

3 **8H.1 Electrical Conductivity Methodology**

4 Electrical conductivity (EC) was modeled quantitatively for the Delta using DSM2-QUAL model
5 output. Section 8.3.1.3 and the EC discussion under section 8.3.1.7 provide more detailed
6 information regarding the assessment methodology for EC and the details of the quantitative
7 approach. Tables to support the assessment are provided below.

8 Water quality modeling using CALSIM II and DSM2 for BDCP alternatives adjusts SWP and CVP
9 operations to fully comply with D-1641 standards. CALSIM II is a model with a monthly time-step,
10 whereas a number of D-1641 standards are described in shorter time-steps. The DSM2 model is
11 used to refine CALSIM II simulation results for a shorter 15-minute time-step, and to account for
12 other localized model assumptions (e.g., tide) and more Delta-specific assumptions. This variation in
13 time-step can create an unintended consequence of CALSIM II correctly adjusting modeled reservoir
14 releases and exports in order to maintain compliance over a monthly average, while DSM2
15 potentially reporting an exceedance over part of the month based upon those same reservoir
16 releases and exports. Therefore, DSM2 results may show an exceedance of D-1641 standards when,
17 in these cases, this is a modeling anomaly and not reflective of an actual violation.

18 It should be noted that many of the modeling results showing exceedance of D-1641 standards
19 reported in Appendix 8H are the result of this mismatch in modeling time-step, known shortcomings
20 in the ANN model to mirror DSM2 modeled flow-salinity interaction, and/or CALSIM II model's
21 limited ability to simulate real-time operational adjustments to avoid exceedance of the standards in
22 shorter time-steps. DWR and USBR have every intention of operating SWP and CVP facilities by fine
23 tuning reservoir storage and exports in real time to meet D-1641 standards, and any changes to D-
24 1641 as adopted by the SWRCB. Actual operations are continuously adjusted to respond to reservoir
25 storages, river flows, exports, in-Delta demands, tides, and other factors to insure compliance to
26 regulatory requirements to the extent possible.

27 For further information, additional description of the model limitations related to the water quality
28 modeling results are found in Appendix 5A. The limitations of the input assumptions described in
29 Appendix 5A, such as Delta agricultural drainage and return flows, should be considered when
30 DSM2 EC results are used to compare performance of a baseline or an alternative against the
31 standards.

1 **Table EC-1. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 1 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 1 LLT	Ex. Cond.	No Act. LLT	Alt 1 LLT	Ex. Cond.	No Act. LLT	Alt 1 LLT	Ex. Cond.	No Act. LLT	Alt 1 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	44	6	12	2	233	485	148	11	22	7
Sacramento River at Emmaton (AGR)	2,176	120	258	591	6	12	27	233	485	849	11	22	39
San Joaquin River at Jersey Point (AGR)	2,176	415	230	257	19	11	12	623	464	426	29	21	20
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	49	1	1	2	27	26	101	1	1	5
San Joaquin River at Vernalis (AGR)	5,842	163	154	154	3	3	3	424	415	415	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	193	3	3	3	449	444	483	8	8	8
Old River near Middle River (AGR)	5,842	183	177	178	3	3	3	444	438	439	8	7	8
Old River at Tracy Bridge (AGR)	5,842	250	206	211	4	4	4	569	467	472	10	8	8
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	17	6	1	3	64	10	17	10	1	3

Notes:

^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.

^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.

^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."

^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 **Table EC-2. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 2 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 2 LLT	Ex. Cond.	No Act. LLT	Alt 2 LLT	Ex. Cond.	No Act. LLT	Alt 2 LLT	Ex. Cond.	No Act. LLT	Alt 2 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	38	6	12	2	233	485	142	11	22	7
Sacramento River at Emmaton (AGR)	2,176	120	258	491	6	12	23	233	485	761	11	22	35
San Joaquin River at Jersey Point (AGR)	2,176	415	230	322	19	11	15	623	464	524	29	21	24
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	78	1	1	4	27	26	134	1	1	6
San Joaquin River at Vernalis (AGR)	5,842	163	154	154	3	3	3	424	415	415	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	177	3	3	3	449	444	438	8	8	7
Old River near Middle River (AGR)	5,842	183	177	184	3	3	3	444	438	445	8	7	8
Old River at Tracy Bridge (AGR)	5,842	250	206	330	4	4	6	569	467	678	10	8	12
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	167	6	1	25	64	10	179	10	1	27

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

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1 **Table EC-3. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 3 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 3 LLT	Ex. Cond.	No Act. LLT	Alt 3 LLT	Ex. Cond.	No Act. LLT	Alt 3 LLT	Ex. Cond.	No Act. LLT	Alt 3 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	42	6	12	2	233	485	146	11	22	7
Sacramento River at Emmaton (AGR)	2,176	120	258	583	6	12	27	233	485	840	11	22	39
San Joaquin River at Jersey Point (AGR)	2,176	415	230	261	19	11	12	623	464	456	29	21	21
S. Fork Mokelumne River at Terminus (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	53	1	1	2	27	26	92	1	1	4
San Joaquin River at Vernalis (AGR)	5,842	163	154	154	3	3	3	424	415	415	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	181	3	3	3	449	444	442	8	8	8
Old River near Middle River (AGR)	5,842	183	177	178	3	3	3	444	438	439	8	7	8
Old River at Tracy Bridge (AGR)	5,842	250	206	210	4	4	4	569	467	471	10	8	8
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	16	6	1	2	64	10	16	10	1	2

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

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1 Table EC-4. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 4 LLT.

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b						% of Days Objective Exceeded ^b						# of Days Out of Compliance ^c						% of Days Out of Compliance ^c					
		Ex. Cond.	No Act. LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Ex. Cond.	No Act. LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Ex. Cond.	No Act. LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Ex. Cond.	No Act. LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	37	56	33	53	6	12	2	3	2	2	233	485	154	173	137	157	11	22	7	8	6	7
Sacramento River at Emmaton (AGR)	2,176	120	258	508	546	507	553	6	12	23	25	23	25	233	485	766	813	791	822	11	22	35	37	36	38
San Joaquin River at Jersey Point (AGR)	2,176	415	230	354	289	327	247	19	11	16	13	15	11	623	464	562	471	522	429	29	21	26	22	24	20
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	92	70	95	55	1	1	4	3	4	3	27	26	157	135	160	107	1	1	7	6	7	5
San Joaquin River at Vernalis (AGR)	5,842	163	154	154	153	154	153	3	3	3	3	3	3	424	415	415	414	415	414	7	7	7	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	177	176	177	176	3	3	3	3	3	3	449	444	438	437	438	437	8	8	7	7	7	7
Old River near Middle River (AGR)	5,842	183	177	184	184	184	184	3	3	3	3	3	3	444	438	445	445	445	445	8	7	8	8	8	8
Old River at Tracy Bridge (AGR)	5,842	250	206	327	317	335	320	4	4	6	5	6	5	569	467	675	636	683	639	10	8	12	11	12	11
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	136	206	143	207	6	1	20	31	21	31	64	10	149	206	169	207	10	1	22	31	25	31

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 **Table EC-5. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 5 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 5 LLT	Ex. Cond.	No Act. LLT	Alt 5 LLT	Ex. Cond.	No Act. LLT	Alt 5 LLT	Ex. Cond.	No Act. LLT	Alt 5 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	47	6	12	2	233	485	134	11	22	6
Sacramento River at Emmaton (AGR)	2,176	120	258	491	6	12	23	233	485	765	11	22	35
San Joaquin River at Jersey Point (AGR)	2,176	415	230	345	19	11	16	623	464	524	29	21	24
S. Fork Mokelumne River at Terminus (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	96	1	1	4	27	26	161	1	1	7
San Joaquin River at Vernalis (AGR)	5,842	163	154	154	3	3	3	424	415	415	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	182	3	3	3	449	444	443	8	8	8
Old River near Middle River (AGR)	5,842	183	177	178	3	3	3	444	438	439	8	7	8
Old River at Tracy Bridge (AGR)	5,842	250	206	263	4	4	5	569	467	611	10	8	10
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	59	6	1	9	64	10	85	10	1	13

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 **Table EC-6. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 6 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 6 LLT	Ex. Cond.	No Act. LLT	Alt 6 LLT	Ex. Cond.	No Act. LLT	Alt 6 LLT	Ex. Cond.	No Act. LLT	Alt 6 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	51	6	12	2	233	485	103	11	22	5
Sacramento River at Emmaton (AGR)	2,176	120	258	608	6	12	28	233	485	864	11	22	40
San Joaquin River at Jersey Point (AGR)	2,176	415	230	22	19	11	1	623	464	61	29	21	3
S. Fork Mokelumne River at Terminus (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	0	1	1	0	27	26	0	1	1	0
San Joaquin River at Vernalis (AGR)	5,842	163	154	153	3	3	3	424	415	414	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	179	3	3	3	449	444	440	8	8	8
Old River near Middle River (AGR)	5,842	183	177	177	3	3	3	444	438	438	8	7	7
Old River at Tracy Bridge (AGR)	5,842	250	206	218	4	4	4	569	467	479	10	8	8
San Joaquin River at Jersey Point (F&W)	671	0	0	23	0	0	3	0	0	36	0	0	5
San Joaquin River at Prisoners Point (F&W)	671	38	10	231	6	1	34	64	10	231	10	1	34

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 **Table EC-7. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 7 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 7 LLT	Ex. Cond.	No Act. LLT	Alt 7 LLT	Ex. Cond.	No Act. LLT	Alt 7 LLT	Ex. Cond.	No Act. LLT	Alt 7 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	45	6	12	2	233	485	136	11	22	6
Sacramento River at Emmaton (AGR)	2,176	120	258	355	6	12	16	233	485	562	11	22	26
San Joaquin River at Jersey Point (AGR)	2,176	415	230	313	19	11	14	623	464	508	29	21	23
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	75	1	1	3	27	26	127	1	1	6
San Joaquin River at Vernalis (AGR)	5,842	163	154	155	3	3	3	424	415	445	7	7	8
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	207	3	3	4	449	444	497	8	8	9
Old River near Middle River (AGR)	5,842	183	177	178	3	3	3	444	438	439	8	7	8
Old River at Tracy Bridge (AGR)	5,842	250	206	219	4	4	4	569	467	480	10	8	8
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	233	6	1	35	64	10	233	10	1	35

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

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1 **Table EC-8. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 8 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 8 LLT	Ex. Cond.	No Act. LLT	Alt 8 LLT	Ex. Cond.	No Act. LLT	Alt 8 LLT	Ex. Cond.	No Act. LLT	Alt 8 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	59	6	12	3	233	485	159	11	22	7
Sacramento River at Emmaton (AGR)	2,176	120	258	395	6	12	18	233	485	603	11	22	28
San Joaquin River at Jersey Point (AGR)	2,176	415	230	157	19	11	7	623	464	339	29	21	16
S. Fork Mokelumne River at Terminous (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	1	1	1	0	27	26	14	1	1	1
San Joaquin River at Vernalis (AGR)	5,842	163	154	173	3	3	3	424	415	463	7	7	8
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	208	3	3	4	449	444	527	8	8	9
Old River near Middle River (AGR)	5,842	183	177	195	3	3	3	444	438	485	8	7	8
Old River at Tracy Bridge (AGR)	5,842	250	206	229	4	4	4	569	467	519	10	8	9
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	218	6	1	32	64	10	218	10	1	32

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 **Table EC-9. Number of days Delta locations exceed Bay-Delta Water Quality Control Plan objectives, and number of days out of compliance, for Alternative 9 LLT.**

Location ^a	# of Days Objective Applicable	# of Days Objective Exceeded ^b			% of Days Objective Exceeded ^b			# of Days Out of Compliance ^c			% of Days Out of Compliance ^c		
		Ex. Cond.	No Act. LLT	Alt 9 LLT	Ex. Cond.	No Act. LLT	Alt 9 LLT	Ex. Cond.	No Act. LLT	Alt 9 LLT	Ex. Cond.	No Act. LLT	Alt 9 LLT
Sacramento River at Emmaton / Three Mile Slough nr. Sacramento River (AGR) ^d	2,176	120	258	114	6	12	5	233	485	244	11	22	11
Sacramento River at Emmaton (AGR)	2,176	120	258	362	6	12	17	233	485	617	11	22	28
San Joaquin River at Jersey Point (AGR)	2,176	415	230	78	19	11	4	623	464	143	29	21	7
S. Fork Mokelumne River at Terminus (AGR)	2,176	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at San Andreas Landing (AGR)	2,176	14	13	24	1	1	1	27	26	50	1	1	2
San Joaquin River at Vernalis (AGR)	5,842	163	154	153	3	3	3	424	415	414	7	7	7
San Joaquin River at Brandt Bridge (AGR)	5,842	188	183	16	3	3	0	449	444	45	8	8	1
Old River near Middle River (AGR)	5,842	183	177	130	3	3	2	444	438	391	8	7	7
Old River at Tracy Bridge (AGR)	5,842	250	206	148	4	4	3	569	467	409	10	8	7
San Joaquin River at Jersey Point (F&W)	671	0	0	0	0	0	0	0	0	0	0	0	0
San Joaquin River at Prisoners Point (F&W)	671	38	10	0	6	1	0	64	10	0	10	1	0

Notes:
^a (AGR) = for the protection of agricultural beneficial uses; (F&W) = for the protection of fish and wildlife beneficial uses.
^b Number of days the Bay-Delta Water Quality Control Plan EC objective was exceeded at the location.
^c Number of days the EC at the location was out of compliance with the Bay-Delta Water Quality Control Plan EC objective. Days out of compliance was determined according to Table 2, footnote 2, which states: "Determination of compliance with an objective expressed as a running average begins on the last day of the averaging period. The averaging period commences with the first day of the time period for the applicable objective. If the objective is not met on the last day of the averaging period, all days in the averaging period are considered out of compliance."
^d Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 Table EC-10: Period average EC levels at Bay-Delta Water Quality Control Plan compliance locations and frequency of exceedance of Bay-Delta Water Quality Control Plan objectives for Banks and Jones pumping plants.

Location	Period ^a	Period Average Electrical Conductivity (µmhos/cm)														Bay-Delta Water Quality Control Plan objective (1000 µmhos/cm) ^b														
		Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT	Frequency of Criterion/Objective Exceedance (%)														
																Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1-H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT				
Western Delta	Sac. R. at Emmaton / Three Mile Sl. nr. Sac. River ^c	ALL	1069	1078	778	677	767	759	768	679	679	695	540	574	603	940	-	-	-	-	-	-	-	-	-	-	-			
		DROUGHT	1449	1600	1036	983	1008	1019	1011	967	966	989	776	792	829	1405	-	-	-	-	-	-	-	-	-	-	-	-		
	Sac. R. at Emmaton	ALL	1069	1078	1238	1063	1219	1205	1221	1070	1072	1096	845	887	935	1302	-	-	-	-	-	-	-	-	-	-	-	-		
		DROUGHT	1449	1600	1675	1578	1621	1644	1629	1559	1559	1591	1265	1266	1317	1976	-	-	-	-	-	-	-	-	-	-	-	-		
	SJR at Jersey Point	ALL	1135	976	1003	838	997	957	944	831	832	907	498	706	681	761	-	-	-	-	-	-	-	-	-	-	-	-		
		DROUGHT	1410	1323	1238	1166	1235	1216	1206	1139	1146	1188	671	913	886	1125	-	-	-	-	-	-	-	-	-	-	-	-		
Interior Delta	S.F. Moke. R. Term.	ALL	203	202	212	213	210	212	213	212	213	210	218	214	214	201	-	-	-	-	-	-	-	-	-	-	-	-		
		DROUGHT	209	207	215	217	215	216	217	216	217	215	222	219	218	204	-	-	-	-	-	-	-	-	-	-	-	-	-	
	SJR at San. And. Landing	ALL	395	376	444	399	444	432	430	397	398	415	316	372	362	457	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	470	468	527	516	531	529	530	502	504	515	367	450	436	625	-	-	-	-	-	-	-	-	-	-	-	-	-	
Southern Delta	SJR at Vernalis	ALL	581	570	569	570	569	570	569	570	568	569	570	570	571	569	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	718	698	698	698	698	698	698	698	698	697	698	699	700	702	697	-	-	-	-	-	-	-	-	-	-	-	-	-
	SJR at Brandt Bridge	ALL	586	574	574	576	575	576	575	575	575	574	575	575	576	577	396	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	726	700	708	705	708	705	705	705	704	706	706	710	710	486	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Old River at Middle River	ALL	586	576	575	579	575	579	578	578	577	576	576	576	577	543	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		DROUGHT	726	705	706	709	706	708	709	708	708	706	707	708	709	660	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Old River at Tracy Bridge	ALL	597	582	584	594	584	593	593	592	591	584	587	586	586	549	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	737	707	715	722	714	721	721	722	722	710	718	717	718	665	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SJR	SJR at Prisoners Pt.	ALL	440	399	436	423	434	436	437	418	424	417	408	438	426	448	-	-	-	-	-	-	-	-	-	-	-	-	-	
		DROUGHT	508	474	492	508	496	509	518	496	504	484	448	513	491	590	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Export Area	Banks PP	ALL	530	493	414	383	433	406	407	390	384	429	176	281	270	231	1	2	0	0	0	0	0	0	0	0	0	0	0	
		DROUGHT	646	607	526	504	532	511	490	491	472	532	176	315	305	243	2	2	0	0	0	0	0	0	0	0	0	0	0	
	Jones PP	ALL	555	529	451	401	460	440	420	420	411	470	176	264	259	435	0	0	0	0	0	0	0	0	0	0	0	0	0	
		DROUGHT	683	652	566	525	549	564	525	537	523	575	176	278	262	559	0	0	0	0	0	0	0	0	0	0	0	0	0	

Notes:
^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).
^b A 1,000 µmhos/cm objective, as a monthly average of mean daily EC, applies to the Banks and Jones pumping plants year-round. Compliance with EC objectives for other locations in the table is assessed on a different time-step and, thus, is summarized in a separate table in this Appendix.
^c Data for Existing Conditions and No Action LLT are for Sacramento River at Emmaton, per the definition of these baselines. Data for the BDCP alternative is for Three Mile Slough, per the description of the alternative.

1 Table EC-11. Period average change in EC levels for the No Action Alternative LLT relative to existing conditions.

Electrical Conductivity			OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	Annual Avg. Change	
No Act. LLT	Location	Period ^a	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	Ex. Cond.	
Western Delta	Sac. R. at Ermaton	ALL	-475 (-22%)	-324 (-15%)	82 (7%)	66 (11%)	77 (19%)	56 (21%)	57 (21%)	94 (20%)	141 (17%)	48 (5%)	167 (12%)	120 (6%)	9 (1%)	
		DROUGHT	-527 (-18%)	-276 (-10%)	190 (10%)	219 (26%)	221 (40%)	66 (21%)	68 (23%)	238 (41%)	394 (38%)	207 (16%)	333 (19%)	677 (23%)	151 (10%)	
	SJR at Jersey Point	ALL	-689 (-35%)	-643 (-29%)	-234 (-14%)	-15 (-2%)	36 (8%)	34 (11%)	28 (10%)	47 (13%)	87 (16%)	-244 (-17%)	-169 (-11%)	-151 (-7%)	-159 (-14%)	
		DROUGHT	-612 (-27%)	-530 (-21%)	-338 (-15%)	18 (2%)	130 (24%)	41 (13%)	32 (12%)	132 (33%)	261 (39%)	-295 (-13%)	-229 (-12%)	353 (15%)	-86 (-6%)	
	Interior Delta	S. Fork Moke. R. Term.	ALL	-1 (-0%)	0 (0%)	-1 (-1%)	-5 (-2%)	-5 (-2%)	-2 (-1%)	-1 (-1%)	-1 (-0%)	-1 (-1%)	0 (0%)	1 (0%)	1 (0%)	-1 (-1%)
			DROUGHT	0 (-0%)	0 (0%)	-1 (-0%)	-4 (-2%)	-5 (-2%)	-6 (-2%)	-4 (-2%)	-2 (-1%)	-1 (-1%)	0 (-0%)	1 (0%)	-1 (-0%)	-2 (-1%)
SJR at San And. Landing		ALL	-68 (-13%)	-119 (-19%)	-53 (-9%)	-16 (-4%)	8 (3%)	7 (3%)	3 (1%)	10 (4%)	21 (8%)	-27 (-7%)	-28 (-7%)	29 (6%)	-19 (-5%)	
		DROUGHT	-26 (-4%)	-77 (-11%)	-46 (-6%)	-42 (-8%)	38 (12%)	8 (3%)	3 (1%)	24 (10%)	63 (25%)	-45 (-9%)	-44 (-8%)	130 (20%)	-1 (-0%)	
Southern Delta	SJR at Vernalis	ALL	3 (1%)	-35 (-6%)	-48 (-6%)	-83 (-11%)	-10 (-2%)	-28 (-4%)	-10 (-2%)	-5 (-1%)	56 (11%)	38 (7%)	7 (1%)	-15 (-3%)	-11 (-2%)	
		DROUGHT	-6 (-1%)	-41 (-6%)	-53 (-6%)	-66 (-7%)	-9 (-1%)	-19 (-2%)	-4 (-1%)	-9 (-2%)	-9 (-1%)	-5 (-1%)	-7 (-1%)	-16 (-2%)	-20 (-3%)	
	SJR at Brandt Bridge	ALL	1 (0%)	-33 (-6%)	-50 (-7%)	-79 (-11%)	-14 (-2%)	-27 (-4%)	-7 (-1%)	-5 (-1%)	54 (10%)	22 (4%)	2 (0%)	-13 (-3%)	-12 (-2%)	
		DROUGHT	-7 (-1%)	-39 (-6%)	-56 (-7%)	-64 (-7%)	-15 (-2%)	-17 (-2%)	5 (1%)	-8 (-1%)	-8 (-1%)	-60 (-9%)	-40 (-6%)	-15 (-2%)	-27 (-4%)	
	Old River at Middle River	ALL	1 (0%)	-33 (-6%)	-48 (-6%)	-81 (-11%)	-13 (-2%)	-27 (-4%)	-9 (-2%)	-5 (-1%)	54 (10%)	36 (6%)	9 (2%)	-14 (-3%)	-11 (-2%)	
		DROUGHT	-7 (-1%)	-39 (-6%)	-54 (-6%)	-66 (-7%)	-13 (-1%)	-18 (-2%)	0 (-0%)	-8 (-1%)	-9 (-1%)	-11 (-2%)	-8 (-1%)	-15 (-2%)	-21 (-3%)	
	Old River at Tracy Bridge	ALL	-7 (-1%)	-27 (-5%)	-49 (-6%)	-80 (-10%)	-18 (-3%)	-28 (-4%)	-10 (-2%)	-6 (-1%)	48 (9%)	31 (5%)	-6 (-1%)	-21 (-4%)	-14 (-2%)	
		DROUGHT	-8 (-1%)	-38 (-6%)	-55 (-7%)	-65 (-7%)	-18 (-2%)	-18 (-2%)	0 (-0%)	-8 (-1%)	-30 (-5%)	-33 (-5%)	-53 (-8%)	-35 (-5%)	-30 (-4%)	
	SJR	SJR at Prisoners Point	ALL	-61 (-12%)	-126 (-21%)	-85 (-14%)	-39 (-7%)	-14 (-4%)	-11 (-3%)	-20 (-6%)	-8 (-3%)	-1 (-0%)	-44 (-11%)	-62 (-14%)	-16 (-3%)	-41 (-9%)
			DROUGHT	-27 (-5%)	-94 (-14%)	-90 (-12%)	-76 (-12%)	-3 (-1%)	-18 (-5%)	-21 (-6%)	3 (1%)	42 (15%)	-63 (-11%)	-104 (-17%)	38 (6%)	-35 (-7%)
	Export Area	Banks PP	ALL	-40 (-7%)	-120 (-19%)	-94 (-14%)	-51 (-8%)	-9 (-2%)	-7 (-2%)	-9 (-2%)	-3 (-1%)	20 (5%)	-20 (-5%)	-73 (-14%)	-38 (-7%)	-37 (-7%)
			DROUGHT	-15 (-2%)	-87 (-12%)	-92 (-11%)	-64 (-8%)	-20 (-3%)	-12 (-2%)	-9 (-1%)	0 (-0%)	40 (9%)	-38 (-7%)	-135 (-19%)	-35 (-5%)	-39 (-6%)
Jones PP		ALL	-25 (-5%)	-104 (-17%)	-81 (-12%)	-59 (-8%)	-6 (-1%)	-8 (-1%)	-4 (-1%)	-4 (-1%)	47 (12%)	5 (1%)	-51 (-10%)	-28 (-5%)	-26 (-5%)	
		DROUGHT	10 (2%)	-81 (-12%)	-74 (-9%)	-81 (-10%)	-14 (-2%)	-8 (-1%)	4 (1%)	-6 (-1%)	40 (10%)	-32 (-6%)	-111 (-16%)	-18 (-3%)	-31 (-5%)	

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index)

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1 Table EC-12. Period average change in EC levels for Alternative 1 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity		OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
Alt 1 LLT	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
			Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1101	-625	-902	-578	-373	-455	-146	-212	-88	-164	-7	-63	-2	-58	-27	-120	-120	-260	-123	-172	-146	-313	-450
DROUGHT	-1519	-992			-1293	-1017	-622	-812	-244	-463	-117	-338	-14	-80	0	-68	68	-170	-3	-397	62	-145	-198	-531	-1071	-1748	-413	-563
Sac. R. at Emmaton	ALL	-428		48	-208	116	128	46	54	-12	22	-54	64	8	93	36	231	137	324	183	432	384	676	509	641	522	169	160
	DROUGHT	-640		-113	-297	-21	140	-50	66	-153	100	-122	97	31	129	60	495	257	702	308	997	790	818	485	105	-572	226	75
SJR at Jersey Point	ALL	-466		223	-722	-79	-240	-7	-76	-61	2	-34	46	12	41	13	52	4	112	24	-293	-49	-61	107	19	171	-132	27
	DROUGHT	-493		119	-854	-324	-456	-118	-209	-227	16	-114	48	7	49	17	159	27	288	27	-438	-143	0	229	-169	-521	-171	-85
Interior Delta	S. Fork Moke. R. Term.	ALL	6	6	9	9	4	5	6	11	6	11	12	14	10	11	7	8	13	14	11	11	11	10	9	9	10	
		DROUGHT	5	5	7	7	4	5	0	4	-5	1	7	12	3	7	7	9	19	20	15	15	11	10	8	9	7	9
	SJR at San And. Landing	ALL	86	154	-6	113	17	69	32	48	25	17	24	17	10	7	12	2	56	36	36	63	98	126	202	173	49	69
		DROUGHT	82	108	-11	66	-1	45	-23	19	45	6	24	16	11	9	41	17	122	59	46	91	153	196	204	74	58	59
Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-48	0	-98	-15	-11	-1	-28	0	-10	0	-5	0	57	1	38	1	9	1	-15	0	-12	-1
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-3	1	-9	1	-7	1	-3	2	-5	2	-16	0	-20	1
	SJR at Brandt Bridge	ALL	1	0	-33	0	-48	2	-97	-18	-16	-1	-27	-1	-9	-2	-5	0	55	0	33	10	12	10	-13	1	-12	0
		DROUGHT	-8	-1	-39	0	-52	4	-66	-2	-14	0	-18	-1	1	-4	-8	0	-7	1	4	63	4	44	-13	1	-18	9
	Old River at Middle River	ALL	1	0	-33	0	-48	0	-94	-14	-14	-1	-27	0	-8	1	-5	1	55	1	39	2	11	1	-14	0	-12	-1
		DROUGHT	-7	0	-40	-1	-54	0	-65	1	-13	0	-18	0	1	1	-8	1	-7	1	-2	9	-5	3	-15	0	-19	1
	Old River at Tracy Bridge	ALL	-4	3	-27	0	-49	-1	-86	-7	-17	1	-26	1	-7	3	-5	0	66	18	40	10	-9	-3	-22	-2	-12	2
		DROUGHT	-7	1	-40	-3	-56	-1	-59	5	-16	2	-15	2	6	6	-7	1	21	50	-1	32	-54	-1	-40	-5	-22	8
SJR	SJR at Prisoners Point	ALL	24	86	-81	45	-55	30	-2	36	16	30	12	23	-8	12	-1	8	23	24	-19	25	-7	55	47	63	-4	36
		DROUGHT	15	42	-115	-21	-105	-15	-78	-2	3	7	8	26	1	23	21	19	71	30	-66	-3	-20	84	67	30	-16	18
Export Area	Banks PP	ALL	11	51	-142	-22	-169	-75	-255	-204	-131	-121	-213	-206	-143	-134	-62	-59	-59	-79	-54	-34	-122	-49	-54	-16	-115	-78
		DROUGHT	21	36	-125	-38	-205	-113	-196	-132	-14	6	-318	-306	-237	-228	-112	-112	25	-14	-88	-50	-151	-15	-31	4	-119	-80
	Jones PP	ALL	-30	-4	-174	-70	-160	-79	-174	-115	-165	-159	-119	-111	-102	-98	-85	-82	-45	-91	-55	-60	-43	8	-94	-66	-104	-77
		DROUGHT	-56	-66	-193	-113	-114	-41	-119	-39	-241	-227	-140	-131	-175	-179	-168	-162	-25	-65	-70	-39	-87	24	-16	2	-117	-86

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-13. Period average change in EC levels for Alternative 2 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change			
	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT		
Alt 2 LLT	Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1359	-884	-1129	-805	-540	-621	-245	-311	-102	-178	-9	-65	0	-56	-38	-132	-127	-267	-126	-174	-150	-317	-875	-995	-392	-401	
			DROUGHT	-1656	-1129	-1520	-1243	-827	-1017	-344	-564	-120	-341	-120	-341	-13	-79	2	-67	66	-172	-8	-401	83	-124	-187	-520	-1067	-1744	-466
		Sac. R. at Emmaton	ALL	-882	-407	-578	-253	-144	-226	-114	-180	-1	-78	63	7	92	35	193	99	305	164	419	371	667	500	-92	-211	-6	-15	
			DROUGHT	-903	-376	-704	-428	-206	-396	-120	-340	94	-127	98	33	127	59	487	249	693	299	1030	823	839	506	119	-558	130	-21	
		SJR at Jersey Point	ALL	-1004	-315	-1140	-497	-622	-388	-278	-263	-69	-105	-28	-6	41	13	56	9	142	55	-257	-12	-12	157	-458	-307	-298	-138	
			DROUGHT	-920	-307	-1087	-557	-634	-297	-306	-325	-50	-180	49	8	56	24	166	34	349	88	-427	-132	11	241	-129	-482	-243	-157	
Interior Delta	S. Fork Moke. R. Term.	ALL	8	9	10	9	5	6	8	12	9	14	15	17	13	15	9	10	14	15	10	10	11	10	8	8	10	11		
		DROUGHT	8	8	8	8	4	5	2	6	-1	4	10	16	5	9	8	10	19	20	15	16	11	10	9	8	8	10		
	SJR at San And. Landing	ALL	-54	14	-149	-30	-110	-57	-58	-42	3	-5	22	16	27	24	32	22	73	53	52	79	118	146	95	66	4	24		
		DROUGHT	-3	24	-91	-14	-40	6	-51	-9	26	-13	33	25	31	28	58	34	144	82	73	118	162	205	218	88	47	48		
	Southern Delta	SJR at Vernalis	ALL	5	2	-35	0	-43	5	-79	4	-10	0	-28	0	-10	0	-5	0	56	0	38	0	7	0	-16	-1	-10	1	
			DROUGHT	-1	5	-41	0	-53	0	-66	0	-9	0	-19	0	-4	0	-9	0	-9	0	-5	0	-7	0	-18	-2	-20	0	
SJR at Brandt Bridge		ALL	3	2	-33	0	-43	7	-80	-1	-14	1	-28	-1	-12	-5	-6	-1	55	0	36	14	11	9	-14	-1	-10	2		
		DROUGHT	-3	4	-38	1	-53	3	-67	-3	-13	2	-19	-2	-7	-12	-9	-2	-8	0	-12	47	-6	33	-16	-2	-21	6		
Old River at Middle River		ALL	8	7	-32	1	-43	5	-70	11	-11	2	-25	2	-3	6	-3	2	54	0	39	3	10	1	-14	-1	-8	3		
		DROUGHT	1	8	-38	1	-54	0	-58	7	-11	2	-14	4	10	10	-5	3	-8	0	-4	8	-6	2	-17	-2	-17	4		
Old River at Tracy Bridge	ALL	6	13	-22	5	-45	3	-48	31	-2	16	-17	10	22	32	3	9	42	-6	34	3	5	11	-12	9	-3	11			
	DROUGHT	3	11	-25	13	-54	1	-49	16	-14	4	-1	16	58	58	4	12	-28	2	-31	2	-34	19	-16	19	-16	14			
SJR	SJR at Prisoners Point	ALL	-53	9	-161	-35	-167	-82	-74	-35	36	50	55	66	54	74	40	48	59	59	-12	32	4	66	14	31	-17	24		
		DROUGHT	-46	-19	-135	-41	-135	-46	-93	-17	39	43	94	111	92	113	78	75	105	63	-50	13	-18	86	68	31	0	34		
Export Area	Banks PP	ALL	-80	-40	-245	-125	-253	-159	-309	-257	-184	-174	-168	-161	-157	-149	-32	-29	-53	-73	-68	-48	-118	-45	-131	-92	-147	-110		
		DROUGHT	-9	6	-186	-99	-270	-178	-405	-340	-194	-174	-294	-282	-234	-225	-68	-68	-44	-83	-79	-41	-168	-33	8	43	-142	-103		
	Jones PP	ALL	-127	-102	-219	-115	-248	-167	-304	-245	-222	-216	-238	-230	-110	-106	-105	-102	-61	-107	-61	-66	-34	16	-128	-100	-154	-127		
		DROUGHT	-103	-113	-167	-86	-246	-173	-455	-375	-193	-179	-343	-334	-134	-138	-187	-181	2	-38	-146	-115	-78	33	25	43	-158	-128		

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-14. Period average change in EC levels for Alternative 3 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity		Location	Period ^a	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change				
				Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	
Alt 3 LLT	Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1115	-640	-965	-640	-362	-444	-179	-246	-103	-179	-9	-65	-1	-58	-19	-113	-125	-265	-123	-171	-156	-323	-470	-589	-302	-311			
			DROUGHT	-1558	-1031	-1434	-1157	-544	-734	-323	-542	-171	-392	-20	-86	3	-65	88	-150	-38	-432	56	-151	-229	-562	-1124	-1801	-241	-441	-592		
		Sac. R. at Emmaton	ALL	-465	10	-287	37	146	64	-9	-76	-3	-79	61	5	96	39	243	149	319	178	429	381	663	496	612	493	150	142			
			DROUGHT	-740	-213	-529	-252	261	71	-100	-319	-3	-224	86	21	136	67	526	287	647	253	986	779	771	438	24	-653	172	21			
		SJR at Jersey Point	ALL	-466	222	-772	-129	-234	0	-97	-82	-37	-73	33	-1	38	11	61	13	113	26	-274	-30	-68	100	48	199	-138	21			
			DROUGHT	-454	158	-1003	-473	-362	-24	-179	-197	-48	-178	37	-4	46	14	181	49	300	39	-436	-140	-7	223	-177	-530	-175	-89			
	Interior Delta	S. Fork Moke. R. Term.	ALL	5	6	8	7	3	4	3	8	3	7	10	12	8	9	7	7	13	14	10	11	11	11	9	9	8	9			
			DROUGHT	5	5	9	9	3	4	-1	3	-5	1	7	12	3	7	9	19	20	15	15	11	10	8	8	7	9				
		SJR at San And. Landing	ALL	109	177	-22	97	12	65	28	44	15	6	20	13	8	5	13	4	56	36	41	68	99	127	206	176	49	68			
			DROUGHT	142	168	-34	43	6	52	5	47	36	-2	21	12	8	6	42	19	125	62	50	95	149	192	188	58	62	63			
		Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-48	0	-93	-11	-11	0	-28	0	-10	0	-5	0	57	0	38	0	8	1	-16	-1	-12	-1		
				DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-4	0	-9	0	-9	0	-5	0	-7	0	-19	-3	-21	0		
SJR at Brandt Bridge	ALL		1	-1	-33	0	-48	2	-91	-12	-15	-1	-27	0	-9	-2	-5	0	54	0	33	10	14	12	-13	0	-12	1				
	DROUGHT		-8	-1	-39	0	-53	3	-66	-2	-14	0	-18	-1	0	-4	-8	0	-8	0	1	61	3	42	-16	-1	-19	8				
Old River at Middle River	ALL		1	0	-33	-1	-48	0	-90	-10	-14	-1	-27	0	-8	1	-5	0	55	1	38	2	10	1	-15	-1	-11	-1				
	DROUGHT		-7	-1	-40	-1	-53	0	-65	1	-13	0	-18	0	1	1	-8	0	-8	0	-4	8	-6	2	-18	-3	-20	1				
Old River at Tracy Bridge	ALL	-4	4	-27	0	-49	0	-85	-5	-18	0	-27	1	-8	3	-6	0	65	17	40	9	-9	-3	-23	-3	-12	2					
	DROUGHT	-8	0	-41	-3	-54	1	-59	5	-16	2	-15	2	4	4	-8	0	19	49	-2	31	-56	-3	-42	-7	-23	7					
SJR	SJR at Prisoners Point	ALL	40	101	-78	48	-71	14	-16	23	4	18	15	26	-10	10	-4	5	22	23	-14	30	-5	57	51	67	-6	35				
		DROUGHT	57	84	-111	-16	-116	-26	-52	23	10	14	13	30	-8	13	7	4	76	35	-64	-1	-18	86	59	22	-12	22				
Export Area	Banks PP	ALL	-1	40	-139	-19	-154	-60	-175	-123	-64	-55	-149	-142	-134	-126	-55	-52	-40	-60	-77	-58	-118	-45	-69	-31	-97	-60				
		DROUGHT	25	40	-160	-73	-192	-100	-363	-299	13	34	-186	-174	-206	-198	-93	-93	20	-20	-178	-140	-151	-15	-8	27	-113	-74				
	Jones PP	ALL	-33	-8	-120	-16	-113	-32	-229	-170	-156	-150	-149	-141	-62	-58	-74	-71	-57	-103	-48	-53	-40	11	-65	-37	-95	-68				
		DROUGHT	-43	-53	-97	-16	-161	-87	-416	-335	-297	-283	-281	-272	-71	-75	-136	-130	-49	-89	-59	-28	-84	26	-45	-27	-135	-104				

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-15A. Period average change in EC levels for Alternative 4-H1 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 4 Scn H1	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
			Western Delta	Sac. R. at Emmaton/ Threemile Sl. Nr. Sac. R.	ALL	-1109	-634	-927	-602	-416	-498	-210	-277	-92	-169	-10	-67	0	-57	-36	-130	-121	-262	-115	-164	-175	-342	-506
DROUGHT	-1609	-1082			-1303	-1026	-735	-925	-225	-444	-63	-284	-19	-84	-1	-69	56	-182	-17	-411	119	-88	-227	-561	-1140	-1817	-430	-581
Sac. R. at Emmaton	ALL	-424		51	-206	119	57	-25	-65	-131	12	-64	60	3	91	34	197	103	314	173	432	383	622	455	541	422	136	127
	DROUGHT	-784		-257	-321	-44	-64	-254	94	-125	195	-26	87	21	124	56	471	233	676	282	1083	876	774	441	10	-667	195	45
SJR at Jersey Point	ALL	-684		4	-892	-249	-388	-155	-220	-205	-58	-94	24	-10	39	11	53	6	140	52	-248	-3	17	185	83	234	-178	-19
	DROUGHT	-780		-168	-851	-321	-542	-204	-243	-261	26	-104	47	6	50	18	151	19	329	68	-414	-118	28	257	-129	-482	-194	-108
Interior Delta	S. Fork Moke. R. Term.	ALL	8	8	9	9	4	5	4	9	6	10	13	15	12	13	9	10	14	15	10	10	11	10	9	8	9	10
		DROUGHT	7	8	8	8	4	5	1	5	-2	4	7	13	5	8	8	10	19	20	16	16	10	10	8	8	8	10
	SJR at San And. Landing	ALL	51	119	-95	23	-32	20	-33	-17	5	-3	19	12	24	20	31	21	71	51	55	82	123	151	230	201	37	57
		DROUGHT	63	90	-42	35	-5	41	-40	2	47	9	30	21	24	21	51	27	136	74	75	120	163	206	206	76	59	60
Southern Delta	SJR at Vernalis	ALL	4	0	-35	0	-43	5	-82	1	-10	0	-28	0	-10	0	-5	0	57	0	38	0	8	1	-16	-1	-10	1
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-4	0	-9	0	-9	0	-5	0	-7	0	-19	-3	-21	0
	SJR at Brandt Bridge	ALL	2	0	-33	0	-43	7	-83	-4	-14	0	-28	-1	-12	-5	-5	-1	55	1	35	13	11	9	-14	-1	-11	2
		DROUGHT	-7	0	-39	0	-53	4	-67	-3	-13	2	-19	-2	-7	-11	-9	-2	-8	0	-16	44	-7	33	-17	-3	-22	5
	Old River at Middle River	ALL	7	6	-32	1	-43	5	-73	7	-11	2	-25	2	-3	6	-3	2	54	0	39	3	11	1	-14	-1	-8	3
		DROUGHT	-3	4	-38	1	-54	0	-58	7	-11	2	-14	4	10	10	-5	3	-8	0	-4	8	-6	2	-18	-3	-17	3
	Old River at Tracy Bridge	ALL	16	23	-20	7	-46	3	-55	25	-6	12	-17	10	21	31	3	9	41	-7	33	2	5	11	-13	8	-3	11
		DROUGHT	10	18	-25	13	-56	-1	-49	15	-15	3	-1	16	56	56	4	12	-33	-3	-36	-2	-36	17	-17	18	-17	13
SJR	SJR at Prisoners Point	ALL	-22	39	-154	-28	-113	-28	-51	-12	24	38	50	61	47	67	37	46	57	58	-12	33	13	75	74	90	-4	37
		DROUGHT	-23	4	-128	-34	-111	-21	-96	-20	36	39	86	104	73	94	69	66	96	55	-55	8	-10	94	73	35	1	35
Export Area	Banks PP	ALL	-53	-13	-173	-53	-198	-104	-230	-179	-158	-148	-190	-183	-153	-144	-40	-37	-50	-69	-78	-58	-113	-41	-46	-8	-124	-87
		DROUGHT	-6	8	-126	-40	-200	-108	-285	-220	-201	-180	-287	-275	-220	-212	-78	-78	48	8	-109	-71	-159	-24	16	51	-134	-95
	Jones PP	ALL	-89	-63	-169	-65	-128	-47	-190	-131	-153	-147	-173	-165	-100	-96	-97	-93	-85	-132	-53	-58	-37	13	-103	-75	-115	-88
		DROUGHT	-80	-90	-129	-48	-124	-50	-206	-125	-188	-174	-214	-206	-107	-111	-165	-159	-49	-88	-128	-97	-73	37	27	45	-120	-89

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-15B. Period average change in EC levels for Alternative 4-H2 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity		Location	Period ^a	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
Alt 4 LLT	Scn H2			Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	
Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1124	-649	-920	-596	-341	-422	-227	-294	-101	-177	-13	-69	-4	-61	-46	-140	-116	-257	-71	-119	-161	-328	-485	-605	-301	-310		
		DROUGHT	-1798	-1271	-1411	-1135	-473	-664	-287	-506	-96	-317	-14	-80	2	-66	51	-187	-8	-402	146	-61	-197	-530	-1171	-1849	-438	-589		
	Sac. R. at Emmaton	ALL	-450	25	-199	125	185	103	-87	-153	-1	-78	52	-4	82	25	175	82	319	178	518	470	654	487	584	465	153	144		
		DROUGHT	-1092	-565	-493	-217	373	183	-7	-227	141	-80	91	26	123	55	458	220	691	297	1108	901	820	487	-46	-724	181	30		
	SJR at Jersey Point	ALL	-689	-1	-876	-233	-410	-177	-238	-223	-67	-103	22	-12	37	9	50	3	124	37	-295	-51	-4	164	49	200	-192	-32		
		DROUGHT	-922	-310	-933	-403	-450	-112	-230	-248	-10	-140	48	7	51	19	145	13	305	43	-348	-52	41	270	-145	-498	-204	-117		
Interior Delta	S. Fork Moke. R. Term.	ALL	8	9	9	9	6	7	5	10	6	11	13	15	12	13	9	10	15	16	12	13	11	10	9	9	10	11		
		DROUGHT	7	7	9	9	6	7	1	5	-2	3	9	14	7	10	9	11	20	21	15	15	11	10	7	8	8	10		
	SJR at San And. Landing	ALL	56	124	-91	27	-29	24	-38	-22	5	-3	21	14	28	24	34	24	74	53	41	68	107	135	218	188	35	55		
		DROUGHT	22	49	-76	1	26	72	-24	18	40	1	34	26	41	38	65	41	136	73	86	130	185	229	190	60	60	62		
Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-48	0	-85	-2	-11	0	-28	0	-10	0	-5	0	57	1	38	1	9	1	-16	-1	-11	0		
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-4	0	-9	0	-7	1	-3	2	-5	2	-19	-4	-20	0		
	SJR at Brandt Bridge	ALL	1	0	-33	0	-47	4	-86	-7	-14	0	-28	-1	-12	-5	-6	-1	55	1	36	14	12	10	-14	-1	-11	1		
		DROUGHT	-7	0	-39	0	-51	5	-67	-3	-13	2	-19	-2	-7	-12	-9	-2	-7	1	-12	47	-5	34	-17	-3	-21	6		
	Old River at Middle River	ALL	6	5	-32	0	-48	0	-77	4	-12	2	-25	2	-3	6	-3	2	54	0	39	3	11	2	-15	-1	-9	2		
		DROUGHT	-3	4	-38	1	-54	0	-58	7	-11	2	-14	4	11	11	-5	3	-7	1	-2	9	-4	4	-18	-3	-17	4		
	Old River at Tracy Bridge	ALL	15	22	-20	7	-50	-1	-59	21	-7	11	-17	11	25	35	3	9	44	-3	34	4	2	8	-17	4	-4	10		
		DROUGHT	7	15	-28	10	-56	-1	-49	16	-15	2	0	17	69	69	5	13	-20	10	-30	3	-44	9	-30	5	-16	14		
SJR	SJR at Prisoners Point	ALL	-16	45	-151	-25	-124	-38	-61	-22	31	45	61	72	64	84	47	55	67	68	-9	36	-4	58	60	76	-3	38		
		DROUGHT	-36	-9	-139	-45	-129	-40	-84	-8	43	47	105	123	123	144	97	95	105	63	-49	14	11	115	70	33	10	44		
Export Area	Banks PP	ALL	-40	0	-170	-50	-206	-112	-232	-181	-158	-149	-142	-135	-176	-167	-80	-77	-78	-98	-58	-39	-99	-26	-44	-6	-122	-85		
		DROUGHT	-38	-23	-146	-59	-277	-185	-222	-158	-179	-159	-224	-212	-303	-294	-208	-208	-36	-76	-105	-67	-105	30	-28	7	-156	-117		
	Jones PP	ALL	-108	-83	-188	-84	-190	-109	-213	-154	-209	-203	-228	-220	-131	-127	-72	-68	-38	-85	-70	-75	-68	-17	-101	-73	-135	-108		
		DROUGHT	-132	-141	-166	-85	-159	-86	-259	-179	-284	-270	-340	-332	-205	-209	-102	-97	12	-28	-126	-94	-92	18	-40	-22	-158	-127		

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-15C. Period average change in EC levels for Alternative 4-H3 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity		Location	Period ^a	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
Alt 4 Scn H3				Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.
Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1328	-853	-1106	-782	-550	-632	-256	-322	-99	-176	-7	-63	1	-56	-38	-132	-119	-259	-102	-151	-149	-316	-918	-1037	-389	-398		
		DROUGHT	-1790	-1263	-1514	-1238	-876	-1066	-355	-575	-107	-328	-16	-82	3	-66	64	-174	3	-391	109	-98	-186	-519	-1110	-1787	-481	-632		
	Sac. R. at Emmaton	ALL	-813	-338	-532	-207	-163	-244	-122	-189	8	-68	68	12	94	38	194	101	319	178	456	407	667	500	-157	-276	2	-7		
		DROUGHT	-1098	-571	-687	-411	-290	-480	-111	-330	129	-92	94	28	131	62	485	247	709	315	1070	863	841	508	49	-628	110	-41		
	SJR at Jersey Point	ALL	-994	-306	-1101	-458	-682	-448	-328	-313	-82	-118	24	-10	38	10	55	8	139	52	-251	-6	10	179	-476	-325	-304	-145		
		DROUGHT	-1022	-410	-1073	-543	-805	-467	-399	-417	-52	-182	42	1	47	15	160	28	343	82	-420	-125	8	237	-76	-429	-271	-184		
Interior Delta	S. Fork Moke. R. Term.	ALL	9	9	10	9	5	6	5	10	6	10	13	15	13	14	9	10	14	15	10	11	11	10	8	7	9	11		
		DROUGHT	8	8	8	8	3	4	1	5	-2	3	9	14	6	9	8	10	19	20	16	16	11	10	8	9	8	10		
	SJR at San And. Landing	ALL	-39	29	-139	-20	-120	-67	-83	-67	-8	-16	18	11	25	22	32	22	71	51	55	82	123	152	85	55	2	21		
		DROUGHT	-26	0	-105	-28	-103	-57	-99	-57	14	-24	26	18	27	25	56	32	141	78	73	118	163	207	219	89	32	33		
Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-48	0	-82	1	-10	0	-28	0	-10	0	-5	0	56	0	38	0	7	0	-16	-1	-11	0		
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-4	0	-9	0	-9	0	-5	0	-7	0	-17	-2	-21	0		
	SJR at Brandt Bridge	ALL	1	0	-33	0	-47	3	-83	-4	-14	0	-28	-1	-12	-5	-6	-1	55	0	36	13	11	9	-14	0	-11	1		
		DROUGHT	-7	0	-39	0	-53	3	-67	-3	-13	2	-19	-2	-7	-12	-9	-2	-8	0	-14	45	-7	33	-16	-1	-22	5		
	Old River at Middle River	ALL	6	5	-32	1	-48	0	-74	7	-11	2	-25	2	-3	6	-3	2	54	0	39	3	10	1	-14	0	-8	2		
		DROUGHT	-3	4	-38	1	-54	0	-58	7	-11	2	-14	4	11	11	-5	3	-8	0	-4	8	-6	2	-16	-1	-17	3		
	Old River at Tracy Bridge	ALL	4	11	-23	5	-50	-1	-55	24	-6	12	-17	10	24	35	3	9	41	-6	33	2	7	13	-11	9	-4	10		
		DROUGHT	3	11	-26	12	-55	0	-49	15	-14	3	-1	16	67	67	4	12	-29	0	-34	-1	-29	24	-16	19	-15	15		
SJR	SJR at Prisoners Point	ALL	-53	8	-149	-23	-181	-95	-104	-65	17	31	49	60	53	73	40	48	57	57	-12	32	9	72	14	30	-22	19		
		DROUGHT	-49	-22	-143	-49	-193	-104	-148	-73	19	22	89	107	90	111	78	76	100	59	-52	11	-18	87	81	43	-12	22		
Export Area	Banks PP	ALL	-88	-47	-225	-105	-247	-153	-293	-242	-160	-151	-167	-160	-177	-168	-48	-45	-42	-61	-58	-38	-116	-43	-90	-51	-140	-103		
		DROUGHT	-29	-14	-194	-107	-309	-217	-425	-360	-189	-168	-306	-294	-282	-273	-70	-70	58	19	-66	-28	-201	-66	38	72	-154	-115		
	Jones PP	ALL	-133	-107	-220	-117	-164	-83	-228	-169	-194	-189	-219	-211	-108	-104	-91	-88	-80	-126	-57	-62	-30	21	-103	-75	-135	-109		
		DROUGHT	-93	-103	-174	-93	-147	-73	-387	-306	-293	-279	-268	-259	-137	-141	-154	-149	-39	-79	-137	-106	-74	37	31	49	-146	-115		

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-15D. Period average change in EC levels for Alternative 4-H4 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity		Location	Period ^a	OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
Alt 4 Scn H4				Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.
Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1363	-887	-1169	-845	-506	-588	-188	-254	-79	-156	-9	-65	-2	-59	-47	-141	-116	-257	-76	-124	-188	-355	-929	-1048	-389	-398		
		DROUGHT	-1776	-1249	-1642	-1366	-750	-941	-232	-451	-67	-288	-12	-77	-1	-69	48	-190	-9	-403	120	-87	-256	-589	-1211	-1888	-482	-633		
	Sac. R. at Emmaton	ALL	-885	-409	-632	-307	-82	-164	-1	-68	42	-34	61	5	85	28	173	80	319	178	515	467	615	448	-172	-292	3	-6		
		DROUGHT	-1099	-572	-891	-614	-50	-241	99	-120	195	-26	96	31	118	49	453	215	690	296	1085	878	734	401	-106	-783	110	-40		
	SJR at Jersey Point	ALL	-984	-295	-1195	-552	-650	-416	-247	-231	-50	-87	28	-5	41	13	51	4	126	39	-315	-71	7	176	-449	-298	-303	-144		
		DROUGHT	-970	-358	-1244	-714	-779	-441	-248	-266	5	-125	52	12	49	17	142	10	311	50	-408	-112	49	278	-128	-481	-264	-178		
Interior Delta	S. Fork Moke. R. Term.	ALL	8	8	9	9	5	6	7	12	7	11	13	15	12	13	9	10	15	16	13	13	10	9	8	7	10	11		
		DROUGHT	7	7	8	8	5	6	3	7	-1	4	9	14	7	10	9	11	20	21	16	16	10	9	7	8	8	10		
	SJR at San And. Landing	ALL	-42	26	-163	-44	-121	-69	-45	-28	10	2	25	18	31	27	35	25	75	55	37	63	99	128	89	59	3	22		
		DROUGHT	-25	1	-148	-71	-122	-76	-38	4	44	6	36	28	41	39	65	41	137	74	67	112	159	202	199	69	35	36		
Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-48	0	-96	-13	-11	-1	-28	0	-11	0	-6	0	56	0	38	0	7	0	-17	-2	-12	-1		
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-20	0	-5	-1	-10	-1	-9	0	-5	0	-7	0	-20	-4	-21	0		
	SJR at Brandt Bridge	ALL	1	0	-33	0	-47	3	-96	-17	-15	-1	-28	-1	-12	-6	-6	-1	54	0	35	12	11	9	-15	-1	-13	0		
		DROUGHT	-7	0	-39	0	-52	4	-67	-3	-13	2	-20	-3	-8	-12	-10	-2	-8	0	-16	43	-7	33	-18	-3	-22	5		
	Old River at Middle River	ALL	6	5	-32	1	-48	0	-87	-6	-13	1	-25	2	-3	6	-4	2	53	-1	39	3	10	1	-15	-1	-10	1		
		DROUGHT	-3	4	-38	1	-54	0	-58	7	-11	2	-14	4	10	10	-6	3	-8	0	-4	8	-6	2	-19	-4	-18	3		
	Old River at Tracy Bridge	ALL	6	13	-22	6	-49	-1	-64	15	-9	9	-17	11	25	35	3	8	45	-3	35	5	1	7	-16	5	-5	9		
		DROUGHT	5	12	-24	14	-54	1	-49	16	-15	3	-1	17	69	69	4	12	-18	12	-28	5	-44	9	-27	8	-15	15		
SJR	SJR at Prisoners Point	ALL	-44	17	-166	-40	-189	-103	-82	-43	32	46	63	74	67	87	47	56	69	70	-9	35	-6	56	19	35	-17	24		
		DROUGHT	-41	-14	-166	-72	-224	-135	-116	-40	41	44	109	126	124	145	98	95	107	66	-57	6	-5	99	79	42	-4	30		
Export Area	Banks PP	ALL	-55	-14	-250	-131	-255	-161	-284	-233	-154	-145	-140	-133	-141	-132	-72	-69	-82	-102	-70	-50	-93	-21	-152	-114	-146	-109		
		DROUGHT	-18	-3	-195	-109	-328	-236	-374	-310	-150	-130	-252	-240	-264	-255	-217	-216	-32	-71	-106	-68	-124	11	-18	17	-173	-134		
	Jones PP	ALL	-141	-116	-214	-110	-177	-95	-279	-220	-224	-218	-224	-216	-139	-134	-70	-67	-47	-93	-63	-68	-62	-12	-99	-71	-144	-117		
		DROUGHT	-120	-130	-189	-108	-197	-124	-434	-353	-367	-353	-309	-300	-202	-206	-99	-93	-7	-47	-68	-36	-90	21	30	48	-160	-129		

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

1 Table EC-16. Period average change in EC levels for Alternative 5 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 5 LLT	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
			Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1216	-741	-1141	-817	-463	-544	-178	-244	-89	-165	-8	-65	-11	-68	-44	-138	-120	-261	-160	-208	-189	-356	-860
DROUGHT	-1665	-1138			-1628	-1351	-614	-805	-274	-493	-136	-357	-20	-86	-9	-77	29	-209	-31	-425	18	-189	-162	-496	-1029	-1706	-460	-611
Sac. R. at Emmaton	ALL	-632		-157	-582	-258	-15	-97	2	-65	26	-51	68	12	74	17	189	96	327	186	350	302	588	421	-69	-189	27	18
	DROUGHT	-920		-393	-847	-571	152	-38	0	-220	67	-155	87	21	112	44	435	197	662	268	914	707	861	527	179	-498	142	-9
SJR at Jersey Point	ALL	-778		-89	-1003	-360	-480	-246	-74	-59	-6	-42	34	0	29	1	39	-8	138	51	-174	70	29	198	-491	-340	-228	-69
	DROUGHT	-765		-153	-1262	-732	-481	-143	-126	-144	-14	-144	43	2	32	0	118	-14	305	44	-362	-67	-16	213	-140	-493	-222	-136
Interior Delta	S. Fork Moke. R. Term.	ALL	6	7	7	7	3	4	0	5	0	5	7	9	8	9	8	9	13	14	8	8	10	9	8	8	7	8
		DROUGHT	6	7	8	8	3	4	-2	2	-6	-1	4	10	4	7	7	9	18	19	14	14	11	11	9	10	6	8
	SJR at San And. Landing	ALL	-19	49	-93	26	-76	-24	21	37	21	13	16	9	10	6	18	9	57	37	56	83	138	166	93	63	20	39
		DROUGHT	15	41	-131	-54	-36	11	35	77	48	10	15	7	5	2	30	6	117	54	69	114	165	209	216	86	46	47
Southern Delta	SJR at Vernalis	ALL	4	1	-35	0	-48	0	-85	-2	-11	0	-28	0	-10	0	-5	0	56	0	38	0	7	0	-16	-1	-11	0
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-4	0	-9	0	-9	0	-5	0	-7	0	-19	-3	-21	0
	SJR at Brandt Bridge	ALL	2	1	-33	0	-48	2	-84	-4	-14	0	-27	-1	-9	-2	-5	0	54	0	38	16	11	10	-14	-1	-11	2
		DROUGHT	-7	0	-39	0	-54	2	-66	-2	-14	0	-18	-1	0	-5	-8	-1	-8	0	-6	53	-5	35	-17	-3	-20	7
	Old River at Middle River	ALL	2	1	-32	1	-48	0	-83	-2	-13	0	-27	0	-8	0	-5	0	55	0	39	3	10	1	-14	0	-10	0
		DROUGHT	-7	0	-39	0	-53	0	-65	1	-13	0	-18	0	1	1	-8	0	-8	1	-3	8	-6	2	-17	-2	-20	1
	Old River at Tracy Bridge	ALL	-4	3	-27	1	-48	1	-79	1	-17	1	-27	1	-7	3	-5	1	50	2	24	-7	1	7	-10	10	-12	2
		DROUGHT	-8	0	-39	-1	-53	2	-60	5	-16	2	-16	2	5	5	-7	1	-22	7	-59	-26	-45	7	-14	21	-28	2
SJR	SJR at Prisoners Point	ALL	-44	18	-109	17	-146	-60	-33	6	-2	12	7	18	1	21	12	20	15	16	-10	34	25	87	6	22	-23	18
		DROUGHT	-19	8	-166	-72	-156	-66	-33	42	9	12	-3	15	-5	16	17	15	67	26	-41	22	-17	87	56	19	-24	10
Export Area	Banks PP	ALL	-85	-44	-188	-68	-182	-88	-160	-108	-53	-43	-70	-63	-123	-114	-42	-39	-24	-43	-104	-84	-119	-46	-67	-28	-101	-64
		DROUGHT	-48	-33	-215	-128	-221	-129	-271	-206	3	23	-120	-108	-171	-162	-69	-68	25	-15	-164	-127	-219	-83	-19	15	-113	-74
	Jones PP	ALL	-38	-13	-178	-75	-150	-68	-207	-148	-72	-66	-115	-108	-55	-51	-66	-63	-14	-60	-29	-34	-20	31	-80	-53	-85	-58
		DROUGHT	-19	-29	-158	-78	-178	-104	-467	-386	-126	-112	-189	-181	-49	-53	-116	-111	-7	-47	-50	-18	-76	35	0	18	-109	-78

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-17. Period average change in EC levels for Alternative 6 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 6 LLT	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
			Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1581	-1106	-1556	-1231	-861	-943	-317	-384	-130	-206	-14	-70	0	-56	-65	-158	-178	-318	71	23	-366	-533	-1348
DROUGHT	-2129	-1602			-2157	-1881	-1295	-1485	-437	-656	-196	-417	-25	-91	1	-68	-28	-266	-137	-531	266	59	-264	-597	-1666	-2343	-672	-823
Sac. R. at Emmaton	ALL	-1207		-732	-1236	-912	-673	-755	-235	-301	-71	-148	29	-27	69	12	138	44	229	88	757	709	327	160	-810	-930	-224	-233
	DROUGHT	-1596		-1069	-1663	-1387	-908	-1099	-246	-465	-62	-283	48	-18	97	29	319	81	503	109	1329	1122	750	417	-772	-1449	-183	-334
SJR at Jersey Point	ALL	-1486		-798	-1764	-1121	-1292	-1059	-504	-489	-87	-123	47	13	70	42	31	-16	3	-84	(100%)	(73%)	(43%)	(20%)	(-26%)	(-40%)	(-13%)	(-21%)
	DROUGHT	-1733		-1121	-2032	-1502	-1698	-1360	-672	-690	-135	-265	65	24	93	62	69	-63	59	-202	-796	-501	-640	-411	-1451	-1804	-739	-653
Interior Delta	S. Fork Moke. R. Term.	ALL	12	13	15	14	11	12	12	17	13	17	18	20	16	17	12	12	18	19	21	21	18	17	13	12	15	16
		DROUGHT	12	13	14	13	12	13	9	13	3	8	14	19	8	12	12	14	23	24	23	23	17	17	14	15	13	15
	SJR at San And. Landing	ALL	-204	-136	-322	-203	-312	-259	-135	-119	12	3	51	44	59	56	59	49	55	34	-5	22	-30	-2	-178	-207	-79	-60
		DROUGHT	-277	-250	-387	-310	-409	-362	-213	-171	8	-30	68	60	78	75	89	65	86	23	-53	-8	-32	12	-193	-323	-103	-102
Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-48	0	-83	-1	-10	0	-28	0	-11	0	-6	0	55	-1	37	-1	6	-1	-10	6	-11	0
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-19	0	-5	-1	-10	-1	-10	-1	-6	-2	-9	-2	5	21	-19	1
	SJR at Brandt Bridge	ALL	1	0	-33	0	-45	6	-83	-4	-14	0	-27	0	-10	-3	-6	-1	53	-1	33	11	9	7	-9	4	-11	1
		DROUGHT	-7	0	-39	0	-48	8	-66	-2	-13	1	-18	-1	-3	-7	-9	-1	-9	-1	-20	40	-9	31	1	16	-20	7
	Old River at Middle River	ALL	0	-1	-33	0	-48	0	-80	1	-13	0	-27	1	-8	1	-5	0	53	-1	38	2	9	0	-9	5	-10	0
		DROUGHT	-8	-1	-39	0	-55	-1	-64	2	-13	0	-18	1	1	1	-9	0	-10	-1	-5	6	-8	0	2	17	-19	2
	Old River at Tracy Bridge	ALL	-4	3	-27	0	-57	-8	-69	11	-15	3	-24	3	-3	8	-5	1	65	18	47	16	-3	3	-18	2	-9	5
		DROUGHT	-9	-1	-40	-2	-65	-10	-55	9	-17	1	-12	6	17	17	-6	2	23	52	14	47	-49	4	-28	7	-19	11
SJR	SJR at Prisoners Point	ALL	-124	-63	-208	-82	-226	-141	-58	-20	101	115	126	137	99	119	84	92	69	70	-34	10	-73	-10	-141	-125	-32	8
		DROUGHT	-192	-164	-244	-150	-314	-224	-131	-55	116	119	175	193	165	187	156	154	111	69	-164	-101	-188	-84	-215	-252	-60	-26
Export Area	Banks PP	ALL	-390	-349	-457	-337	-502	-408	-482	-430	-359	-350	-304	-297	-287	-278	-257	-254	-219	-239	-256	-236	-353	-280	-377	-339	-354	-317
		DROUGHT	-475	-460	-532	-445	-634	-542	-600	-535	-481	-461	-467	-455	-453	-444	-373	-373	-247	-287	-355	-317	-546	-411	-470	-436	-469	-430
	Jones PP	ALL	-382	-356	-448	-344	-525	-443	-530	-471	-444	-438	-417	-409	-305	-301	-264	-260	-219	-266	-286	-291	-352	-301	-375	-348	-379	-352
		DROUGHT	-466	-476	-524	-443	-638	-565	-669	-589	-663	-649	-679	-671	-471	-475	-397	-391	-218	-258	-377	-345	-517	-406	-466	-449	-507	-476

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-18. Period average change in EC levels for Alternative 7 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change		
Alt 7 LLT	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	
			Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-1235	-760	-1506	-1181	-849	-931	-320	-387	-135	-211	-20	-76	-4	-61	-116	-210	-363	-504	-204	-253	-320	-487	-859	-979
DROUGHT	-1642	-1115			-2035	-1758	-1250	-1440	-442	-662	-200	-421	-35	-101	-8	-77	-105	-344	-449	-843	-194	-400	-459	-792	-1063	-1740	-657	-808	
Sac. R. at Emmaton	ALL	-684		-209	-1175	-850	-661	-743	-240	-307	-78	-154	20	-36	60	3	50	-44	-81	-222	294	246	387	220	-72	-191	-182	-191	
	DROUGHT	-870		-343	-1499	-1222	-849	-1039	-262	-481	-71	-292	28	-37	78	9	187	-51	-19	-413	581	374	382	48	119	-558	-183	-334	
SJR at Jersey Point	ALL	-1020		-332	-1672	-1029	-1270	-1036	-506	-491	-99	-136	40	6	65	38	5	-42	-132	-219	92	-247	-3	92	261	-405	-254	-429	-270
	DROUGHT	-1099		-487	-1874	-1344	-1643	-1305	-662	-680	-135	-265	61	20	88	56	30	-102	-161	-422	-512	-216	76	305	-129	-482	-497	-410	
Interior Delta	S. Fork Moke. R. Term.	ALL	12	12	14	13	10	11	11	16	9	14	15	17	14	15	11	11	15	16	8	8	8	7	8	7	11	12	
		DROUGHT	12	12	12	12	11	12	8	12	2	7	13	18	8	11	10	12	20	21	12	12	8	7	8	9	10	12	
	SJR at San And. Landing	ALL	-14	54	-277	-158	-301	-248	-136	-120	4	-4	46	39	56	52	52	42	21	1	15	41	146	175	111	82	-23	-4	
		DROUGHT	-12	14	-307	-231	-381	-335	-206	-164	8	-30	65	57	74	72	80	56	37	-25	1	46	186	230	225	95	-19	-18	
Southern Delta	SJR at Vernalis	ALL	5	1	-35	0	-48	0	-85	-2	-10	0	-28	0	-11	-1	-6	-1	55	-1	37	-1	9	2	-9	6	-11	0	
		DROUGHT	-1	5	-41	0	-53	0	-66	0	-9	0	-19	0	-5	-1	-10	0	-10	-1	-6	-2	2	9	5	21	-18	3	
	SJR at Brandt Bridge	ALL	3	1	-32	0	-45	6	-84	-5	-14	0	-28	-1	-10	-4	-6	-1	53	-1	31	9	16	14	-8	5	-10	2	
		DROUGHT	-3	4	-38	1	-48	8	-66	-2	-13	1	-18	-1	-3	-7	-9	-1	-9	-1	-6	54	9	48	4	19	-17	10	
	Old River at Middle River	ALL	2	1	-33	0	-48	0	-81	0	-13	0	-27	0	-8	0	-6	-1	53	-1	38	2	11	1	-9	5	-10	1	
		DROUGHT	-3	4	-39	0	-54	-1	-64	2	-13	0	-17	1	2	2	-8	0	-10	-1	-5	7	0	8	3	18	-17	3	
	Old River at Tracy Bridge	ALL	-3	4	-27	1	-57	-8	-72	8	-16	2	-25	3	-3	8	-5	0	65	17	38	7	-10	-4	-18	2	-11	3	
		DROUGHT	-6	2	-39	-1	-65	-10	-55	9	-17	1	-12	6	17	17	-6	3	22	52	-6	27	-52	1	-25	10	-20	10	
SJR	SJR at Prisoners Point	ALL	-44	18	-189	-63	-219	-134	-66	-27	89	103	120	131	97	117	81	89	55	55	-40	4	56	118	37	53	-2	39	
		DROUGHT	-68	-40	-210	-116	-298	-208	-125	-50	117	120	172	190	164	185	155	152	92	50	-95	-32	68	172	90	53	5	40	
Export Area	Banks PP	ALL	-390	-350	-457	-337	-500	-406	-392	-341	-311	-302	-245	-238	-287	-278	-257	-254	-215	-235	-58	-38	-31	42	-89	-51	-249	-212	
		DROUGHT	-510	-495	-567	-480	-634	-543	-600	-535	-517	-496	-495	-483	-559	-550	-514	-513	-388	-427	-154	-116	-42	94	21	56	-330	-291	
	Jones PP	ALL	-382	-356	-448	-344	-516	-435	-453	-394	-394	-388	-392	-384	-305	-301	-264	-260	-219	-265	-9	-14	-8	43	-100	-72	-291	-264	
		DROUGHT	-466	-476	-524	-443	-638	-565	-669	-589	-663	-650	-676	-668	-471	-475	-397	-391	-218	-258	-82	-50	-42	69	-14	4	-405	-374	

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-19. Period average change in EC levels for Alternative 8 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 8 LLT	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
			Western Delta	Sac. R. at Emmator/Threemile Sl. Nr. Sac. R.	ALL	-1152	-677	-1439	-1115	-833	-915	-319	-385	-140	-217	-33	-89	-24	-81	-169	-263	-385	-526	-137	-186	-195	-361	-761
DROUGHT	-1489	-962			-1915	-1638	-1222	-1412	-434	-654	-212	-433	-70	-136	-49	-117	-231	-470	-521	-915	-111	-318	-263	-596	-919	-1597	-620	-771
Sac. R. at Emmaton	ALL	-545		-70	-1066	-741	-635	-717	-240	-306	-89	-166	-6	-62	18	-39	-54	-148	-125	-266	436	388	617	450	83	-37	-134	-143
	DROUGHT	-640		-113	-1322	-1045	-810	-1000	-255	-475	-101	-322	-42	-108	-9	-78	-54	-292	-155	-549	738	531	722	389	340	-337	-132	-283
SJR at Jersey Point	ALL	-1000		-311	-1644	-1001	-1260	-1027	-505	-490	-103	-139	32	-2	53	25	-23	-70	-150	-237	-476	-232	33	202	-412	-261	-455	-295
	DROUGHT	-1034		-422	-1805	-1275	-1622	-1284	-655	-673	-138	-268	42	1	60	28	-38	-170	-221	-482	-752	-457	22	251	-149	-502	-524	-438
Interior Delta	S. Fork Moke. R. Term.	ALL	12	13	13	12	10	11	9	14	8	12	12	14	11	12	9	10	15	16	14	14	10	9	9	8	11	12
		DROUGHT	13	13	12	12	11	12	7	11	-1	4	6	11	4	8	7	9	20	21	16	16	10	10	10	11	10	11
	SJR at San And. Landing	ALL	-8	60	-273	-155	-298	-245	-138	-122	0	-9	38	31	44	41	40	30	17	-3	-38	-12	99	127	116	87	-33	-14
		DROUGHT	6	33	-292	-216	-373	-327	-205	-163	2	-37	46	38	55	53	58	34	23	-39	-88	-43	136	180	228	98	-34	-33
Southern Delta	SJR at Vernalis	ALL	4	0	-35	0	-43	5	-85	-2	-10	1	-28	0	-11	-1	-6	0	55	-1	37	-1	15	8	-9	6	-10	1
		DROUGHT	-6	0	-41	0	-52	0	-66	0	-9	0	-19	0	-4	0	-10	0	-10	-1	-6	-2	18	25	6	22	-17	4
	SJR at Brandt Bridge	ALL	2	0	-32	0	-40	10	-85	-6	-13	1	-27	-1	-10	-4	-6	-1	53	-1	38	16	18	16	-7	6	-9	3
		DROUGHT	-7	0	-39	0	-48	8	-66	-2	-13	1	-18	-1	-2	-7	-9	-1	-9	-1	-6	54	12	52	7	22	-16	10
	Old River at Middle River	ALL	1	0	-33	0	-44	4	-82	-1	-13	1	-27	1	-8	0	-5	0	53	-1	38	2	15	6	-8	6	-9	1
		DROUGHT	-8	-1	-39	0	-54	0	-64	2	-13	0	-17	1	2	2	-8	0	-10	-1	-6	6	12	20	5	20	-17	4
	Old River at Tracy Bridge	ALL	-4	3	-27	1	-53	-5	-72	7	-15	3	-24	3	-3	8	-5	1	66	18	39	8	-6	0	-16	4	-10	4
		DROUGHT	-9	-1	-40	-2	-65	-10	-56	9	-17	1	-12	6	17	18	-5	3	22	52	-5	28	-44	9	-20	15	-19	11
SJR	SJR at Prisoners Point	ALL	-47	14	-190	-64	-219	-133	-65	-27	88	102	117	128	92	112	76	85	52	52	-74	-29	-16	46	19	35	-14	27
		DROUGHT	-66	-38	-207	-113	-295	-205	-124	-48	115	118	165	182	152	173	143	141	81	40	-191	-128	-36	68	59	22	-17	18
Export Area	Banks PP	ALL	-390	-349	-457	-337	-498	-404	-421	-369	-313	-304	-260	-253	-287	-278	-257	-255	-216	-236	30	50	-56	16	-147	-108	-260	-223
		DROUGHT	-545	-530	-532	-445	-670	-578	-600	-536	-481	-461	-467	-455	-559	-550	-514	-513	-352	-392	98	136	-156	-21	-95	-60	-340	-301
	Jones PP	ALL	-382	-356	-448	-344	-520	-438	-443	-384	-399	-393	-387	-379	-305	-301	-264	-260	-220	-266	-15	-20	-51	0	-124	-96	-296	-270
		DROUGHT	-466	-476	-524	-443	-638	-565	-670	-589	-663	-650	-668	-659	-471	-475	-397	-391	-218	-258	-114	-83	-140	-30	-80	-62	-421	-390

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 Table EC-20. Period average change in EC levels for Alternative 9 LLT relative to existing conditions and the No Action Alternative LLT.

Electrical Conductivity			OCT		NOV		DEC		JAN		FEB		MAR		APR		MAY		JUN		JUL		AUG		SEP		Annual Avg. Change	
Alt 9 LLT	Location	Period ^a	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT	Ex. Cond.	No Act. LLT
			Western Delta	Sac. R. at Emmaton/Threemile Sl. Nr. Sac. R.	ALL	-560	-85	-432	-107	-4	-86	102	35	77	1	42	-14	38	-18	-13	-107	-147	-287	101	53	-119	-286	-633
DROUGHT	-556	-29			-333	-56	100	-91	258	39	230	9	71	5	58	-10	131	-107	30	-364	401	194	-263	-597	-646	-1323	-43	-194
Sac. R. at Emmaton	ALL	104		579	234	559	467	386	345	279	220	143	110	54	110	53	132	38	138	-3	492	443	395	228	51	-68	233	224
	DROUGHT	426		953	693	969	908	718	693	474	516	295	175	109	155	87	405	167	499	105	1031	824	393	59	430	-247	527	376
SJR at Jersey Point	ALL	-790		-102	-826	-183	-575	-342	-161	-146	54	18	91	57	81	53	28	-19	-94	-650	-405	-747	-579	-989	-837	-374	-215	
	DROUGHT	-615		-2	-483	46	-320	18	-17	-35	191	61	174	133	126	94	114	-18	106	-155	-951	-656	-900	-671	-840	-1193	-285	-198
Interior Delta	S. Fork Moke. R. Term.	ALL	2	3	2	2	0	1	-10	-5	-13	-8	-4	-2	-5	-4	-1	0	2	3	2	2	3	2	3	2	-2	0
		DROUGHT	3	3	2	2	3	4	-15	-11	-28	-23	-18	-12	-9	-4	-2	2	3	3	3	4	4	3	4	3	4	-5
	SJR at San And. Landing	ALL	173	241	139	258	66	118	29	45	79	71	35	28	12	9	31	21	64	43	19	45	21	49	73	44	62	81
		DROUGHT	309	335	404	481	320	366	148	190	192	154	50	41	13	10	80	57	140	77	38	83	-15	29	183	53	155	156
Southern Delta	SJR at Vernalis	ALL	3	0	-35	0	-43	5	-87	-5	-11	0	-28	0	-11	0	-6	0	56	0	38	0	7	0	-17	-2	-11	0
		DROUGHT	-6	0	-41	0	-53	0	-66	0	-9	0	-20	0	-5	-1	-10	-1	-9	0	-5	0	-7	0	-20	-5	-21	-1
	SJR at Brandt Bridge	ALL	-147	-148	-191	-158	-347	-296	-293	-214	-238	-223	-255	-228	-74	-67	-72	-67	-159	-213	-207	-230	-154	-156	-145	-132	-190	-178
		DROUGHT	-179	-172	-208	-169	-350	-293	-346	-282	-381	-367	-388	-371	-99	-104	-123	-115	-211	-204	-233	-173	-189	-149	-182	-167	-241	-214
	Old River at Middle River	ALL	-20	-21	-46	-13	-87	-39	-114	-33	-55	-41	-79	-52	-26	-17	-21	-15	3	-51	-12	-49	-28	-37	-41	-27	-44	-33
		DROUGHT	-27	-20	-45	-6	-85	-31	-102	-37	-83	-70	-109	-91	-36	-36	-40	-31	-81	-73	-73	-62	-57	-49	-53	-38	-66	-45
	Old River at Tracy Bridge	ALL	-24	-17	-43	-15	-86	-38	-123	-43	-65	-47	-81	-53	-38	-28	-24	-19	19	-28	-11	-42	-50	-44	-50	-29	-48	-34
		DROUGHT	-28	-20	-49	-12	-82	-27	-109	-44	-89	-71	-108	-90	-54	-54	-43	-35	-45	-15	-70	-36	-109	-56	-78	-43	-72	-42
SJR	SJR at Prisoners Point	ALL	128	190	138	264	46	131	-35	3	-3	12	-25	-14	-85	-65	-49	-41	-3	-2	-13	31	-34	28	33	50	8	49
		DROUGHT	241	269	396	490	295	385	85	161	81	84	-29	-11	-113	-92	-20	-23	78	36	-11	52	-125	-21	105	67	82	116
Export Area	Banks PP	ALL	-345	-305	-421	-301	-460	-366	-435	-383	-295	-286	-228	-221	-232	-223	-207	-204	-165	-184	-195	-175	-291	-218	-315	-277	-299	-262
		DROUGHT	-408	-393	-465	-378	-568	-476	-535	-471	-416	-395	-401	-389	-387	-378	-306	-306	-180	-220	-288	-250	-479	-344	-403	-369	-403	-364
	Jones PP	ALL	-44	-19	1	104	-76	5	-160	-101	-176	-170	-198	-191	-173	-169	-164	-160	-114	-160	-127	-132	-116	-65	-97	-69	-120	-94
		DROUGHT	5	-5	157	237	113	187	-73	8	-267	-253	-355	-347	-280	-284	-288	-282	-85	-125	-93	-61	-187	-76	-137	-120	-124	-93

^a ALL: Water years 1976-1991 represent the 16-year period modeled using DSM2. DROUGHT: Represents a 5 consecutive year (water years 1987-1991) drought period consisting of dry and critical water year types (as defined by the Sacramento Valley 40-30-30 water year hydrologic classification index).

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1 **Table EC-21: Period Average EC levels (mS/cm) for the Sacramento River at Collinsville.**

	Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT
JAN	2.7	2.7	2.7	2.0	2.5	2.1	2.2	2.0	2.4	2.6	1.3	1.3	1.3	3.1
FEB	1.7	1.9	1.7	1.5	1.6	1.5	1.5	1.6	1.7	1.7	1.1	1.0	1.0	2.0
MAR	0.9	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2	1.3	0.9	0.9	0.7	1.2
APR	1.0	1.3	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.2	1.2	0.9	1.3
MAY	1.9	2.2	2.7	2.5	2.8	2.5	2.3	2.5	2.3	2.5	2.2	2.1	1.6	2.2
JUN	3.2	3.6	4.1	4.0	4.1	4.0	3.9	4.0	3.9	4.1	3.7	3.0	2.8	3.5
JUL	4.5	4.2	5.3	5.3	5.3	5.3	5.4	5.3	5.4	5.2	5.5	5.1	5.2	5.3
AUG	5.6	5.6	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.8	5.7	6.6	7.0	6.2
SEP	7.3	6.6	8.4	6.4	8.4	8.2	8.3	6.3	6.3	6.4	4.6	6.4	6.6	6.5
OCT	7.7	5.8	6.1	4.4	5.9	6.0	6.0	4.6	4.4	5.1	3.6	4.7	4.9	6.3
NOV	7.4	5.8	6.0	4.8	5.8	6.0	6.0	4.9	4.7	5.0	3.2	3.3	3.6	6.4
DEC	5.2	4.9	5.1	4.2	5.1	4.8	5.0	4.1	4.2	4.5	2.2	2.2	2.3	5.4

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1 **Table EC-22: Period Average EC levels (mS/cm) for Montezuma Slough at National Steele, Suisun Marsh.**

	Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT
JAN	2.7	2.9	2.2	1.7	2.1	1.8	1.9	1.6	1.9	2.1	0.9	1.0	1.0	2.9
FEB	1.7	2.0	1.4	1.0	1.2	1.1	1.1	1.1	1.3	1.3	0.7	0.8	0.7	1.8
MAR	1.3	1.7	1.0	0.9	0.9	0.8	0.8	0.9	0.9	0.9	0.6	0.6	0.5	1.0
APR	1.6	2.0	1.0	0.9	0.9	0.9	0.8	0.9	0.9	0.9	0.7	0.7	0.6	0.9
MAY	2.7	3.2	1.6	1.4	1.5	1.4	1.3	1.4	1.3	1.4	1.2	1.1	0.9	1.3
JUN	4.2	4.9	2.4	2.3	2.4	2.3	2.2	2.3	2.2	2.4	2.1	1.6	1.5	2.0
JUL	6.3	6.4	3.4	3.3	3.3	3.3	3.4	3.4	3.4	3.3	3.5	2.9	2.9	3.3
AUG	7.8	7.8	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.0	4.1	4.4	4.0
SEP	9.8	9.2	5.9	4.8	5.9	5.9	5.9	4.8	4.7	4.8	3.4	4.6	4.9	4.7
OCT	7.2	5.7	4.7	3.4	4.7	4.9	4.8	3.5	3.4	3.9	2.5	3.7	3.9	4.8
NOV	7.1	5.8	4.4	3.4	4.3	4.4	4.3	3.5	3.4	3.8	2.2	2.5	2.7	5.1
DEC	4.9	4.8	3.6	2.9	3.7	3.6	3.8	2.9	3.0	3.2	1.6	1.6	1.7	4.3

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1 **Table EC-23: Period Average EC levels (mS/cm) for Montezuma Slough near Beldon Landing, Suisun Marsh.**

	Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT
JAN	3.3	3.4	8.8	7.6	8.7	8.1	8.3	7.5	7.9	8.3	5.4	5.5	5.4	9.2
FEB	2.1	2.3	6.1	5.3	5.9	5.4	5.5	5.3	5.7	5.8	4.0	4.0	3.9	6.5
MAR	2.5	3.0	4.9	4.6	4.8	4.6	4.6	4.6	4.7	4.8	3.4	3.4	3.0	5.0
APR	2.9	3.5	4.7	4.5	4.6	4.5	4.3	4.5	4.4	4.5	3.7	3.6	3.1	4.5
MAY	4.3	5.0	6.3	5.9	6.3	5.9	5.6	5.9	5.6	5.9	5.3	5.2	4.4	5.8
JUN	6.2	7.1	8.2	7.8	8.2	7.8	7.5	7.8	7.5	7.9	7.4	6.9	6.3	7.5
JUL	9.0	9.3	10.2	9.9	10.2	10.0	9.9	10.0	9.9	10.0	9.8	9.2	9.0	10.0
AUG	11.0	10.7	12.0	11.9	12.0	11.9	12.0	11.9	11.9	11.8	11.3	11.7	11.8	11.9
SEP	13.1	12.6	14.0	12.8	14.0	13.8	13.9	12.7	12.7	12.7	11.3	12.6	12.8	12.9
OCT	7.8	6.4	13.7	10.9	13.6	13.6	13.6	11.0	10.9	11.3	9.8	11.1	11.3	12.1
NOV	7.6	6.2	12.4	10.5	12.2	12.4	12.3	10.6	10.4	11.0	9.1	9.8	10.1	12.5
DEC	5.1	4.9	11.3	9.7	11.2	11.2	11.2	9.7	9.7	10.0	7.4	7.6	7.8	11.4

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1 **Table EC-24: Period Average EC levels (mS/cm) for Chadbourne Slough near Sunrise Duck Club, Suisun Marsh.**

	Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT
JAN	7.1	6.9	10.3	9.1	10.2	9.5	9.7	8.9	9.3	9.8	6.7	6.8	6.7	10.5
FEB	4.8	4.9	7.5	6.6	7.3	6.8	6.9	6.6	7.0	7.2	5.2	5.2	5.0	7.7
MAR	3.8	4.3	6.1	5.7	5.9	5.7	5.7	5.7	5.8	5.9	4.5	4.4	4.0	5.9
APR	3.6	4.2	5.9	5.7	5.8	5.7	5.4	5.7	5.5	5.7	4.8	4.7	4.1	5.5
MAY	4.9	5.6	7.8	7.3	7.8	7.3	6.9	7.3	6.9	7.3	6.7	6.5	5.6	7.0
JUN	7.0	7.8	9.9	9.5	10.0	9.5	9.2	9.5	9.2	9.6	9.1	8.5	7.9	9.1
JUL	9.7	10.0	12.1	11.9	12.1	11.9	11.9	11.9	11.9	12.0	11.7	11.2	11.0	11.7
AUG	11.7	11.5	14.2	14.0	14.1	14.0	14.1	14.1	14.1	14.0	13.3	13.8	13.9	13.8
SEP	13.7	13.3	16.1	14.8	16.1	15.9	16.0	14.7	14.7	14.7	13.2	14.6	14.7	14.6
OCT	12.3	10.9	15.5	12.8	15.5	15.5	15.5	12.9	12.8	13.2	11.6	12.9	13.1	13.8
NOV	11.2	9.4	14.0	12.1	13.9	14.1	14.0	12.3	12.0	12.7	10.6	11.3	11.6	13.8
DEC	9.4	8.4	12.9	11.3	12.9	12.8	12.8	11.3	11.3	11.7	8.8	9.1	9.2	12.8

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1 **Table EC-25: Period Average EC levels (mS/cm) for Suisun Slough 300 feet south of Volanti Slough, Suisun Marsh.**

	Ex. Cond.	No Act. LLT	Alt 1 LLT	Alt 2 LLT	Alt 3 LLT	Alt 4 LLT H1	Alt 4 LLT H2	Alt 4 LLT H3	Alt 4 LLT H4	Alt 5 LLT	Alt 6 LLT	Alt 7 LLT	Alt 8 LLT	Alt 9 LLT
JAN	6.4	6.3	9.6	8.5	9.6	8.8	9.0	8.3	8.8	9.2	6.1	6.2	6.1	10.0
FEB	4.4	4.5	6.8	6.0	6.6	6.1	6.3	6.0	6.5	6.6	4.7	4.7	4.5	7.1
MAR	3.7	4.1	5.6	5.3	5.4	5.3	5.2	5.3	5.4	5.5	4.1	4.0	3.6	5.4
APR	3.5	4.2	5.5	5.3	5.4	5.3	5.0	5.3	5.1	5.3	4.5	4.4	3.7	5.1
MAY	4.8	5.4	7.4	7.0	7.5	7.0	6.6	7.0	6.6	7.0	6.4	6.2	5.4	6.7
JUN	6.7	7.5	9.6	9.2	9.7	9.2	8.9	9.2	8.9	9.3	8.8	8.2	7.6	8.8
JUL	9.4	9.7	11.8	11.7	11.8	11.7	11.7	11.7	11.6	11.7	11.5	10.9	10.8	11.5
AUG	11.5	11.2	13.9	13.8	13.9	13.8	13.9	13.9	13.9	13.8	13.1	13.6	13.8	13.6
SEP	13.6	13.1	15.9	14.5	15.9	15.8	15.8	14.5	14.5	14.4	12.9	14.3	14.5	14.4
OCT	11.5	10.3	15.2	12.3	15.1	15.2	15.2	12.4	12.3	12.7	11.1	12.4	12.6	13.5
NOV	10.3	8.6	13.6	11.7	13.4	13.6	13.5	11.8	11.6	12.2	10.2	10.8	11.1	13.5
DEC	8.4	7.6	12.4	10.8	12.4	12.3	12.3	10.8	10.8	11.2	8.3	8.5	8.6	12.4

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