Appendix 4G

Attachment 3: Flow Results (CalSim 3)

Appendix 4G
Attachment 3: Flow Results (CalSim 3)

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

- Baseline Conditions (Updated) (040424)
- Alternative 1 plus Cumulative Projects (102023)

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

Note:

[1] Parameter has been post-processed for the Alternative 1 plus Cumulative Projects scenario.

Report formats:

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

Table 4G-3-1-1a. Sacramento River Flow at Freeport, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,836	22,456	50,214	62,194	69,277	65,843	52,801	43,765	28,055	22,868	19,017	20,490
20% Exceedance	14,437	15,164	33,046	51,801	60,195	52,978	36,838	33,365	22,001	22,161	18,411	19,874
30% Exceedance	13,720	14,235	24,010	33,898	49,108	41,592	25,288	22,681	16,255	20,603	18,072	18,439
40% Exceedance	13,073	13,723	18,057	26,550	36,508	32,477	20,069	16,947	14,089	19,946	17,555	16,690
50% Exceedance	11,780	13,122	15,189	21,734	27,577	24,024	16,406	15,383	13,659	19,273	16,744	15,582
60% Exceedance	9,956	11,536	14,470	19,403	21,753	21,550	12,544	12,900	13,244	18,546	15,851	13,492
70% Exceedance	8,559	10,320	12,759	14,574	18,511	18,662	11,262	11,427	12,731	17,072	14,263	11,058
80% Exceedance	7,400	9,082	10,410	12,404	16,158	14,899	10,779	10,784	11,439	15,175	11,602	9,932
90% Exceedance	6,617	7,335	9,322	10,943	13,228	12,271	9,452	8,851	10,087	11,173	8,898	8,891
Full Simulation Period Average[a]	11,712	14,113	22,654	29,700	35,939	32,604	23,408	20,585	17,102	18,467	15,490	14,989
Wet Water Years (30%)	14,209	19,122	38,333	49,632	58,897	51,638	41,547	34,746	25,705	19,828	17,643	19,755
Above Normal Water Years (11%)	10,776	12,892	19,063	40,685	44,419	44,391	26,264	23,033	18,474	21,171	18,985	19,113
Below Normal Water Years (21%)	11,909	13,808	16,626	22,295	28,700	26,846	17,617	17,024	13,914	21,106	17,475	15,024
Dry Water Years (22%)	11,277	12,059	16,252	15,858	22,058	20,188	12,675	12,069	13,104	18,208	13,676	10,906
Critical Water Years (16%)	8,011	8,786	12,441	13,529	15,650	13,441	9,792	8,735	9,706	10,948	8,943	8,786

Table 4G-3-1-1b. Sacramento River Flow at Freeport, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	15,861	21,748	51,067	62,534	69,269	65,793	53,849	44,748	27,405	22,440	18,838	21,945
20% Exceedance	14,688	15,650	33,760	51,677	61,179	53,000	38,998	35,371	21,972	21,530	18,254	20,752
30% Exceedance	13,812	14,355	23,990	34,593	49,070	41,184	27,043	23,953	16,243	20,723	17,830	19,226
40% Exceedance	13,224	13,714	18,135	27,308	37,652	32,639	21,407	18,718	14,329	19,498	17,300	17,369
50% Exceedance	11,725	13,101	15,326	21,977	28,083	24,270	18,080	16,721	13,693	18,973	16,840	16,102
60% Exceedance	10,167	11,429	14,466	19,398	21,869	21,597	14,486	15,132	13,276	18,143	15,840	12,921
70% Exceedance	9,253	10,396	12,728	14,680	18,837	18,742	13,069	13,894	12,854	16,875	14,574	11,451
80% Exceedance	7,825	9,168	10,301	12,440	16,563	15,184	12,246	13,175	12,385	15,033	10,732	10,216
90% Exceedance	6,615	7,433	9,402	10,988	12,956	12,490	10,797	10,581	9,531	10,828	8,887	8,910
Full Simulation Period Average[a]	11,907	14,221	22,845	29,886	36,268	32,708	24,916	22,313	17,203	18,214	15,302	15,499
Wet Water Years (30%)	14,436	19,373	38,753	49,824	59,075	51,574	42,553	35,933	25,800	19,897	17,780	20,703
Above Normal Water Years (11%)	10,695	13,062	19,264	41,079	45,312	44,312	28,025	25,155	18,652	21,067	18,523	20,495
Below Normal Water Years (21%)	12,012	13,890	16,896	22,562	28,905	26,933	19,722	18,990	14,368	20,588	17,226	14,867
Dry Water Years (22%)	11,507	12,198	16,327	15,933	21,909	20,628	14,635	14,636	13,250	17,660	13,243	11,305
Critical Water Years (16%)	8,412	8,573	12,249	13,605	16,696	13,543	10,660	9,739	9,243	10,740	8,749	8,901

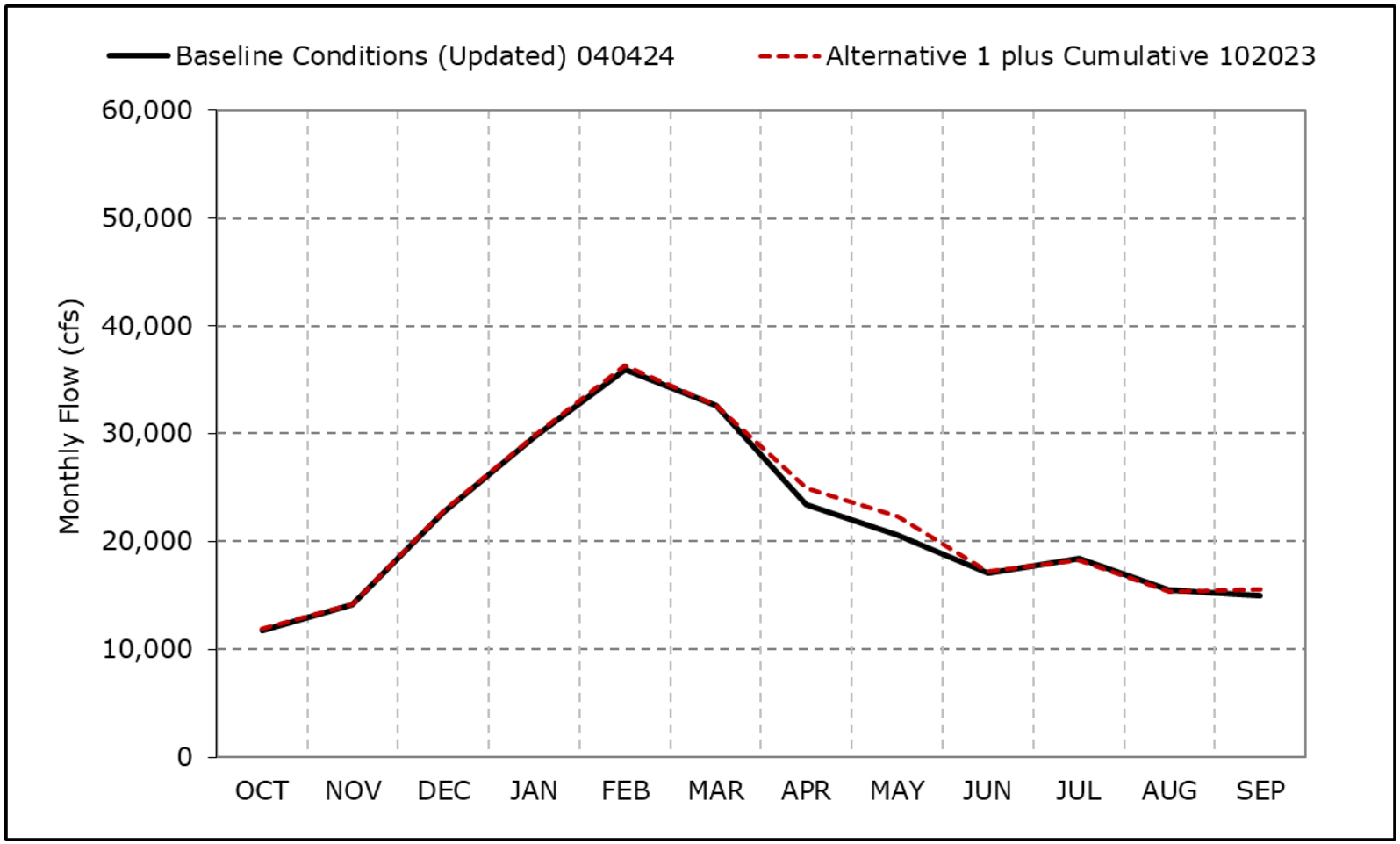
Table 4G-3-1-1c. Sacramento River Flow at Freeport, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	25	-708	853	340	-8	-50	1,048	983	-650	-428	-179	1,454
20% Exceedance	250	486	714	-124	984	22	2,161	2,007	-29	-631	-157	878
30% Exceedance	92	120	-20	696	-38	-407	1,755	1,273	-12	120	-241	787
40% Exceedance	152	-9	77	759	1,144	162	1,338	1,771	240	-448	-255	679
50% Exceedance	-55	-21	137	243	507	246	1,675	1,338	34	-300	96	520
60% Exceedance	212	-107	-4	-5	116	46	1,942	2,232	32	-402	-12	-571
70% Exceedance	695	75	-32	106	326	81	1,806	2,467	123	-197	311	394
80% Exceedance	426	86	-109	36	405	286	1,467	2,390	945	-142	-870	285
90% Exceedance	-2	98	80	45	-272	219	1,345	1,730	-555	-344	-12	19
Full Simulation Period Average[a]	195	108	191	186	329	104	1,508	1,727	102	-253	-188	510
Wet Water Years (30%)	227	251	421	192	178	-63	1,006	1,186	95	69	137	948
Above Normal Water Years (11%)	-81	170	201	394	893	-79	1,762	2,123	178	-104	-462	1,382
Below Normal Water Years (21%)	103	82	269	267	205	87	2,104	1,966	454	-518	-249	-157
Dry Water Years (22%)	229	139	75	75	-149	440	1,960	2,566	146	-547	-434	399
Critical Water Years (16%)	401	-213	-193	76	1,045	102	869	1,004	-463	-208	-194	116

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

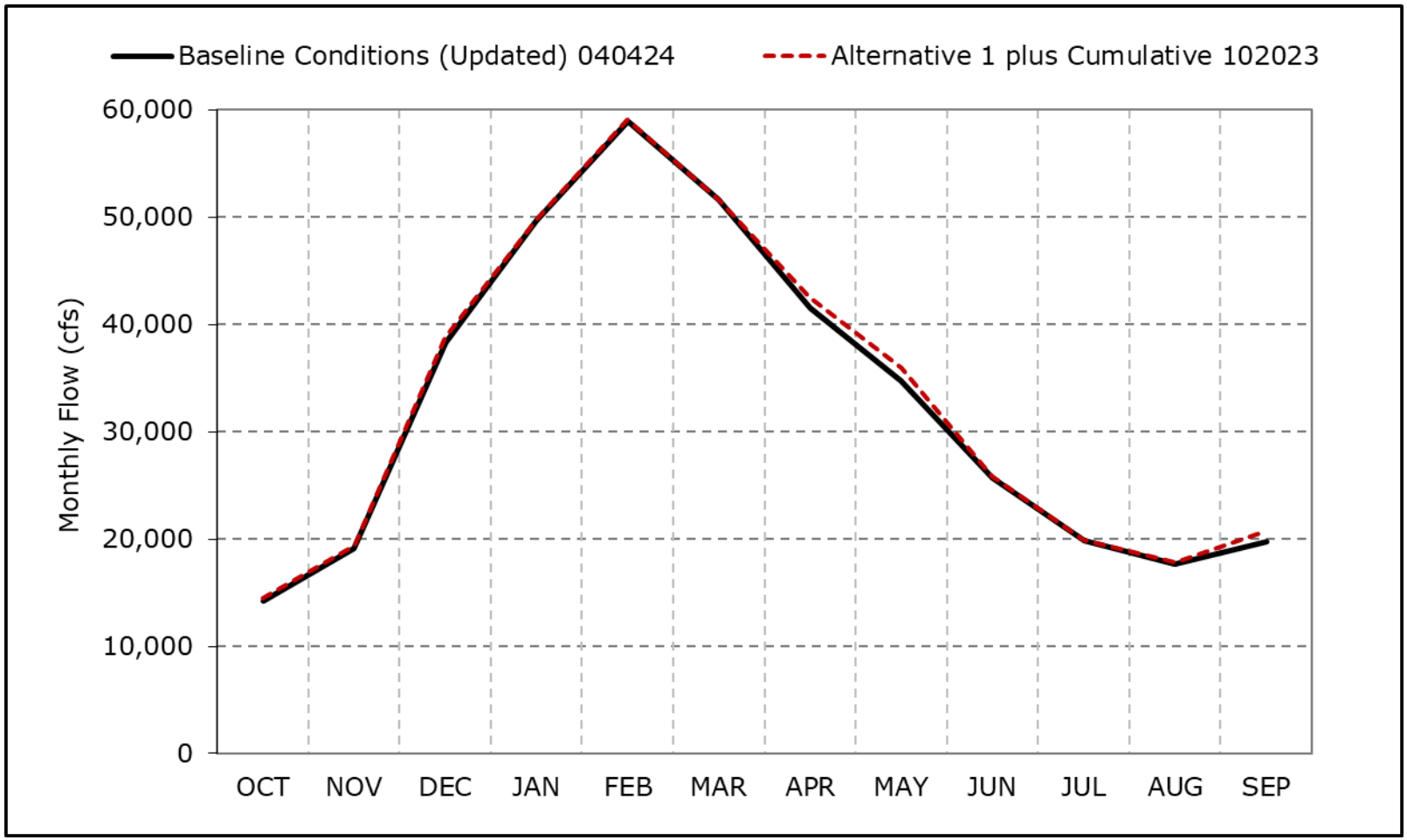
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



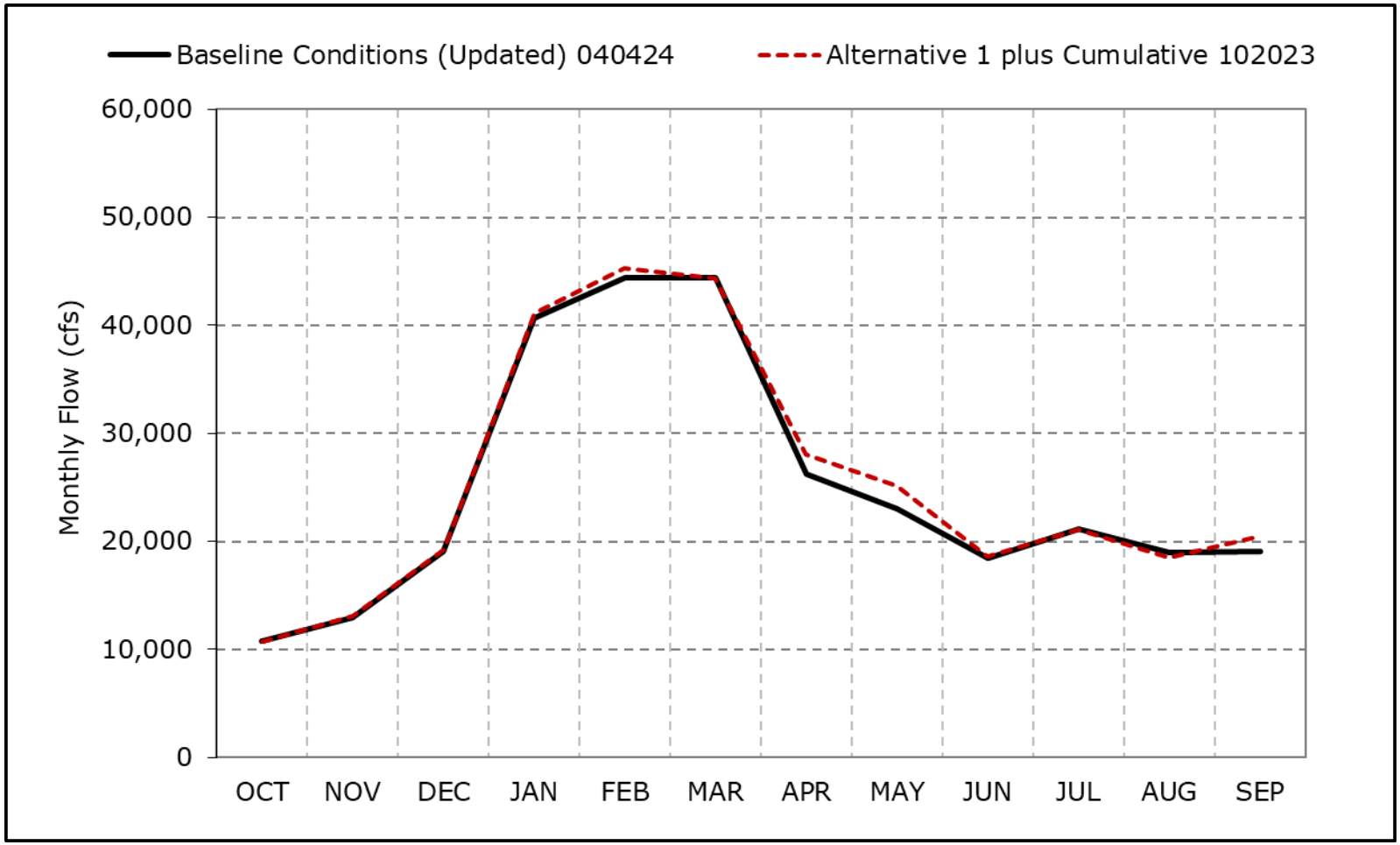
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



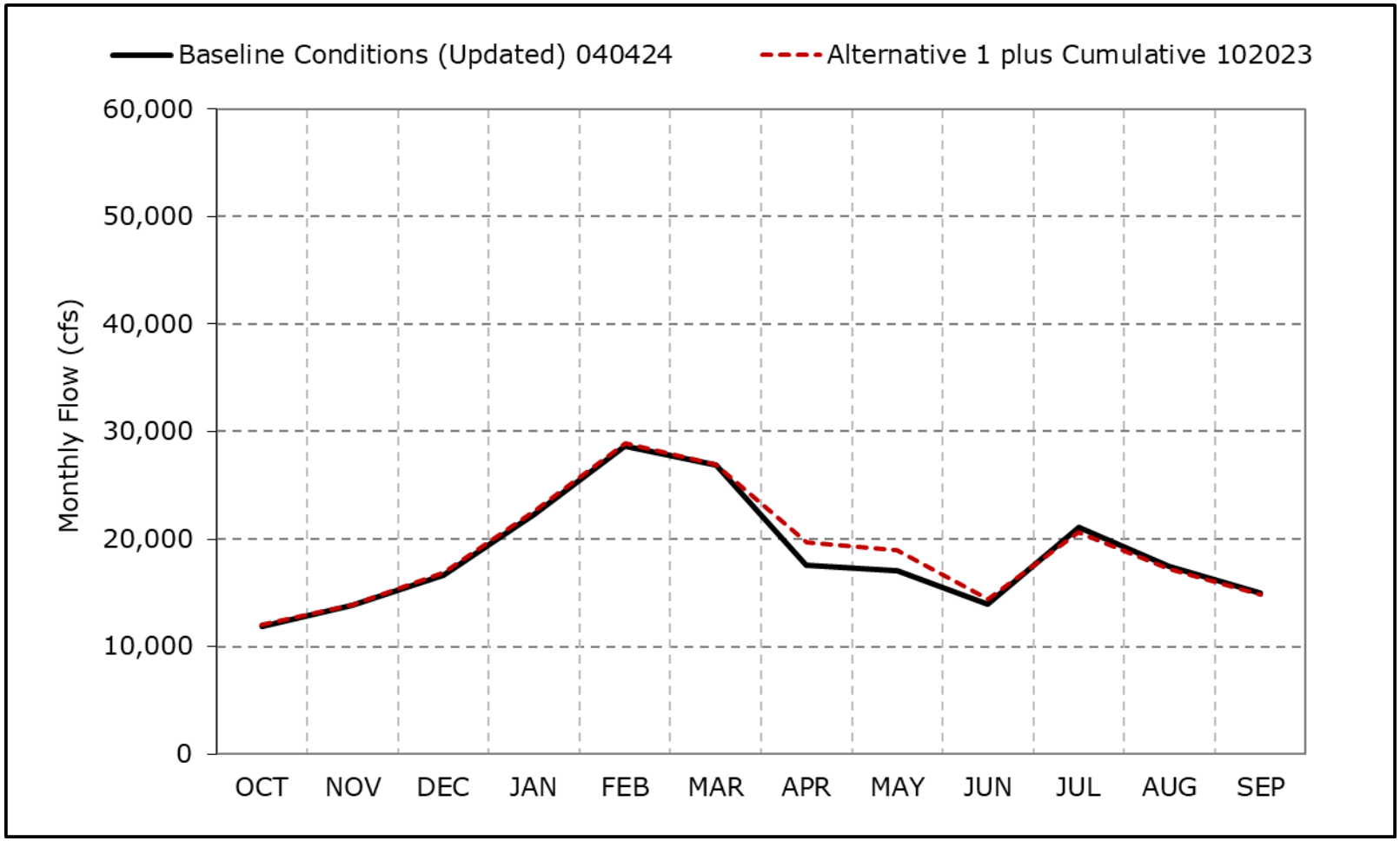
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



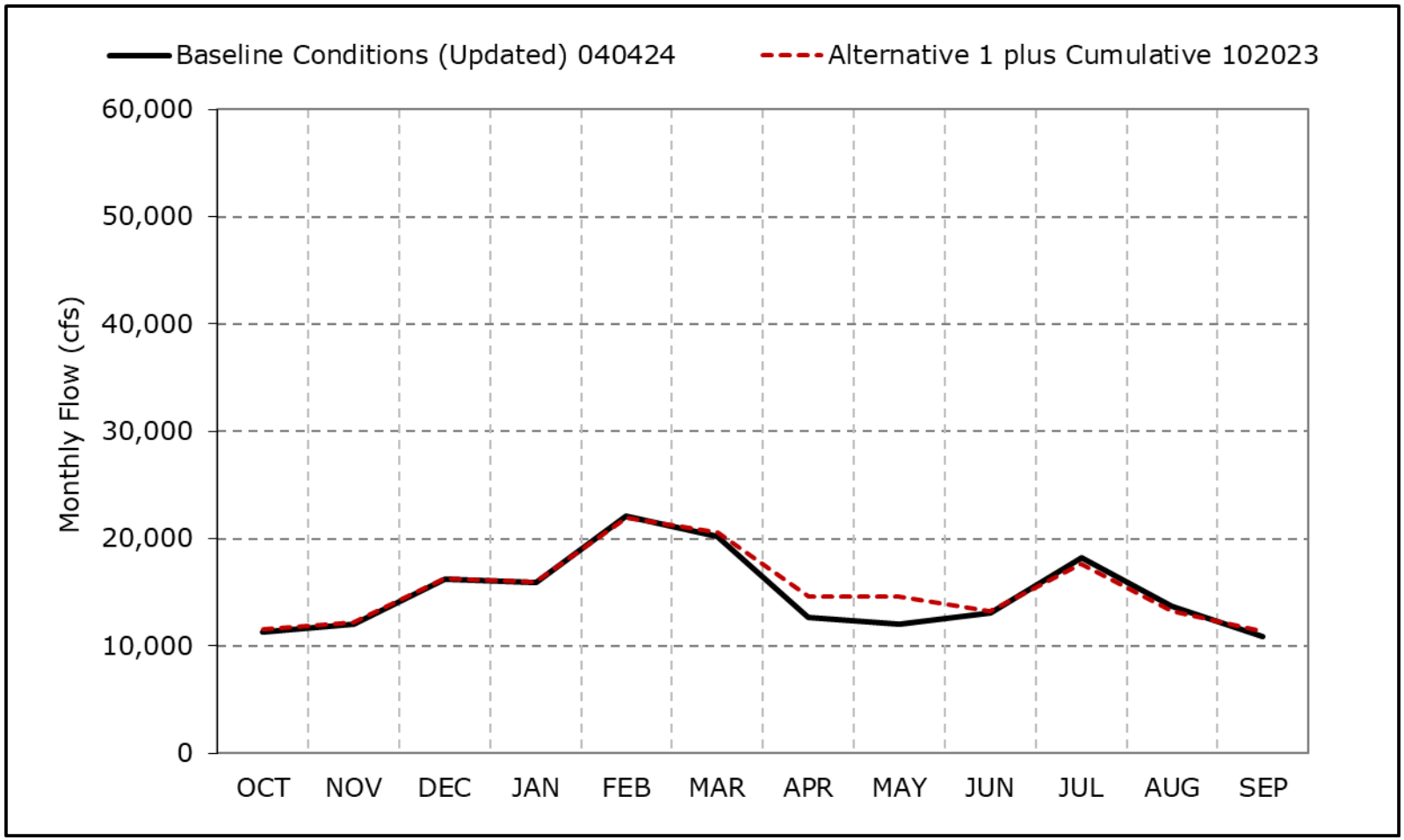
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



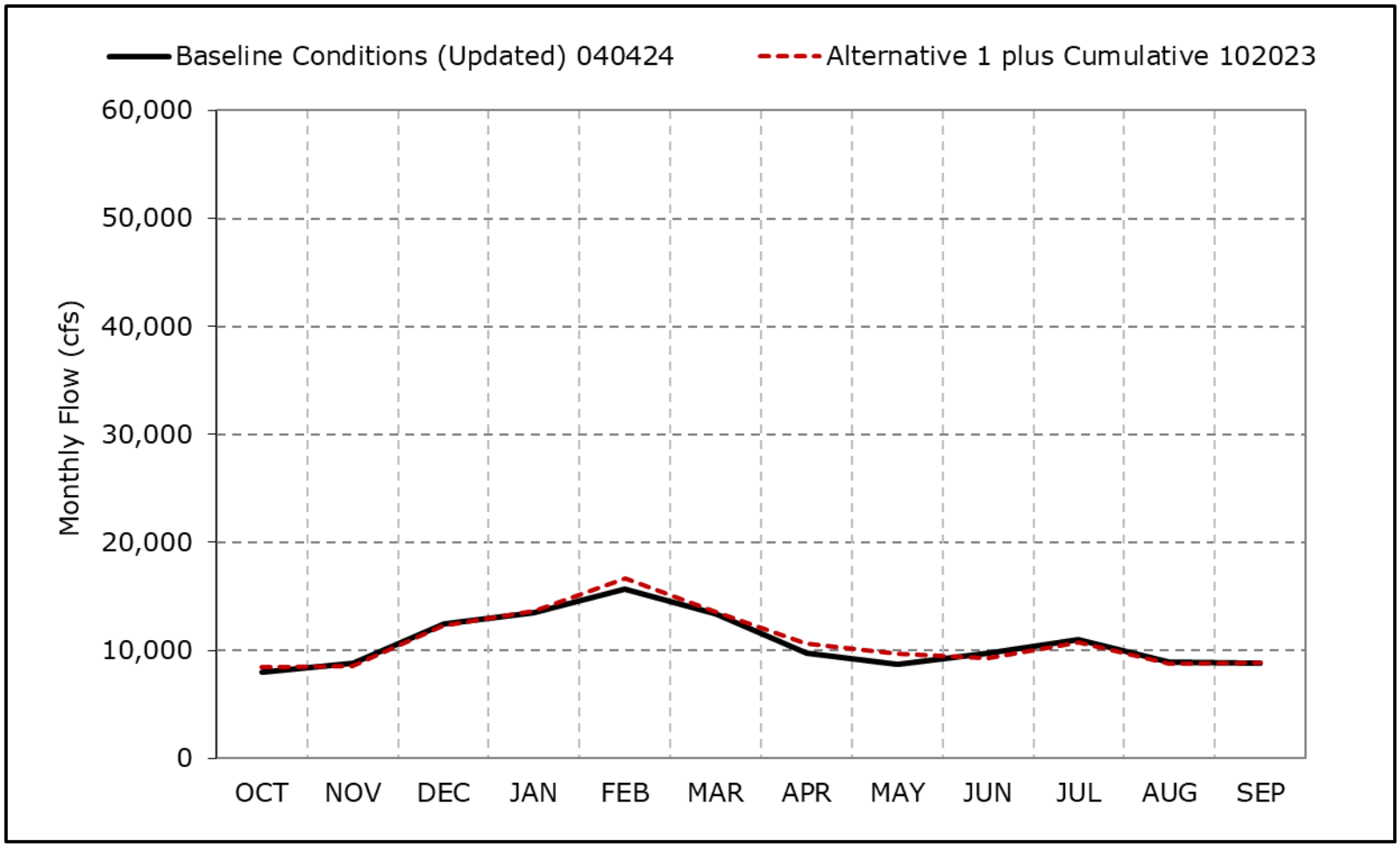
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



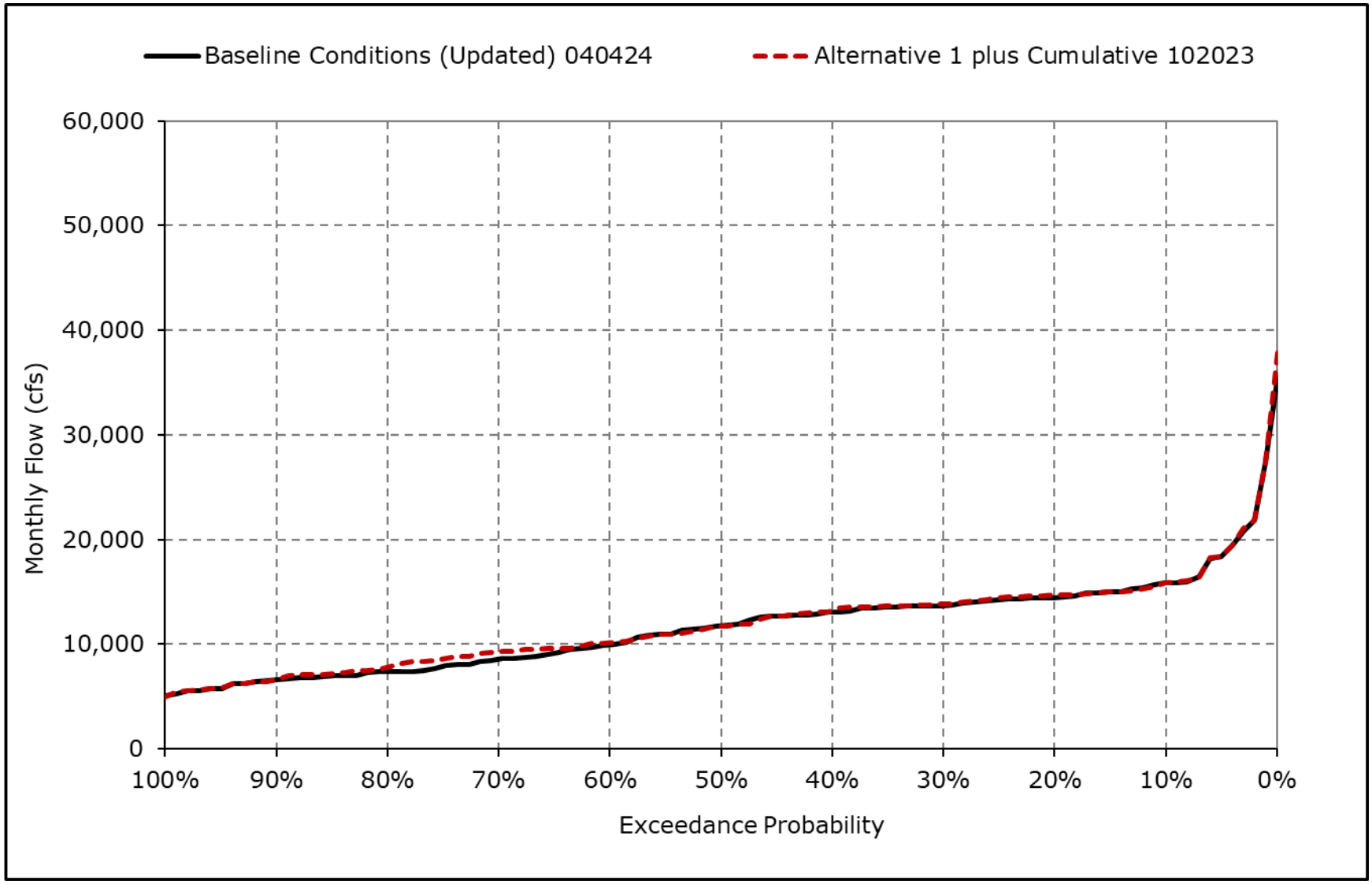
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



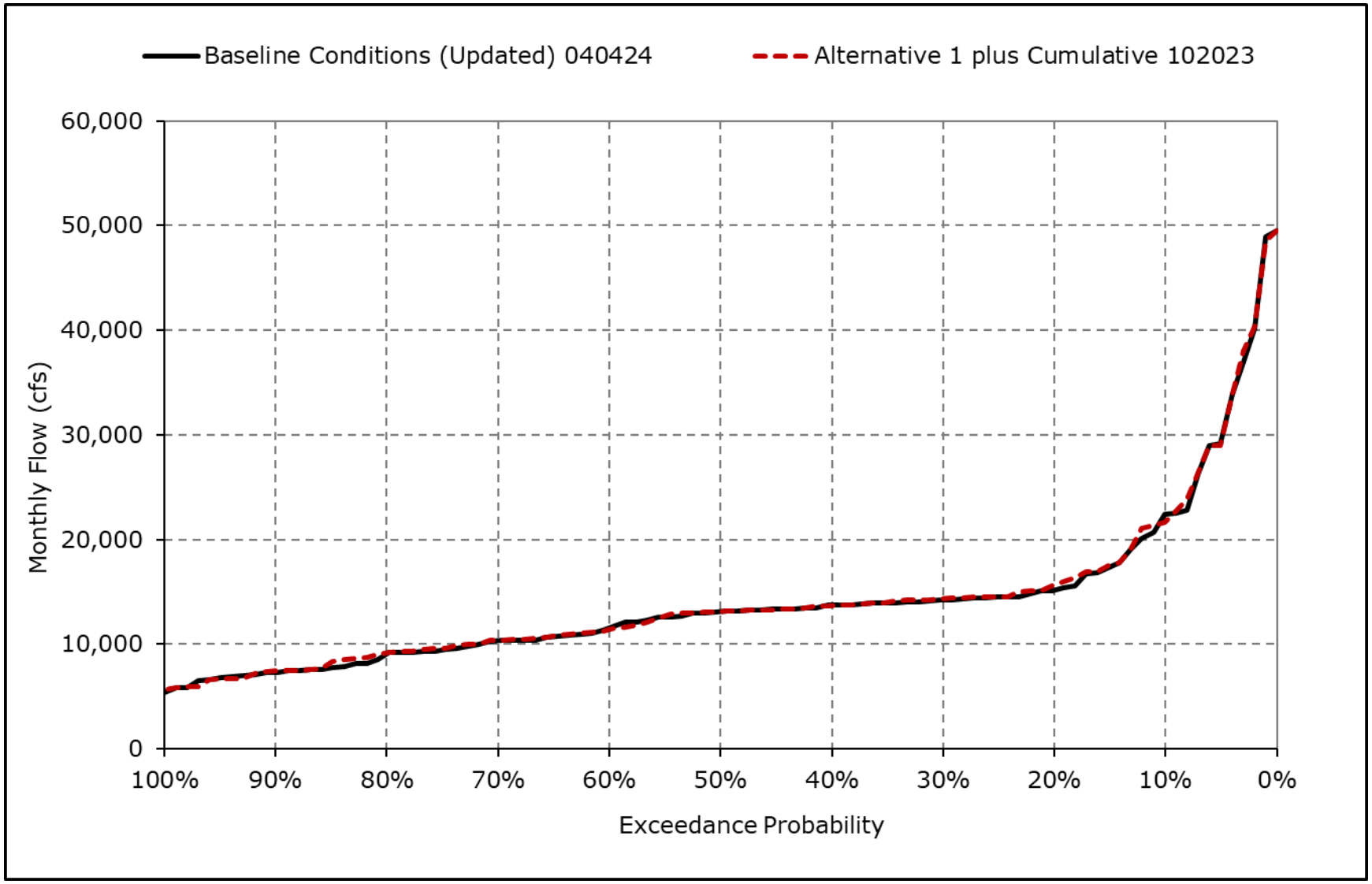
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



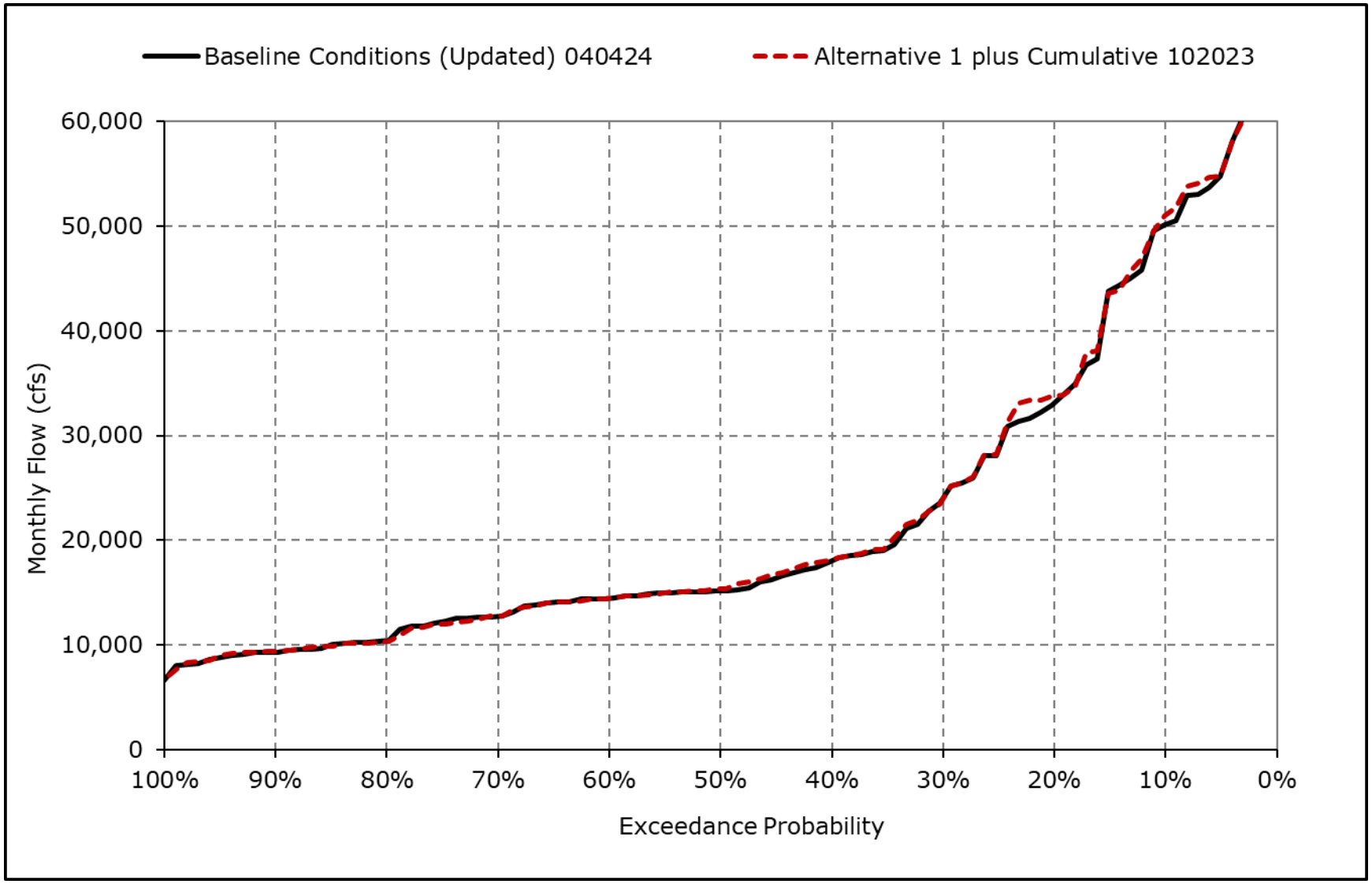
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



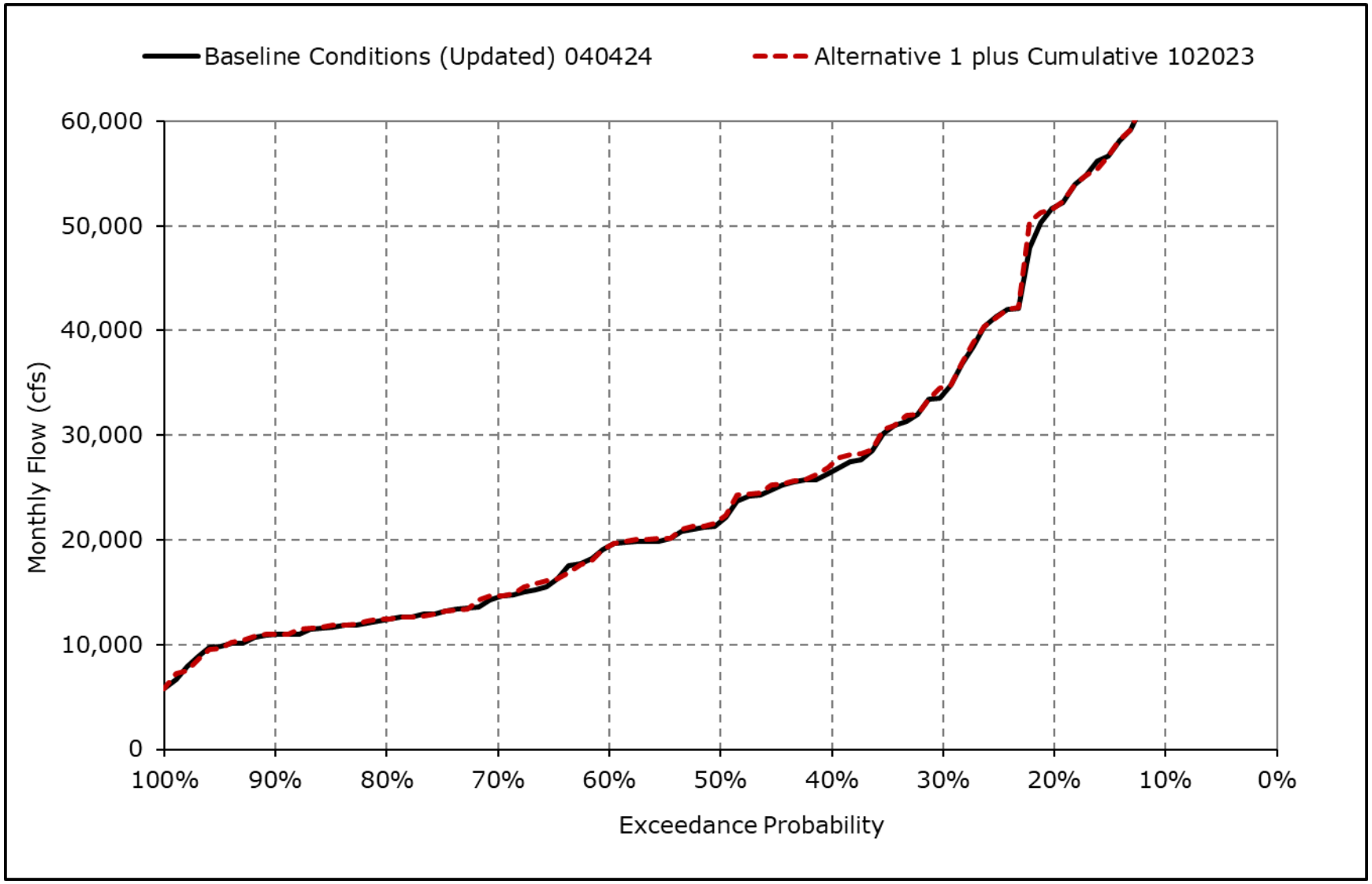
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



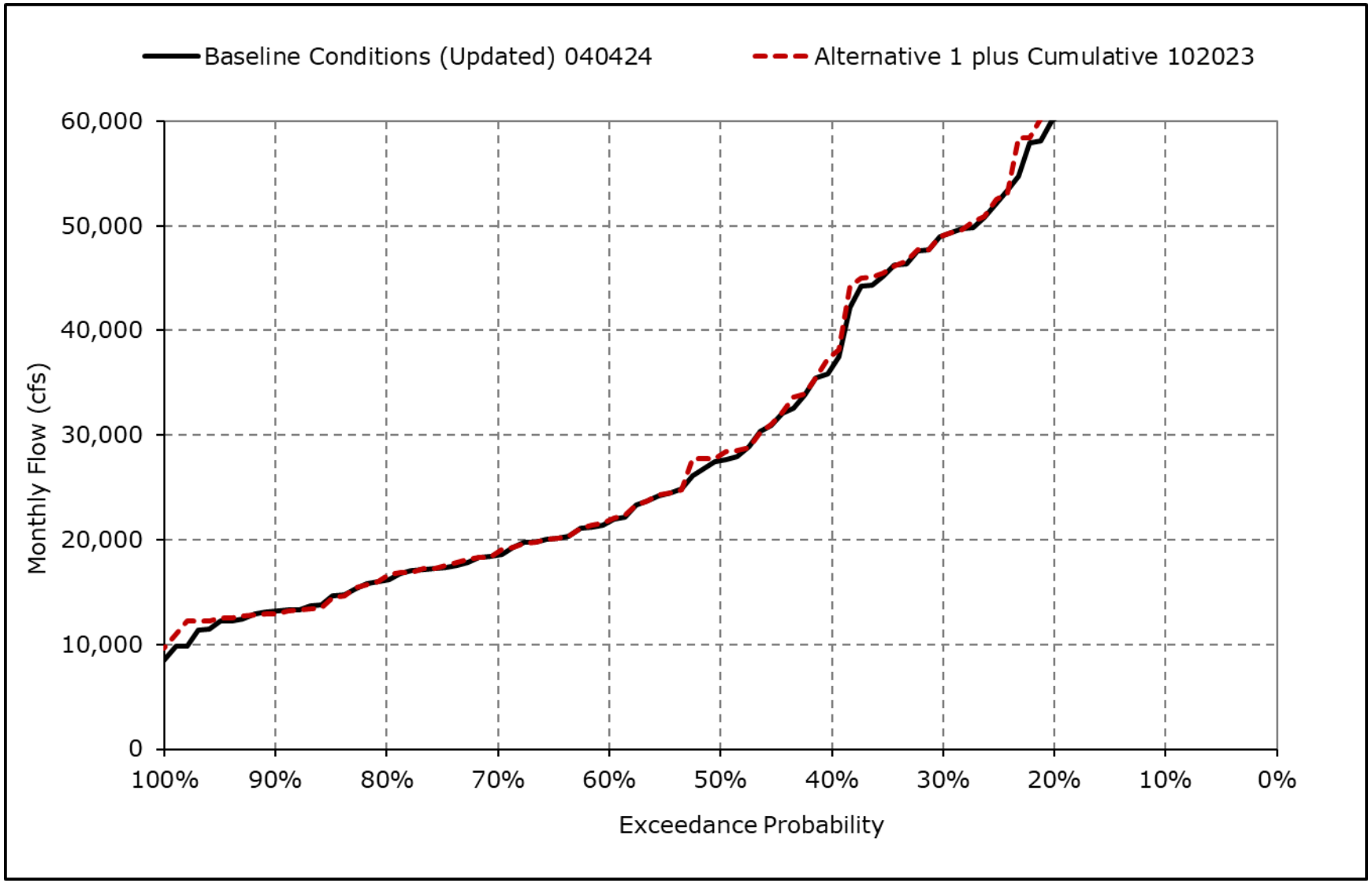
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



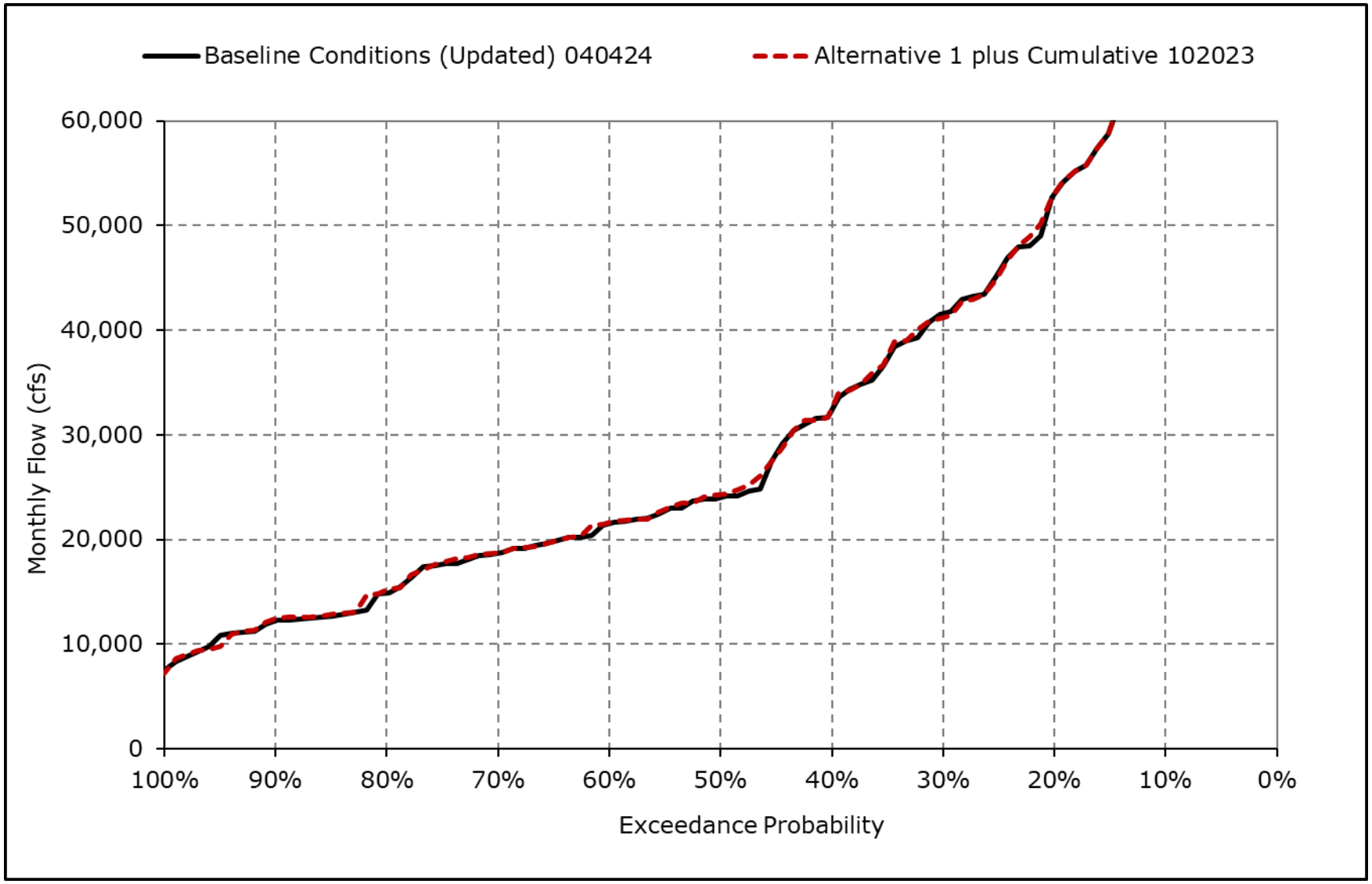
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



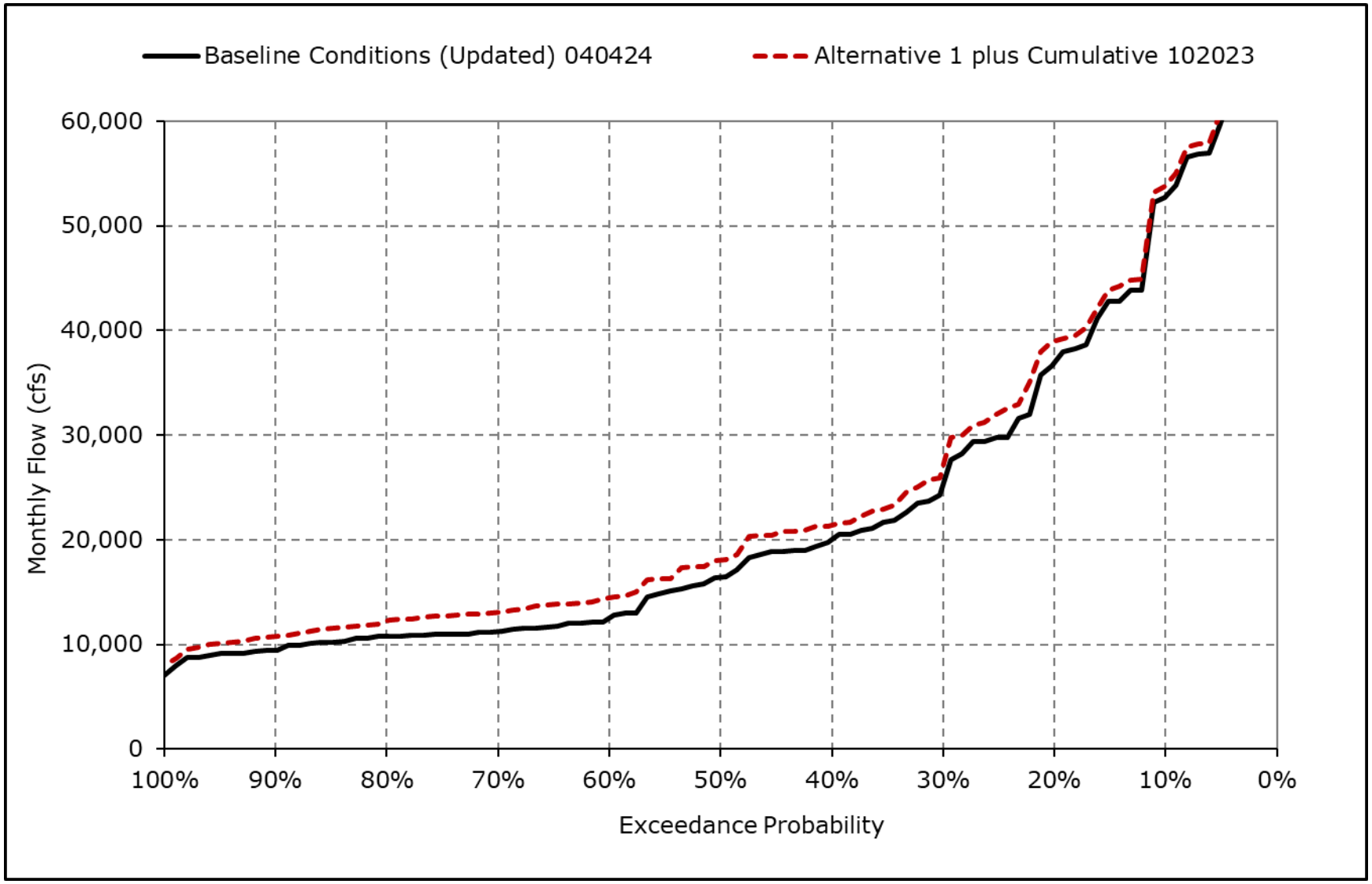
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



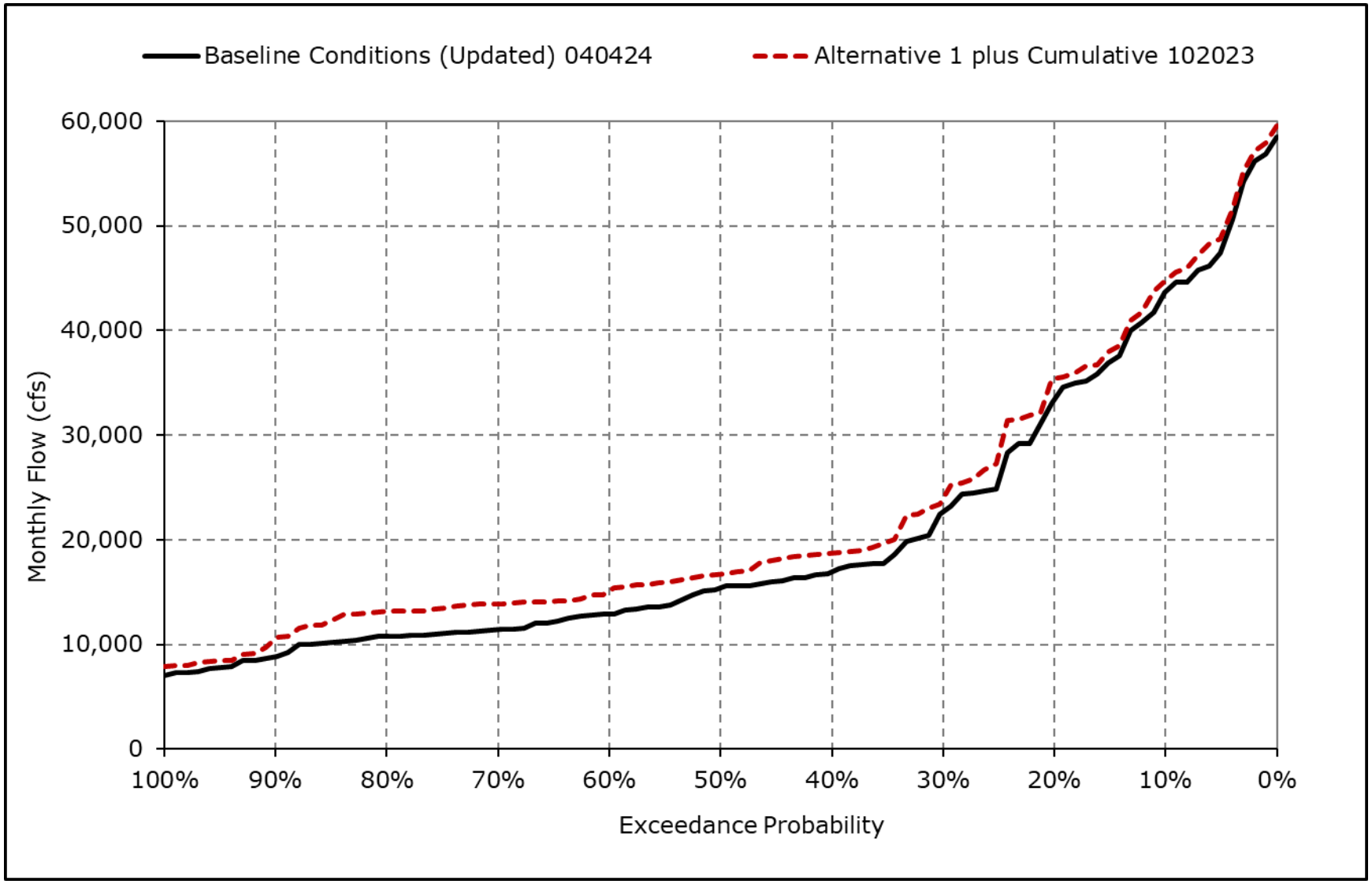
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



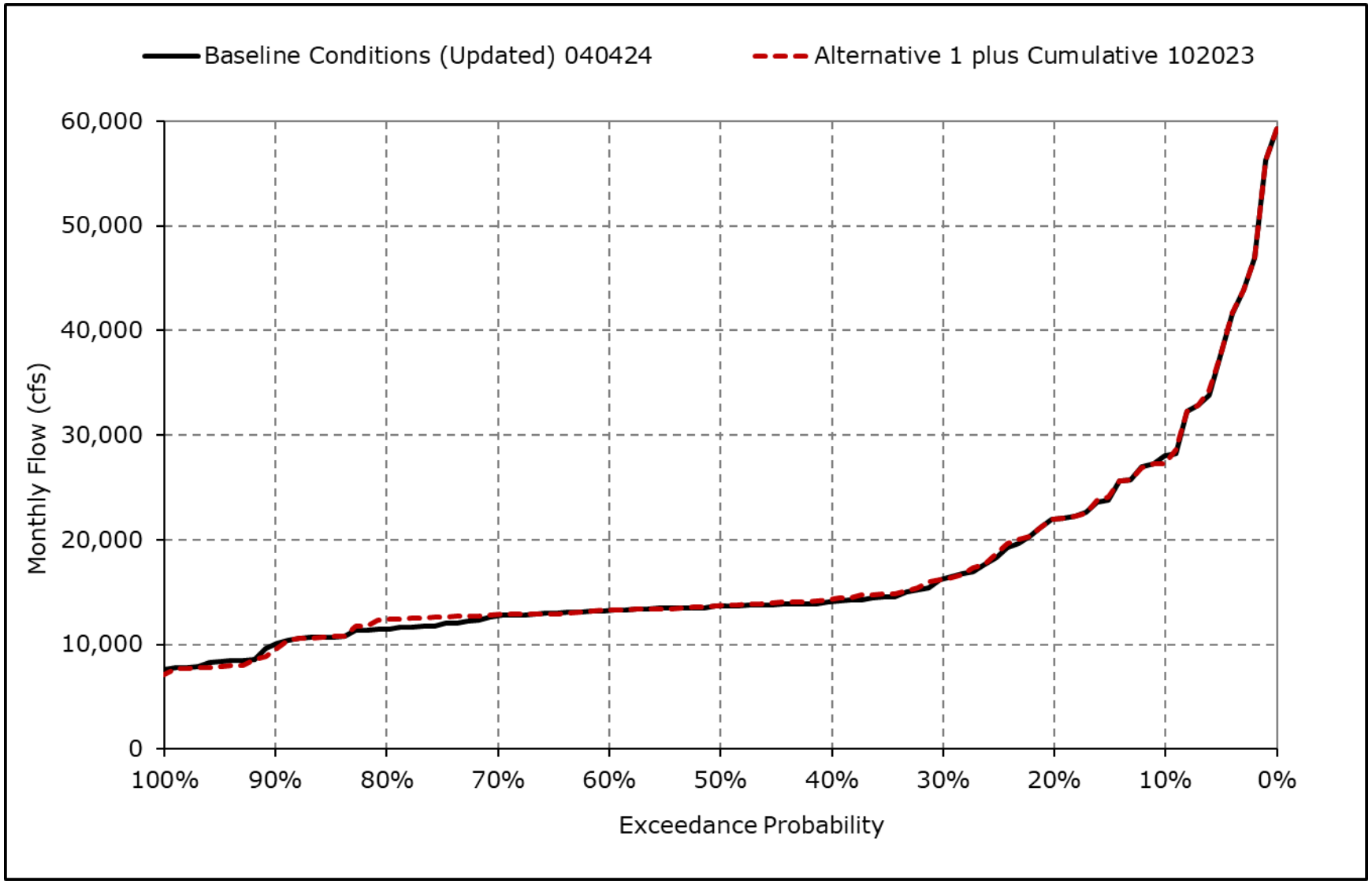
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



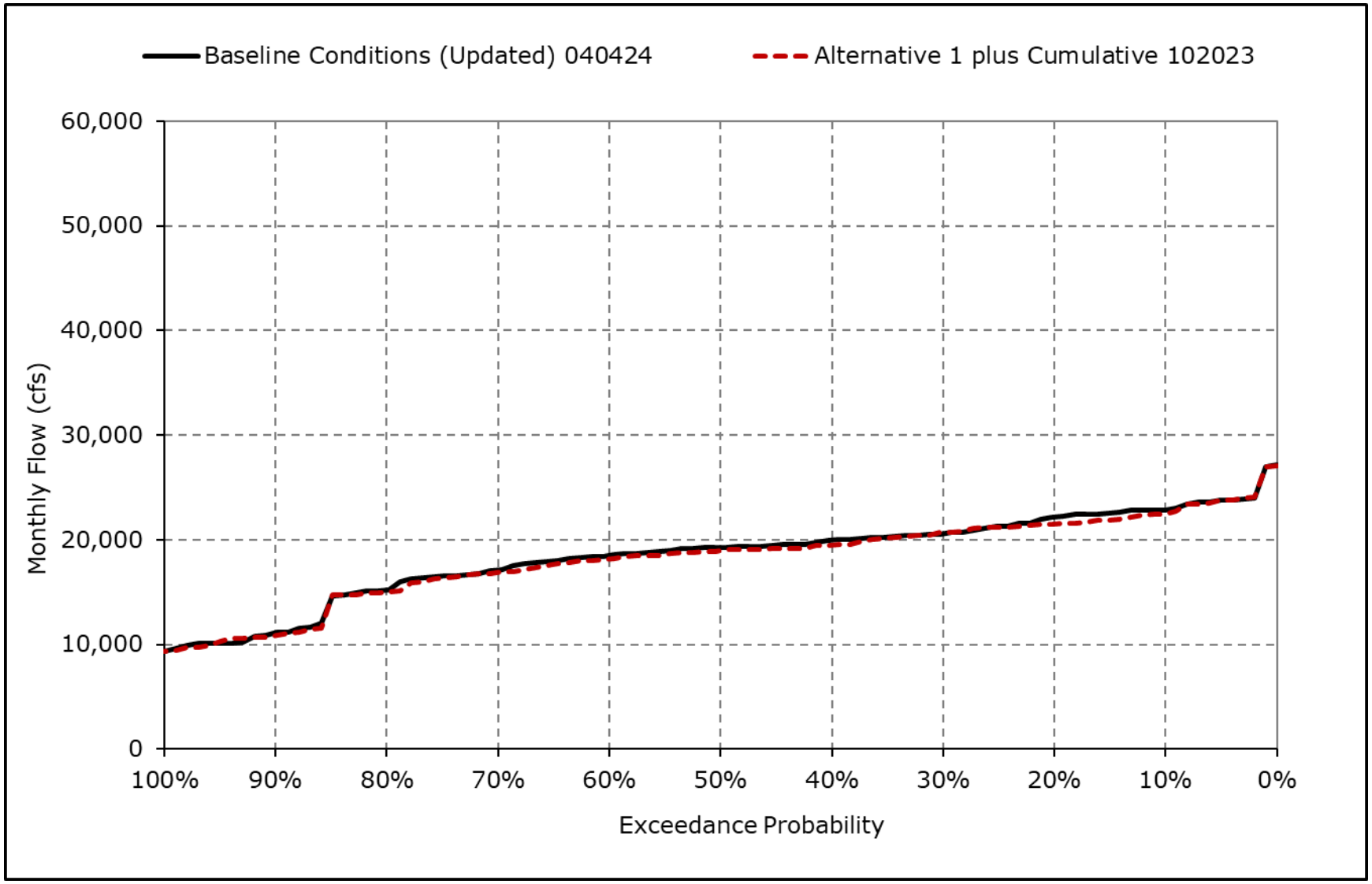
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



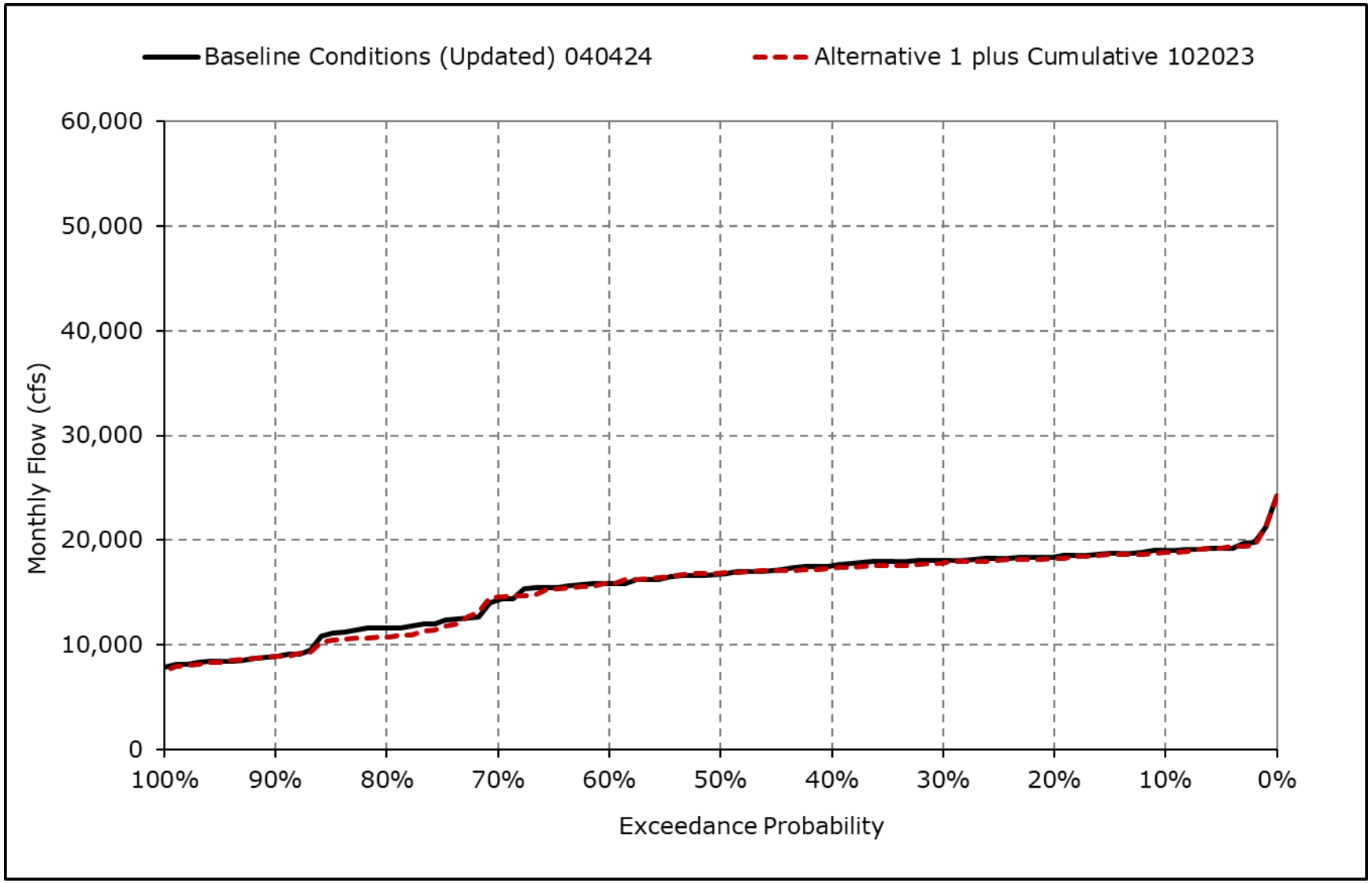
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



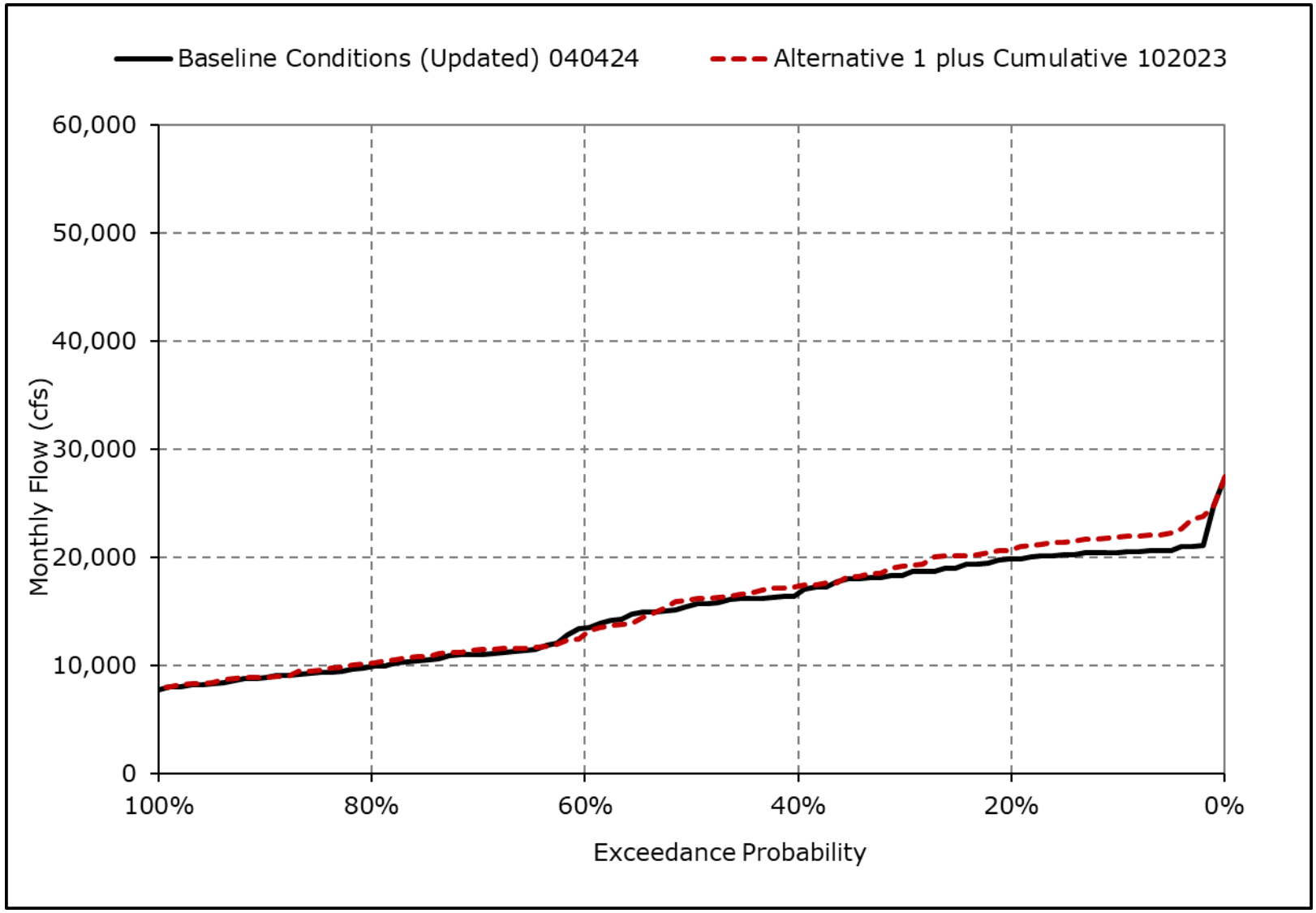
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-2-1a. Yolo Bypass Flow, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	199	884	11,566	30,800	46,555	23,646	3,221	1,121	504	285	216	284
20% Exceedance	120	373	6,385	12,551	15,705	7,550	1,799	602	357	267	200	265
30% Exceedance	108	278	1,572	4,987	9,565	4,188	1,029	514	293	260	196	257
40% Exceedance	88	188	882	2,776	6,113	2,713	677	427	257	254	193	250
50% Exceedance	81	136	444	1,741	2,678	1,345	377	311	249	250	190	241
60% Exceedance	70	120	273	856	1,737	689	272	270	243	245	188	226
70% Exceedance	61	104	165	408	681	498	248	244	236	239	183	205
80% Exceedance	54	88	113	229	393	273	231	229	224	232	179	199
90% Exceedance	45	76	93	133	208	130	208	193	210	217	166	176
Full Simulation Period Average[a]	164	675	4,175	10,086	14,260	8,301	2,142	636	323	252	192	239
Wet Water Years (30%)	320	1,654	11,131	27,303	36,759	22,184	5,939	1,181	509	297	225	280
Above Normal Water Years (11%)	122	290	2,044	10,748	14,283	9,160	1,100	635	281	245	188	235
Below Normal Water Years (21%)	111	405	1,249	2,016	4,987	1,887	606	571	270	215	173	230
Dry Water Years (22%)	95	184	1,030	777	2,134	845	347	273	222	245	184	228
Critical Water Years (16%)	65	134	764	743	902	352	223	199	215	230	169	188

Table 4G-3-2-1b. Yolo Bypass Flow, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	182	1,395	12,563	30,805	46,566	23,542	3,195	1,120	510	285	217	284
20% Exceedance	119	396	5,929	12,496	15,955	7,653	1,804	598	363	267	204	266
30% Exceedance	108	282	1,608	5,036	9,556	4,402	1,033	522	296	262	197	258
40% Exceedance	88	210	891	2,475	6,025	2,665	681	427	258	256	194	250
50% Exceedance	80	155	473	1,600	2,531	1,334	385	319	251	251	190	241
60% Exceedance	69	132	277	869	1,739	715	282	272	244	247	188	230
70% Exceedance	61	118	183	417	683	495	250	251	236	243	182	216
80% Exceedance	53	106	122	235	417	304	233	236	225	235	179	203
90% Exceedance	44	90	103	141	204	138	208	203	212	225	166	175
Full Simulation Period Average[a]	173	712	4,209	10,137	14,226	8,272	2,158	640	326	256	194	241
Wet Water Years (30%)	365	1,739	11,214	27,540	36,706	21,997	5,990	1,186	511	299	227	281
Above Normal Water Years (11%)	79	303	2,088	10,803	14,342	9,293	1,100	637	284	247	188	235
Below Normal Water Years (21%)	111	419	1,261	1,900	4,970	1,881	611	570	271	220	181	235
Dry Water Years (22%)	94	203	1,112	785	2,094	898	350	281	230	253	182	231
Critical Water Years (16%)	66	156	659	720	824	365	219	202	214	232	169	189

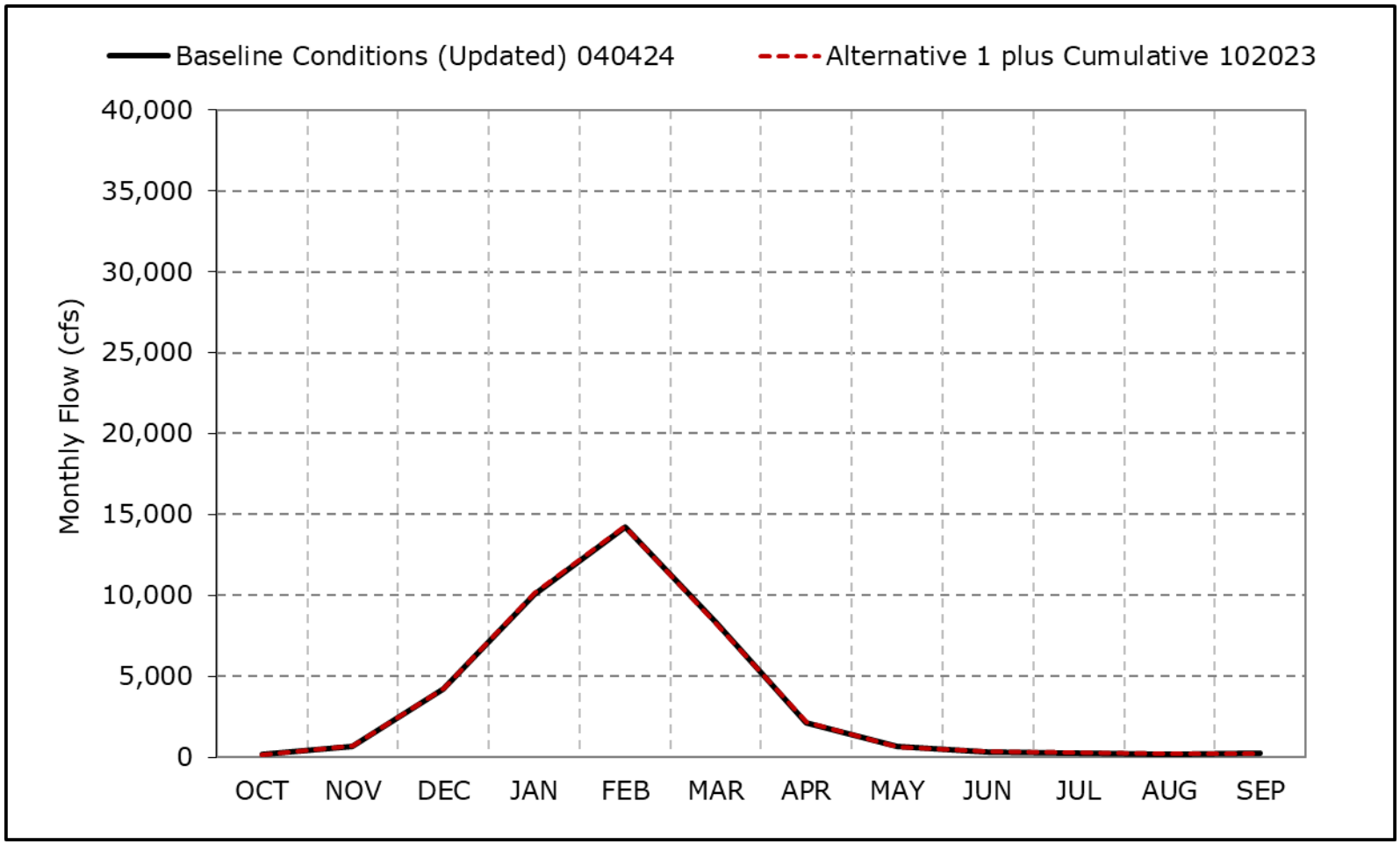
Table 4G-3-2-1c. Yolo Bypass Flow, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-17	511	997	4	10	-105	-26	-1	5	0	1	1
20% Exceedance	-1	23	-456	-55	250	104	4	-4	6	0	4	1
30% Exceedance	0	5	35	49	-9	214	3	8	4	2	1	1
40% Exceedance	0	22	9	-301	-88	-48	4	0	1	1	1	0
50% Exceedance	0	19	29	-141	-147	-11	9	8	1	1	0	0
60% Exceedance	-1	13	4	13	2	26	9	2	1	1	0	4
70% Exceedance	1	14	18	9	2	-3	2	7	0	4	0	11
80% Exceedance	-1	18	9	6	24	31	1	7	1	2	0	4
90% Exceedance	-1	14	10	8	-4	7	0	10	2	8	0	-1
Full Simulation Period Average[a]	9	38	34	51	-34	-29	16	4	3	4	2	2
Wet Water Years (30%)	45	85	84	237	-52	-187	51	6	2	2	2	1
Above Normal Water Years (11%)	-43	14	45	55	59	133	0	2	3	3	0	0
Below Normal Water Years (21%)	0	14	11	-116	-16	-6	6	0	1	5	8	5
Dry Water Years (22%)	-1	19	83	9	-40	53	2	8	8	8	-2	3
Critical Water Years (16%)	1	22	-105	-23	-78	13	-4	3	-2	2	0	0

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

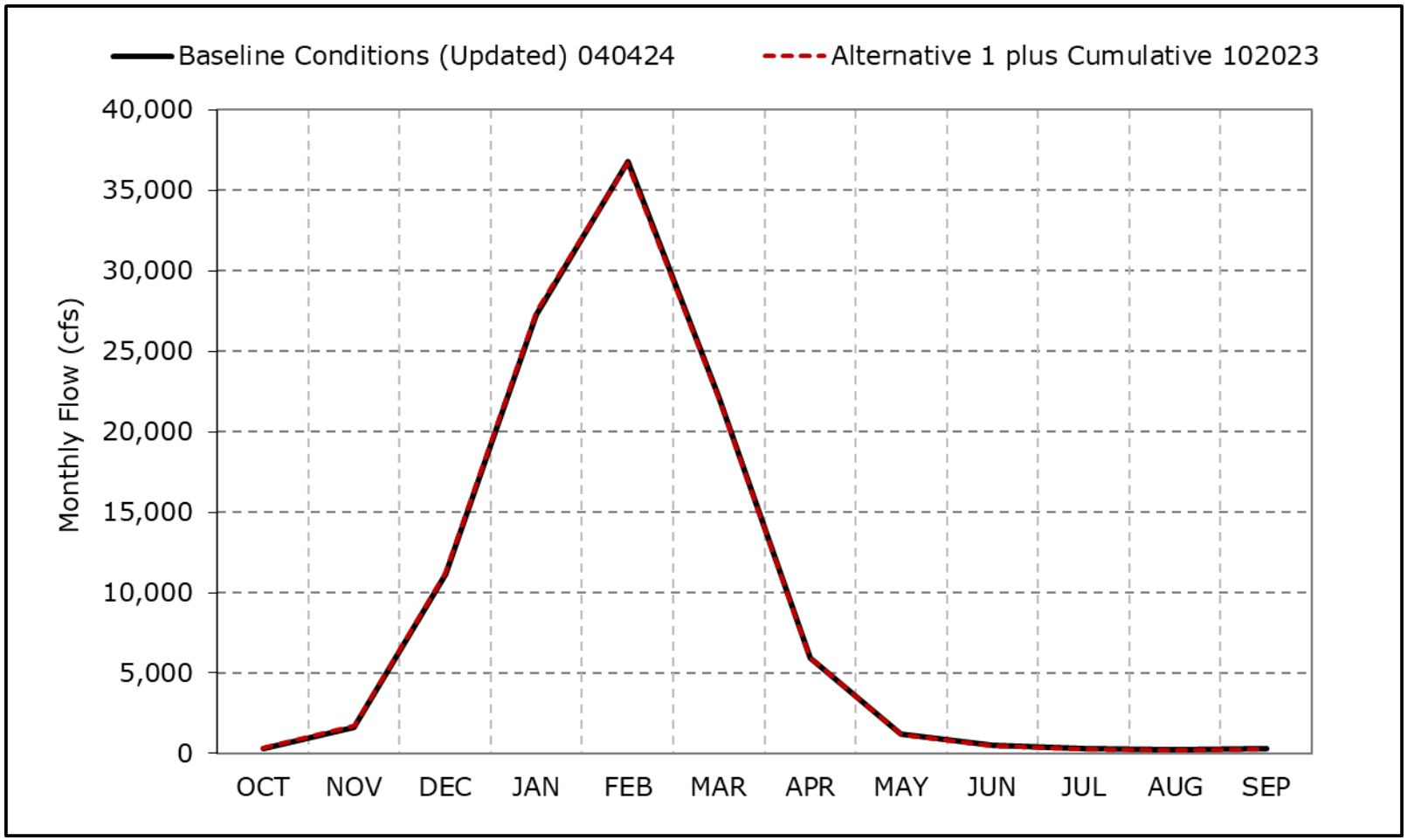
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



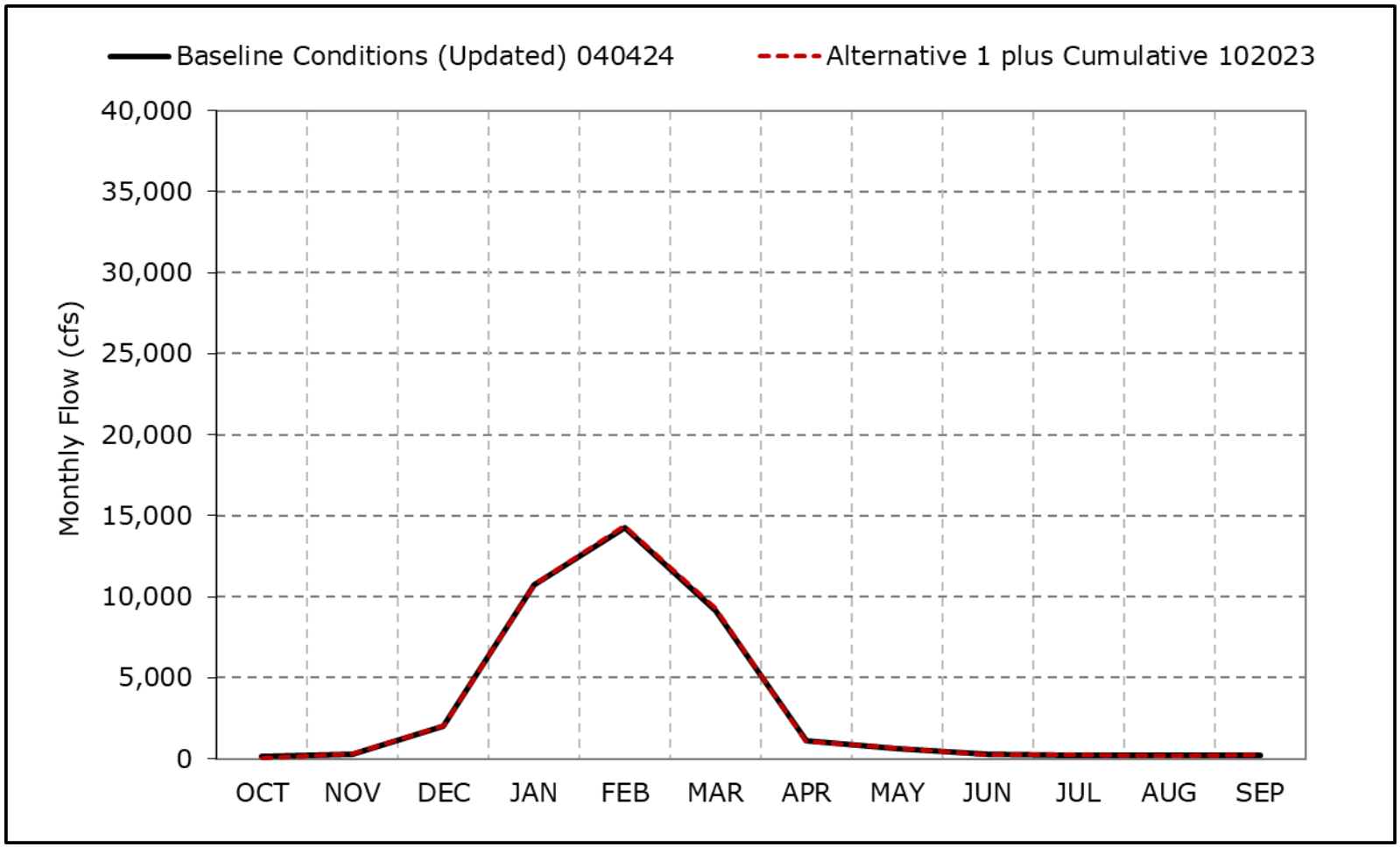
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



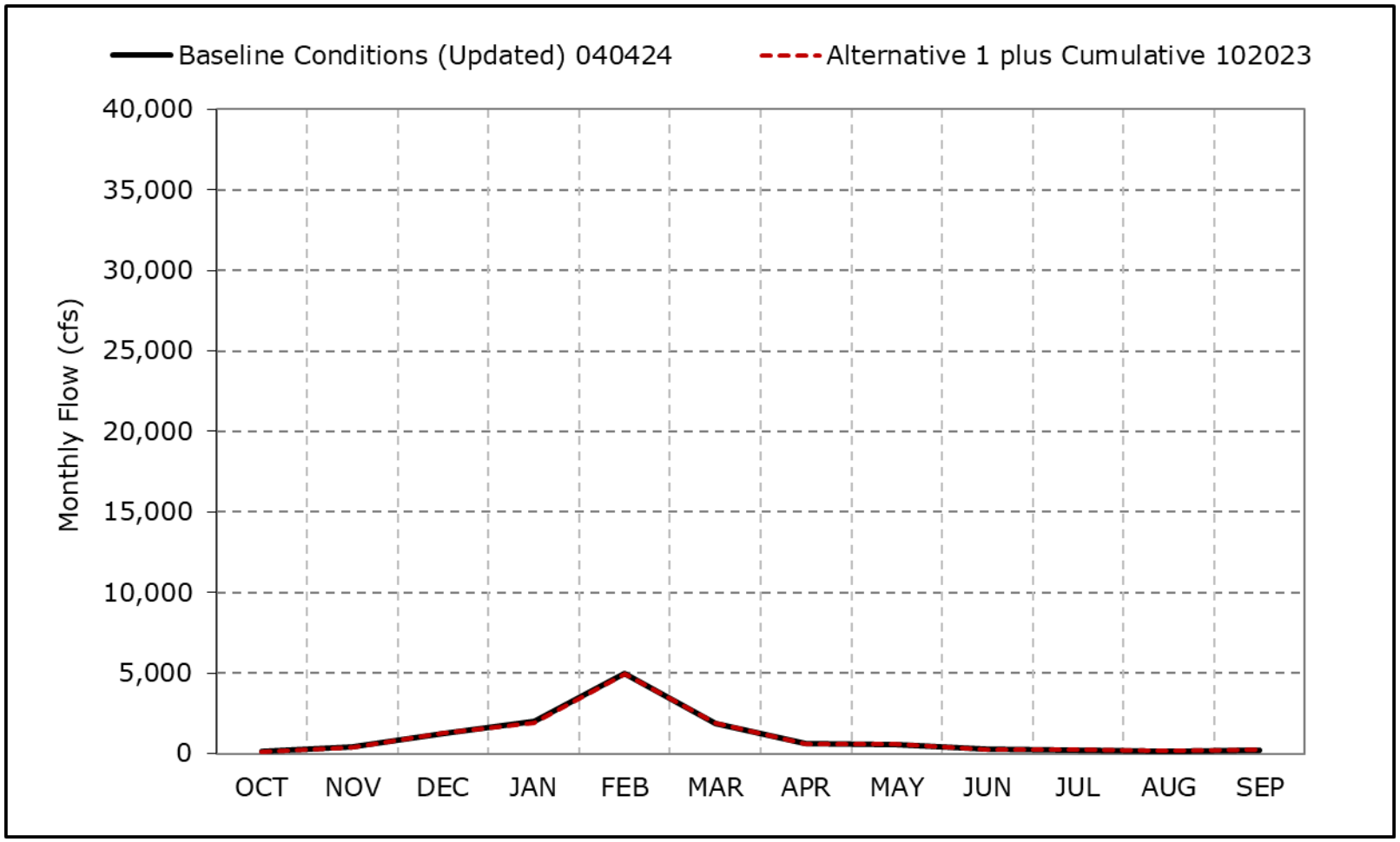
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



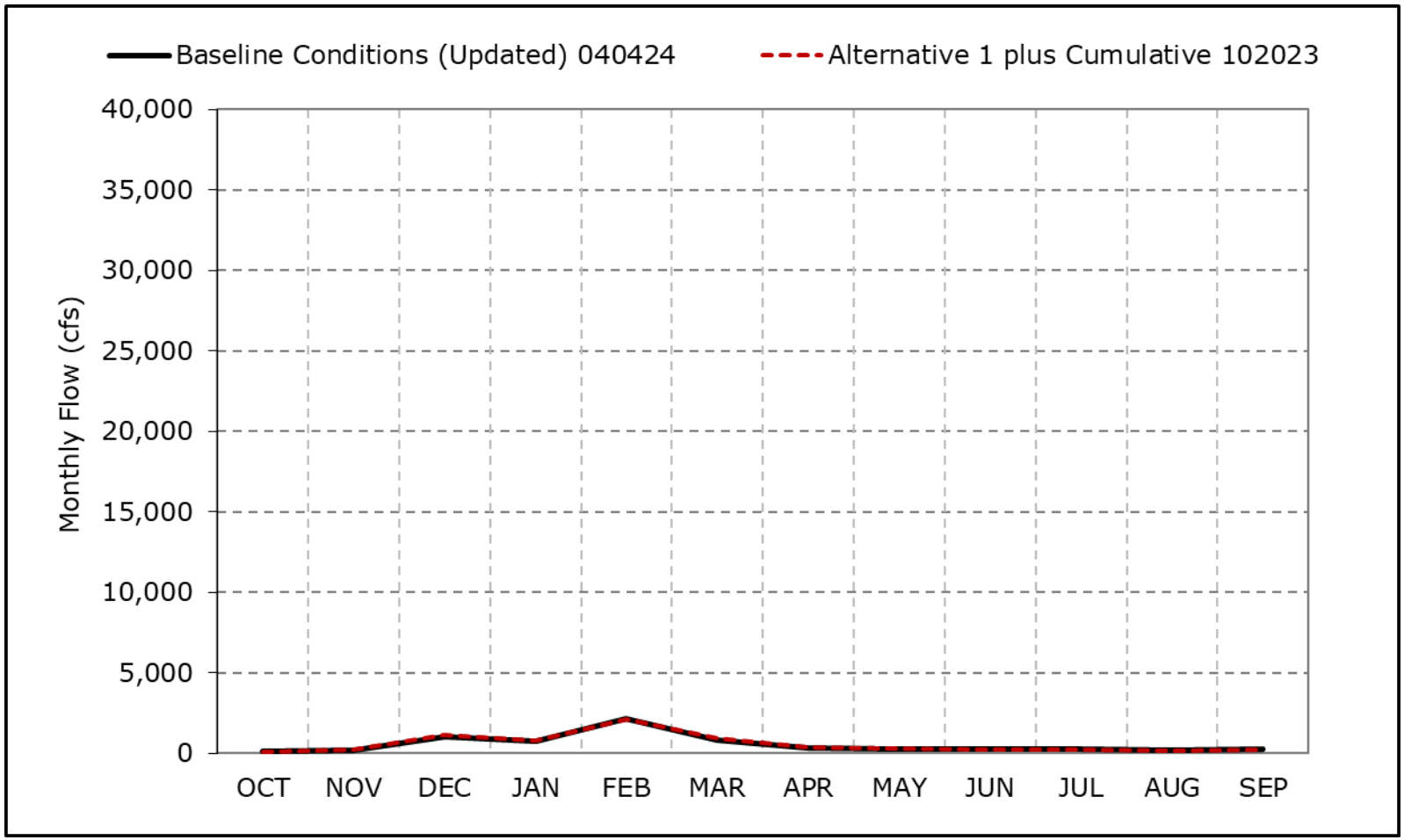
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



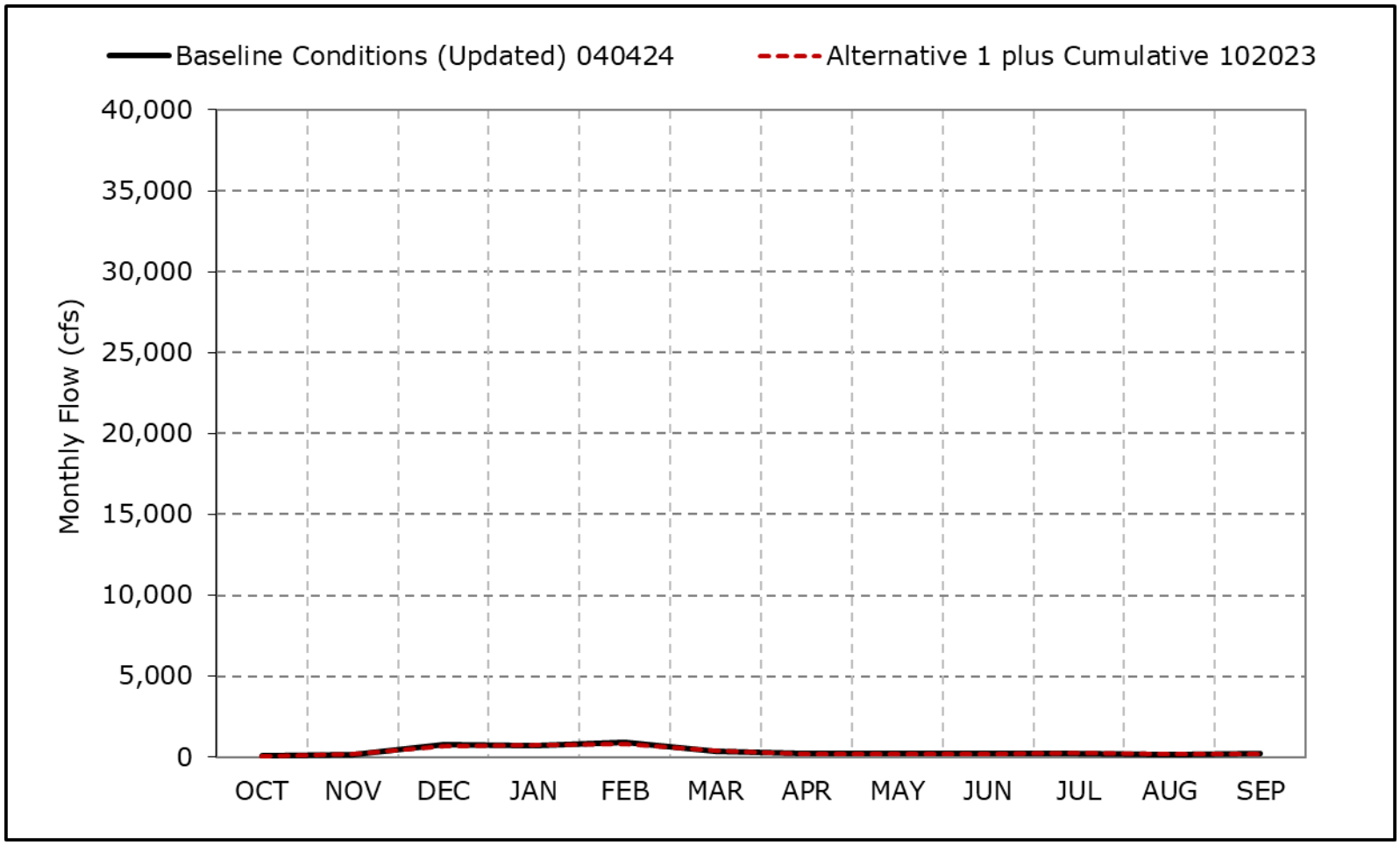
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



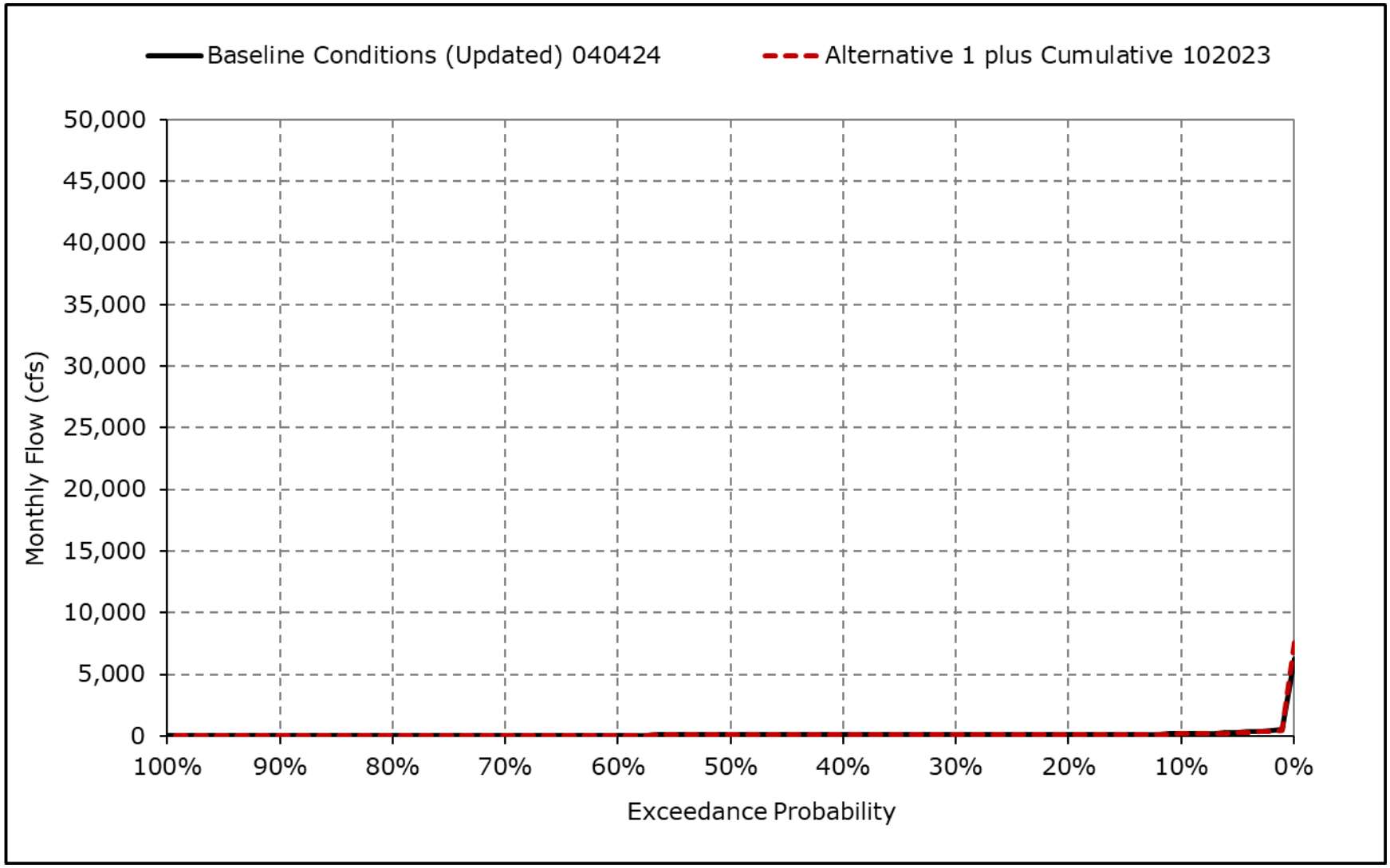
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



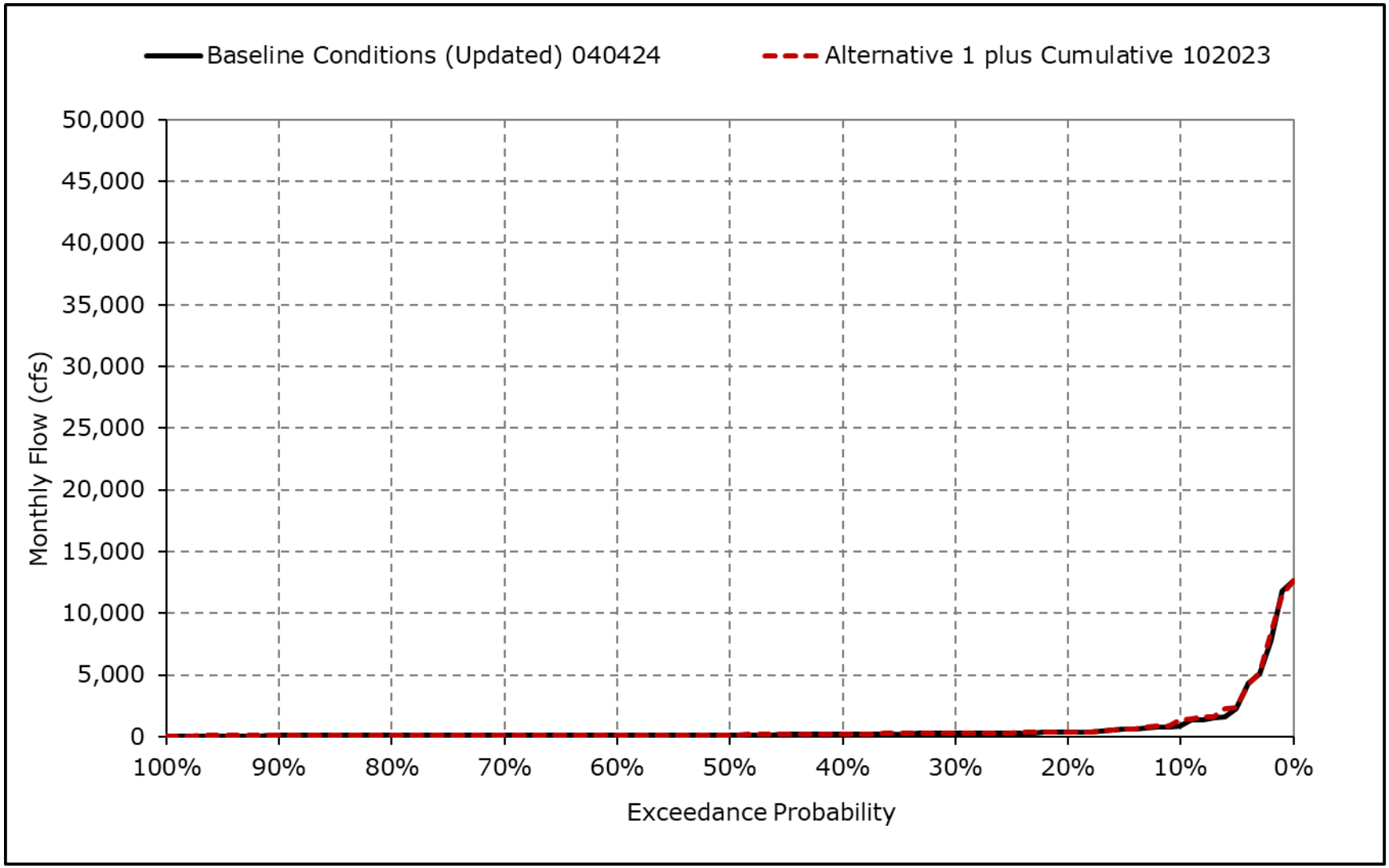
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



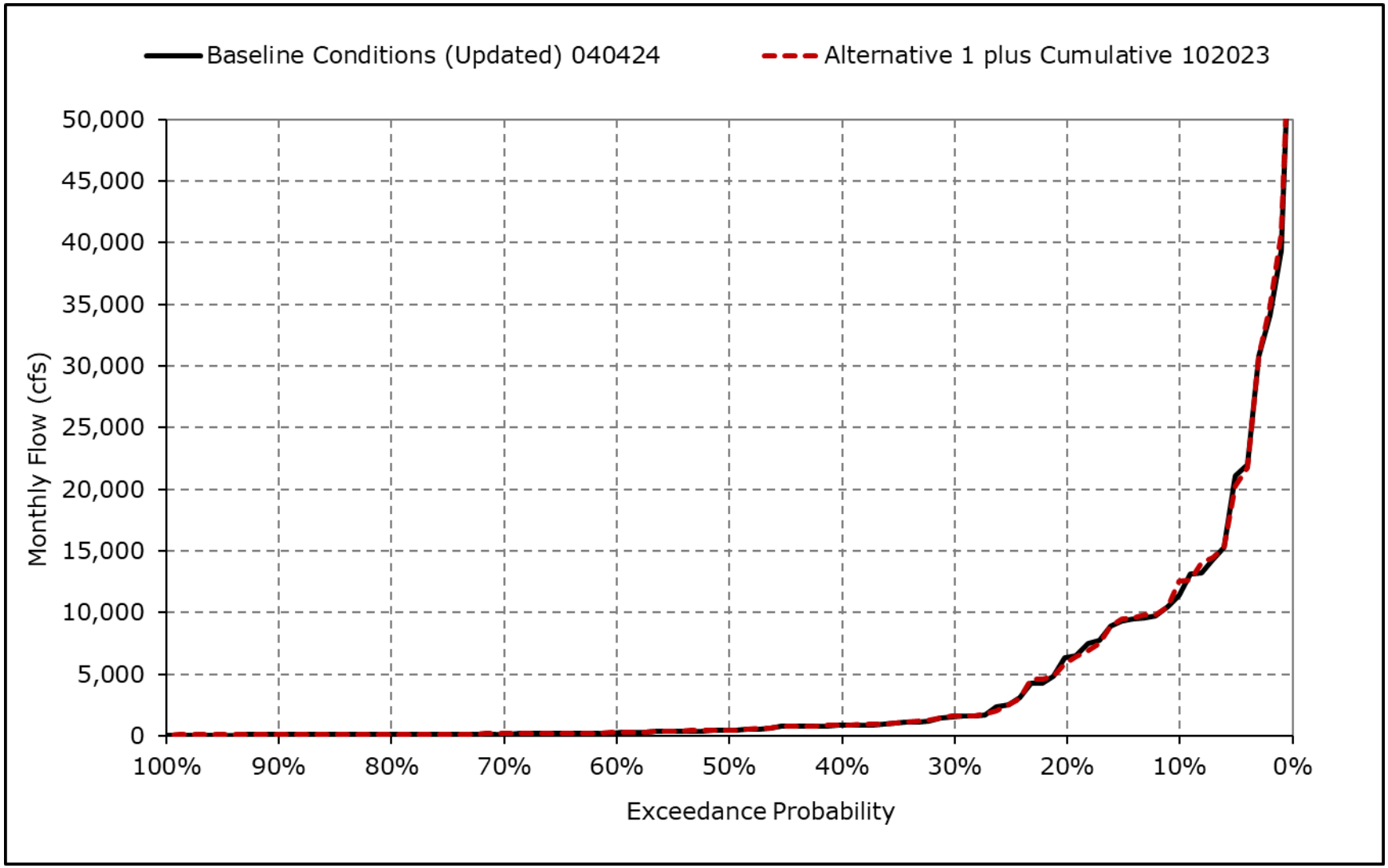
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



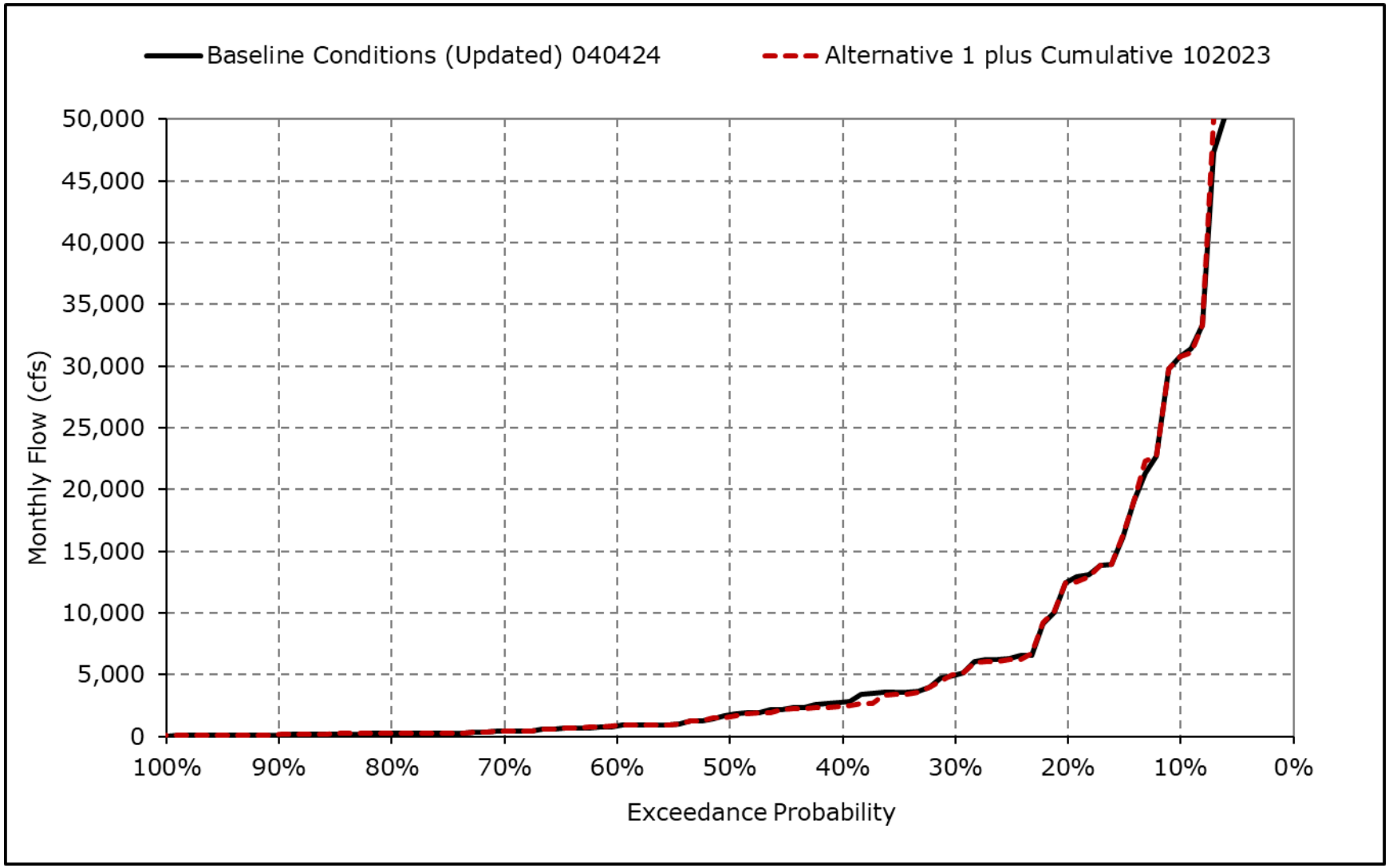
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



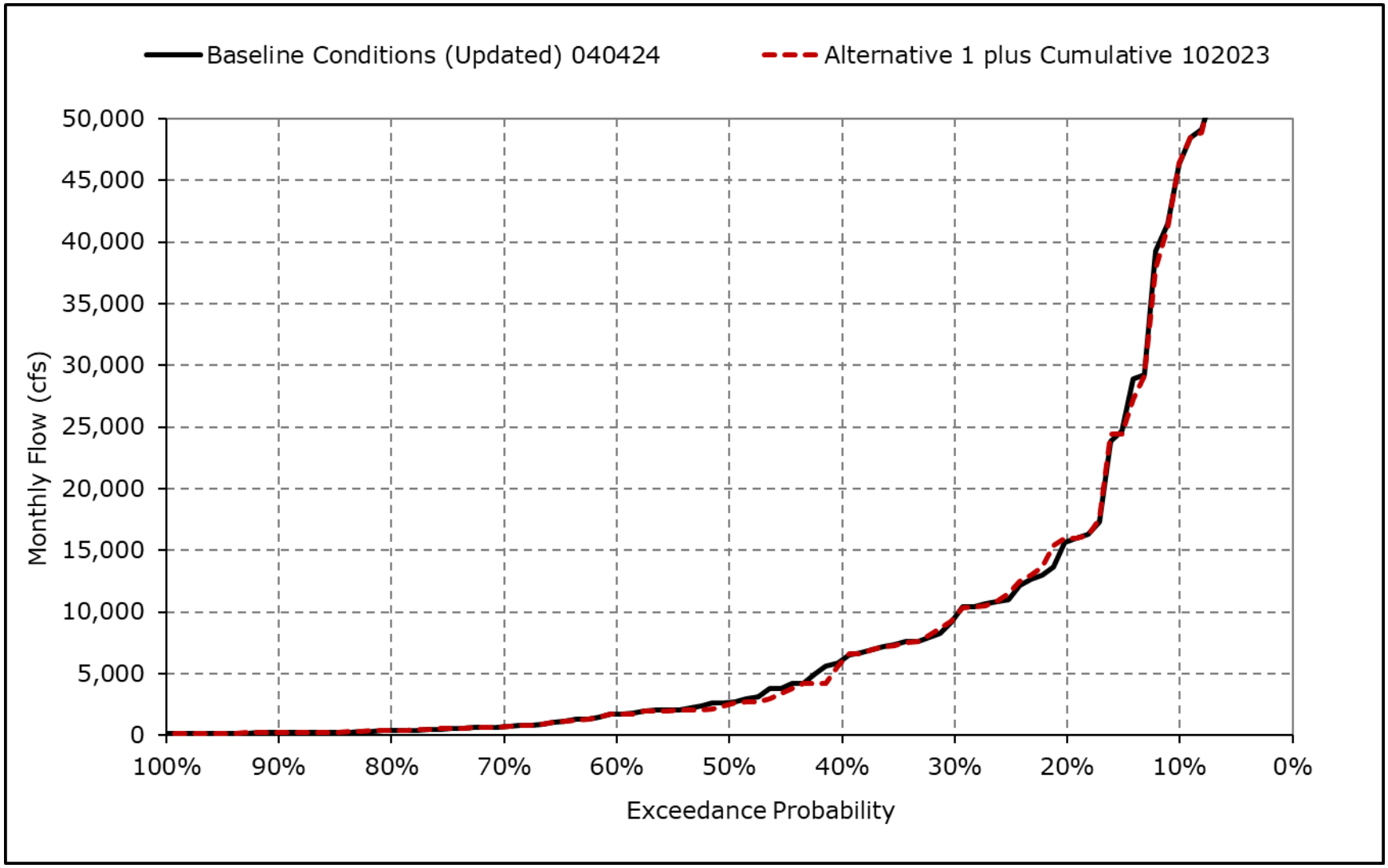
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



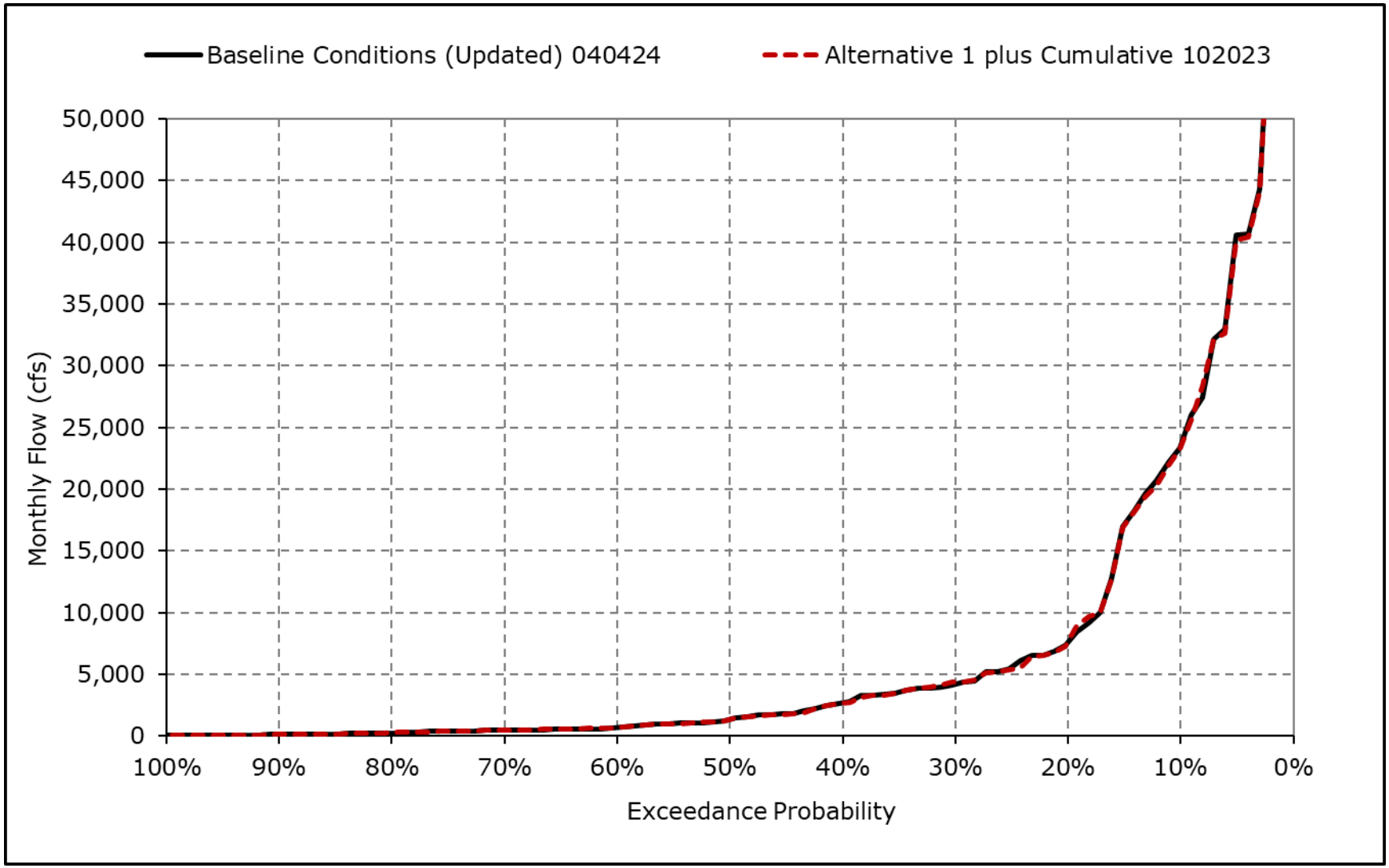
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



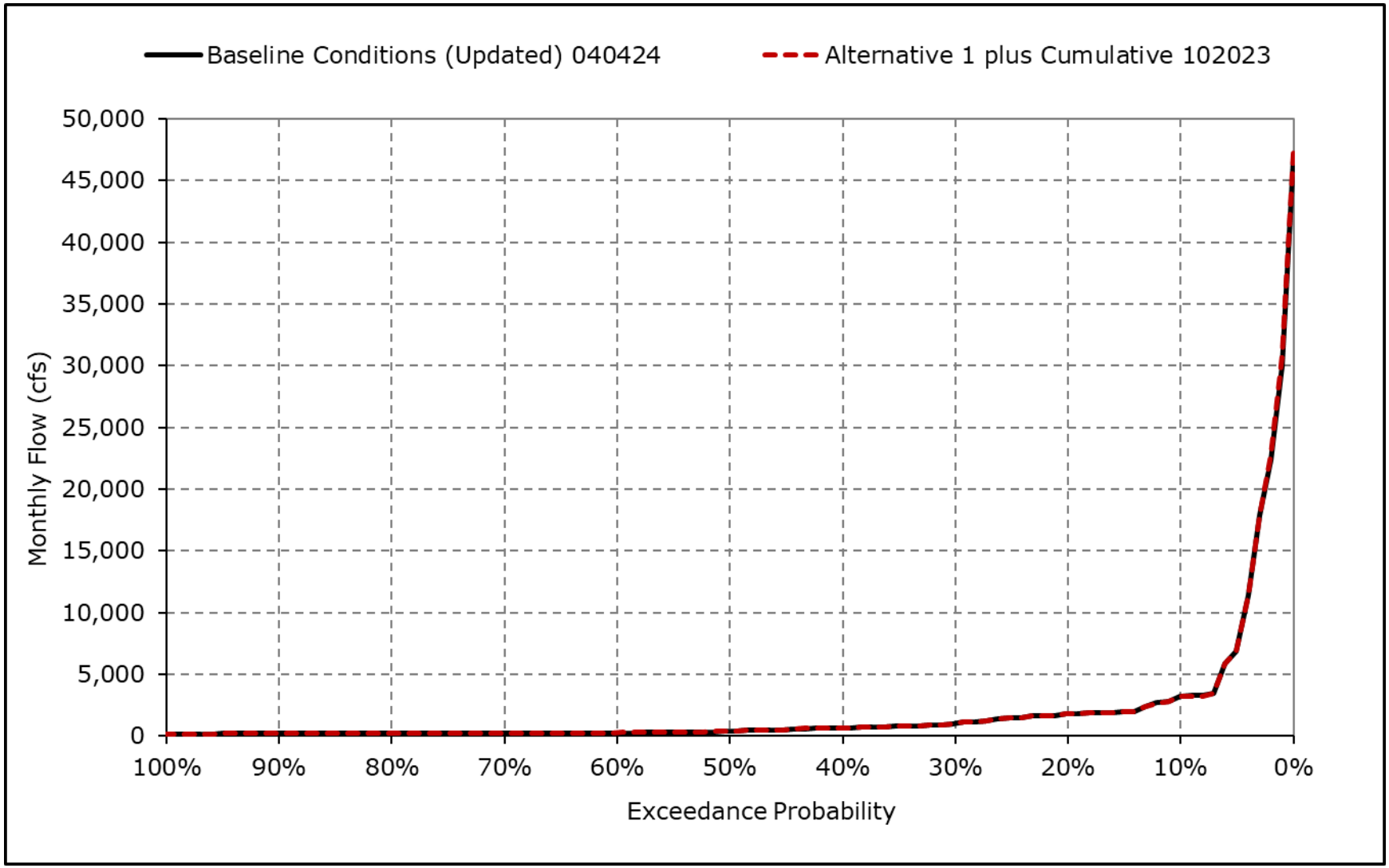
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



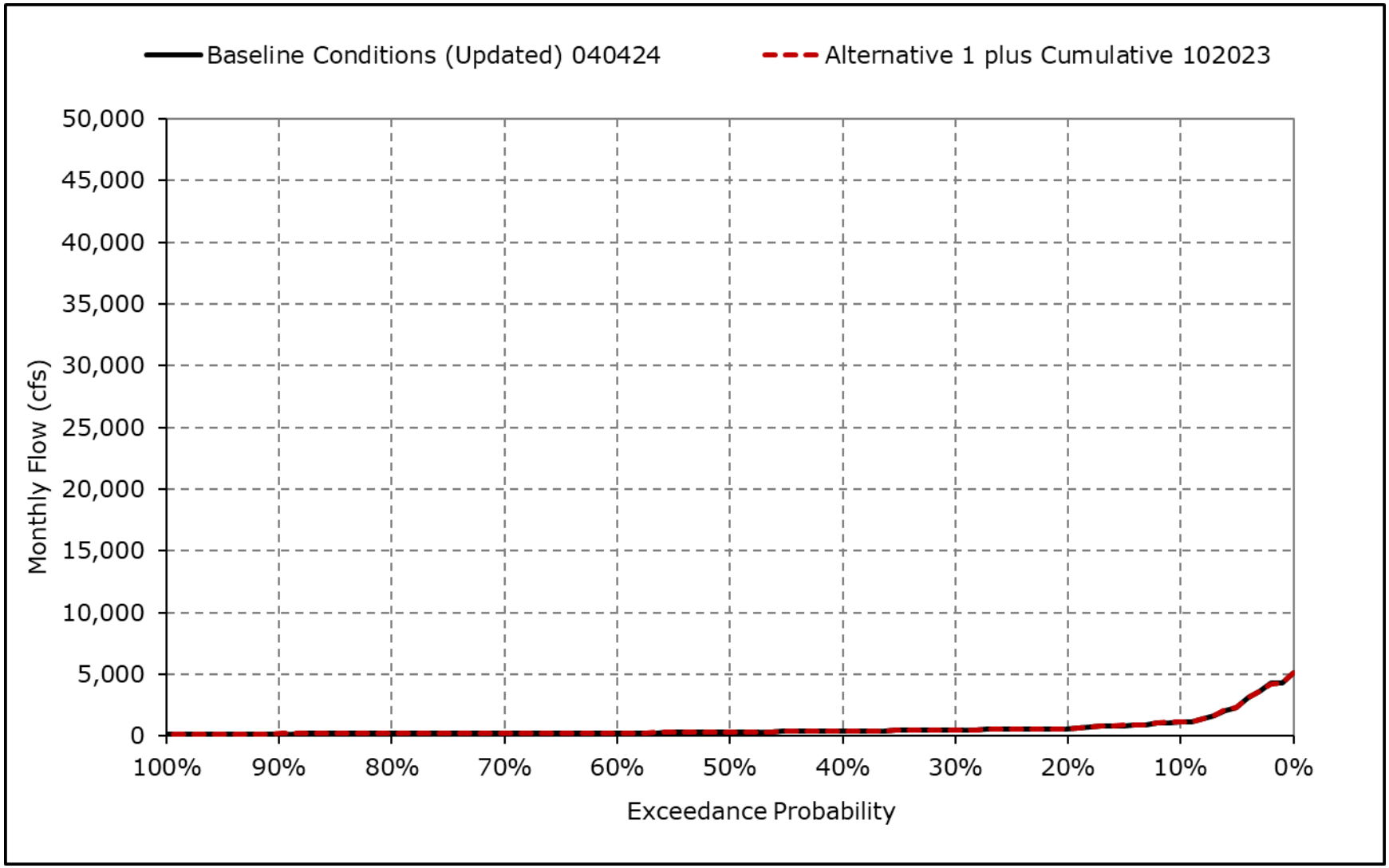
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



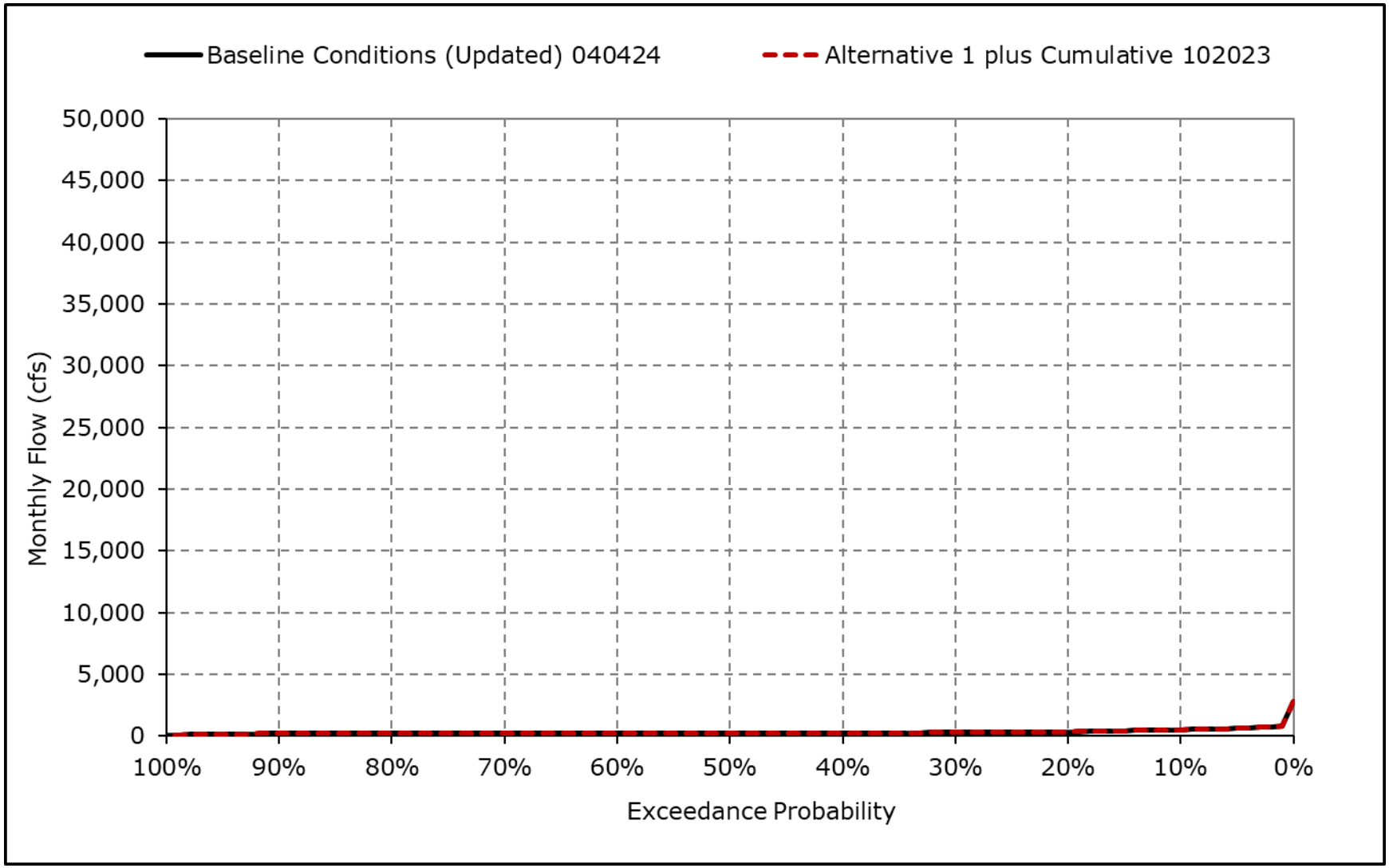
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



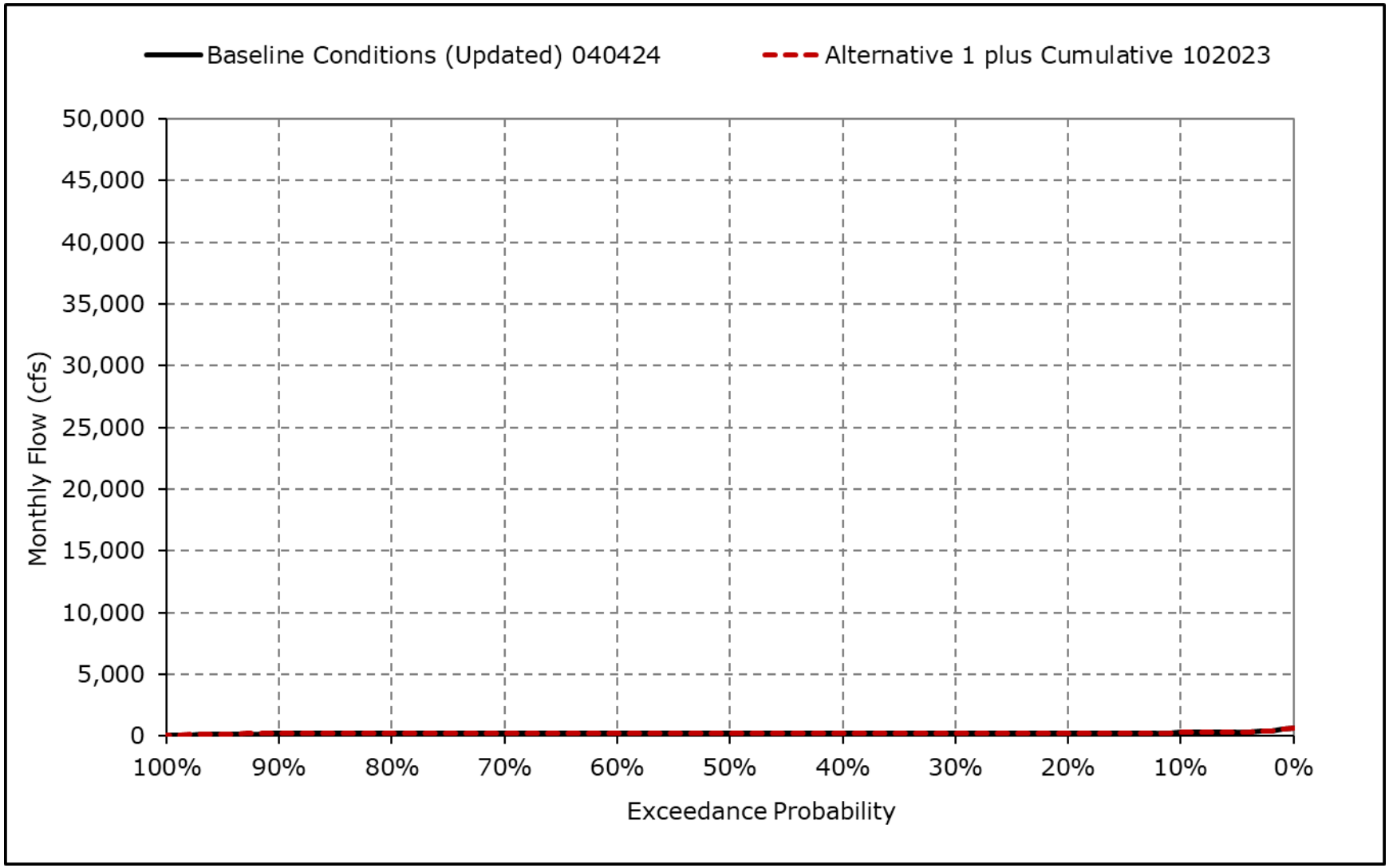
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



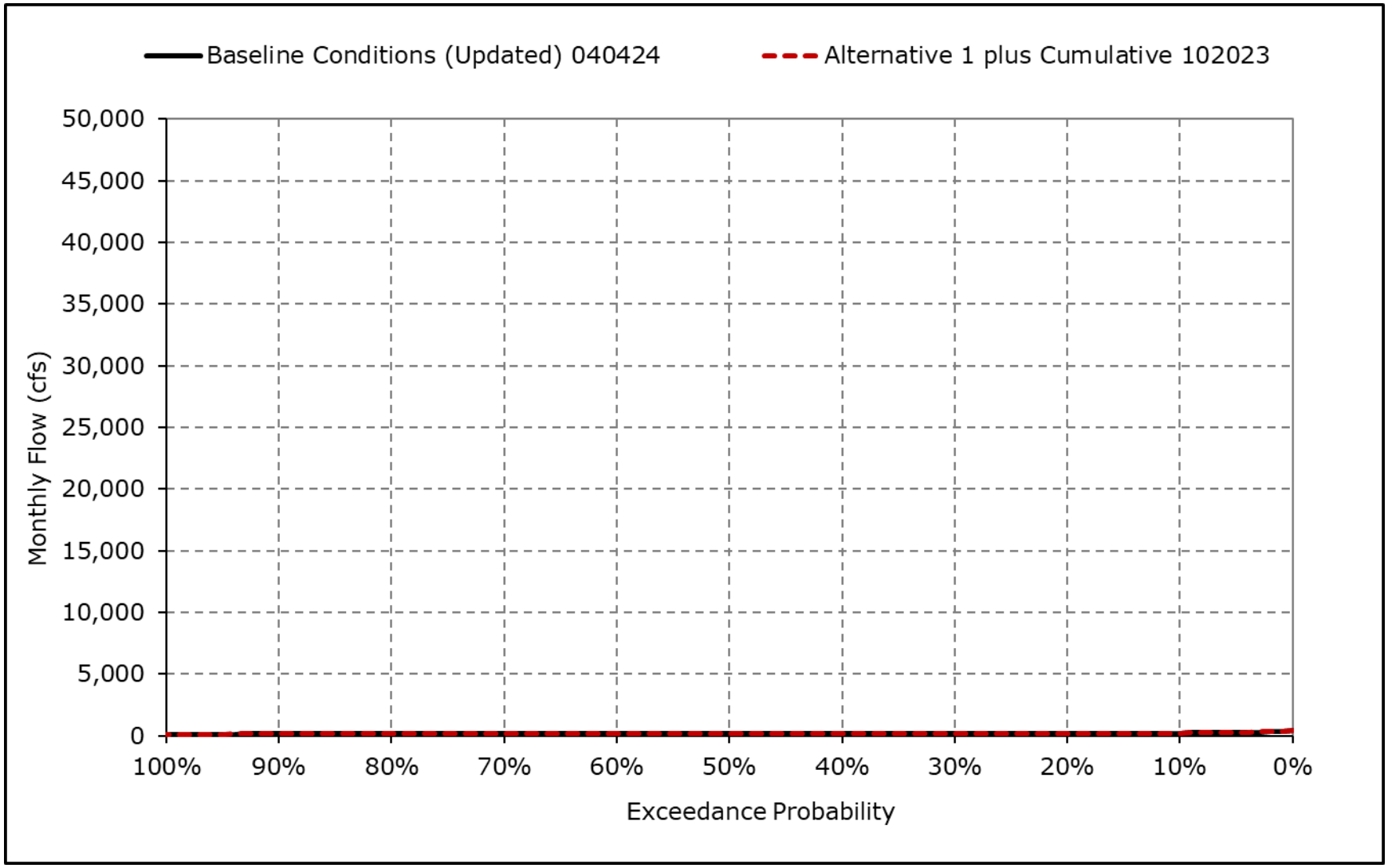
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



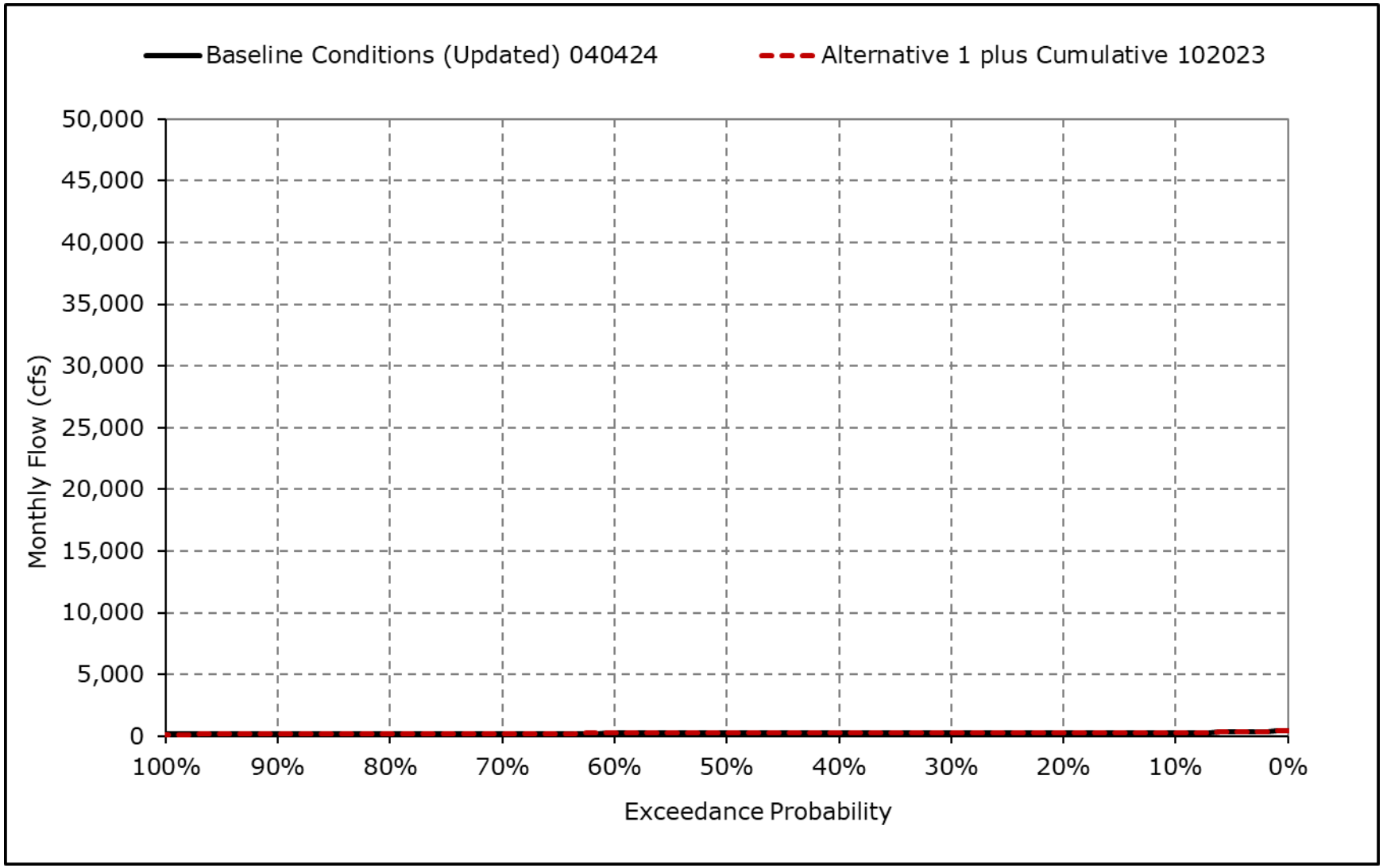
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-3-1a. San Joaquin River at Vernalis, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,745	2,791	4,101	7,308	11,298	13,134	13,819	10,607	11,467	5,768	4,628	3,532
20% Exceedance	3,332	2,397	2,730	4,281	8,152	7,835	9,112	6,663	5,419	3,345	2,287	1,993
30% Exceedance	3,007	2,324	2,227	3,337	5,269	6,556	7,660	5,416	3,327	2,121	1,713	1,606
40% Exceedance	2,126	2,101	1,925	2,712	3,940	4,562	5,869	4,348	2,590	1,789	1,554	1,469
50% Exceedance	1,864	1,872	1,783	2,221	3,161	3,108	4,256	3,509	2,047	1,487	1,460	1,383
60% Exceedance	1,749	1,584	1,644	2,059	2,502	2,702	3,332	2,702	1,760	1,299	1,237	1,266
70% Exceedance	1,661	1,478	1,530	1,893	2,295	2,408	2,964	2,447	1,633	1,185	1,101	1,158
80% Exceedance	1,555	1,371	1,348	1,757	2,129	2,224	2,638	2,071	1,440	925	925	989
90% Exceedance	1,374	1,304	1,255	1,647	1,949	2,126	2,285	1,710	1,183	743	750	848
Full Simulation Period Average[a]	2,387	2,098	2,616	3,912	5,584	5,844	6,426	5,131	4,241	2,502	1,906	1,683
Wet Water Years (30%)	2,738	2,684	4,492	7,533	10,543	11,408	11,912	9,653	8,998	5,122	3,546	2,747
Above Normal Water Years (11%)	2,174	1,932	2,050	3,566	6,062	5,875	6,754	5,160	3,976	2,322	1,762	1,659
Below Normal Water Years (21%)	2,606	2,131	2,014	2,515	4,153	4,238	5,228	4,146	2,674	1,680	1,411	1,387
Dry Water Years (22%)	2,296	1,806	1,723	1,975	2,366	2,420	2,854	2,336	1,566	1,116	1,093	1,147
Critical Water Years (16%)	1,712	1,471	1,506	1,857	2,258	2,207	2,398	1,769	1,237	696	700	827

Table 4G-3-3-1b. San Joaquin River at Vernalis, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,751	2,801	4,102	7,315	11,306	12,743	14,280	10,691	11,476	5,782	4,636	3,539
20% Exceedance	3,352	2,404	2,738	4,289	8,161	7,853	9,768	7,419	5,452	3,514	2,302	2,000
30% Exceedance	3,013	2,336	2,237	3,344	5,278	6,564	8,460	6,435	3,370	2,384	1,743	1,616
40% Exceedance	2,133	2,117	1,939	2,722	3,948	4,564	7,299	5,489	2,615	1,926	1,592	1,487
50% Exceedance	1,874	1,896	1,793	2,228	3,163	3,100	5,734	4,979	2,068	1,663	1,504	1,407
60% Exceedance	1,812	1,594	1,663	2,043	2,494	2,710	4,481	3,897	1,793	1,366	1,306	1,284
70% Exceedance	1,672	1,483	1,541	1,901	2,328	2,415	3,609	2,955	1,651	1,250	1,160	1,215
80% Exceedance	1,573	1,400	1,363	1,754	2,136	2,216	3,048	2,476	1,489	1,084	978	1,028
90% Exceedance	1,431	1,311	1,253	1,654	1,973	2,127	2,703	2,099	1,194	764	794	871
Full Simulation Period Average[a]	2,403	2,110	2,629	3,916	5,575	5,847	7,209	5,873	4,266	2,604	1,947	1,709
Wet Water Years (30%)	2,755	2,697	4,519	7,551	10,559	11,425	12,519	10,215	9,017	5,170	3,557	2,758
Above Normal Water Years (11%)	2,215	1,957	2,065	3,511	5,911	5,840	7,796	6,109	3,990	2,482	1,787	1,680
Below Normal Water Years (21%)	2,611	2,141	2,022	2,523	4,160	4,245	6,301	5,179	2,714	1,867	1,480	1,434
Dry Water Years (22%)	2,328	1,826	1,733	1,987	2,369	2,418	3,655	3,106	1,582	1,206	1,126	1,159
Critical Water Years (16%)	1,700	1,465	1,501	1,858	2,267	2,208	2,930	2,283	1,277	766	778	879

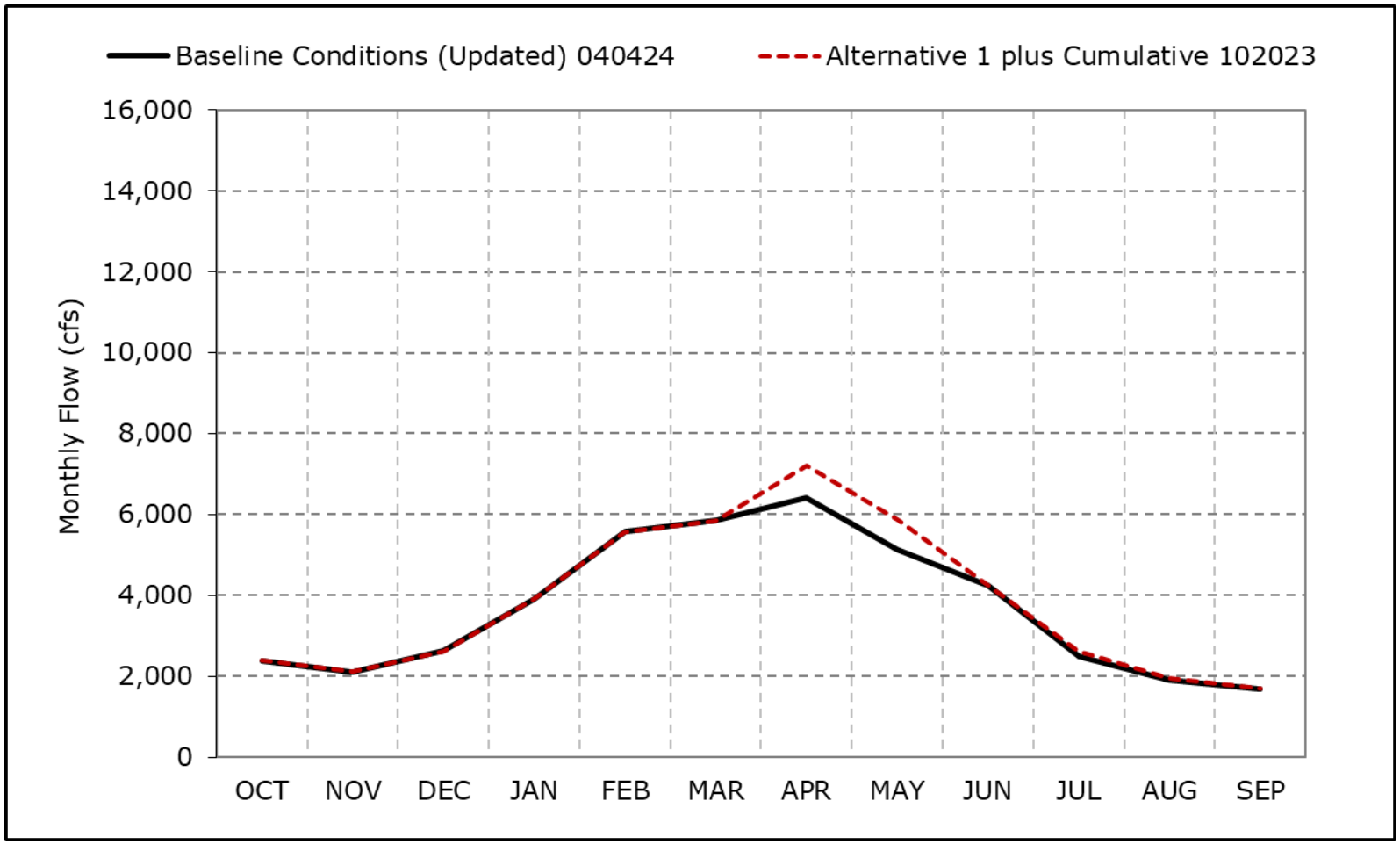
Table 4G-3-3-1c. San Joaquin River at Vernalis, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	5	9	1	7	8	-390	462	84	10	13	8	7
20% Exceedance	20	6	9	8	9	18	657	756	33	169	16	6
30% Exceedance	6	13	10	7	8	7	800	1,019	43	263	30	10
40% Exceedance	8	15	14	11	8	2	1,429	1,141	25	138	37	19
50% Exceedance	10	23	10	7	2	-8	1,478	1,469	20	176	45	24
60% Exceedance	63	10	18	-17	-8	8	1,148	1,195	33	67	69	18
70% Exceedance	11	5	10	8	33	7	645	508	18	65	59	57
80% Exceedance	18	29	15	-3	7	-8	410	405	49	159	53	39
90% Exceedance	56	7	-2	7	25	1	418	388	11	22	44	23
Full Simulation Period Average[a]	16	12	13	4	-8	2	783	742	25	102	40	26
Wet Water Years (30%)	17	13	27	18	16	17	608	562	19	48	12	10
Above Normal Water Years (11%)	41	25	15	-55	-150	-35	1,041	949	14	160	25	20
Below Normal Water Years (21%)	5	10	9	9	7	7	1,073	1,033	40	188	68	47
Dry Water Years (22%)	33	19	10	12	4	-3	801	770	16	90	33	12
Critical Water Years (16%)	-12	-6	-5	1	9	1	532	514	40	70	78	52

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

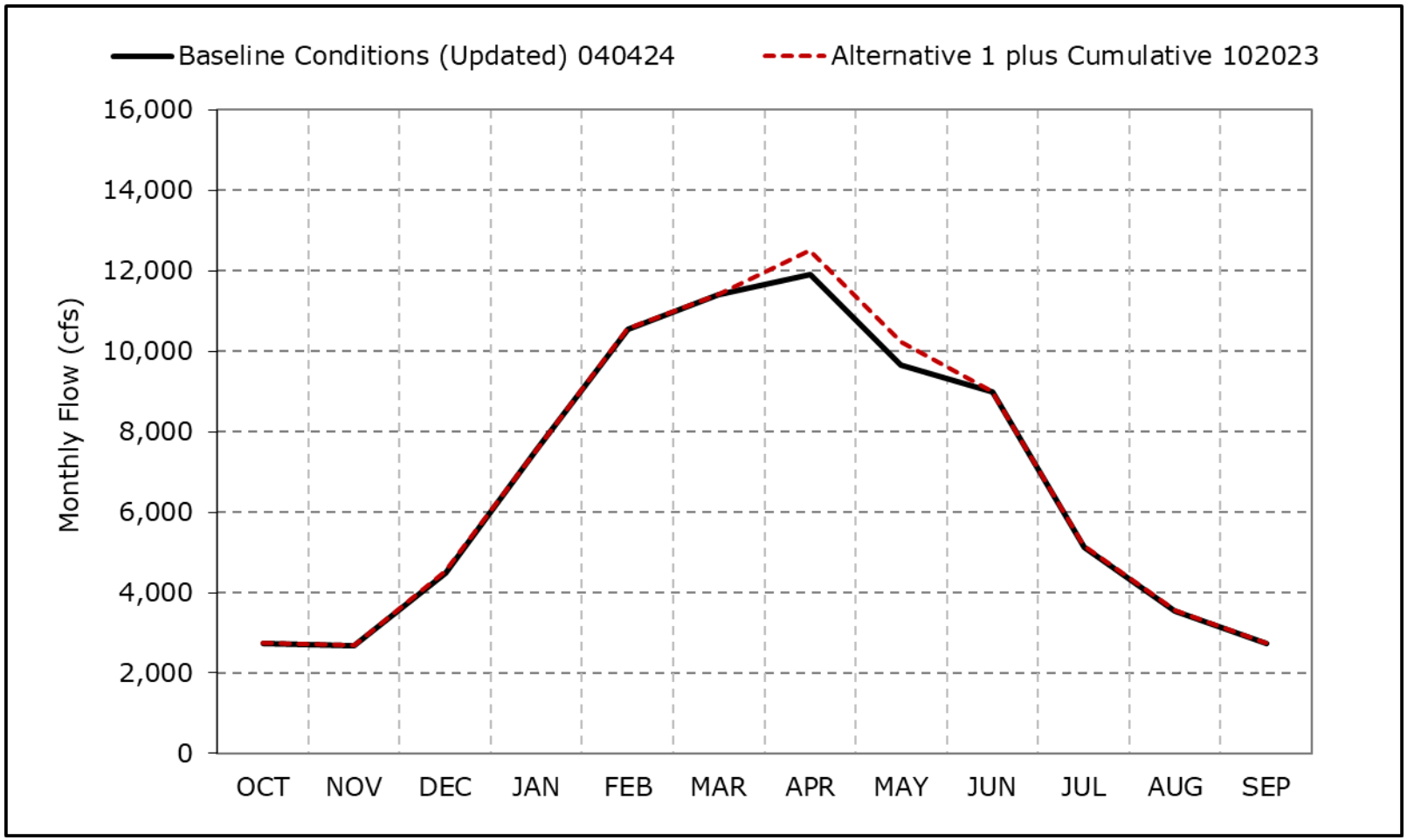
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



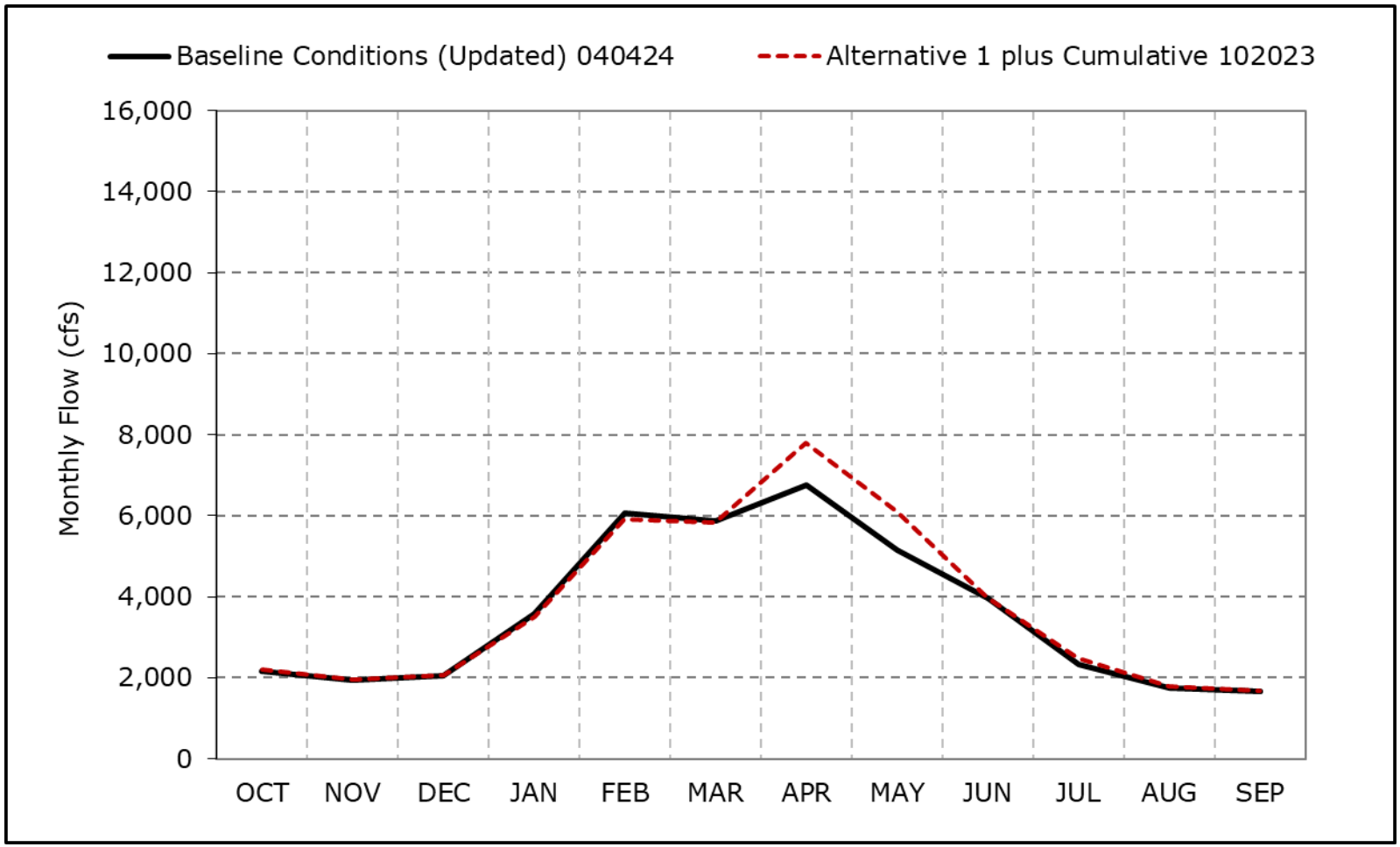
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



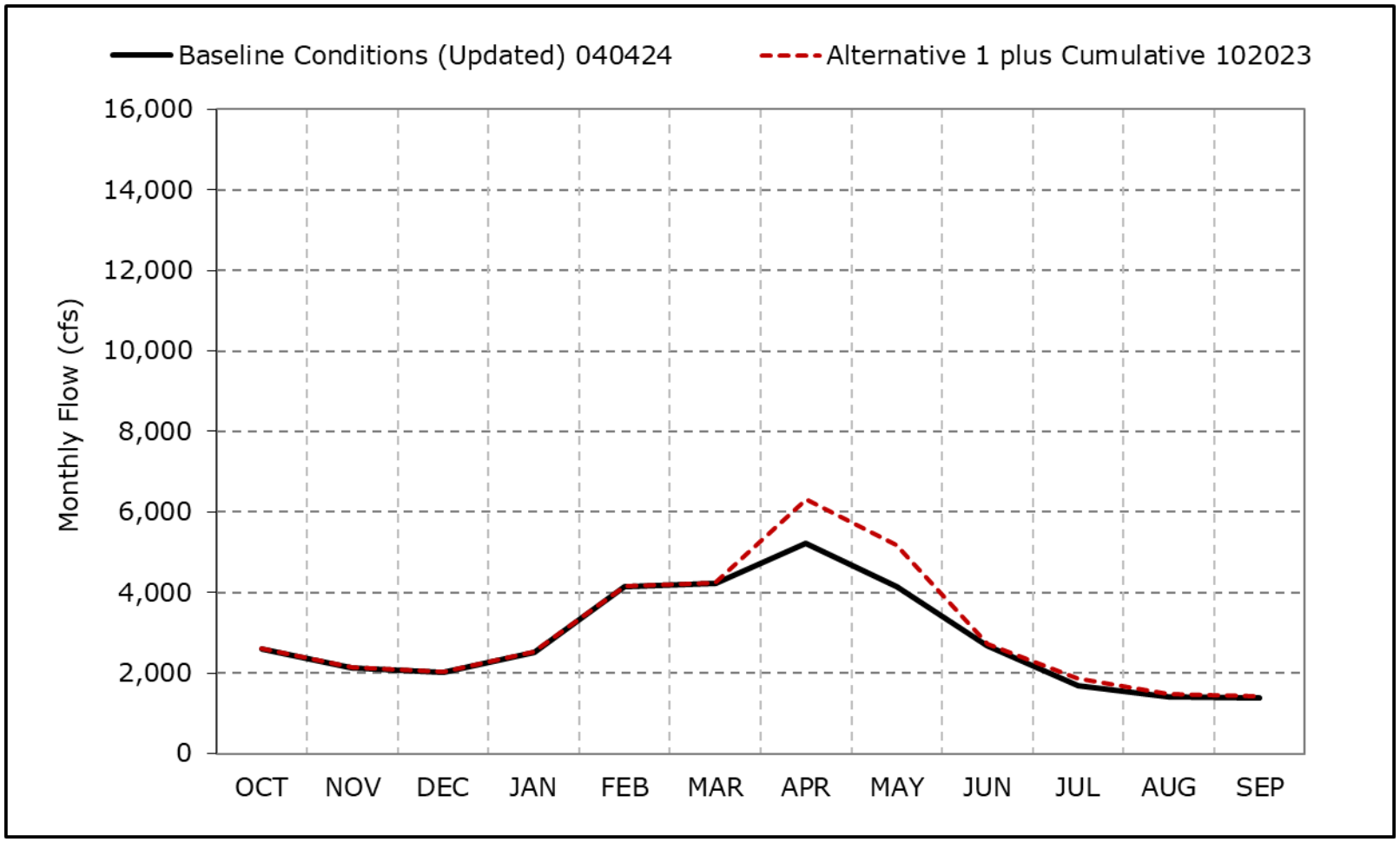
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



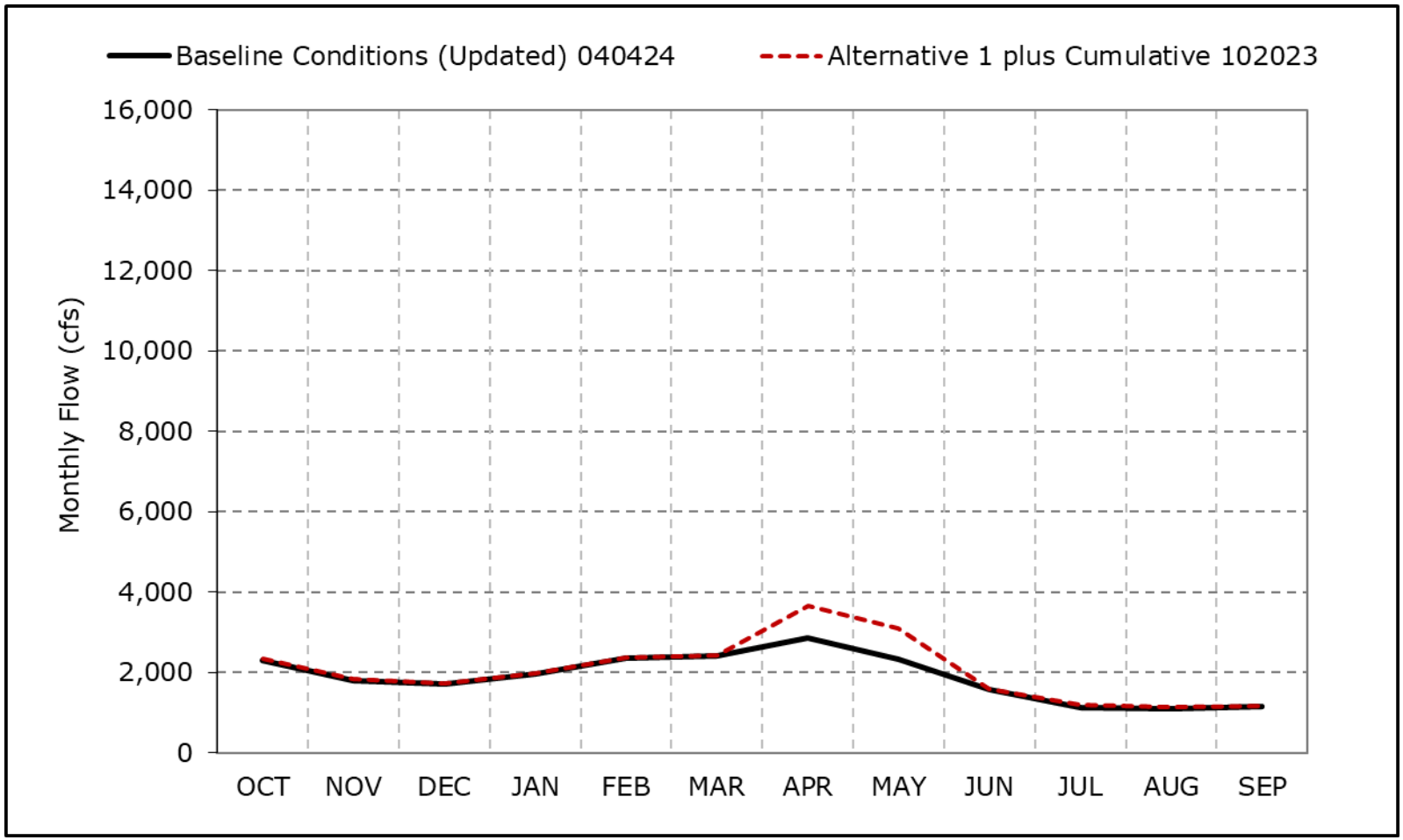
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



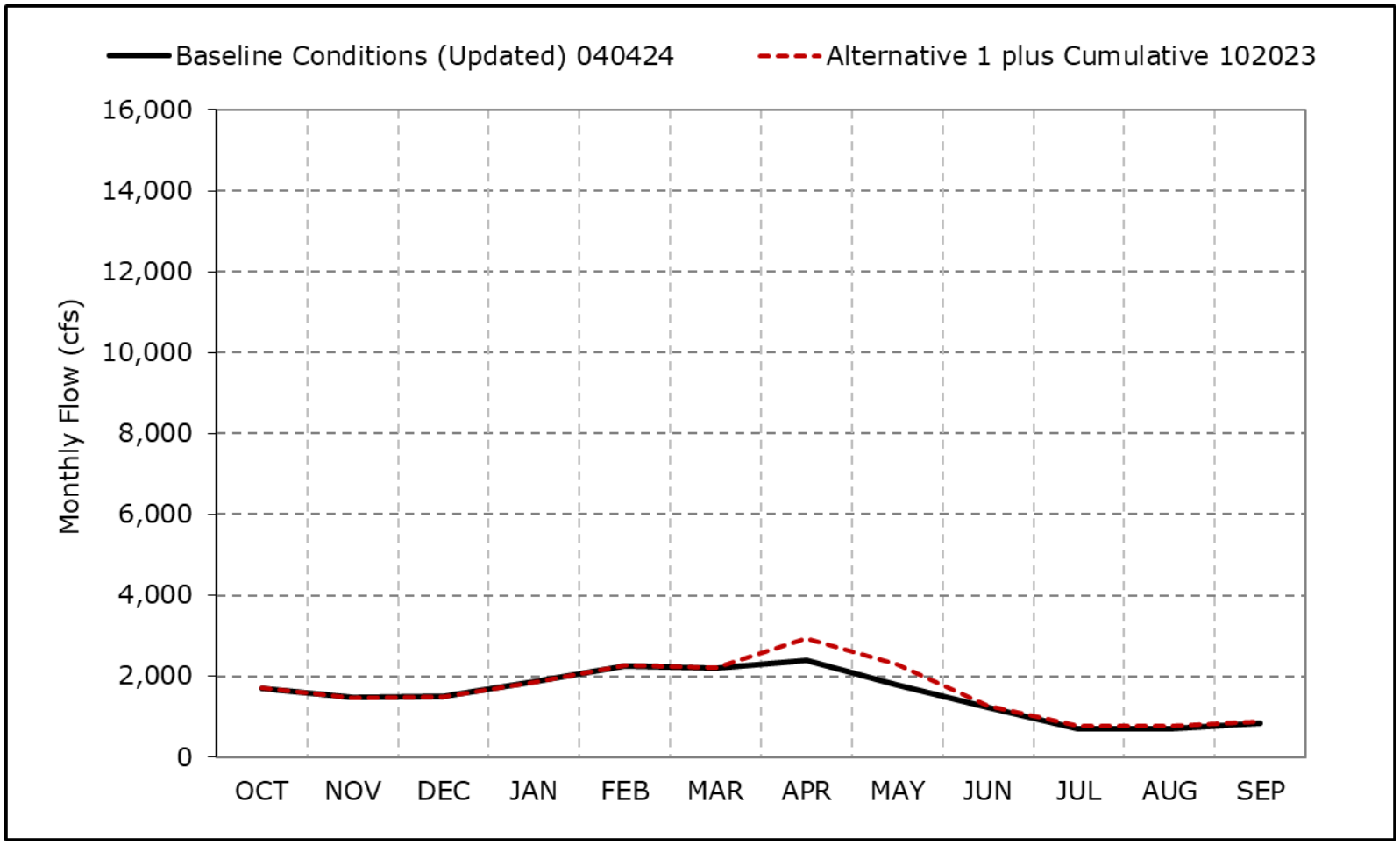
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



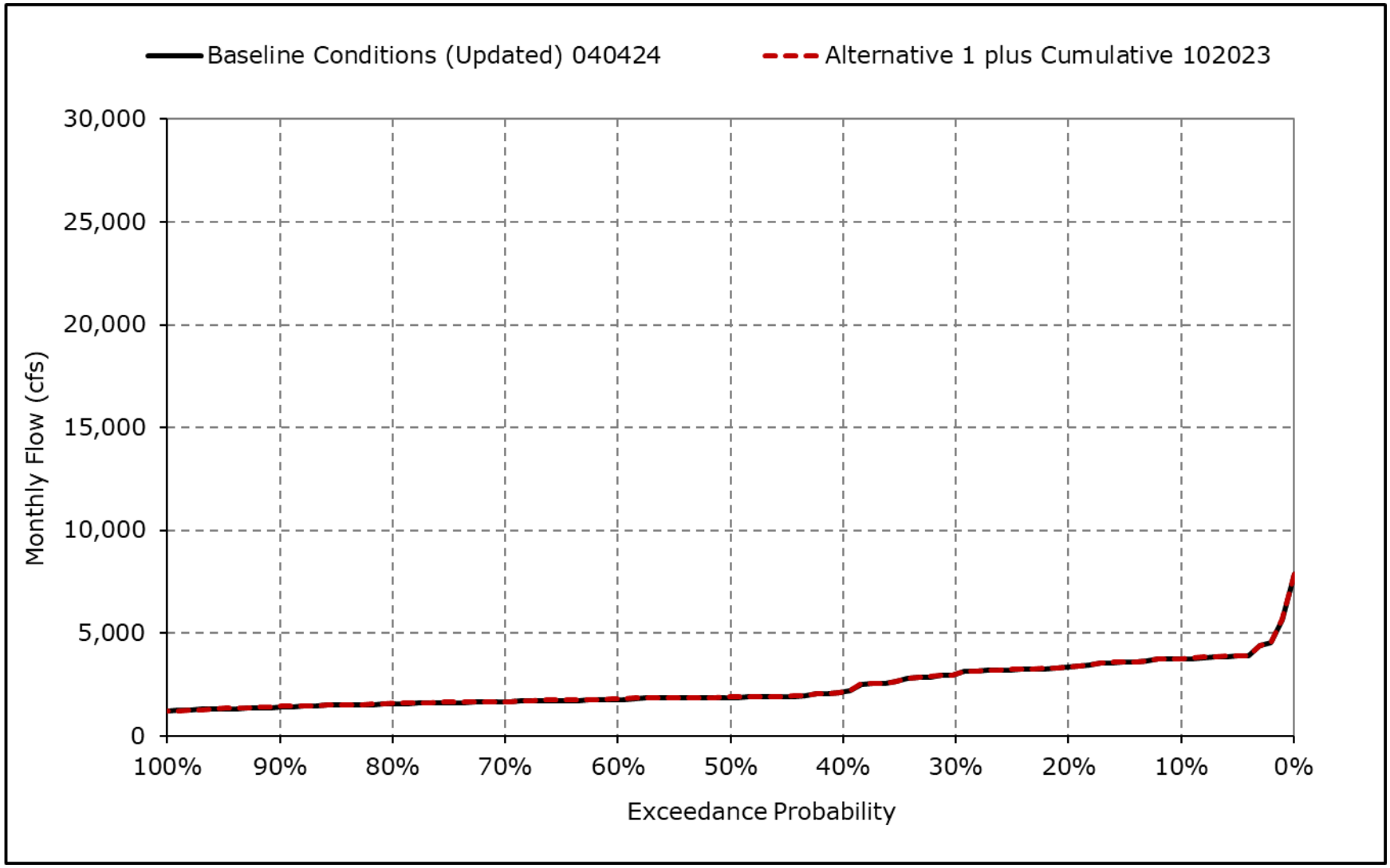
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



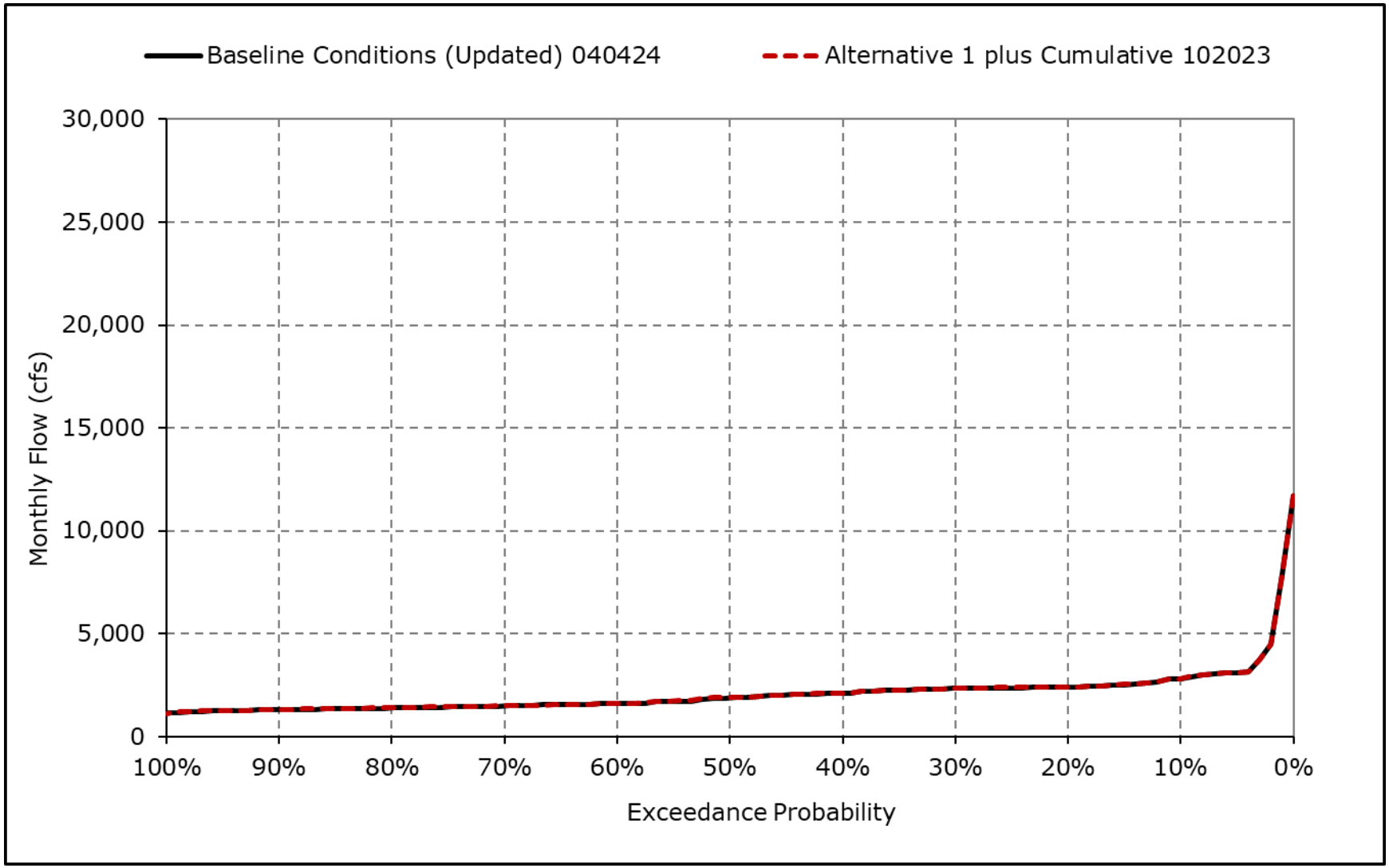
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



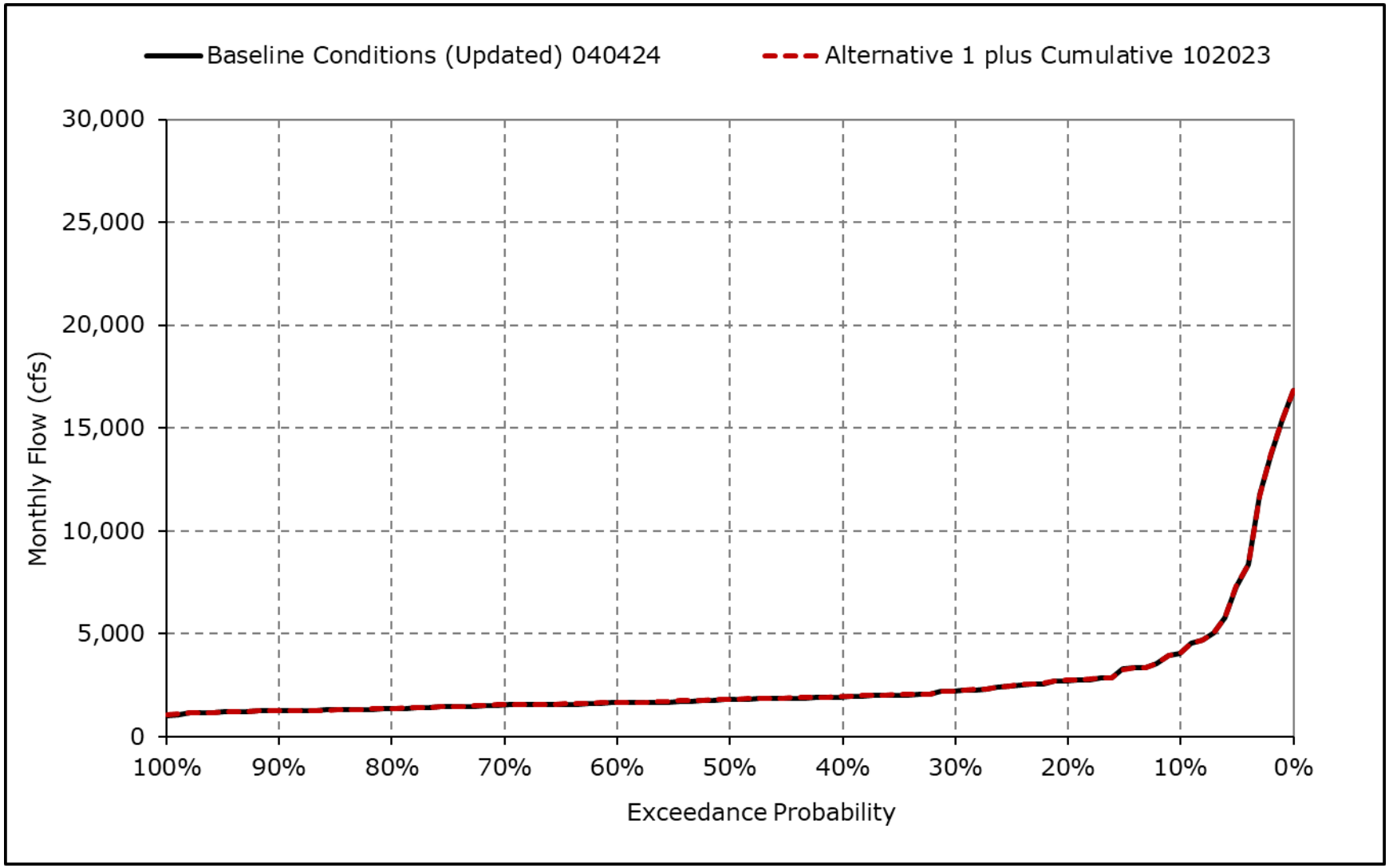
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



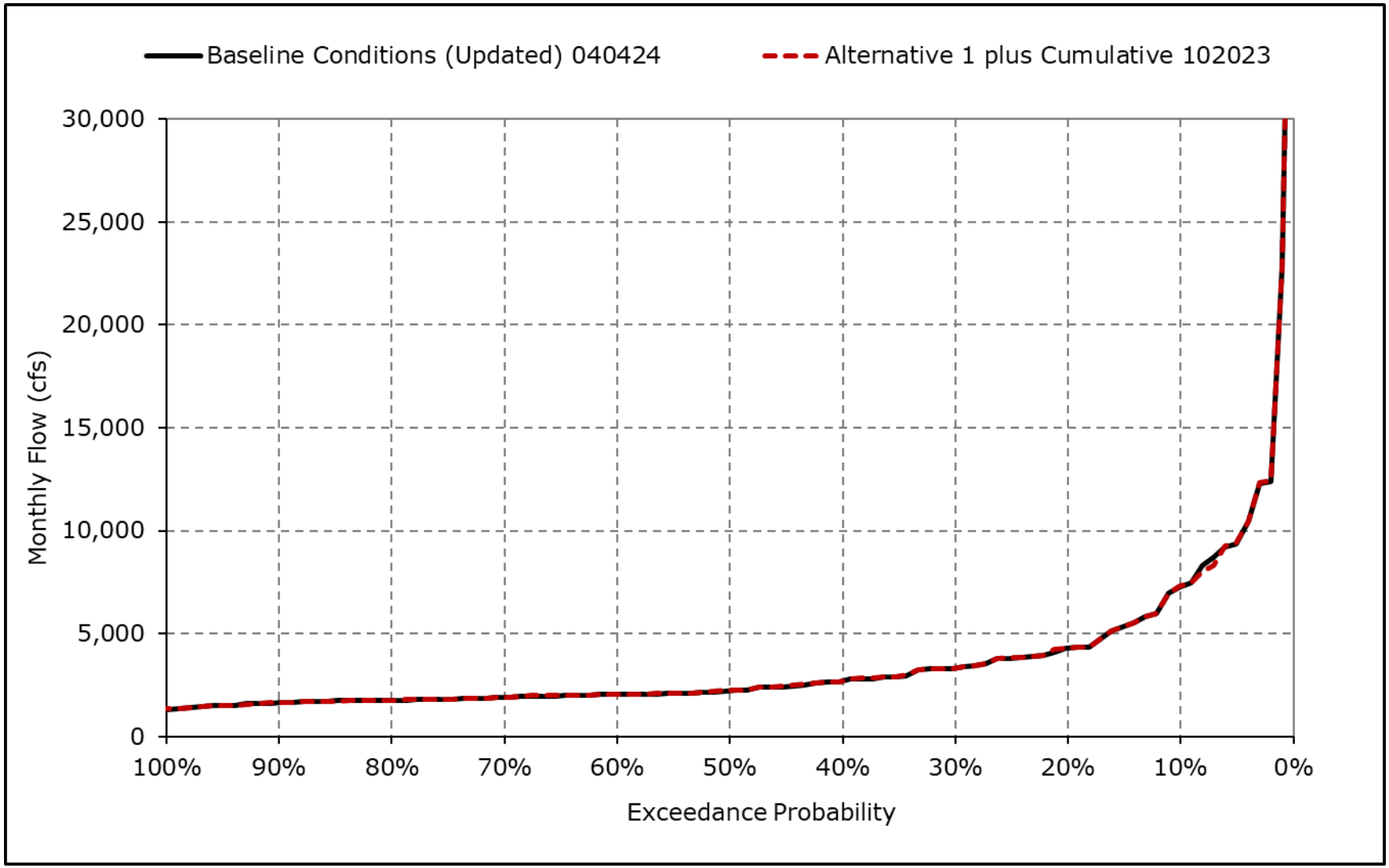
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



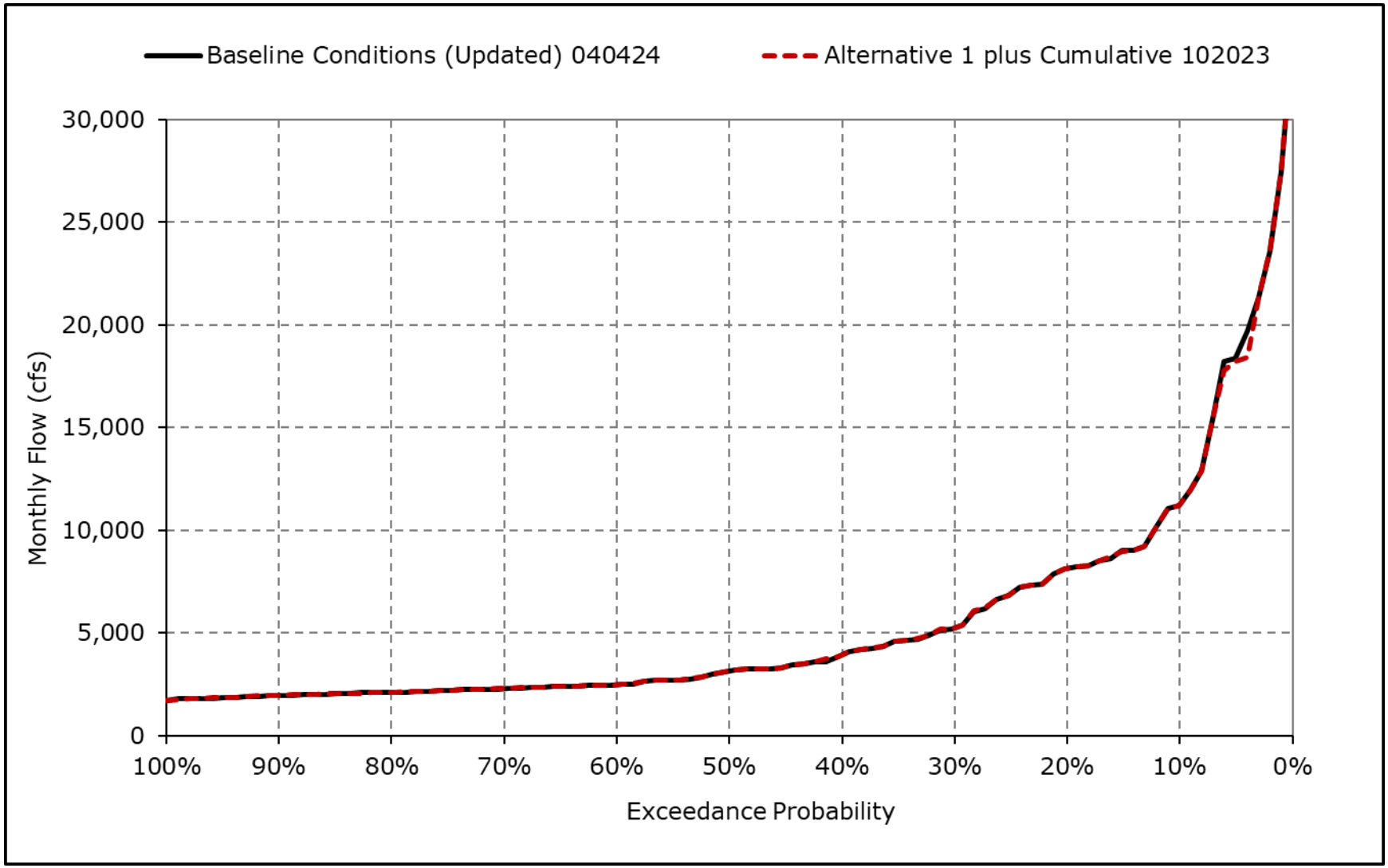
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



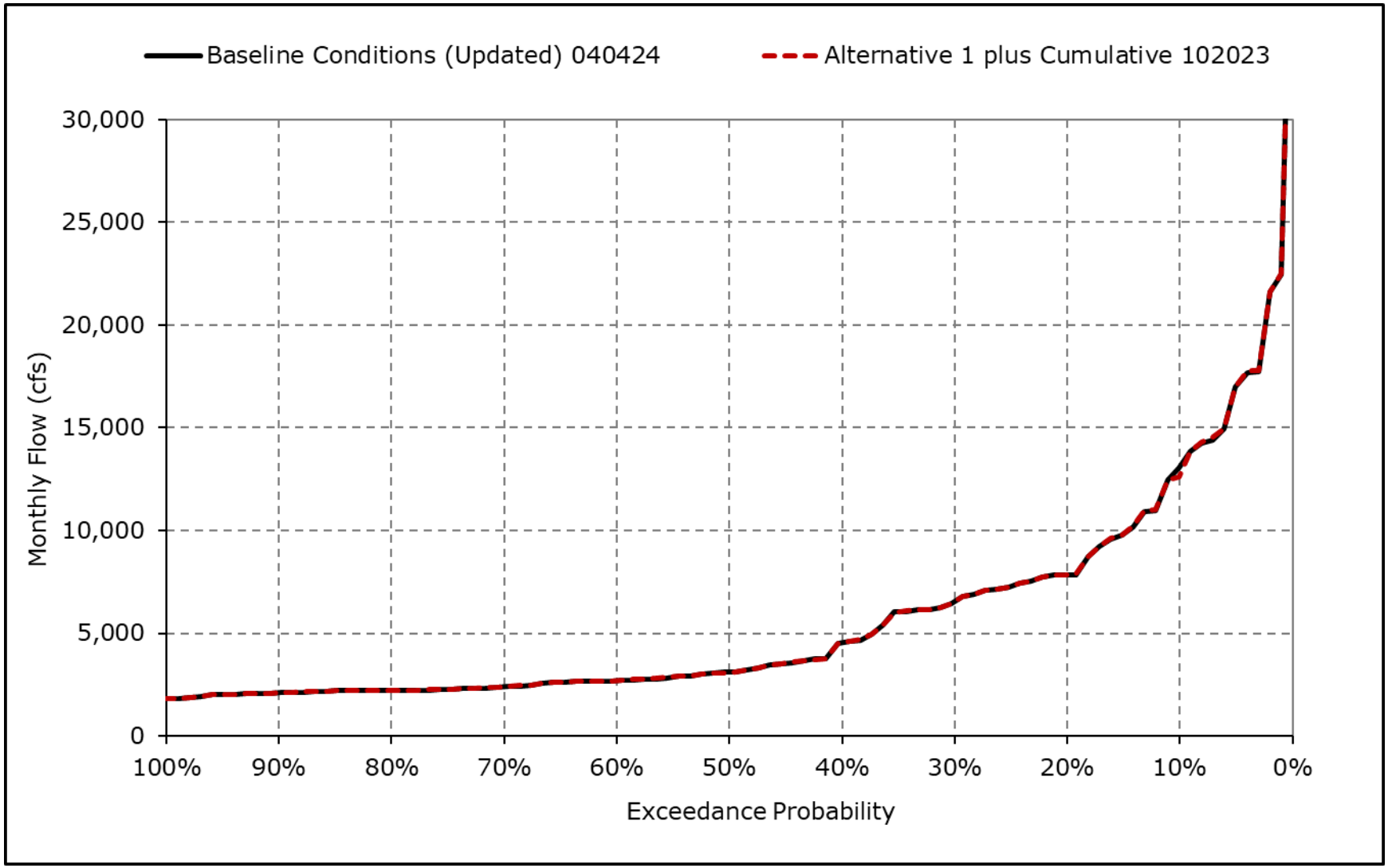
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



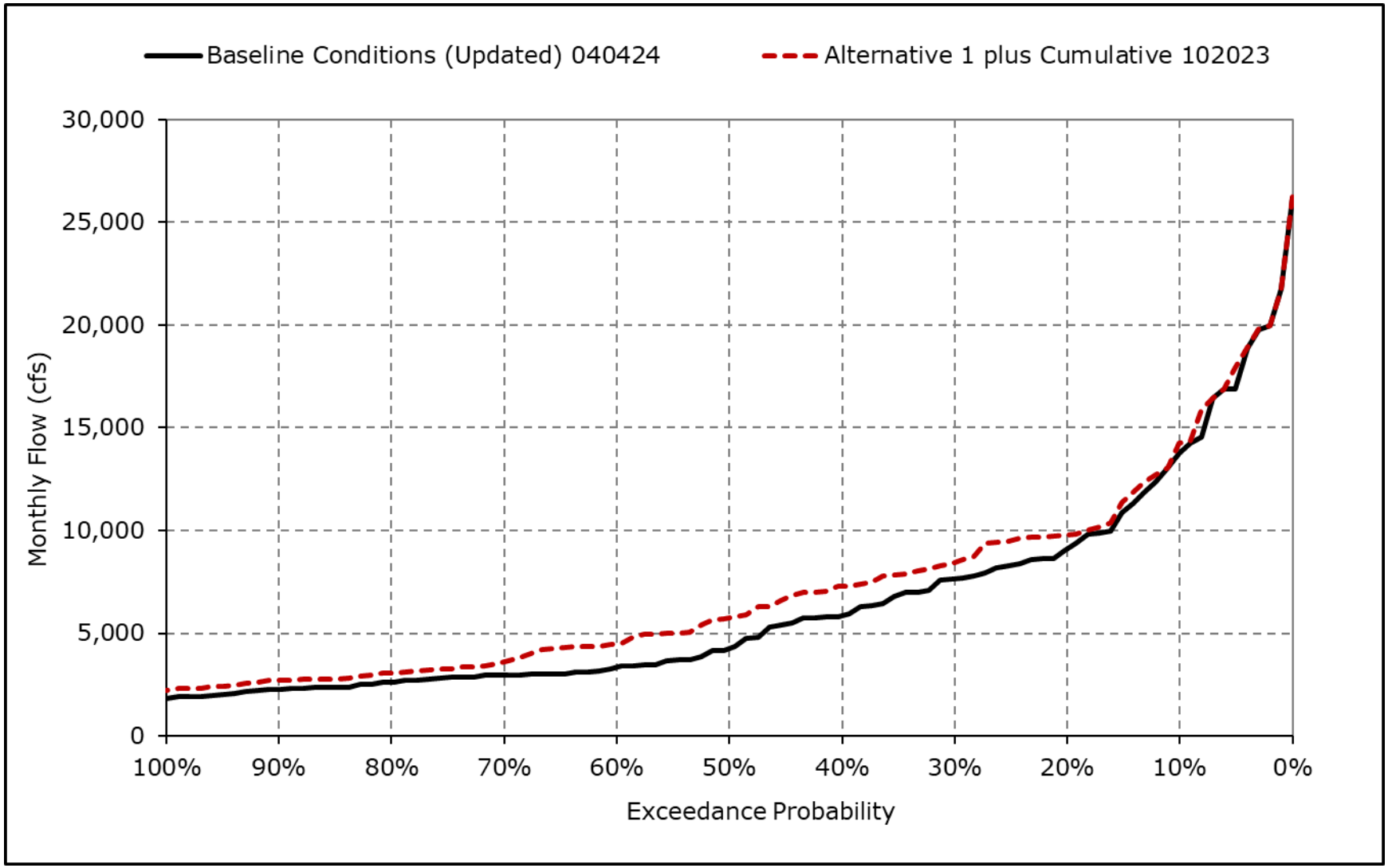
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



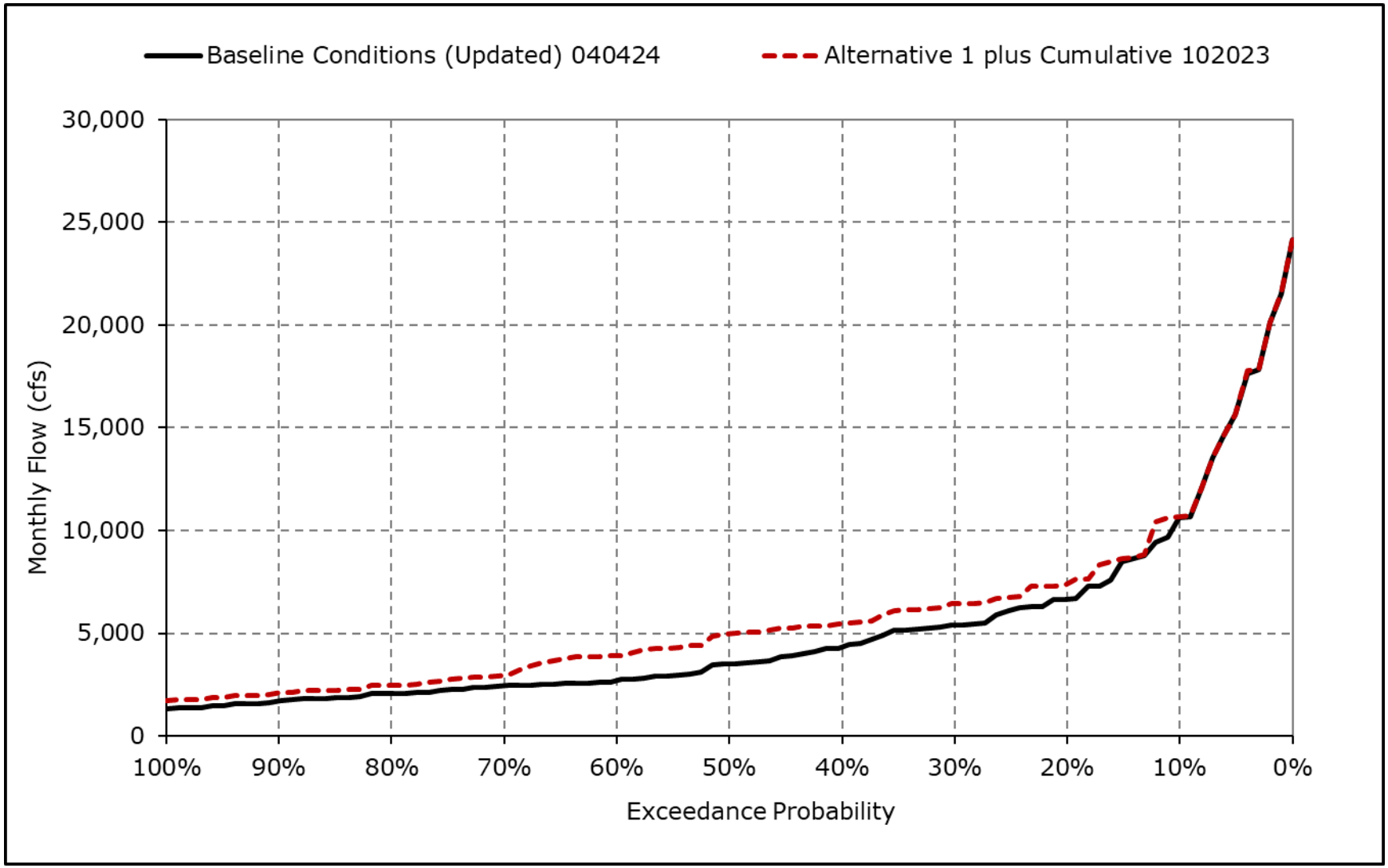
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



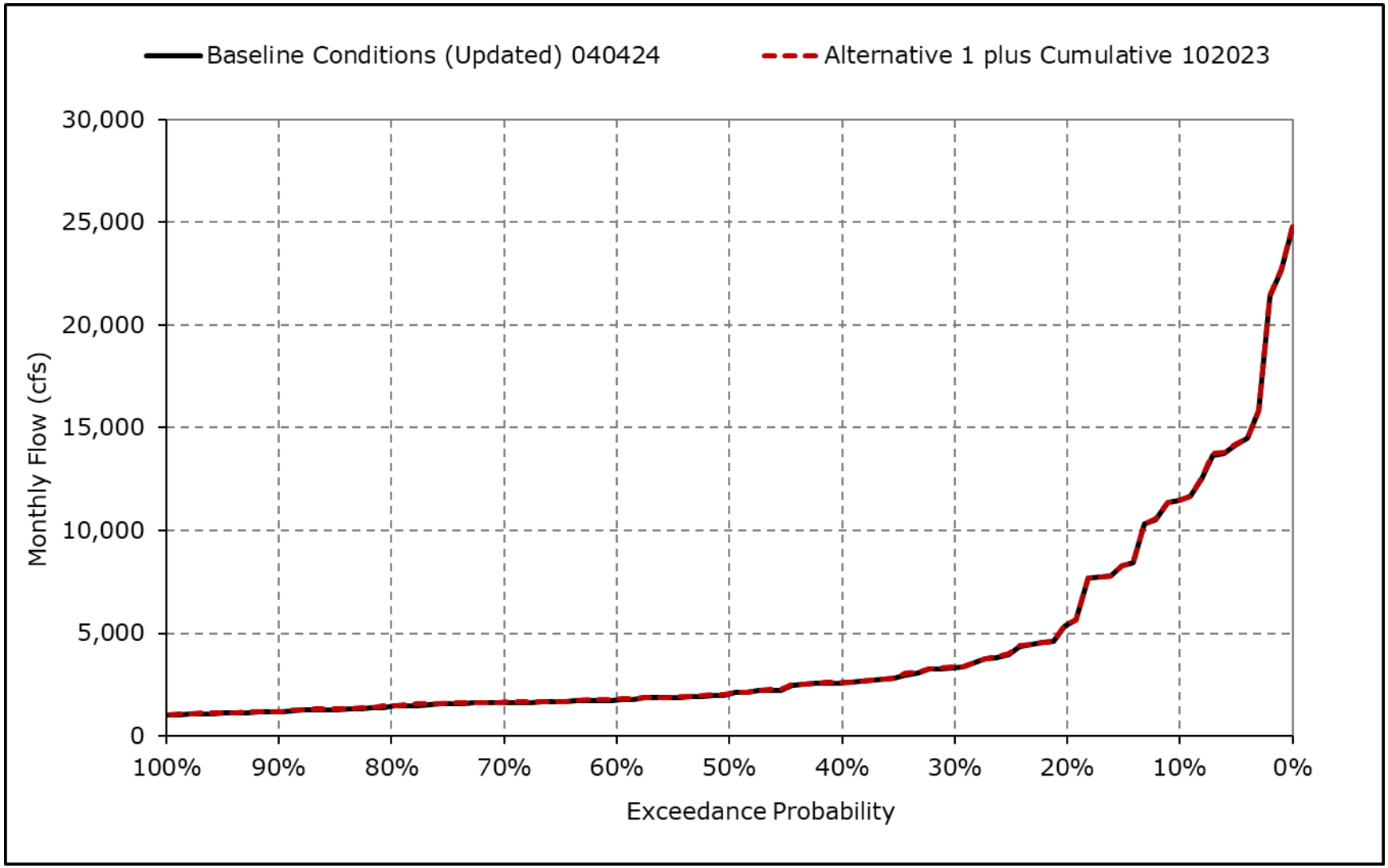
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



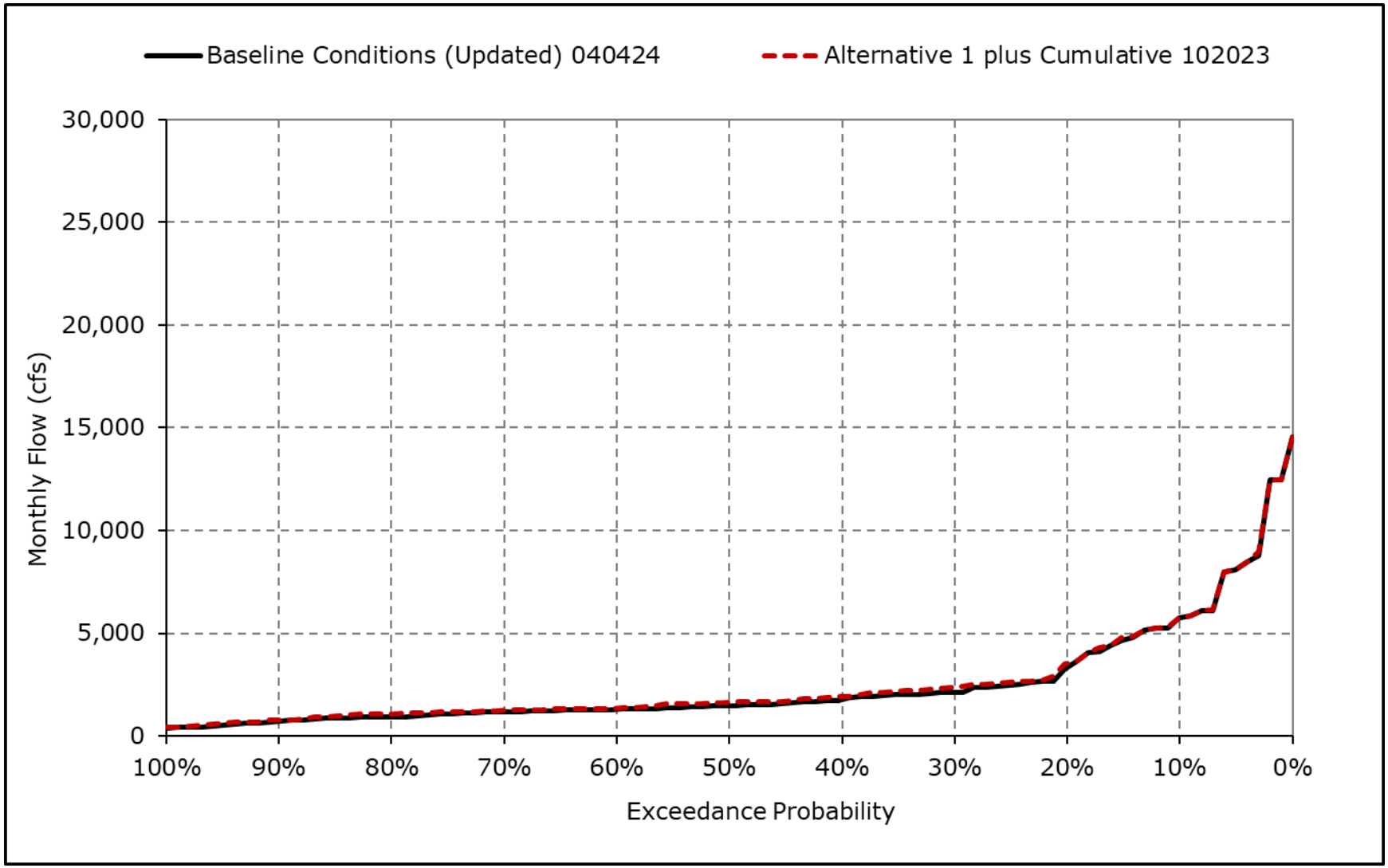
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



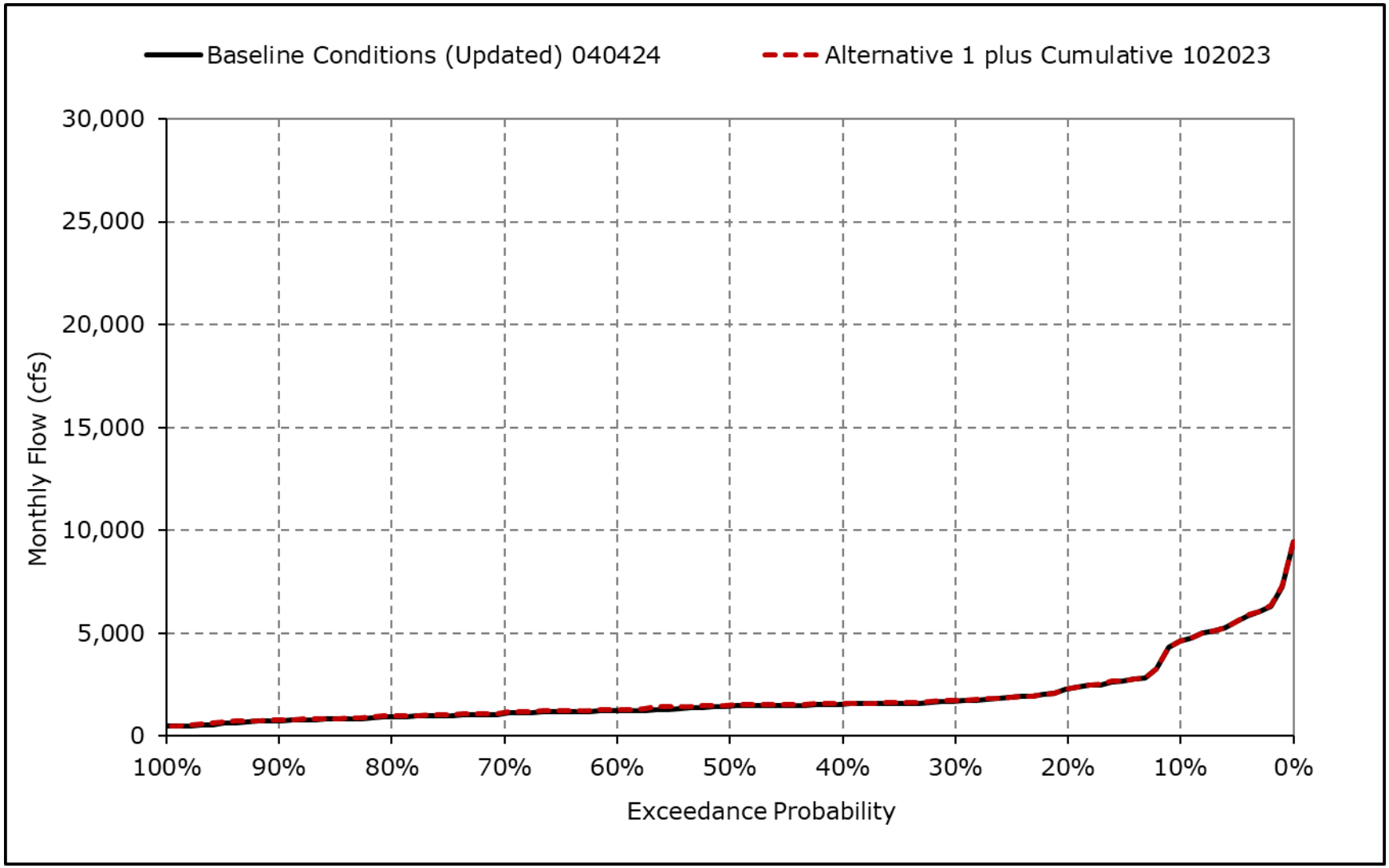
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



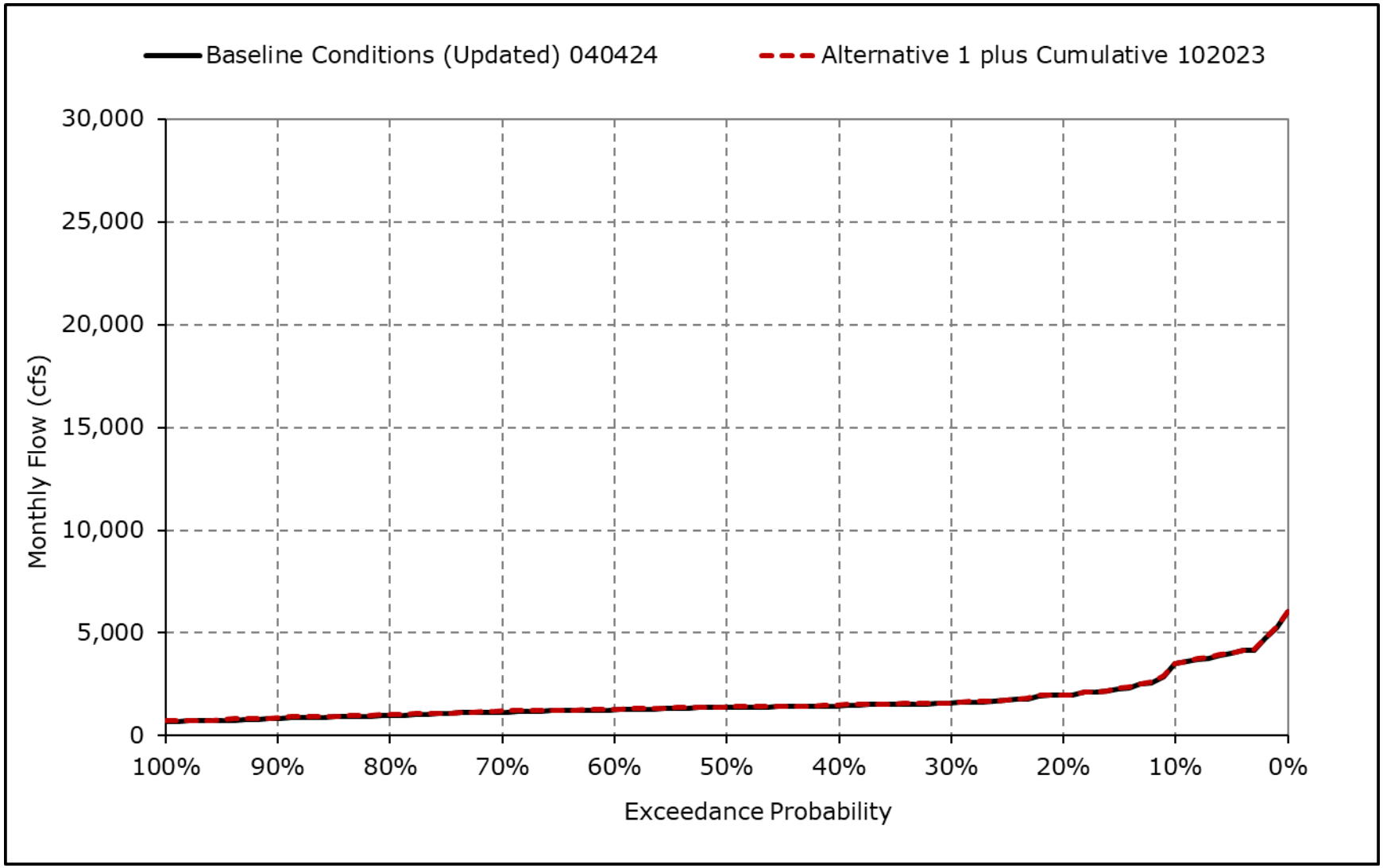
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-4-1a. San Joaquin River at Vernalis (60-20-20), Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,745	2,791	4,101	7,308	11,298	13,134	13,819	10,607	11,467	5,768	4,628	3,532
20% Exceedance	3,332	2,397	2,730	4,281	8,152	7,835	9,112	6,663	5,419	3,345	2,287	1,993
30% Exceedance	3,007	2,324	2,227	3,337	5,269	6,556	7,660	5,416	3,327	2,121	1,713	1,606
40% Exceedance	2,126	2,101	1,925	2,712	3,940	4,562	5,869	4,348	2,590	1,789	1,554	1,469
50% Exceedance	1,864	1,872	1,783	2,221	3,161	3,108	4,256	3,509	2,047	1,487	1,460	1,383
60% Exceedance	1,749	1,584	1,644	2,059	2,502	2,702	3,332	2,702	1,760	1,299	1,237	1,266
70% Exceedance	1,661	1,478	1,530	1,893	2,295	2,408	2,964	2,447	1,633	1,185	1,101	1,158
80% Exceedance	1,555	1,371	1,348	1,757	2,129	2,224	2,638	2,071	1,440	925	925	989
90% Exceedance	1,374	1,304	1,255	1,647	1,949	2,126	2,285	1,710	1,183	743	750	848
Full Simulation Period Average[a]	2,387	2,098	2,616	3,912	5,584	5,844	6,426	5,131	4,241	2,502	1,906	1,683
Wet Water Years (25%)	2,508	2,211	3,864	7,853	11,648	12,999	13,347	11,025	10,618	5,895	3,977	3,046
Above Normal Water Years (17%)	2,543	2,681	3,541	4,308	6,463	5,728	7,118	5,282	3,772	2,286	1,719	1,598
Below Normal Water Years (14%)	2,465	2,139	2,324	2,455	3,823	3,817	4,952	3,939	2,211	1,469	1,390	1,311
Dry Water Years (16%)	2,640	2,065	1,825	2,175	2,461	2,741	3,209	2,598	1,711	1,234	1,146	1,160
Critical Water Years (28%)	1,999	1,643	1,538	1,873	2,301	2,313	2,402	1,820	1,292	843	864	1,001

Table 4G-3-4-1b. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	3,751	2,801	4,102	7,315	11,306	12,743	14,280	10,691	11,476	5,782	4,636	3,539
20% Exceedance	3,352	2,404	2,738	4,289	8,161	7,853	9,768	7,419	5,452	3,514	2,302	2,000
30% Exceedance	3,013	2,336	2,237	3,344	5,278	6,564	8,460	6,435	3,370	2,384	1,743	1,616
40% Exceedance	2,133	2,117	1,939	2,722	3,948	4,564	7,299	5,489	2,615	1,926	1,592	1,487
50% Exceedance	1,874	1,896	1,793	2,228	3,163	3,100	5,734	4,979	2,068	1,663	1,504	1,407
60% Exceedance	1,812	1,594	1,663	2,043	2,494	2,710	4,481	3,897	1,793	1,366	1,306	1,284
70% Exceedance	1,672	1,483	1,541	1,901	2,328	2,415	3,609	2,955	1,651	1,250	1,160	1,215
80% Exceedance	1,573	1,400	1,363	1,754	2,136	2,216	3,048	2,476	1,489	1,084	978	1,028
90% Exceedance	1,431	1,311	1,253	1,654	1,973	2,127	2,703	2,099	1,194	764	794	871
Full Simulation Period Average[a]	2,403	2,110	2,629	3,916	5,575	5,847	7,209	5,873	4,266	2,604	1,947	1,709
Wet Water Years (25%)	2,537	2,228	3,898	7,846	11,592	13,002	13,712	11,328	10,640	5,958	3,991	3,059
Above Normal Water Years (17%)	2,553	2,692	3,548	4,317	6,478	5,732	8,271	6,369	3,801	2,448	1,751	1,620
Below Normal Water Years (14%)	2,474	2,144	2,327	2,461	3,828	3,822	6,336	5,270	2,231	1,624	1,422	1,334
Dry Water Years (16%)	2,670	2,085	1,839	2,191	2,465	2,741	4,211	3,582	1,736	1,347	1,220	1,210
Critical Water Years (28%)	2,003	1,648	1,540	1,877	2,308	2,315	2,909	2,311	1,322	912	918	1,029

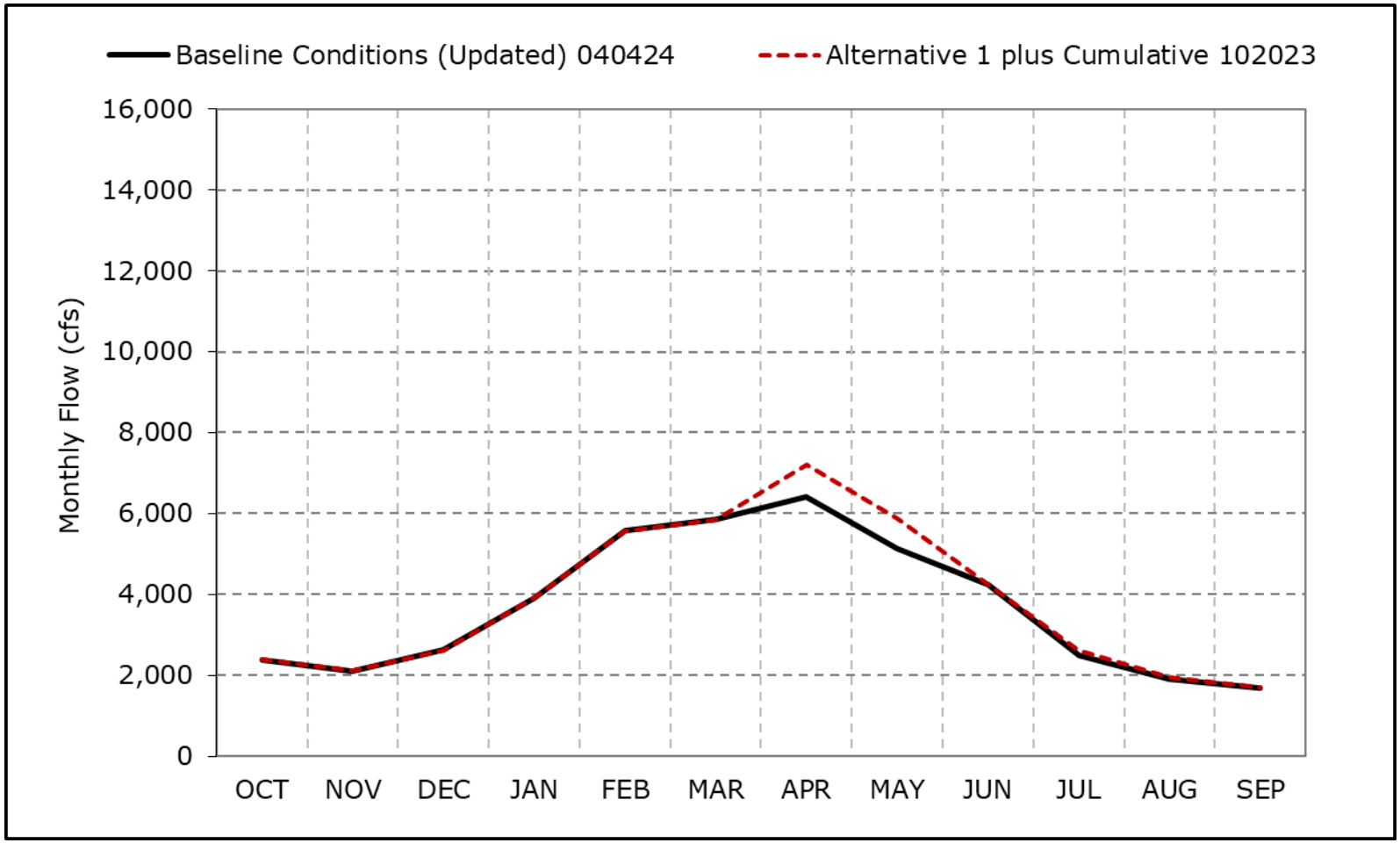
Table 4G-3-4-1c. San Joaquin River at Vernalis (60-20-20), Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	5	9	1	7	8	-390	462	84	10	13	8	7
20% Exceedance	20	6	9	8	9	18	657	756	33	169	16	6
30% Exceedance	6	13	10	7	8	7	800	1,019	43	263	30	10
40% Exceedance	8	15	14	11	8	2	1,429	1,141	25	138	37	19
50% Exceedance	10	23	10	7	2	-8	1,478	1,469	20	176	45	24
60% Exceedance	63	10	18	-17	-8	8	1,148	1,195	33	67	69	18
70% Exceedance	11	5	10	8	33	7	645	508	18	65	59	57
80% Exceedance	18	29	15	-3	7	-8	410	405	49	159	53	39
90% Exceedance	56	7	-2	7	25	1	418	388	11	22	44	23
Full Simulation Period Average[a]	16	12	13	4	-8	2	783	742	25	102	40	26
Wet Water Years (25%)	28	17	34	-8	-56	3	366	303	22	63	14	13
Above Normal Water Years (17%)	10	11	7	9	15	4	1,153	1,087	29	162	32	22
Below Normal Water Years (14%)	9	6	3	6	5	5	1,384	1,331	20	155	32	23
Dry Water Years (16%)	30	21	14	16	4	0	1,002	984	24	112	74	50
Critical Water Years (28%)	4	6	3	4	7	1	507	490	30	69	54	28

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

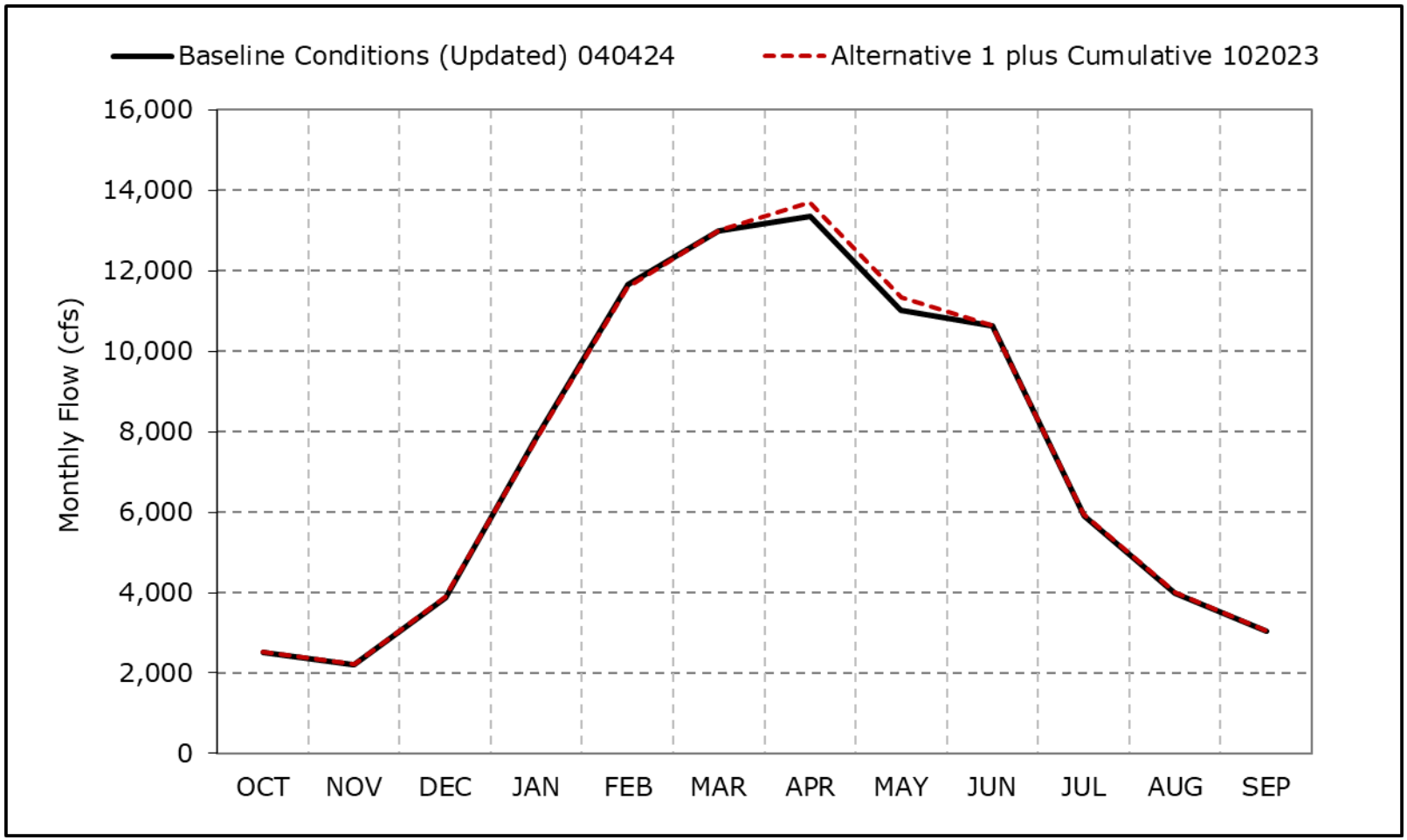
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



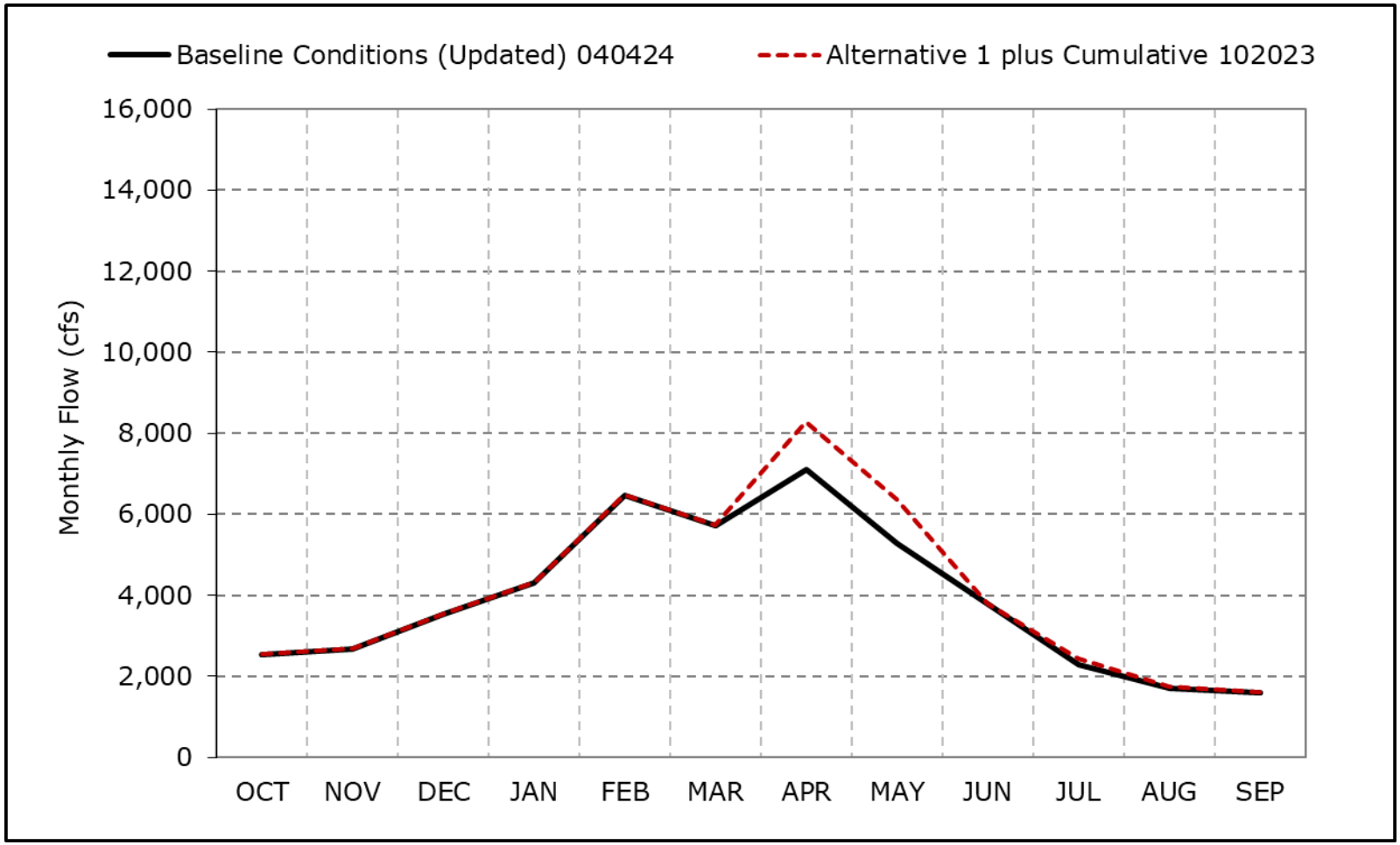
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



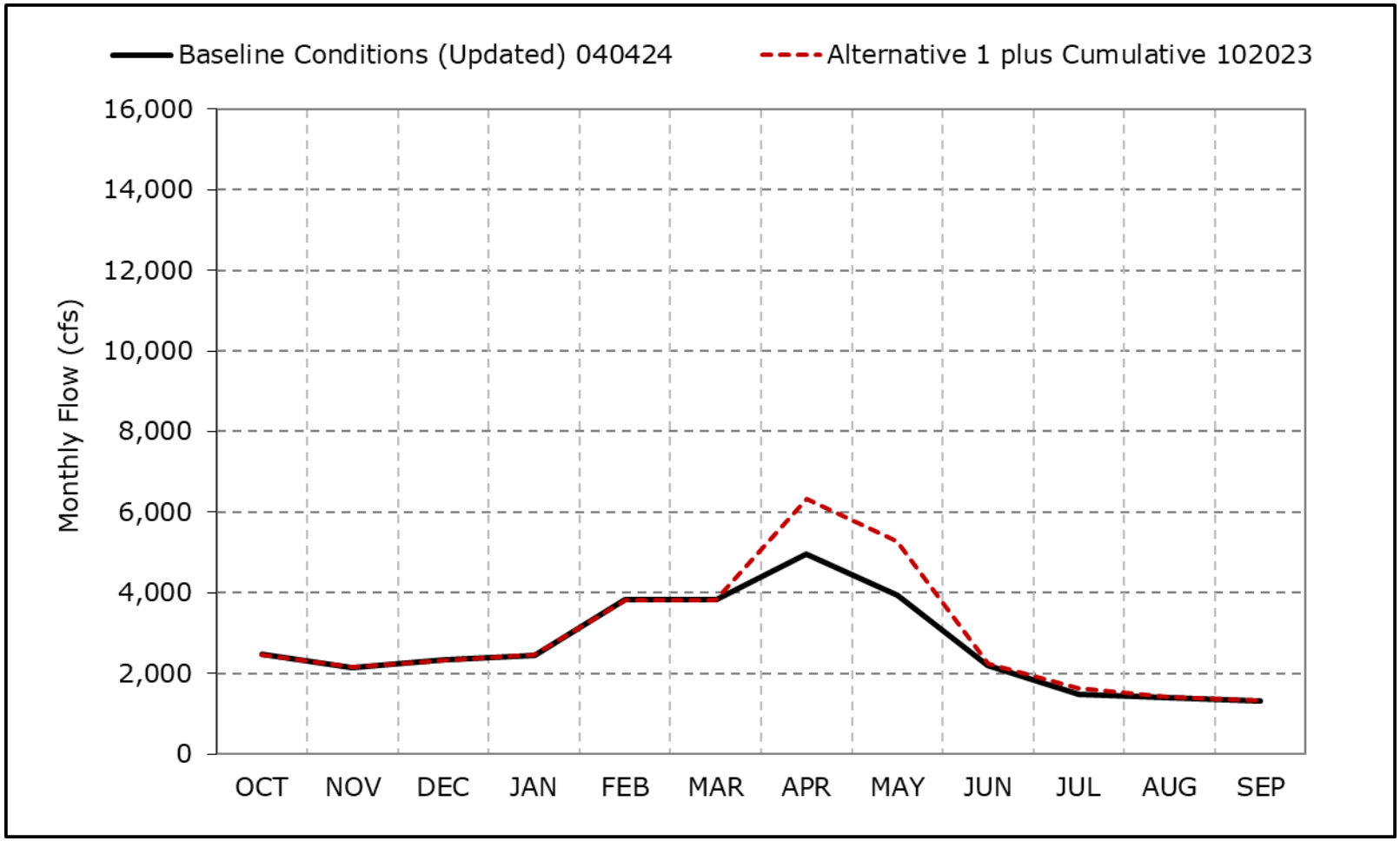
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



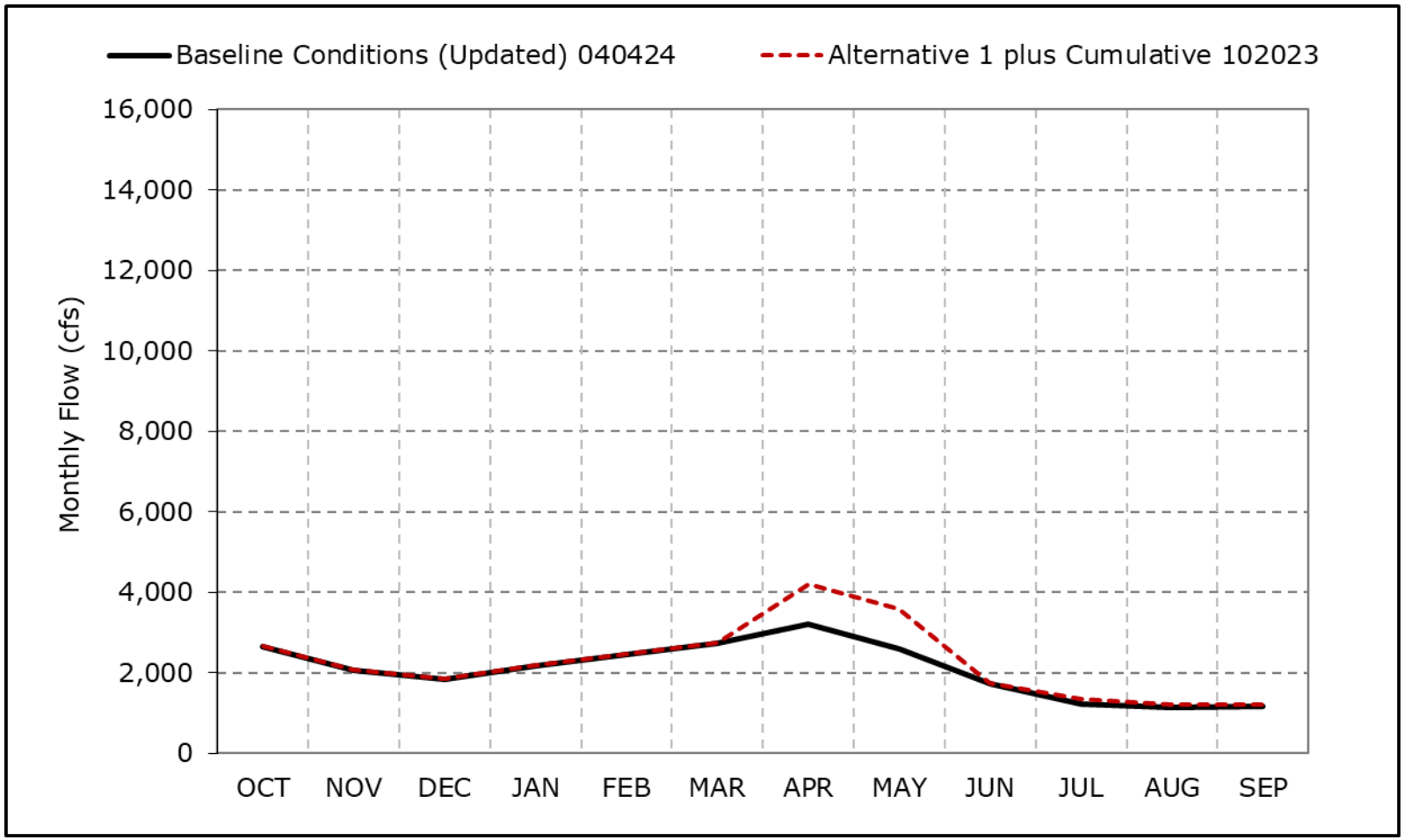
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



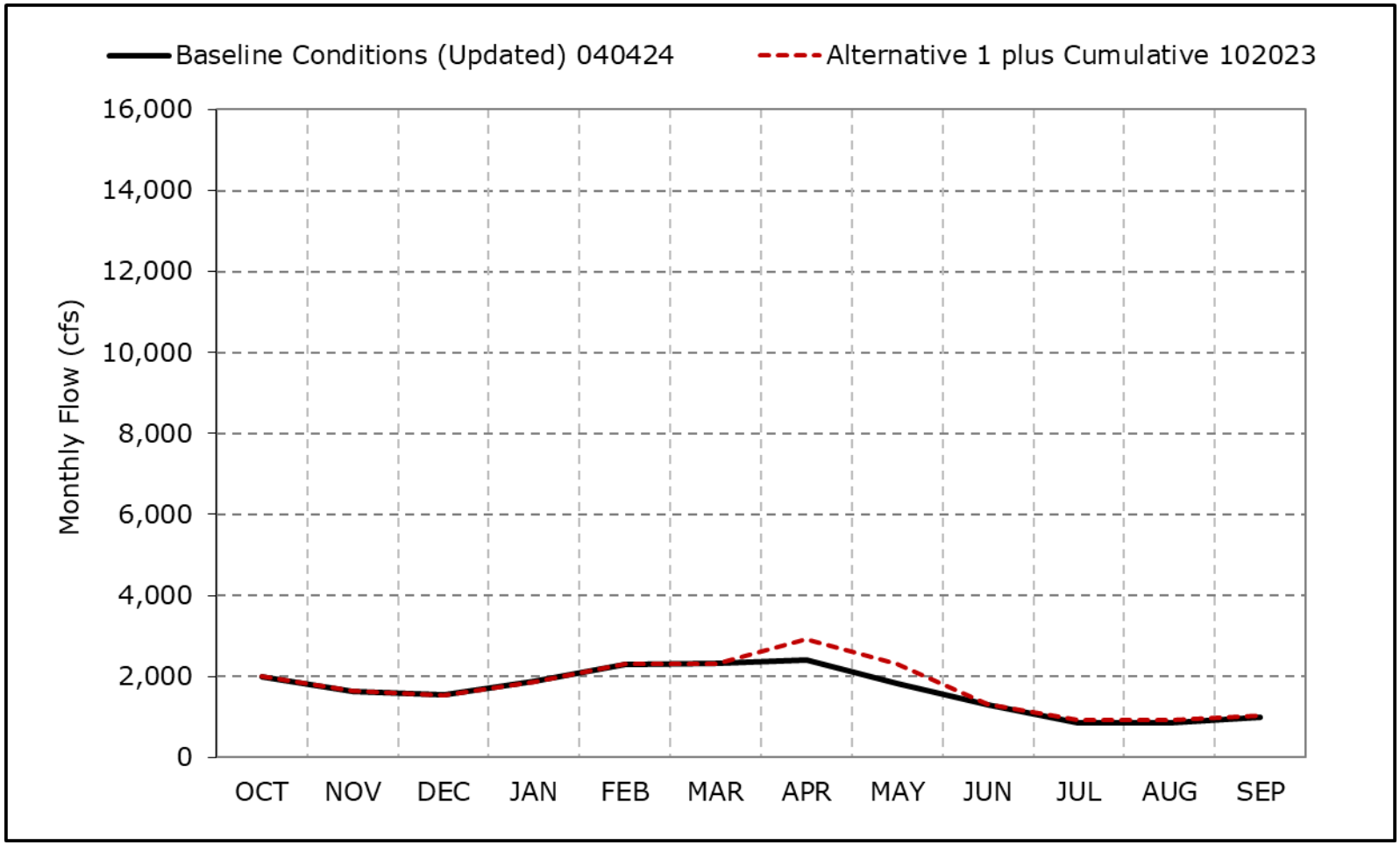
*As defined by the San Joaquin Valley 60-20-20 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-5-1a. Mokelumne River below Cosumnes, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	550	860	2,788	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	642	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	81
70% Exceedance	273	345	425	546	806	1,021	804	489	168	73	62	63
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[a]	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	3,182	1,871	978	728	848
Above Normal Water Years (11%)	313	404	712	2,612	2,894	2,430	1,825	1,426	937	513	544	689
Below Normal Water Years (21%)	365	492	826	1,053	1,776	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 4G-3-5-1b. Mokelumne River below Cosumnes, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	603	849	2,648	5,261	5,790	4,735	4,336	4,086	2,252	873	750	861
20% Exceedance	523	563	1,591	3,252	3,553	3,467	2,779	1,899	1,563	768	710	834
30% Exceedance	498	441	838	1,696	2,730	2,364	2,314	1,490	1,023	610	660	796
40% Exceedance	480	406	636	1,266	1,933	1,781	1,758	1,163	562	508	615	750
50% Exceedance	458	384	531	913	1,330	1,435	1,587	985	449	99	83	534
60% Exceedance	449	366	467	682	1,019	1,213	1,161	716	323	82	68	73
70% Exceedance	313	332	424	545	806	1,036	864	536	167	73	60	61
80% Exceedance	248	288	387	464	629	789	701	442	97	58	47	50
90% Exceedance	214	236	297	390	462	564	385	197	74	49	36	44
Full Simulation Period Average[a]	448	587	1,248	2,009	2,461	2,231	2,015	1,503	831	424	356	448
Wet Water Years (30%)	581	1,050	2,668	4,291	4,779	4,097	3,772	3,123	1,843	956	701	845
Above Normal Water Years (11%)	403	391	699	2,569	2,867	2,427	1,974	1,368	891	443	530	669
Below Normal Water Years (21%)	444	479	807	1,046	1,758	1,818	1,761	1,097	539	273	277	382
Dry Water Years (22%)	406	380	559	648	1,003	1,139	1,004	597	210	106	104	141
Critical Water Years (16%)	293	279	492	481	764	641	473	336	129	48	41	57

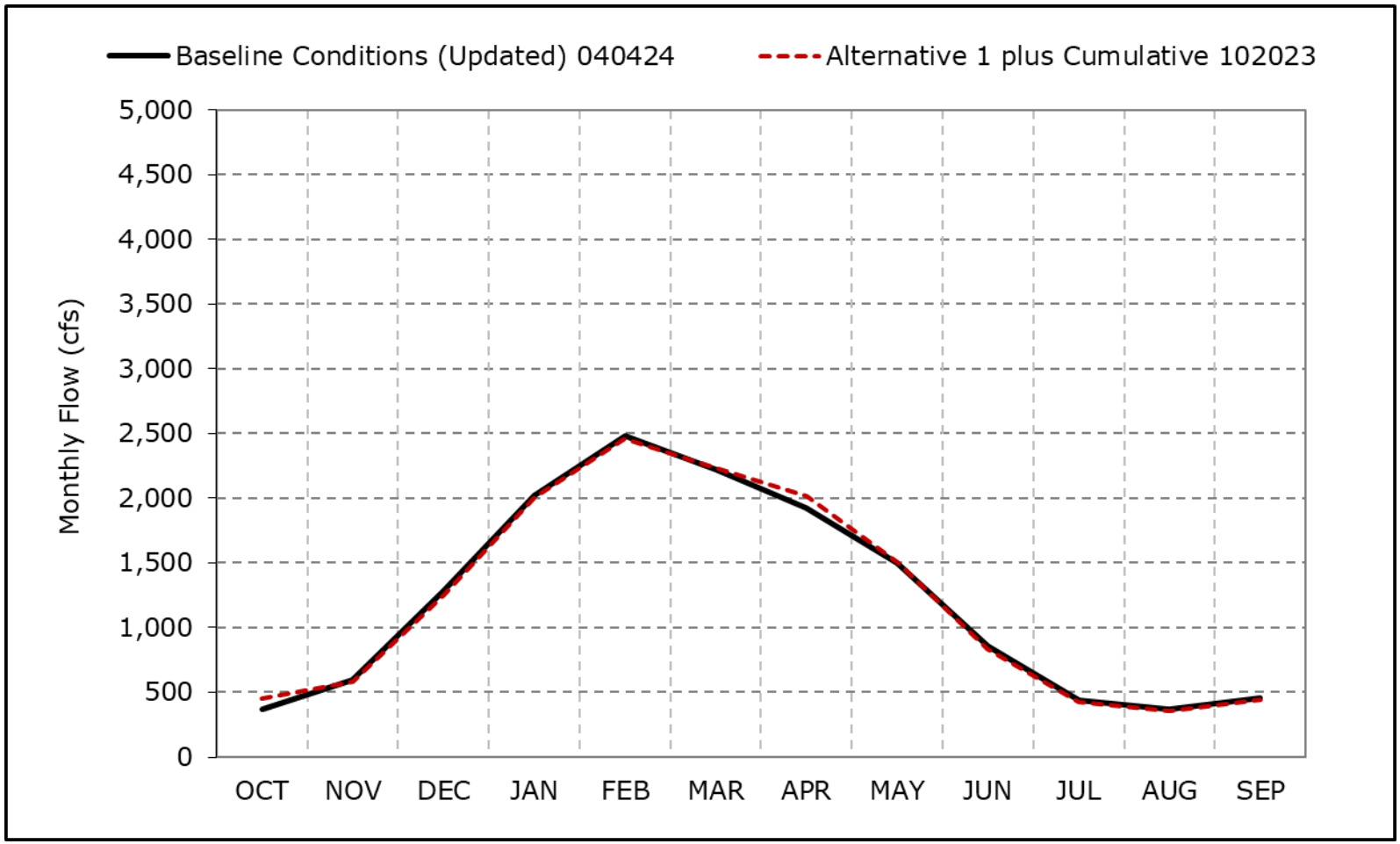
Table 4G-3-5-1c. Mokelumne River below Cosumnes, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	53	-11	-141	-2	-161	-5	-2	-13	-3	-3	-3	-2
20% Exceedance	116	-24	-3	-29	-97	36	153	-289	-3	-2	-2	-2
30% Exceedance	125	-3	-1	-2	-9	5	150	-72	-180	-32	-2	-2
40% Exceedance	138	-3	-1	-20	-36	63	59	32	-65	-75	-15	-3
50% Exceedance	129	-4	0	0	0	34	196	91	-11	-5	-196	-132
60% Exceedance	137	-9	-2	-5	-15	39	120	86	0	0	-2	-8
70% Exceedance	40	-13	0	-1	0	14	61	48	-1	0	-2	-2
80% Exceedance	18	-9	0	-5	0	-7	60	46	0	-1	-2	-1
90% Exceedance	0	-4	-7	-3	-20	19	1	-1	-1	0	-2	0
Full Simulation Period Average[a]	77	-13	-30	-15	-25	9	85	2	-24	-19	-15	-12
Wet Water Years (30%)	89	-19	-72	-20	-52	9	112	-59	-29	-22	-27	-2
Above Normal Water Years (11%)	89	-13	-13	-43	-27	-3	149	-58	-46	-69	-14	-19
Below Normal Water Years (21%)	79	-13	-19	-7	-18	18	79	59	-35	-16	-23	-33
Dry Water Years (22%)	77	-9	-7	-7	-7	14	62	48	-11	-5	-1	-1
Critical Water Years (16%)	41	-8	-7	-7	-7	3	30	23	0	0	0	-14

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

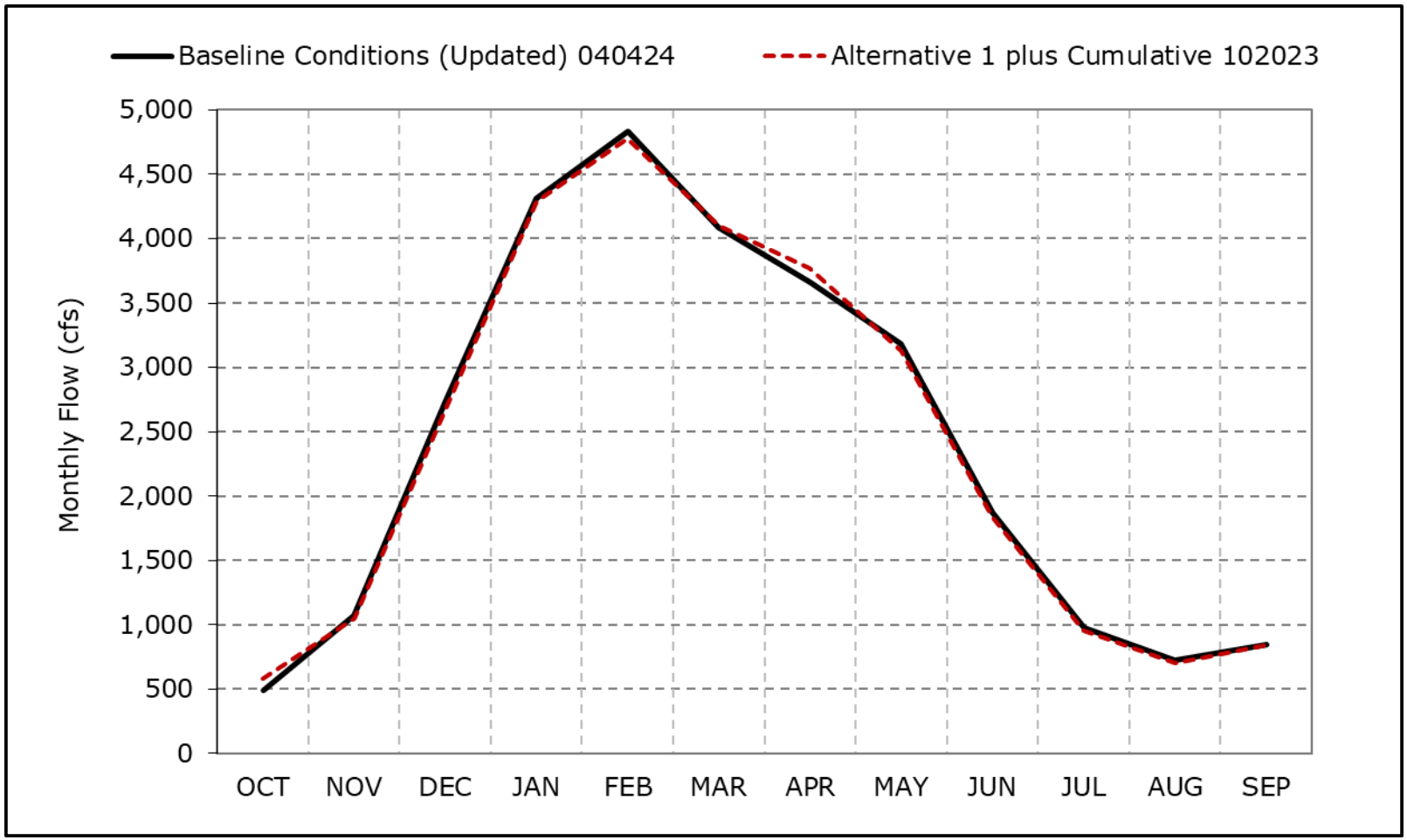
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



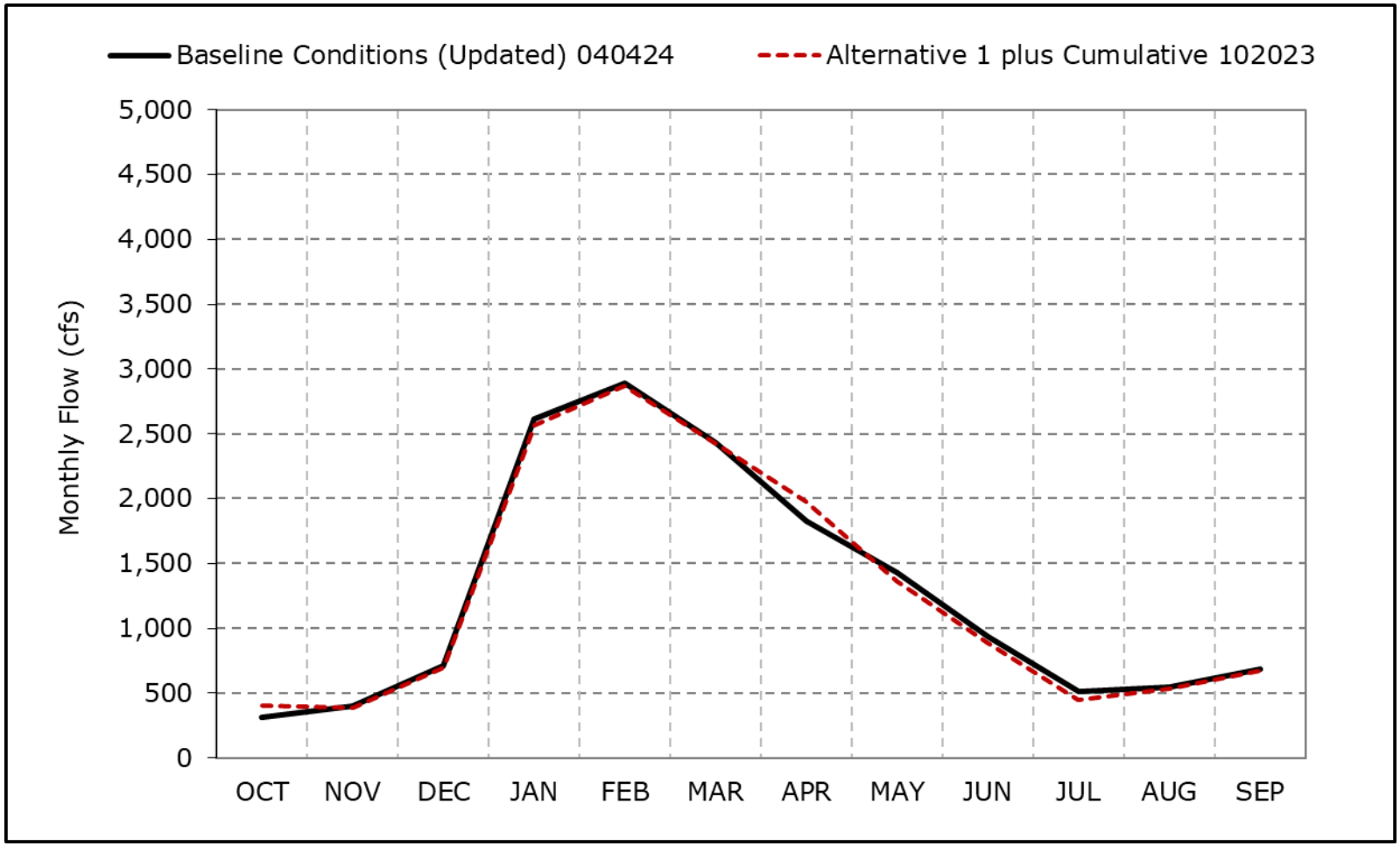
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



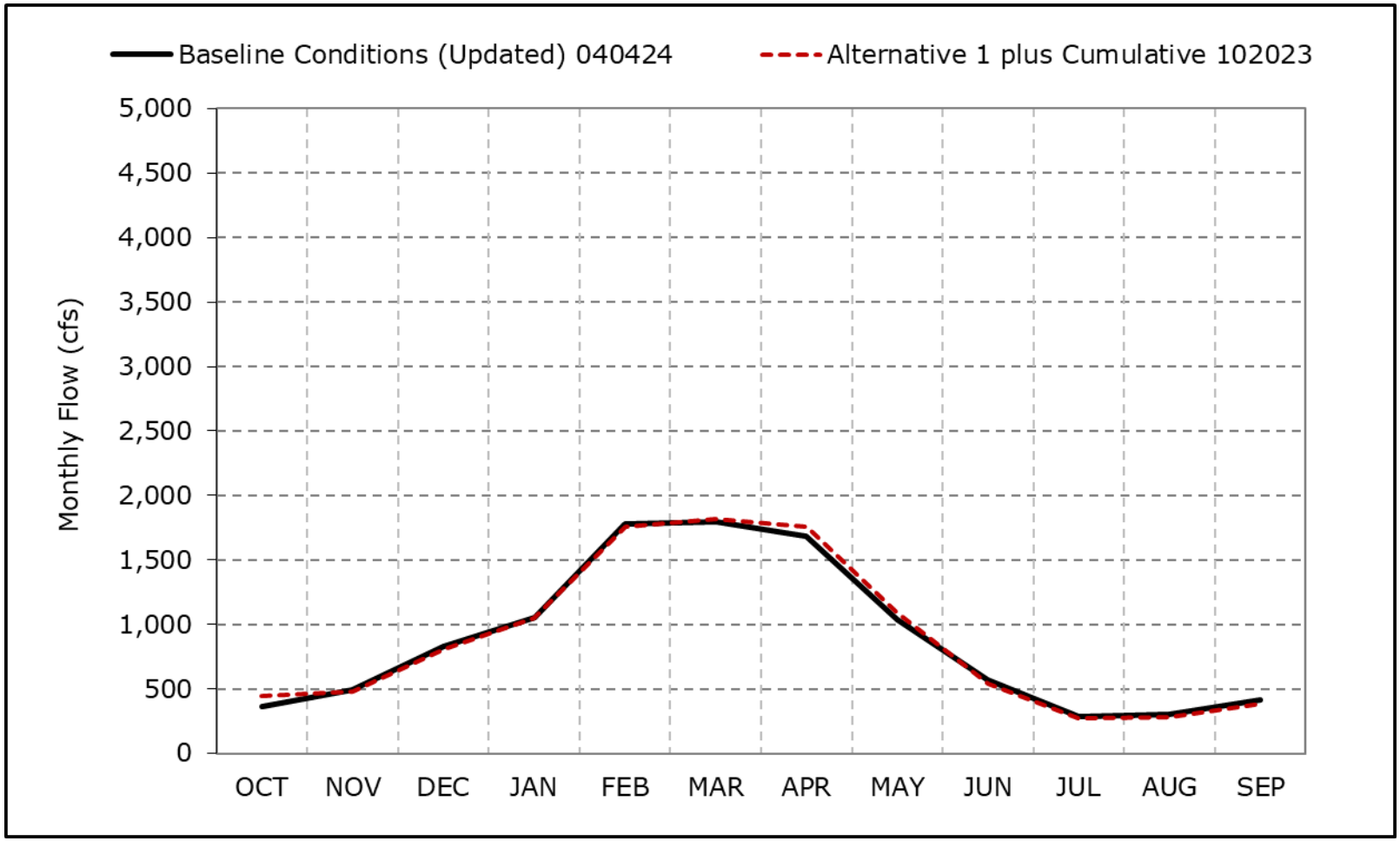
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



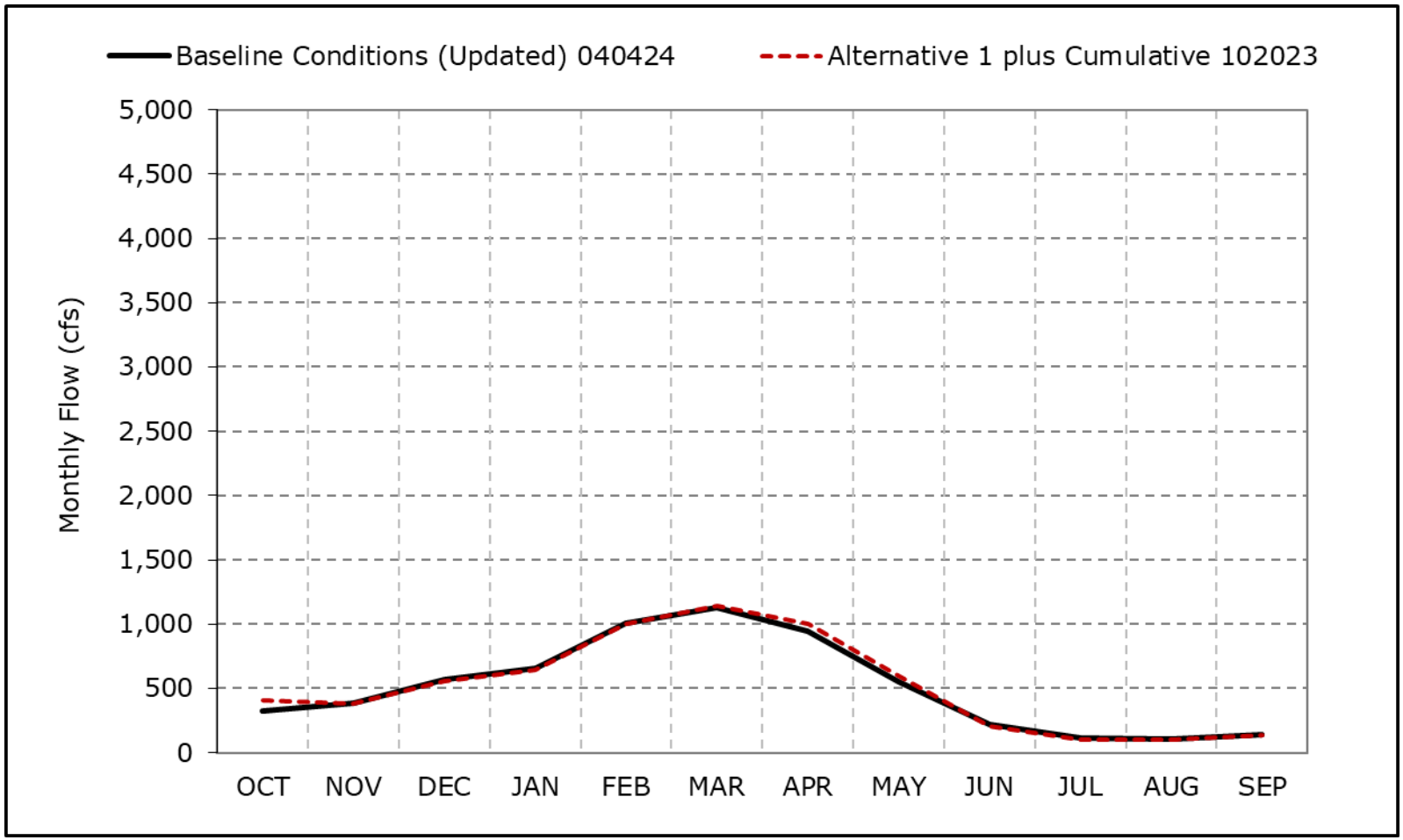
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



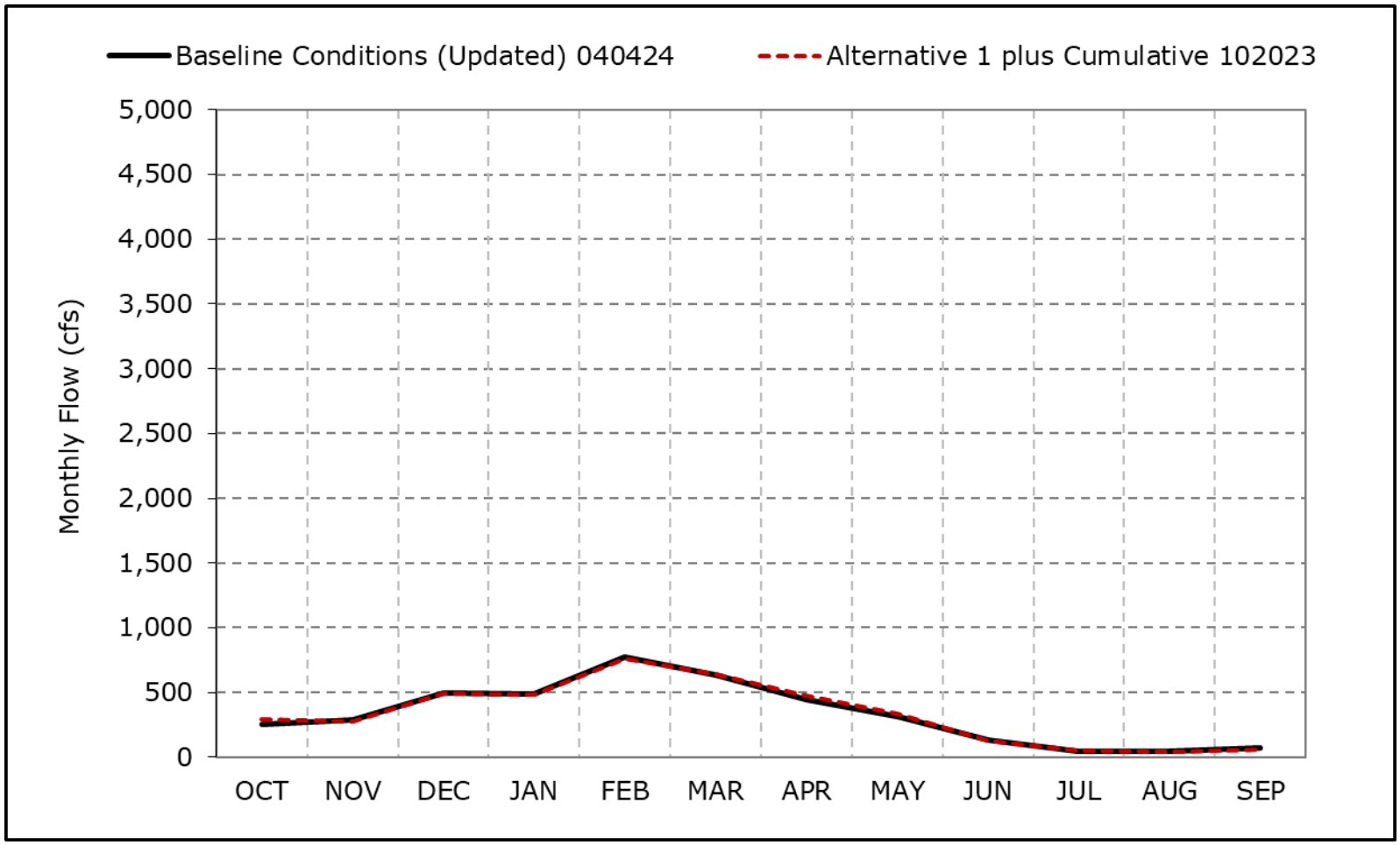
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



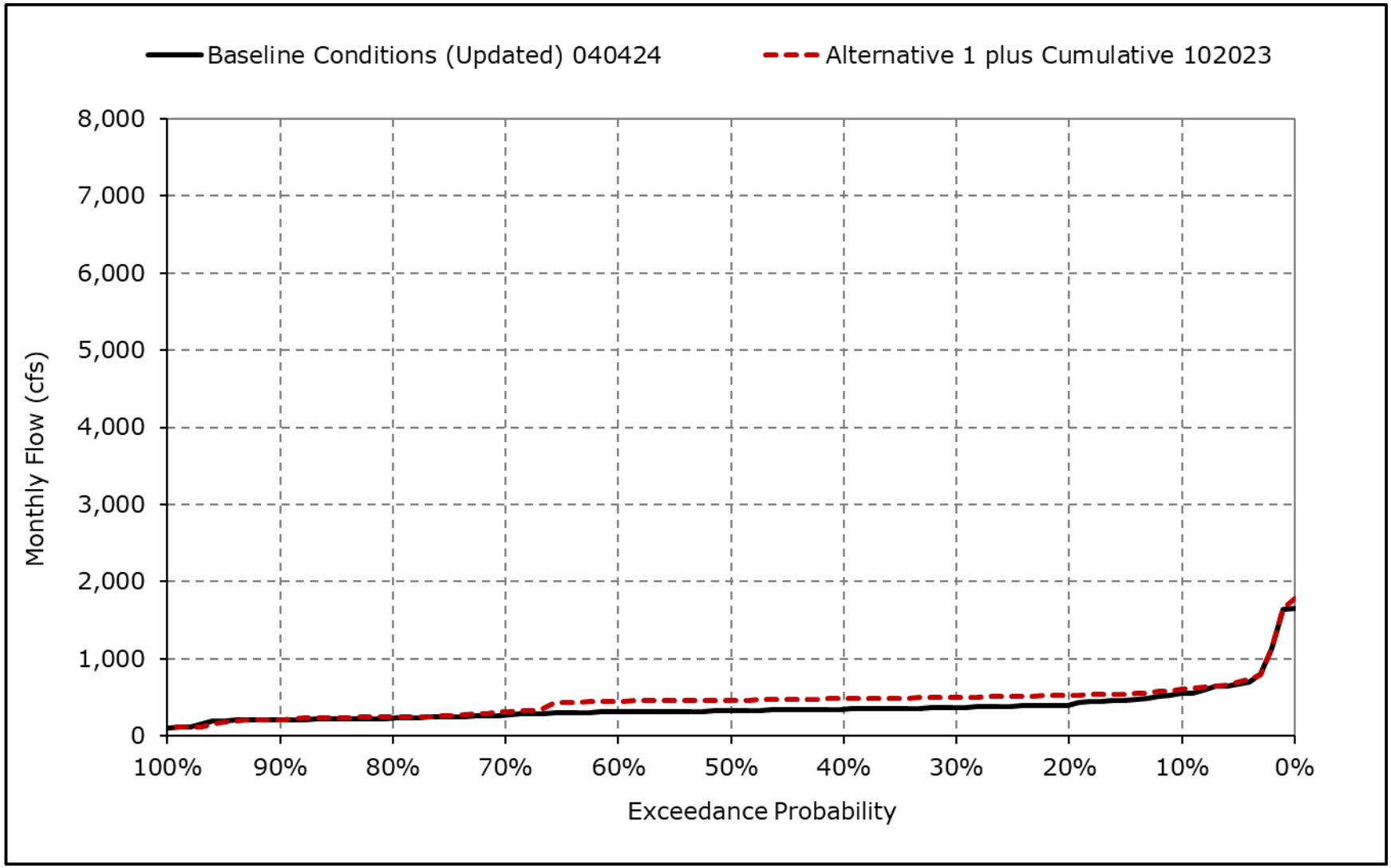
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



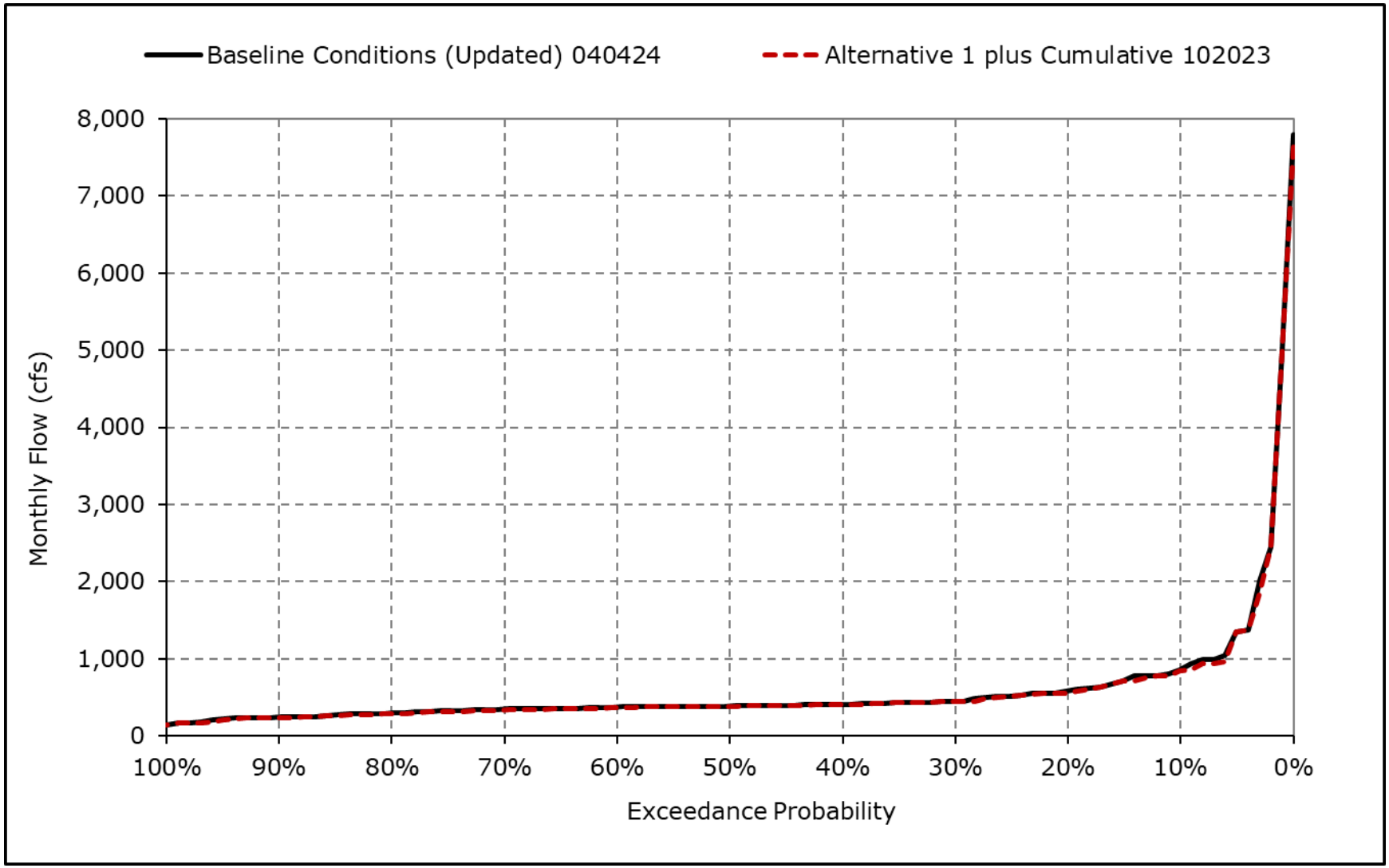
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



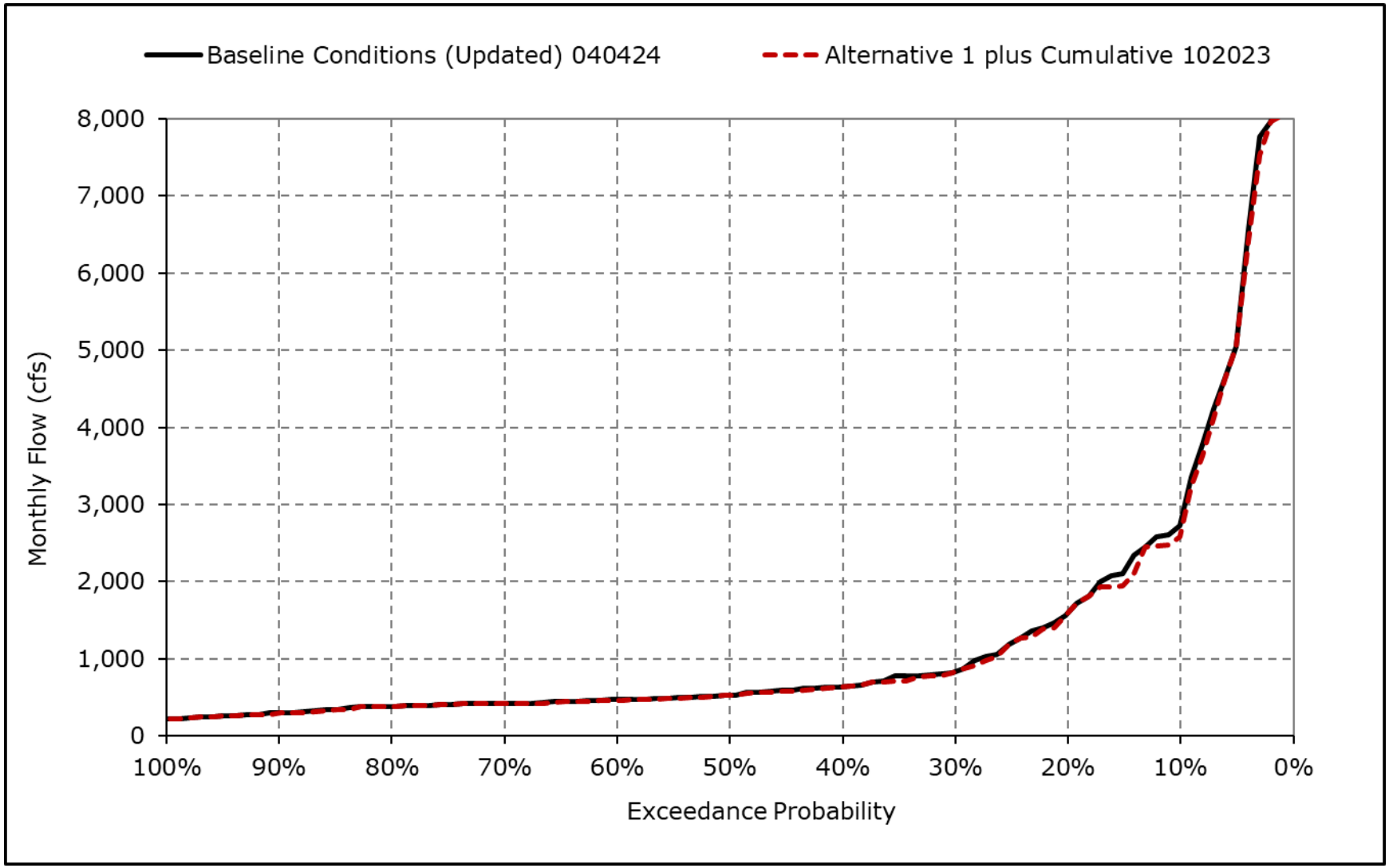
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



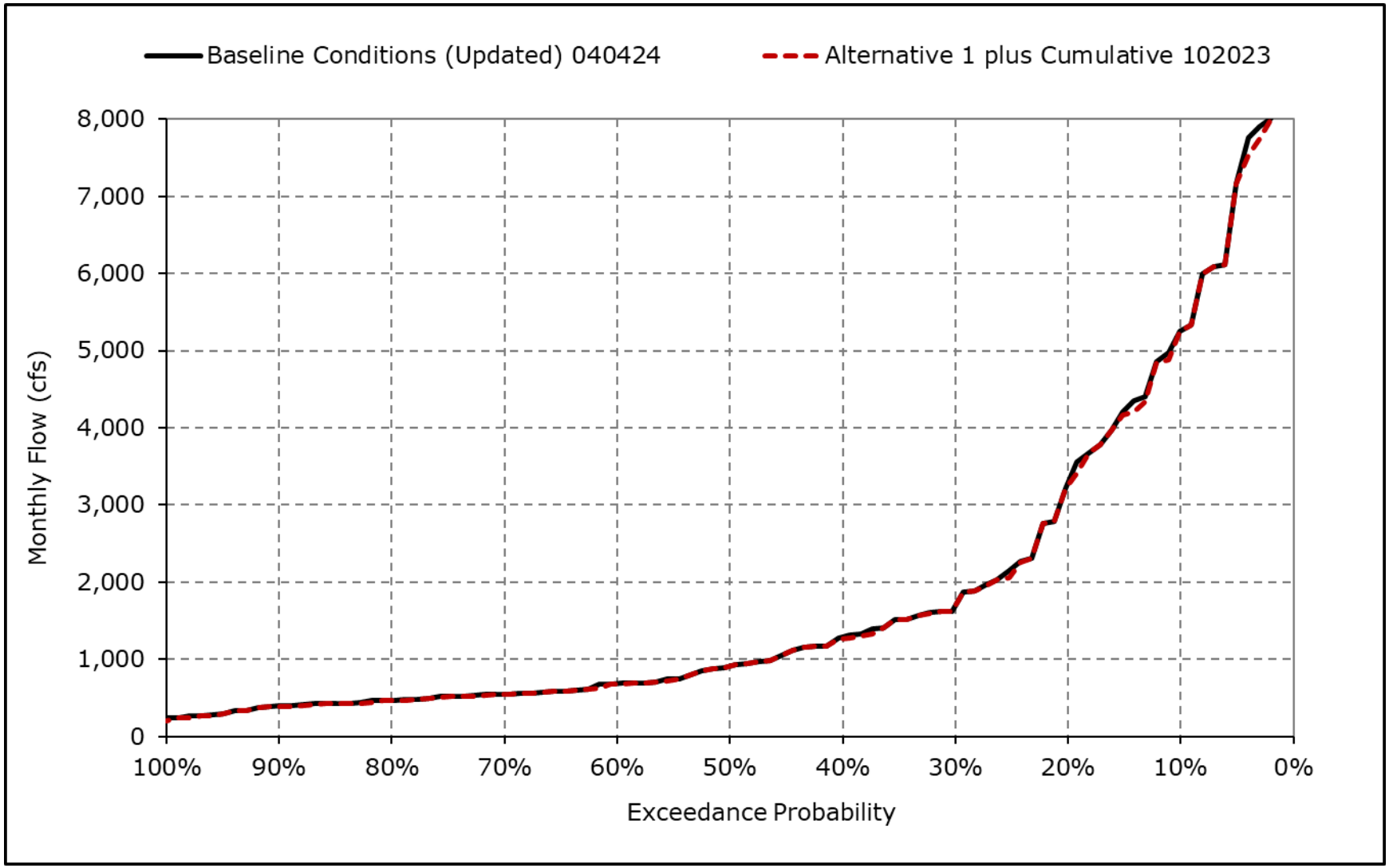
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



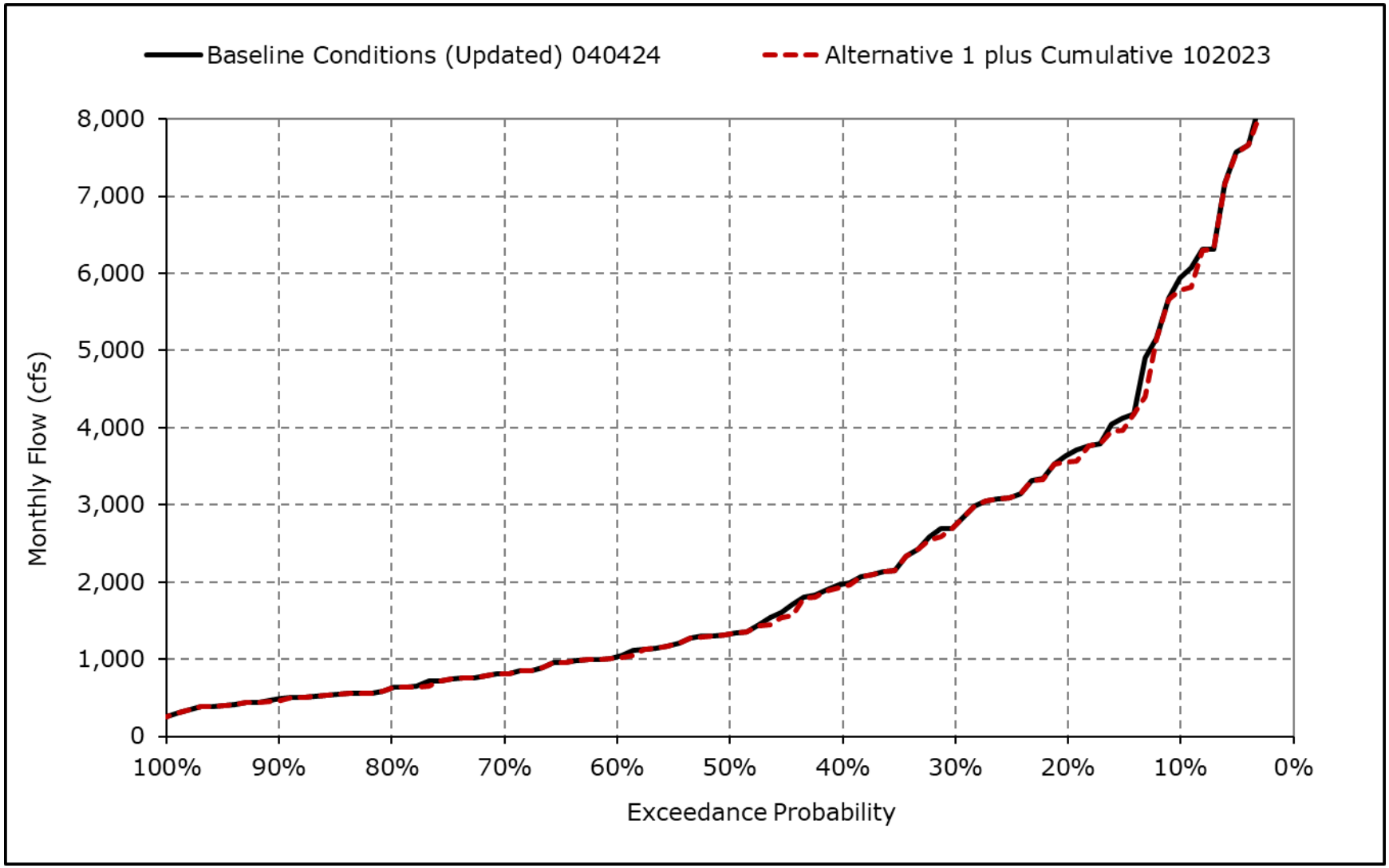
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



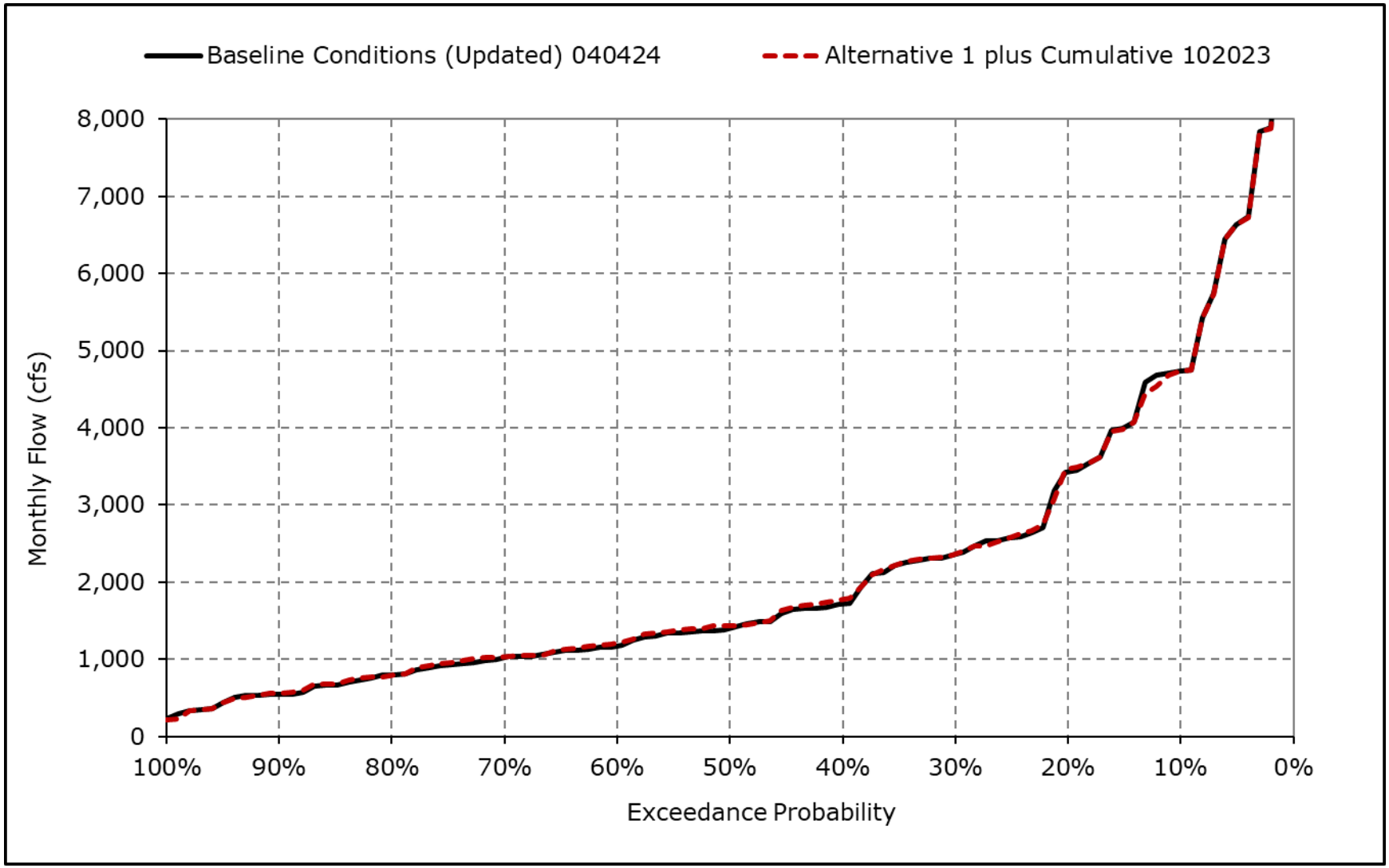
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



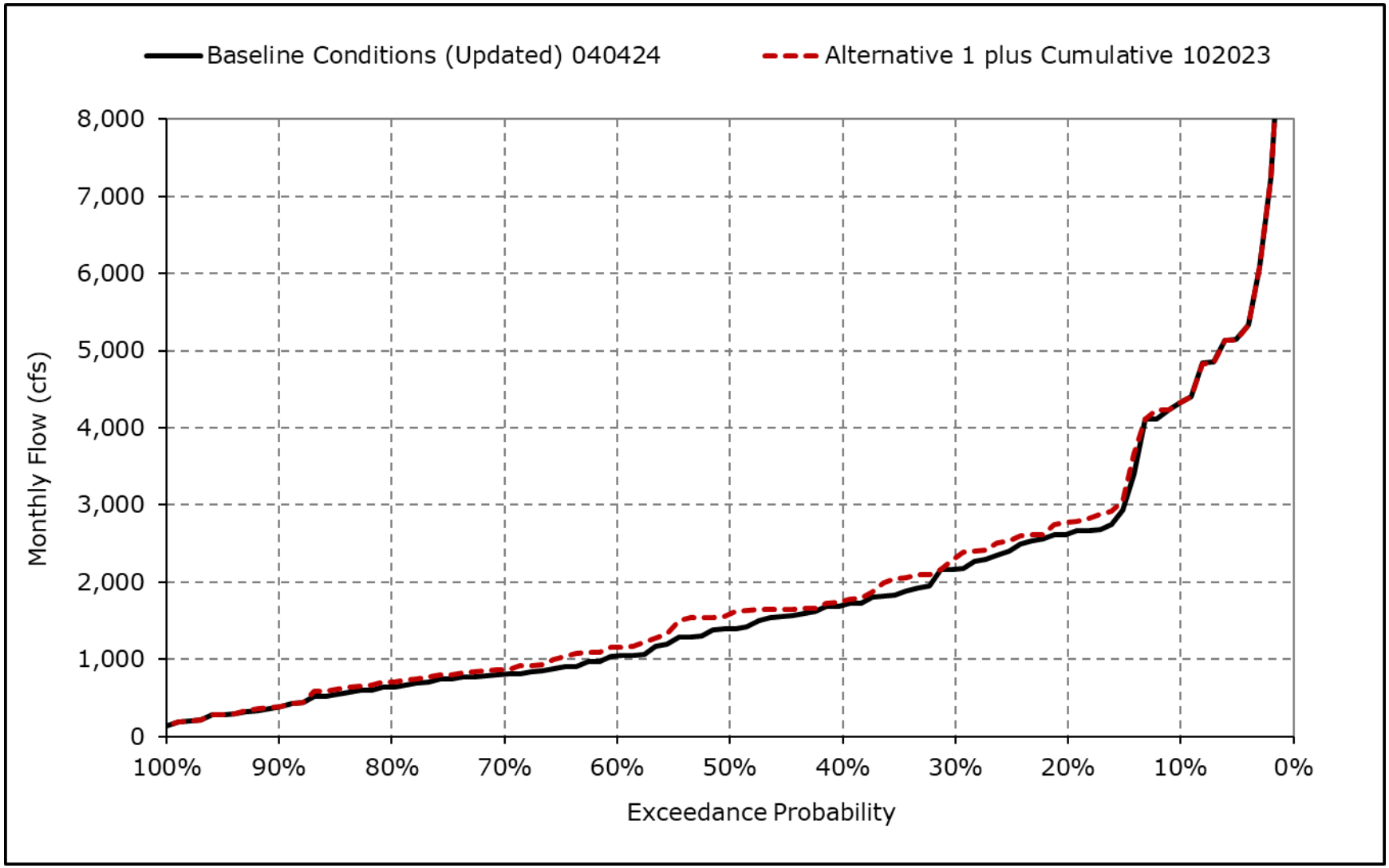
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



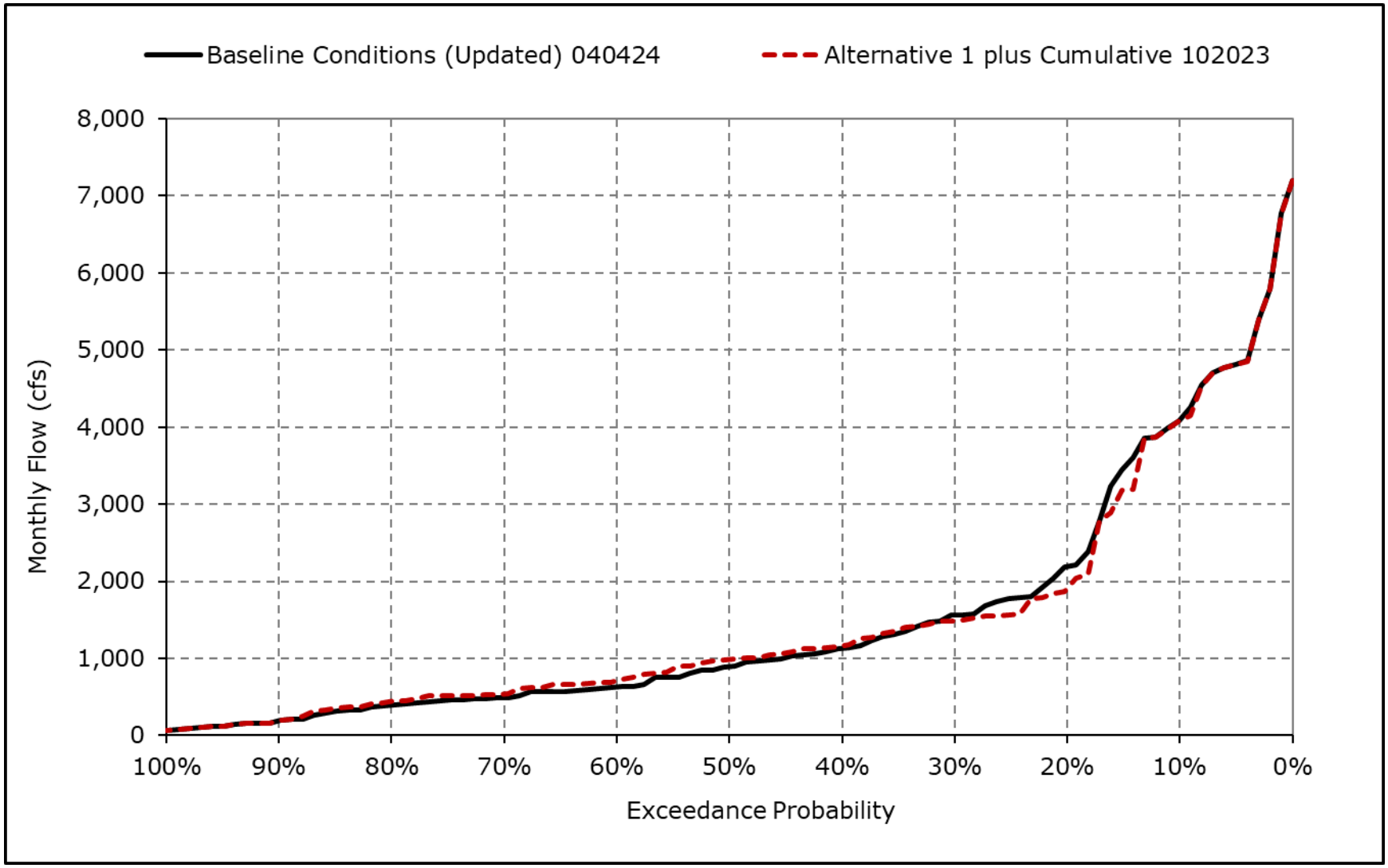
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



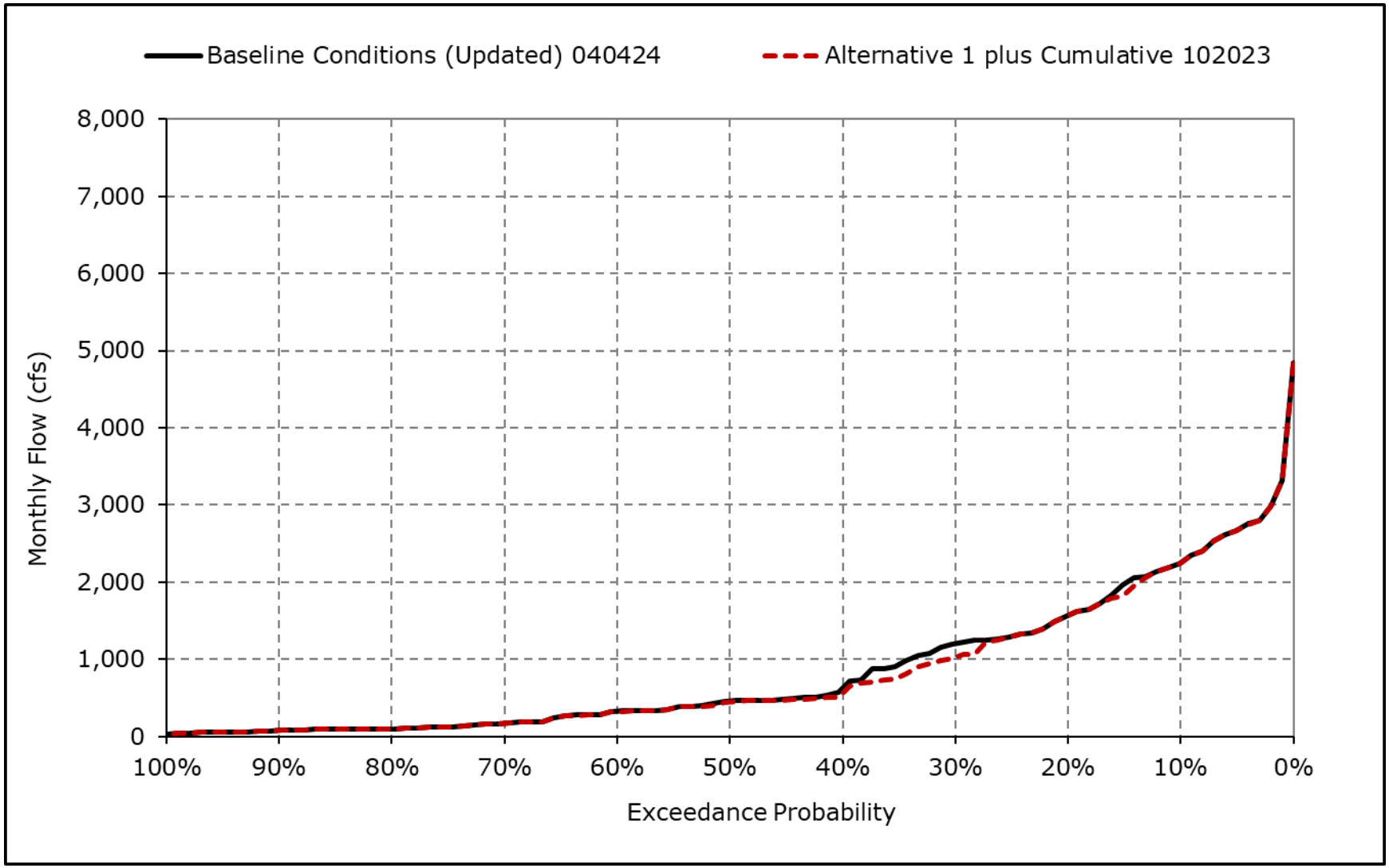
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



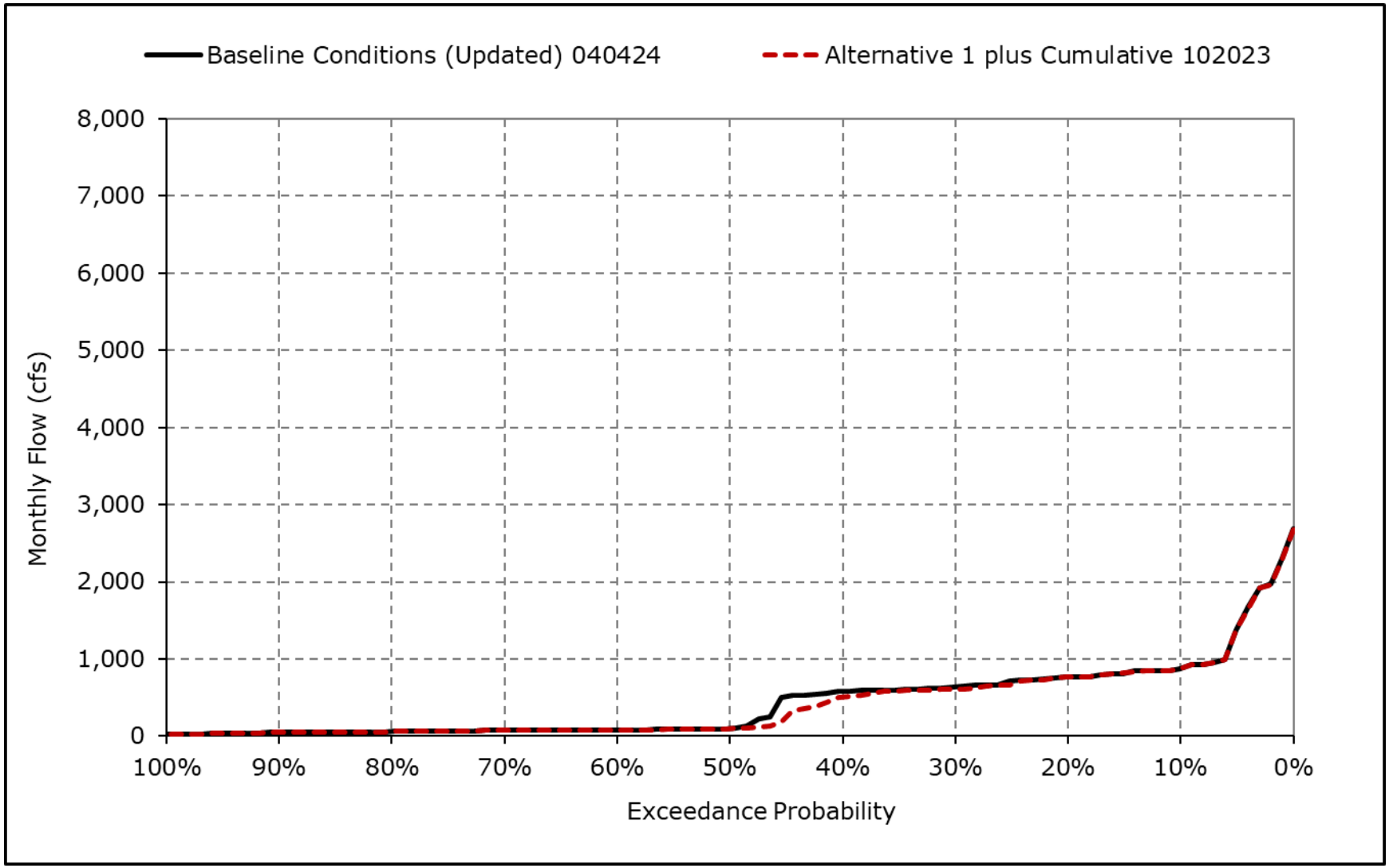
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



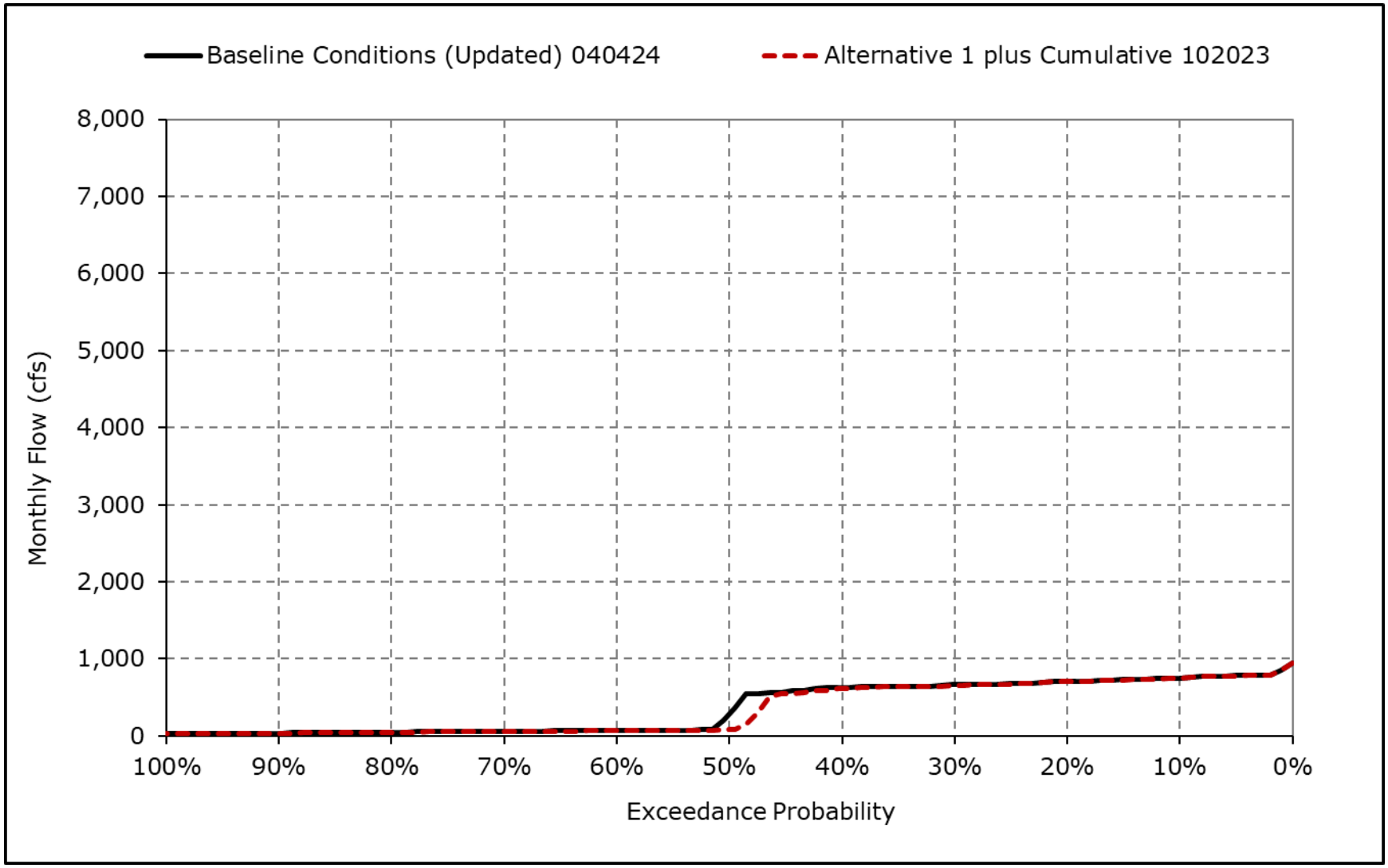
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



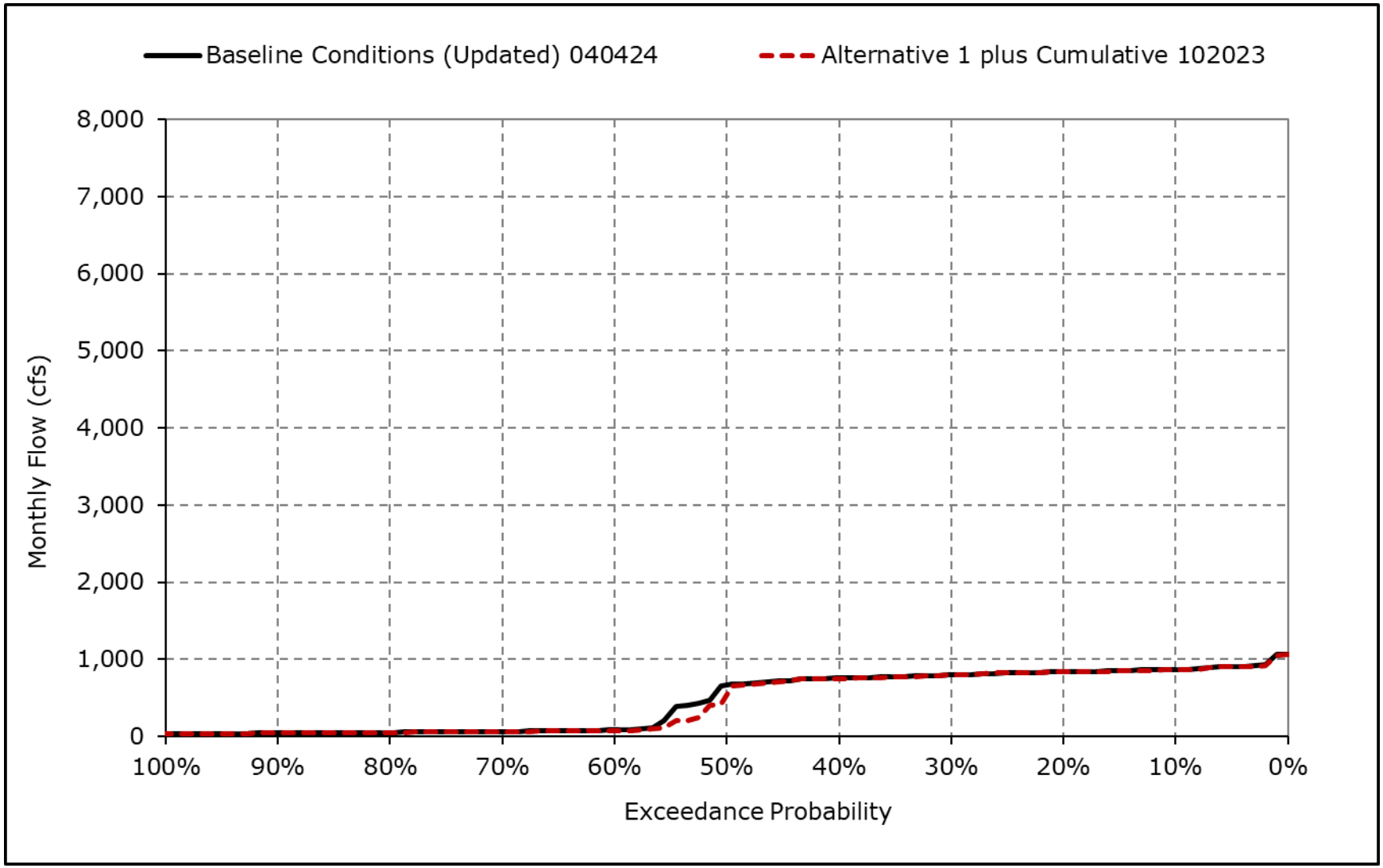
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-6-1a. Old and Middle River Flow, Baseline Conditions (Updated) 040424, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,558	-2,102	-3,022	-3,521	-2,786	-1,051	1,471	142	-2,287	-4,141	-3,389	-4,129
20% Exceedance	-3,293	-3,082	-4,338	-3,645	-4,021	-3,138	319	-398	-4,091	-7,536	-5,671	-5,134
30% Exceedance	-3,976	-4,463	-5,290	-3,645	-4,144	-3,370	-88	-734	-4,306	-9,151	-7,298	-5,669
40% Exceedance	-4,891	-5,636	-5,290	-4,280	-4,144	-3,414	-395	-1,071	-4,504	-9,700	-9,244	-6,811
50% Exceedance	-5,615	-7,823	-5,290	-4,516	-4,272	-3,421	-685	-1,457	-4,851	-10,147	-9,785	-8,033
60% Exceedance	-6,120	-8,465	-5,290	-4,516	-4,316	-3,425	-934	-1,636	-4,995	-10,773	-10,508	-8,808
70% Exceedance	-6,901	-8,911	-6,713	-4,516	-4,415	-3,429	-1,152	-1,865	-5,000	-10,960	-10,744	-9,151
80% Exceedance	-7,486	-9,295	-8,457	-5,000	-4,464	-3,908	-1,265	-2,039	-5,000	-11,239	-10,972	-9,643
90% Exceedance	-8,817	-9,486	-9,380	-5,000	-4,611	-3,994	-1,573	-2,876	-5,000	-11,493	-11,311	-10,052
Full Simulation Period Average[a]	-5,589	-6,488	-5,790	-3,834	-3,717	-2,758	-389	-1,287	-4,203	-9,211	-8,601	-7,507
Wet Water Years (30%)	-6,738	-7,548	-5,693	-3,224	-2,830	-1,355	-569	-1,795	-3,974	-9,633	-9,906	-8,807
Above Normal Water Years (11%)	-4,852	-6,729	-6,461	-4,085	-3,682	-3,066	-672	-2,257	-4,755	-10,010	-10,848	-7,898
Below Normal Water Years (21%)	-5,847	-7,077	-6,206	-4,194	-4,170	-3,600	563	-462	-4,862	-11,195	-10,939	-9,580
Dry Water Years (22%)	-5,568	-6,451	-6,284	-4,265	-4,178	-3,683	-605	-977	-4,849	-10,128	-7,240	-6,057
Critical Water Years (16%)	-3,631	-3,610	-4,287	-3,743	-4,176	-2,799	-810	-1,178	-2,504	-4,008	-3,412	-4,075

Table 4G-3-6-1b. Old and Middle River Flow, Alternative 1 plus Cumulative 102023, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-2,665	-2,435	-3,238	-3,127	-2,980	-934	1,495	-1,399	-1,587	-3,678	-3,199	-4,035
20% Exceedance	-3,366	-3,765	-4,328	-3,518	-3,621	-1,260	254	-1,783	-3,636	-6,976	-4,814	-5,446
30% Exceedance	-4,495	-4,750	-5,290	-3,645	-3,741	-1,402	-271	-2,150	-4,301	-8,456	-7,946	-6,042
40% Exceedance	-5,043	-5,962	-5,290	-3,876	-3,982	-1,566	-557	-2,380	-4,394	-9,514	-9,310	-6,872
50% Exceedance	-5,804	-8,080	-5,290	-4,093	-4,033	-2,341	-1,107	-2,610	-4,400	-9,918	-9,913	-8,340
60% Exceedance	-6,335	-8,656	-5,290	-4,364	-4,194	-3,445	-1,292	-2,846	-4,400	-10,409	-10,452	-9,404
70% Exceedance	-6,844	-8,985	-6,471	-4,516	-4,242	-3,608	-1,489	-3,105	-4,475	-10,818	-10,803	-10,005
80% Exceedance	-7,658	-9,293	-8,472	-4,625	-4,464	-3,724	-1,584	-3,417	-4,475	-11,175	-10,989	-10,597
90% Exceedance	-8,535	-9,487	-9,375	-4,775	-4,485	-3,950	-1,821	-3,615	-4,490	-11,341	-11,178	-10,961
Full Simulation Period Average[a]	-5,636	-6,640	-5,774	-3,681	-3,521	-2,025	-531	-2,449	-3,818	-8,968	-8,518	-7,897
Wet Water Years (30%)	-6,765	-7,798	-5,605	-3,070	-2,876	-884	186	-2,778	-3,722	-9,664	-10,218	-9,799
Above Normal Water Years (11%)	-4,561	-6,791	-6,917	-3,944	-3,520	-1,819	8	-2,636	-4,370	-10,292	-10,893	-8,345
Below Normal Water Years (21%)	-5,857	-7,184	-6,303	-4,014	-3,930	-2,105	-841	-2,537	-4,457	-10,937	-10,690	-9,507
Dry Water Years (22%)	-5,716	-6,684	-6,132	-4,062	-3,802	-3,019	-960	-2,205	-4,394	-9,375	-6,913	-6,361
Critical Water Years (16%)	-3,856	-3,593	-4,121	-3,684	-3,807	-2,833	-1,251	-1,927	-1,990	-3,610	-3,055	-4,019

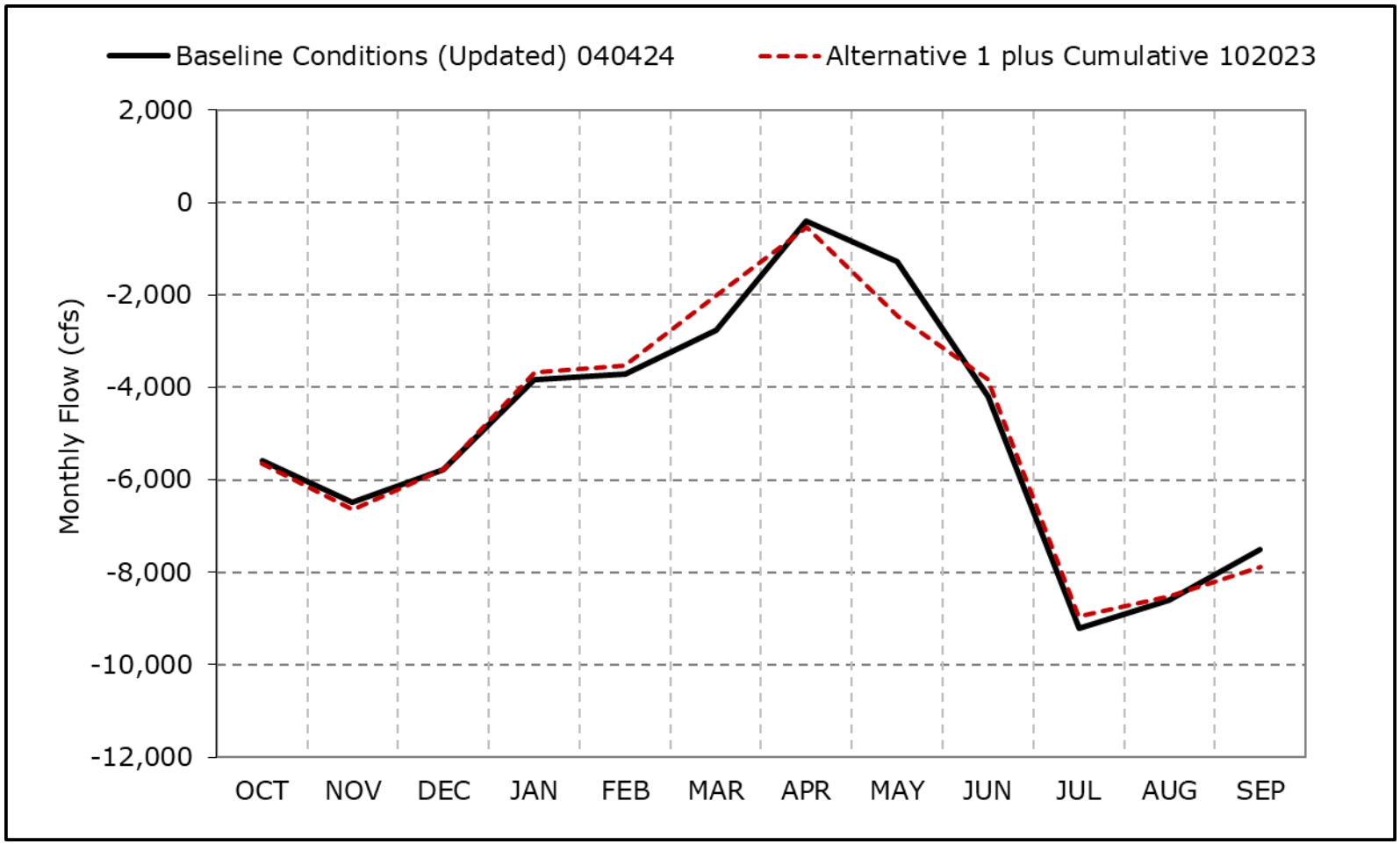
Table 4G-3-6-1c. Old and Middle River Flow, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (combined flows)(cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-107	-333	-216	394	-194	117	25	-1,542	701	464	190	94
20% Exceedance	-73	-682	10	127	400	1,878	-64	-1,384	455	560	857	-313
30% Exceedance	-520	-287	0	0	403	1,968	-182	-1,416	5	694	-648	-373
40% Exceedance	-153	-326	0	404	162	1,848	-162	-1,309	110	186	-67	-61
50% Exceedance	-190	-257	0	423	239	1,081	-422	-1,154	451	229	-128	-307
60% Exceedance	-215	-191	0	152	123	-20	-358	-1,210	595	363	57	-597
70% Exceedance	57	-74	242	0	173	-179	-337	-1,240	525	142	-58	-854
80% Exceedance	-172	2	-15	375	0	184	-319	-1,378	525	64	-17	-954
90% Exceedance	282	-1	5	225	126	45	-247	-739	510	152	132	-909
Full Simulation Period Average[a]	-47	-153	16	154	196	733	-143	-1,162	385	243	83	-389
Wet Water Years (30%)	-27	-251	88	154	-45	470	755	-983	252	-31	-312	-992
Above Normal Water Years (11%)	291	-63	-456	141	162	1,246	680	-379	385	-282	-44	-447
Below Normal Water Years (21%)	-10	-107	-97	180	240	1,495	-1,405	-2,074	405	258	249	73
Dry Water Years (22%)	-148	-232	152	203	376	664	-355	-1,228	455	753	326	-304
Critical Water Years (16%)	-226	17	166	59	369	-34	-441	-749	514	398	357	56

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

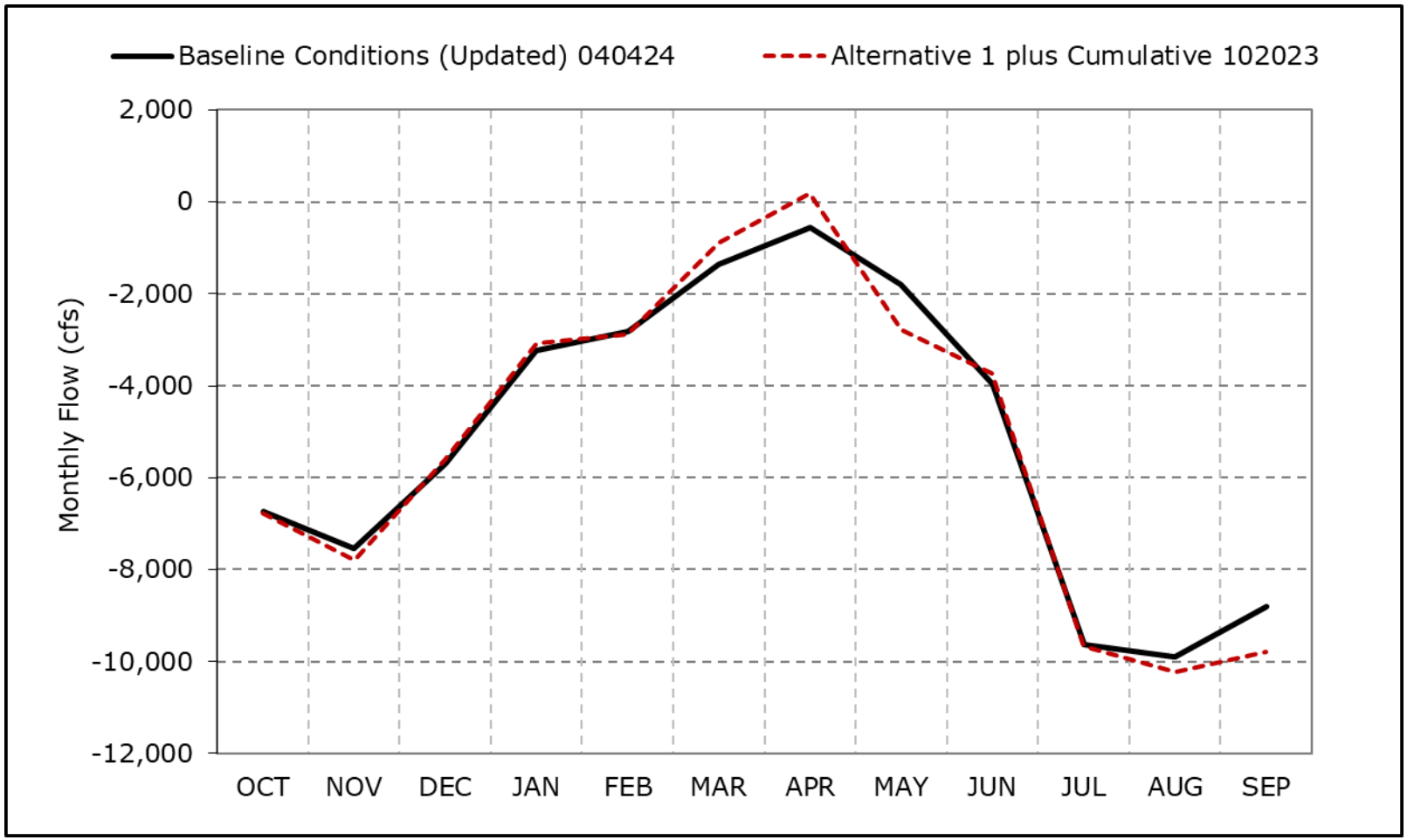
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



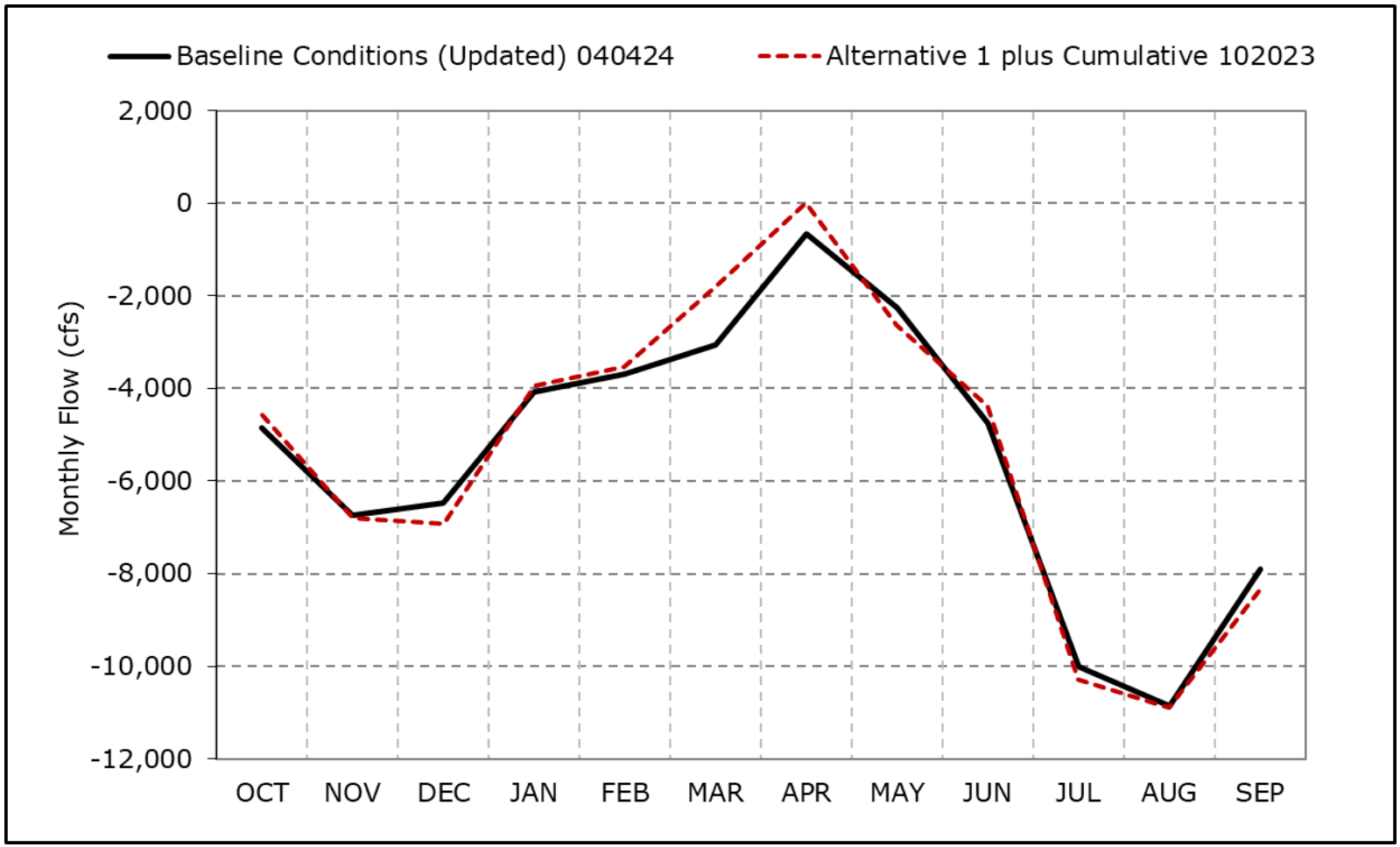
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



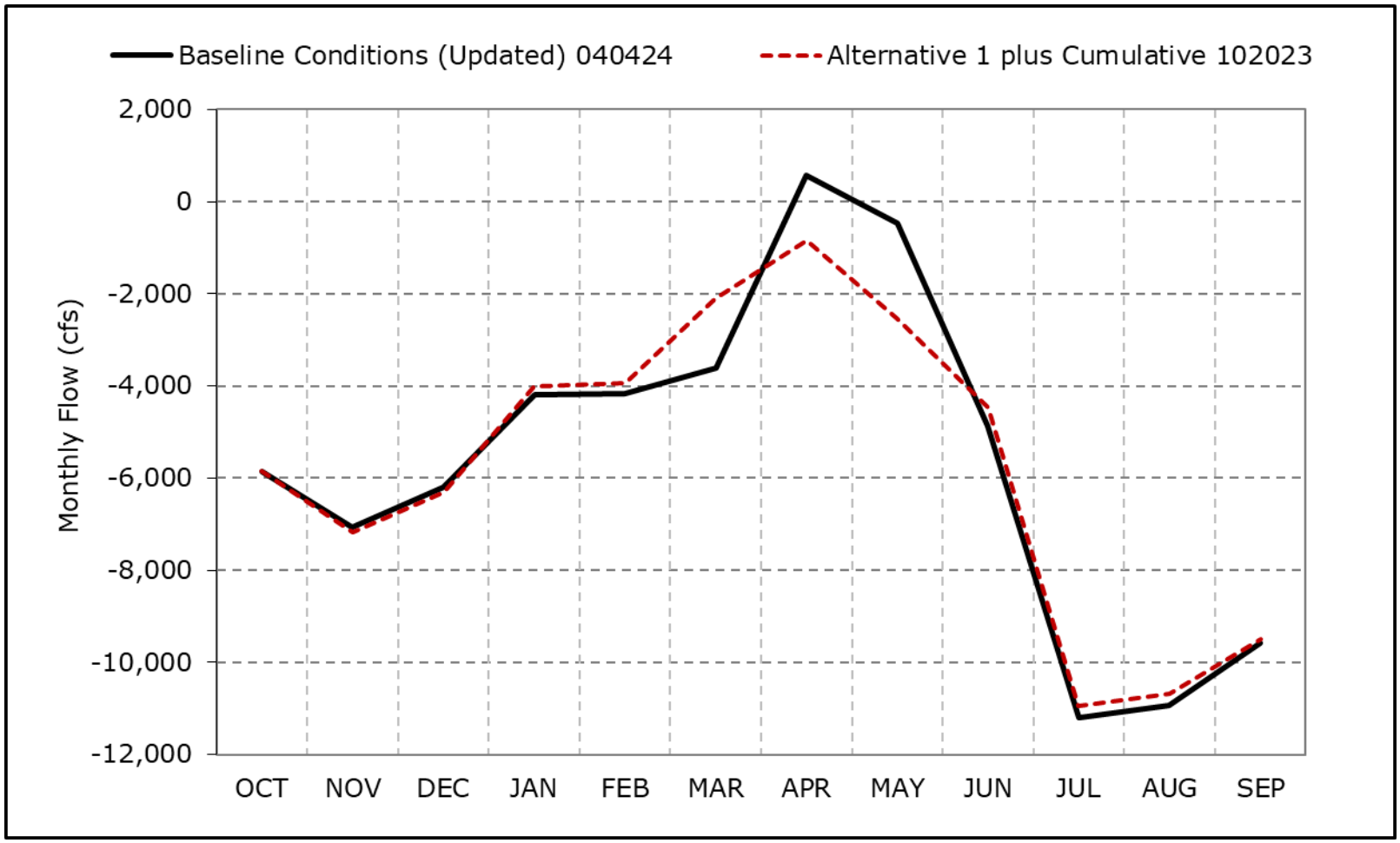
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



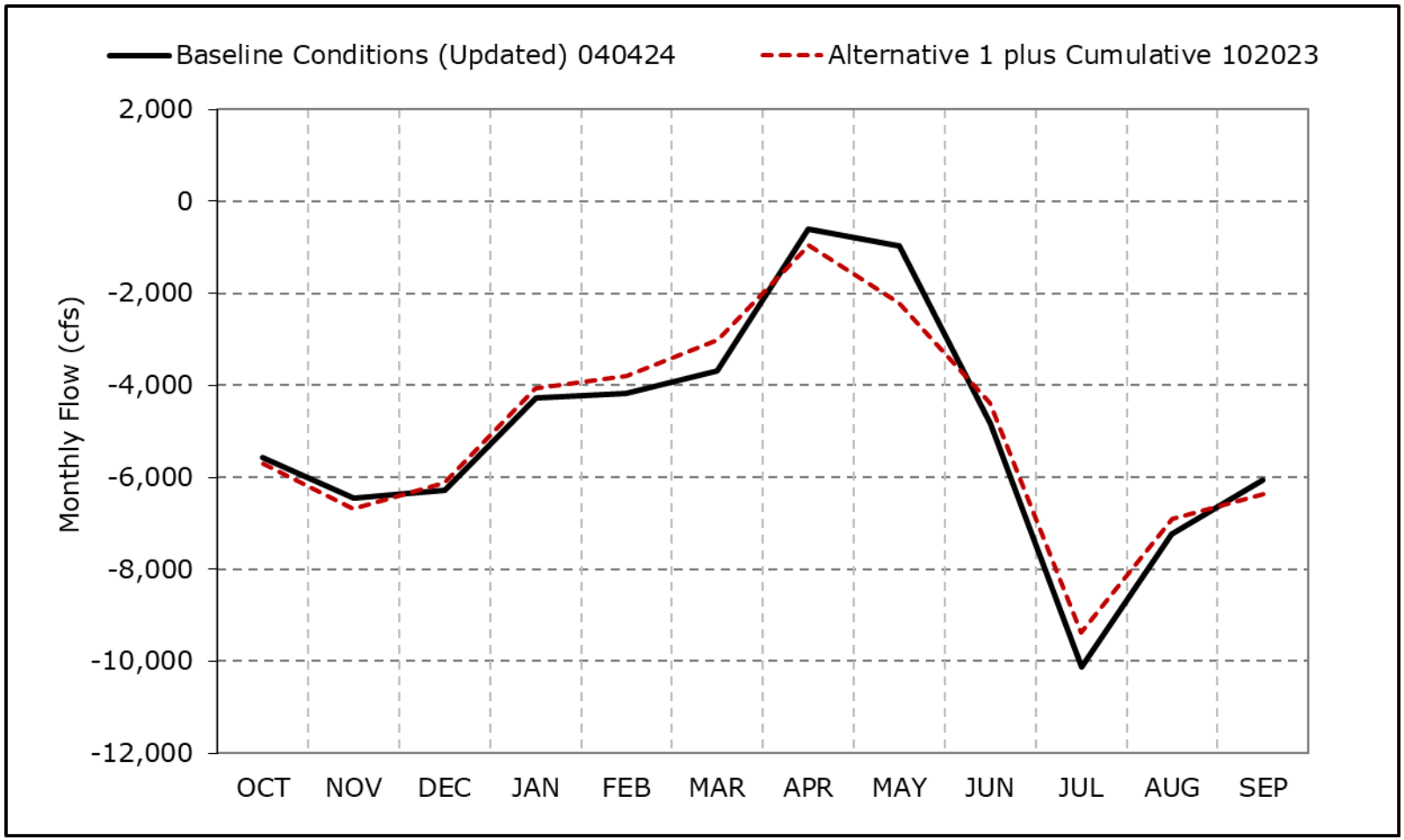
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



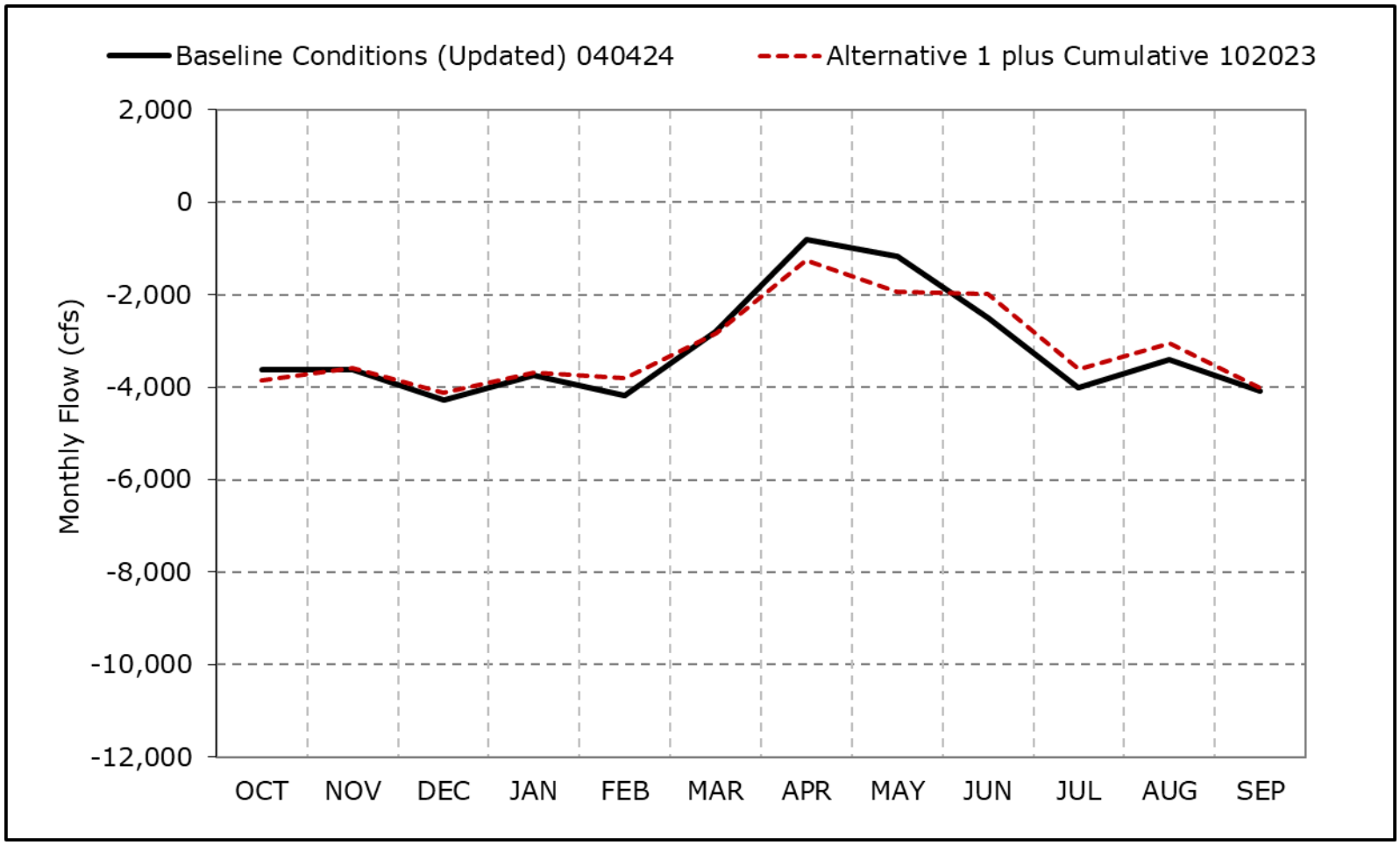
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



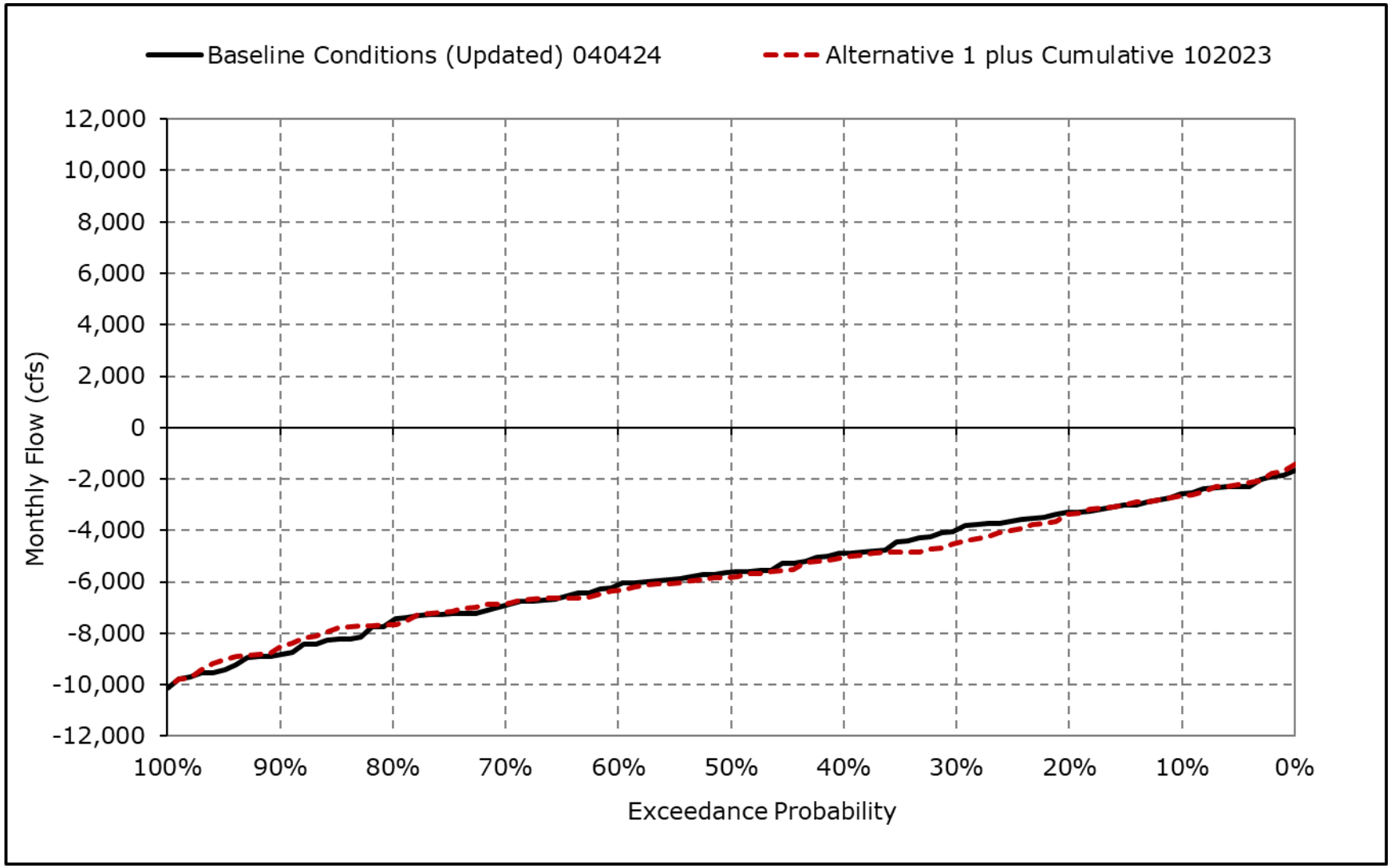
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



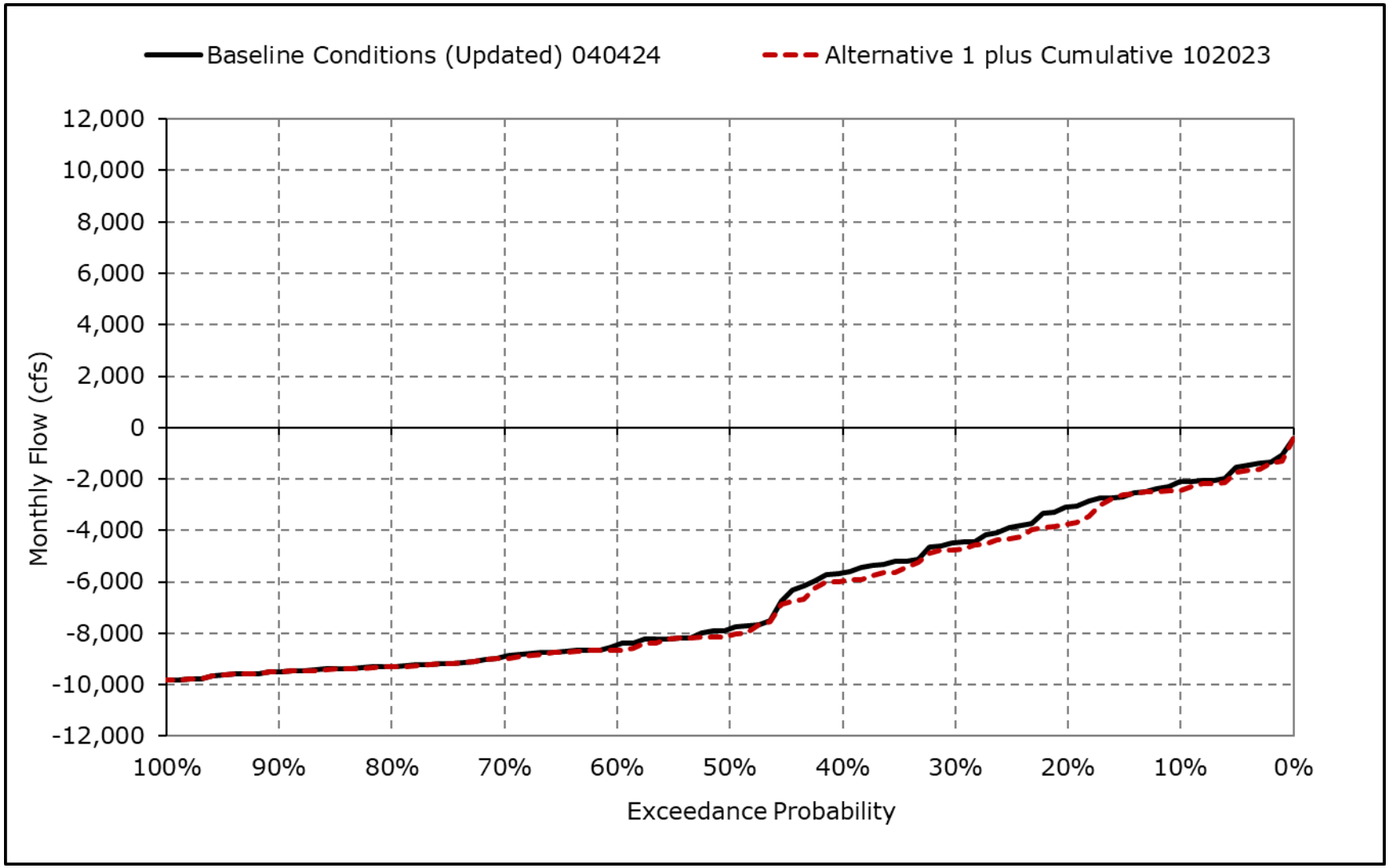
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



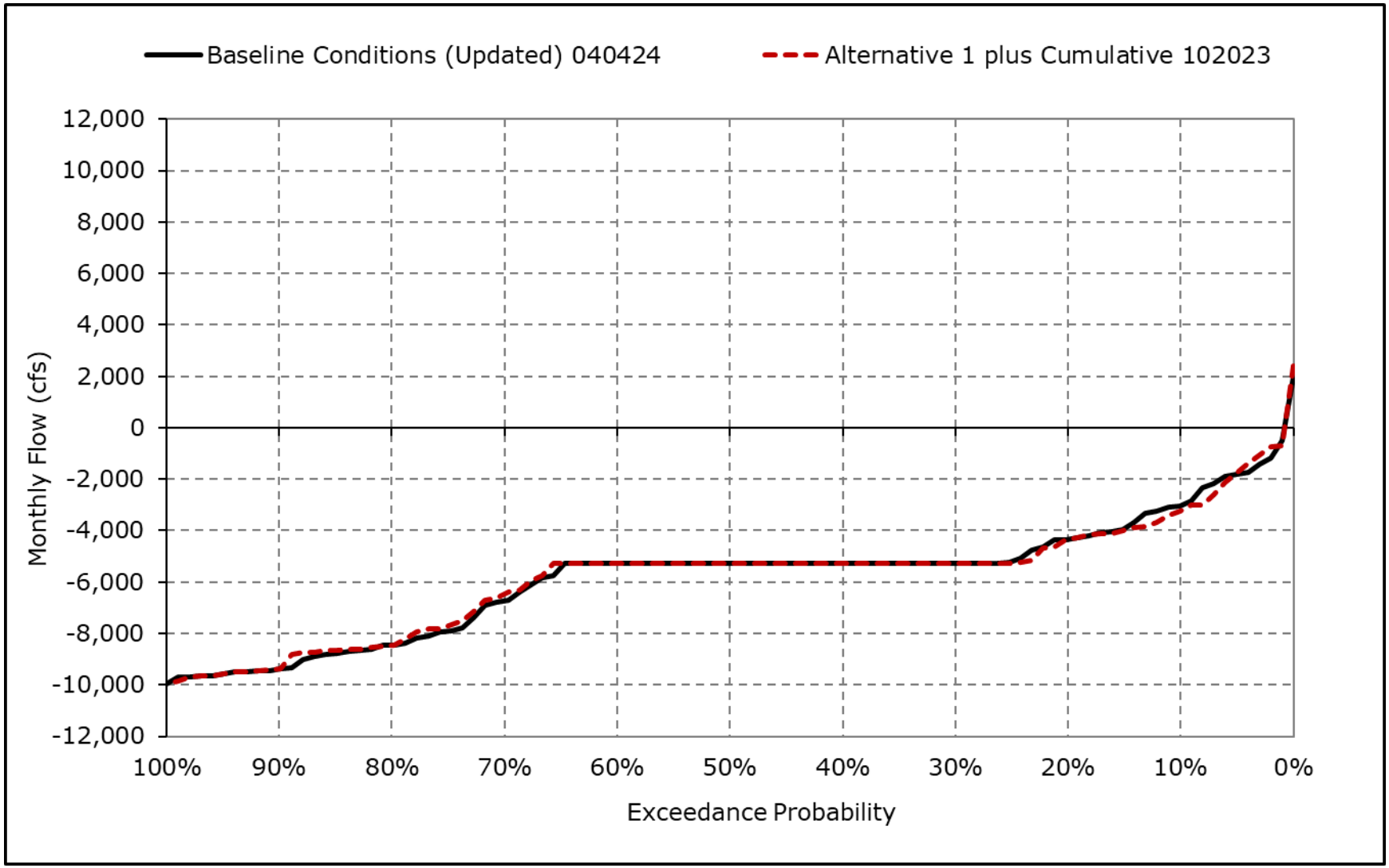
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



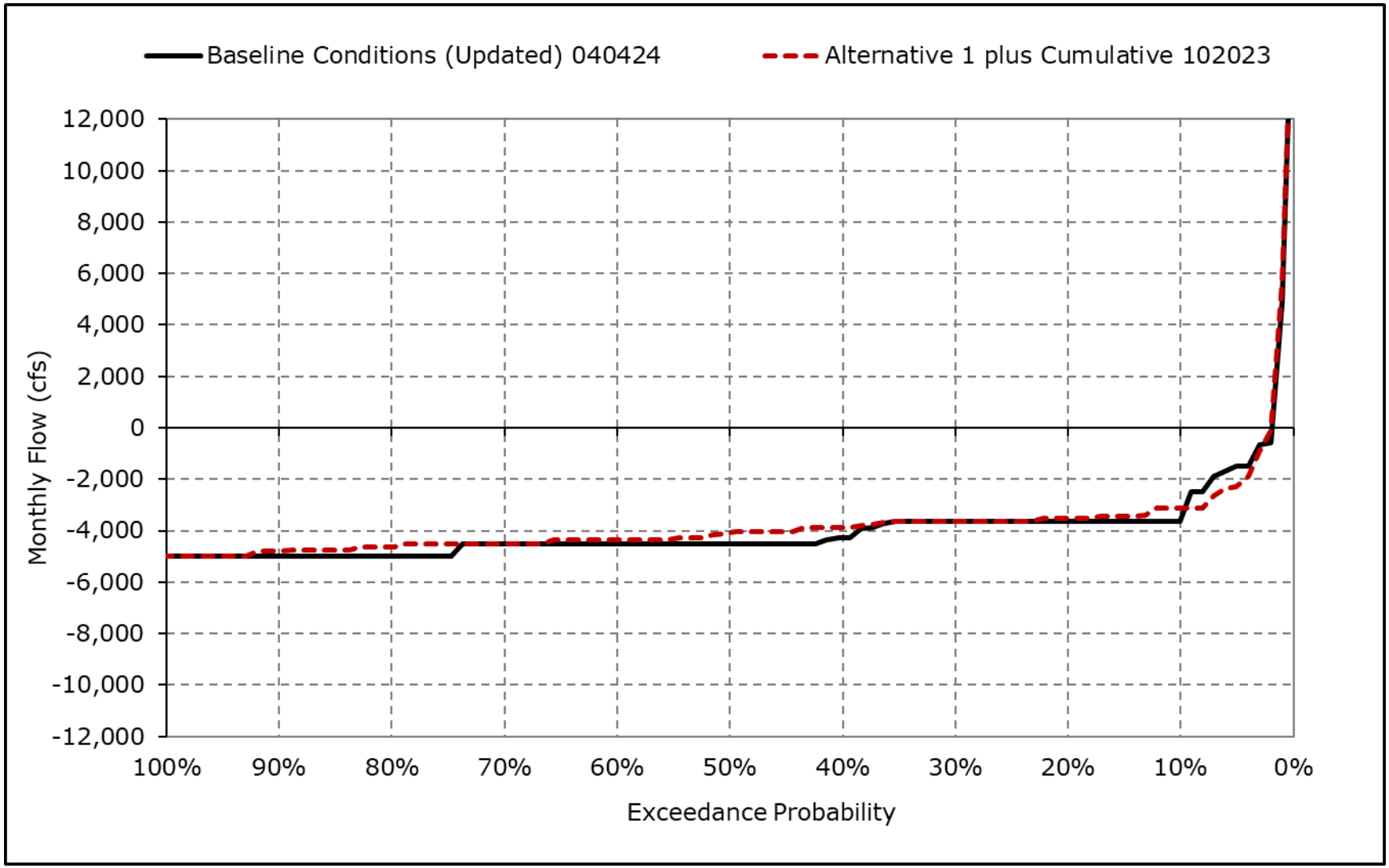
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



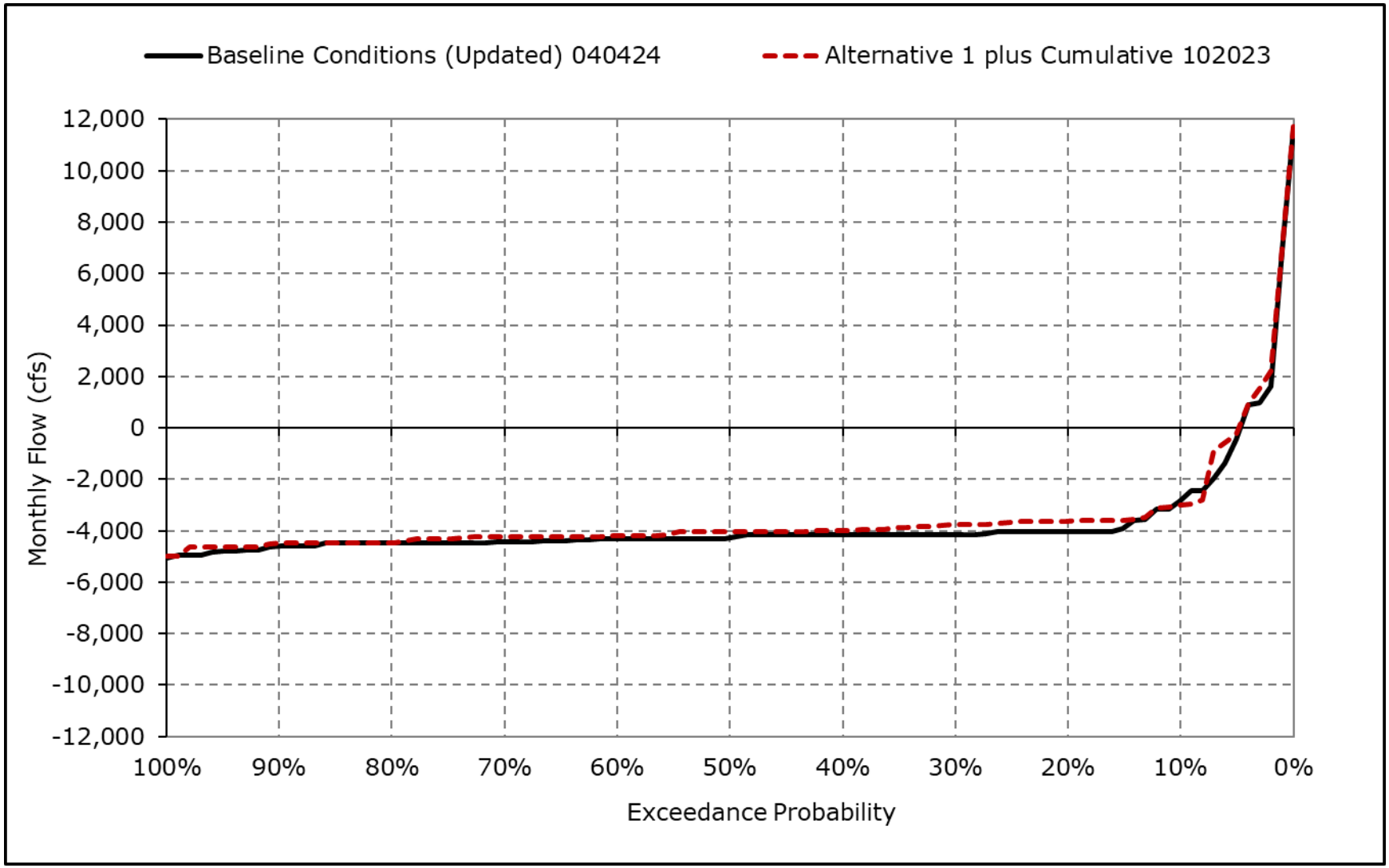
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



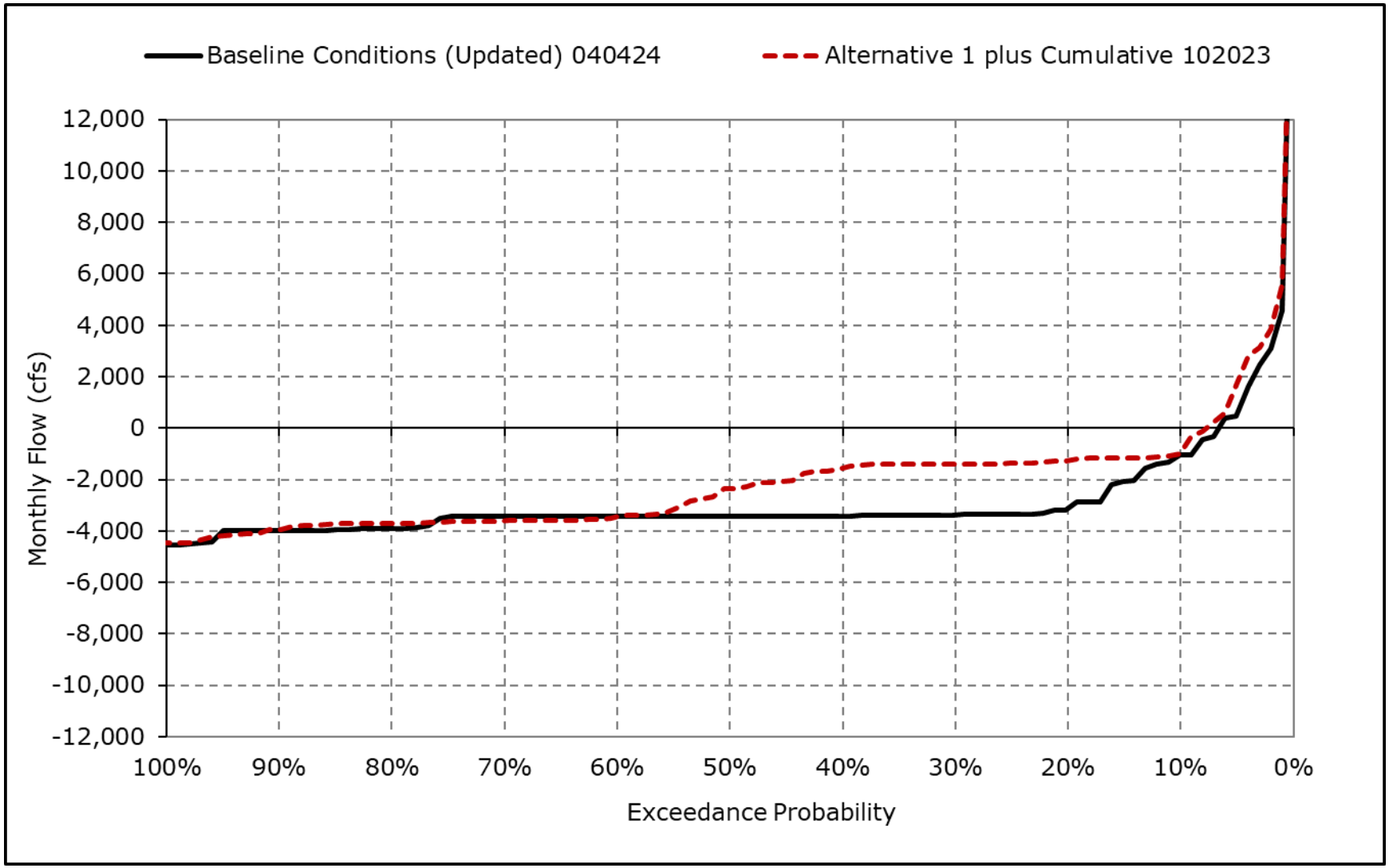
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



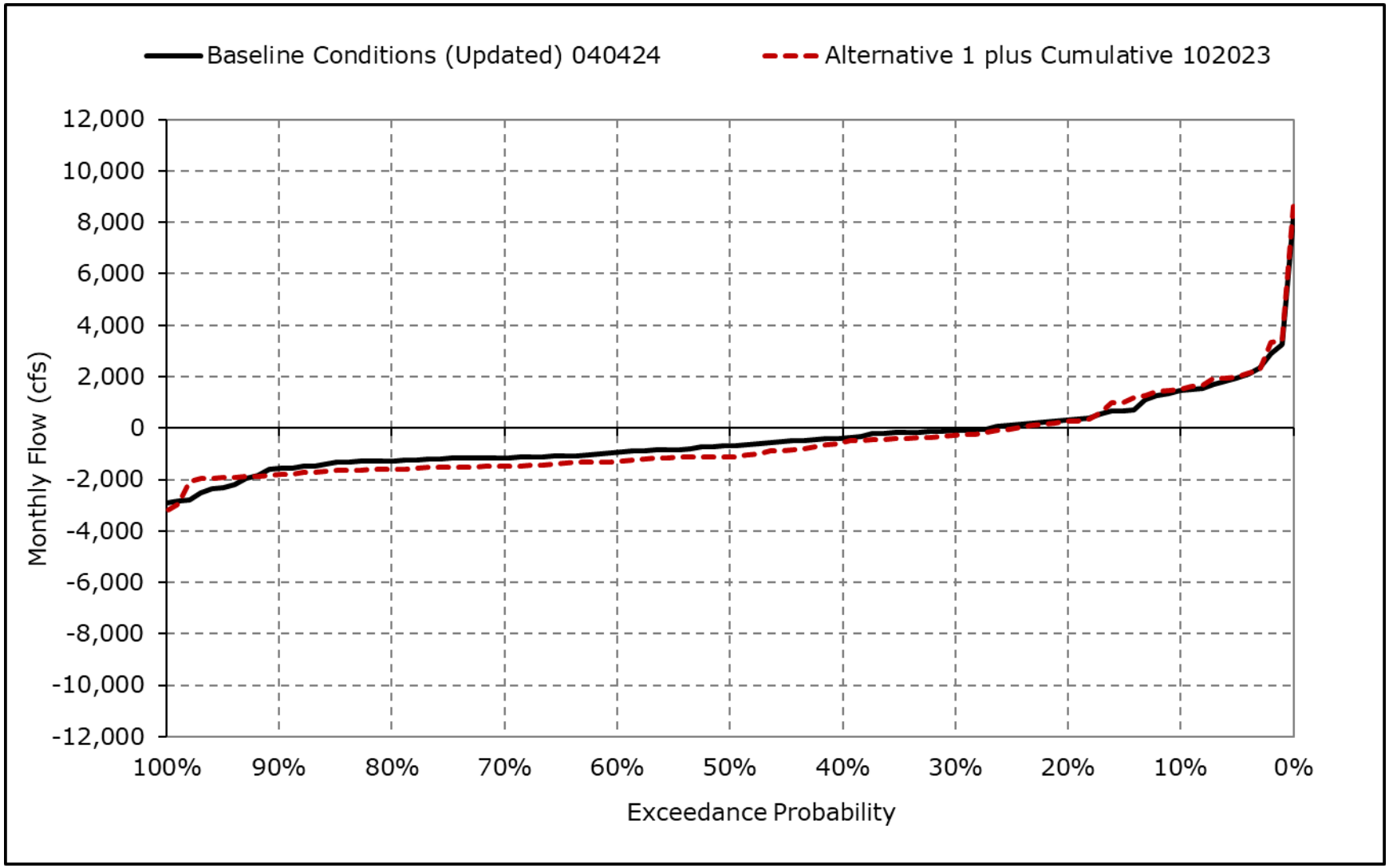
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



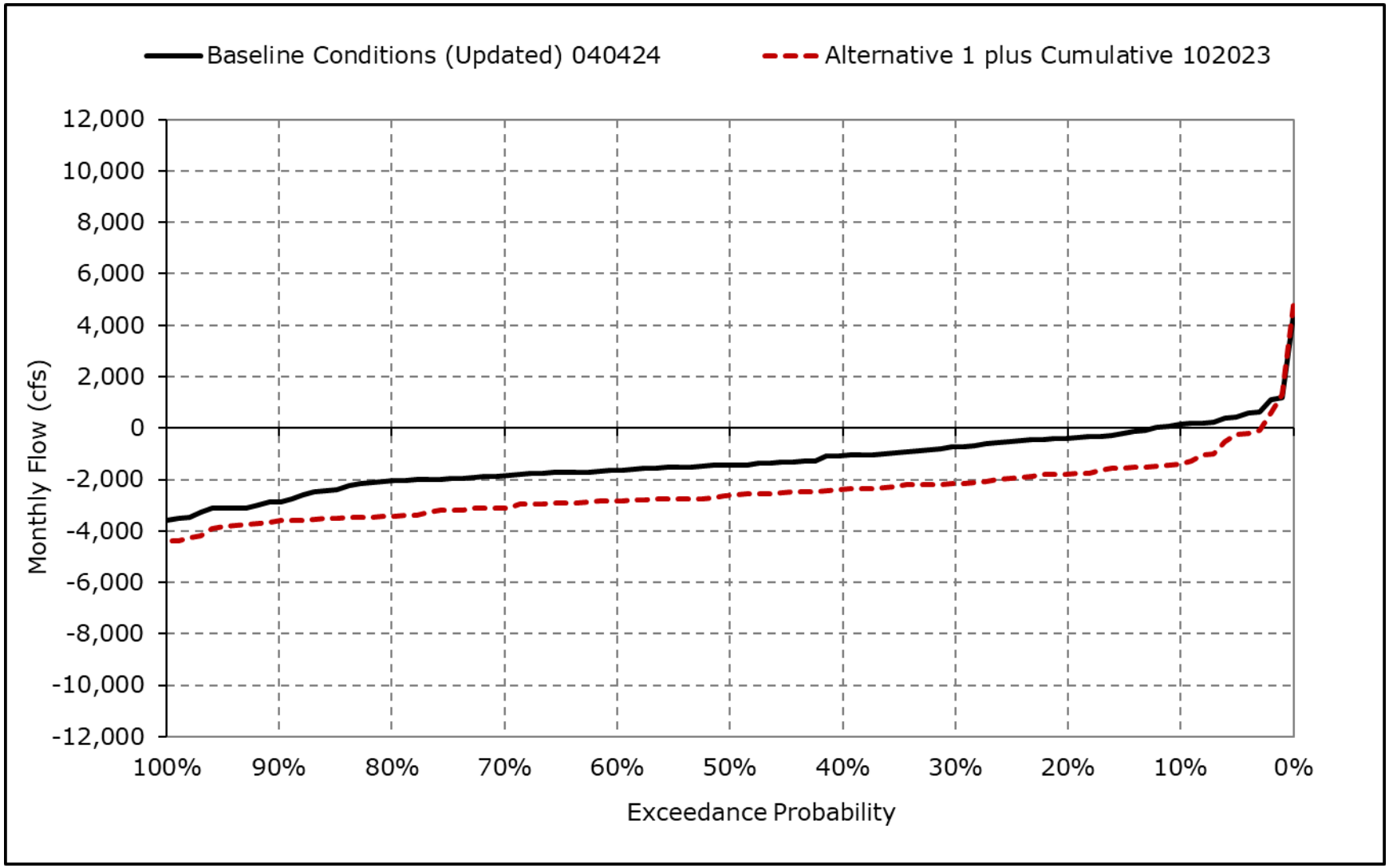
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



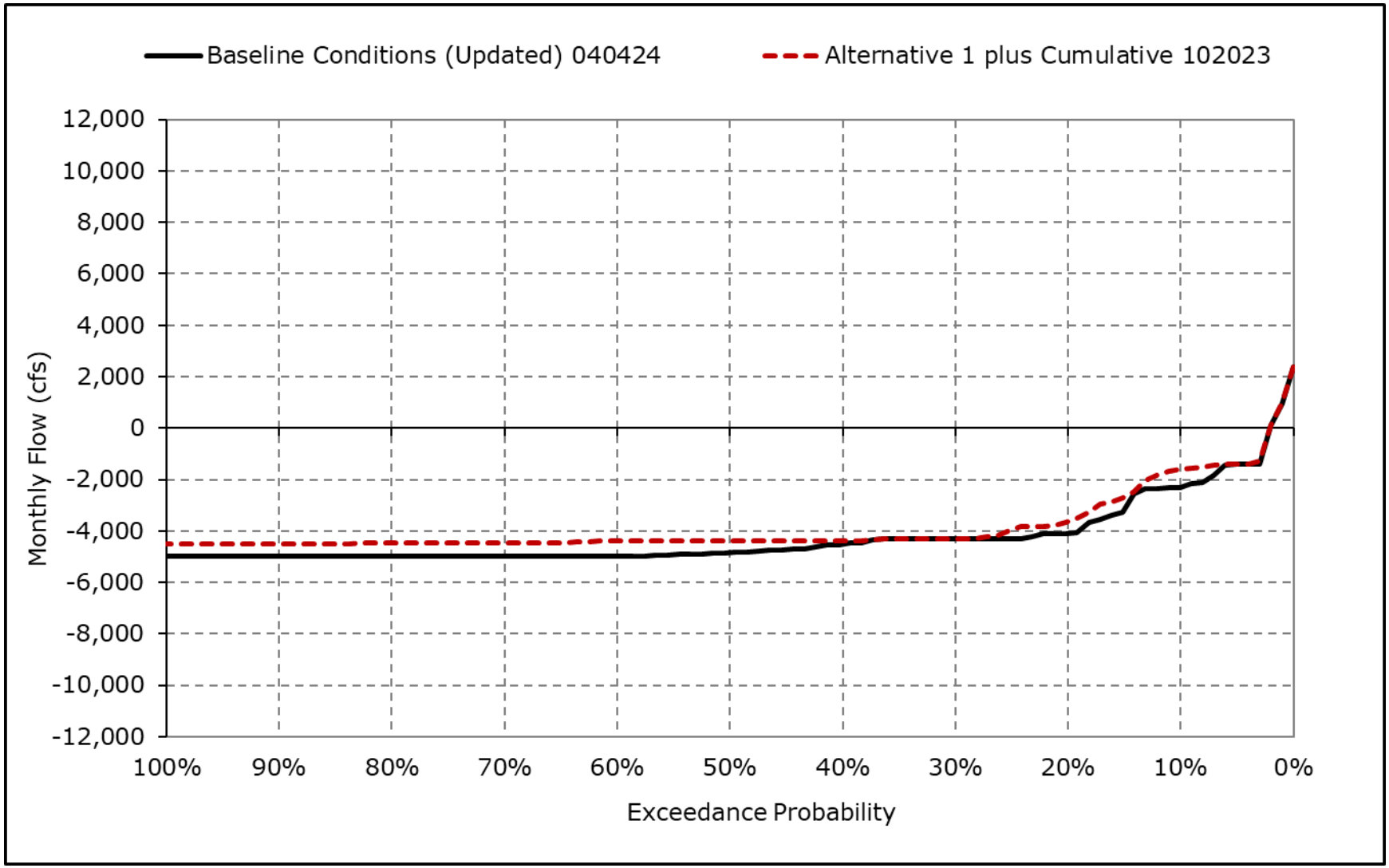
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



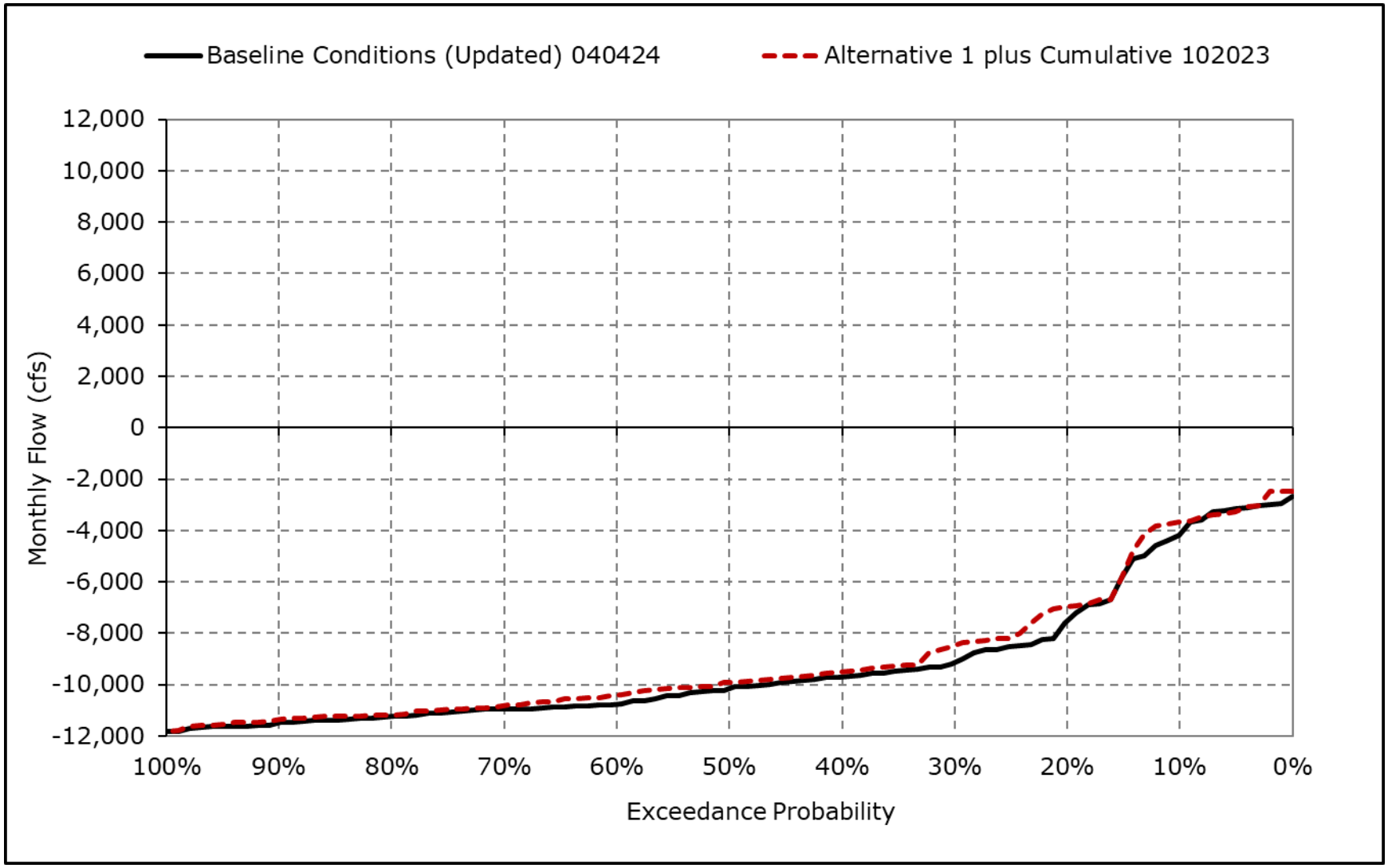
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



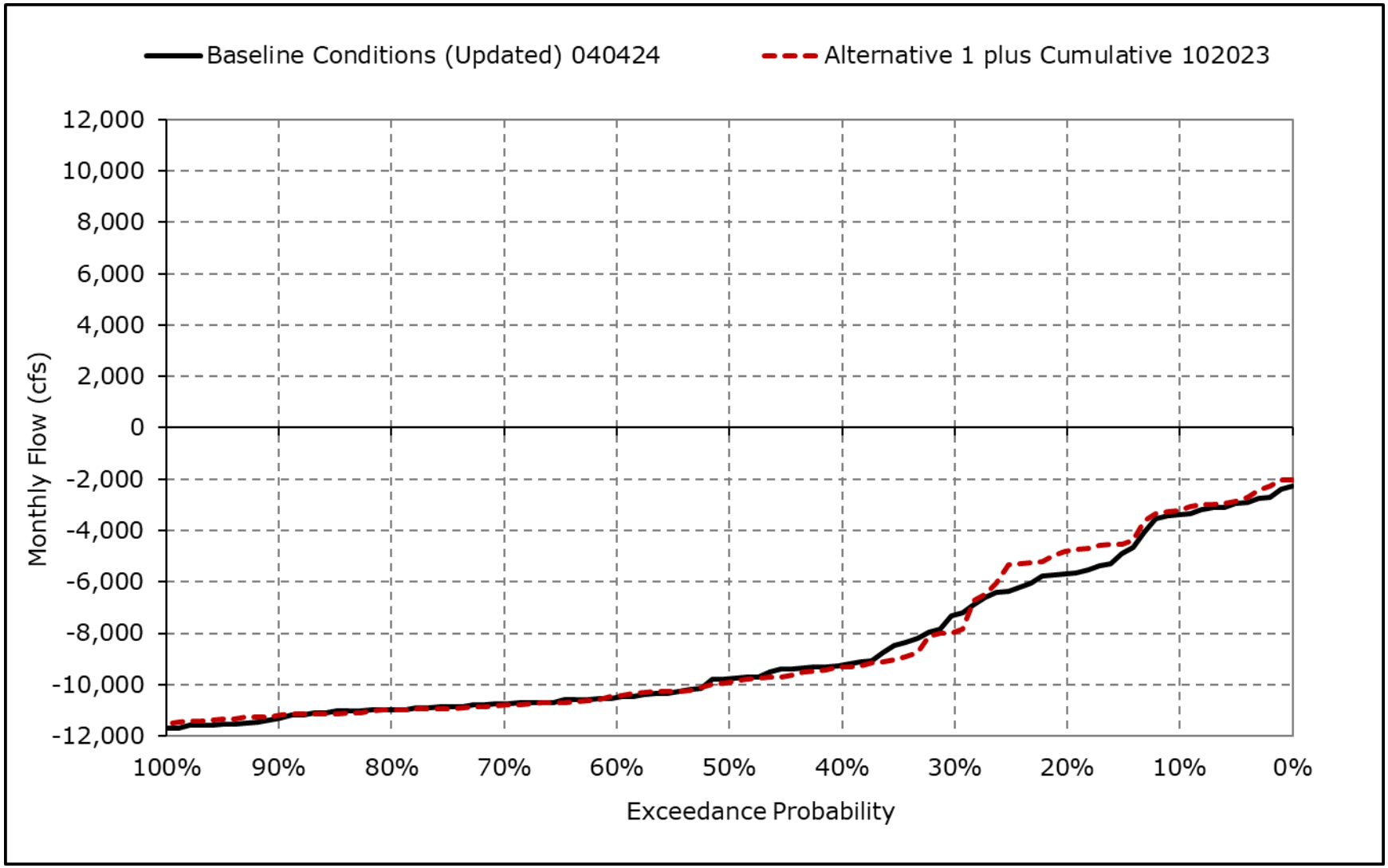
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



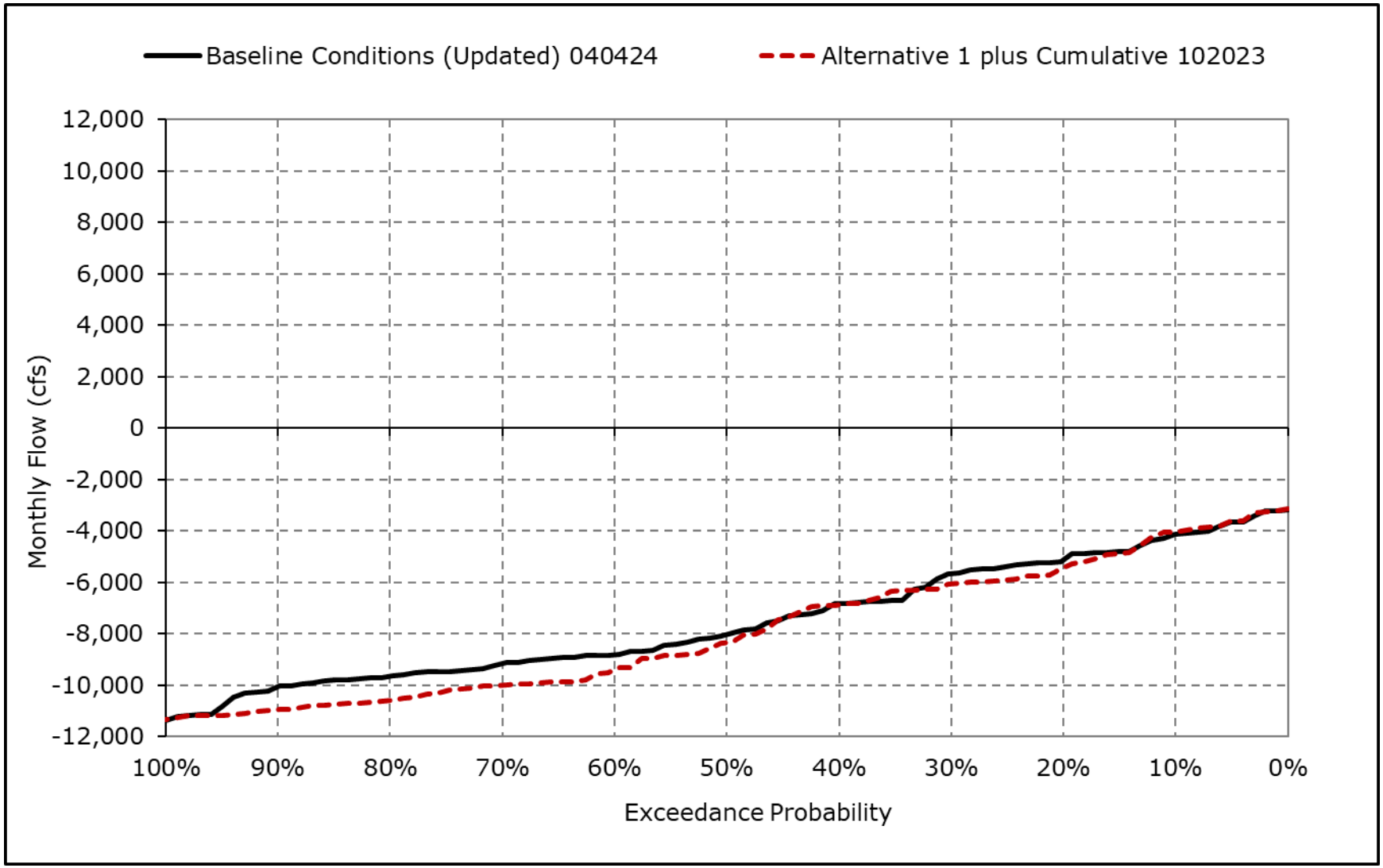
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-7-1a. Qwest, Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,041	359	8,369	15,346	20,961	20,523	16,713	13,257	9,911	1,244	862	1,086
20% Exceedance	708	-182	3,810	9,899	12,856	12,923	12,291	7,924	4,392	311	297	600
30% Exceedance	383	-670	1,041	4,871	9,991	8,500	10,274	6,172	2,841	-467	-621	144
40% Exceedance	117	-1,019	-73	3,125	6,612	5,830	8,103	5,197	2,127	-1,135	-1,301	-202
50% Exceedance	-165	-1,538	-874	2,214	4,299	4,212	6,220	4,219	1,499	-1,978	-2,454	-393
60% Exceedance	-290	-2,592	-1,793	640	2,192	2,849	5,273	3,479	1,099	-2,730	-2,975	-716
70% Exceedance	-591	-3,245	-3,712	-479	1,471	2,268	3,995	2,732	738	-3,123	-3,152	-988
80% Exceedance	-1,202	-3,638	-5,073	-1,471	556	1,693	3,058	2,058	427	-3,360	-3,442	-1,949
90% Exceedance	-2,177	-4,349	-5,695	-2,068	-359	582	2,234	1,721	262	-4,141	-4,049	-2,918
Full Simulation Period Average[a]	-257	-1,524	506	5,049	8,144	7,893	8,546	6,066	3,286	-1,427	-1,794	-612
Wet Water Years (30%)	-758	-822	5,869	13,436	17,795	17,086	15,391	11,230	7,624	254	-1,316	367
Above Normal Water Years (11%)	322	-2,690	-1,688	7,259	10,551	9,386	8,678	5,228	2,549	-1,372	-3,012	608
Below Normal Water Years (21%)	-127	-2,052	-1,822	1,680	5,202	4,933	7,920	5,584	1,476	-3,246	-3,922	-2,914
Dry Water Years (22%)	-388	-2,021	-2,425	-338	2,019	2,103	4,034	2,994	533	-3,440	-1,598	-965
Critical Water Years (16%)	292	-660	-956	-365	678	1,474	2,644	1,819	1,822	538	673	219

Table 4G-3-7-1b. Qwest, Alternative 1 plus Cumulative 102023, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,166	262	8,371	15,297	20,891	20,654	18,524	12,127	9,930	1,281	1,182	978
20% Exceedance	695	-478	3,958	10,156	13,019	13,772	13,414	7,561	4,695	820	217	357
30% Exceedance	444	-821	1,249	5,155	10,102	9,324	9,857	5,285	3,272	-559	-314	-205
40% Exceedance	343	-1,027	-198	3,395	6,974	6,926	8,060	4,413	2,603	-1,224	-1,302	-559
50% Exceedance	47	-1,765	-1,038	2,360	4,708	5,143	6,918	3,527	1,993	-1,711	-2,539	-926
60% Exceedance	-224	-2,712	-1,924	822	2,781	4,383	5,351	2,706	1,657	-2,268	-3,028	-1,179
70% Exceedance	-523	-3,384	-3,311	-447	1,880	2,960	4,538	2,197	1,329	-2,701	-3,308	-1,453
80% Exceedance	-1,045	-3,633	-4,821	-1,104	879	1,826	3,149	1,655	1,021	-3,076	-3,567	-1,808
90% Exceedance	-1,845	-4,376	-5,554	-1,798	-105	715	2,175	1,225	849	-3,393	-3,986	-3,168
Full Simulation Period Average[a]	-125	-1,679	531	5,229	8,382	8,718	9,080	5,411	3,725	-1,175	-1,755	-864
Wet Water Years (30%)	-520	-1,084	5,974	13,622	17,724	17,603	16,776	10,525	7,909	264	-1,629	-393
Above Normal Water Years (11%)	586	-2,681	-2,167	7,393	10,799	10,723	10,365	5,516	2,981	-1,622	-3,205	570
Below Normal Water Years (21%)	-5	-2,186	-1,905	1,912	5,479	6,610	7,301	4,158	2,038	-2,981	-3,714	-2,891
Dry Water Years (22%)	-367	-2,240	-2,250	-104	2,405	2,899	4,374	2,462	1,067	-2,731	-1,366	-1,157
Critical Water Years (16%)	300	-667	-801	-308	1,232	1,449	2,569	1,447	2,260	943	1,042	332

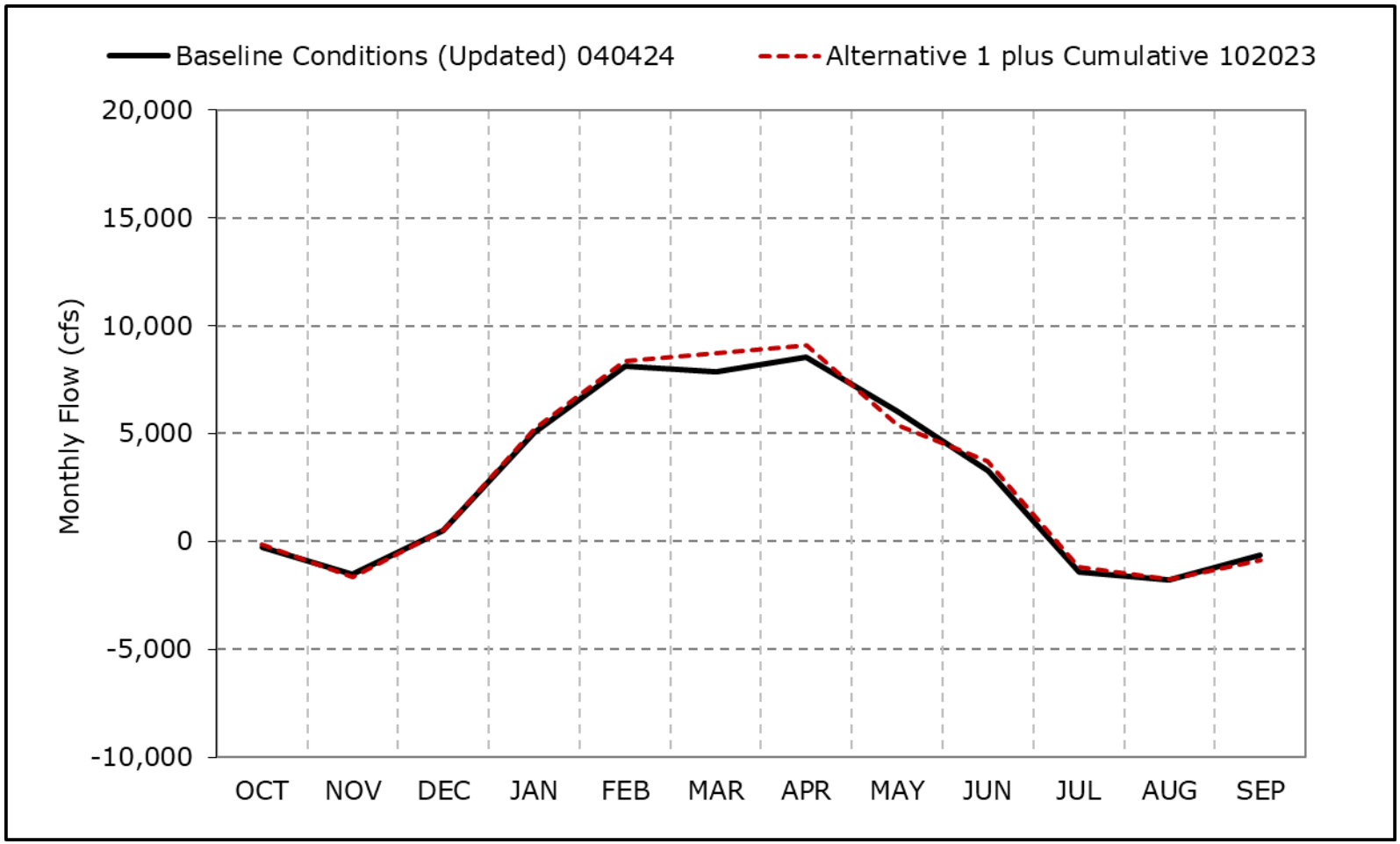
Table 4G-3-7-1c. Qwest, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Flow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	124	-98	3	-49	-70	132	1,811	-1,130	19	37	320	-108
20% Exceedance	-13	-296	148	257	163	849	1,122	-363	303	510	-80	-243
30% Exceedance	60	-152	208	283	111	824	-416	-887	431	-92	307	-349
40% Exceedance	225	-8	-125	270	362	1,096	-44	-785	476	-89	-2	-356
50% Exceedance	211	-227	-164	147	409	931	698	-692	495	268	-85	-533
60% Exceedance	66	-120	-131	182	590	1,534	77	-773	558	462	-53	-463
70% Exceedance	68	-140	402	32	409	691	544	-535	591	421	-156	-465
80% Exceedance	157	4	251	367	323	134	91	-403	594	284	-125	141
90% Exceedance	332	-27	141	270	254	133	-59	-496	587	748	64	-250
Full Simulation Period Average[a]	132	-155	24	180	238	825	534	-656	439	252	38	-252
Wet Water Years (30%)	237	-262	104	187	-70	517	1,384	-704	285	9	-313	-760
Above Normal Water Years (11%)	264	9	-478	135	248	1,337	1,687	287	432	-251	-193	-38
Below Normal Water Years (21%)	122	-134	-83	232	276	1,677	-618	-1,427	562	265	208	23
Dry Water Years (22%)	22	-218	175	234	386	796	340	-532	534	709	232	-193
Critical Water Years (16%)	8	-7	154	57	554	-25	-75	-372	438	404	368	113

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

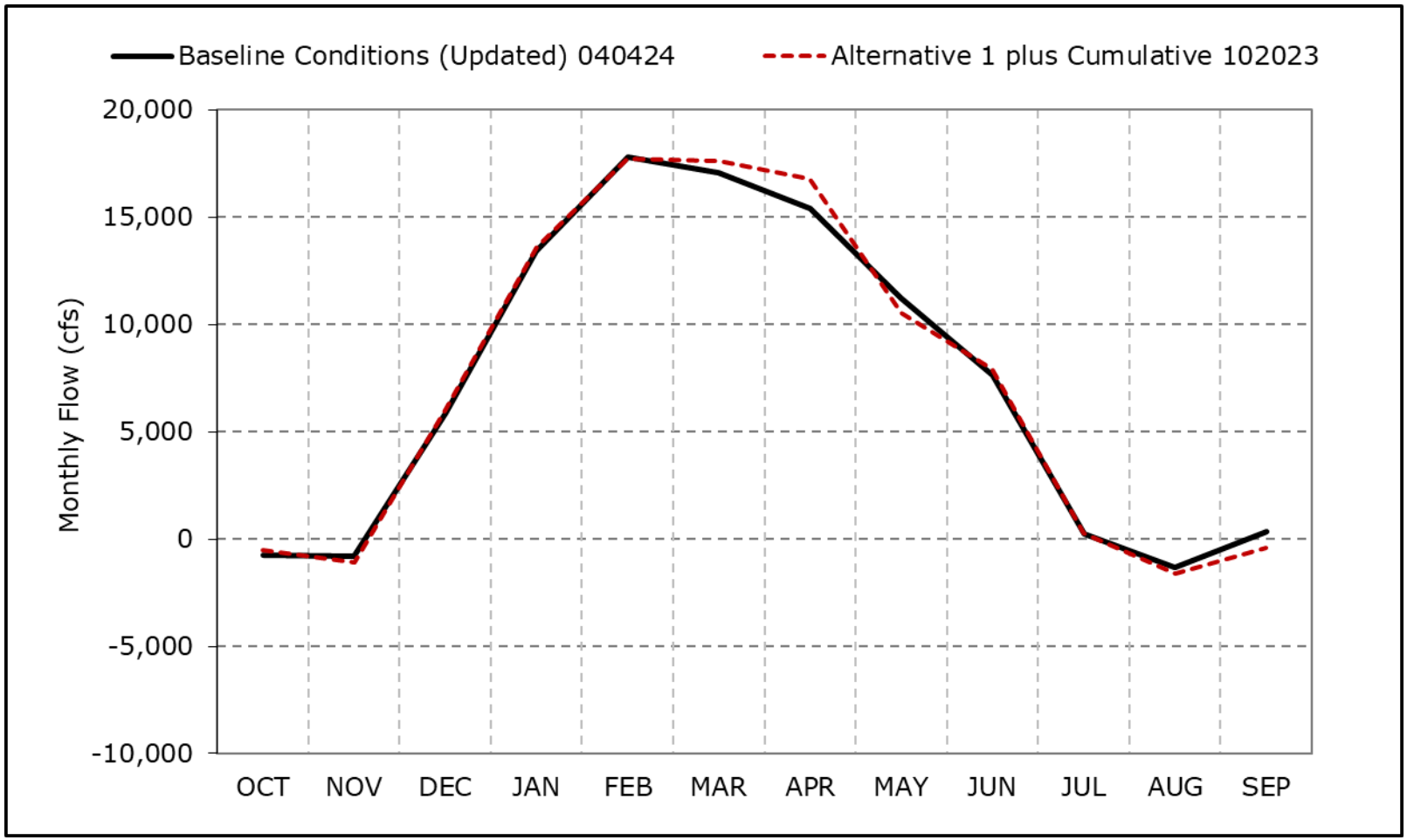
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



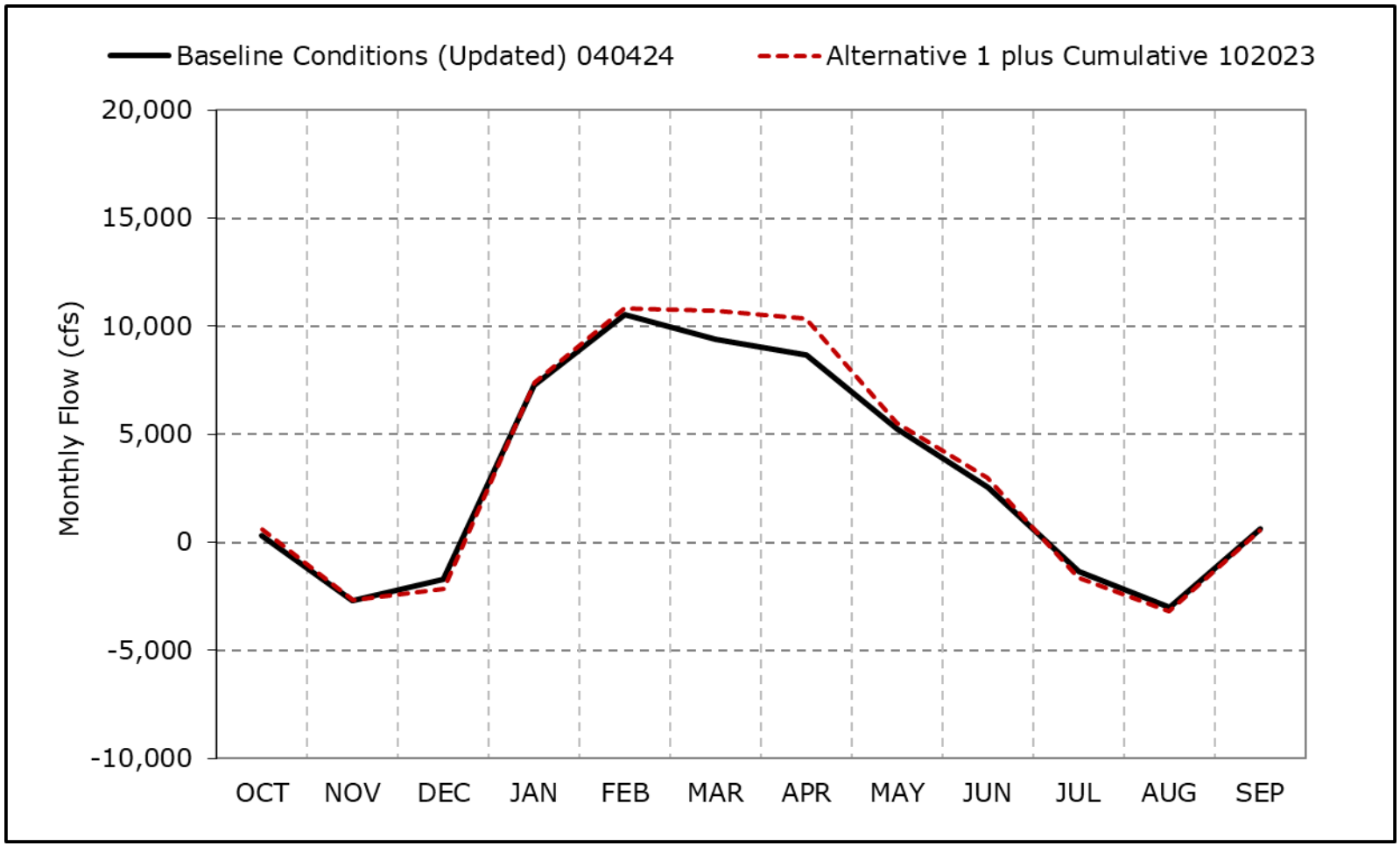
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



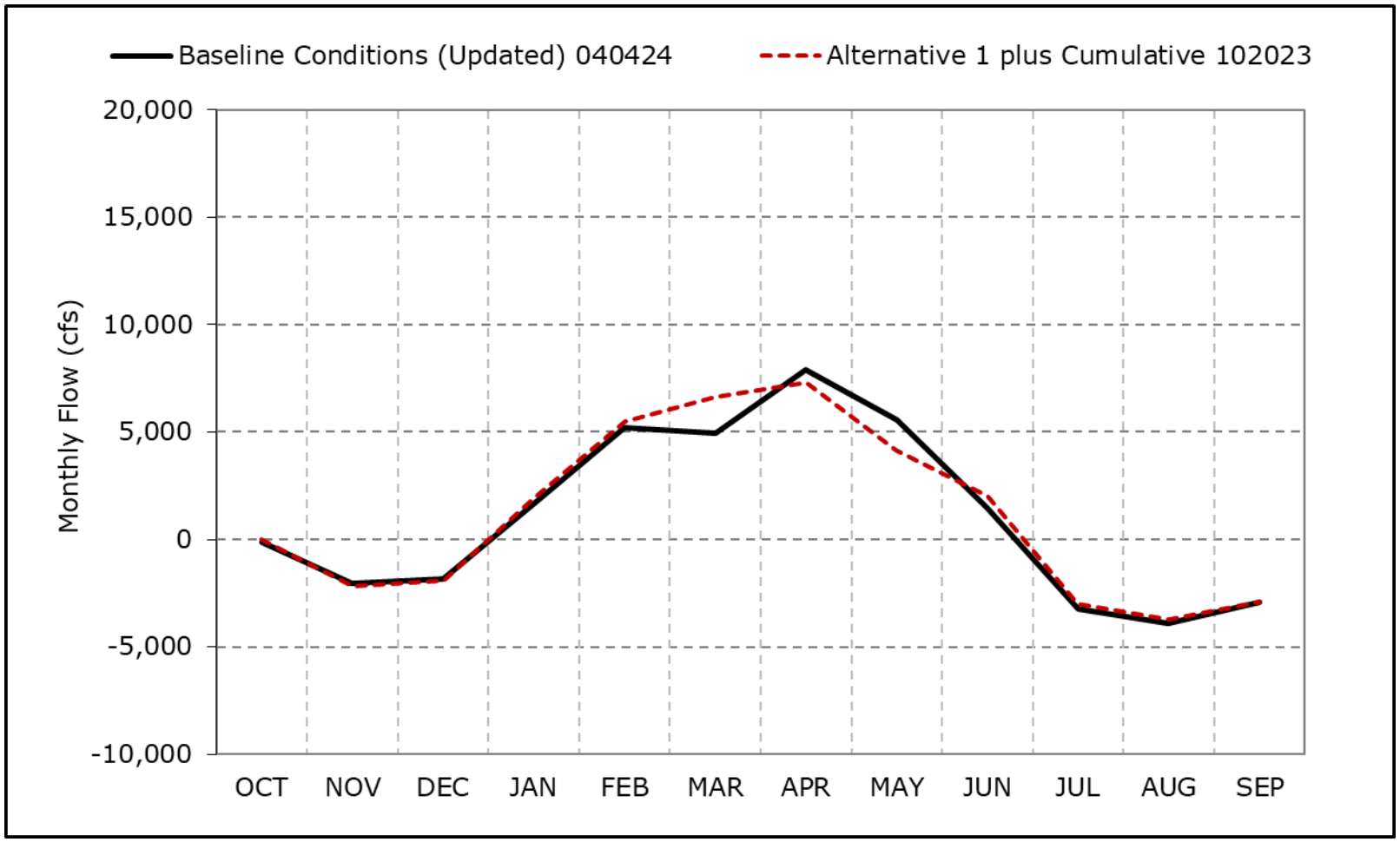
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



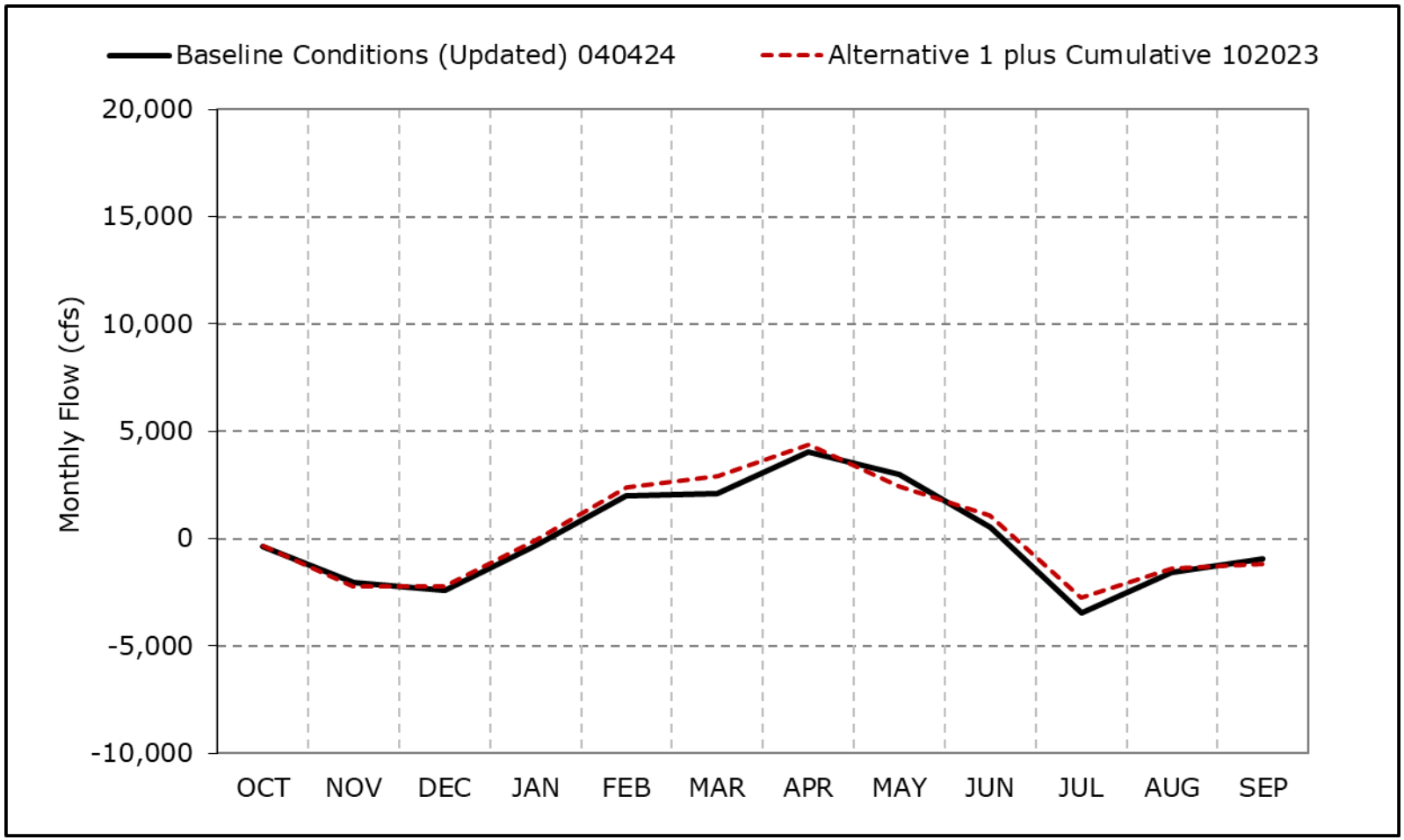
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



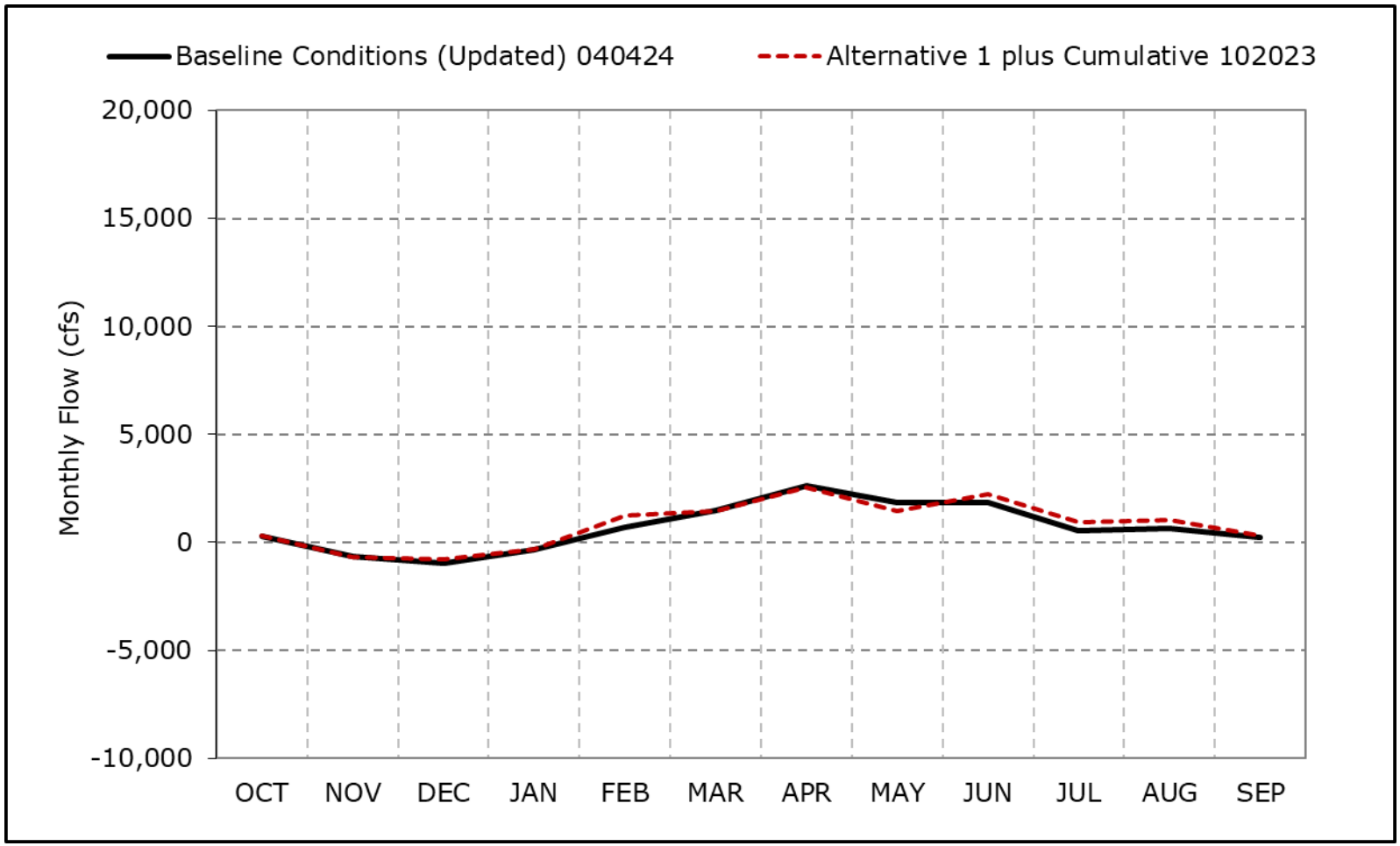
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



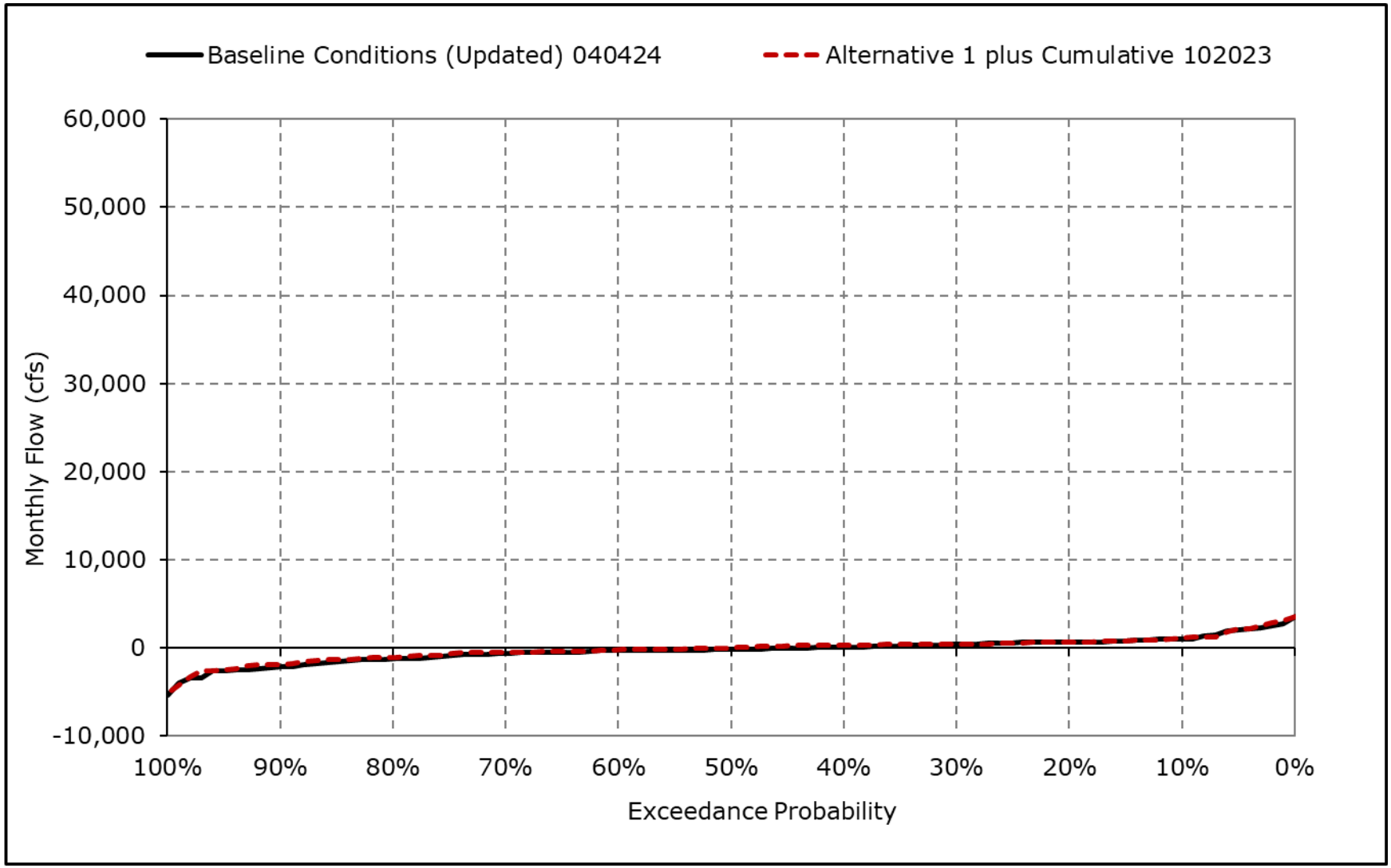
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



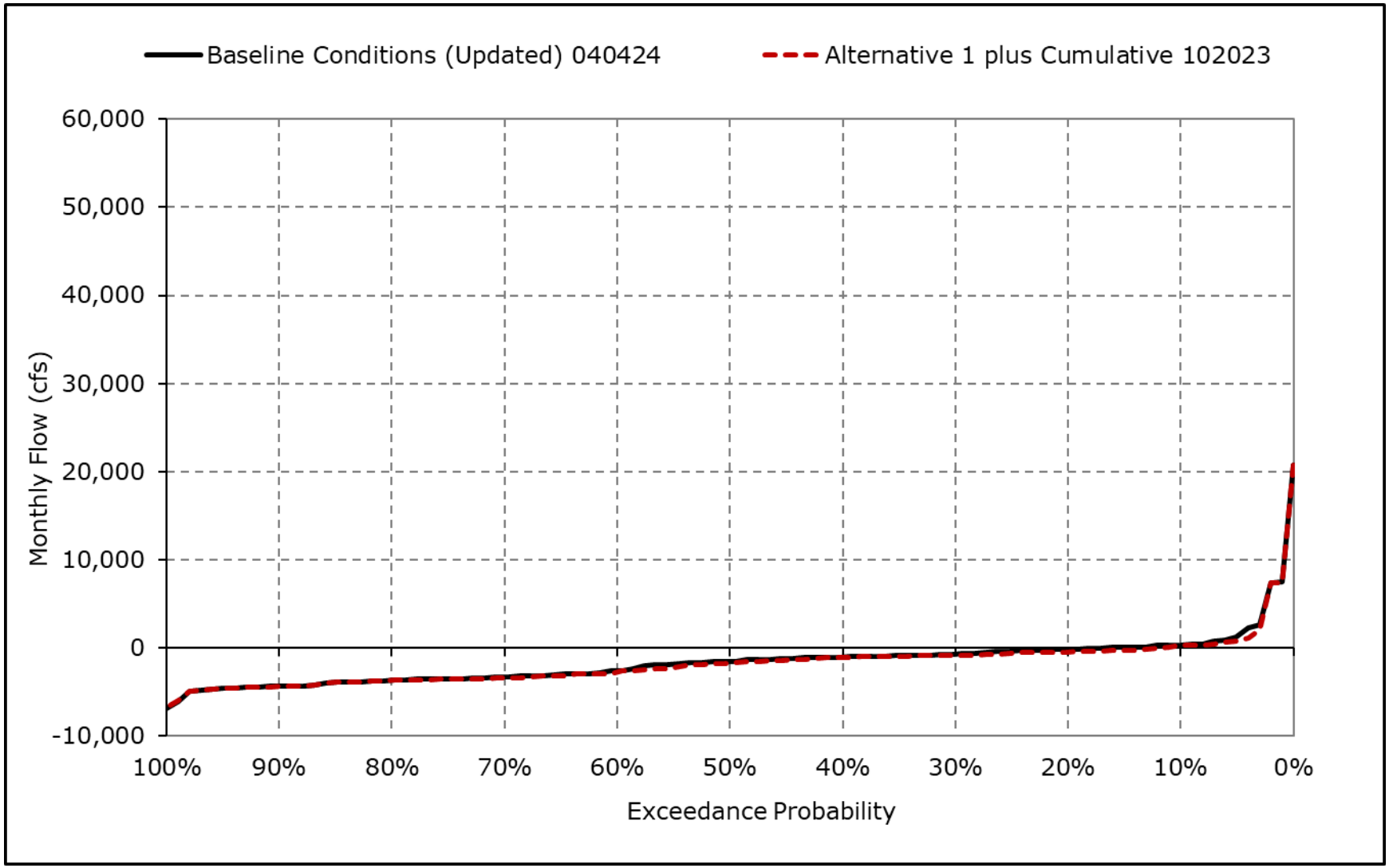
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



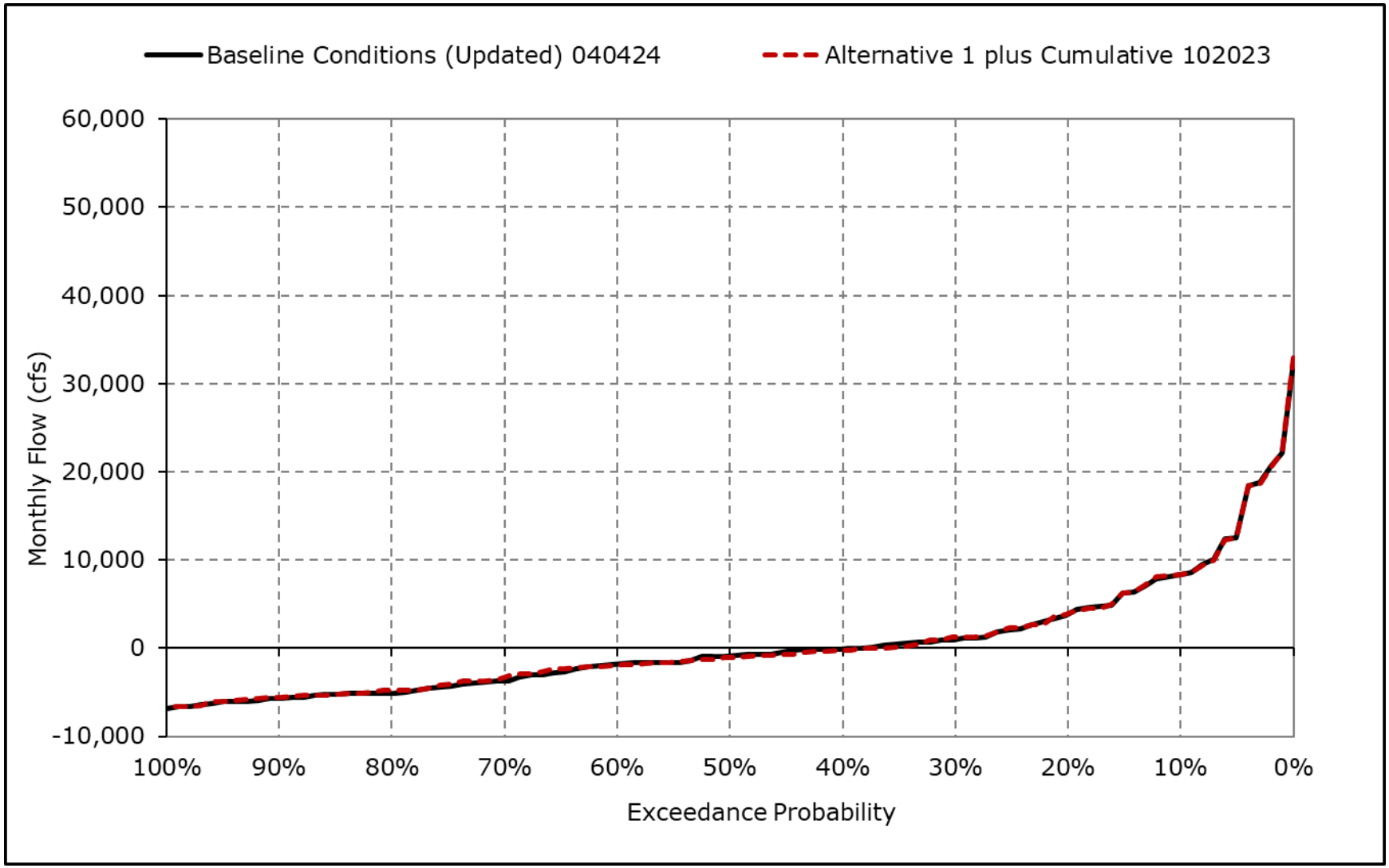
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



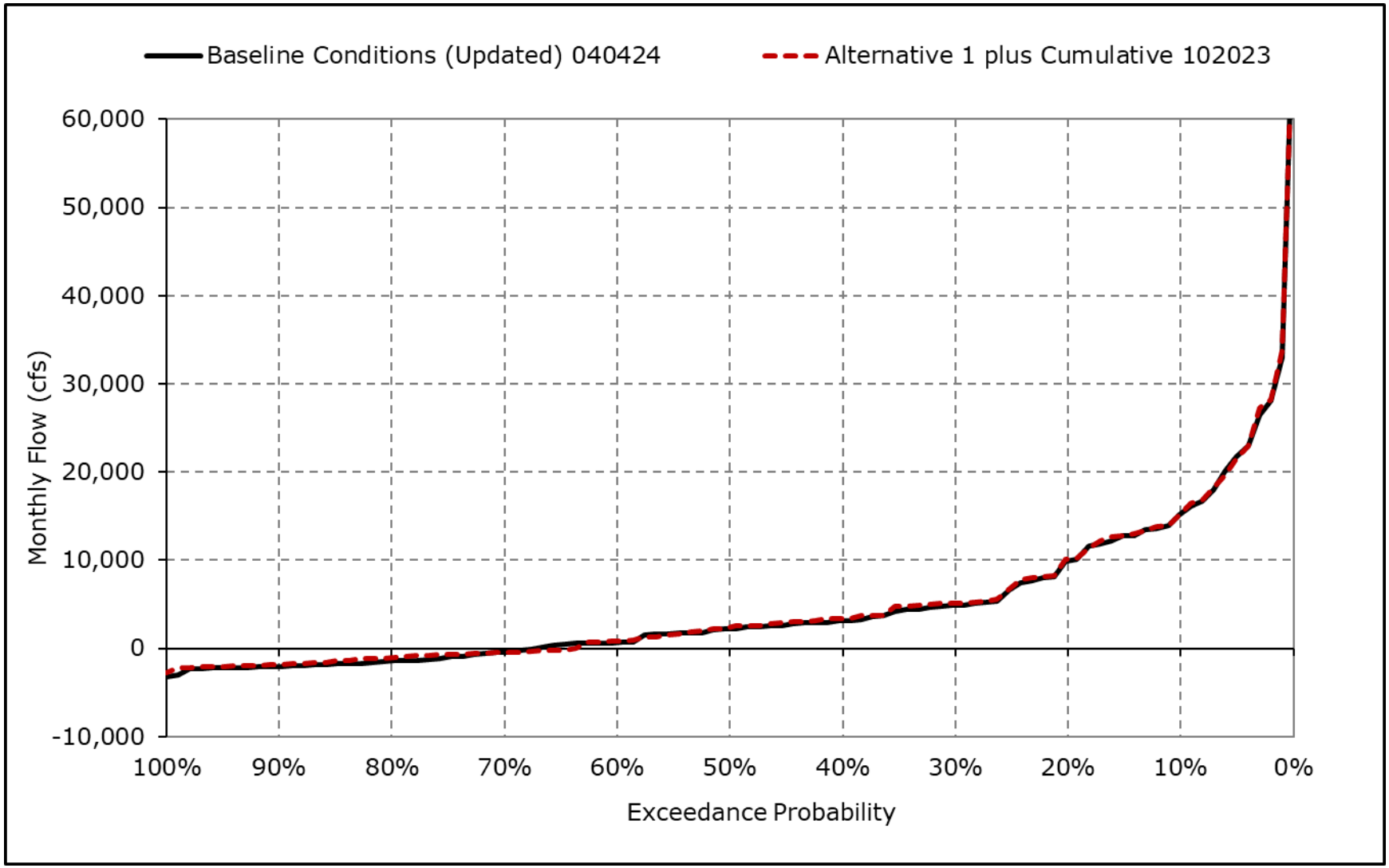
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



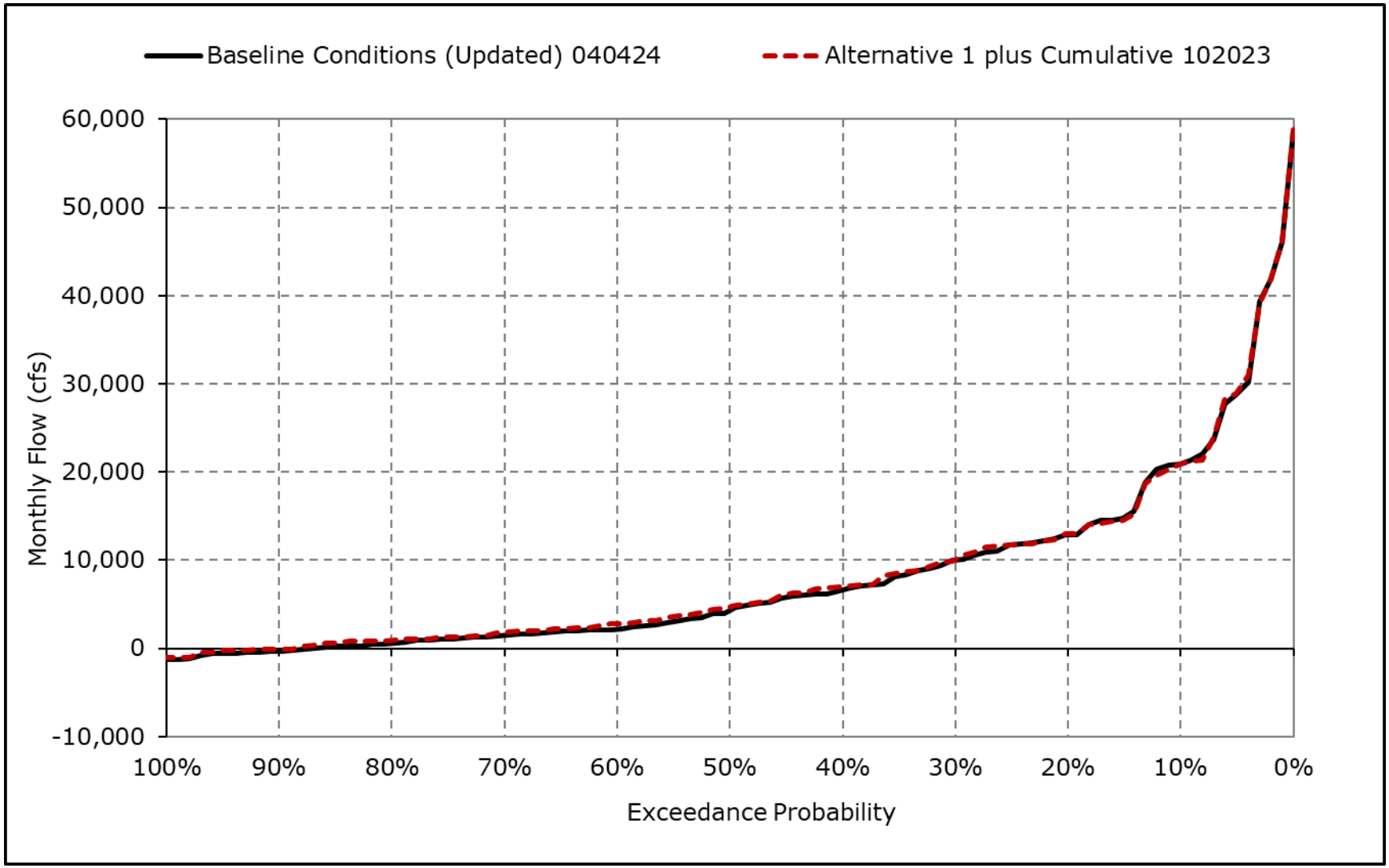
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



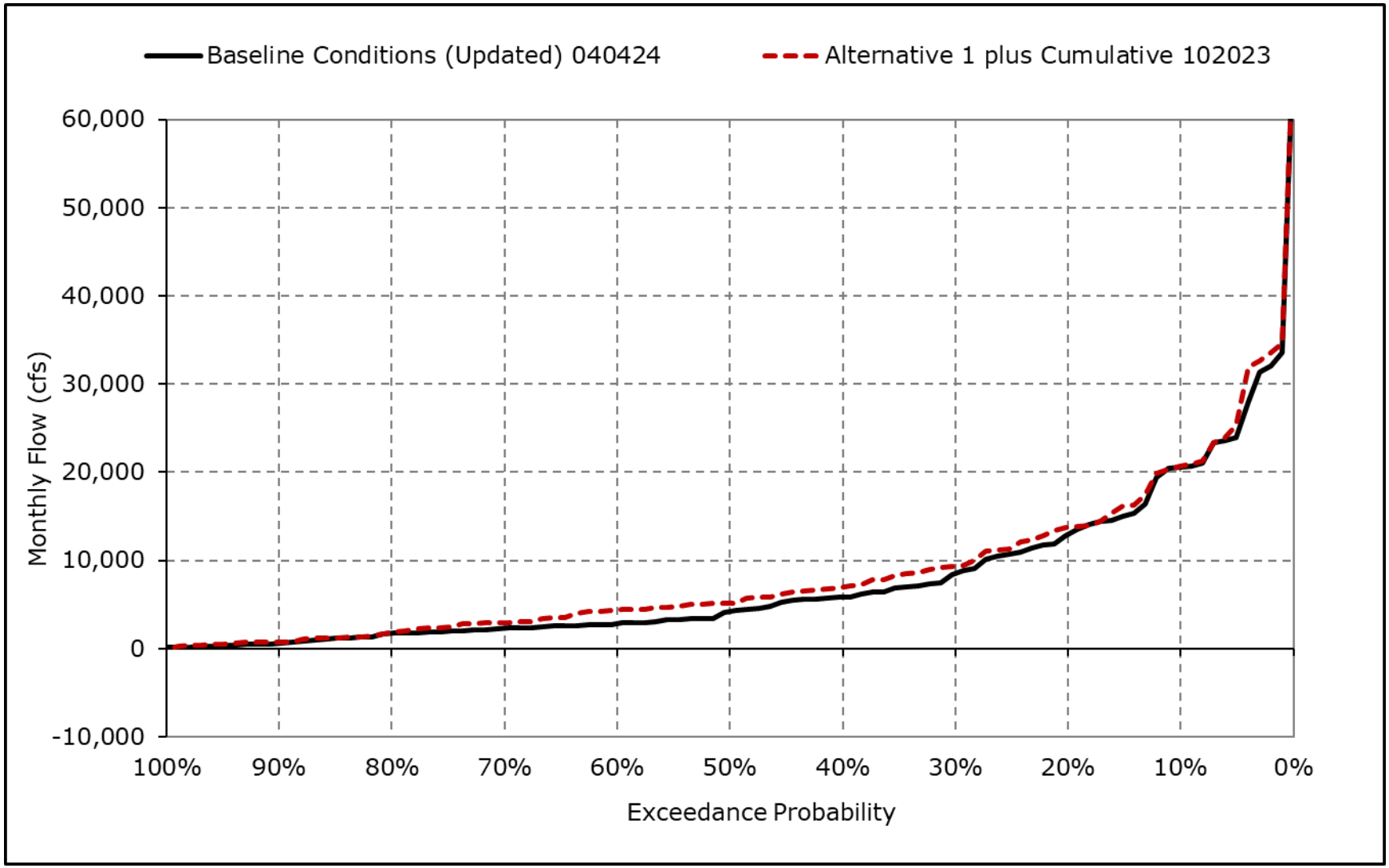
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



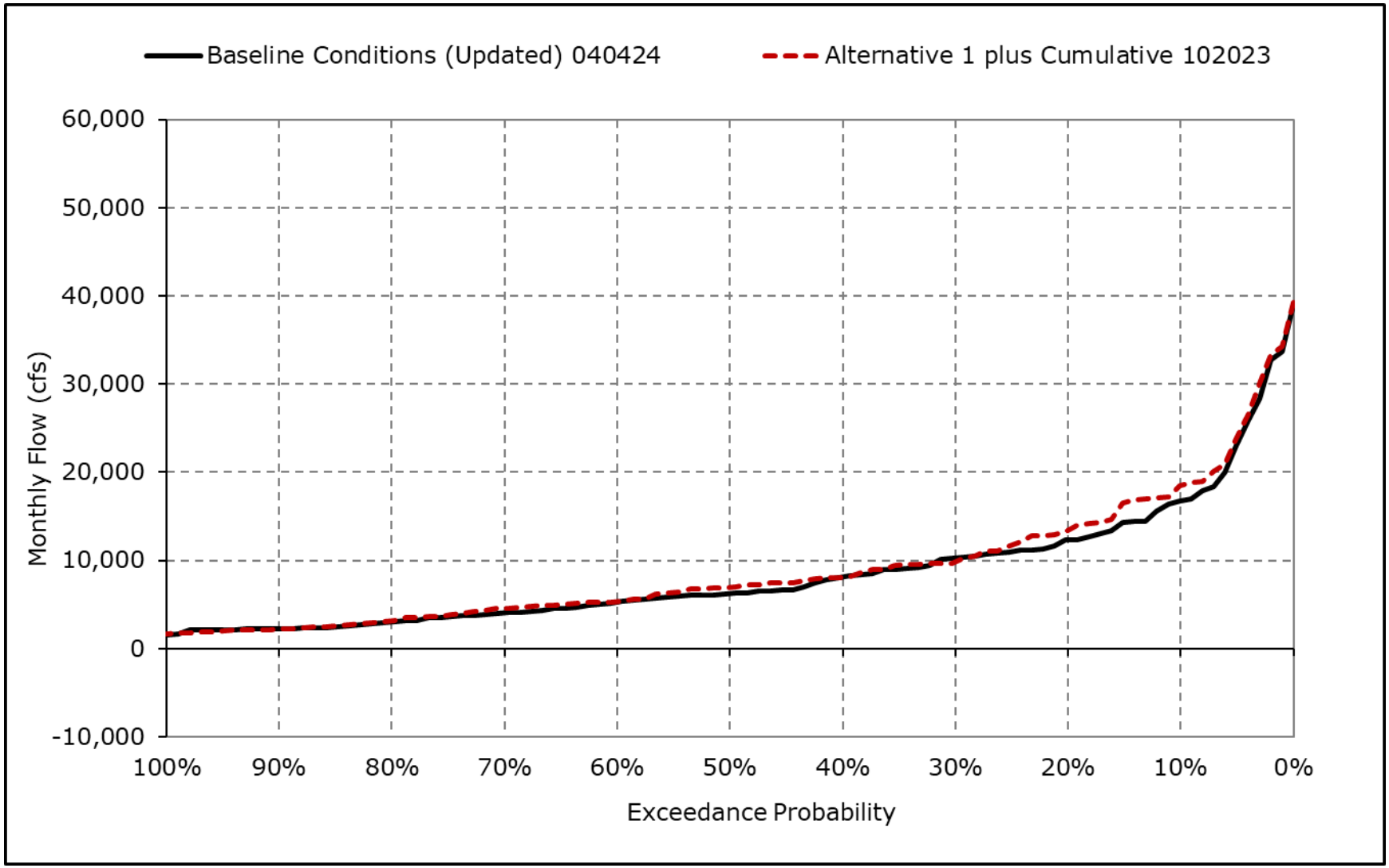
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



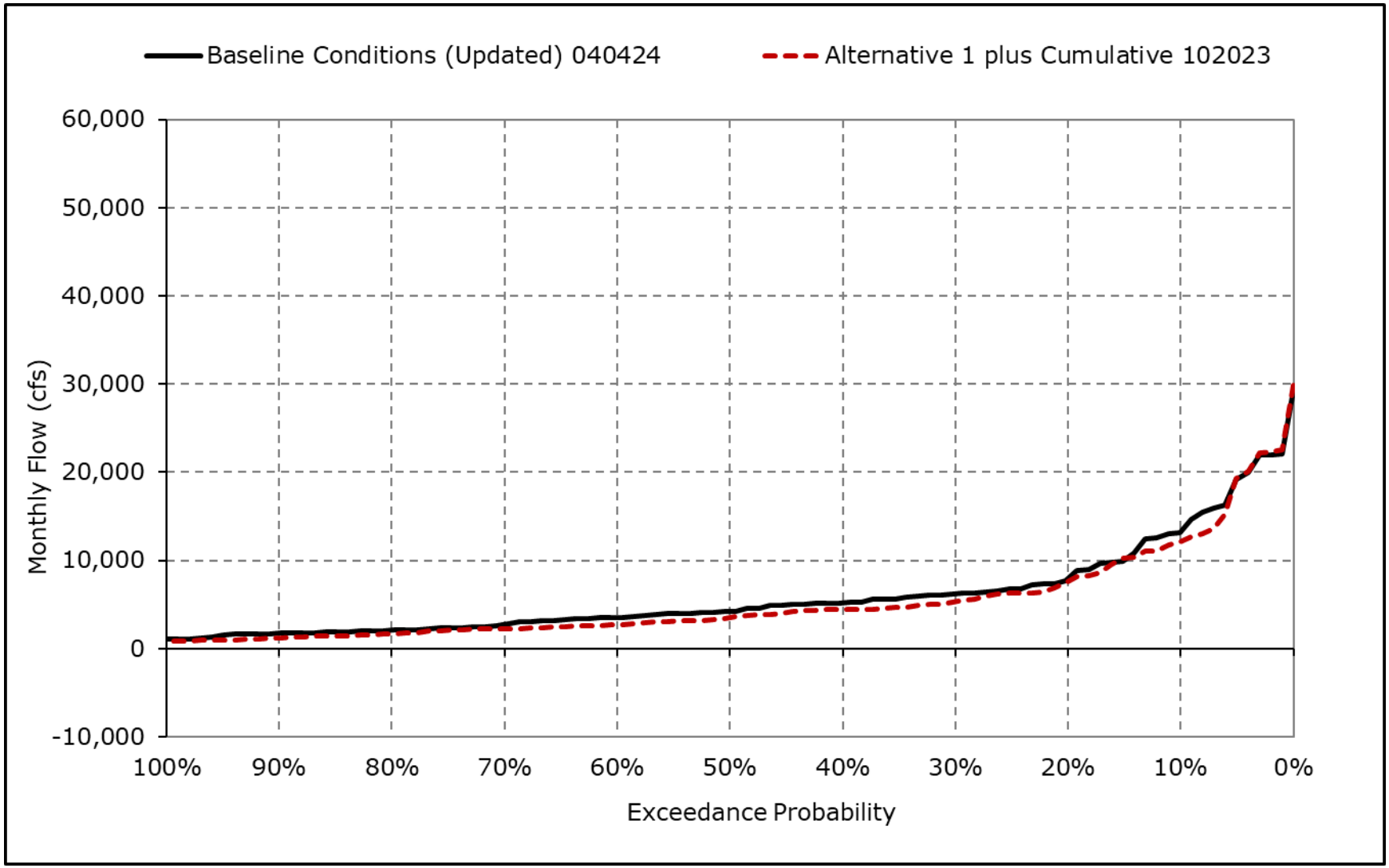
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



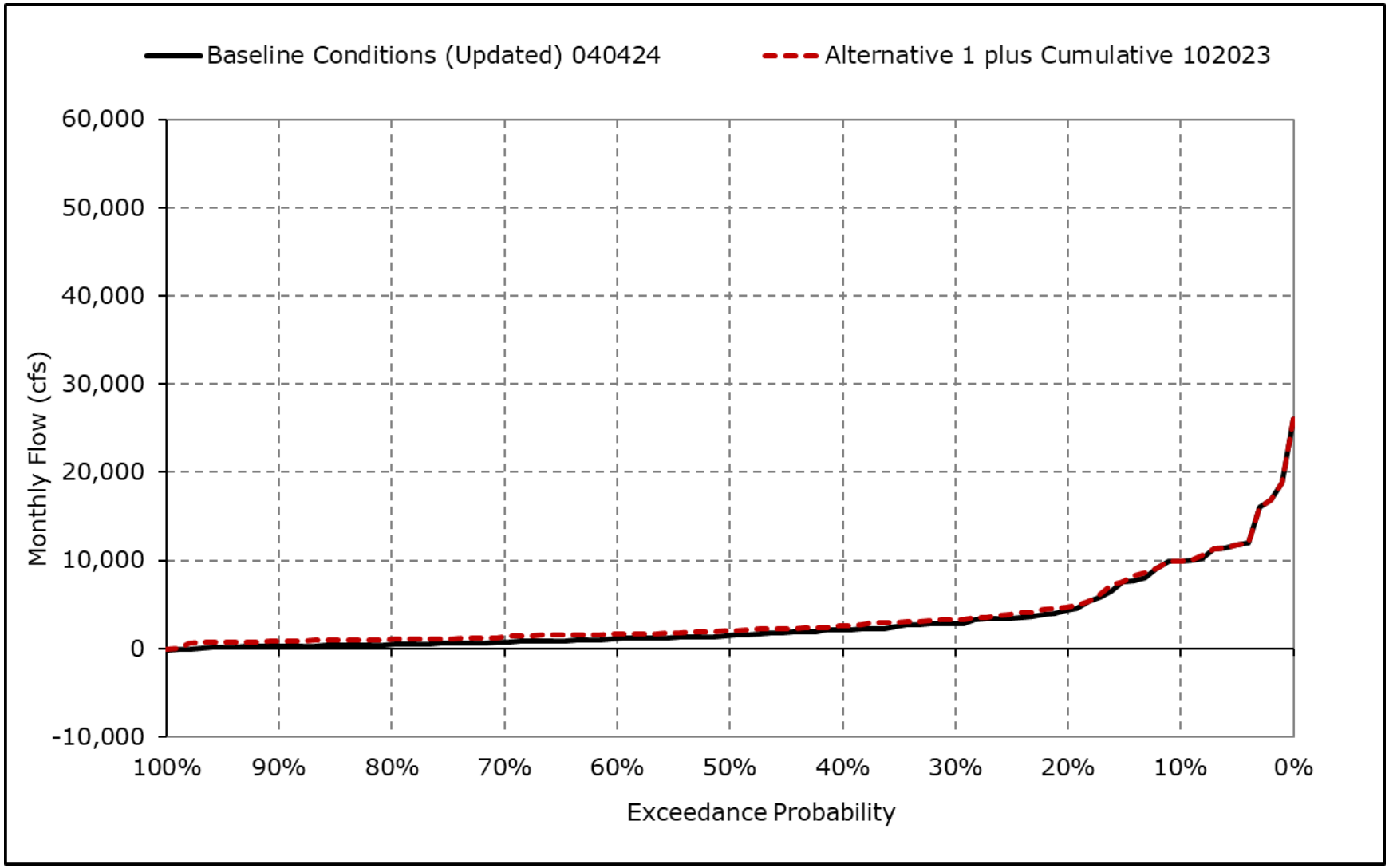
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



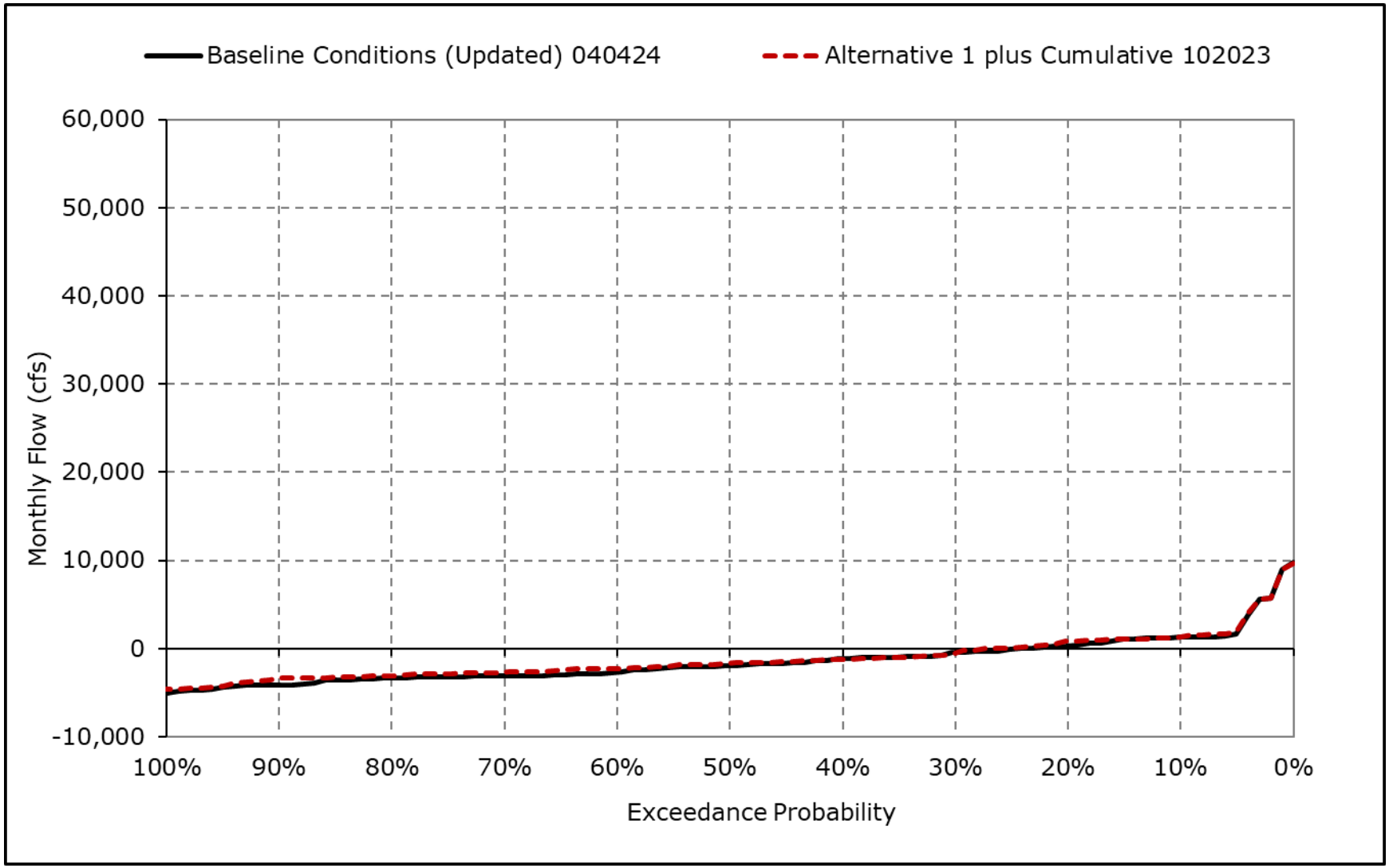
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



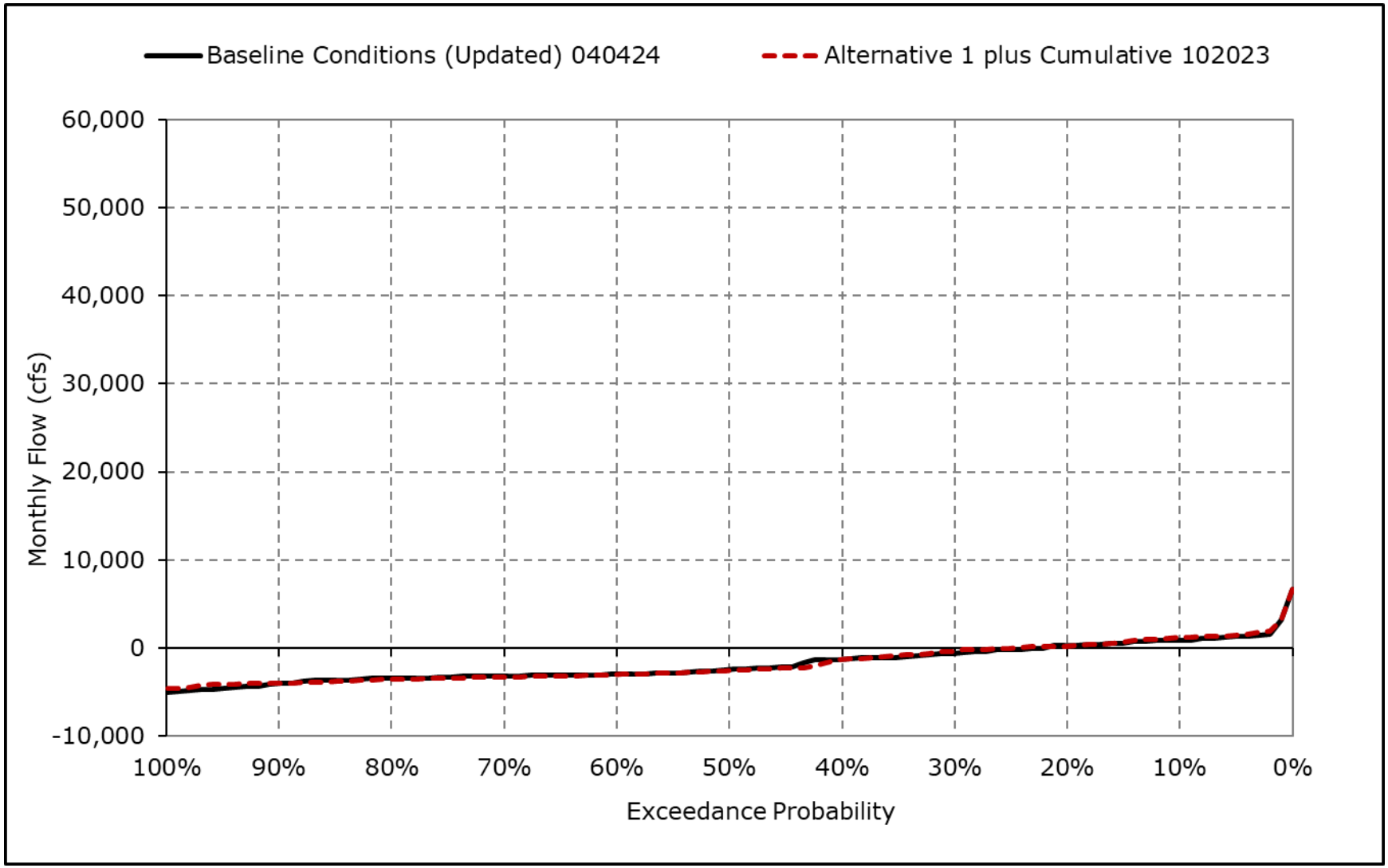
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



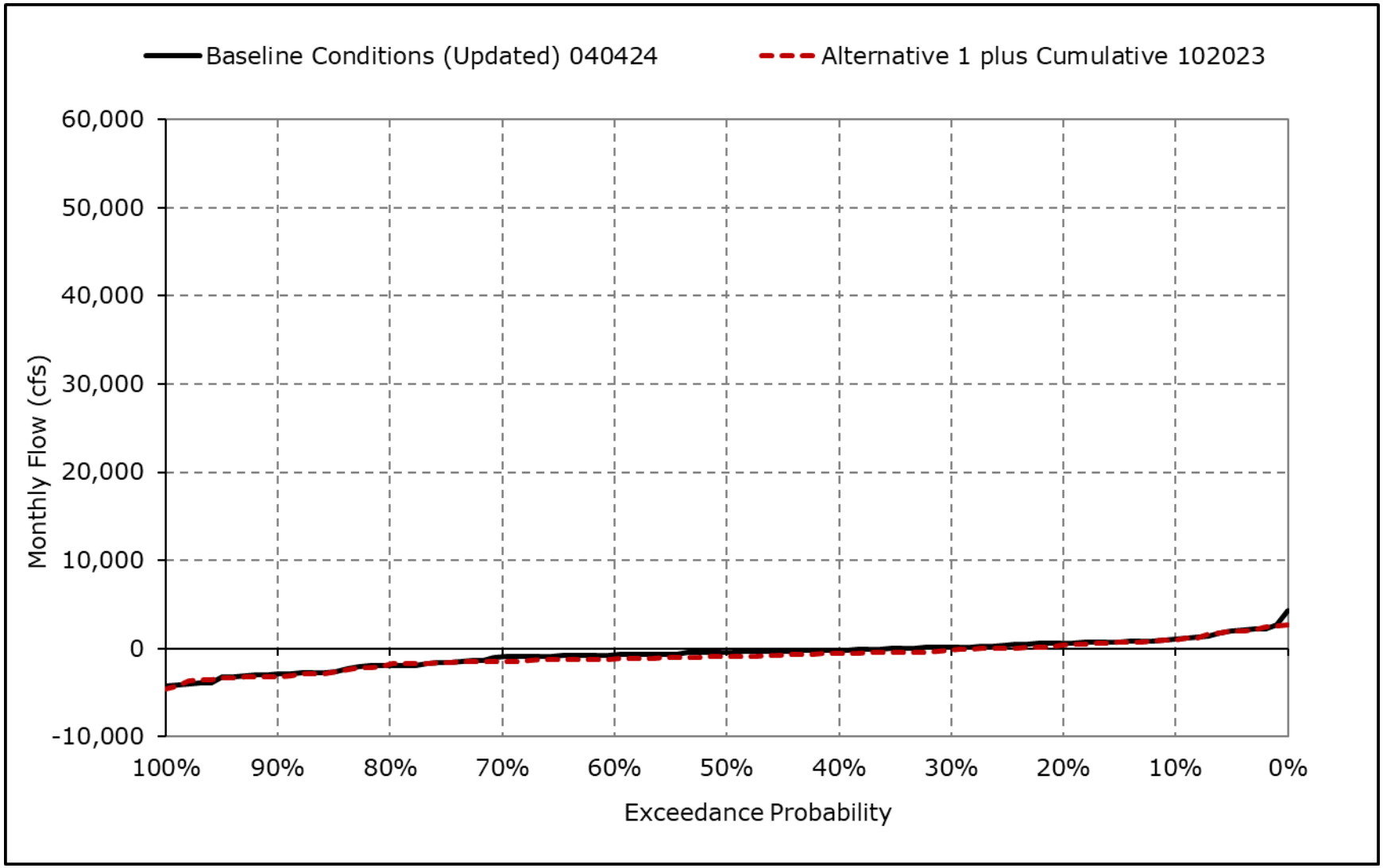
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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

Table 4G-3-8-1a. Delta Outflow, Baseline Conditions (Updated) 040424, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,750	15,802	61,124	93,124	124,948	95,161	63,477	47,600	31,869	10,942	7,085	10,504
20% Exceedance	8,125	8,426	34,906	61,502	79,484	62,006	45,213	33,061	20,571	8,749	6,112	10,181
30% Exceedance	7,969	6,909	19,731	36,740	56,477	45,515	31,001	23,220	11,753	8,249	5,812	10,024
40% Exceedance	7,656	6,060	12,296	27,765	40,735	35,702	25,965	18,728	8,622	8,244	5,520	8,872
50% Exceedance	4,797	5,776	9,230	21,973	30,173	24,222	19,196	16,441	7,366	8,005	4,649	4,413
60% Exceedance	4,000	5,357	6,590	16,890	21,333	20,649	15,234	13,056	7,102	6,500	4,050	3,857
70% Exceedance	4,000	4,948	6,040	11,328	16,721	17,417	12,721	11,224	6,930	5,278	4,000	3,115
80% Exceedance	4,000	4,631	5,410	9,385	14,104	13,293	11,173	9,731	6,554	5,000	3,500	3,000
90% Exceedance	3,000	4,500	4,959	7,391	9,825	9,639	10,064	7,777	4,017	4,000	3,000	3,000
Full Simulation Period Average[a]	6,410	9,149	22,224	39,022	50,907	42,658	29,366	22,233	13,246	7,653	5,155	6,559
Wet Water Years (30%)	8,198	15,115	47,417	80,674	101,611	81,776	55,355	39,927	25,280	10,680	7,197	10,966
Above Normal Water Years (11%)	6,010	6,855	14,467	50,398	59,250	55,211	30,859	23,540	14,025	9,696	6,390	10,430
Below Normal Water Years (21%)	6,428	7,857	12,401	21,387	32,858	28,315	22,461	18,719	8,612	7,599	4,322	4,195
Dry Water Years (22%)	5,769	6,233	10,915	13,504	21,708	19,078	14,063	11,689	6,746	5,212	4,107	3,459
Critical Water Years (16%)	4,188	5,246	8,760	11,339	13,942	11,927	9,717	7,269	5,168	4,000	3,011	3,000

Table 4G-3-8-1b. Delta Outflow, Alternative 1 plus Cumulative 102023, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	8,600	16,334	61,852	93,734	125,515	97,900	66,257	49,532	31,863	10,314	6,417	11,251
20% Exceedance	8,363	8,090	35,076	63,635	78,458	63,202	47,000	35,057	20,907	8,722	5,961	10,519
30% Exceedance	7,956	6,614	20,239	37,636	56,236	46,613	33,053	24,872	12,285	8,493	5,620	10,203
40% Exceedance	7,817	5,936	12,759	28,487	42,437	35,735	27,065	18,341	9,506	8,111	5,134	8,999
50% Exceedance	5,190	5,728	9,291	22,406	31,770	26,322	21,939	17,013	8,398	7,248	4,583	4,440
60% Exceedance	4,392	5,358	6,723	16,984	21,497	22,374	17,228	13,703	7,569	6,593	4,248	3,666
70% Exceedance	4,226	4,982	6,156	11,805	16,810	18,444	14,465	12,162	7,268	5,688	4,056	3,341
80% Exceedance	4,118	4,660	5,584	9,212	14,643	14,704	12,726	11,499	7,038	5,375	3,771	3,280
90% Exceedance	3,118	4,500	5,153	6,966	10,645	9,967	10,818	8,506	4,625	4,327	3,330	3,009
Full Simulation Period Average[a]	6,651	9,103	22,473	39,485	51,472	43,545	31,187	23,064	13,770	7,744	5,072	6,653
Wet Water Years (30%)	8,542	15,111	47,981	81,335	101,679	82,084	57,642	40,257	25,635	10,738	6,976	10,845
Above Normal Water Years (11%)	6,317	6,972	14,205	51,016	60,556	56,624	34,039	25,664	14,582	9,376	5,883	11,323
Below Normal Water Years (21%)	6,605	7,825	12,564	21,889	33,352	30,053	23,625	18,978	9,490	7,535	4,377	4,114
Dry Water Years (22%)	5,937	6,135	11,239	13,814	21,966	20,287	16,050	13,339	7,425	5,566	4,052	3,542
Critical Water Years (16%)	4,381	5,062	8,782	11,480	15,442	11,980	10,363	7,774	5,310	4,279	3,255	3,194

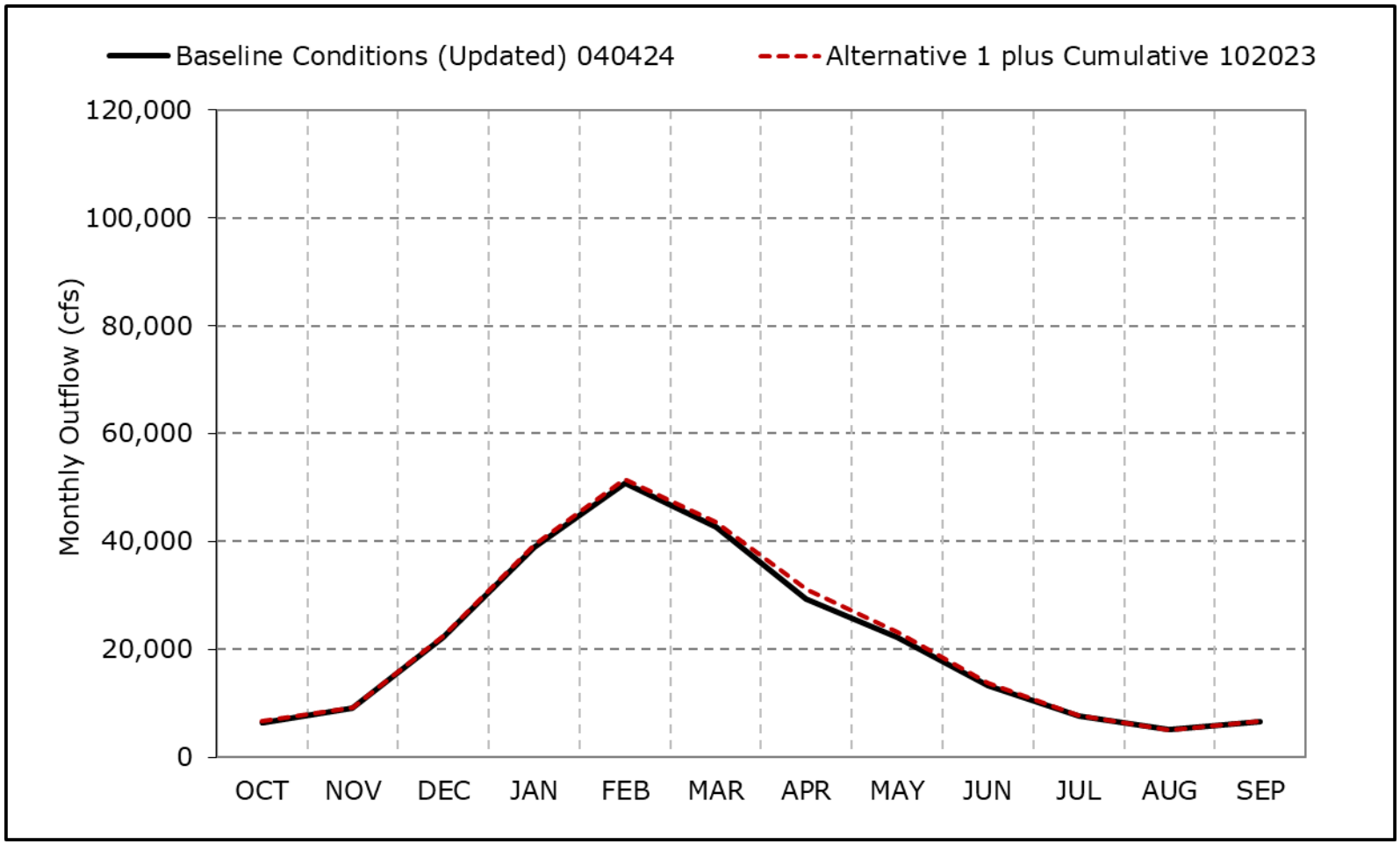
Table 4G-3-8-1c. Delta Outflow, Alternative 1 plus Cumulative 102023 minus Baseline Conditions (Updated) 040424, Monthly Outflow (cfs)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	-150	532	729	609	567	2,739	2,780	1,932	-5	-628	-669	748
20% Exceedance	238	-337	170	2,134	-1,026	1,196	1,788	1,996	335	-27	-151	337
30% Exceedance	-13	-295	508	895	-242	1,097	2,051	1,652	532	244	-193	179
40% Exceedance	161	-124	462	722	1,702	33	1,100	-386	884	-134	-386	127
50% Exceedance	393	-48	61	433	1,598	2,099	2,742	572	1,032	-757	-66	27
60% Exceedance	392	1	133	93	165	1,725	1,995	647	467	93	199	-191
70% Exceedance	226	34	117	477	89	1,027	1,743	938	337	409	56	226
80% Exceedance	118	28	175	-172	539	1,411	1,553	1,768	484	375	271	280
90% Exceedance	118	0	194	-425	820	329	754	728	608	327	330	9
Full Simulation Period Average[a]	242	-46	249	462	564	887	1,821	831	524	92	-83	94
Wet Water Years (30%)	344	-4	563	661	68	307	2,287	331	355	59	-220	-121
Above Normal Water Years (11%)	307	117	-263	618	1,306	1,413	3,180	2,124	557	-320	-507	892
Below Normal Water Years (21%)	176	-32	163	502	494	1,737	1,164	260	879	-63	55	-82
Dry Water Years (22%)	168	-98	324	310	258	1,209	1,987	1,650	679	354	-55	83
Critical Water Years (16%)	194	-184	21	140	1,500	53	646	505	141	278	244	194

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

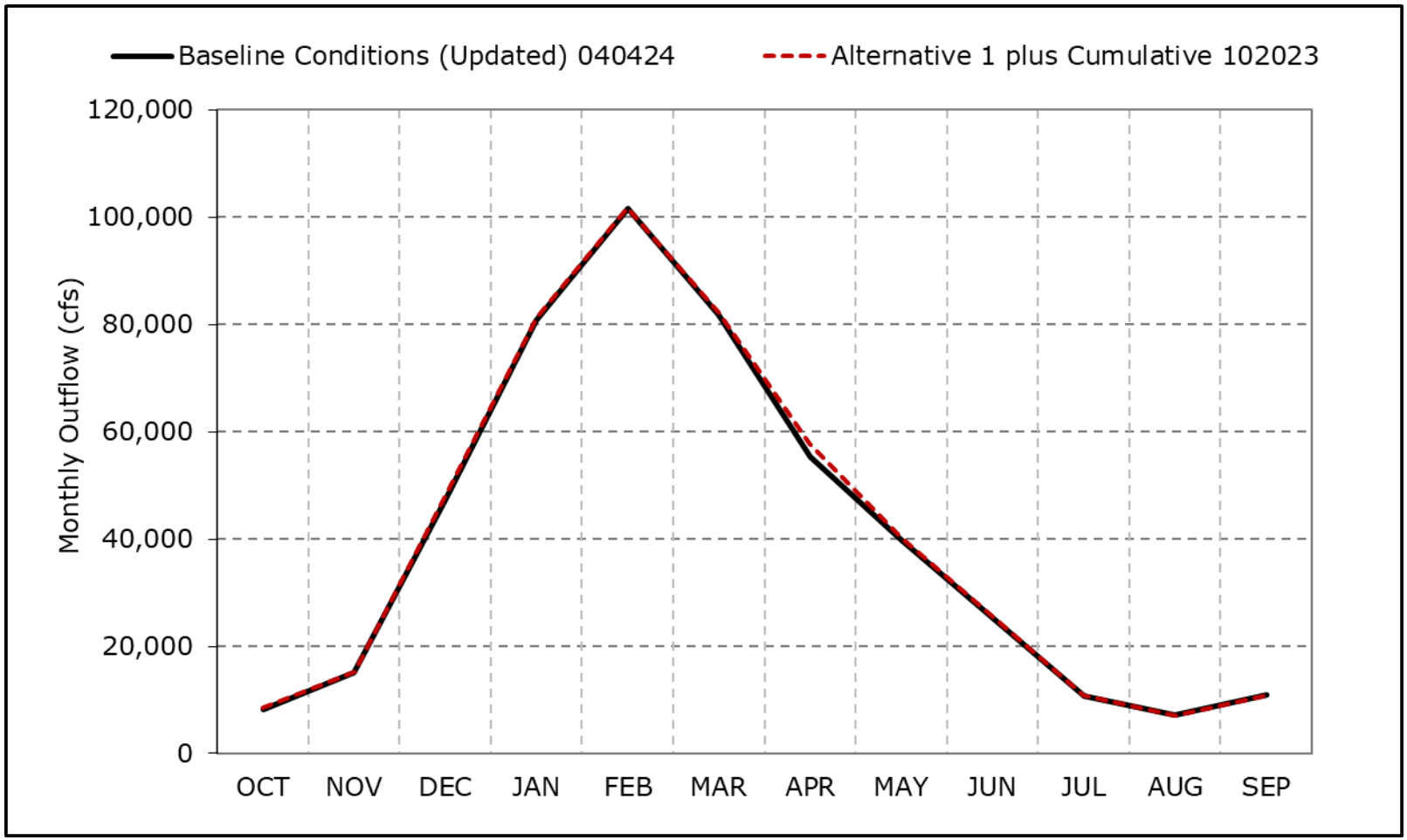
* All scenarios are simulated at current climate condition and 0 cm sea level rise.
* Water Year Types defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
* Water Year Types results are displayed with water year - year type sorting.

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



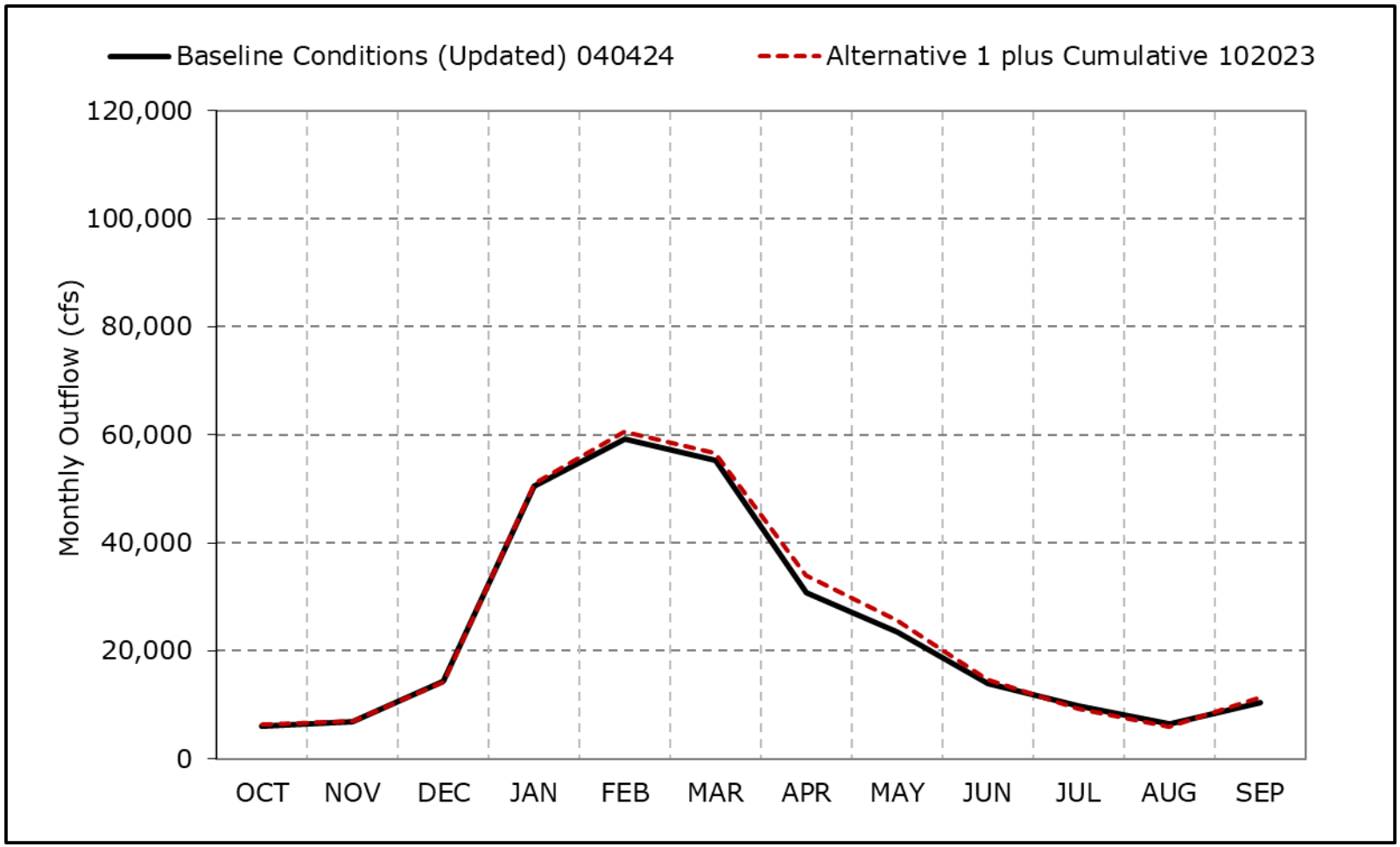
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



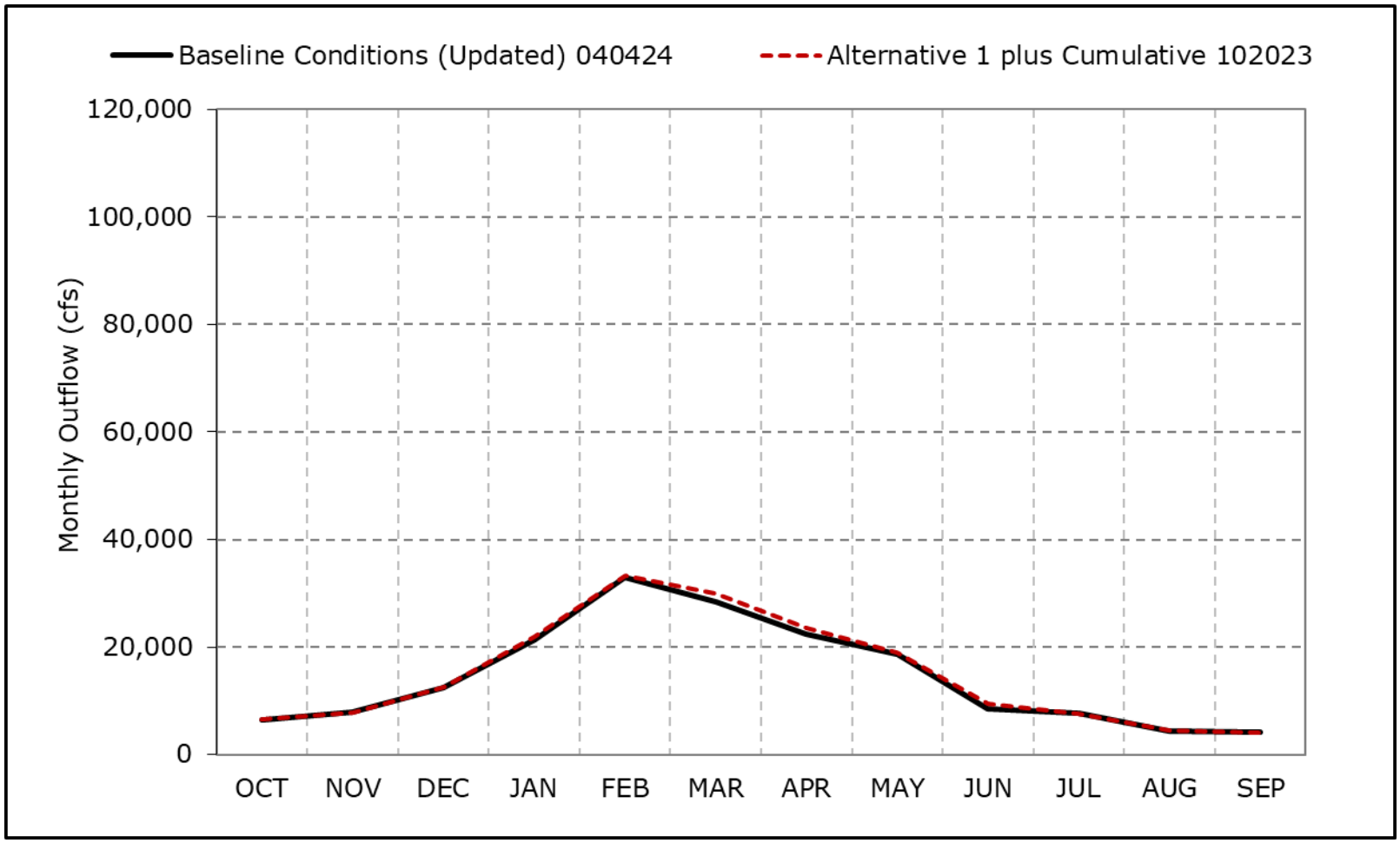
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



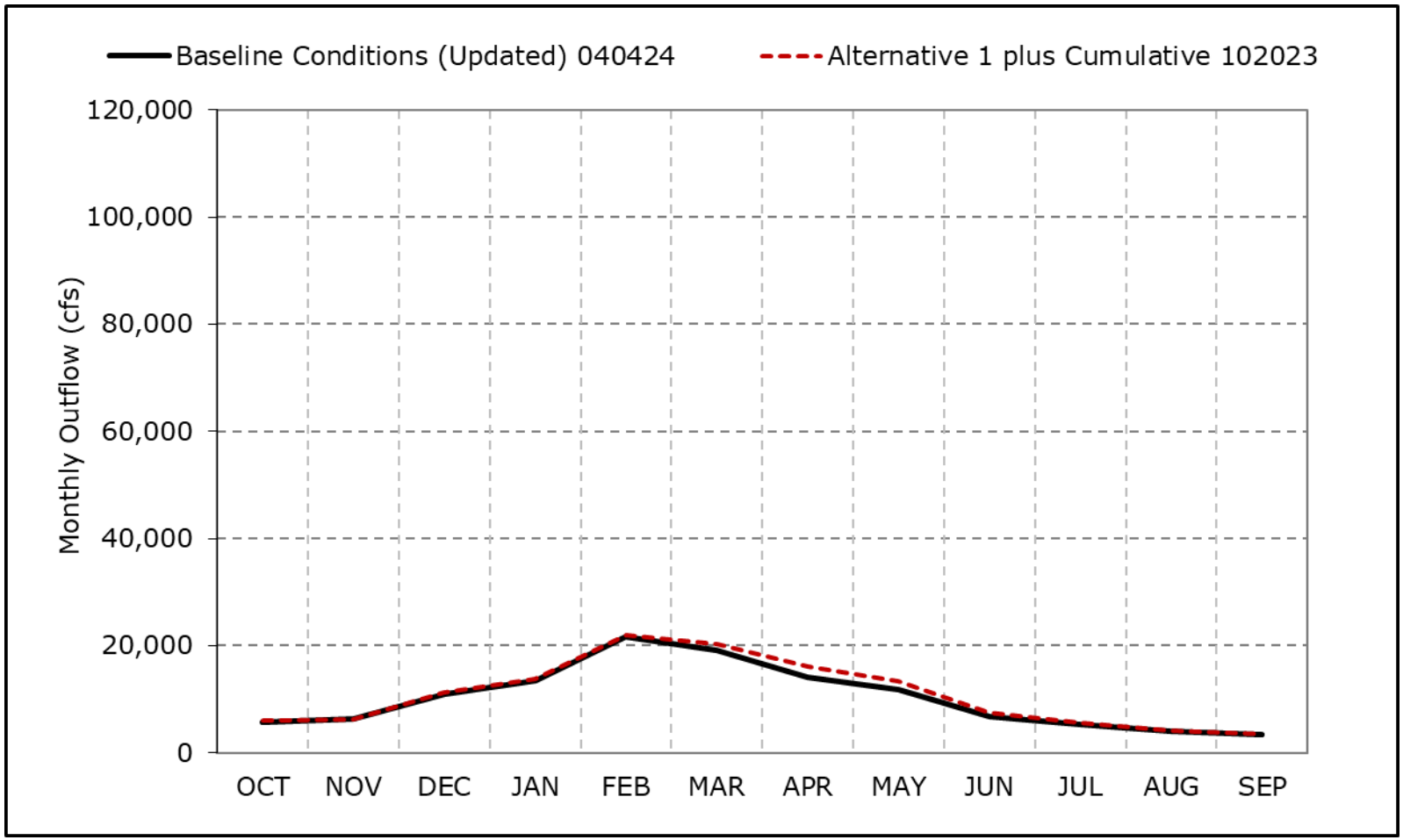
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



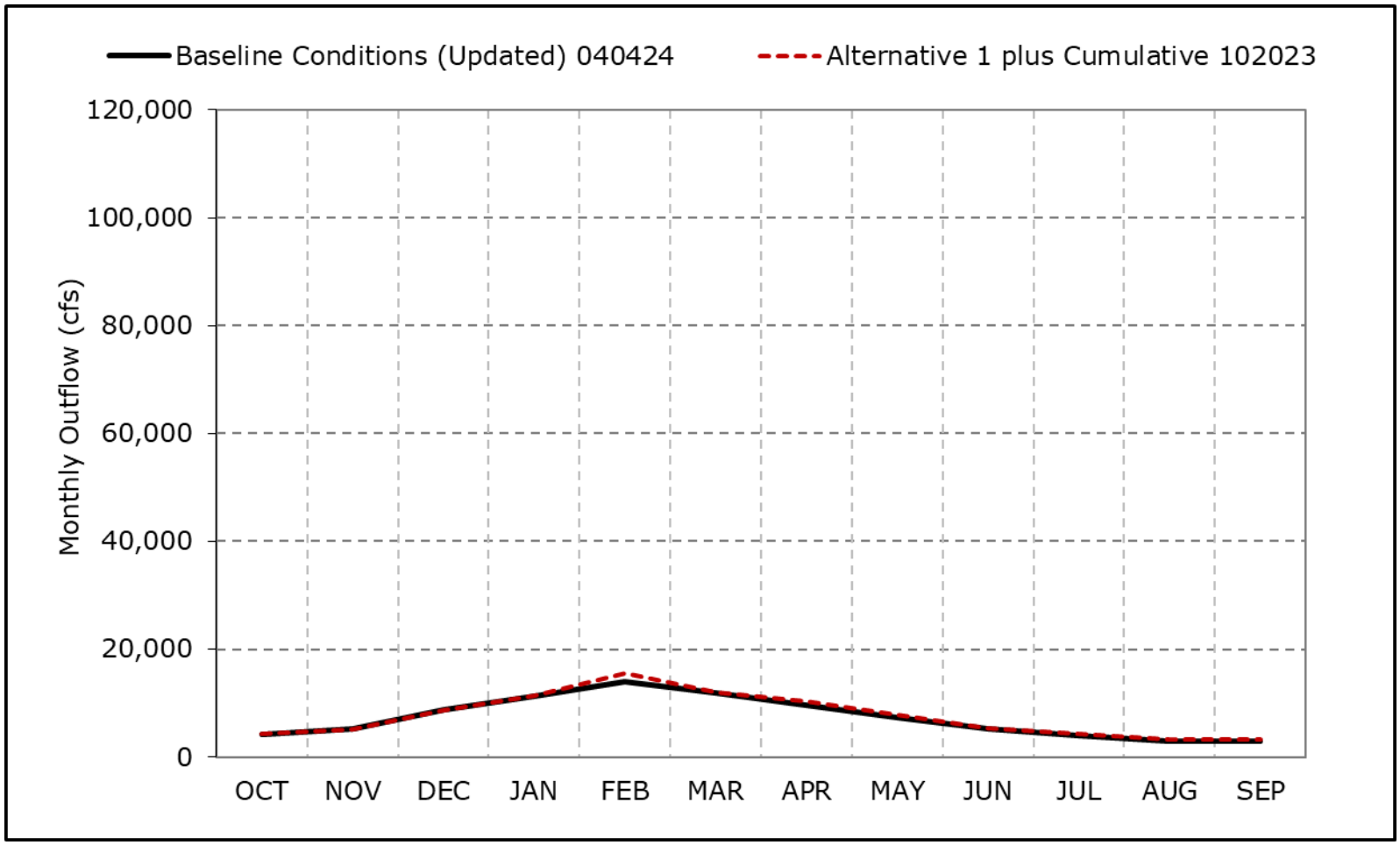
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



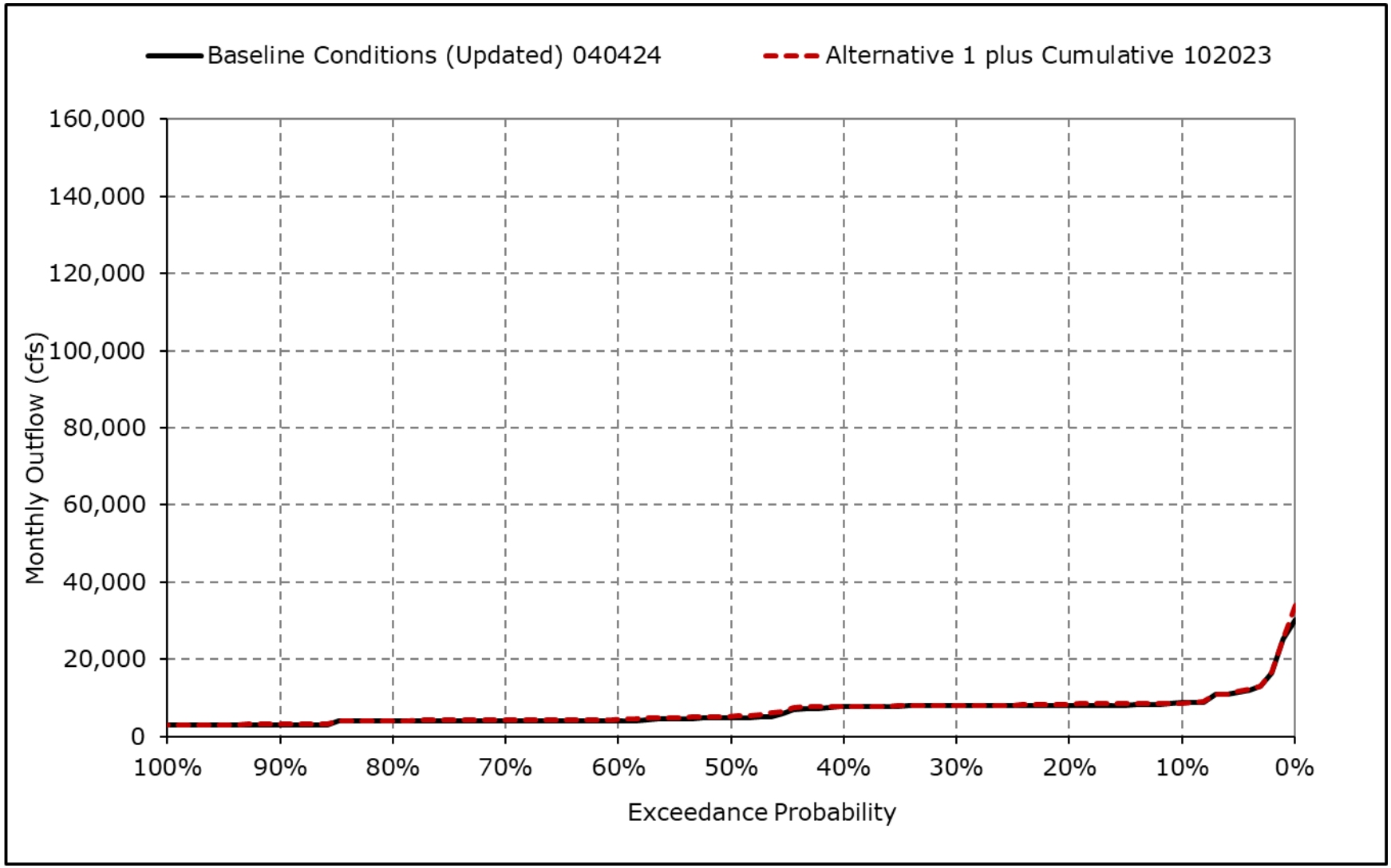
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



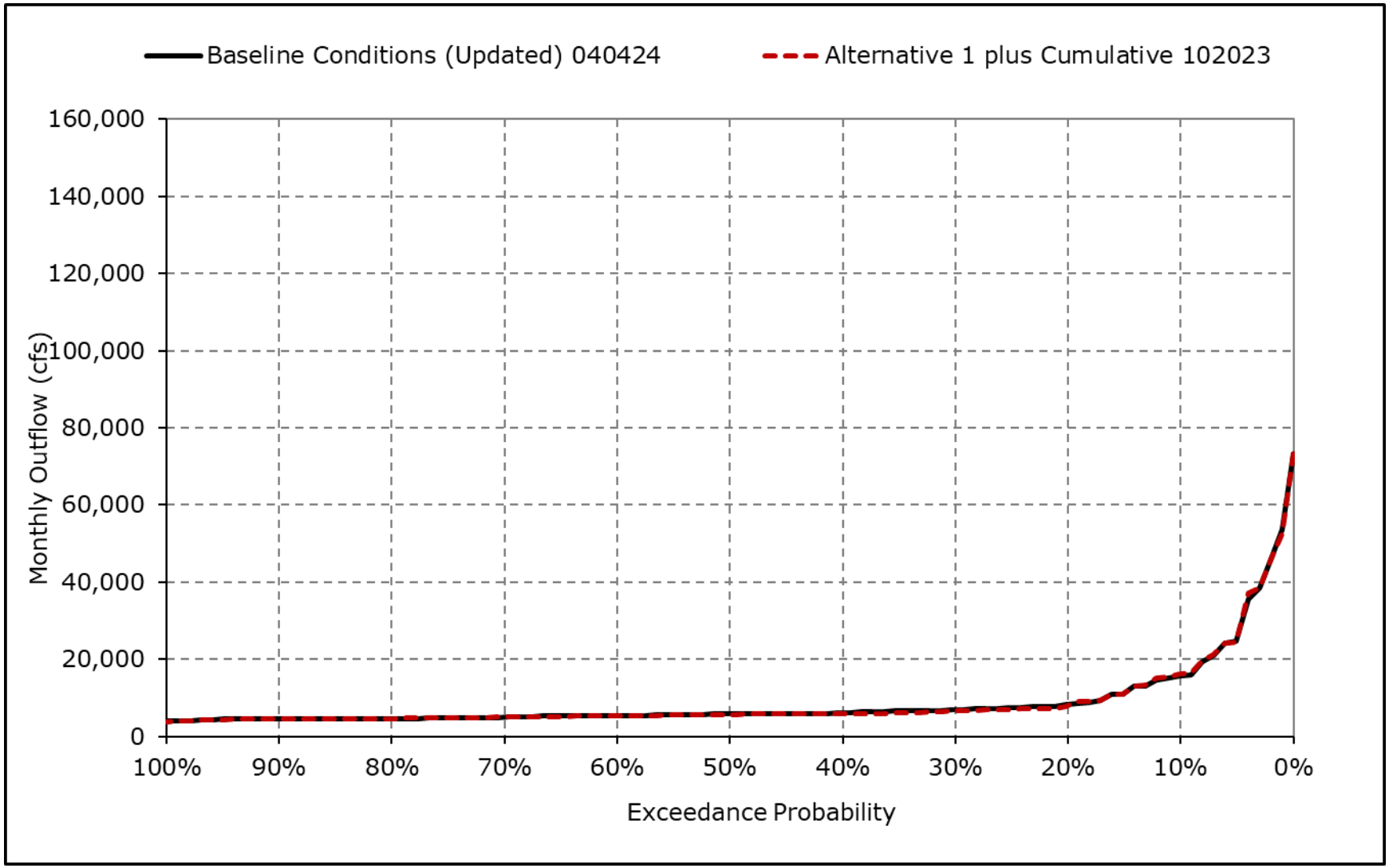
*As defined by the Sacramento Valley 40-30-30 Index Water Year Hydrologic Classification (SWRCB D-1641, 1999).
*These results are displayed with water year - year type sorting.
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



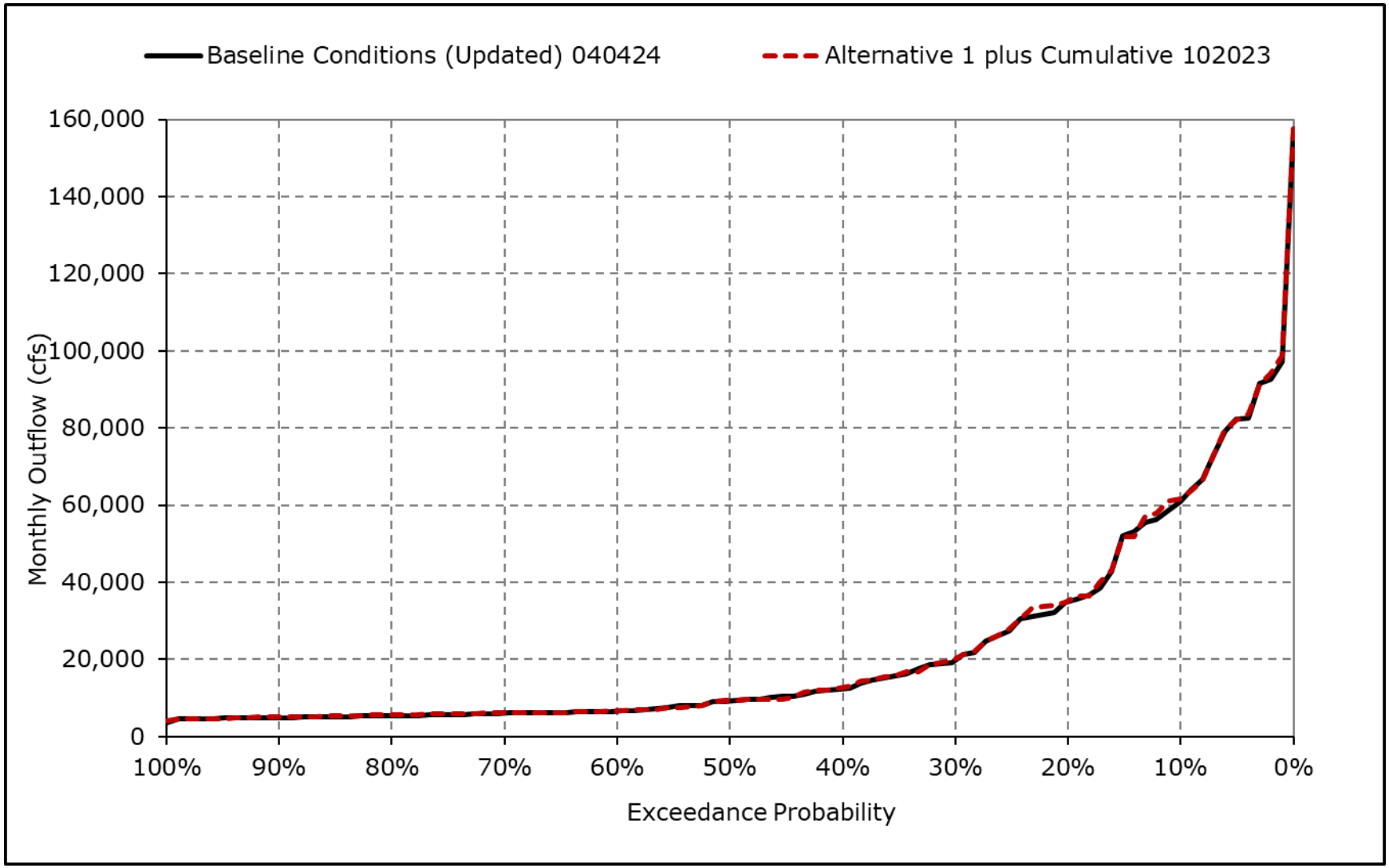
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



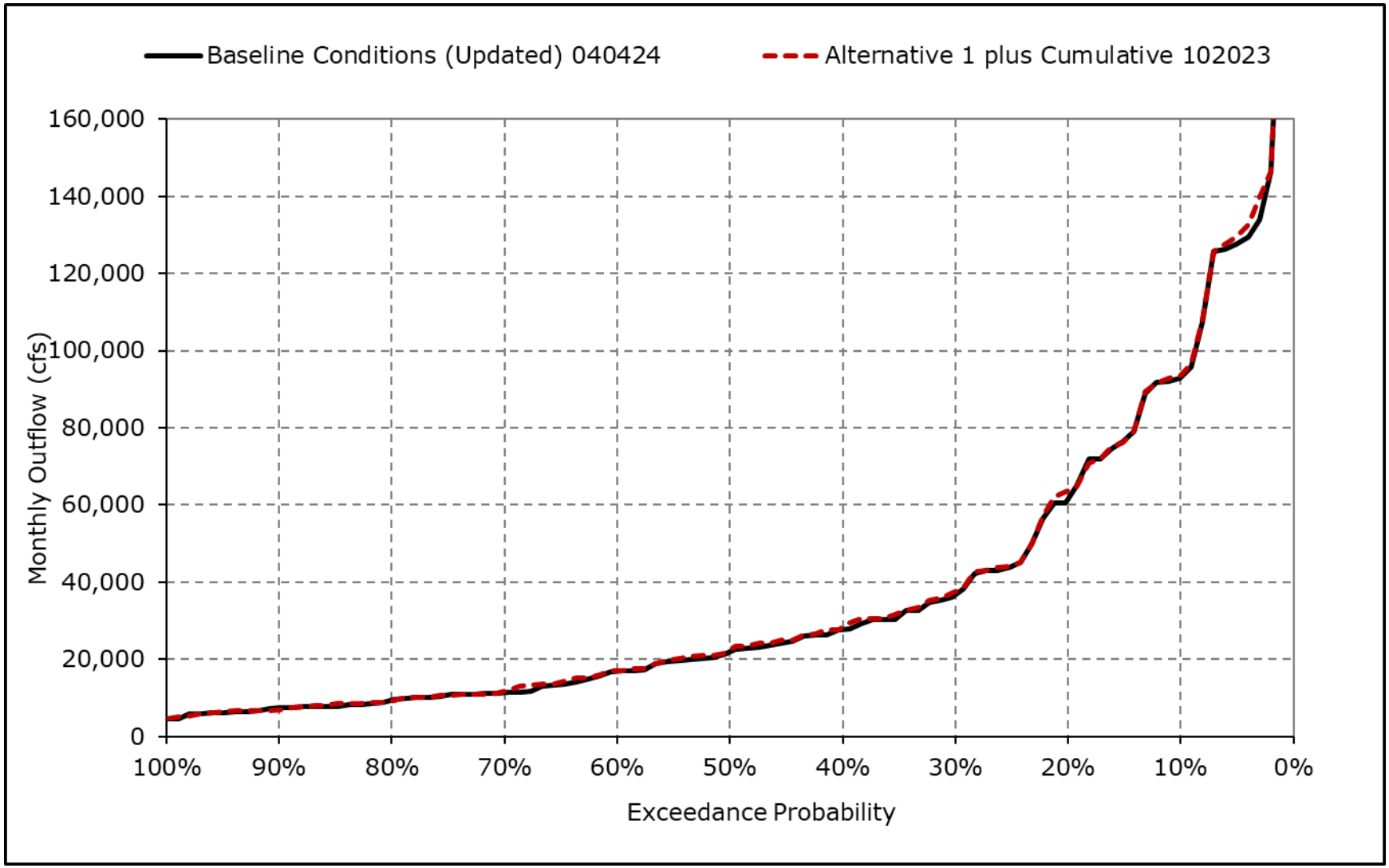
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



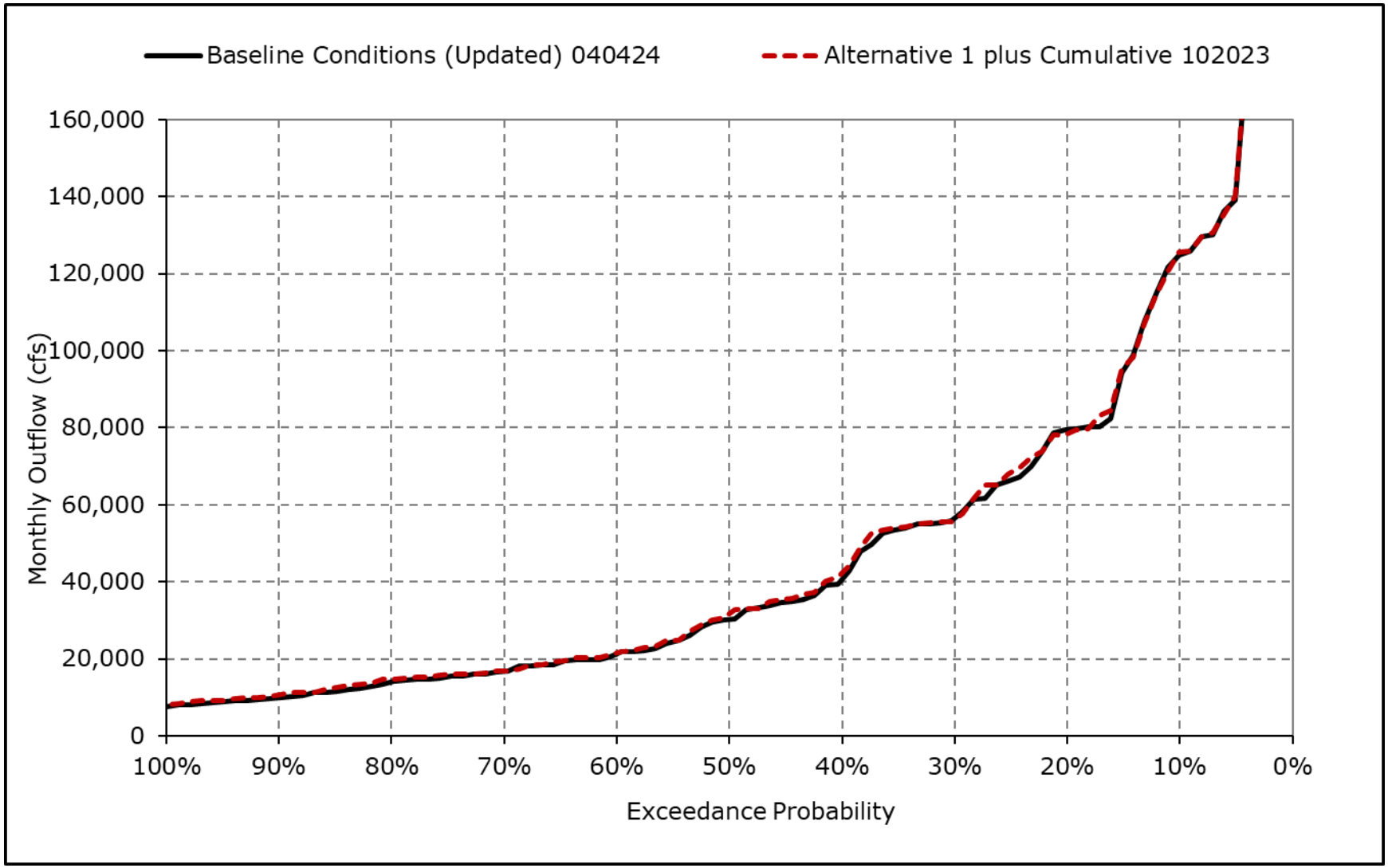
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



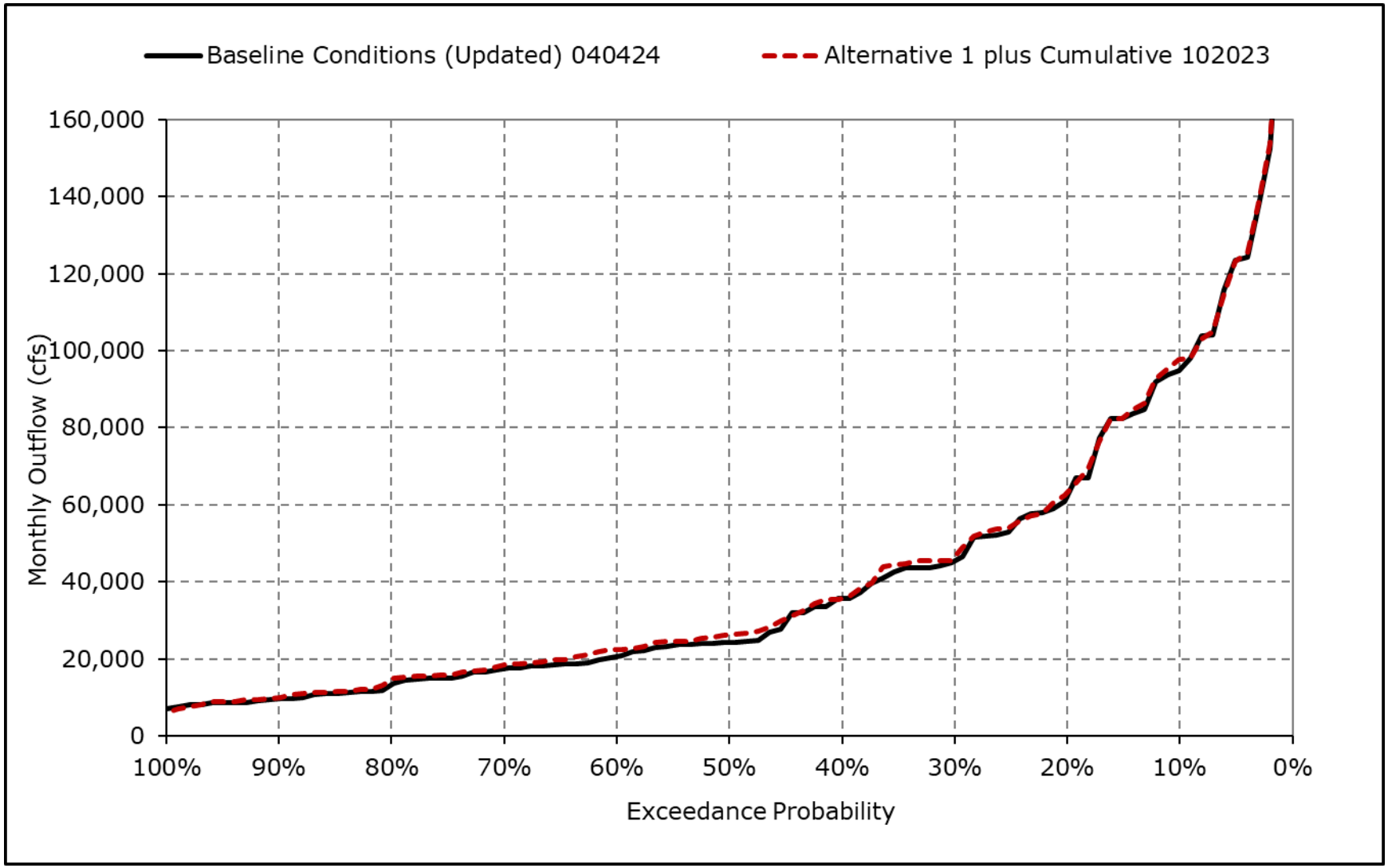
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



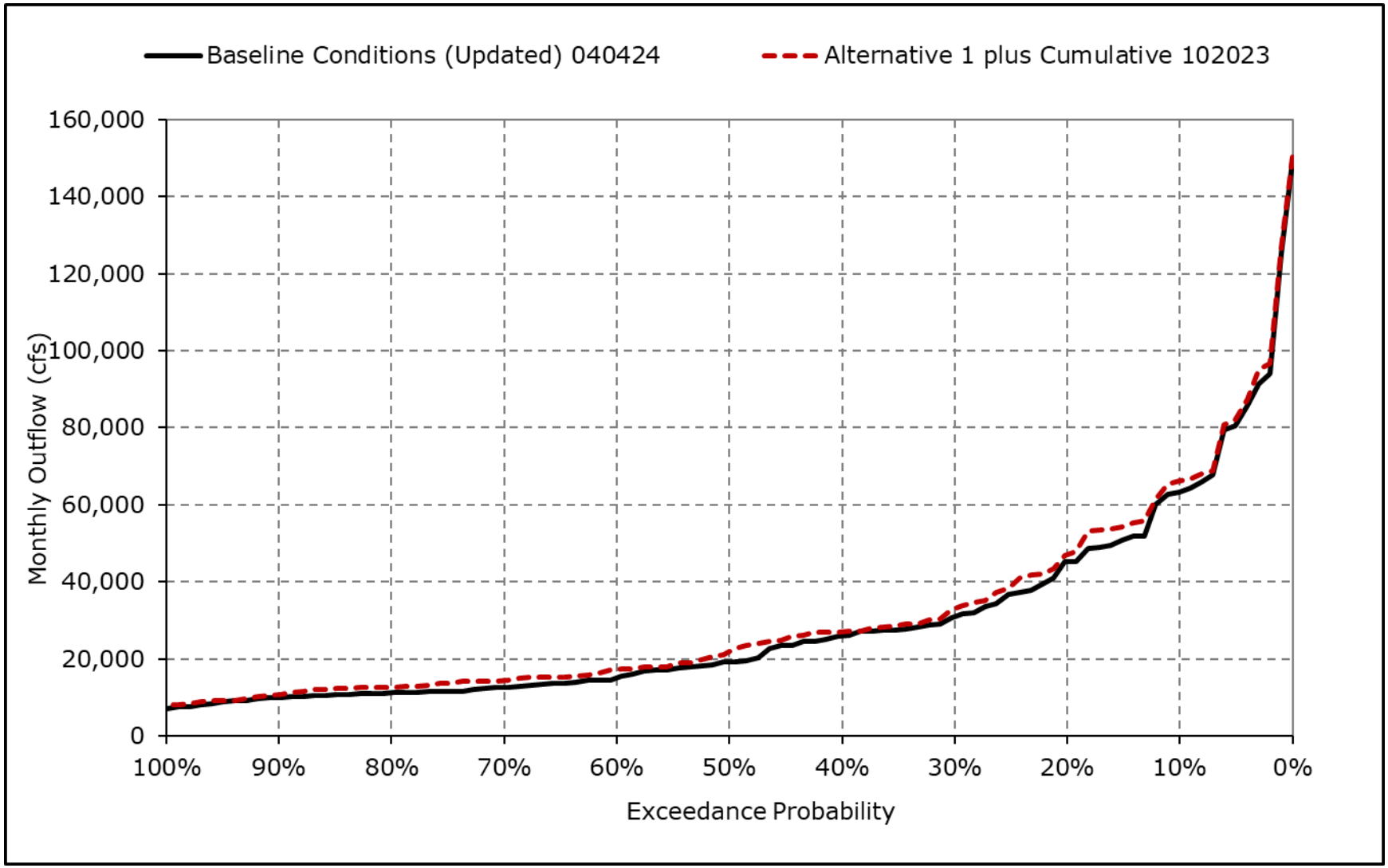
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



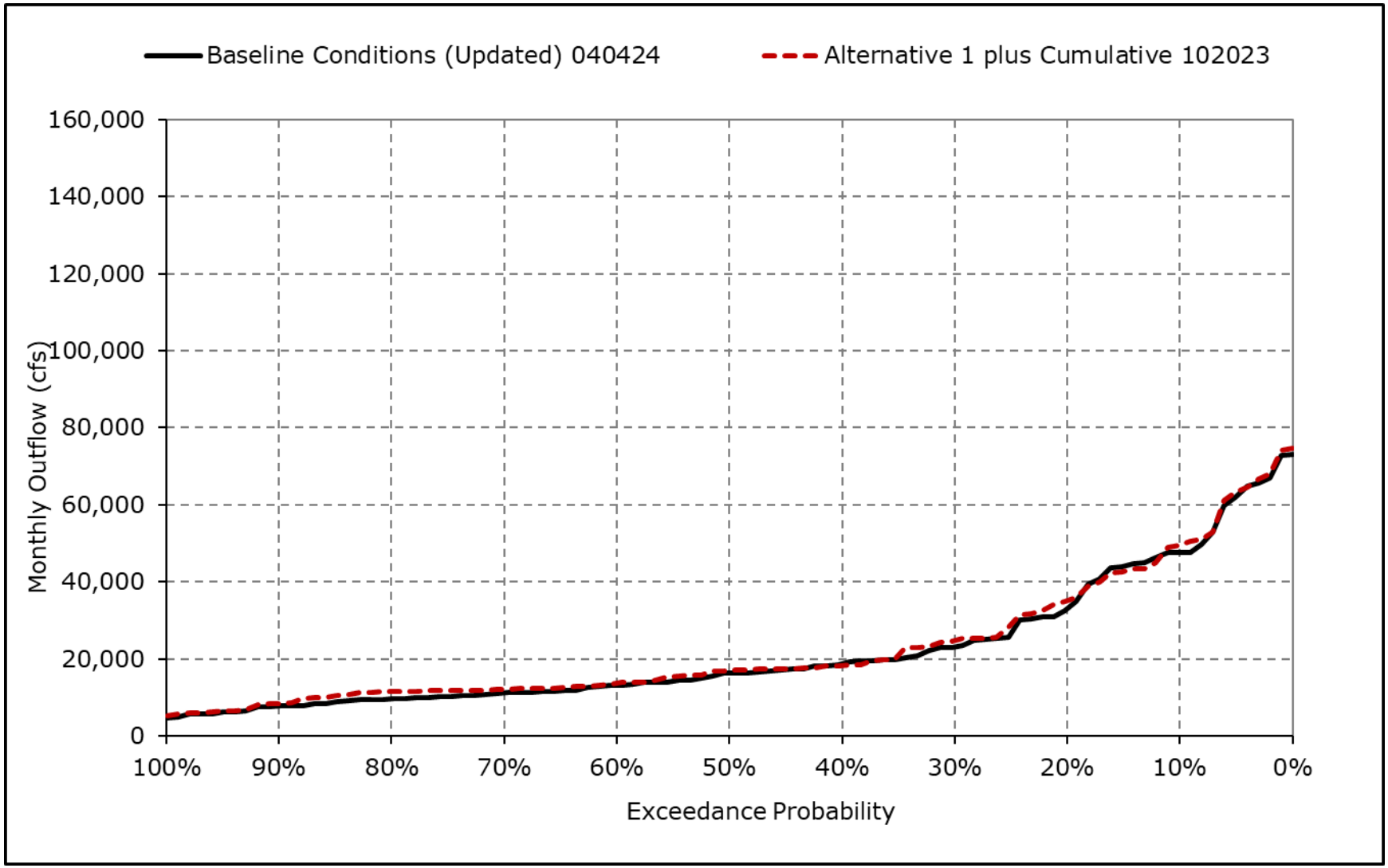
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



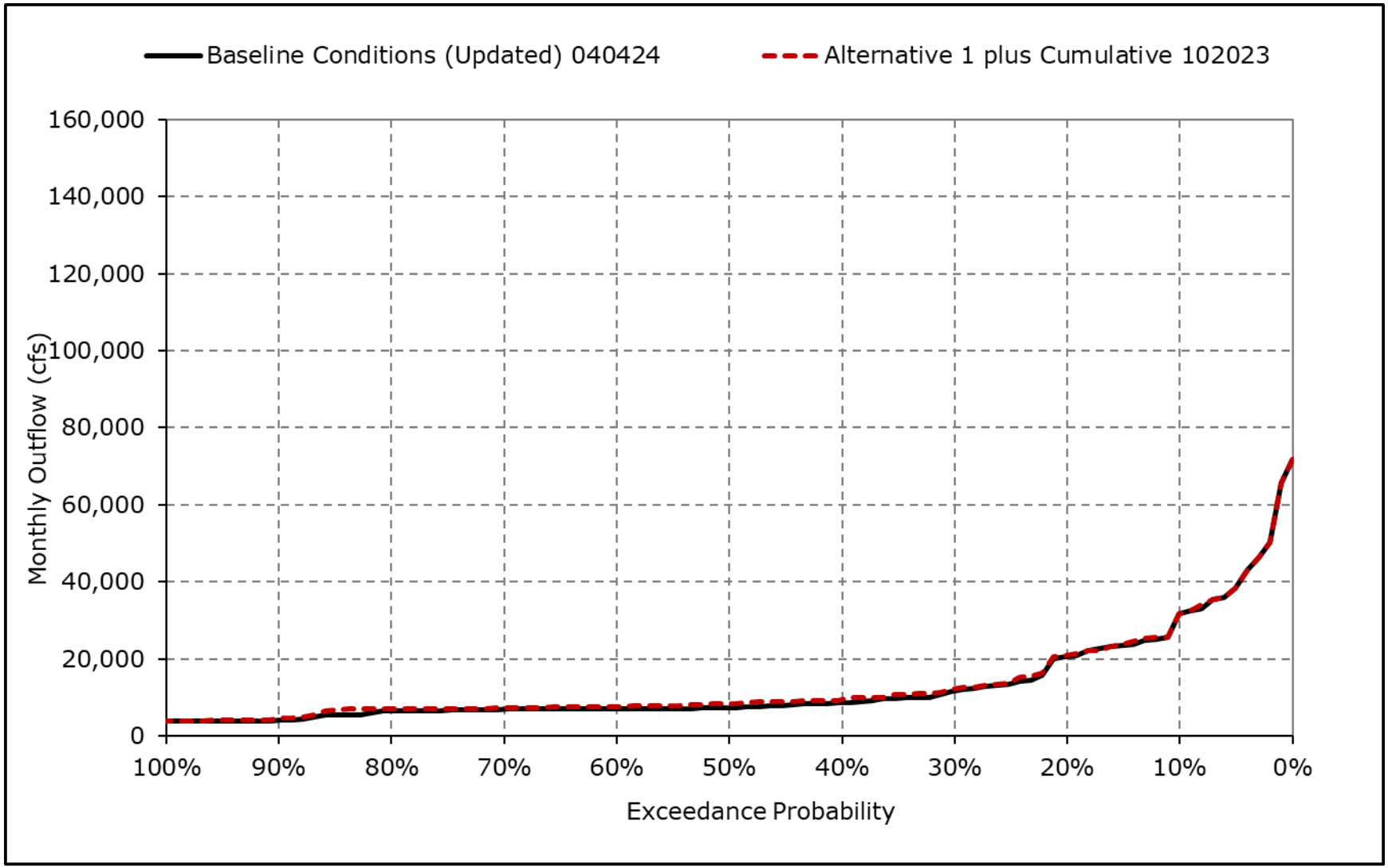
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



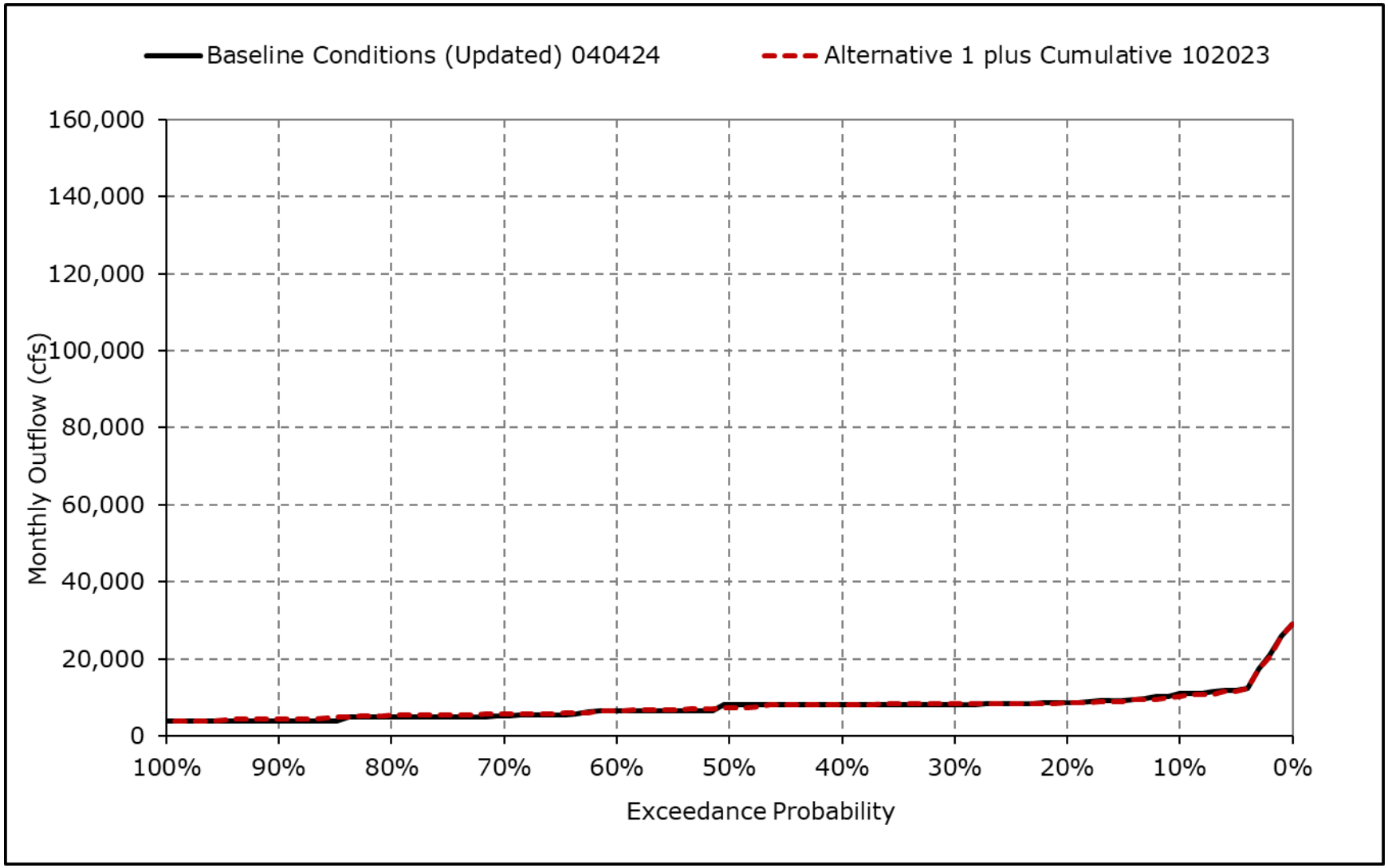
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



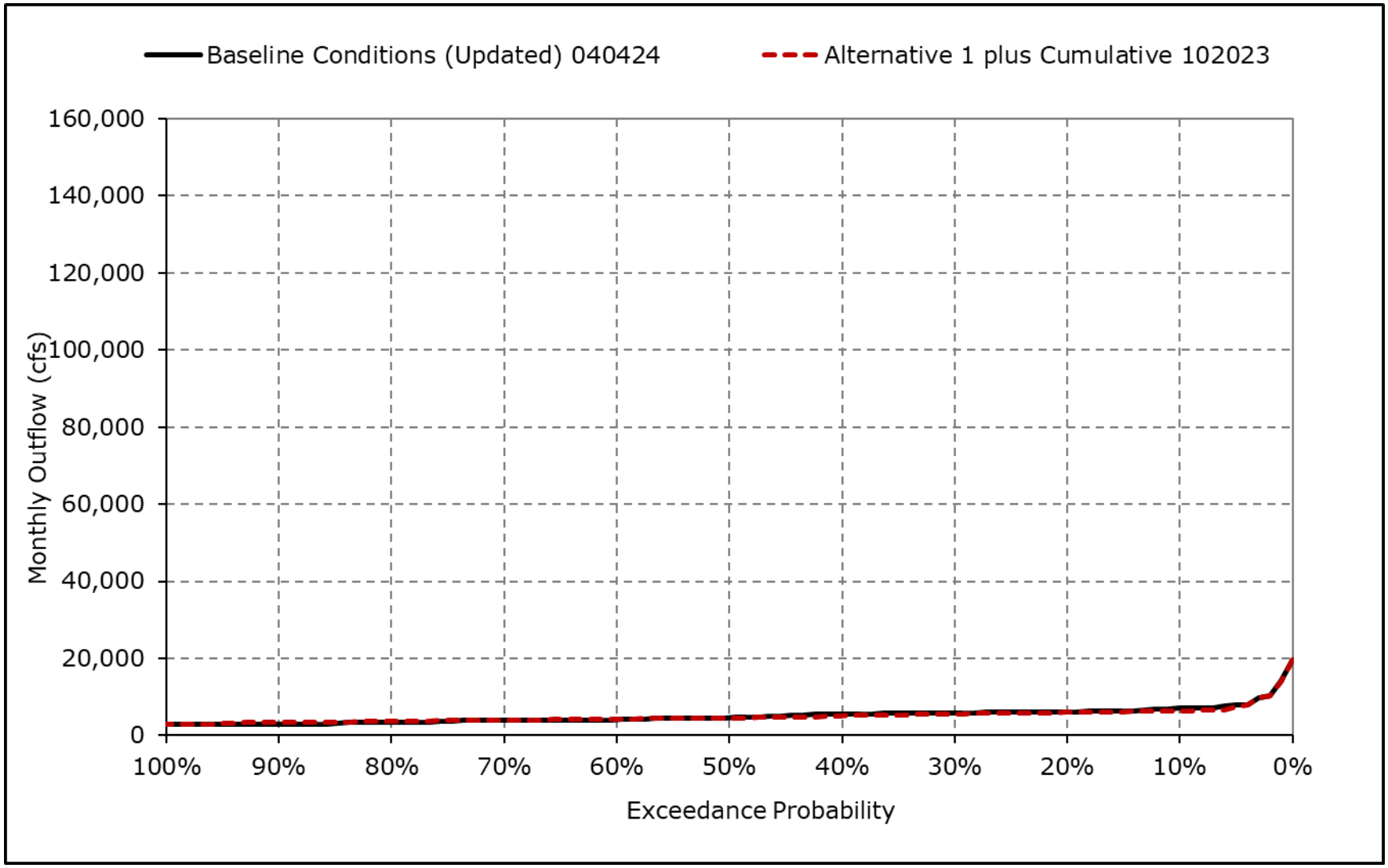
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



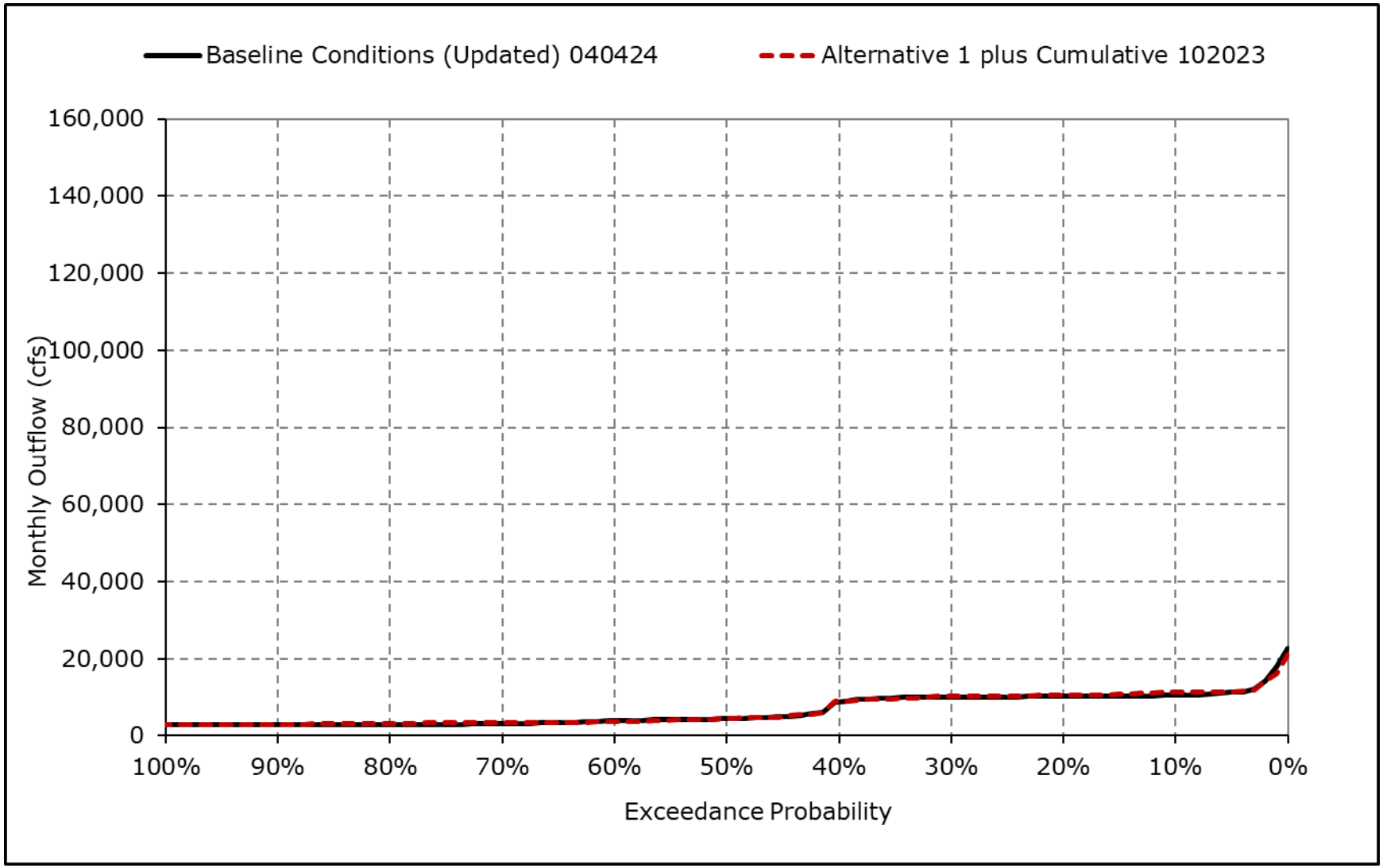
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

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



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

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



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