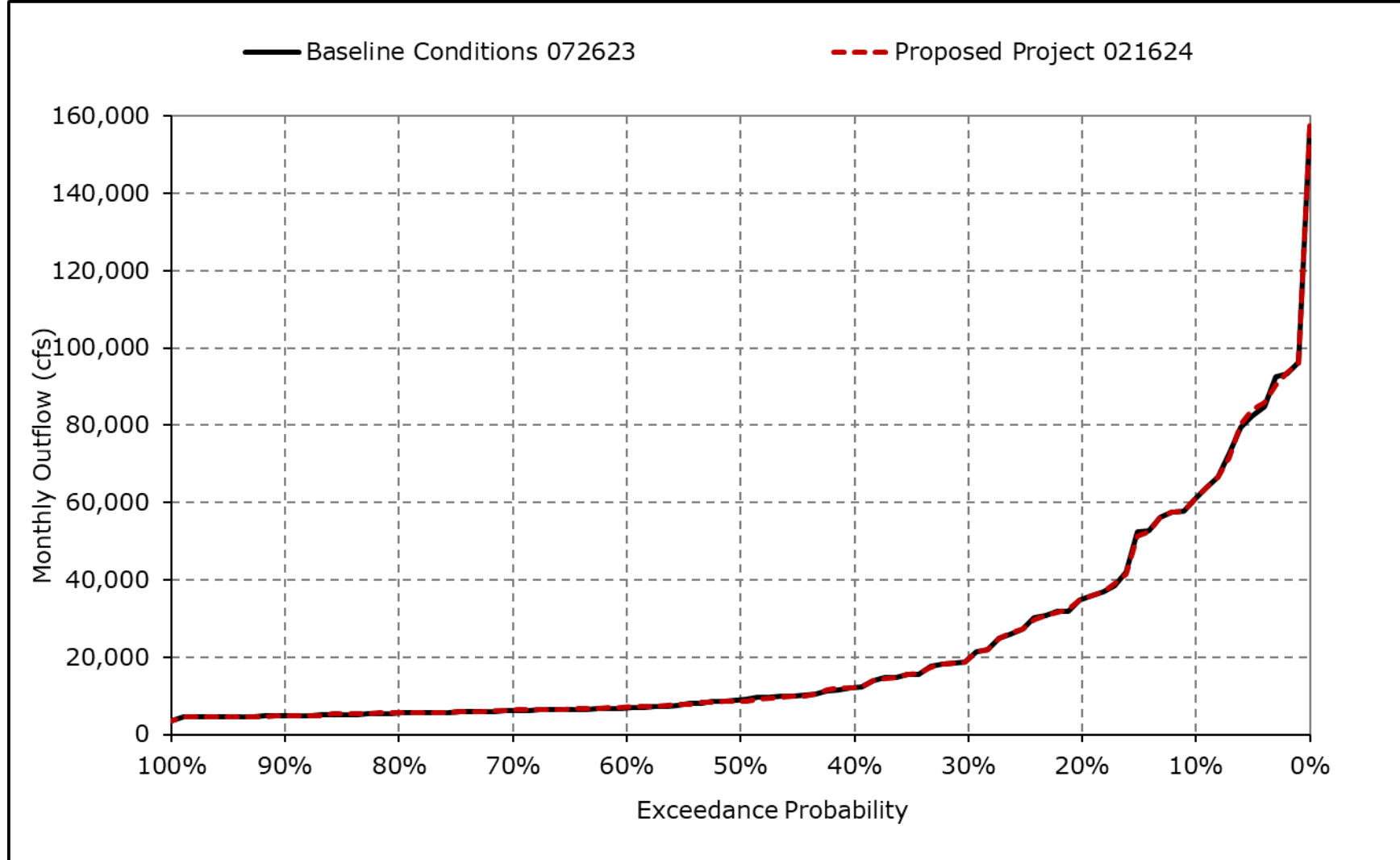
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10h. Delta Outflow, November**



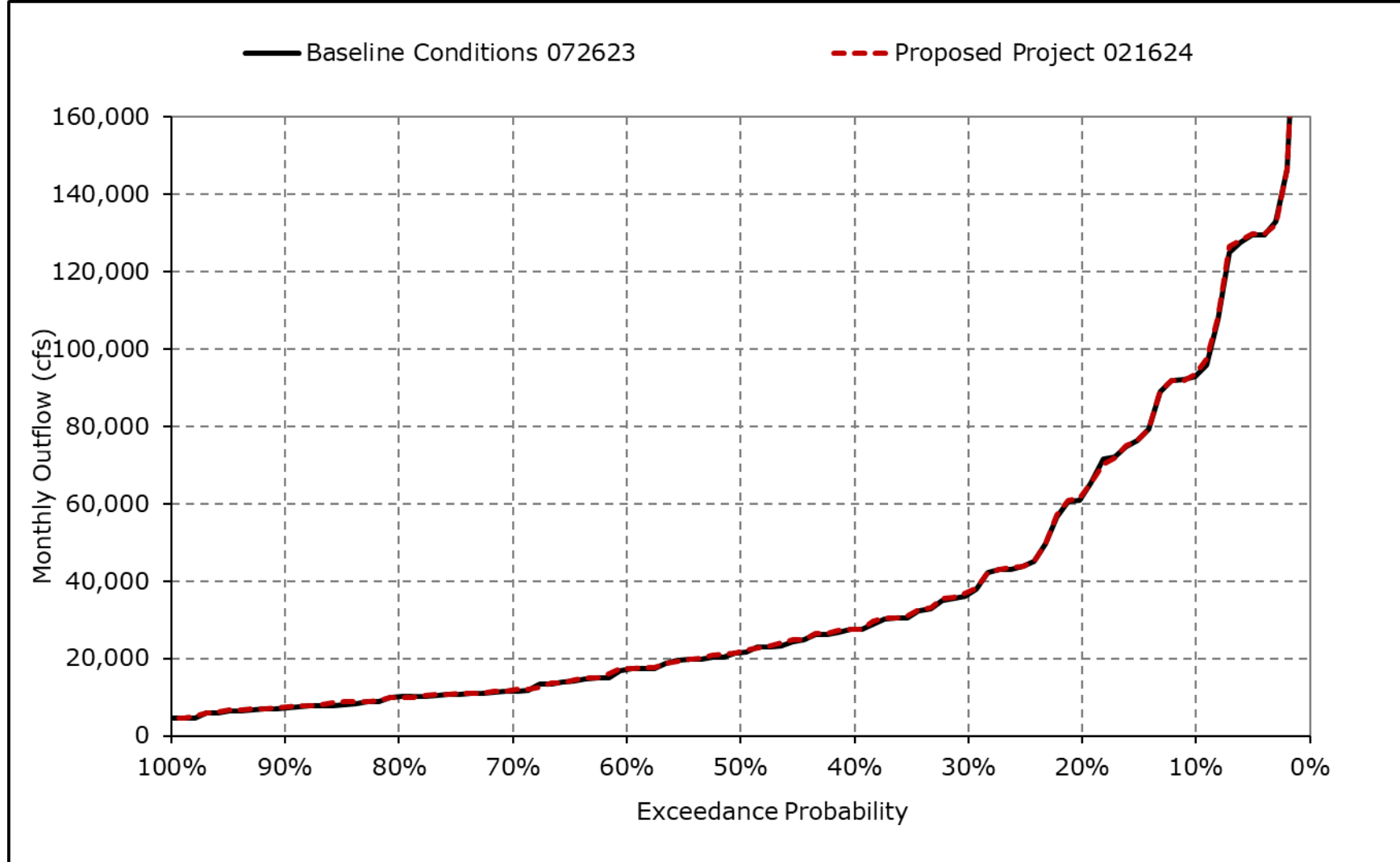
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10i. Delta Outflow, December**



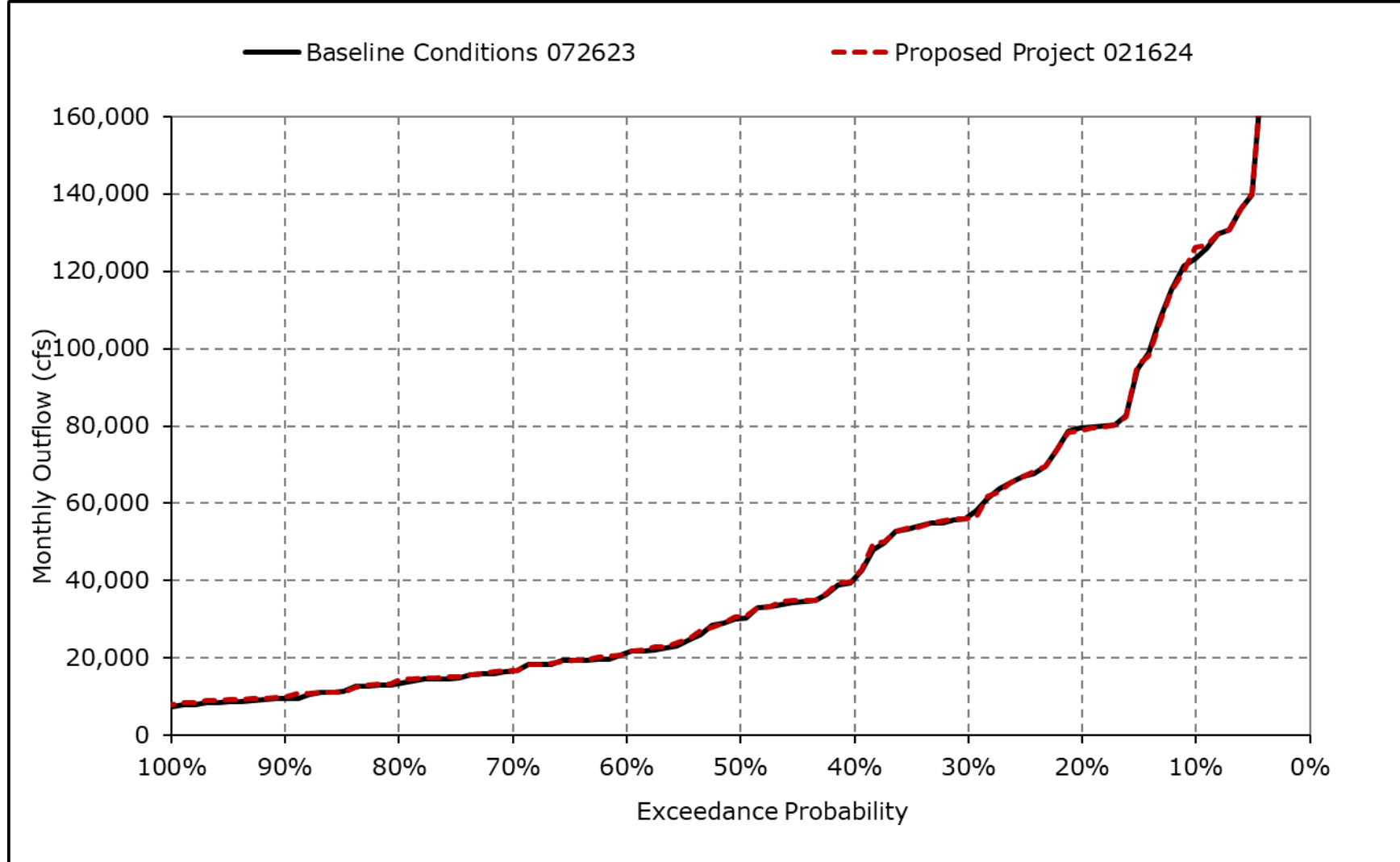
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10j. Delta Outflow, January**



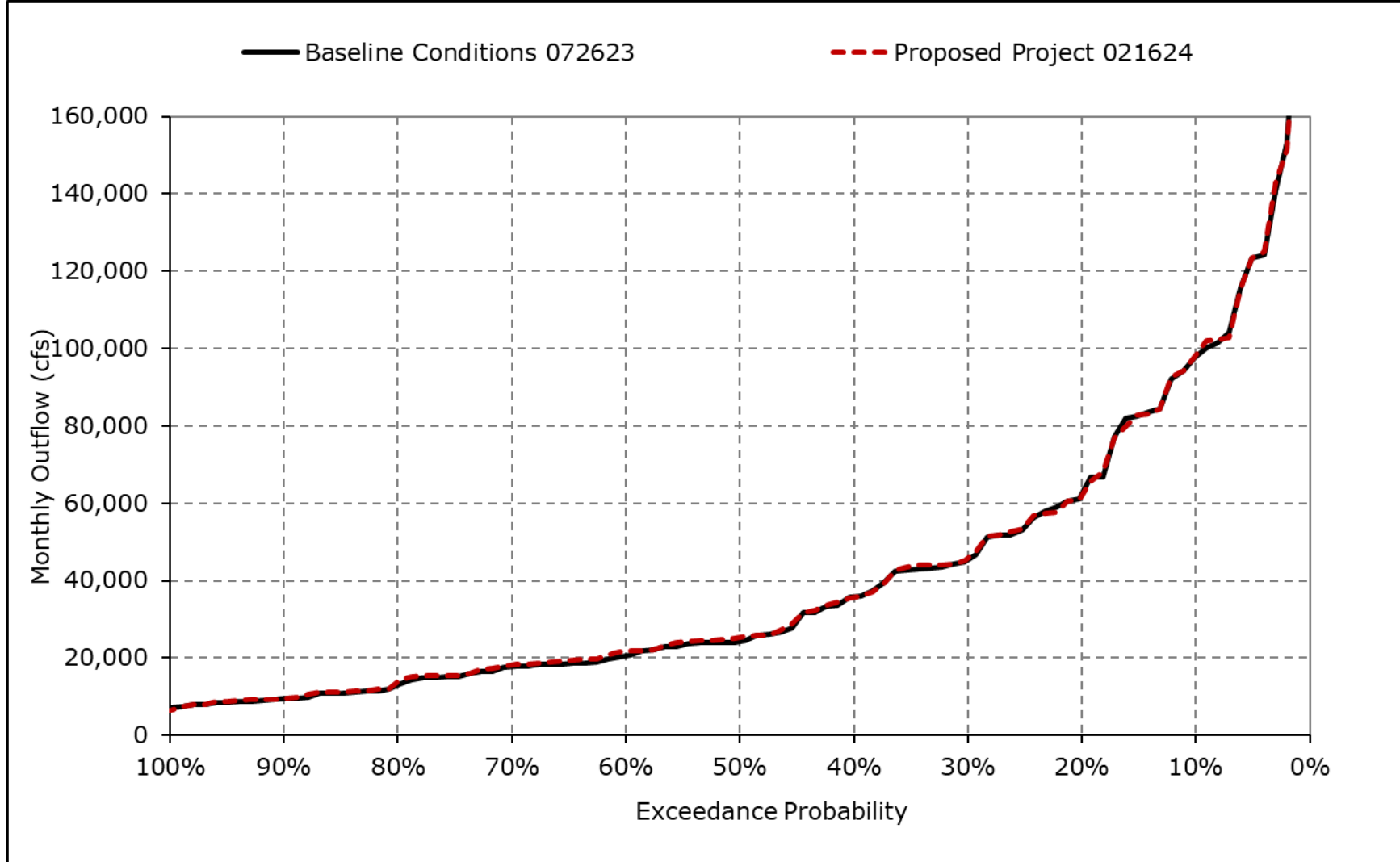
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10k. Delta Outflow, February**



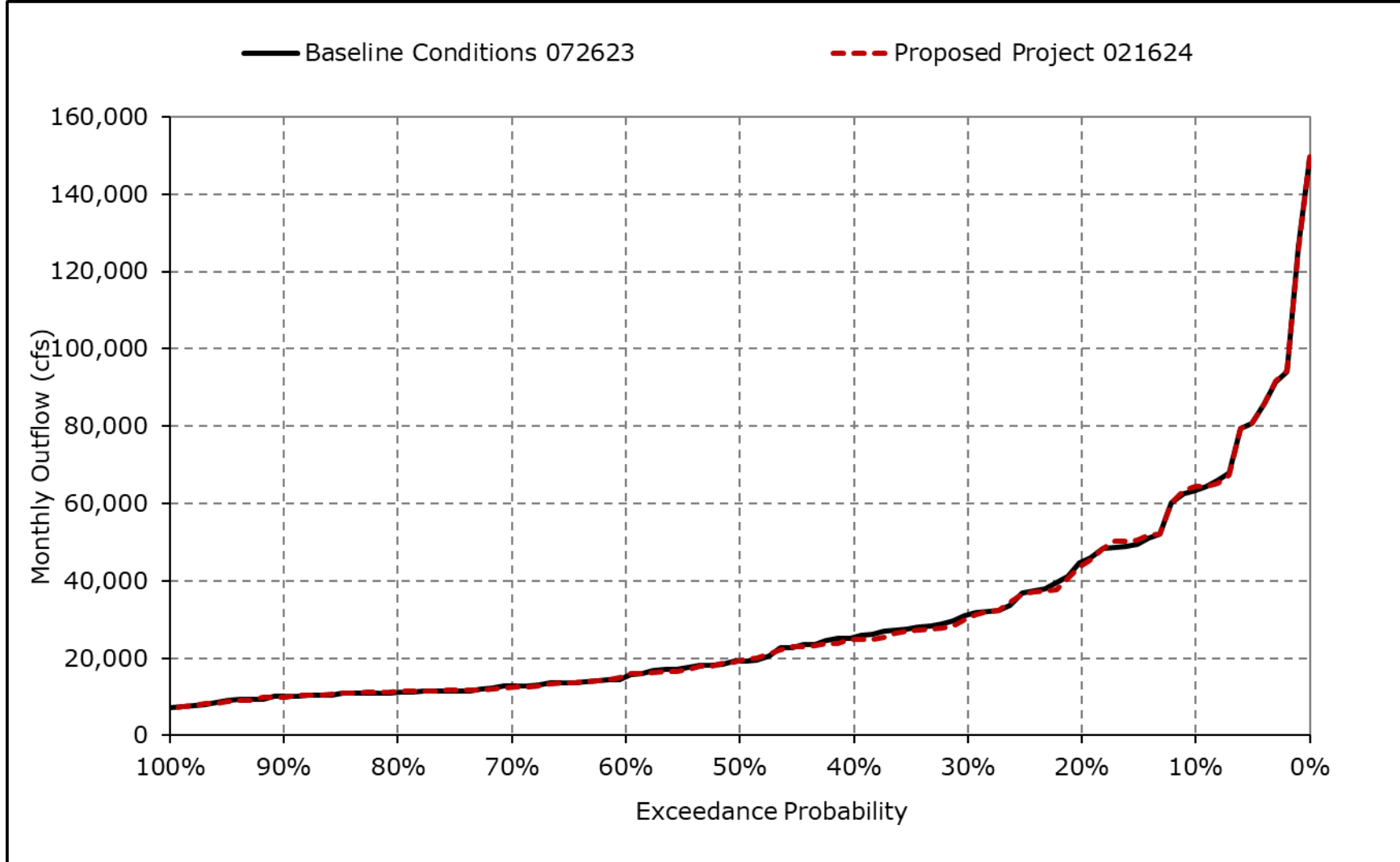
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10I. Delta Outflow, March**



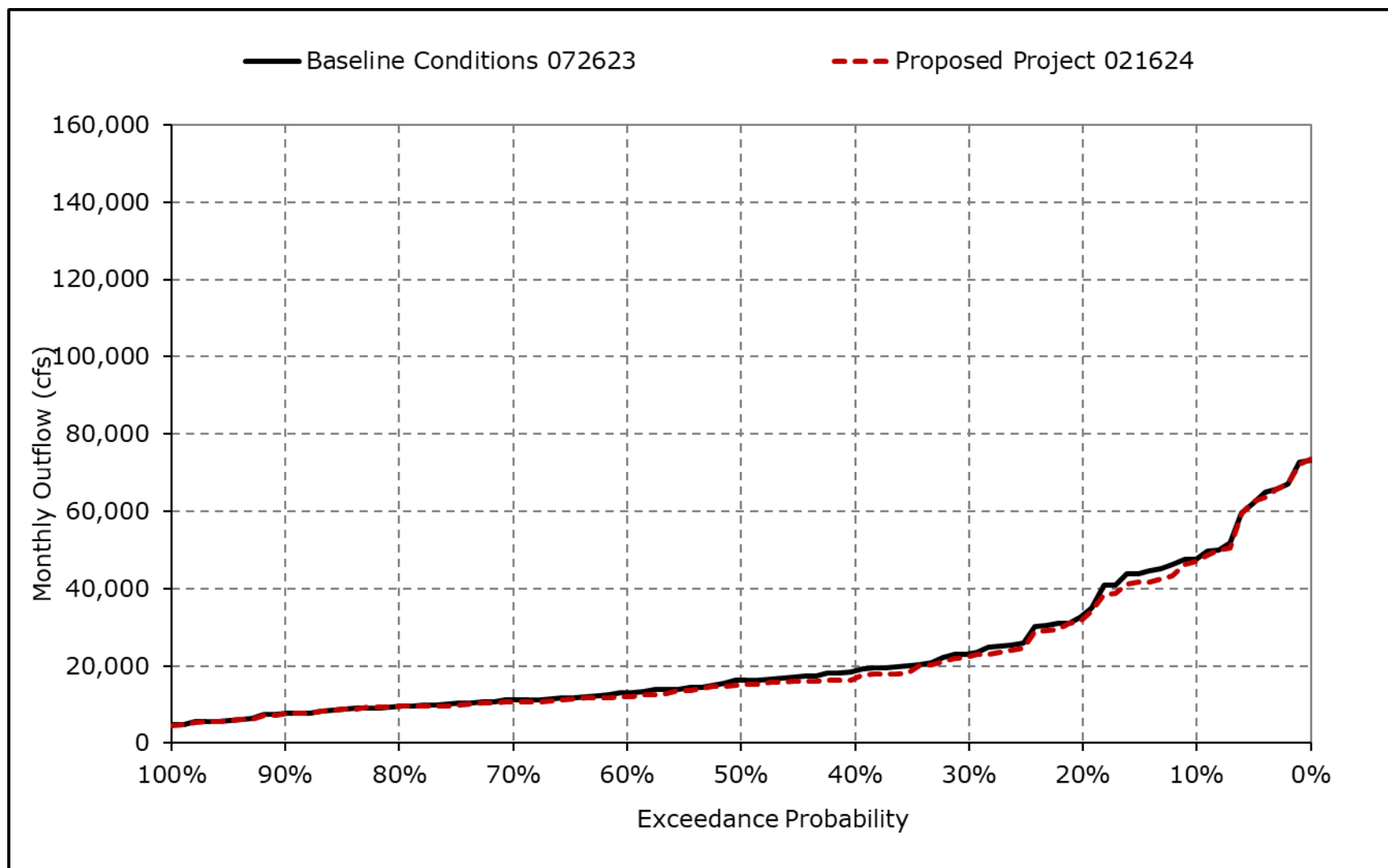
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10m. Delta Outflow, April**



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

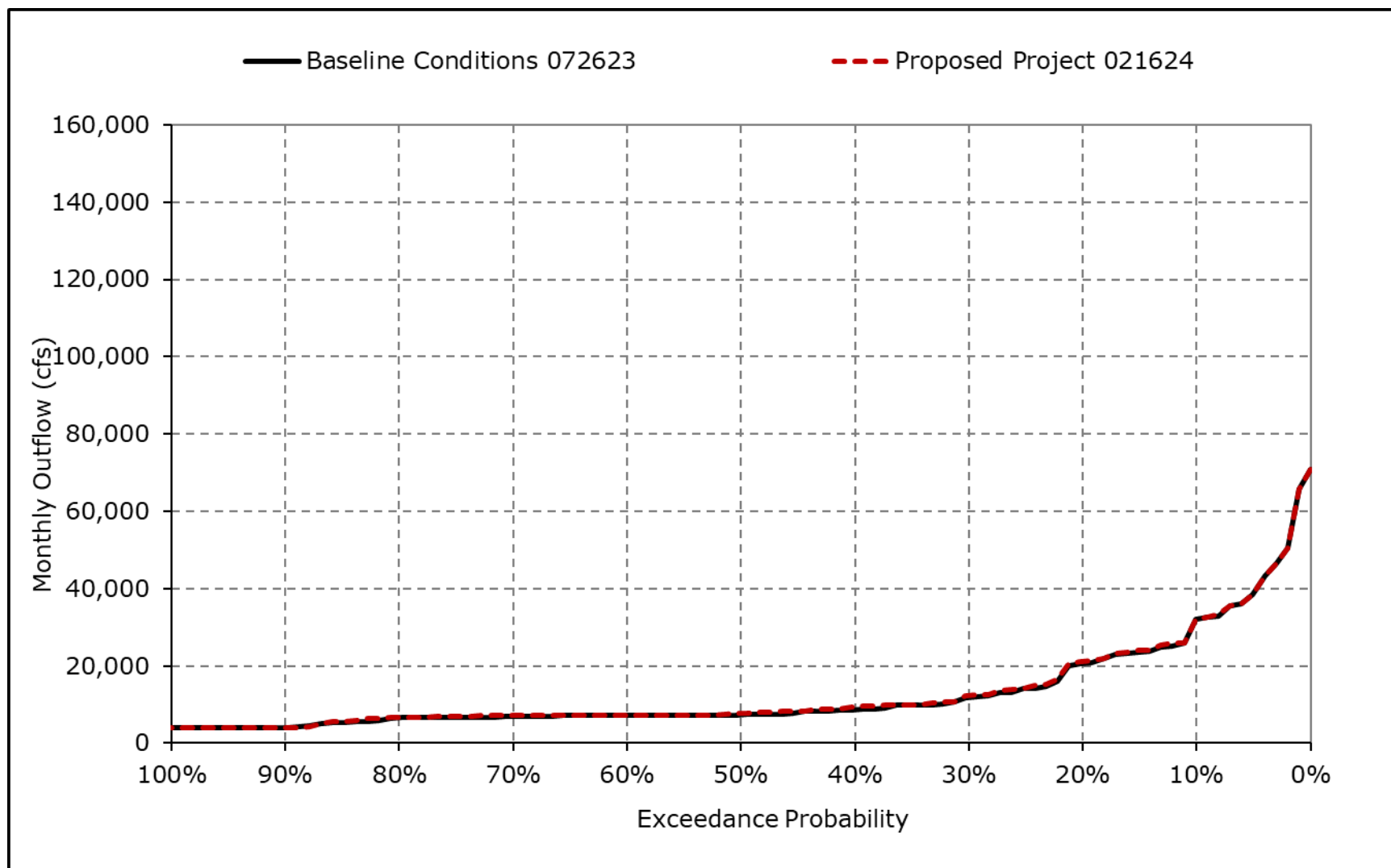
**Figure 4B-2-10n. Delta Outflow, May**



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

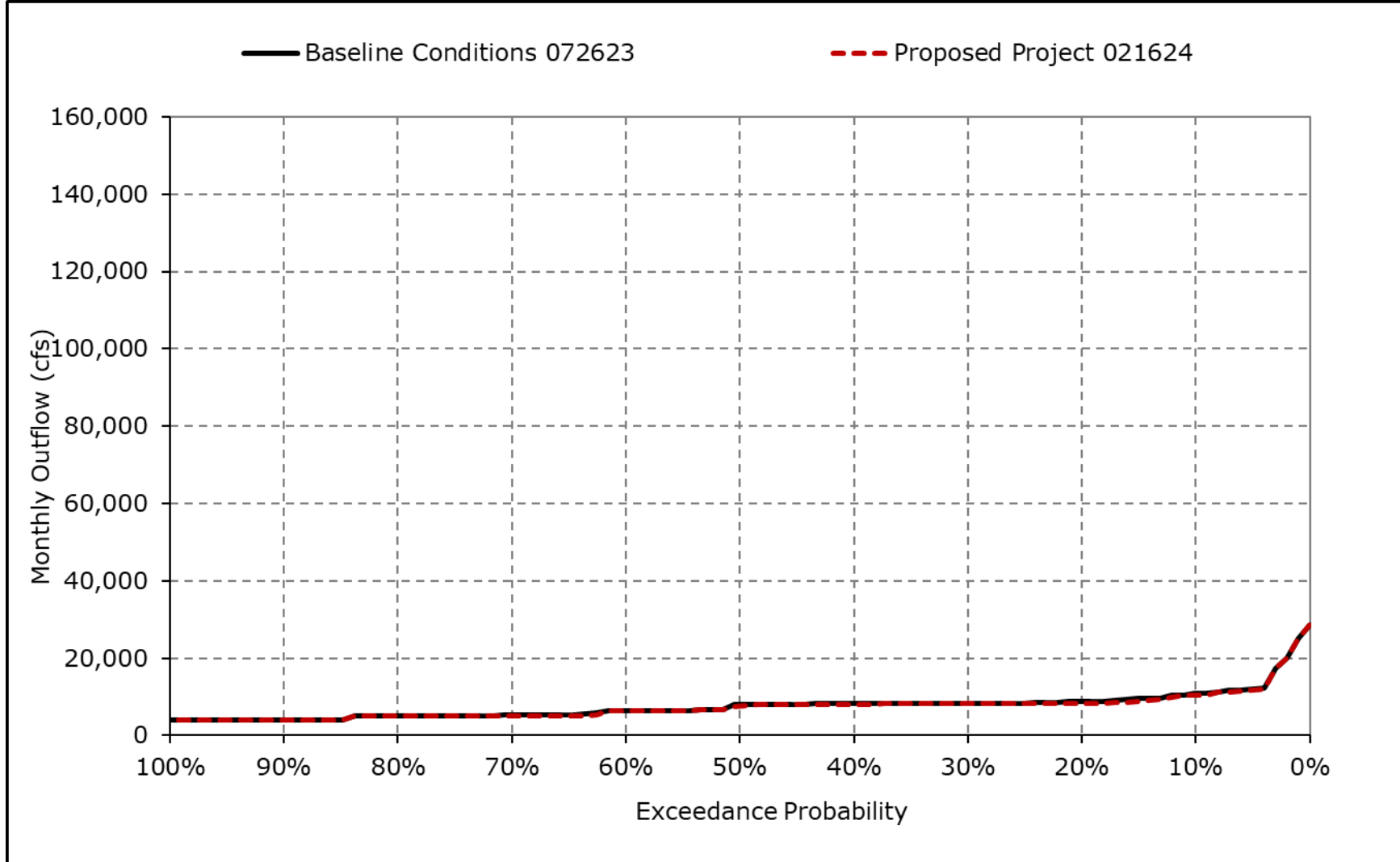


**Figure 4B-2-10o. Delta Outflow, June**



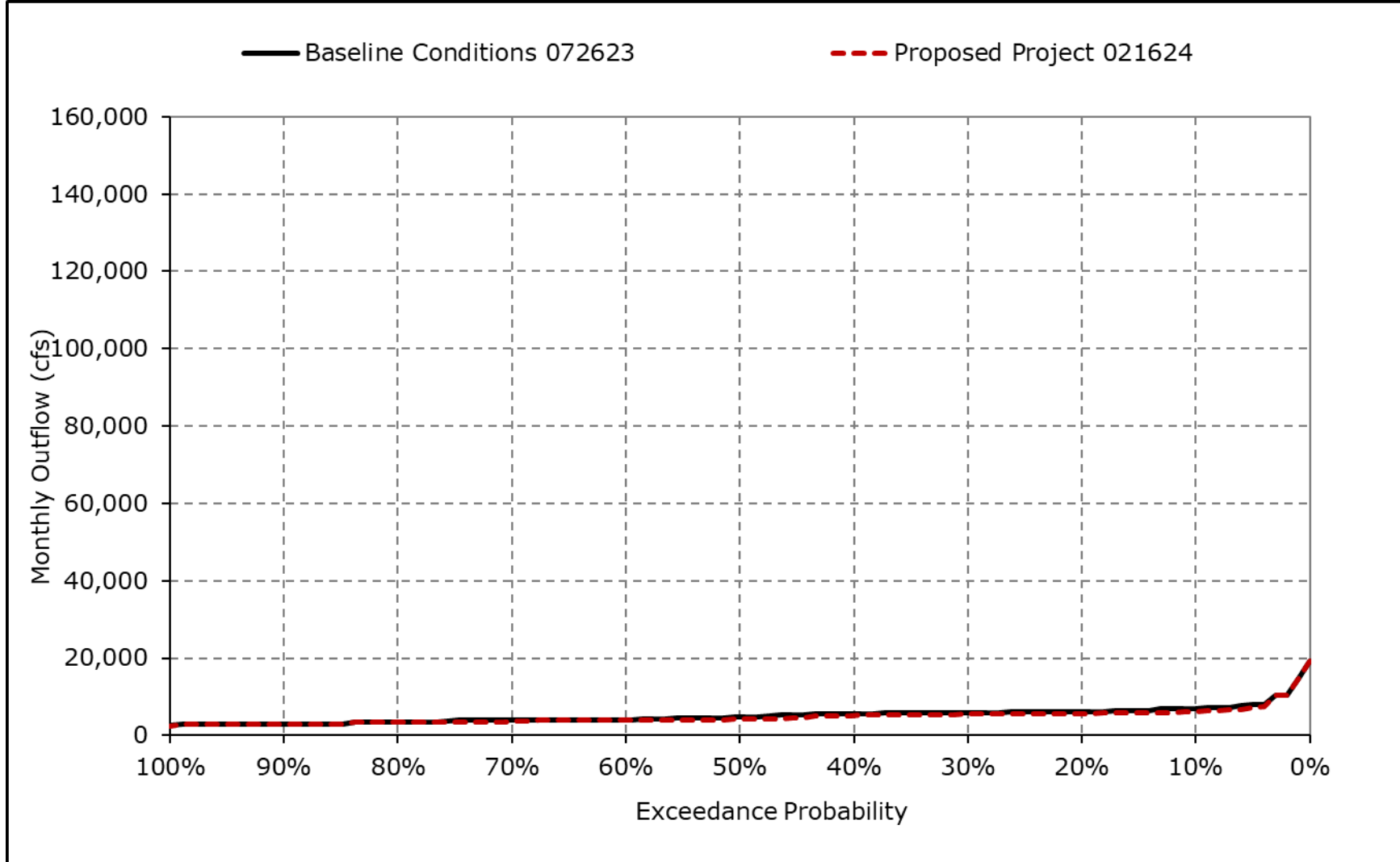
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10p. Delta Outflow, July**



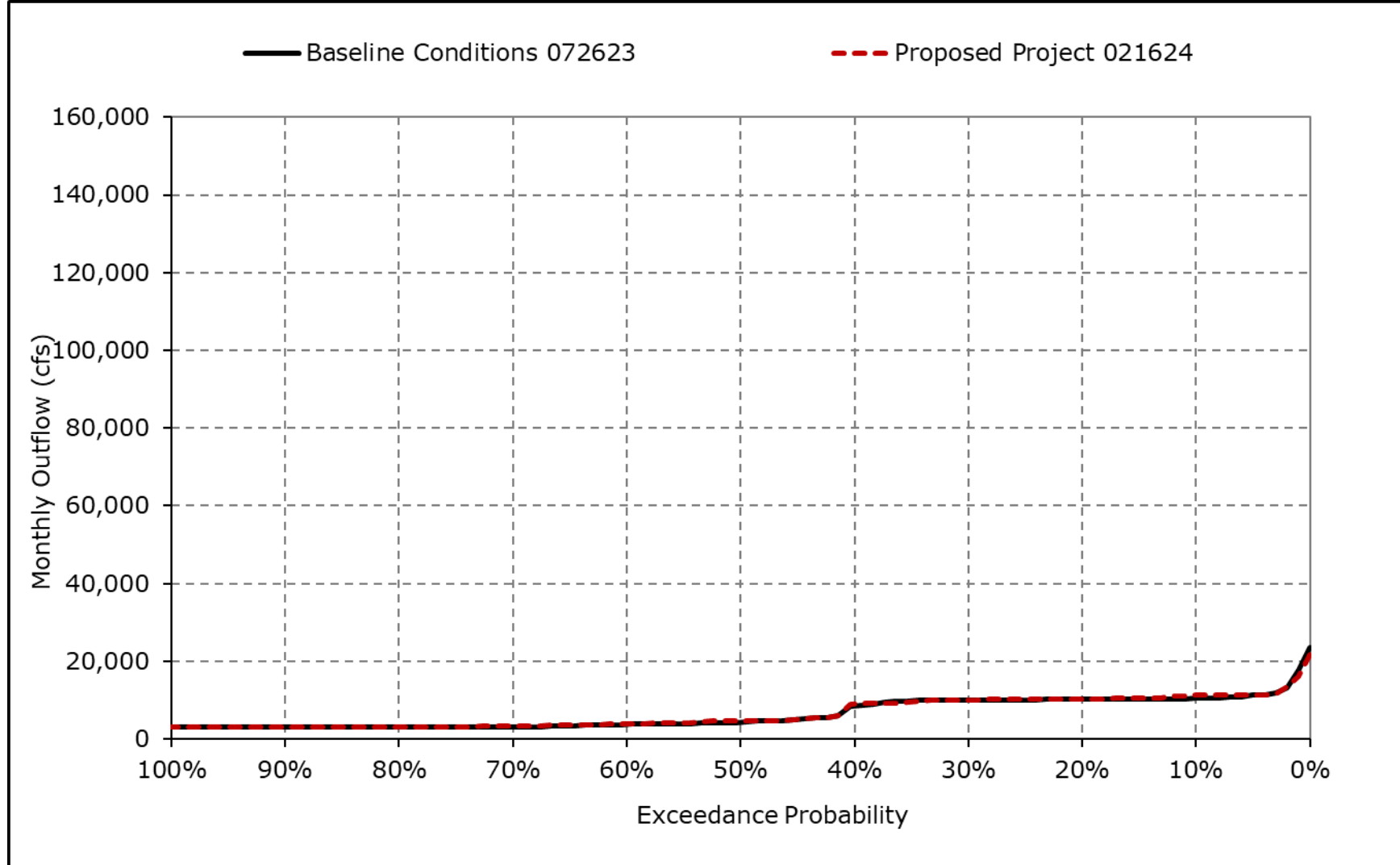
\*All scenarios are simulated at current climate condition and 0 cm sea level rise.

**Figure 4B-2-10q. Delta Outflow, August**



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

**Figure 4B-2-10r. Delta Outflow, September**



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