

Attachment 2: Storage and Elevation Results (CalSim 3)

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The following results of the CalSim 3 model are included for reservoir storage and elevation conditions for the following scenarios:

- Baseline Conditions (082624)
- Proposed Project ITP Spring Outflow (091224)

Title	Model Parameter	Table Numbers	Figure Numbers
San Luis Reservoir SWP Storage	S_SLUIS_SWP	4L-2-1-1a to 4L-2-1-1c	4L-2-1a to 4L-2-1l
San Luis Reservoir Storage	Post-Processed	4L-2-2-1a to 4L-2-2-1c	4L-2-2a to 4L-2-2l
San Luis Reservoir Elevation	Post-Processed	4L-2-3-1a to 4L-2-3-1c	4L-2-3a to 4L-2-3l

Report formats:

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

Table 4L-2-1-1a. San Luis SWP Storage, Baseline Conditions 082624, End of Month Storage (TAF)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	766	870	980	1,010	1,067	1,067	1,067	1,065	981	914	840	762
20% Exceedance	618	732	769	826	951	1,067	970	915	740	735	685	631
30% Exceedance	525	603	677	747	888	989	925	776	610	599	578	537
40% Exceedance	445	488	610	679	783	859	784	671	526	498	496	481
50% Exceedance	383	427	540	612	709	726	683	553	434	474	435	384
60% Exceedance	264	340	459	549	625	682	599	497	376	392	354	272
70% Exceedance	217	275	347	480	587	637	567	406	306	327	294	218
80% Exceedance	151	174	305	391	466	537	456	373	257	298	240	171
90% Exceedance	49	78	99	223	320	410	375	292	138	254	182	111
Full Simulation Period Average ^a	394	454	531	613	709	762	704	611	491	507	466	405
Wet Water Years (32%)	431	527	605	711	842	904	893	817	690	708	703	646
Above Normal Water Years (9%)	465	564	689	769	866	906	792	653	472	529	571	462
Below Normal Water Years (20%)	454	513	575	633	704	758	634	483	316	393	410	366
Dry Water Years (21%)	360	400	475	536	584	643	569	465	371	387	227	146
Critical Water Years (18%)	265	267	334	427	544	583	558	535	479	408	331	293

Table 4L-2-1-1b. San Luis SWP Storage, Proposed Project ITP Spring Outflow 091224, End of Month Storage (TAF)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	865	923	1,002	1,030	1,067	1,067	1,067	1,067	955	892	864	865
20% Exceedance	663	781	811	867	989	1,067	970	905	704	661	654	664
30% Exceedance	550	638	708	738	874	970	914	772	556	557	573	594
40% Exceedance	462	530	623	689	773	838	771	656	485	501	500	501
50% Exceedance	388	431	555	622	701	746	687	542	430	438	421	396
60% Exceedance	265	350	449	550	616	668	588	495	360	369	352	290
70% Exceedance	186	276	350	491	564	605	536	390	296	302	283	207
80% Exceedance	145	161	234	374	440	493	419	351	229	268	231	161
90% Exceedance	70	98	102	235	343	402	353	254	111	209	175	123
Full Simulation Period Average ^a	411	470	542	617	701	753	693	602	469	484	455	430
Wet Water Years (32%)	457	550	622	721	848	911	895	819	667	679	688	712
Above Normal Water Years (9%)	481	576	706	772	848	896	777	635	432	489	545	521
Below Normal Water Years (20%)	470	528	588	637	690	741	618	472	299	371	412	371
Dry Water Years (21%)	381	421	484	537	574	621	549	450	344	366	217	140
Critical Water Years (18%)	266	266	337	425	529	566	543	520	467	395	320	284

Table 4L-2-1-1c. San Luis SWP Storage, Proposed Project ITP Spring Outflow 091224 minus Baseline Conditions 082624, End of Month Storage (TAF)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	99	53	22	21	0	0	0	2	-27	-22	24	103
20% Exceedance	44	48	42	41	38	0	0	-10	-36	-74	-31	33
30% Exceedance	25	35	31	-9	-13	-20	-10	-4	-55	-42	-5	56
40% Exceedance	18	42	13	10	-11	-21	-13	-15	-42	3	4	20
50% Exceedance	5	4	14	10	-8	20	4	-11	-5	-35	-15	12
60% Exceedance	1	10	-9	1	-9	-14	-11	-1	-16	-23	-2	18
70% Exceedance	-31	1	3	11	-22	-32	-32	-16	-10	-25	-11	-12
80% Exceedance	-6	-13	-71	-17	-26	-44	-37	-21	-28	-29	-9	-10
90% Exceedance	21	21	3	11	24	-8	-22	-37	-27	-45	-8	12
Full Simulation Period Average ^a	18	16	12	4	-8	-10	-11	-9	-22	-24	-11	25
Wet Water Years (32%)	26	23	16	10	6	8	2	2	-23	-30	-15	66
Above Normal Water Years (9%)	16	12	17	4	-18	-10	-15	-18	-41	-40	-26	59
Below Normal Water Years (20%)	17	15	14	4	-15	-17	-17	-11	-16	-22	2	5
Dry Water Years (21%)	21	21	9	1	-11	-22	-19	-16	-27	-20	-10	-6
Critical Water Years (18%)	1	-2	3	-1	-15	-17	-16	-14	-12	-13	-10	-8

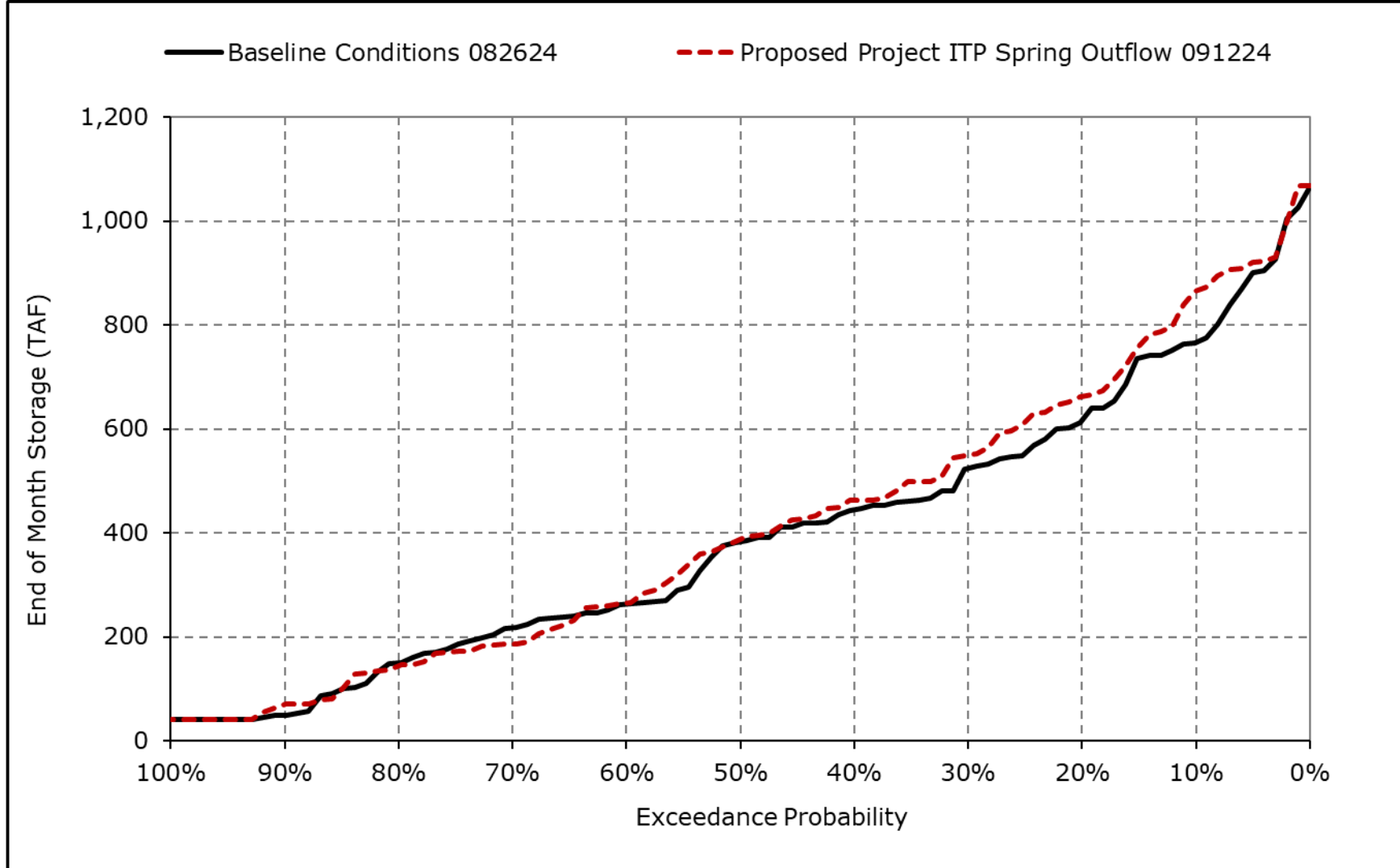
^a Based on the 100-year simulation period.

* 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).

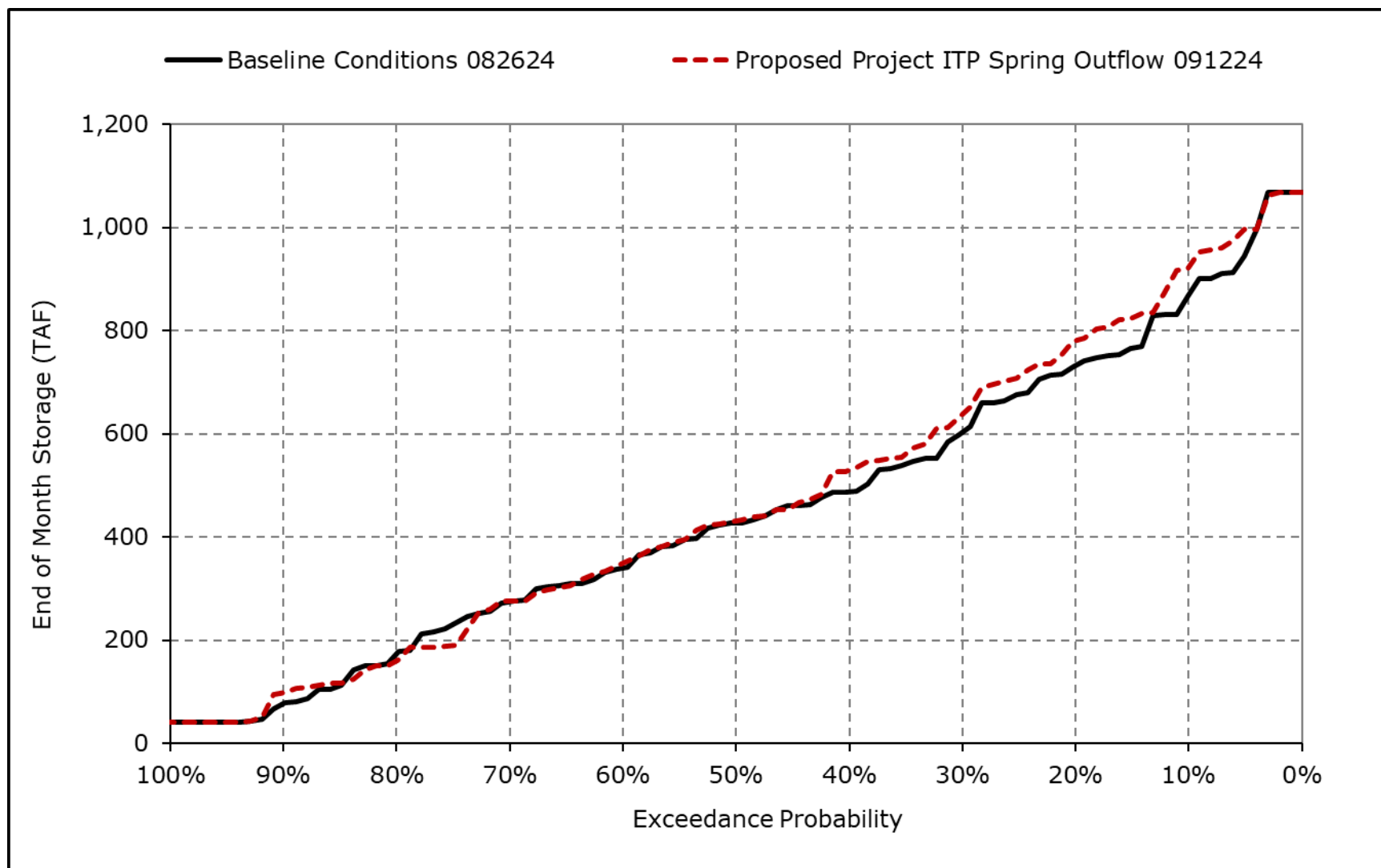
* Water Year Types results are displayed with water year - year type sorting.

Figure 4L-2-1a. San Luis SWP Storage, October



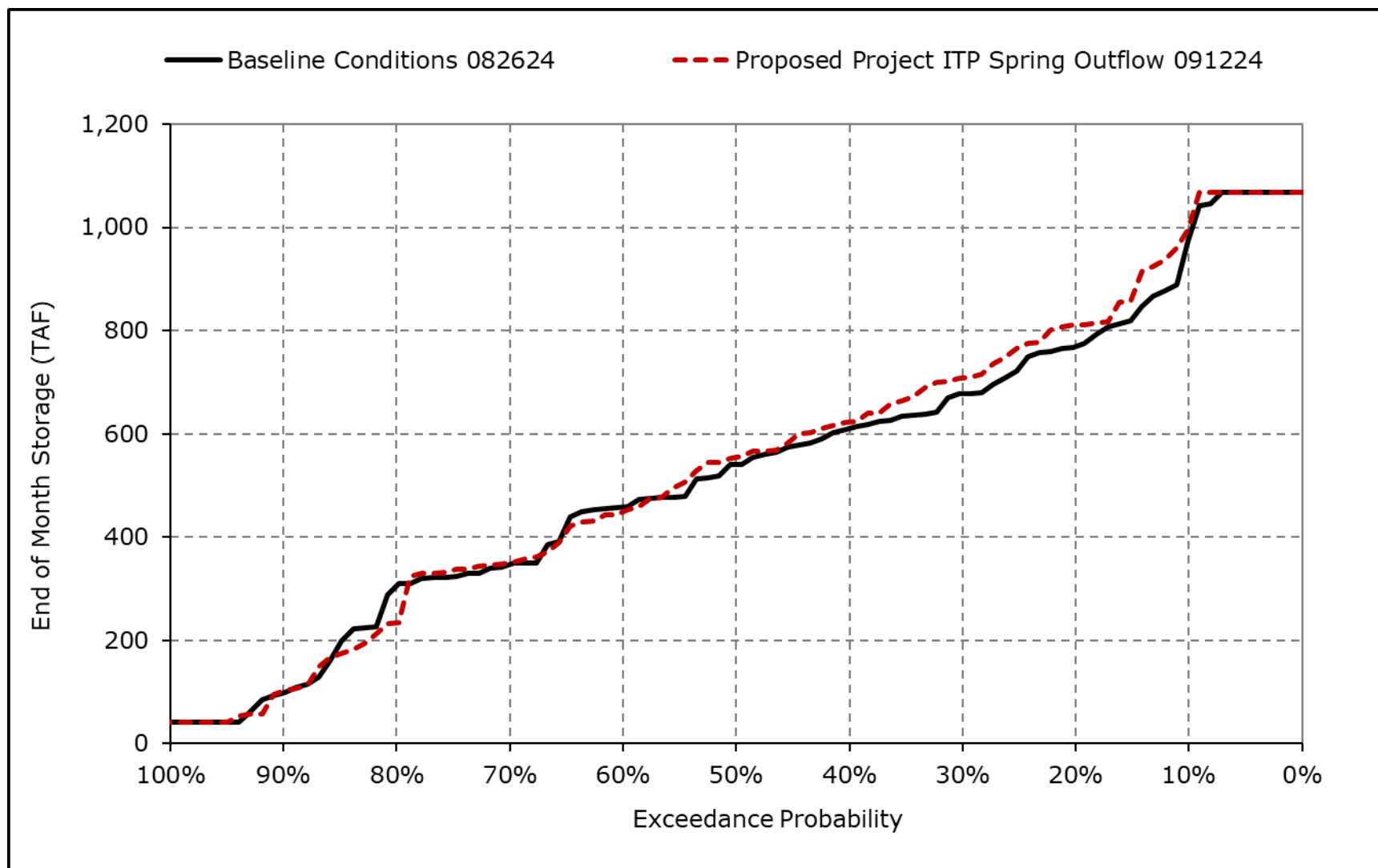
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1b. San Luis SWP Storage, November



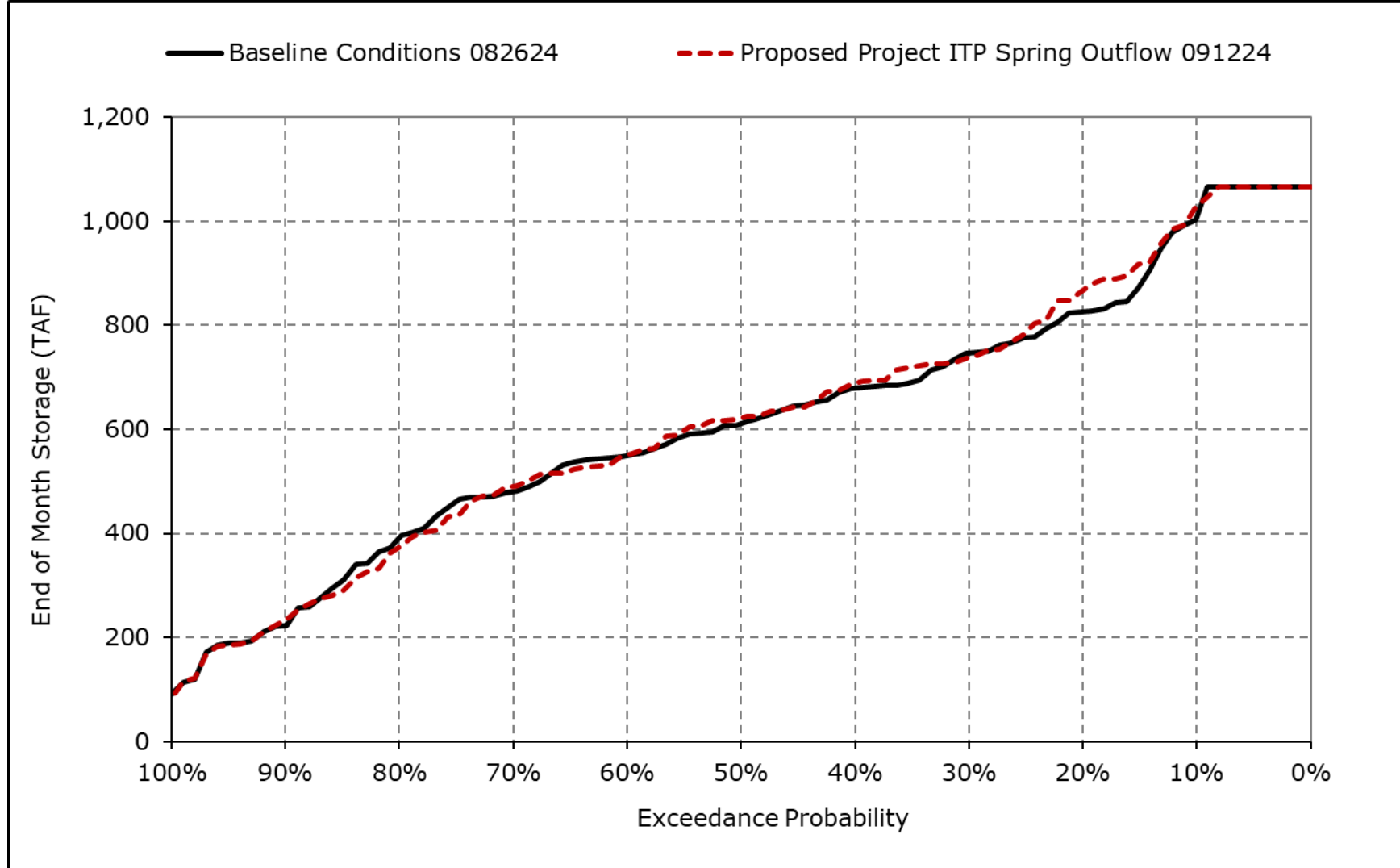
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1c. San Luis SWP Storage, December



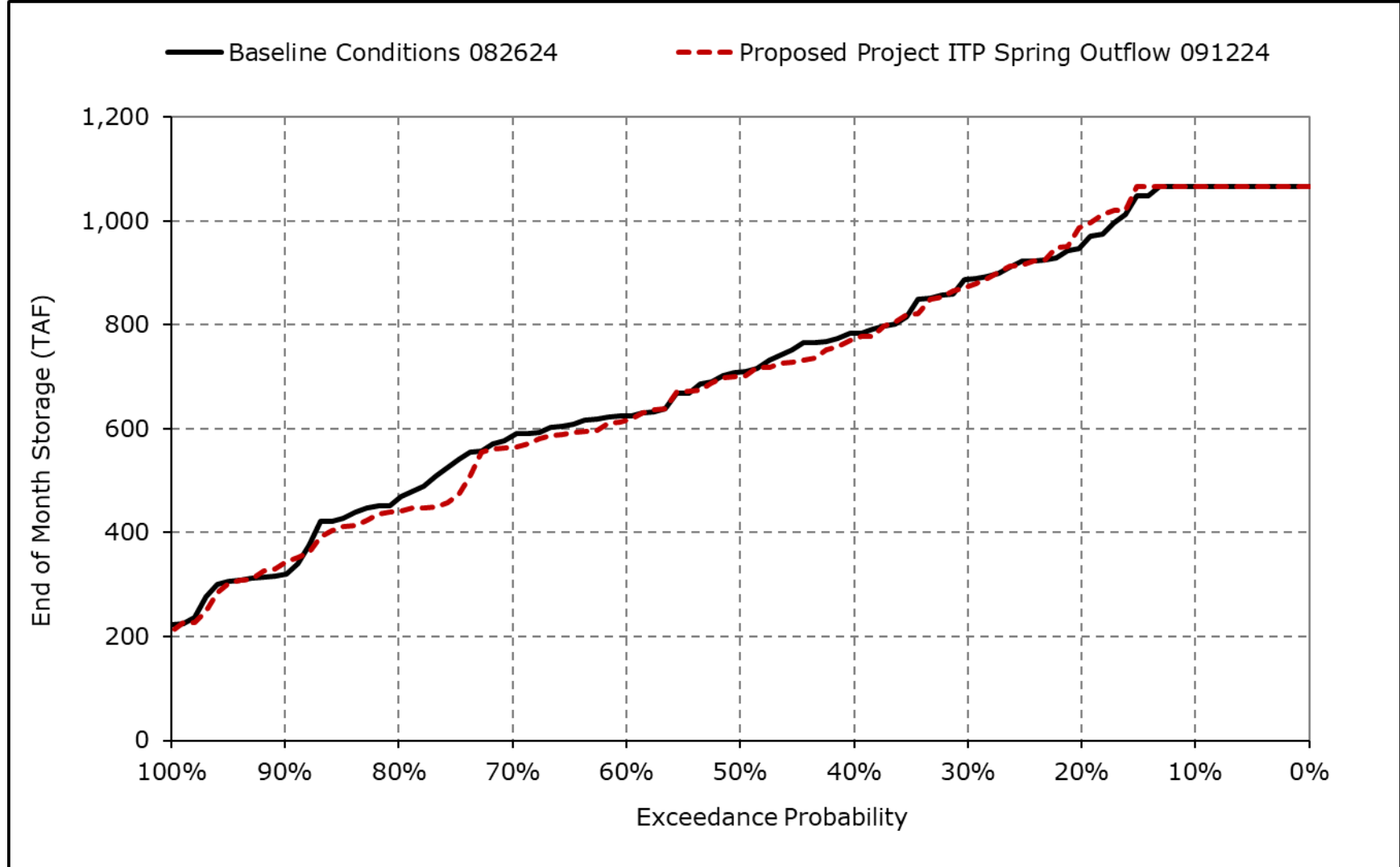
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1d. San Luis SWP Storage, January



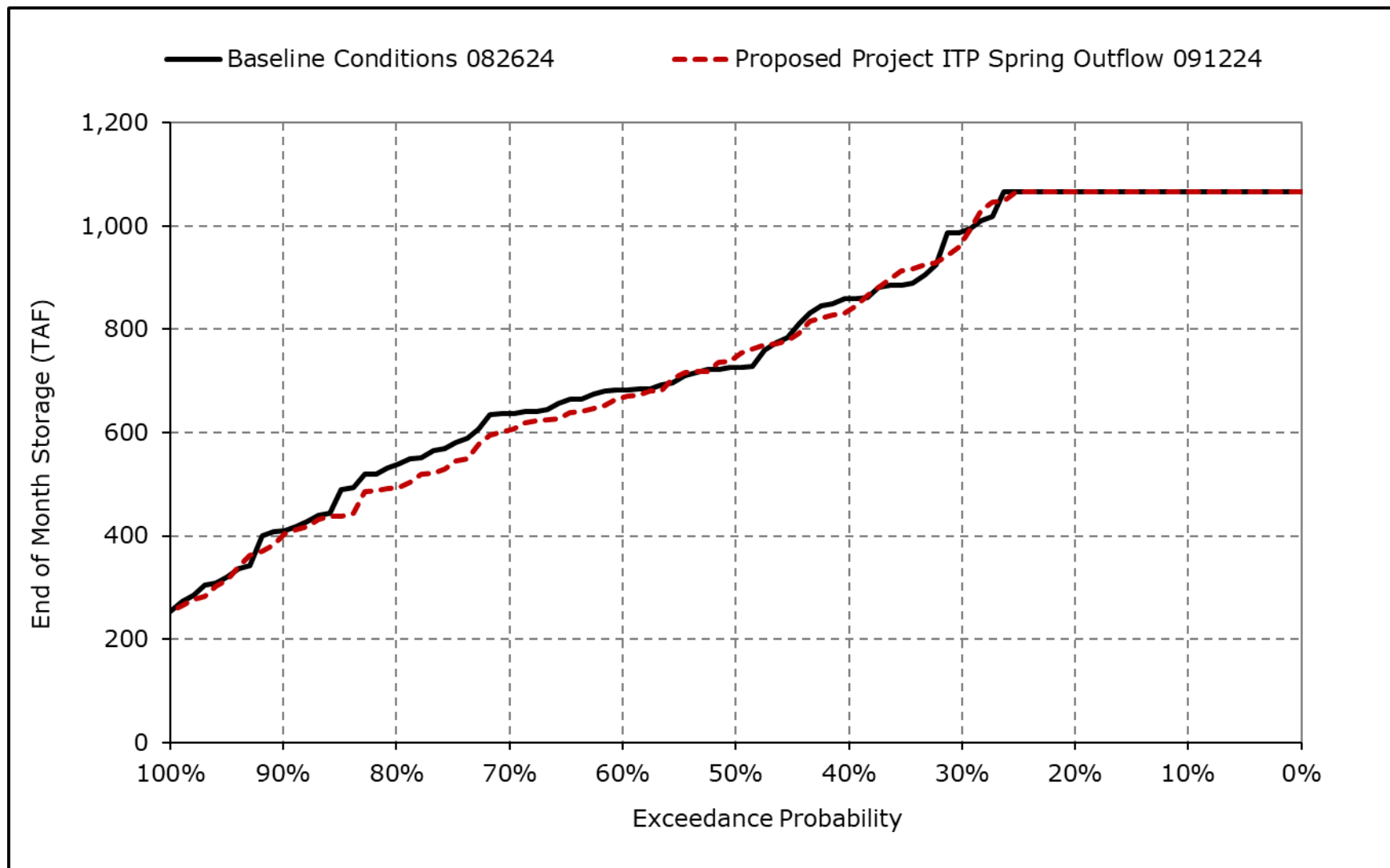
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1e. San Luis SWP Storage, February



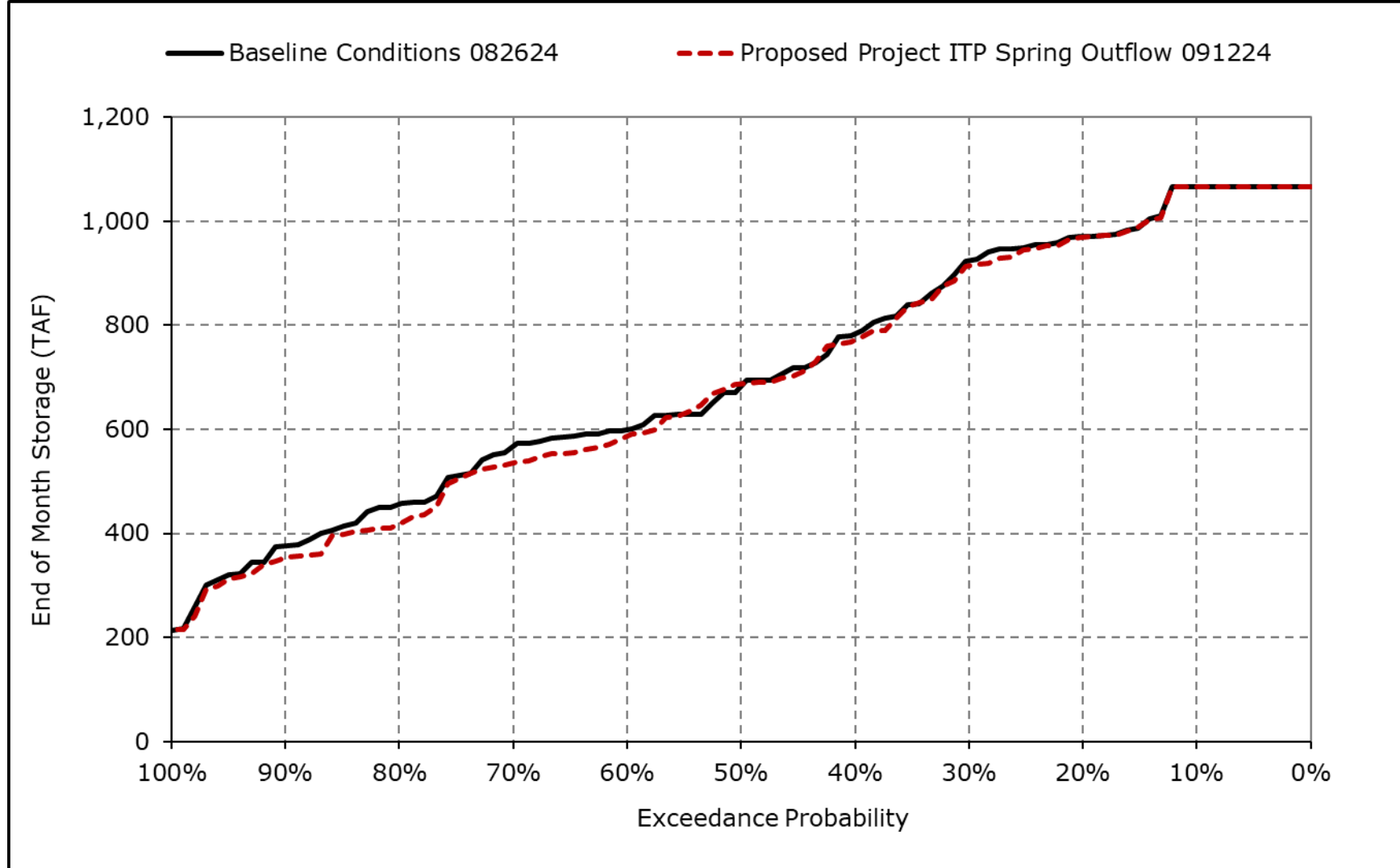
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1f. San Luis SWP Storage, March



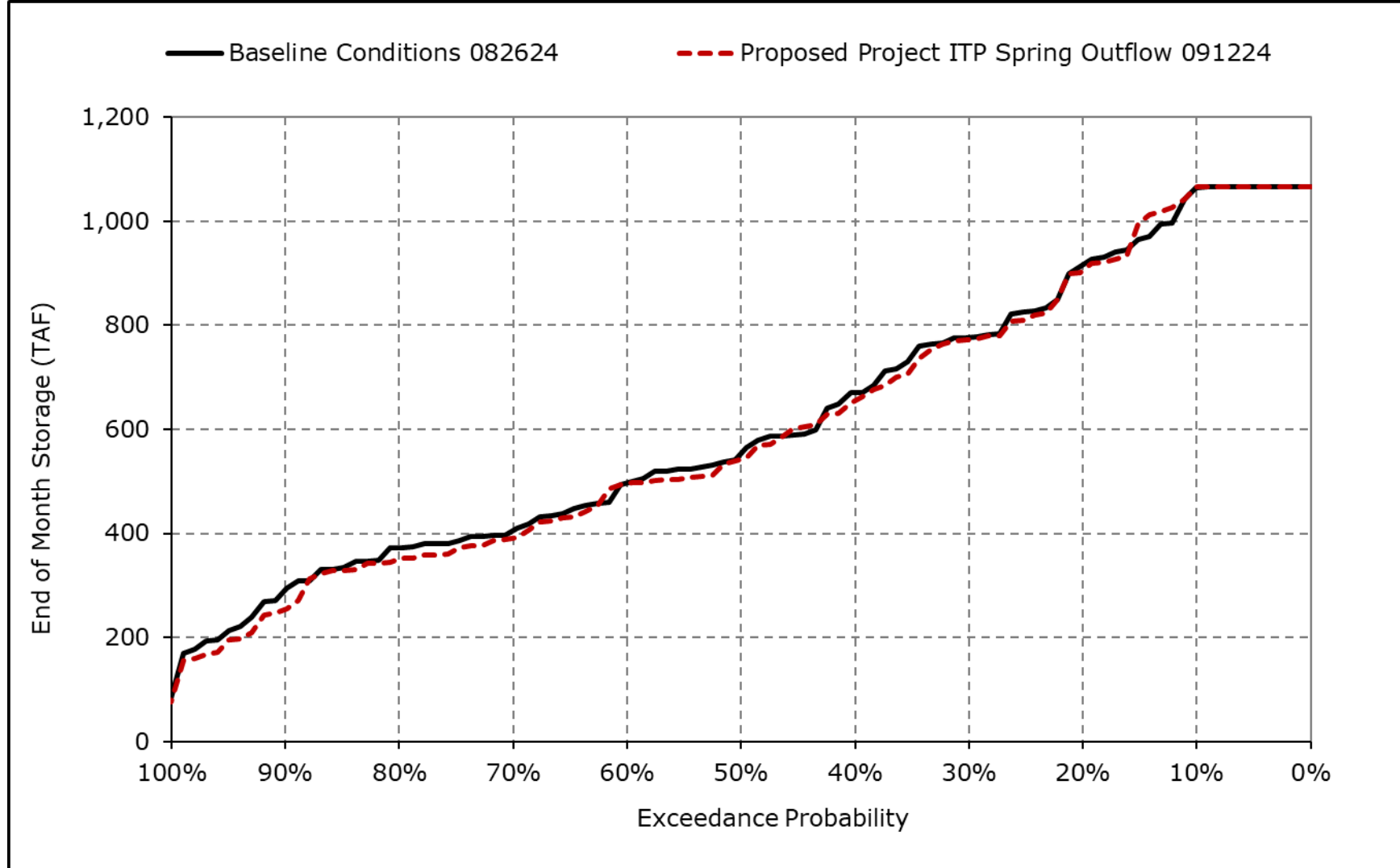
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1g. San Luis SWP Storage, April



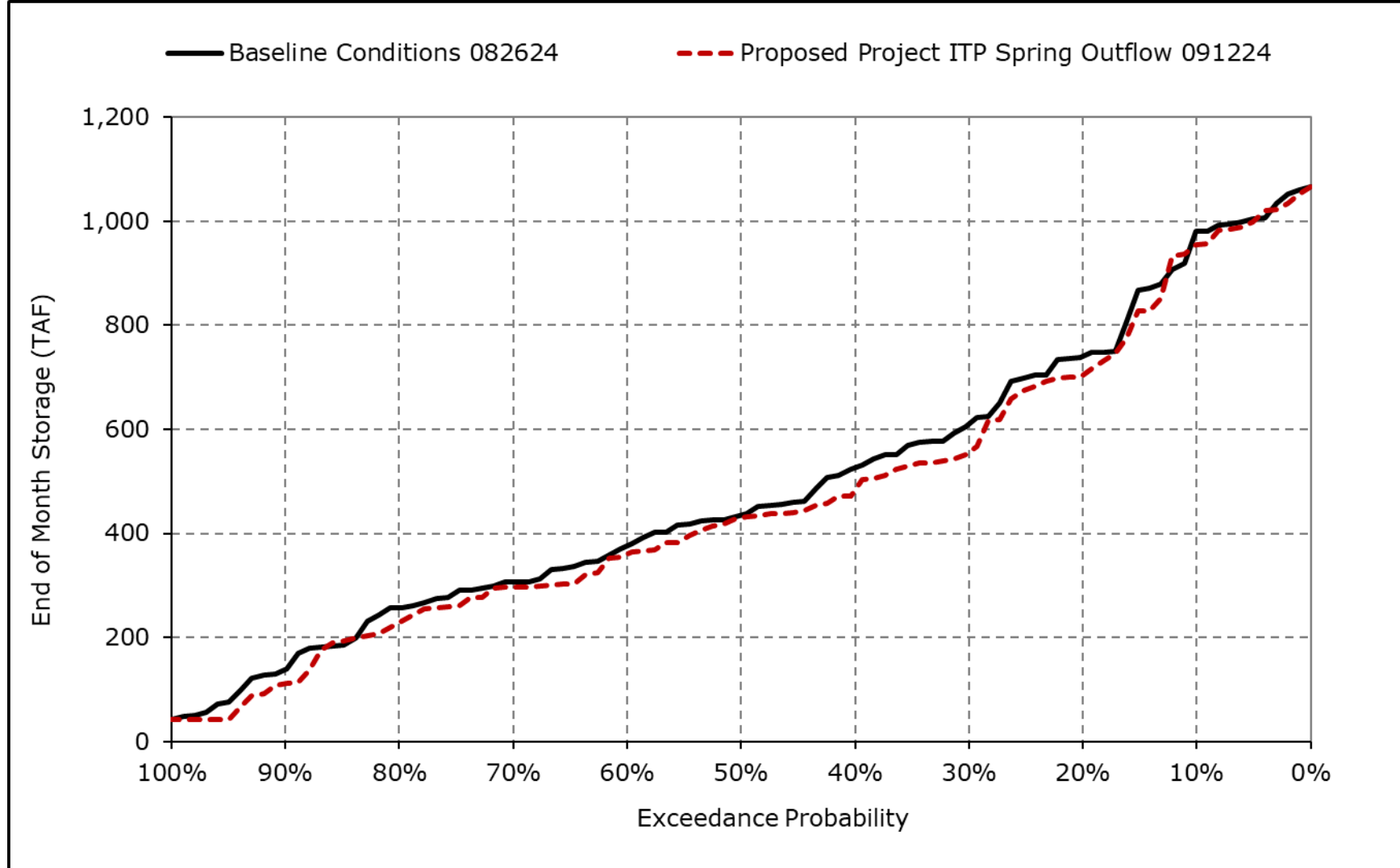
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1h. San Luis SWP Storage, May



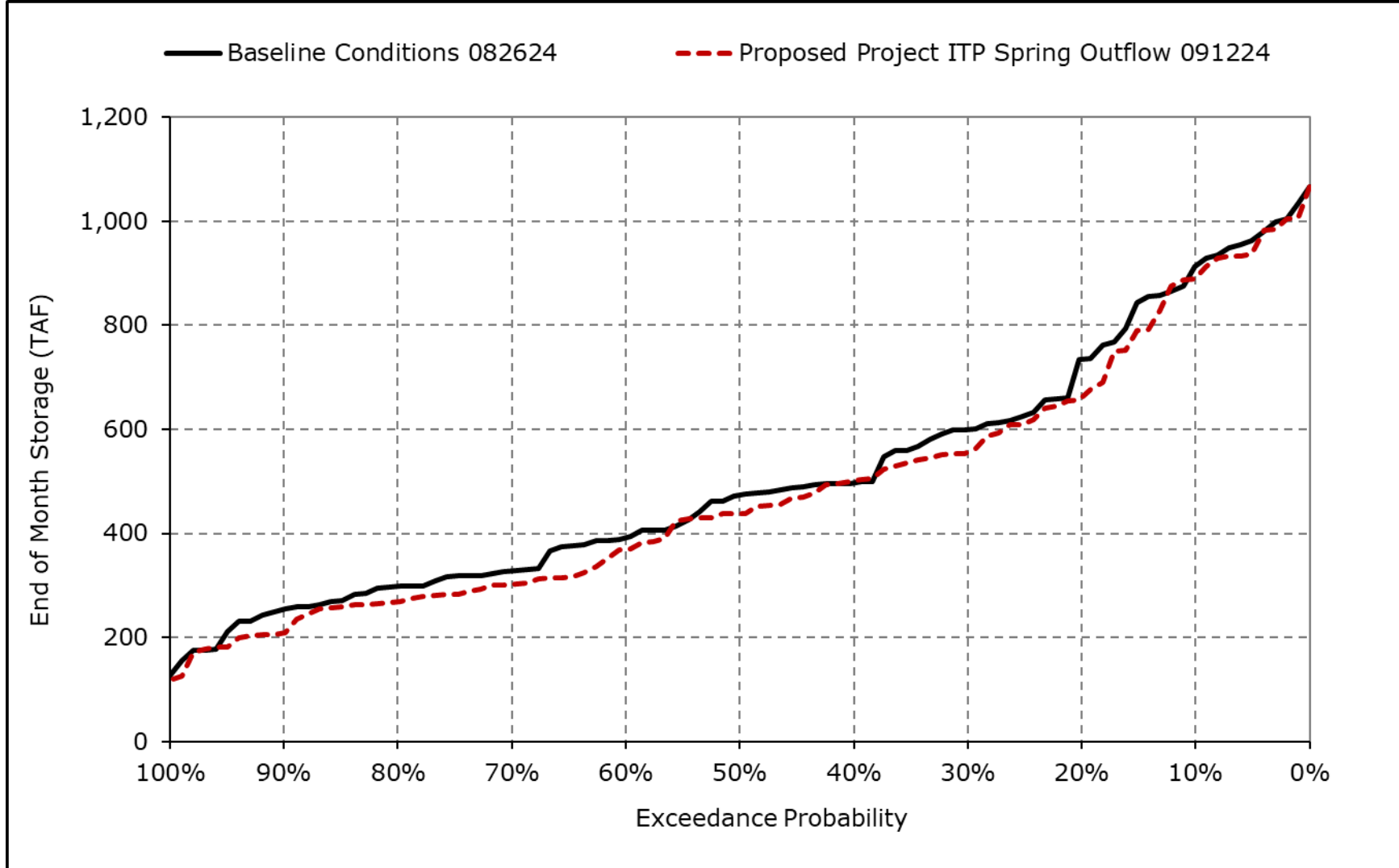
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1i. San Luis SWP Storage, June



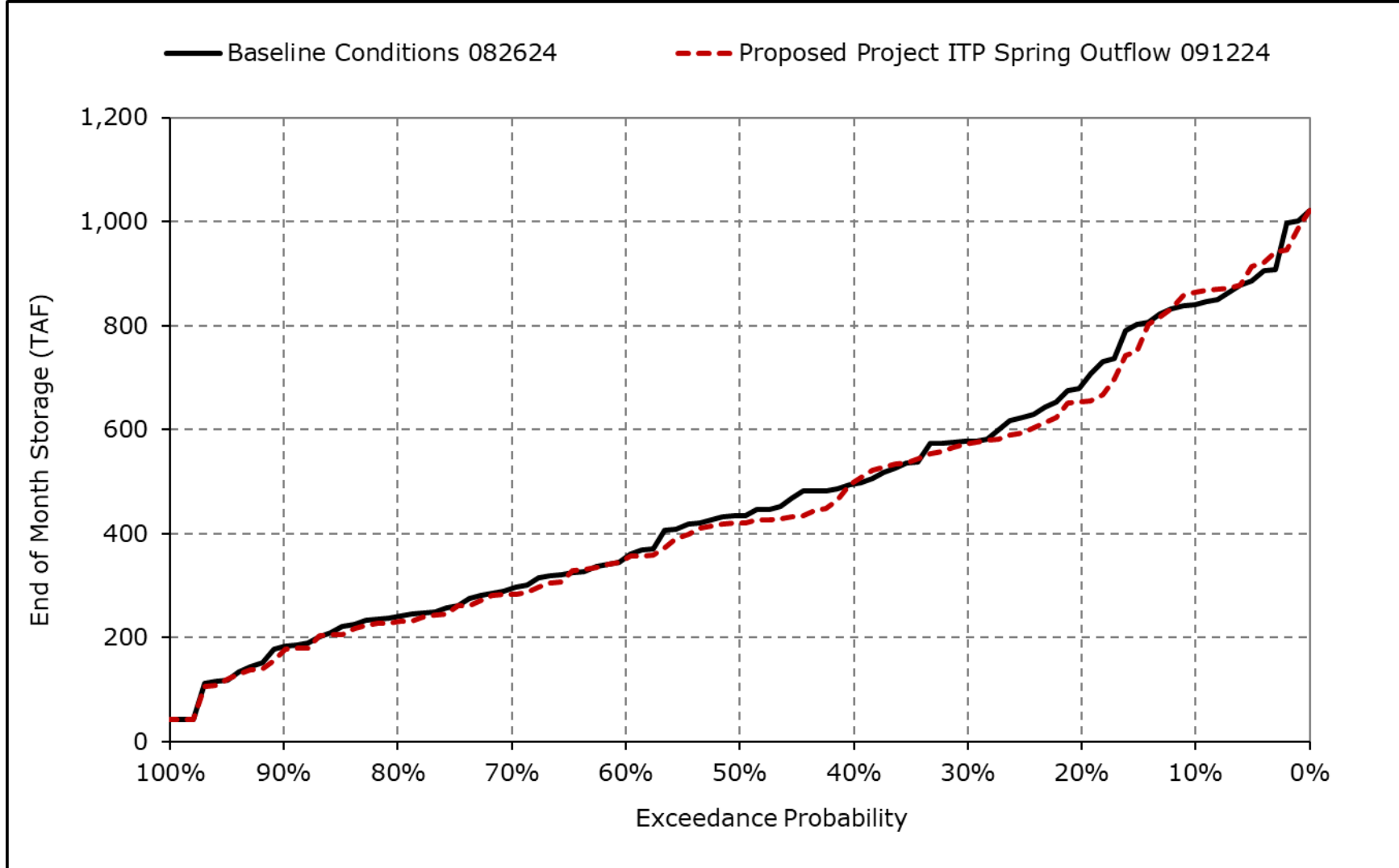
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1j. San Luis SWP Storage, July



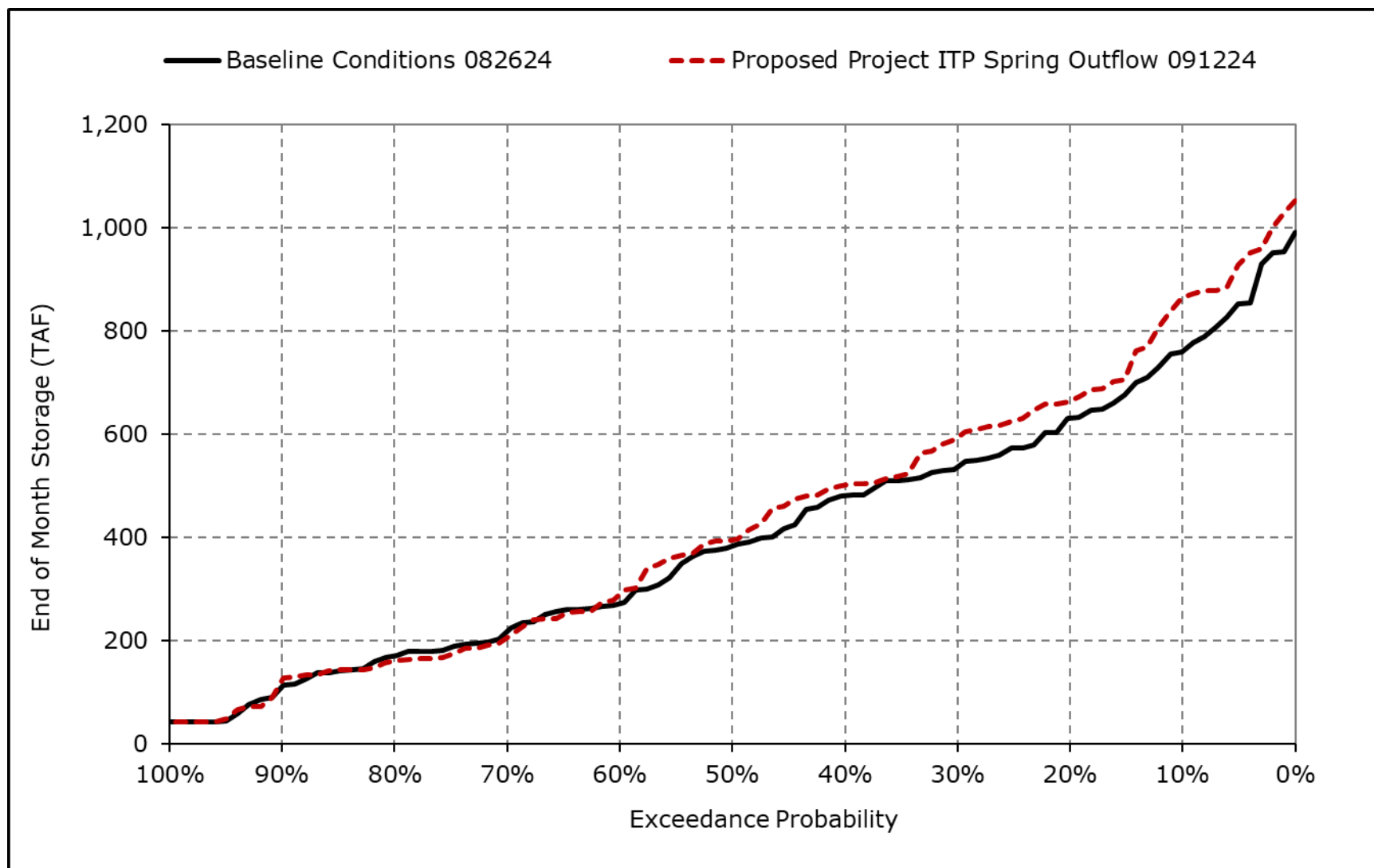
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-1k. San Luis SWP Storage, August



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

Figure 4L-2-1I. San Luis SWP Storage, September



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

Table 4L-2-2-1a. San Luis Storage (CVP and SWP), Baseline Conditions 082624, End of Month Storage (TAF)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,397	1,595	1,783	1,830	1,974	2,039	2,039	1,937	1,828	1,528	1,366	1,387
20% Exceedance	990	1,198	1,414	1,583	1,860	2,036	1,854	1,811	1,403	1,106	924	859
30% Exceedance	725	999	1,262	1,440	1,657	1,864	1,732	1,481	1,069	848	669	674
40% Exceedance	635	837	1,090	1,306	1,477	1,613	1,432	1,169	895	730	587	570
50% Exceedance	512	703	980	1,178	1,359	1,485	1,267	1,040	806	635	521	512
60% Exceedance	454	577	842	1,083	1,269	1,385	1,209	973	695	568	443	416
70% Exceedance	349	516	707	962	1,211	1,310	1,107	847	569	502	380	358
80% Exceedance	305	444	624	863	1,146	1,199	1,021	745	518	442	330	303
90% Exceedance	221	311	484	626	854	988	851	665	402	386	259	227
Full Simulation Period Average ^a	648	827	1,032	1,215	1,412	1,526	1,387	1,189	928	778	633	613
Wet Water Years (32%)	698	933	1,185	1,446	1,701	1,824	1,789	1,643	1,365	1,159	1,027	998
Above Normal Water Years (9%)	676	903	1,196	1,408	1,636	1,749	1,582	1,349	978	778	683	566
Below Normal Water Years (20%)	763	961	1,117	1,259	1,436	1,547	1,272	956	634	566	509	533
Dry Water Years (21%)	630	780	962	1,092	1,209	1,328	1,121	869	649	556	315	302
Critical Water Years (18%)	441	507	664	805	998	1,089	1,013	932	780	594	417	404

Table 4L-2-2-1b. San Luis Storage (CVP and SWP), Proposed Project ITP Spring Outflow 091224, End of Month Storage (TAF)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	1,462	1,677	1,874	1,870	1,994	2,039	2,039	1,954	1,800	1,479	1,375	1,473
20% Exceedance	977	1,216	1,414	1,603	1,831	2,026	1,848	1,800	1,335	1,038	872	866
30% Exceedance	763	1,035	1,244	1,421	1,619	1,879	1,714	1,455	1,016	811	679	721
40% Exceedance	626	823	1,094	1,318	1,476	1,609	1,382	1,149	849	691	568	576
50% Exceedance	534	738	983	1,138	1,344	1,450	1,275	1,019	752	593	495	506
60% Exceedance	457	581	875	1,084	1,256	1,339	1,159	952	642	518	427	420
70% Exceedance	346	515	693	951	1,163	1,279	1,077	818	533	452	357	354
80% Exceedance	294	423	633	843	1,080	1,165	982	725	462	418	318	307
90% Exceedance	232	314	458	637	832	964	810	635	344	349	242	231
Full Simulation Period Average ^a	660	837	1,038	1,213	1,389	1,501	1,362	1,167	882	738	616	630
Wet Water Years (32%)	718	951	1,194	1,449	1,699	1,827	1,787	1,641	1,324	1,116	1,003	1,054
Above Normal Water Years (9%)	686	910	1,213	1,406	1,607	1,732	1,560	1,327	909	726	660	620
Below Normal Water Years (20%)	775	972	1,127	1,256	1,406	1,514	1,242	933	585	521	501	529
Dry Water Years (21%)	648	798	965	1,088	1,172	1,278	1,077	833	592	516	300	287
Critical Water Years (18%)	433	494	658	795	964	1,049	974	896	752	572	404	395

Table 4L-2-2-1c. San Luis Storage (CVP and SWP), Proposed Project ITP Spring Outflow 091224 minus Baseline Conditions 082624, End of Month Storage (TAF)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	65	81	92	40	20	0	0	17	-28	-48	9	87
20% Exceedance	-12	18	0	19	-29	-11	-5	-10	-68	-68	-52	7
30% Exceedance	38	36	-18	-20	-38	15	-18	-26	-53	-37	10	47
40% Exceedance	-9	-14	4	11	-1	-3	-50	-20	-46	-39	-19	6
50% Exceedance	22	35	3	-40	-14	-34	8	-21	-54	-42	-26	-6
60% Exceedance	3	4	33	0	-12	-46	-50	-20	-53	-50	-16	4
70% Exceedance	-3	-1	-14	-11	-48	-31	-30	-29	-36	-49	-23	-4
80% Exceedance	-11	-22	9	-20	-66	-34	-39	-20	-56	-24	-12	4
90% Exceedance	11	3	-26	10	-22	-24	-41	-30	-58	-37	-16	4
Full Simulation Period Average ^a	12	10	6	-2	-23	-25	-25	-21	-46	-40	-17	17
Wet Water Years (32%)	20	18	10	3	-2	3	-2	-2	-42	-43	-24	56
Above Normal Water Years (9%)	10	6	17	-2	-29	-17	-22	-22	-69	-52	-23	54
Below Normal Water Years (20%)	11	11	10	-3	-30	-32	-31	-23	-49	-46	-9	-4
Dry Water Years (21%)	18	18	3	-3	-37	-50	-44	-36	-58	-40	-15	-15
Critical Water Years (18%)	-8	-13	-6	-9	-34	-41	-39	-36	-28	-21	-13	-9

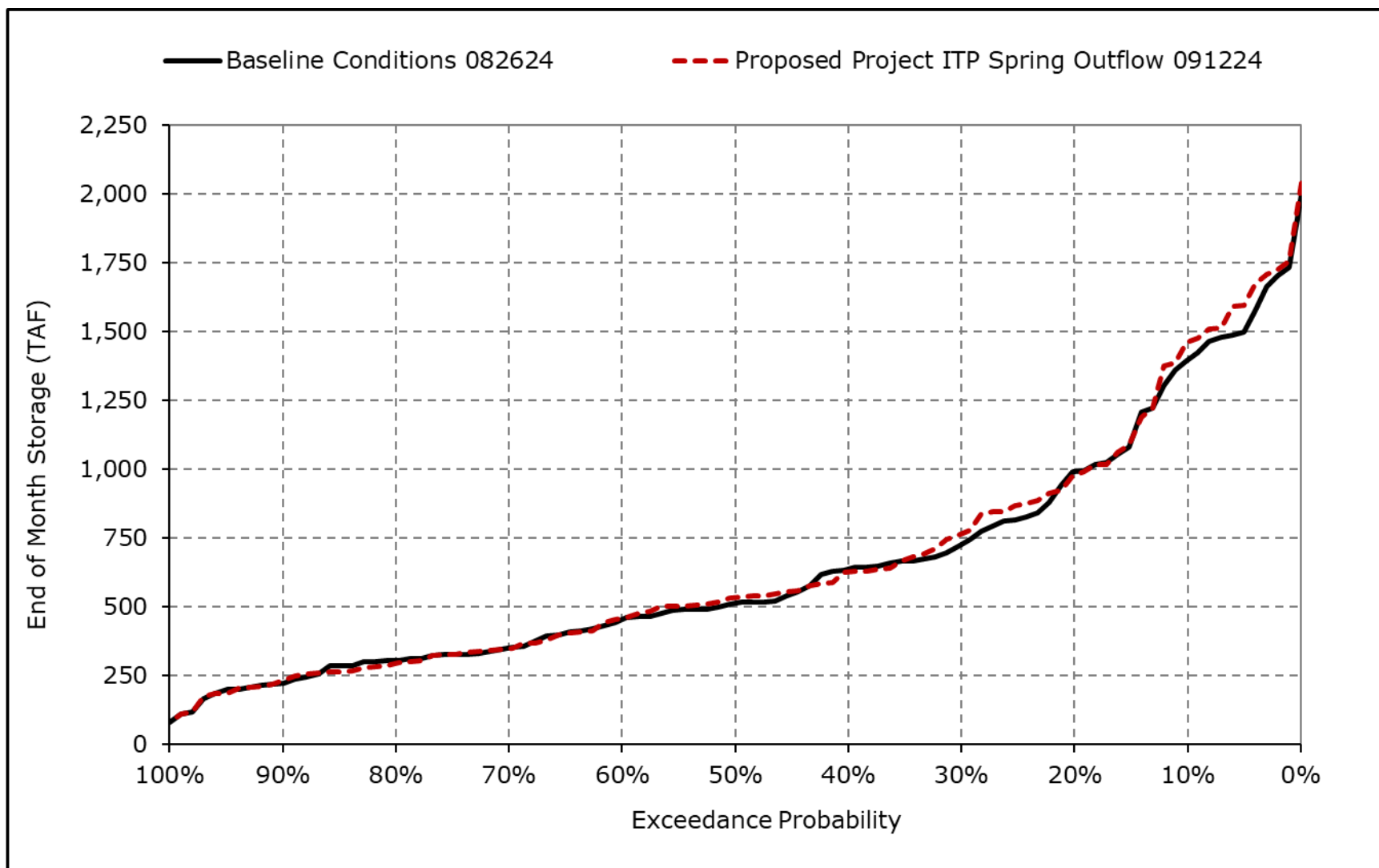
^a Based on the 100-year simulation period.

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

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

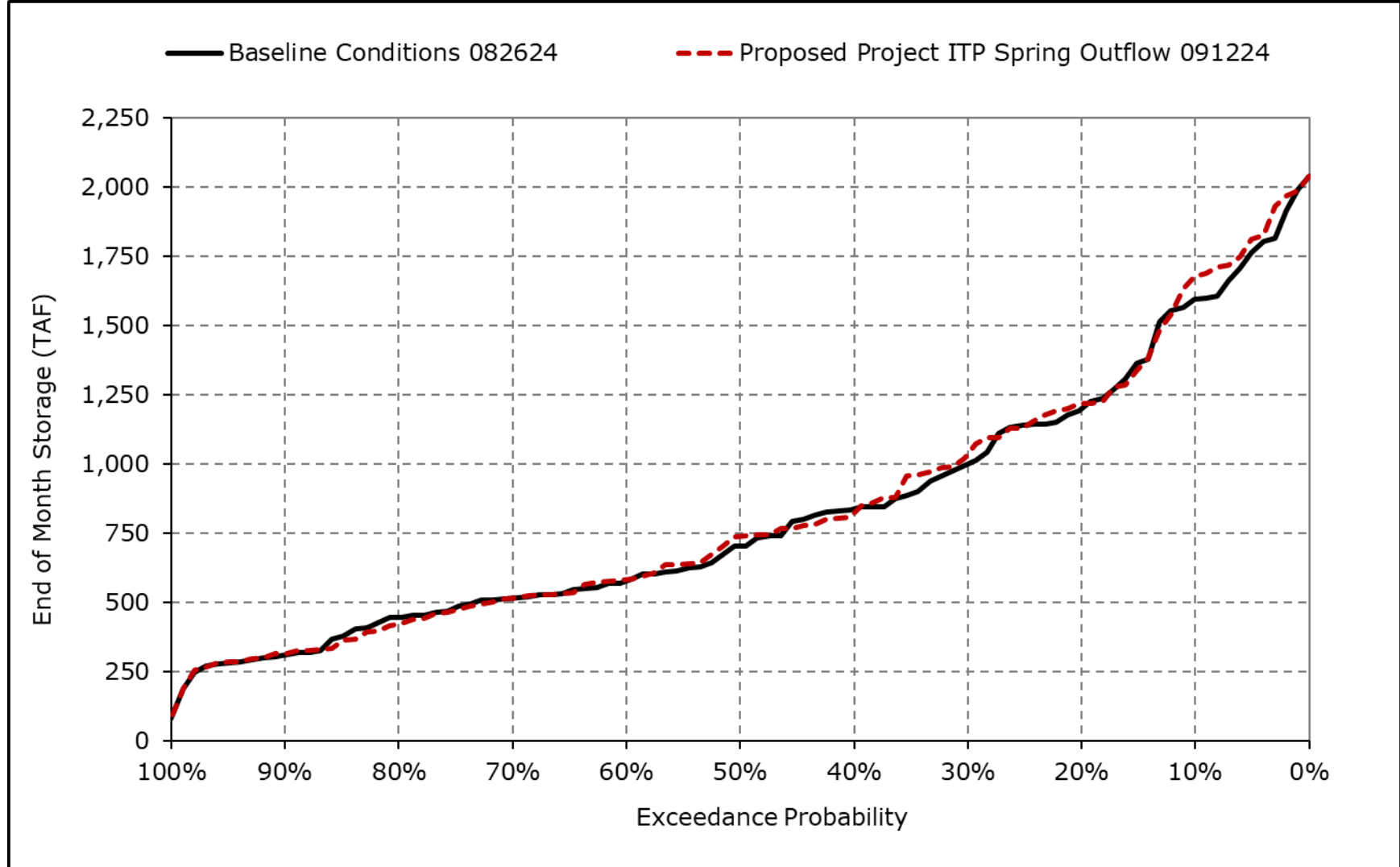
* Water Year Types results are displayed with water year - year type sorting.

Figure 4L-2-2a. San Luis Storage (CVP and SWP), October



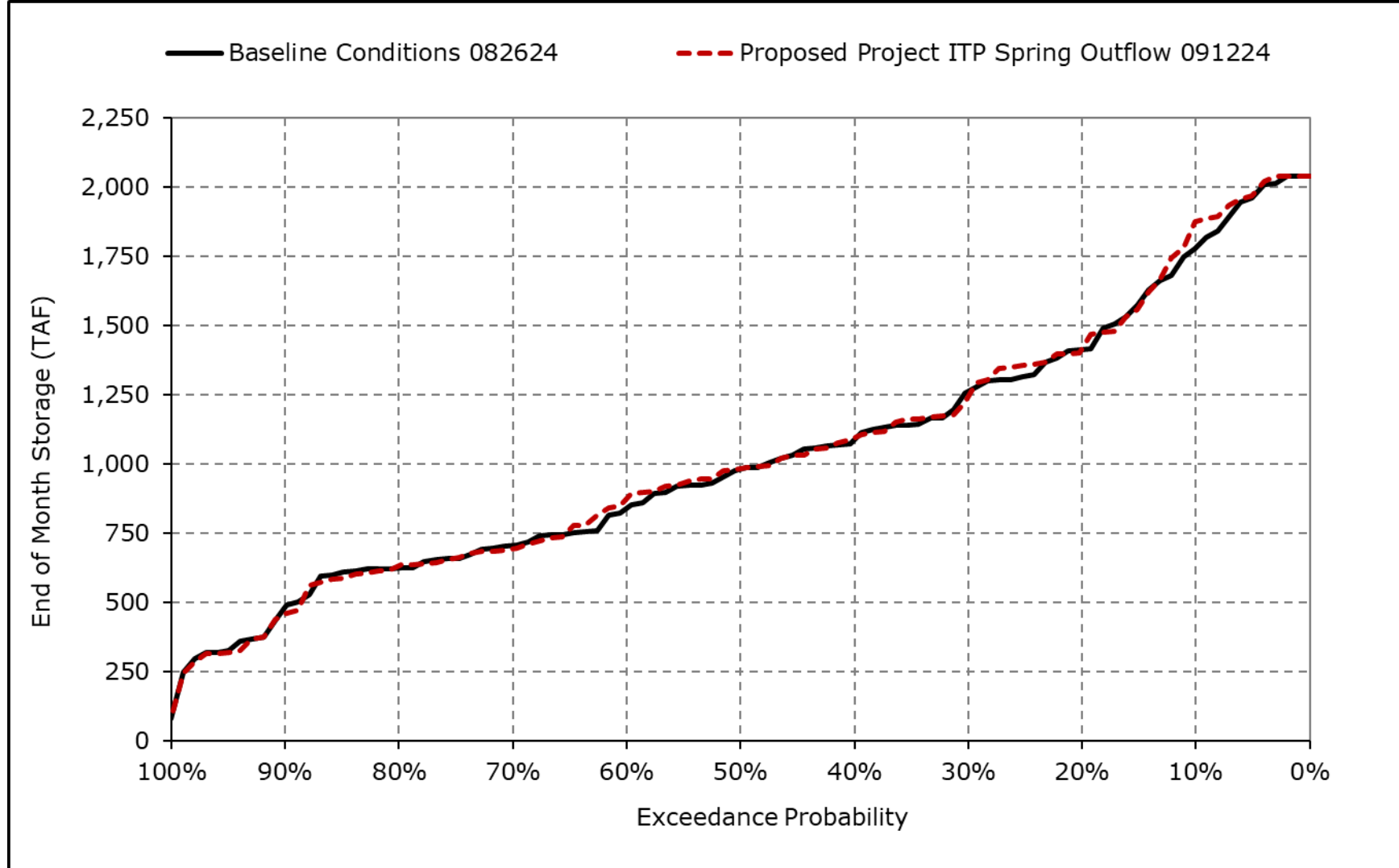
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2b. San Luis Storage (CVP and SWP), November



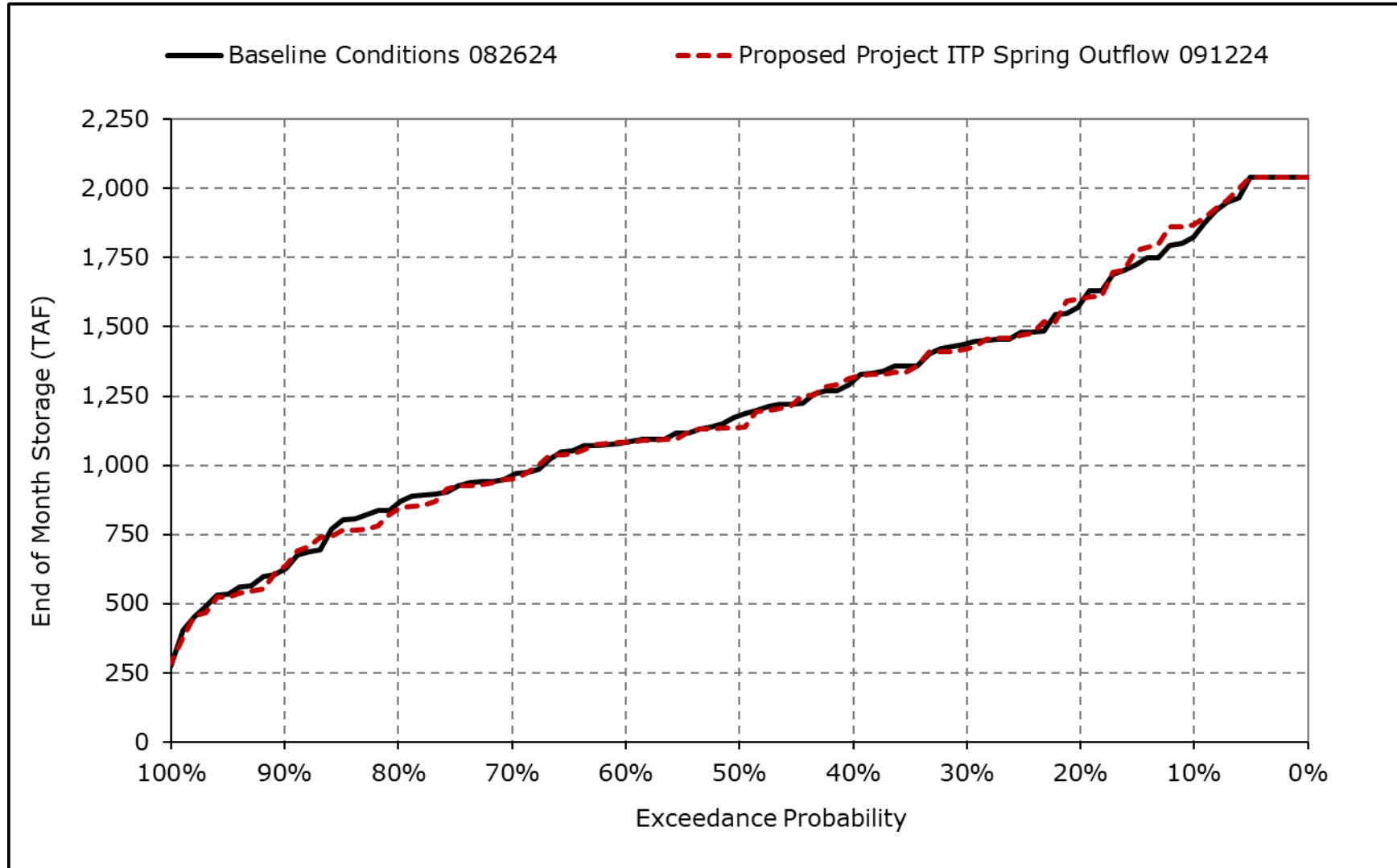
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2c. San Luis Storage (CVP and SWP), December



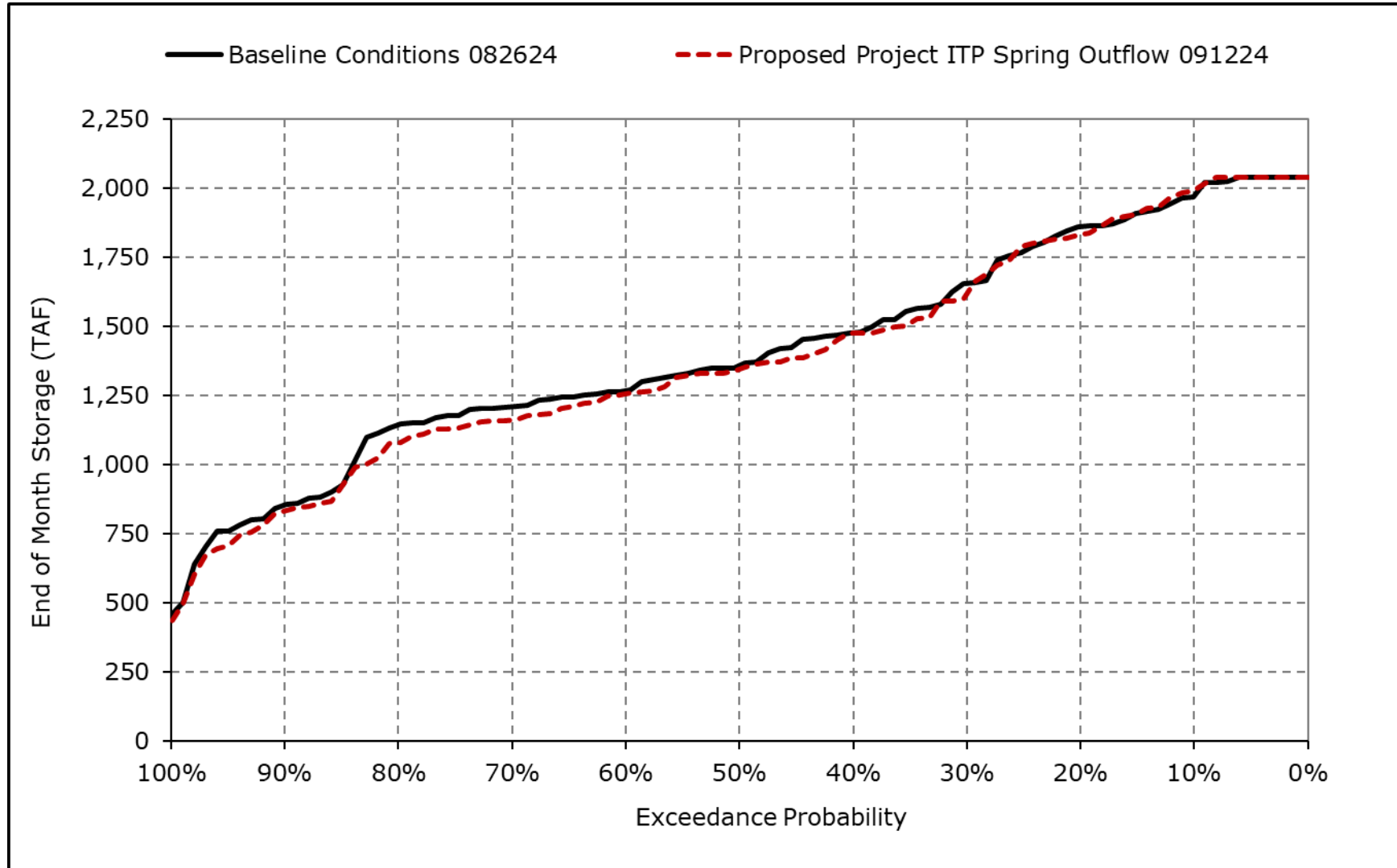
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2d. San Luis Storage (CVP and SWP), January



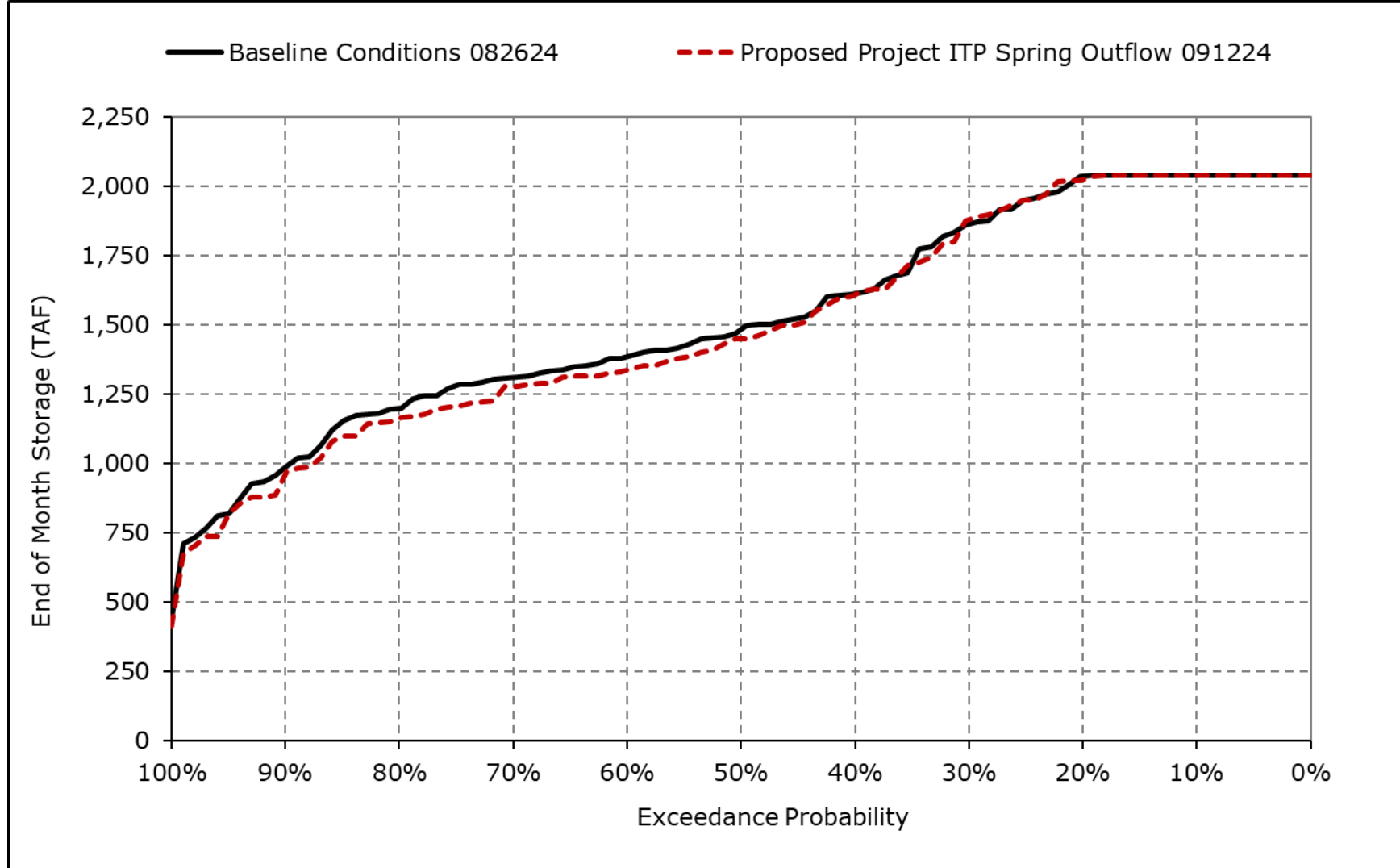
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2e. San Luis Storage (CVP and SWP), February



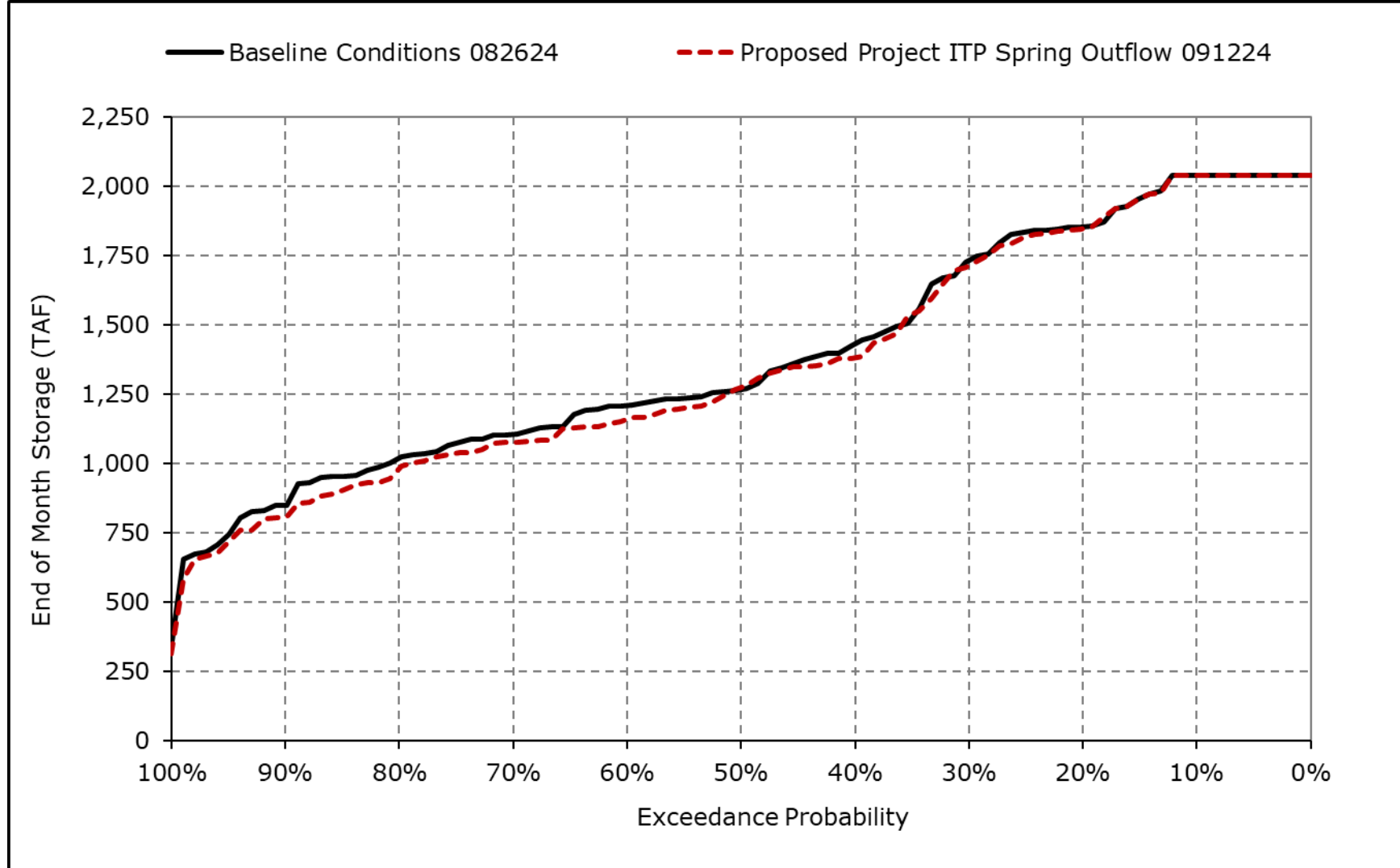
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2f. San Luis Storage (CVP and SWP), March



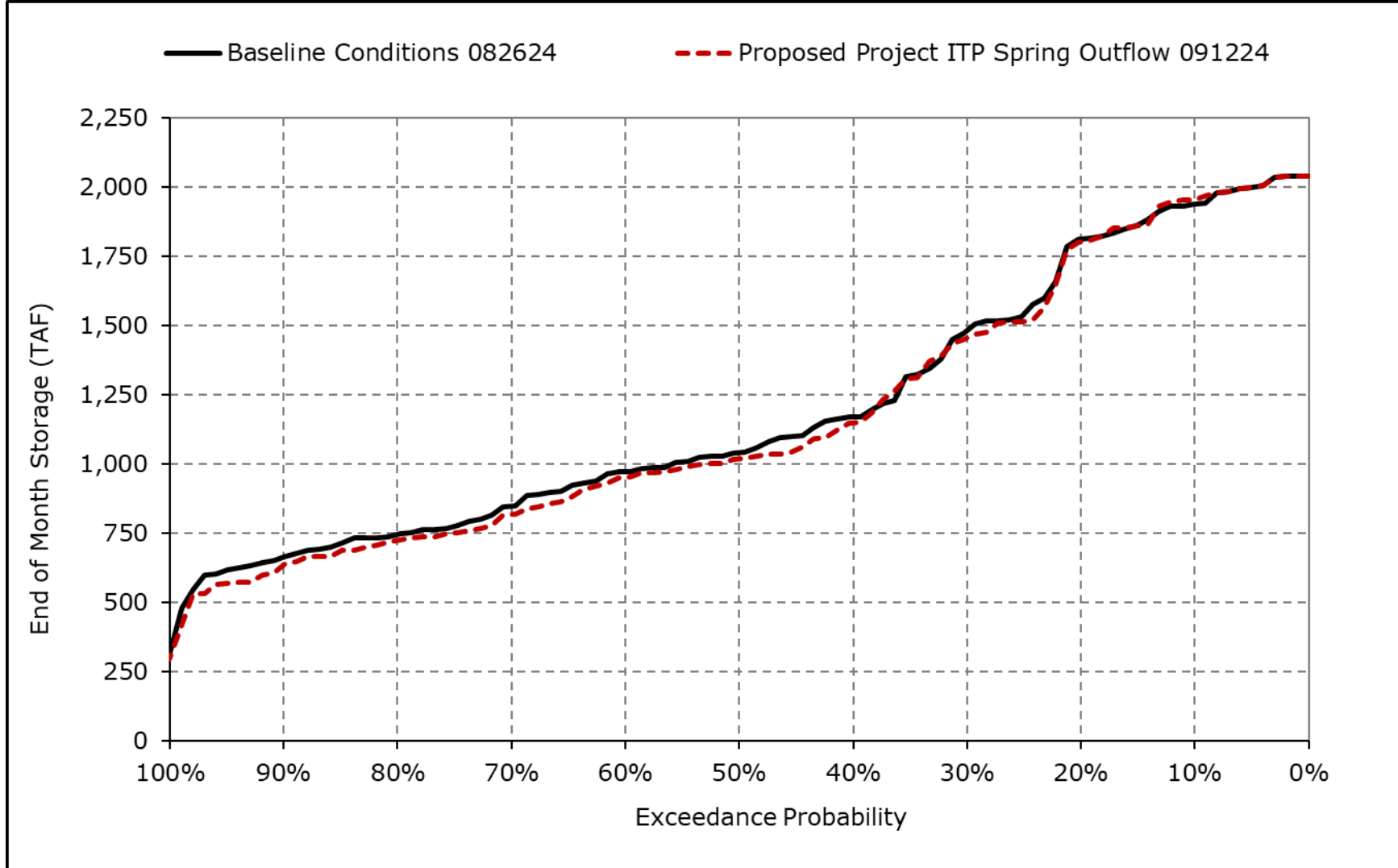
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2g. San Luis Storage (CVP and SWP), April



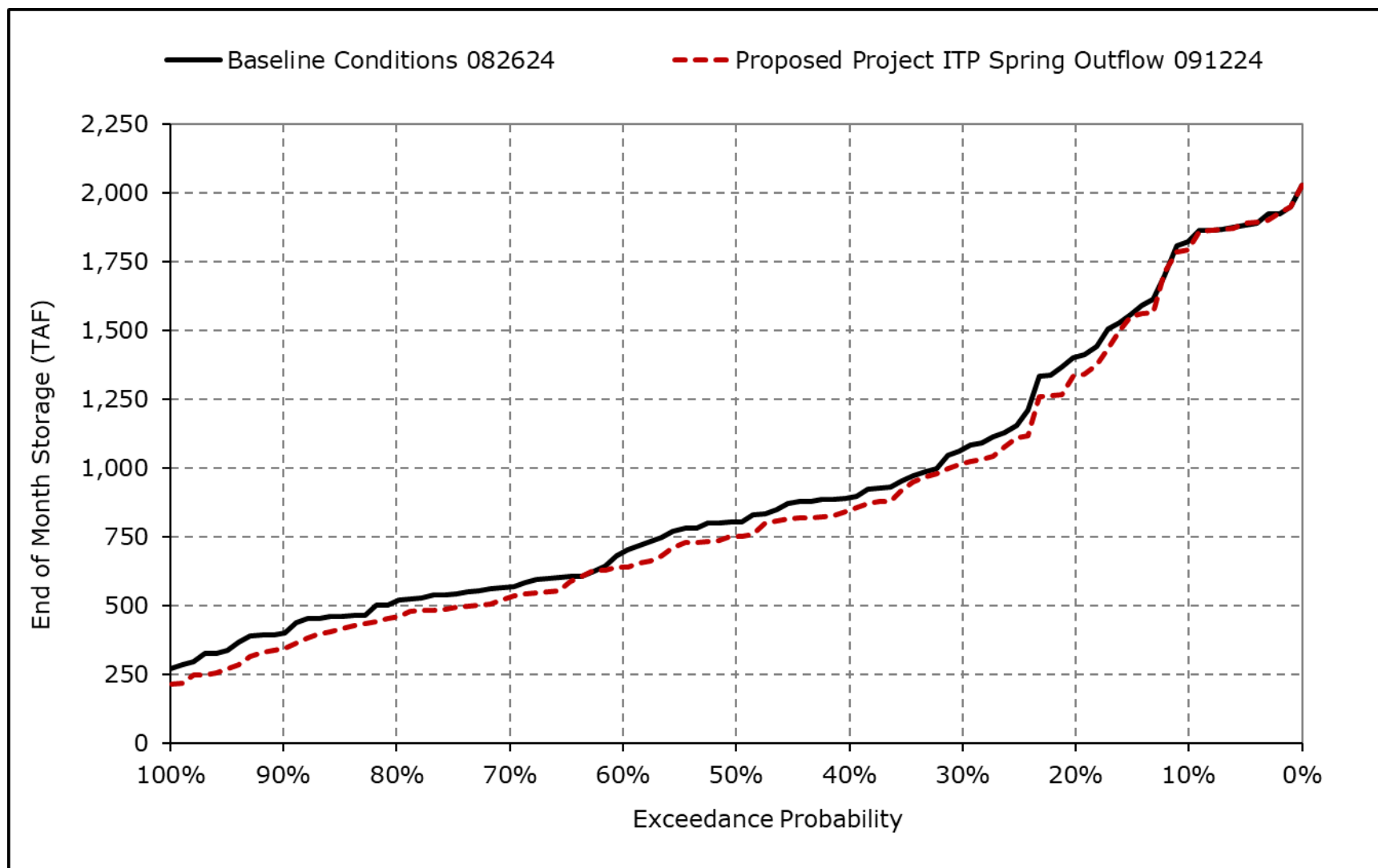
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2h. San Luis Storage (CVP and SWP), May



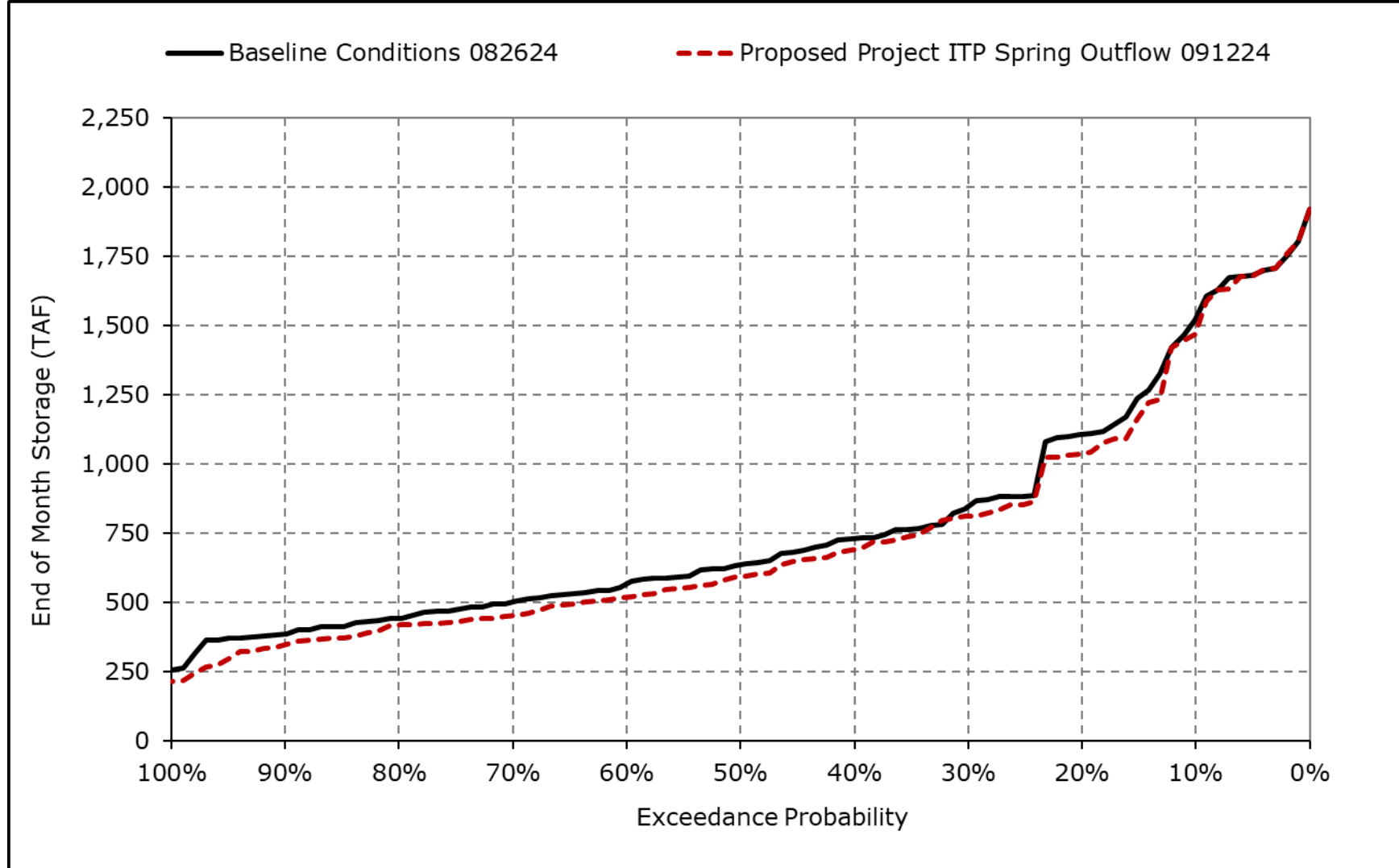
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2i. San Luis Storage (CVP and SWP), June



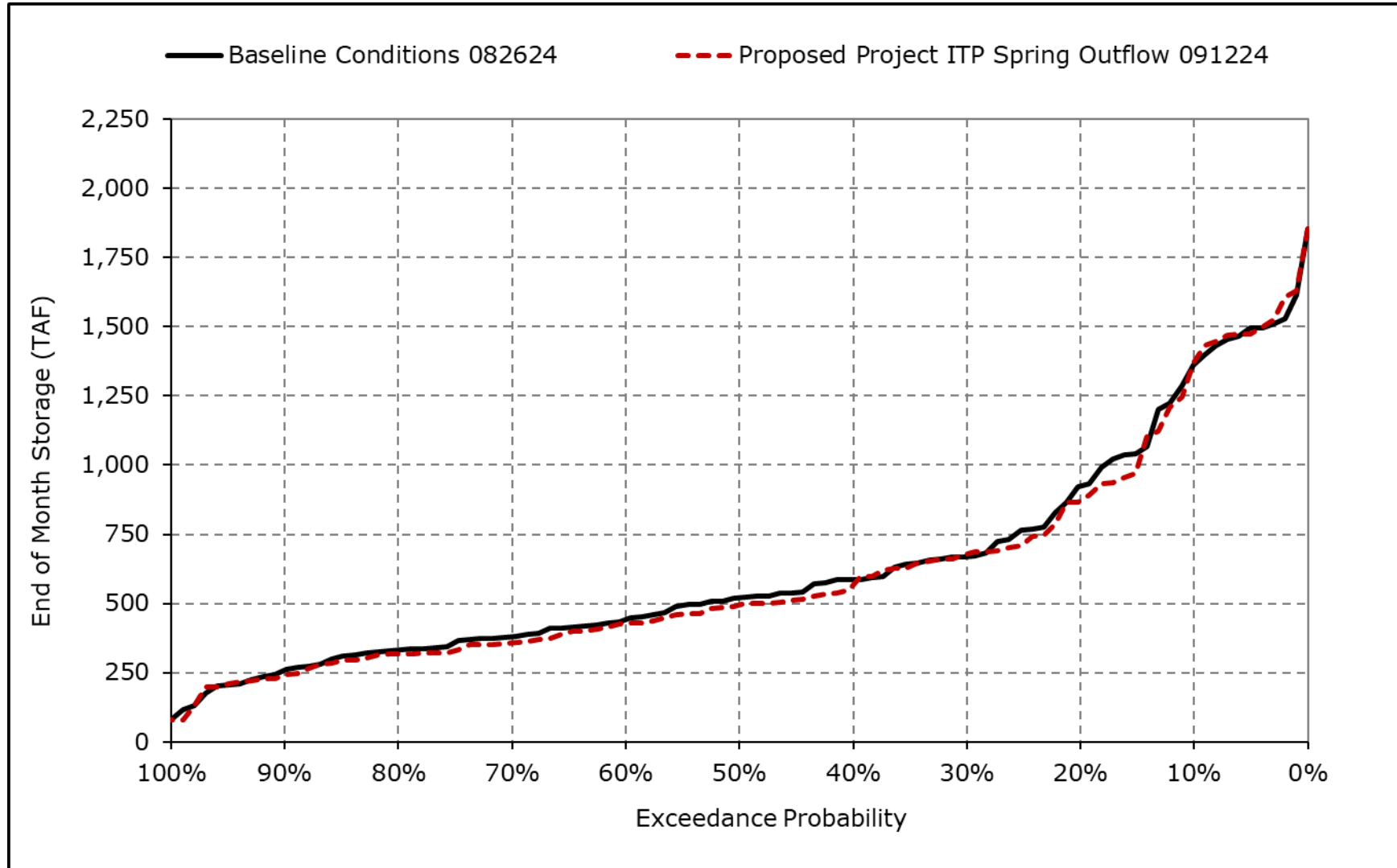
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2j. San Luis Storage (CVP and SWP), July



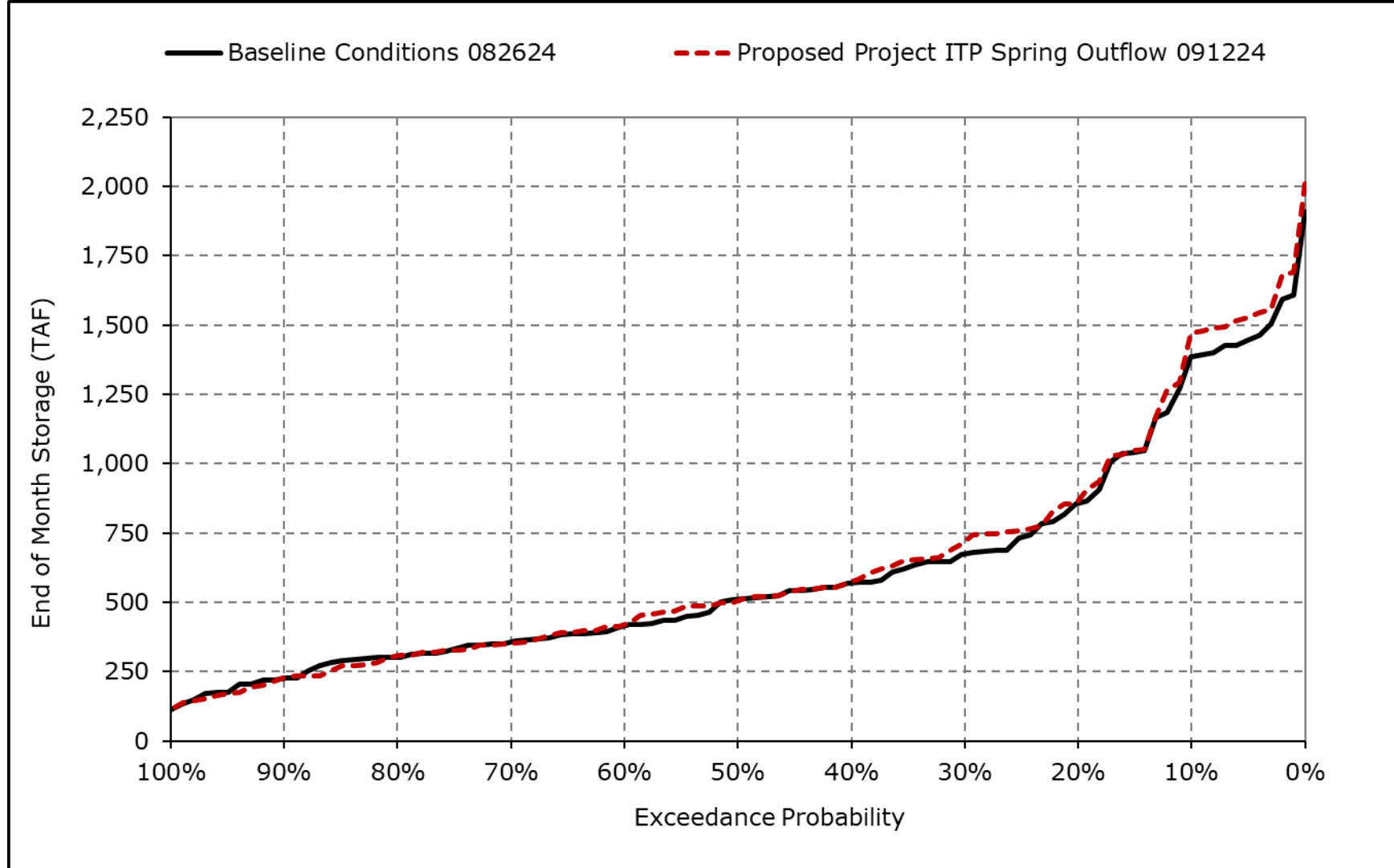
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-2k. San Luis Storage (CVP and SWP), August



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

Figure 4L-2-2I. San Luis Storage (CVP and SWP), September



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

Table 4L-2-3-1a. San Luis Reservoir (SWP and CVP), Baseline Conditions 082624, End of Month Elevation (Feet)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	490	507	523	527	539	544	544	536	527	502	487	489
20% Exceedance	452	471	492	506	530	544	529	525	491	463	445	438
30% Exceedance	424	453	477	494	513	530	519	497	459	437	417	418
40% Exceedance	413	436	461	482	497	509	493	469	442	424	407	405
50% Exceedance	399	421	451	470	487	498	478	457	432	413	400	398
60% Exceedance	390	406	436	461	478	489	472	450	420	405	389	385
70% Exceedance	376	399	422	449	473	482	463	437	405	397	380	377
80% Exceedance	370	389	412	438	467	472	455	426	399	389	373	370
90% Exceedance	354	371	395	412	438	452	437	417	383	381	361	355
Full Simulation Period Average ^a	409	430	452	471	490	500	487	468	441	426	408	405
Wet Water Years (32%)	412	440	466	492	515	526	523	510	484	465	452	449
Above Normal Water Years (9%)	414	438	469	490	510	520	505	484	447	427	418	403
Below Normal Water Years (20%)	423	445	461	476	493	502	478	446	409	403	395	398
Dry Water Years (21%)	409	426	446	460	472	483	464	438	414	403	369	368
Critical Water Years (18%)	386	395	414	430	451	460	452	444	428	407	384	382

Table 4L-2-3-1b. San Luis Reservoir (SWP and CVP), Proposed Project ITP Spring Outflow 091224, End of Month Elevation (Feet)

Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
10% Exceedance	496	514	531	530	540	544	544	537	525	497	488	497
20% Exceedance	450	473	492	508	527	543	529	525	484	456	439	439
30% Exceedance	428	456	476	492	509	531	518	495	454	433	418	423
40% Exceedance	412	434	462	483	497	509	489	467	437	420	405	406
50% Exceedance	401	425	451	466	485	495	479	455	427	408	396	398
60% Exceedance	391	407	440	461	477	485	468	448	414	399	387	386
70% Exceedance	376	399	420	448	468	479	460	434	401	390	377	377
80% Exceedance	368	386	413	436	460	468	451	424	392	386	372	370
90% Exceedance	356	371	391	413	435	449	433	413	375	376	358	356
Full Simulation Period Average ^a	410	431	452	470	487	497	485	466	435	421	406	407
Wet Water Years (32%)	414	442	467	492	515	526	522	509	480	460	450	455
Above Normal Water Years (9%)	415	439	471	490	508	518	503	482	440	421	415	409
Below Normal Water Years (20%)	424	446	462	476	490	500	475	444	403	396	394	397
Dry Water Years (21%)	411	428	446	459	468	479	459	434	406	398	367	365
Critical Water Years (18%)	385	394	413	429	447	456	448	440	425	404	382	380

Table 4L-2-3-1c. San Luis Reservoir (SWP and CVP), Proposed Project ITP Spring Outflow 091224 minus Baseline Conditions 082624, End of Month Elevation (Feet)

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

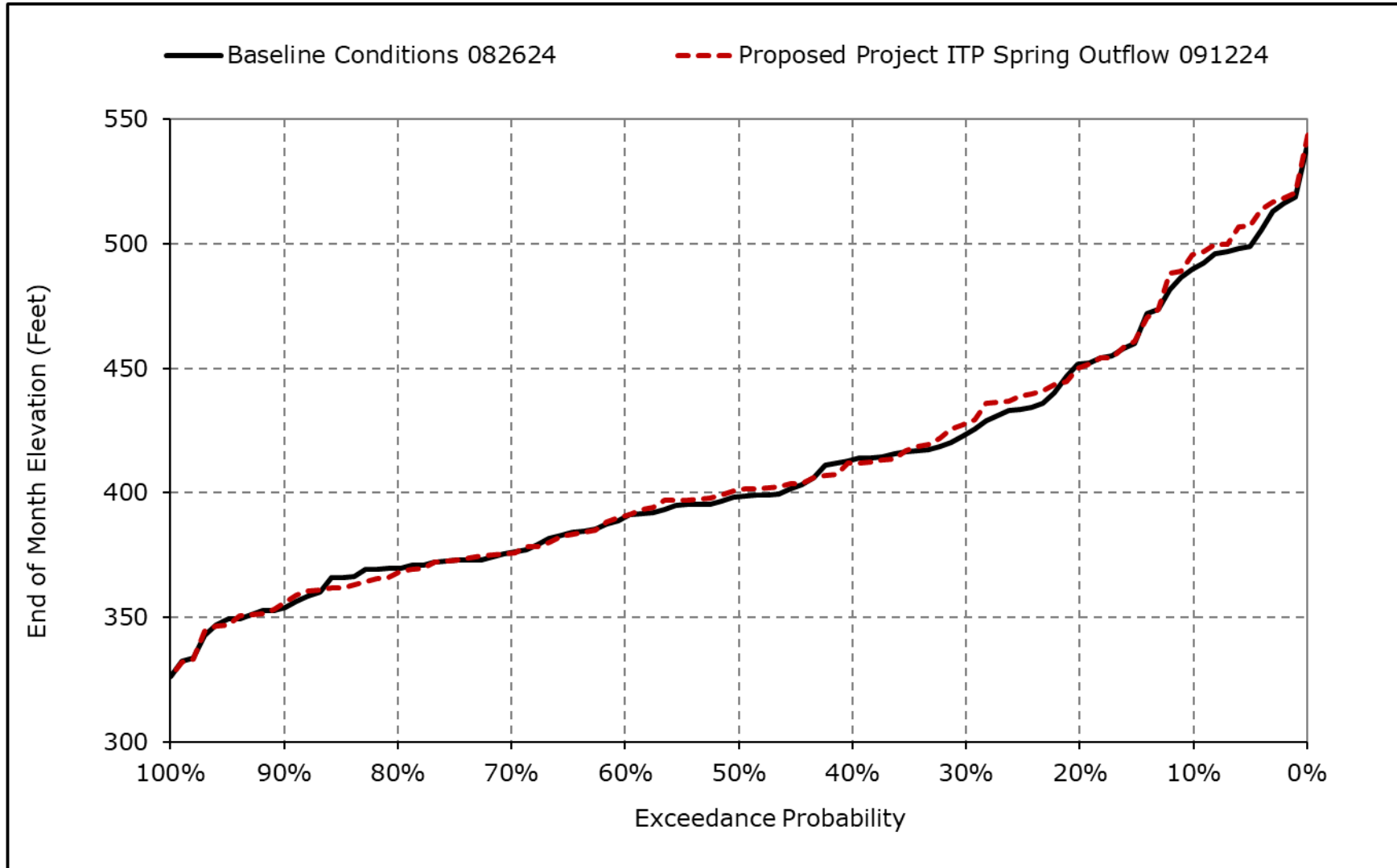
^a Based on the 100-year simulation period.

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

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

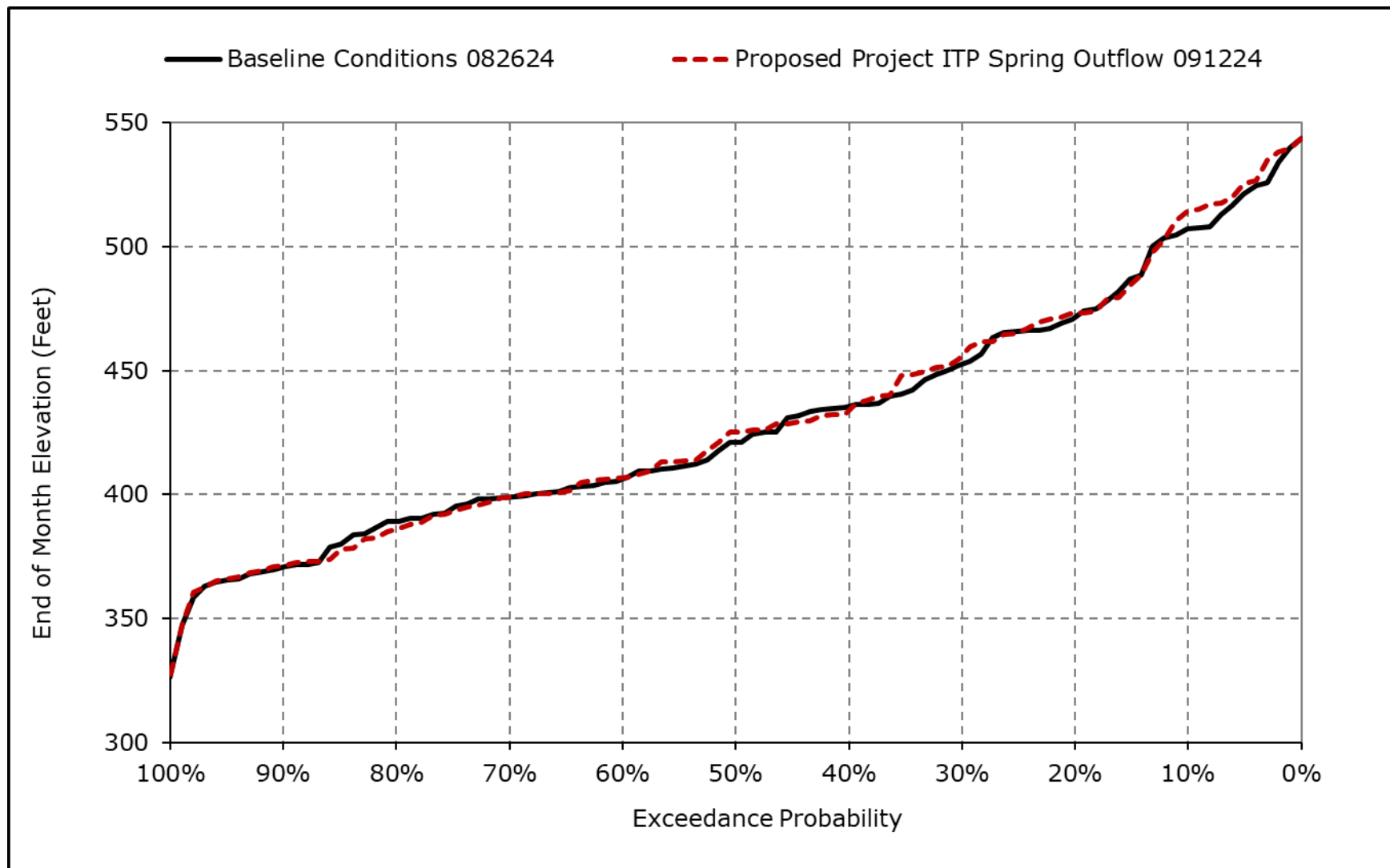
* Water Year Types results are displayed with water year - year type sorting.

Figure 4L-2-3a. San Luis Reservoir (SWP and CVP), October



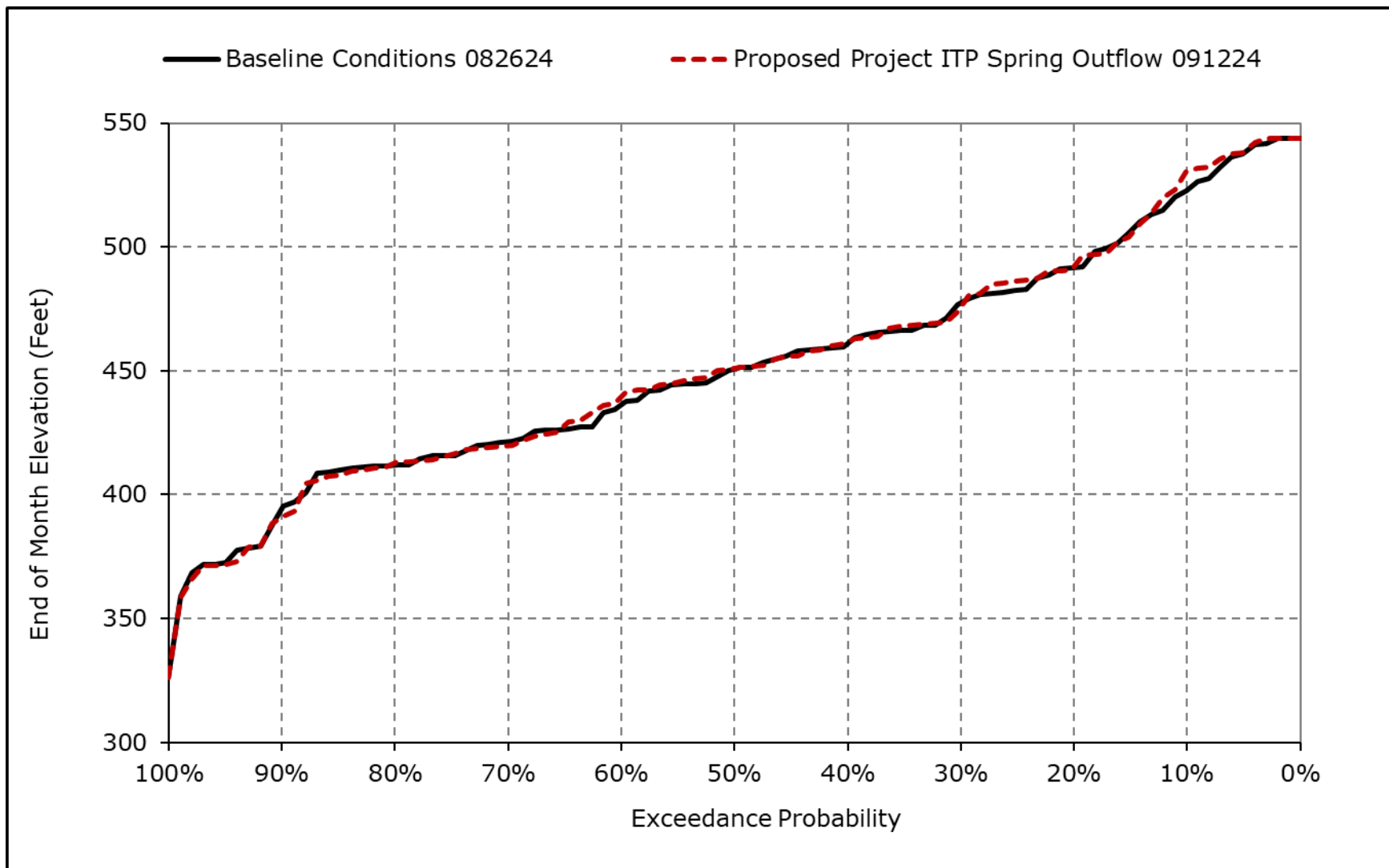
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3b. San Luis Reservoir (SWP and CVP), November



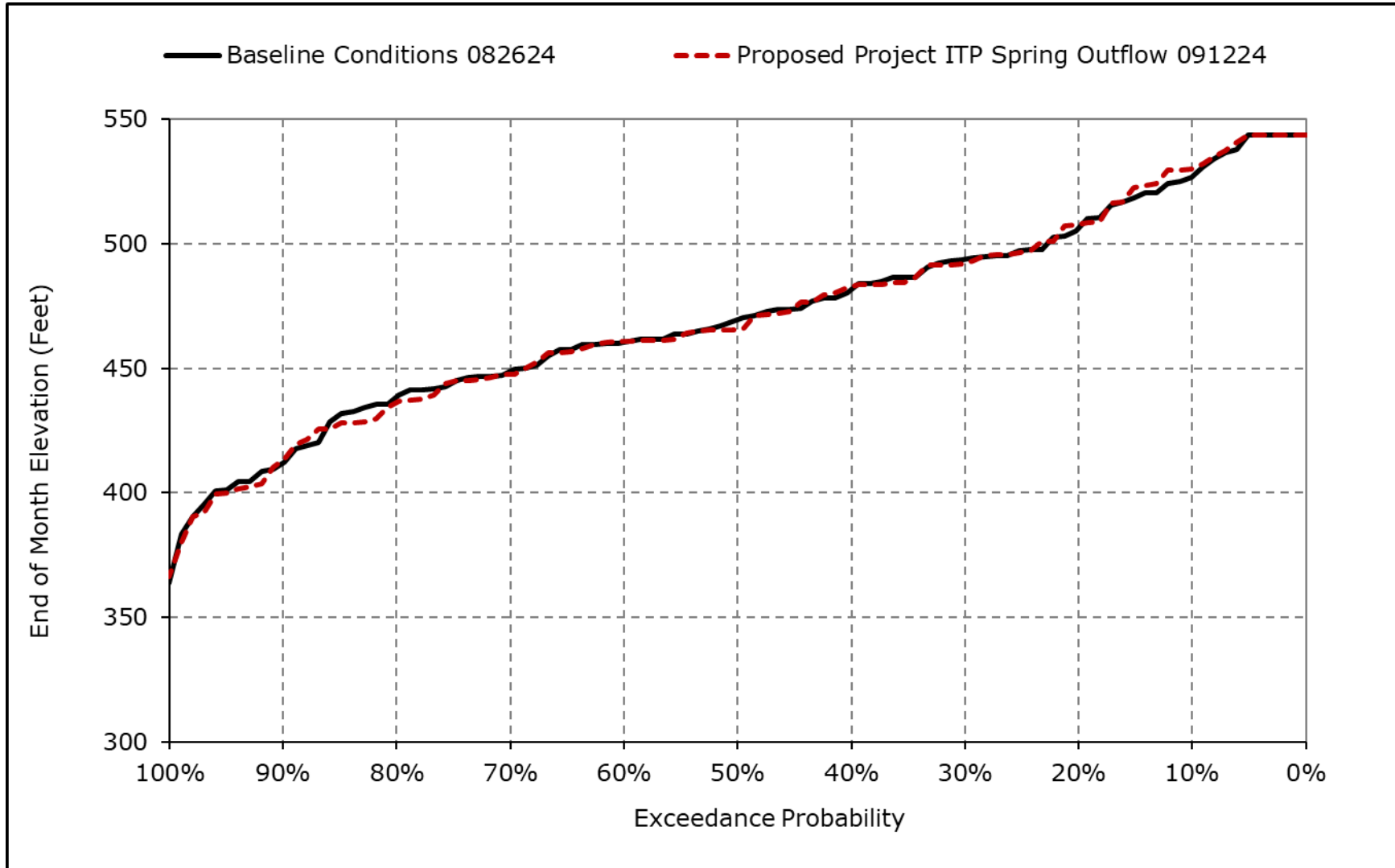
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3c. San Luis Reservoir (SWP and CVP), December



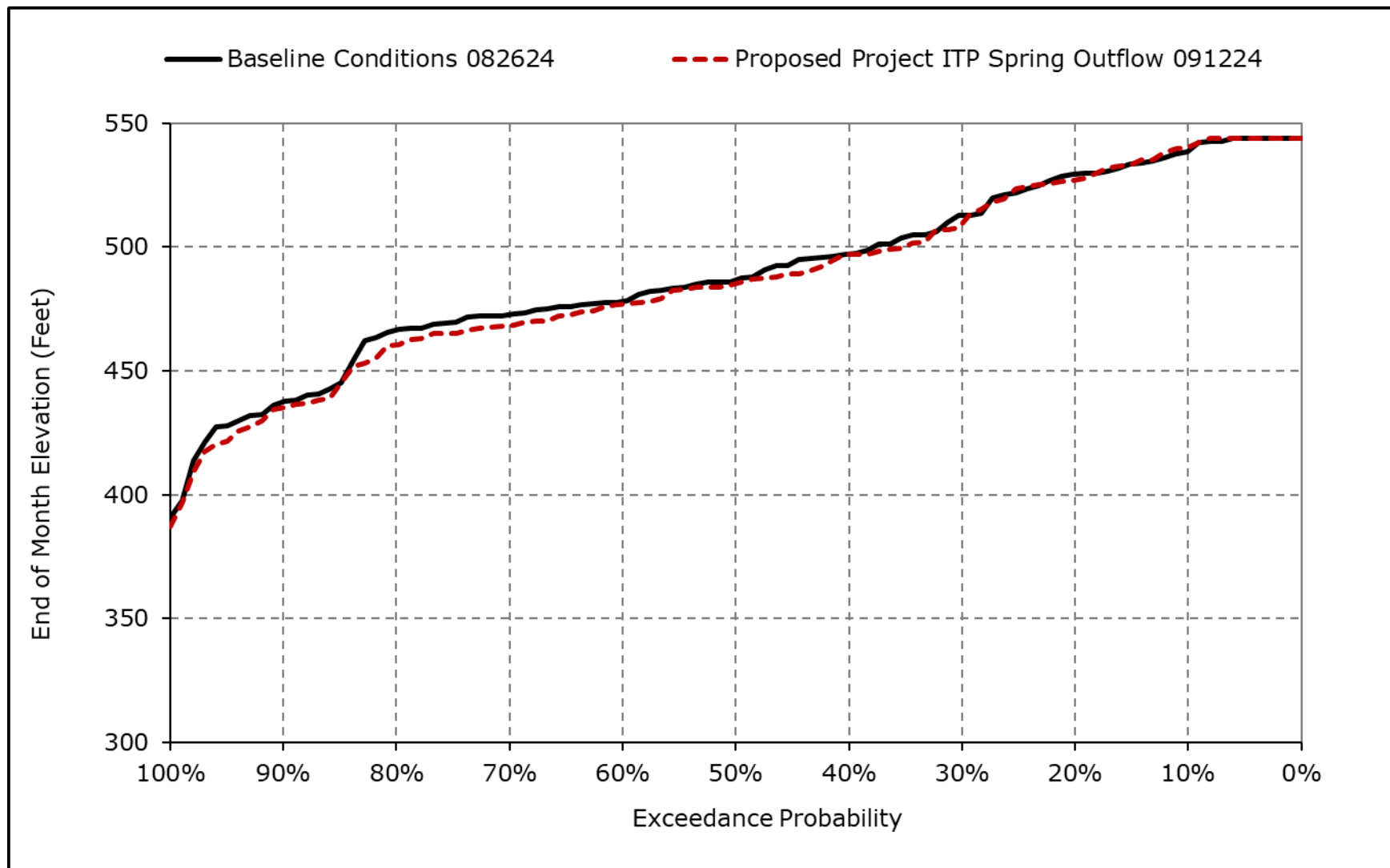
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3d. San Luis Reservoir (SWP and CVP), January



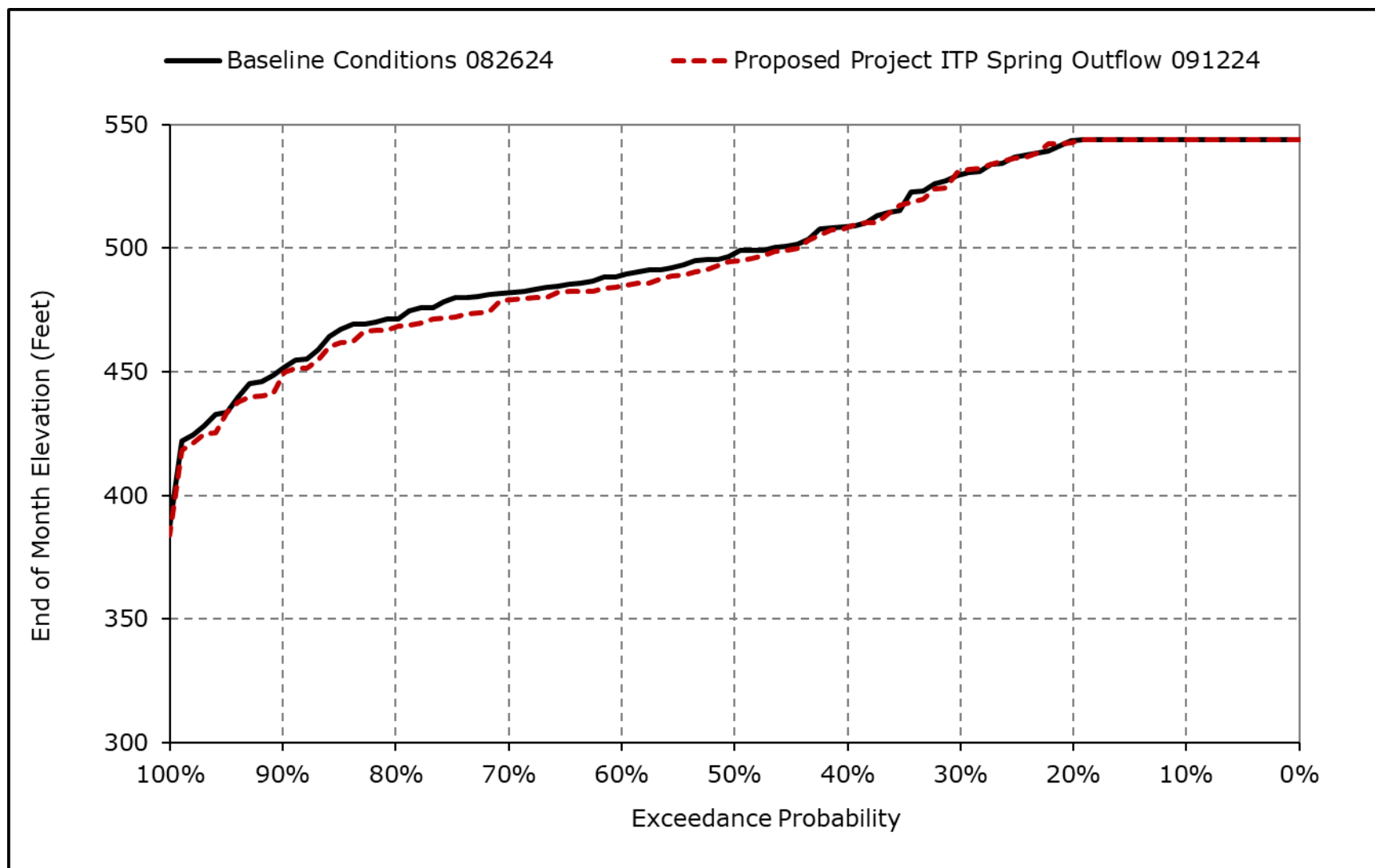
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3e. San Luis Reservoir (SWP and CVP), February



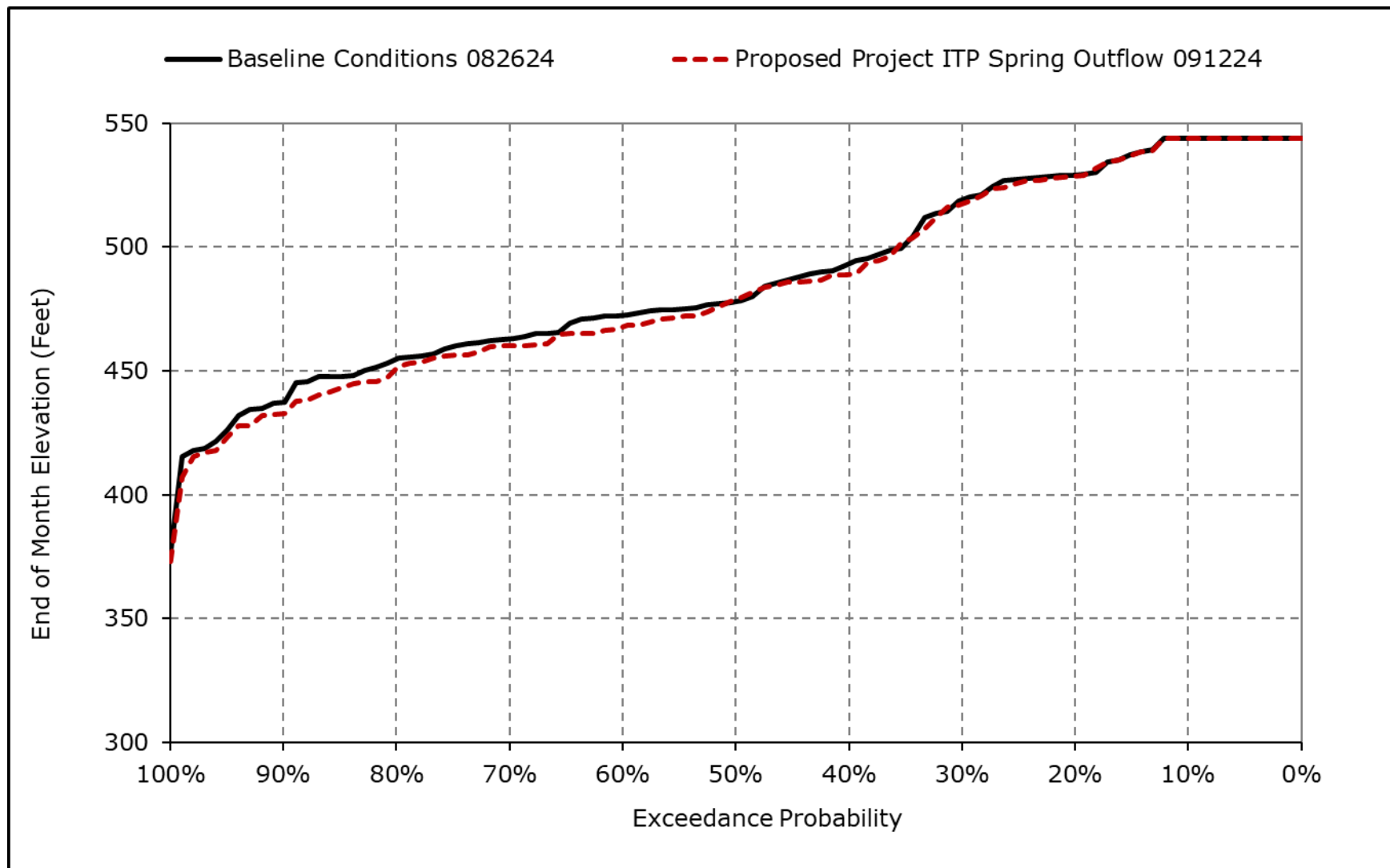
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3f. San Luis Reservoir (SWP and CVP), March



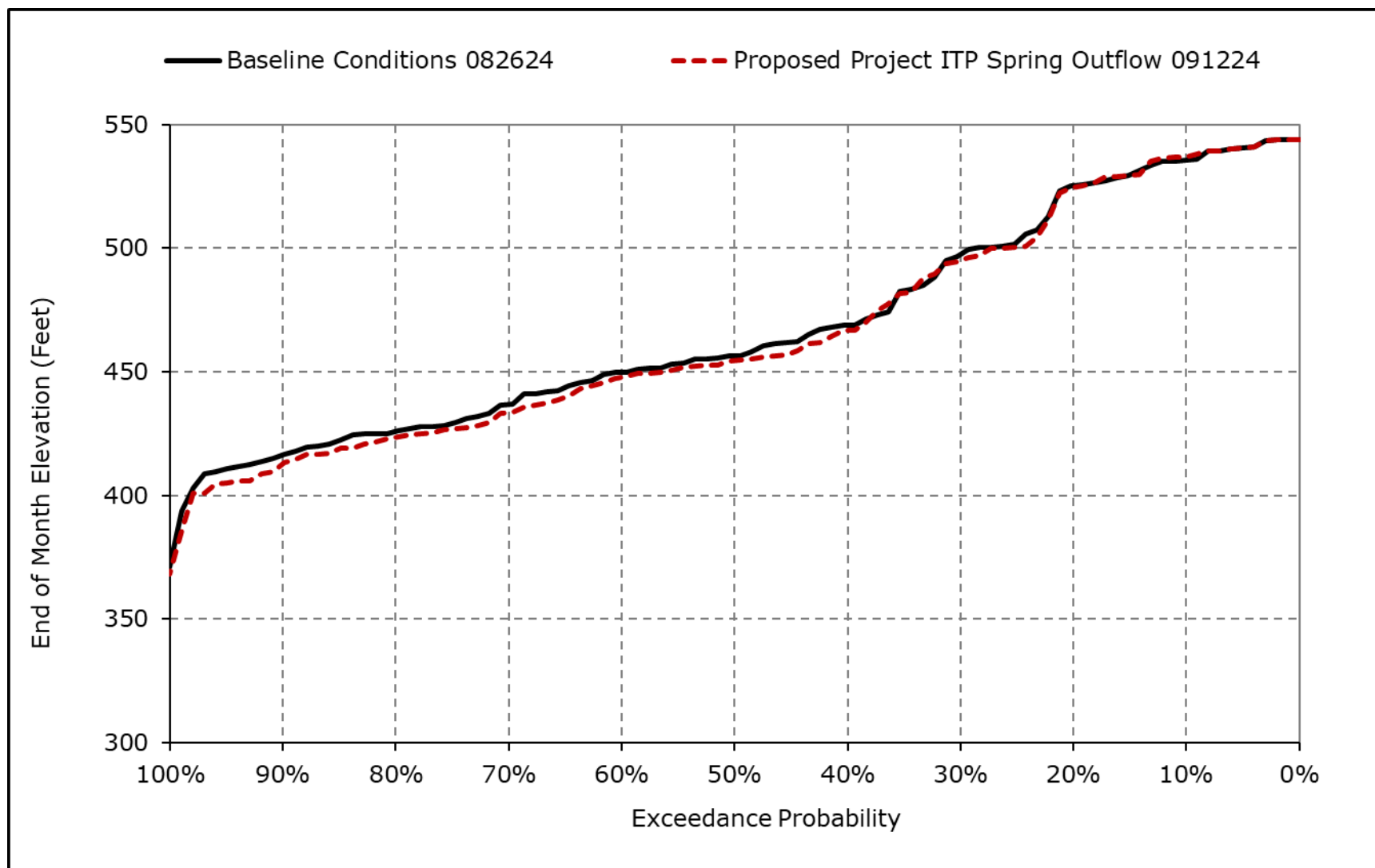
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3g. San Luis Reservoir (SWP and CVP), April



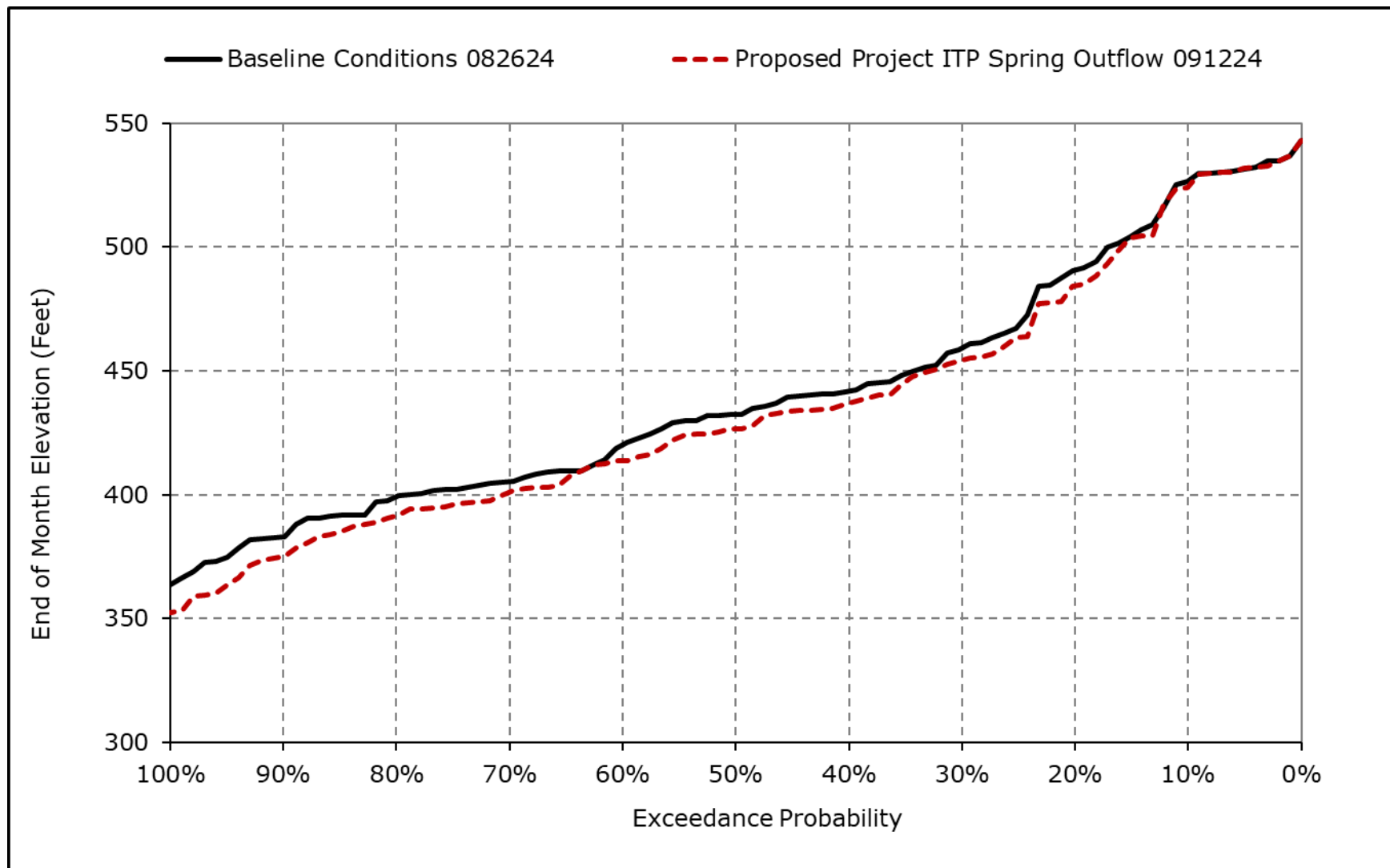
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3h. San Luis Reservoir (SWP and CVP), May



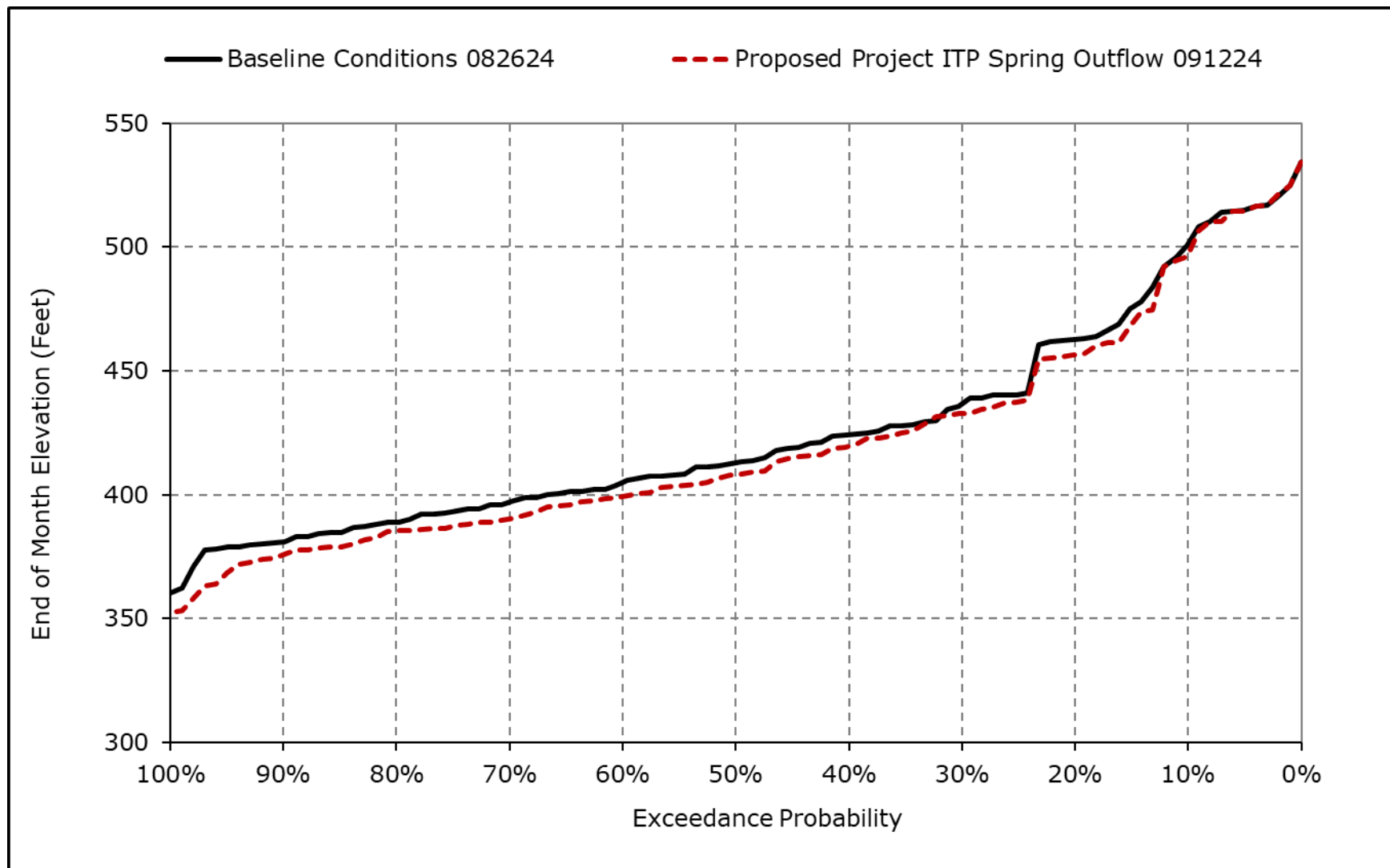
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3i. San Luis Reservoir (SWP and CVP), June



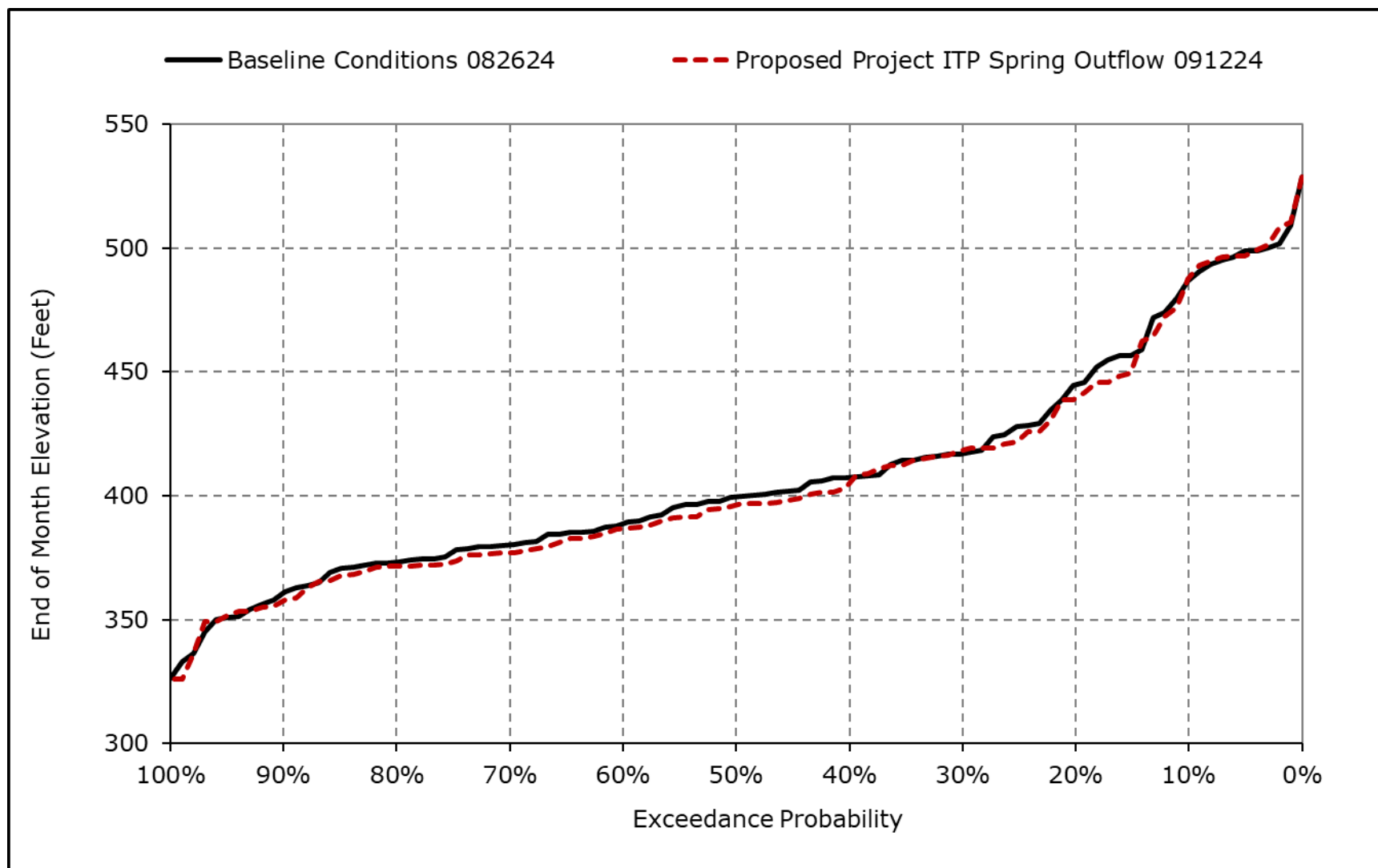
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3j. San Luis Reservoir (SWP and CVP), July



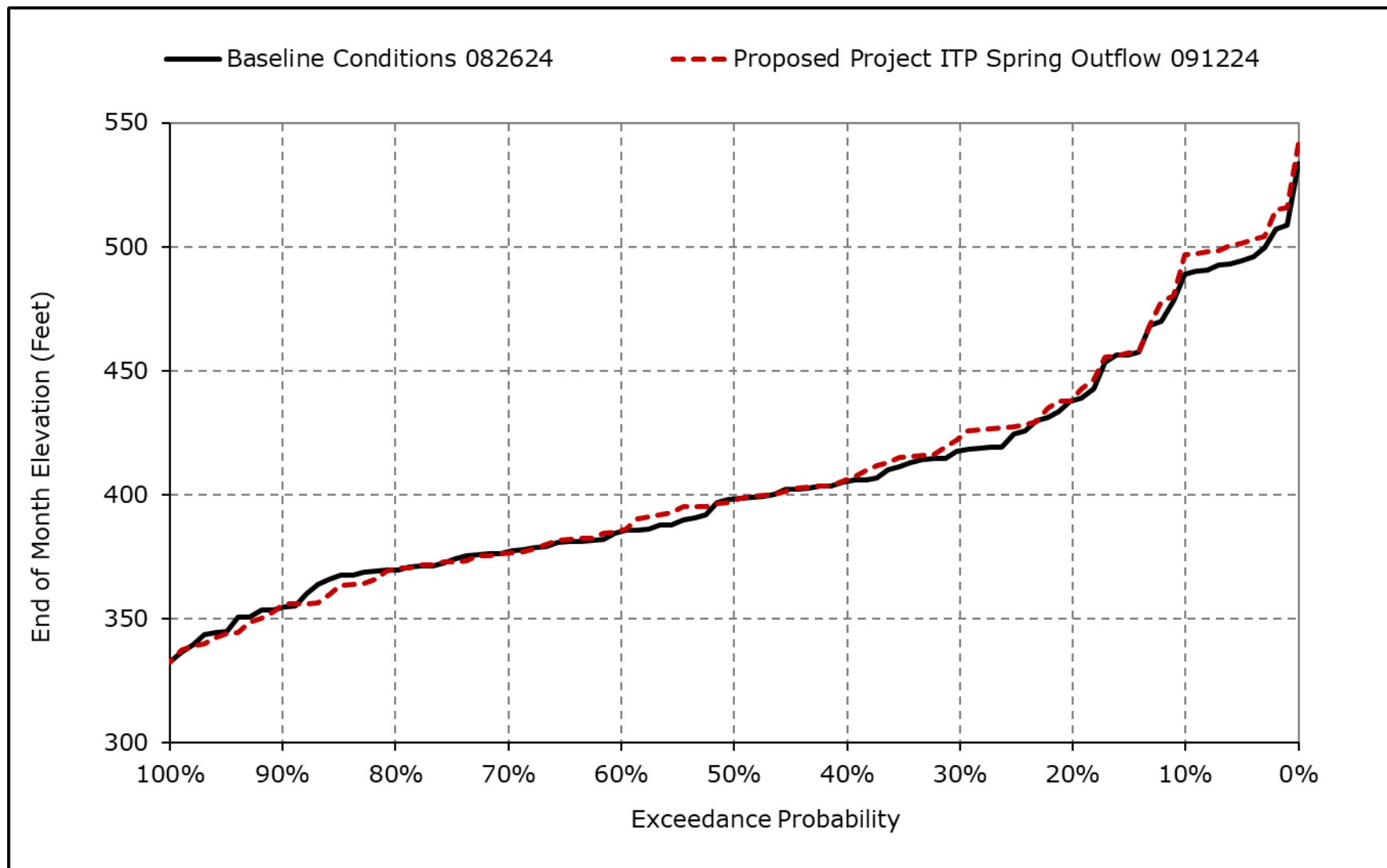
*All scenarios are simulated at current climate condition and 0 cm sea level rise.

Figure 4L-2-3k. San Luis Reservoir (SWP and CVP), August



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

Figure 4L-2-3I. San Luis Reservoir (SWP and CVP), September



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