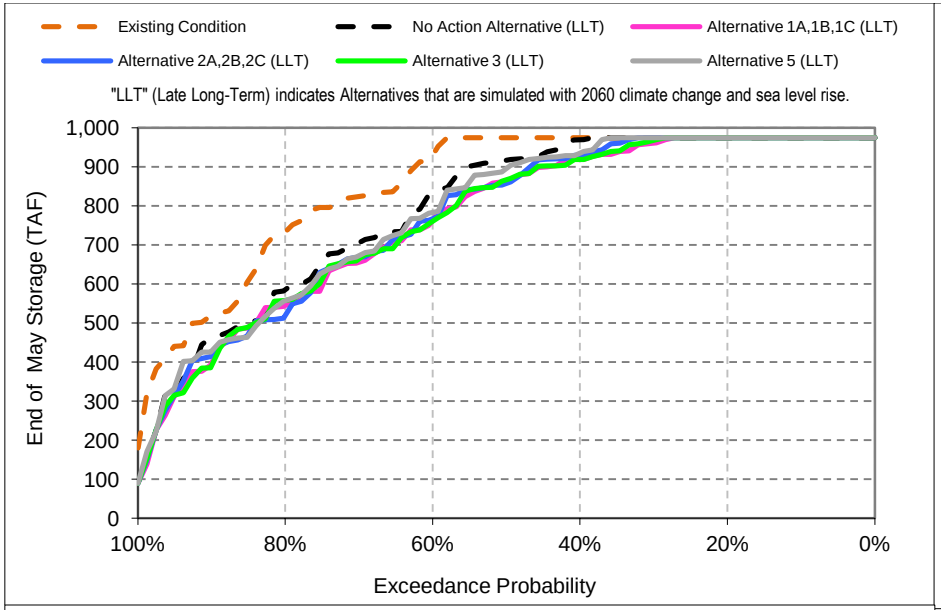
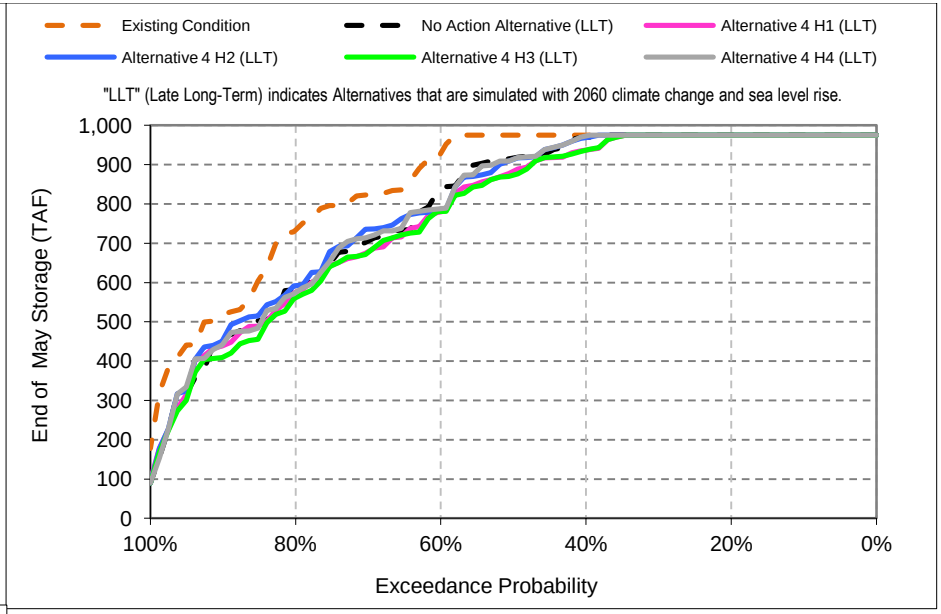
Appendix 5A
Modeling Technical Appendix

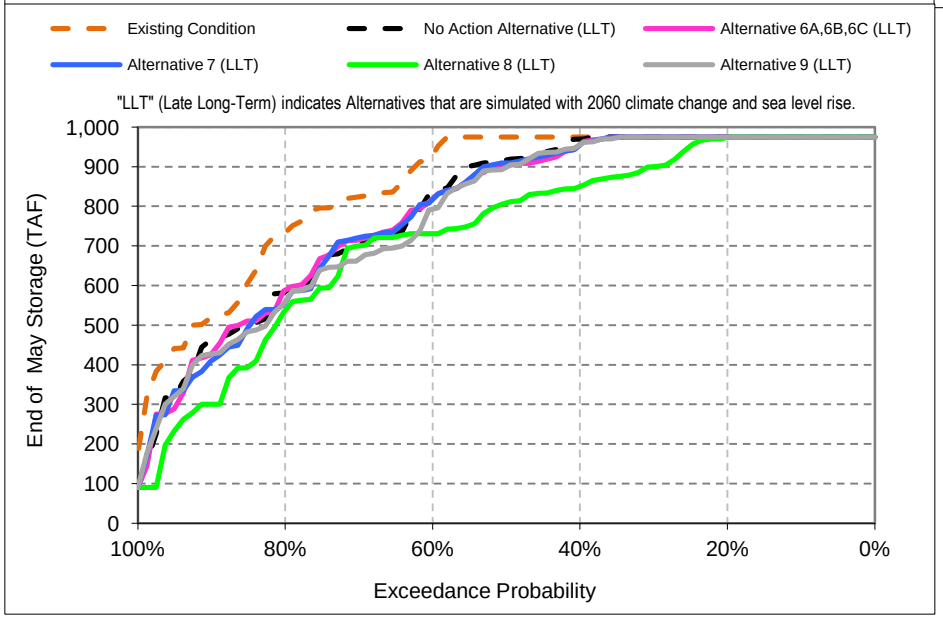
Public Draft – November, 2013

Bay-Delta Conservation Plan EIR/EIS Appendix 5A

Section C: CALSIM II and DSM2 Modeling Results



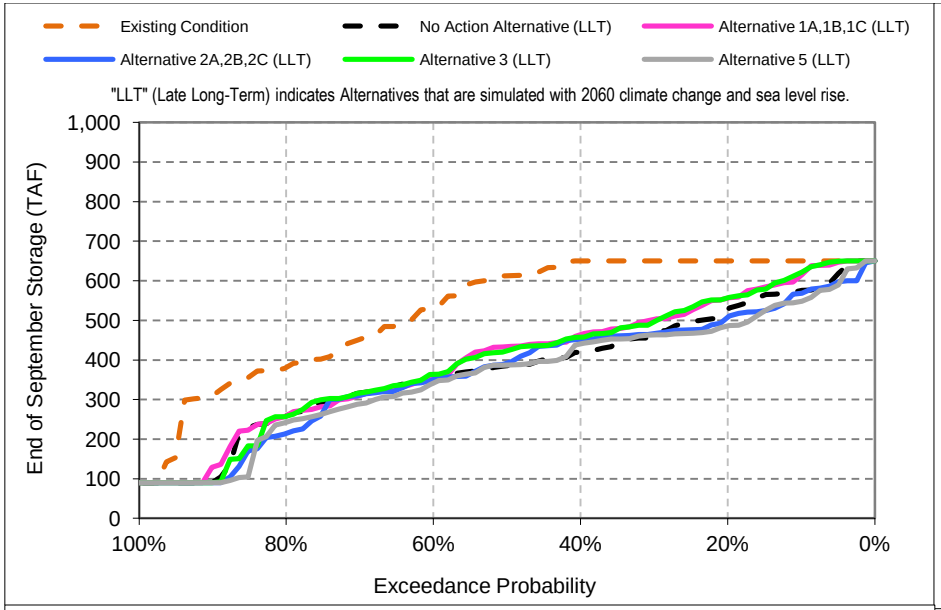


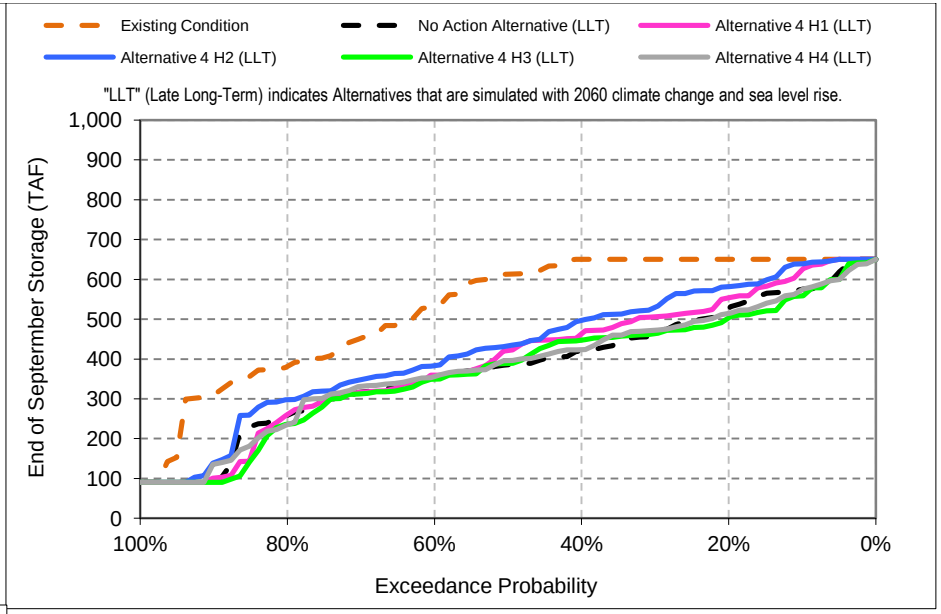


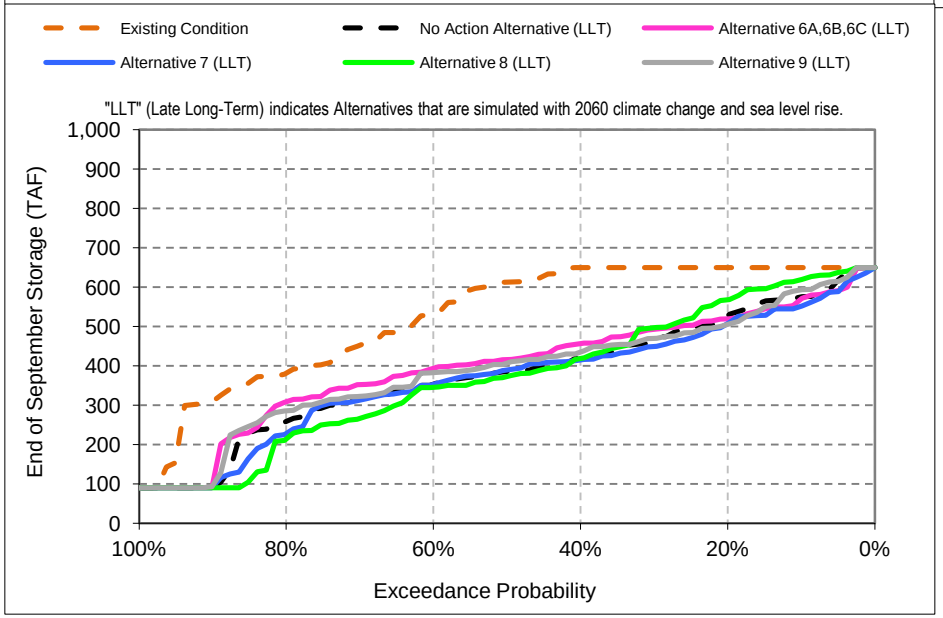
Alternative 4 Scenario Definitions:

H1 - Low Delta Outflow Scenario
H2 - Enhanced Spring Delta Outflow Scenario
H3 - Fall X2 Scenario
H4 - High Delta Outflow Scenario

Figure C-4-1. Folsom Lake, End of May Storage







Alternative 4 Scenario Definitions:

H1 - Low Delta Outflow Scenario
H2 - Enhanced Spring Delta Outflow Scenario
H3 - Fall X2 Scenario
H4 - High Delta Outflow Scenario

Figure C-4-2. Folsom Lake, End of September Storage

Table C-4-1. Folsom Lake, End of Month Storage

Existing Condition

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	652	575	575	575	575	672	800	975	975	950	800	650
20%	642	575	575	575	573	667	800	975	975	891	800	650
30%	632	575	571	570	563	659	800	975	975	807	767	650
40%	603	568	546	560	553	645	800	975	975	781	725	650
50%	583	544	516	521	536	634	800	975	975	751	659	613
60%	480	459	476	481	506	622	800	929	874	667	577	532
70%	411	420	404	431	467	601	755	824	743	554	476	452
80%	361	374	359	385	427	563	682	734	640	469	391	381
90%	301	297	285	318	359	465	498	519	499	376	326	310
Long Term												
Full Simulation Period[a]	505	467	468	479	494	598	727	850	823	684	600	525
Water Year Types[b]												
Wet (32%)	559	520	527	523	502	633	794	966	966	876	770	636
Above Normal (15%)	474	432	445	526	531	642	796	968	952	760	697	623
Below Normal (17%)	511	491	478	515	543	639	790	934	913	710	643	589
Dry (22%)	496	461	469	460	522	618	731	806	741	572	477	441
Critical (15%)	423	370	349	324	340	401	433	448	405	329	270	240

No Action Alternative (LLT)

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	548	494	575	575	575	672	800	975	975	798	718	575
20%	473	424	546	572	570	667	800	975	961	716	620	526
30%	415	399	492	561	562	660	800	975	878	618	547	469
40%	380	376	429	529	555	649	800	970	822	581	491	419
50%	348	351	389	457	518	629	800	917	770	527	428	385
60%	319	330	346	412	474	611	797	835	692	443	396	353
70%	292	299	306	347	417	570	686	706	601	372	332	317
80%	243	259	255	313	360	502	605	585	443	322	285	259
90%	92	115	212	233	330	402	431	463	410	180	90	91
Long Term												
Full Simulation Period[a]	354	341	388	431	469	580	697	791	712	509	439	379
Water Year Types[b]												
Wet (32%)	400	401	500	515	505	635	789	943	902	705	623	485
Above Normal (15%)	341	311	358	489	516	648	795	930	825	547	483	430
Below Normal (17%)	352	338	354	438	522	624	776	891	788	543	451	423
Dry (22%)	339	336	371	386	471	579	665	691	560	376	319	306
Critical (15%)	291	253	245	249	278	345	359	360	324	210	165	159

No Action Alternative (LLT) minus Existing Condition

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-103	-81	0	0	0	0	0	0	0	-152	-82	-75
20%	-169	-151	-29	-3	-3	0	0	0	-14	-175	-180	-124
30%	-218	-176	-78	-9	0	1	0	0	-97	-189	-220	-181
40%	-223	-192	-117	-31	1	4	0	-5	-153	-199	-234	-231
50%	-235	-193	-127	-64	-18	-6	0	-58	-205	-224	-232	-227
60%	-161	-130	-130	-69	-32	-11	-3	-94	-181	-225	-181	-179
70%	-118	-121	-98	-85	-50	-31	-69	-118	-142	-182	-144	-135
80%	-119	-115	-104	-71	-67	-61	-78	-148	-197	-148	-106	-123
90%	-209	-182	-73	-85	-29	-63	-67	-56	-89	-196	-236	-219
Long Term												
Full Simulation Period[a]	-151	-126	-79	-48	-25	-18	-29	-58	-112	-174	-161	-146
Water Year Types[b]												
Wet (32%)	-158	-119	-27	-8	3	2	-5	-23	-64	-172	-147	-151
Above Normal (15%)	-133	-122	-87	-37	-14	6	-1	-38	-126	-213	-215	-192
Below Normal (17%)	-159	-153	-124	-77	-21	-15	-14	-43	-125	-167	-192	-166
Dry (22%)	-157	-125	-98	-74	-51	-39	-66	-115	-181	-196	-158	-136
Critical (15%)	-132	-117	-104	-75	-62	-57	-74	-89	-81	-119	-105	-80

a Based on the 82-year simulation period

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

Table C-4-5. Folsom Lake, End of Month Storage

Existing Condition

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	652	575	575	575	575	672	800	975	975	950	800	650
20%	642	575	575	575	573	667	800	975	975	891	800	650
30%	632	575	571	570	563	659	800	975	975	807	767	650
40%	603	568	546	560	553	645	800	975	975	781	725	650
50%	583	544	516	521	536	634	800	975	975	751	659	613
60%	480	459	476	481	506	622	800	929	874	667	577	532
70%	411	420	404	431	467	601	755	824	743	554	476	452
80%	361	374	359	385	427	563	682	734	640	469	391	381
90%	301	297	285	318	359	465	498	519	499	376	326	310
Long Term												
Full Simulation Period[a]	505	467	468	479	494	598	727	850	823	684	600	525
Water Year Types[b]												
Wet (32%)	559	520	527	523	502	633	794	966	966	876	770	636
Above Normal (15%)	474	432	445	526	531	642	796	968	952	760	697	623
Below Normal (17%)	511	491	478	515	543	639	790	934	913	710	643	589
Dry (22%)	496	461	469	460	522	618	731	806	741	572	477	441
Critical (15%)	423	370	349	324	340	401	433	448	405	329	270	240

Alternative 4 H1 (LLT)

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	600	559	575	575	575	670	800	975	975	744	674	624
20%	522	517	568	574	571	667	800	975	885	657	567	554
30%	449	446	510	565	563	660	800	975	837	583	529	506
40%	398	401	476	541	556	649	800	937	752	549	478	463
50%	349	364	418	463	524	634	800	883	694	472	430	421
60%	320	319	354	425	445	617	766	780	614	410	378	360
70%	289	302	307	382	421	577	687	679	526	359	321	317
80%	249	264	268	313	375	505	596	575	421	301	276	261
90%	99	112	195	215	306	423	434	439	367	165	91	101
Long Term												
Full Simulation Period[a]	367	361	398	437	471	583	698	780	662	476	417	394
Water Year Types[b]												
Wet (32%)	421	429	510	519	505	636	789	939	851	663	581	541
Above Normal (15%)	353	339	385	507	525	648	794	913	774	510	445	424
Below Normal (17%)	377	369	368	450	530	629	778	864	692	476	416	401
Dry (22%)	329	330	360	383	464	579	663	672	531	367	325	311
Critical (15%)	308	272	259	259	284	354	366	364	297	204	175	163

Alternative 4 H1 (LLT) minus Existing Condition

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-52	-16	0	0	0	-2	0	0	0	-206	-126	-26
20%	-120	-58	-7	0	-1	0	0	0	-90	-233	-233	-96
30%	-183	-129	-60	-5	0	1	0	0	-138	-224	-238	-144
40%	-206	-167	-70	-19	3	4	0	-38	-223	-232	-247	-187
50%	-234	-180	-99	-58	-12	0	0	-92	-281	-279	-229	-191
60%	-160	-140	-122	-56	-61	-5	-34	-149	-260	-258	-198	-172
70%	-122	-118	-97	-49	-45	-24	-68	-145	-218	-195	-155	-135
80%	-112	-110	-91	-72	-51	-57	-87	-159	-218	-168	-114	-121
90%	-202	-185	-90	-103	-53	-41	-64	-80	-132	-211	-235	-209
Long Term												
Full Simulation Period[a]	-138	-107	-70	-42	-23	-15	-28	-70	-162	-207	-183	-131
Water Year Types[b]												
Wet (32%)	-138	-91	-17	-4	3	3	-5	-27	-115	-214	-189	-95
Above Normal (15%)	-121	-94	-60	-19	-6	6	-2	-55	-178	-250	-252	-198
Below Normal (17%)	-134	-121	-110	-65	-13	-10	-11	-70	-221	-235	-227	-187
Dry (22%)	-167	-131	-108	-78	-58	-39	-68	-134	-210	-204	-152	-131
Critical (15%)	-116	-99	-90	-65	-55	-47	-67	-84	-108	-124	-96	-76

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H1" represents the low delta outflow scenario of Alternative 4.

Table C-4-6. Folsom Lake, End of Month Storage

Existing Condition

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	652	575	575	575	575	672	800	975	975	950	800	650
20%	642	575	575	575	573	667	800	975	975	891	800	650
30%	632	575	571	570	563	659	800	975	975	807	767	650
40%	603	568	546	560	553	645	800	975	975	781	725	650
50%	583	544	516	521	536	634	800	975	975	751	659	613
60%	480	459	476	481	506	622	800	929	874	667	577	532
70%	411	420	404	431	467	601	755	824	743	554	476	452
80%	361	374	359	385	427	563	682	734	640	469	391	381
90%	301	297	285	318	359	465	498	519	499	376	326	310
Long Term												
Full Simulation Period[a]	505	467	468	479	494	598	727	850	823	684	600	525
Water Year Types[b]												
Wet (32%)	559	520	527	523	502	633	794	966	966	876	770	636
Above Normal (15%)	474	432	445	526	531	642	796	968	952	760	697	623
Below Normal (17%)	511	491	478	515	543	639	790	934	913	710	643	589
Dry (22%)	496	461	469	460	522	618	731	806	741	572	477	441
Critical (15%)	423	370	349	324	340	401	433	448	405	329	270	240

Alternative 4 H2 (LLT)

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	600	559	575	575	575	672	800	975	975	780	668	639
20%	538	518	574	572	575	667	800	975	971	696	600	581
30%	502	489	520	561	563	662	800	975	871	649	546	530
40%	428	417	488	541	559	655	800	969	808	592	520	497
50%	394	390	437	488	535	636	800	913	736	528	460	433
60%	345	338	385	446	470	621	796	783	704	472	412	383
70%	314	325	308	390	428	591	691	736	604	401	369	348
80%	285	289	271	319	392	526	636	592	473	359	315	298
90%	114	113	231	254	327	445	452	455	414	220	158	139
Long Term												
Full Simulation Period[a]	394	380	411	447	478	589	705	795	712	518	449	422
Water Year Types[b]												
Wet (32%)	448	442	508	519	505	635	789	943	889	700	611	568
Above Normal (15%)	370	350	392	507	524	648	795	921	830	569	498	479
Below Normal (17%)	404	393	392	468	537	636	786	899	793	558	477	454
Dry (22%)	368	363	390	404	481	591	677	694	569	393	345	326
Critical (15%)	327	290	275	273	299	369	383	382	328	210	170	157

Alternative 4 H2 (LLT) minus Existing Condition

Statistic	End of Month Storage (TAF)											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-52	-16	0	0	0	0	0	0	0	-170	-132	-11
20%	-104	-57	-1	-3	2	0	0	0	-4	-194	-200	-69
30%	-130	-86	-51	-9	0	3	0	0	-104	-157	-222	-120
40%	-175	-151	-58	-19	6	10	0	-6	-167	-189	-205	-153
50%	-189	-154	-79	-33	-1	2	0	-62	-239	-223	-199	-180
60%	-135	-121	-91	-35	-36	-1	-4	-146	-170	-196	-165	-149
70%	-97	-95	-96	-41	-39	-11	-64	-88	-139	-153	-107	-104
80%	-76	-85	-88	-65	-35	-37	-47	-142	-167	-110	-76	-83
90%	-187	-183	-55	-64	-32	-19	-46	-64	-85	-156	-168	-171
Long Term												
Full Simulation Period[a]	-111	-87	-56	-32	-16	-9	-21	-55	-112	-166	-152	-103
Water Year Types[b]												
Wet (32%)	-111	-78	-19	-4	3	2	-5	-24	-77	-176	-159	-68
Above Normal (15%)	-104	-83	-53	-19	-7	6	-1	-47	-122	-190	-199	-144
Below Normal (17%)	-107	-98	-85	-47	-6	-3	-3	-34	-120	-152	-166	-134
Dry (22%)	-128	-98	-78	-56	-41	-27	-54	-112	-172	-179	-132	-115
Critical (15%)	-96	-80	-74	-51	-41	-32	-50	-66	-77	-118	-100	-82

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H2" represents the enchanced spring delta outflow scenario of Alternative 4.

Table C-4-7. Folsom Lake, End of Month Storage

Existing Condition

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	652	575	575	575	575	672	800	975	975	950	800	650
20%	642	575	575	575	573	667	800	975	975	891	800	650
30%	632	575	571	570	563	659	800	975	975	807	767	650
40%	603	568	546	560	553	645	800	975	975	781	725	650
50%	583	544	516	521	536	634	800	975	975	751	659	613
60%	480	459	476	481	506	622	800	929	874	667	577	532
70%	411	420	404	431	467	601	755	824	743	554	476	452
80%	361	374	359	385	427	563	682	734	640	469	391	381
90%	301	297	285	318	359	465	498	519	499	376	326	310
Long Term												
Full Simulation Period[a]	505	467	468	479	494	598	727	850	823	684	600	525
Water Year Types[b]												
Wet (32%)	559	520	527	523	502	633	794	966	966	876	770	636
Above Normal (15%)	474	432	445	526	531	642	796	968	952	760	697	623
Below Normal (17%)	511	491	478	515	543	639	790	934	913	710	643	589
Dry (22%)	496	461	469	460	522	618	731	806	741	572	477	441
Critical (15%)	423	370	349	324	340	401	433	448	405	329	270	240

Alternative 4 H3 (LLT)

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	555	512	575	575	575	670	800	975	975	764	677	558
20%	444	431	549	573	574	667	800	975	886	678	584	503
30%	422	400	500	563	563	659	800	975	839	581	520	464
40%	377	380	430	541	556	649	800	937	753	542	474	447
50%	345	345	382	437	523	632	800	873	691	476	437	389
60%	323	313	341	395	430	617	769	781	640	411	379	349
70%	287	297	302	359	404	561	681	677	557	361	319	313
80%	220	243	257	298	362	509	588	561	412	329	275	236
90%	90	100	188	206	283	383	401	411	331	157	90	90
Long Term												
Full Simulation Period[a]	345	337	385	428	463	577	693	774	666	475	417	371
Water Year Types[b]												
Wet (32%)	390	396	500	515	505	635	789	938	856	669	587	485
Above Normal (15%)	335	313	361	495	518	648	795	913	775	508	443	405
Below Normal (17%)	345	339	351	438	523	622	775	864	724	488	431	417
Dry (22%)	330	322	357	378	455	571	657	662	519	358	318	302
Critical (15%)	281	251	239	233	262	332	346	346	299	182	152	143

Alternative 4 H3 (LLT) minus Existing Condition

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-96	-63	0	0	0	-2	0	0	0	-186	-123	-92
20%	-198	-144	-26	-2	1	0	0	0	-89	-213	-216	-147
30%	-210	-175	-71	-7	0	0	0	0	-136	-225	-247	-186
40%	-226	-188	-116	-19	2	3	0	-38	-222	-238	-251	-203
50%	-238	-198	-134	-84	-13	-3	0	-102	-284	-275	-222	-224
60%	-157	-146	-135	-86	-76	-6	-31	-148	-234	-256	-198	-183
70%	-123	-123	-102	-72	-62	-40	-74	-147	-187	-193	-157	-139
80%	-141	-130	-102	-87	-64	-54	-94	-172	-227	-141	-115	-145
90%	-211	-197	-98	-112	-76	-82	-97	-109	-169	-219	-236	-220
Long Term												
Full Simulation Period[a]	-160	-131	-83	-51	-30	-22	-33	-75	-157	-209	-183	-154
Water Year Types[b]												
Wet (32%)	-169	-124	-27	-8	3	3	-5	-29	-110	-208	-183	-151
Above Normal (15%)	-139	-119	-84	-31	-13	6	-1	-54	-177	-251	-254	-218
Below Normal (17%)	-166	-152	-127	-77	-20	-17	-15	-69	-189	-222	-212	-172
Dry (22%)	-166	-139	-111	-82	-67	-47	-74	-144	-222	-214	-159	-139
Critical (15%)	-142	-119	-110	-90	-78	-69	-87	-102	-106	-147	-118	-96

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H3" represents the fall X2 scenario of Alternative 4.

Table C-4-8. Folsom Lake, End of Month Storage

Existing Condition

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	652	575	575	575	575	672	800	975	975	950	800	650
20%	642	575	575	575	573	667	800	975	975	891	800	650
30%	632	575	571	570	563	659	800	975	975	807	767	650
40%	603	568	546	560	553	645	800	975	975	781	725	650
50%	583	544	516	521	536	634	800	975	975	751	659	613
60%	480	459	476	481	506	622	800	929	874	667	577	532
70%	411	420	404	431	467	601	755	824	743	554	476	452
80%	361	374	359	385	427	563	682	734	640	469	391	381
90%	301	297	285	318	359	465	498	519	499	376	326	310
Long Term												
Full Simulation Period[a]	505	467	468	479	494	598	727	850	823	684	600	525
Water Year Types[b]												
Wet (32%)	559	520	527	523	502	633	794	966	966	876	770	636
Above Normal (15%)	474	432	445	526	531	642	796	968	952	760	697	623
Below Normal (17%)	511	491	478	515	543	639	790	934	913	710	643	589
Dry (22%)	496	461	469	460	522	618	731	806	741	572	477	441
Critical (15%)	423	370	349	324	340	401	433	448	405	329	270	240

Alternative 4 H4 (LLT)

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	575	517	575	575	575	672	800	975	975	787	683	574
20%	474	447	564	572	574	667	800	975	971	702	604	514
30%	431	404	502	561	563	662	800	975	877	650	546	472
40%	386	381	446	541	556	652	800	973	824	593	512	423
50%	366	364	389	449	523	634	800	914	742	540	459	396
60%	322	333	349	414	456	618	787	788	692	454	387	356
70%	310	303	297	361	411	578	691	716	607	376	335	331
80%	246	268	266	317	381	519	608	575	470	336	309	235
90%	128	129	221	253	344	411	419	444	380	216	128	136
Long Term												
Full Simulation Period[a]	360	351	394	436	471	584	701	792	706	515	441	380
Water Year Types[b]												
Wet (32%)	402	406	497	515	505	635	789	942	889	695	606	468
Above Normal (15%)	331	313	363	490	514	648	795	924	829	568	488	436
Below Normal (17%)	362	355	366	449	527	629	780	896	790	559	474	450
Dry (22%)	352	342	374	392	472	584	673	688	560	393	337	314
Critical (15%)	305	275	262	261	286	356	370	369	307	205	157	148

Alternative 4 H4 (LLT) minus Existing Condition

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	-76	-58	0	0	0	0	0	0	0	-163	-117	-76
20%	-168	-128	-11	-3	1	0	0	0	-4	-189	-196	-136
30%	-201	-171	-69	-9	0	3	0	0	-98	-157	-221	-178
40%	-217	-187	-100	-19	2	7	0	-2	-151	-188	-213	-227
50%	-217	-180	-128	-72	-13	0	0	-61	-232	-211	-200	-217
60%	-158	-126	-127	-67	-50	-4	-13	-141	-182	-214	-189	-176
70%	-101	-116	-107	-70	-56	-24	-64	-108	-137	-178	-141	-121
80%	-115	-106	-93	-68	-46	-44	-74	-159	-169	-134	-82	-146
90%	-173	-168	-64	-65	-15	-54	-79	-75	-119	-160	-198	-174
Long Term												
Full Simulation Period[a]	-145	-116	-74	-43	-23	-14	-25	-58	-118	-169	-159	-145
Water Year Types[b]												
Wet (32%)	-157	-113	-30	-8	3	3	-5	-24	-77	-181	-164	-167
Above Normal (15%)	-143	-119	-82	-36	-17	6	-1	-44	-123	-192	-209	-186
Below Normal (17%)	-149	-135	-111	-66	-16	-11	-10	-38	-124	-151	-169	-139
Dry (22%)	-144	-119	-94	-68	-50	-34	-58	-118	-181	-179	-140	-127
Critical (15%)	-118	-95	-87	-63	-54	-45	-63	-79	-98	-124	-113	-91

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H4" represents the high delta outflow scenario of Alternative 4.

Table C-4-17. Folsom Lake, End of Month Storage

No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	548	494	575	575	575	672	800	975	975	798	718	575
20%	473	424	546	572	570	667	800	975	961	716	620	526
30%	415	399	492	561	562	660	800	975	878	618	547	469
40%	380	376	429	529	555	649	800	970	822	581	491	419
50%	348	351	389	457	518	629	800	917	770	527	428	385
60%	319	330	346	412	474	611	797	835	692	443	396	353
70%	292	299	306	347	417	570	686	706	601	372	332	317
80%	243	259	255	313	360	502	605	585	443	322	285	259
90%	92	115	212	233	330	402	431	463	410	180	90	91
Long Term												
Full Simulation Period[a]	354	341	388	431	469	580	697	791	712	509	439	379
Water Year Types[b]												
Wet (32%)	400	401	500	515	505	635	789	943	902	705	623	485
Above Normal (15%)	341	311	358	489	516	648	795	930	825	547	483	430
Below Normal (17%)	352	338	354	438	522	624	776	891	788	543	451	423
Dry (22%)	339	336	371	386	471	579	665	691	560	376	319	306
Critical (15%)	291	253	245	249	278	345	359	360	324	210	165	159

Alternative 4 H1 (LLT)

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	600	559	575	575	575	670	800	975	975	744	674	624
20%	522	517	568	574	571	667	800	975	885	657	567	554
30%	449	446	510	565	563	660	800	975	837	583	529	506
40%	398	401	476	541	556	649	800	937	752	549	478	463
50%	349	364	418	463	524	634	800	883	694	472	430	421
60%	320	319	354	425	445	617	766	780	614	410	378	360
70%	289	302	307	382	421	577	687	679	526	359	321	317
80%	249	264	268	313	375	505	596	575	421	301	276	261
90%	99	112	195	215	306	423	434	439	367	165	91	101
Long Term												
Full Simulation Period[a]	367	361	398	437	471	583	698	780	662	476	417	394
Water Year Types[b]												
Wet (32%)	421	429	510	519	505	636	789	939	851	663	581	541
Above Normal (15%)	353	339	385	507	525	648	794	913	774	510	445	424
Below Normal (17%)	377	369	368	450	530	629	778	864	692	476	416	401
Dry (22%)	329	330	360	383	464	579	663	672	531	367	325	311
Critical (15%)	308	272	259	259	284	354	366	364	297	204	175	163

Alternative 4 H1 (LLT) minus No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Probability of Exceedance												
10%	52	65	0	0	0	-2	0	0	0	-54	-44	49
20%	50	93	22	3	2	0	0	0	-76	-59	-54	28
30%	35	46	18	4	1	0	0	0	-40	-35	-18	38
40%	18	25	46	12	1	0	0	-32	-70	-33	-14	44
50%	1	13	29	6	6	6	0	-34	-75	-55	3	36
60%	1	-11	8	13	-28	6	-30	-55	-78	-33	-17	6
70%	-3	3	1	35	5	8	1	-27	-75	-13	-11	0
80%	7	5	13	0	15	3	-9	-11	-21	-21	-9	2
90%	7	-3	-17	-18	-24	22	4	-24	-44	-15	0	10
Long Term												
Full Simulation Period[a]	13	20	9	7	2	3	1	-12	-50	-33	-22	15
Water Year Types[b]												
Wet (32%)	20	28	10	4	0	0	0	-4	-51	-42	-42	56
Above Normal (15%)	12	28	27	18	8	0	-2	-16	-51	-36	-38	-6
Below Normal (17%)	25	31	14	12	8	5	3	-27	-96	-68	-35	-21
Dry (22%)	-10	-6	-10	-4	-6	0	-2	-19	-29	-9	6	5
Critical (15%)	17	18	14	11	6	10	7	5	-27	-6	10	4

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H1" represents the low delta outflow scenario of Alternative 4.

Table C-4-18. Folsom Lake, End of Month Storage

No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	548	494	575	575	575	672	800	975	975	798	718	575
20%	473	424	546	572	570	667	800	975	961	716	620	526
30%	415	399	492	561	562	660	800	975	878	618	547	469
40%	380	376	429	529	555	649	800	970	822	581	491	419
50%	348	351	389	457	518	629	800	917	770	527	428	385
60%	319	330	346	412	474	611	797	835	692	443	396	353
70%	292	299	306	347	417	570	686	706	601	372	332	317
80%	243	259	255	313	360	502	605	585	443	322	285	259
90%	92	115	212	233	330	402	431	463	410	180	90	91
Long Term												
Full Simulation Period[a]	354	341	388	431	469	580	697	791	712	509	439	379
Water Year Types[b]												
Wet (32%)	400	401	500	515	505	635	789	943	902	705	623	485
Above Normal (15%)	341	311	358	489	516	648	795	930	825	547	483	430
Below Normal (17%)	352	338	354	438	522	624	776	891	788	543	451	423
Dry (22%)	339	336	371	386	471	579	665	691	560	376	319	306
Critical (15%)	291	253	245	249	278	345	359	360	324	210	165	159

Alternative 4 H2 (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	600	559	575	575	575	672	800	975	975	780	668	639
20%	538	518	574	572	575	667	800	975	971	696	600	581
30%	502	489	520	561	563	662	800	975	871	649	546	530
40%	428	417	488	541	559	655	800	969	808	592	520	497
50%	394	390	437	488	535	636	800	913	736	528	460	433
60%	345	338	385	446	470	621	796	783	704	472	412	383
70%	314	325	308	390	428	591	691	736	604	401	369	348
80%	285	289	271	319	392	526	636	592	473	359	315	298
90%	114	113	231	254	327	445	452	455	414	220	158	139
Long Term												
Full Simulation Period[a]	394	380	411	447	478	589	705	795	712	518	449	422
Water Year Types[b]												
Wet (32%)	448	442	508	519	505	635	789	943	889	700	611	568
Above Normal (15%)	370	350	392	507	524	648	795	921	830	569	498	479
Below Normal (17%)	404	393	392	468	537	636	786	899	793	558	477	454
Dry (22%)	368	363	390	404	481	591	677	694	569	393	345	326
Critical (15%)	327	290	275	273	299	369	383	382	328	210	170	157

Alternative 4 H2 (LLT) minus No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	52	65	0	0	0	0	0	0	0	**-18**	**-50**	64
20%	66	95	29	0	5	0	0	0	9	**-20**	**-20**	56
30%	88	90	27	0	1	2	0	0	**-6**	32	**-2**	61
40%	48	41	59	11	4	6	0	**-1**	**-13**	10	29	78
50%	46	39	48	31	17	7	0	**-4**	**-34**	1	32	48
60%	26	9	39	34	**-4**	10	**-1**	**-52**	12	29	16	30
70%	22	26	2	43	11	21	5	30	3	28	37	31
80%	42	30	16	6	32	24	31	7	30	37	30	39
90%	22	**-1**	18	21	**-3**	44	21	**-8**	3	40	68	48
Long Term												
Full Simulation Period[a]	40	39	23	16	9	8	8	4	**0**	8	9	43
Water Year Types[b]												
Wet (32%)	48	41	9	4	0	**0**	0	**-1**	**-13**	**-4**	**-11**	83
Above Normal (15%)	29	39	34	18	8	**0**	**0**	**-9**	5	23	15	48
Below Normal (17%)	52	55	39	30	15	12	11	9	5	15	26	32
Dry (22%)	29	27	20	17	11	12	12	3	9	16	25	20
Critical (15%)	36	37	30	24	20	25	24	22	3	0	5	**-2**

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H2" represents the enchanced spring delta outflow scenario of Alternative 4.

Table C-4-19. Folsom Lake, End of Month Storage

No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	548	494	575	575	575	672	800	975	975	798	718	575
20%	473	424	546	572	570	667	800	975	961	716	620	526
30%	415	399	492	561	562	660	800	975	878	618	547	469
40%	380	376	429	529	555	649	800	970	822	581	491	419
50%	348	351	389	457	518	629	800	917	770	527	428	385
60%	319	330	346	412	474	611	797	835	692	443	396	353
70%	292	299	306	347	417	570	686	706	601	372	332	317
80%	243	259	255	313	360	502	605	585	443	322	285	259
90%	92	115	212	233	330	402	431	463	410	180	90	91
Long Term												
Full Simulation Period[a]	354	341	388	431	469	580	697	791	712	509	439	379
Water Year Types[b]												
Wet (32%)	400	401	500	515	505	635	789	943	902	705	623	485
Above Normal (15%)	341	311	358	489	516	648	795	930	825	547	483	430
Below Normal (17%)	352	338	354	438	522	624	776	891	788	543	451	423
Dry (22%)	339	336	371	386	471	579	665	691	560	376	319	306
Critical (15%)	291	253	245	249	278	345	359	360	324	210	165	159

Alternative 4 H3 (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	555	512	575	575	575	670	800	975	975	764	677	558
20%	444	431	549	573	574	667	800	975	886	678	584	503
30%	422	400	500	563	563	659	800	975	839	581	520	464
40%	377	380	430	541	556	649	800	937	753	542	474	447
50%	345	345	382	437	523	632	800	873	691	476	437	389
60%	323	313	341	395	430	617	769	781	640	411	379	349
70%	287	297	302	359	404	561	681	677	557	361	319	313
80%	220	243	257	298	362	509	588	561	412	329	275	236
90%	90	100	188	206	283	383	401	411	331	157	90	90
Long Term												
Full Simulation Period[a]	345	337	385	428	463	577	693	774	666	475	417	371
Water Year Types[b]												
Wet (32%)	390	396	500	515	505	635	789	938	856	669	587	485
Above Normal (15%)	335	313	361	495	518	648	795	913	775	508	443	405
Below Normal (17%)	345	339	351	438	523	622	775	864	724	488	431	417
Dry (22%)	330	322	357	378	455	571	657	662	519	358	318	302
Critical (15%)	281	251	239	233	262	332	346	346	299	182	152	143

Alternative 4 H3 (LLT) minus No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	7	18	0	0	0	**-2**	0	0	0	**-34**	**-41**	**-17**
20%	**-28**	7	3	1	4	**0**	0	0	**-75**	**-38**	**-37**	**-23**
30%	7	1	8	2	1	**-1**	0	0	**-39**	**-37**	**-27**	**-4**
40%	**-3**	4	1	12	1	**0**	0	**-33**	**-69**	**-39**	**-17**	28
50%	**-4**	**-6**	**-7**	**-20**	5	3	0	**-44**	**-78**	**-51**	9	3
60%	5	**-17**	**-5**	**-17**	**-44**	5	**-27**	**-54**	**-52**	**-32**	**-17**	**-4**
70%	**-5**	**-2**	**-4**	13	**-12**	**-9**	**-5**	**-29**	**-44**	**-12**	**-13**	**-4**
80%	**-23**	**-15**	2	**-15**	2	7	**-17**	**-24**	**-30**	7	**-10**	**-23**
90%	**-2**	**-15**	**-25**	**-27**	**-47**	**-19**	**-29**	**-53**	**-80**	**-23**	**0**	**-1**
Long Term												
Full Simulation Period[a]	**-9**	**-4**	**-4**	**-3**	**-5**	**-4**	**-4**	**-17**	**-46**	**-35**	**-22**	**-8**
Water Year Types[b]												
Wet (32%)	**-11**	**-5**	0	0	**0**	0	**0**	**-5**	**-46**	**-36**	**-35**	**0**
Above Normal (15%)	**-6**	2	3	6	1	**0**	**0**	**-16**	**-50**	**-38**	**-39**	**-25**
Below Normal (17%)	**-7**	1	**-3**	**0**	1	**-2**	**-1**	**-26**	**-64**	**-55**	**-20**	**-6**
Dry (22%)	**-10**	**-14**	**-13**	**-8**	**-15**	**-8**	**-8**	**-29**	**-42**	**-18**	**-1**	**-4**
Critical (15%)	**-10**	**-2**	**-6**	**-15**	**-16**	**-12**	**-13**	**-14**	**-26**	**-28**	**-13**	**-16**

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H3" represents the fall X2 scenario of Alternative 4.

Table C-4-20. Folsom Lake, End of Month Storage

No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	548	494	575	575	575	672	800	975	975	798	718	575
20%	473	424	546	572	570	667	800	975	961	716	620	526
30%	415	399	492	561	562	660	800	975	878	618	547	469
40%	380	376	429	529	555	649	800	970	822	581	491	419
50%	348	351	389	457	518	629	800	917	770	527	428	385
60%	319	330	346	412	474	611	797	835	692	443	396	353
70%	292	299	306	347	417	570	686	706	601	372	332	317
80%	243	259	255	313	360	502	605	585	443	322	285	259
90%	92	115	212	233	330	402	431	463	410	180	90	91
Long Term												
Full Simulation Period[a]	354	341	388	431	469	580	697	791	712	509	439	379
Water Year Types[b]												
Wet (32%)	400	401	500	515	505	635	789	943	902	705	623	485
Above Normal (15%)	341	311	358	489	516	648	795	930	825	547	483	430
Below Normal (17%)	352	338	354	438	522	624	776	891	788	543	451	423
Dry (22%)	339	336	371	386	471	579	665	691	560	376	319	306
Critical (15%)	291	253	245	249	278	345	359	360	324	210	165	159

Alternative 4 H4 (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	575	517	575	575	575	672	800	975	975	787	683	574
20%	474	447	564	572	574	667	800	975	971	702	604	514
30%	431	404	502	561	563	662	800	975	877	650	546	472
40%	386	381	446	541	556	652	800	973	824	593	512	423
50%	366	364	389	449	523	634	800	914	742	540	459	396
60%	322	333	349	414	456	618	787	788	692	454	387	356
70%	310	303	297	361	411	578	691	716	607	376	335	331
80%	246	268	266	317	381	519	608	575	470	336	309	235
90%	128	129	221	253	344	411	419	444	380	216	128	136
Long Term												
Full Simulation Period[a]	360	351	394	436	471	584	701	792	706	515	441	380
Water Year Types[b]												
Wet (32%)	402	406	497	515	505	635	789	942	889	695	606	468
Above Normal (15%)	331	313	363	490	514	648	795	924	829	568	488	436
Below Normal (17%)	362	355	366	449	527	629	780	896	790	559	474	450
Dry (22%)	352	342	374	392	472	584	673	688	560	393	337	314
Critical (15%)	305	275	262	261	286	356	370	369	307	205	157	148

Alternative 4 H4 (LLT) minus No Action Alternative (LLT)

	End of Month Storage (TAF)											
Statistic	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**
Probability of Exceedance												
10%	27	23	0	0	0	0	0	0	0	**-11**	**-35**	**-1**
20%	1	23	18	0	4	0	0	0	9	**-14**	**-16**	**-12**
30%	17	4	10	0	0	2	0	0	**-1**	32	**-1**	4
40%	6	5	17	11	1	3	0	3	2	11	21	4
50%	18	13	**-1**	**-8**	5	6	0	**-3**	**-27**	13	31	11
60%	3	4	3	2	**-18**	7	**-10**	**-47**	**-1**	11	**-8**	2
70%	18	5	**-9**	15	**-6**	8	5	10	6	4	3	15
80%	4	9	11	3	21	17	4	**-11**	28	14	24	**-23**
90%	36	14	9	20	14	9	**-12**	**-19**	**-30**	36	37	44
Long Term												
Full Simulation Period[a]	6	10	5	5	2	4	4	1	**-6**	6	2	1
Water Year Types[b]												
Wet (32%)	1	6	**-3**	0	**0**	0	**0**	**-1**	**-13**	**-9**	**-17**	**-16**
Above Normal (15%)	**-10**	3	5	1	**-2**	**0**	**0**	**-6**	3	21	5	6
Below Normal (17%)	10	17	13	11	5	5	4	5	1	16	22	28
Dry (22%)	13	6	4	6	1	5	8	**-3**	**0**	17	17	8
Critical (15%)	15	22	17	13	7	11	10	10	**-17**	**-5**	**-8**	**-11**

Note: "LLT" (Late Long-Term) indicates Alternatives that are simulated with 2060 climate change and sea level rise.

a Based on the 82-year simulation period

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

"Alternative 4 H4" represents the high delta outflow scenario of Alternative 4.