Appendix H1a6
Sensitivity Analysis for 2025 Record of Decision and Incidental Take Permit Amendments

H1a6.1 Introduction

This appendix summarizes modeling methods and results developed to evaluate the effects of changes to operations of the Central Valley Project (CVP) and State Water Project (SWP) (collectively, Projects) resulting from changes to Endangered Species Act (ESA) and California Endangered Species Act (CESA) implementation that occurred subsequent to the release of the December 2025 *Partially Recirculated Draft Staff Report/Substitute Environmental Document in Support of Potential Updates to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary for the Sacramento River and its Tributaries, Delta Eastside Tributaries, and Delta* (2025 partially recirculated draft Staff Report). Specifically, the United States Bureau of Reclamation (Reclamation) adopted the 2025 Record of Decision on the Long-Term Operation of the Central Valley Project and State Water Project (2025 ROD) and the California Department of Fish and Wildlife (CDFW) issued amendments to Incidental Take Permit No. 2081-2023-054-00 (ITP; CDFW 2024) on September 12, 2025 (ITP Amendment 1; CDFW 2025a) and December 18, 2025 (ITP Amendment 2; CDFW 2025b) modifying specified conditions of approval, as described further below. A further ITP amendment request was submitted by the California Department of Water Resources (DWR) in May 2026 (DWR 2026a). CDFW issued ITP Amendment 3 on July 2, 2026 (CDFW 2026) for a one-year modification to the ITP. CDFW is continuing to process the request for a permanent amendment to the ITP and expects to make its decision on the request by December 2026.

The model updates described in this appendix build on those previously described in Appendix H1a, *Sacramento Water Allocation Model Methods*, which in turn build on methods and assumptions described in Appendix A1, *Sacramento Water Allocation Model Methods and Results*, and Appendix G3a, *Sacramento Water Allocation Model Methods and Results for the Proposed Voluntary Agreements*. The primary purpose of model updates described in this appendix is to evaluate the sensitivity of the revised proposed Plan amendments to changes in Project operations resulting from the 2025 ROD and ITP amendments (collectively, 2025 ROD/ITP), and are described in Section H1a6.2.3, *Model Updates to Support Analysis of 2025 ROD and ITP Amendments*. These updates only affect the scenarios used to evaluate those specific operational changes. A number of minor updates were also made that have small effects on model results for all scenarios, as described in Section H1a6.2.1, *General Updates*. Finally, limited changes were made to the implementation of Voluntary Agreement (VA) scenarios to simplify modeling workflow and transparency, and to address comments received on the model implementation of the Mokelumne River VA proposal.

The remaining subsections of this introduction provide an overview of the operational changes associated with the 2025 ROD and ITP amendments as well as the modeling challenges that motivate the approach to the sensitivity analysis.

H1a6.1.1 Summary of Operational Changes

The 2025 ROD and 2025 ITP amendments alter certain actions for the protection of threatened and endangered species pursuant to the ESA and CESA relative to the corresponding actions specified by the 2024 ROD and 2024 ITP. Although the RODs, ITP, and ITP amendments contain descriptions of these changes, they are summarized here for the purposes of documenting the modeling assumptions and methods supporting this sensitivity analysis.

H1a6.1.1.1 Fall X2

The 2025 ROD eliminated the requirement that the distance of the 2 practical salinity units isohaline from the Golden Gate Bridge (X2) be maintained at or downstream of 80 km in September and October following wet and above normal water years (as defined by the Sacramento Valley water year hydrologic classification), commonly known as fall X2. The corresponding requirement of the ITP, Delta Smelt Summer-Fall Habitat Action (condition of approval 9.1.3), was temporarily modified in water year 2025 pursuant to ITP Amendment 1 (CDFW 2025a) to remove the requirement to meet a monthly average X2 of less than or equal to 80 km and to include alternative mitigation for condition of approval 9.1.3 (DWR 2026b). In its May 2026 request for a further ITP amendment, DWR requested permanent removal of fall X2 from condition of approval 9.1.3. ITP Amendment 3 (CDFW 2026) included a one-year modification of action 9.1.3 for water year 2026 substantially similar to that in ITP Amendment 1 (CDFW 2025a). CDFW deferred action on a permanent removal of the fall X2 requirement.

H1a6.1.1.2 Old and Middle River Reverse Flow Limits

The 2025 ROD and 2025 ITP amendments also include changes to OMR management actions. Pursuant to ITP Amendment 2 (CDFW 2025b), when the first flush action is triggered, DWR may provide an assessment to CDFW demonstrating that OMR more negative than -2,000 cfs would provide equal protection for fish species. If CDFW's Director agrees, DWR may operate to OMR flows as negative as -5,000 cfs. The 2025 ROD provides that based on Reclamation's assessment, Reclamation may initiate an early first flush action, or may postpone or reduce the duration and magnitude of the action if Reclamation concludes that it is not warranted to avoid exceeding incidental take of Delta smelt. During the remainder of the OMR management season, the 2025 ROD and 2025 ITP amendments provide for increased flexibility in the management of negative OMR flows for both Projects. Under the 2025 ITP amendments, DWR may submit assessments for approval by CDFW's Director supporting alternative operations for OMR actions to prevent entrainment of Delta smelt when the default OMR limit would be -3,500 cfs, provided that no other action limiting OMR is triggered. The 2025 ROD provides Reclamation broader discretion to select an OMR limit as negative as -5,000 cfs at any time during the OMR management season based on a real-time assessment. Additionally, the 2025 ROD increased the magnitude of the allowable negative OMR for Reclamation during storm flex operations from -6,250 cfs to -6,500 cfs and modified provisions regarding the hydrologic conditions and governance for the action.

H1a6.1.2 Modeling Challenges

Efforts to model the combined effects of the 2025 ROD and 2025 ITP amendments are complicated by inconsistent constraints on export operations between the CVP and SWP. Because the export operations of the two Projects are intertwined via shared responsibilities for meeting regulatory requirements and the Coordinated Operations Agreement (COA) that governs the sharing of that responsibility, inconsistent values of other operational constraints such as OMR reverse flow limits can introduce the possibility that the modeled operations of one Project may benefit collaterally from relaxations to the other Project's constraints. Initial attempts to model such scenarios generally resulted in a collateral benefit to SWP exports during the OMR management season that were inconsistent with the provisions of the ITP, likely overestimating the combined effects of the 2025 ROD and ITP amendments on Project exports and Delta outflow. Attempts to prevent such modeled operations resulted in over-constrained SWP exports, likely underestimating the combined effects of the 2025 ROD and ITP amendments. Although it is in principle possible to formulate model constraints to overcome both challenges, there is currently no publicly available operations model that has been confirmed to effectively model such operations, and SacWAM modelers have been unable to formulate such constraints to date. Accordingly, Section H1a6.3, *Sensitivity Analysis Methods*, describes a postprocessing approach to represent the combined effects of the 2025 ROD and 2025 ITP amendments adequately for the purposes of analyzing the sensitivity of both the VA and regulatory pathways to those changes.

H1a6.2 SacWAM Updates

Since the release of SacWAM 2025.08.28 to support the 2025 partially recirculated draft Staff Report, several minor refinements were made to SacWAM as part of SacWAM 2026.05.29 as a result of review of public comments.

H1a6.2.1 General Updates

This section describes updates included in SacWAM 2026.05.29 that affect all scenarios. These updates generally result in a very limited scope of changes to model results, with potentially larger effects in specific locations during specific months of the simulation. Consequently, results presented in this appendix for previously existing scenarios such as baseline, VA, and 55 w/WSAs differ slightly from those presented in Section 13.4.3, *Changes in Hydrology*, and Section 13.4.4, *Changes in Water Supply*. However, the updated results for existing scenarios support the same general conclusions, with limited exceptions indicated in the sections below.

H1a6.2.1.1 WEAP Software Version

SacWAM 2026.05.29 was built and simulated using WEAP version 2025.003. This software version includes an enhancement that enables file paths to be specified by the values of variables in the data tree, which facilitates more transparent definition of scenarios that rely on input variables read from the filesystem within the current WEAP area. Other cumulative updates to the WEAP software since

version 2024.0008 (previously used for SacWAM 2025.08.28) may result in small changes to simulated results.

H1a6.2.1.2 Trinity River Water Year Type

The extension of the SacWAM period of record to include water years 2016 through 2021 introduced an error in the values of the Trinity River water year type for water years 2017 through 2021. For that range of years, the values were offset by one year, such that water years 2017 through 2021 were modeled according to the water year types for water years 2016 through 2020. These values were corrected in the file "Data\WYT\CalSim WYTypes.csv" to reflect the correct historical values. This update only affects modeled results for water years 2017 through 2021 and improves the representation of Trinity River Restoration Program flows for that period.

H1a6.2.1.3 Lodi Decree Instream Flow Requirements

Public comments noted that certain instream flow requirements in SacWAM were frequently unmet (e.g., as summarized in Table H1a2-475). A review of the flow requirements intended to model the Lodi Decree revealed that one of the frequently unmet requirements, "REG Lodi1950 LoMayStorageHiEOMStorage," was incorrectly implemented. This requirement was updated to more correctly model the corresponding requirement by incorporating a condition that restricts the requirement to conditions with low May storage but high June storage. This update improves the representation of the Lodi Decree and reduces the incidence of unmet instream flow requirements. Still, the implementation of these requirements is simplified relative to the complexity of the full requirements of the Lodi Decree, and unmet instream flow requirements still occur during the simulated record.

H1a6.2.2 Voluntary Agreement Scenario Updates

This section describes updates that apply to Voluntary Agreement scenarios generally. Further updates regarding the effects of the 2025 ROD and 2025 ITP amendments are described in Section H1a6.2.3, *Model Updates to Support Analysis of 2025 ROD and ITP Amendments*, below.

H1a6.2.2.1 Specification of Input File Locations

Simulation of VA scenarios relies in part on values saved from prior runs of scenarios that represent the base, or reference, conditions that a given VA scenario is built upon. To facilitate simulation of multiple VA scenarios within a single model, new variables were added to the data tree under "Key Assumptions\VA" to specify paths to the input files for each scenario.

H1a6.2.2.2 Mokelumne Voluntary Agreement

Modeling assumptions for the Mokelumne VA were further refined in SacWAM version 2026.05.29 in response to comments from East Bay Municipal Utilities District. Updates to the VA scenario in SacWAM 2025.08.28 released with the 2025 partially recirculated draft Staff Report introduced a circular reference problem resulting in releases from Camanche Reservoir that would at times be less than the required VA flow in addition to the required flow at Camanche and Woodbridge. To avoid the circular reference problem, the VA storage offramp is now preprocessed from a previous

simulation and is read in as a csv file "Data\VSA\VA_Mok_Storage_offramp.csv". Additionally, the VA flow requirements are now simplified and just added to the Lower Mokelumne River Joint Settlement Agreement (JSA) requirements below Camanche and below Woodbridge. Previously the VA Camanche release involved a complex calculation for Camanche releases for downstream demand, losses, and the required instream flow below Camanche and Woodbridge. These updates result in an increase of approximately 2 thousand acre-feet (TAF) in the VA scenario long-term average January-June outflow from the Mokelumne River relative to the results presented in Section 13.4.3, *Changes in Hydrology*, with larger relative increases of approximately 4 TAF in dry, below normal, and above normal water years.

H1a6.2.3 Model Updates to Support Analysis of 2025 ROD and ITP Amendments

SacWAM version 2026.05.29 includes five additional scenarios to collectively represent the changes to Project operations expected to result from the 2025 ROD and ITP amendments under both the VA and regulatory pathways. Each new scenario is identified with a brief narrative description and a list of changes to model assumptions relative to baseline in Table H1a6-1. The implementation of model assumptions is described in greater detail in the SacWAM documentation (^SacWAM 2026).

Results presented in Sections H1a6.4, *Changes in Hydrology*, H1a6.5, *Changes in Water Supply*, and H1a6.6, *Changes in Water Temperature*, of this appendix as well as the more detailed results presented in Appendix H1a7, *Sacramento Water Allocation Model Results for 2025 Record of Decision and Incidental Take Permit Amendments*, are based directly upon results simulated by SacWAM 2026.05.29 for the baseline, 55 w/WSAs, 55 WSA NoFallX2 FF (labeled "55 w/WSAs + 2025 ROD/ITP"), VA, and VA NoFallX2 FF (labeled "VA + 2025 ROD/ITP") scenarios, including postprocessing of unspecified water purchases and Friant VA flow contributions, as described in Appendix G3a, *Sacramento Water Allocation Model Methods and Results for the Proposed Voluntary Agreements*. These scenarios capture the effects of the 2025 ROD and ITP amendments that are similar enough between CVP and SWP operations to be simulated dynamically in SacWAM.

The additional scenarios listed in Table H1a6-1 (55 WSA A5, VABTsdl NoFallX2 FF, and VABTsdl A5) are used to estimate the incremental effect of Reclamation's greater discretion in OMR management pursuant to the 2025 ROD, using the postprocessing method described in Section H1a6.3, *Sensitivity Analysis Methods*, below. The 55 WSA A5 and VABTsdl A5 scenarios assume that OMR limits are relaxed to -5,000 cfs whenever a turbidity bridge avoidance action is not active and allow further relaxation of OMR limits to -6,500 cfs during storm flex events. This assumption is intended to provide an estimate of the maximal increase in total exports that could occur during the OMR management season if both Projects were to operate consistently with the 2025 ROD.

Table H1a6-1. Sensitivity Analysis Model Scenarios and Changes in Assumptions Relative to Existing (Baseline) Scenario

Scenario Name	Description	Assumptions Changed Relative to Baseline
55 WSA NoFallX2 FF	55 w/WSAs including features common to 2025 ROD and ITP amendments	• Regulatory pathway consistent with 55 w/WSAs (see Appendix H1a, Section H1a.4, 55 with Water Supply Adjustments (55 WSA) Scenario) • Fall X2 removed • First flush OMR limit of -5,000 cfs
55 WSA A5	55 w/WSAs including 2025 ROD operations for CVP and SWP	• Regulatory pathway, fall X2, and first flush assumptions consistent with "55 WSA NoFallX2 FF" • January/February turbidity bridge action: 12 days at -3,500 cfs • Storm flex OMR up to -6,500 cfs • All other OMR actions relaxed to -5,000 cfs
VABTsdl NoFallX2 FF	VA reference condition including features common to 2025 ROD and ITP amendments	• VA reference condition consistent with 2019 BiOps Condition (see Appendix G3a, Section G3a.2, SacWAM Proposed Voluntary Agreements Modeling Methods) • Fall X2 removed • First flush OMR limit of -5,000 cfs
VA NoFallX2 FF	VA scenario including features common to 2025 ROD and ITP amendments	• VA pathway consistent with VA scenario (see Appendix G3a, Section G3a.2, SacWAM Proposed Voluntary Agreements Modeling Methods, and Appendix H1a, Section H1a.3, Voluntary Agreements Scenario), built upon reference condition simulated using "VABTsdl NoFallX2 FF"
VABTsdl A5	VA reference condition including 2025 ROD operations for CVP and SWP	• VA reference condition, fall X2, and first flush assumptions consistent with "VABTsdl NoFallX2 FF" • January/February turbidity bridge action: 12 days at -3,500 cfs • Storm flex OMR up to -6,500 cfs • All other OMR actions relaxed to -5,000 cfs

Appendix G3a, *Sacramento Water Allocation Model Methods and Results for the Proposed Voluntary Agreements*
Appendix H1a, *Sacramento Water Allocation Model Methods*

H1a6.3 Sensitivity Analysis Methods

As described above, inconsistent constraints on Project operations pursuant to the 2025 ROD and 2025 ITP amendments present challenges for modeling the combined effect of changes to ESA and CESA requirements. Given these challenges, SacWAM modelers formulated a postprocessing approach to account for the incremental change in Delta exports and outflow that may result from the exercise of greater operational flexibility by the CVP. For both regulatory and VA pathways, this was accomplished by calculating the incremental change in January through June CVP exports associated with the difference between two scenarios that differ only by the changes in export operations associated with the 2025 ROD. For the regulatory pathway, this increment may be calculated using the equation:

$$\Delta DMC_{Reg} = DMC_{55\ WSA\ A5} - DMC_{55\ WSA\ NoFallX2\ FF},$$

where DMC refers to the total CVP export through the Delta-Mendota Canal during January through June. This increment is then added to the modeled January through June CVP exports and subtracted from modeled January through June Delta outflow as follows:

$$DMC_{55\ w/WSAs\ +\ 2025\ ROD/ITP} = DMC_{55\ WSA\ NoFallX2\ FF} + \Delta DMC_{Reg},$$

and

$$NDO_{55\ w/WSAs\ +\ 2025\ ROD/ITP} = NDO_{55\ WSA\ NoFallX2\ FF} - \Delta DMC_{Reg},$$

where NDO refers to the total modeled net Delta outflow during January through June.

For the VA scenario, it is most straightforward to estimate the incremental effect on CVP exports by comparing two alternative VA reference scenarios, according to the equation:

$$\Delta DMC_{VA} = DMC_{VABTsdl\ A5} - DMC_{VABTsdl\ NoFallX2\ FF}.$$

The postprocessed values for January through June CVP exports and Delta outflow are then calculated as:

$$DMC_{VA\ +\ 2025\ ROD/ITP} = DMC_{VA\ NoFallX2\ FF} + \Delta DMC_{VA},$$

and

$$NDO_{VA\ +\ 2025\ ROD/ITP} = NDO_{VA\ NoFallX2\ FF} - \Delta DMC_{VA},$$

respectively.

These calculations are most appropriately performed and presented as multi-year averages of seasonal volumes. Hence, as stated above, the more detailed summaries of results presented in this appendix and Appendix H1a7, *Sacramento Water Allocation Model Results for 2025 Record of Decision and Incidental Take Permit Amendments*, omit this postprocessing step. Results presented in Section 13.4.6, *Sensitivity Analysis for 2025 Record of Decision and 2025 Incidental Take Permit*, include postprocessing of the incremental effects of CVP export operations as described here where appropriate.

H1a6.4 Changes in Hydrology

The effects of the 2025 ROD and ITP amendments on changes in hydrology are described qualitatively in Section 13.4.6.1, *Sensitivity Analysis for 2025 Record of Decision and 2025 Incidental Take Permit, Changes in Hydrology*. Graphical and tabular summaries of results are provided below for comparison with results presented in Section 13.4.3, *Changes in Hydrology*.

H1a6.4.1 Flows

H1a6.4.1.1 Sacramento River Region and Delta Eastside Tributaries

American River

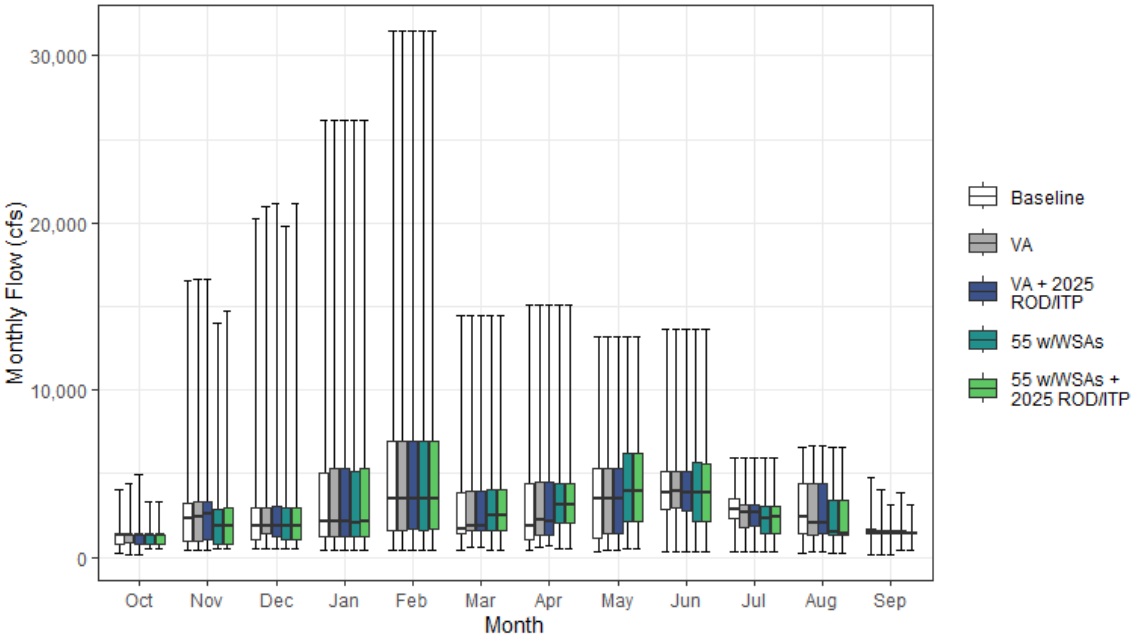

Figure H1a6-1. Monthly Streamflow for the American River above the Sacramento River under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-2. Average Total January-June Flow for the American River above the Sacramento River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	416	32	36	62	62
D	707	72	70	97	96
BN	1,052	38	38	142	154
AN	1,621	21	24	119	118
W	2,573	5	5	66	69
All	1,403	33	33	93	96

Table H1a6-3. Average Total July-December Flow for the American River above the Sacramento River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	426	-5	4	-30	-37
D	671	-56	-49	-96	-78
BN	810	-39	-30	-100	-111
AN	989	-12	-84	-119	-141
W	1,272	-4	8	-60	-68
All	879	-23	-23	-78	-82

Table H1a6-4. Average Total Annual Flow for the American River above the Sacramento River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	843	28	40	32	26
D	1,378	16	21	1	18
BN	1,862	-1	8	42	43
AN	2,610	9	-60	0	-23
W	3,845	1	13	6	1
All	2,281	9	10	15	14

Feather River

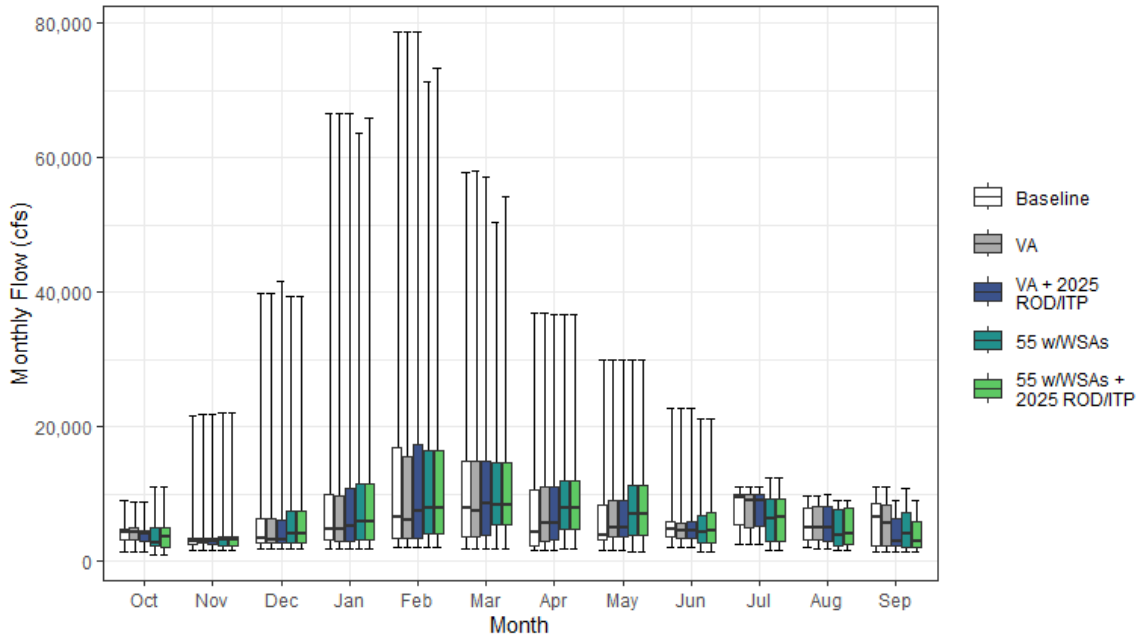

Figure H1a6-2. Monthly Streamflow for the Feather River above the Sacramento River under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-5. Average Total January-June Flow for the Feather River above the Sacramento River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	985	3	37	62	67
D	1,387	116	188	312	325
BN	2,094	133	207	523	530
AN	3,481	95	188	351	413
W	6,205	20	59	60	104
All	3,171	69	128	240	266

Table H1a6-6. Average Total July-December Flow for the Feather River above the Sacramento River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,188	-8	-10	-237	-205
D	1,714	-33	60	-467	-416
BN	2,171	-91	-83	-415	-380
AN	2,332	-16	-387	-171	-360
W	2,512	-31	-163	138	40
All	2,033	-38	-100	-201	-230

Table H1a6-7. Average Total Annual Flow for the Feather River above the Sacramento River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	2,173	-5	28	-175	-138
D	3,100	83	248	-155	-92
BN	4,265	42	124	108	150
AN	5,813	79	-199	179	53
W	8,717	-12	-103	198	144
All	5,205	32	28	40	36

Sacramento River

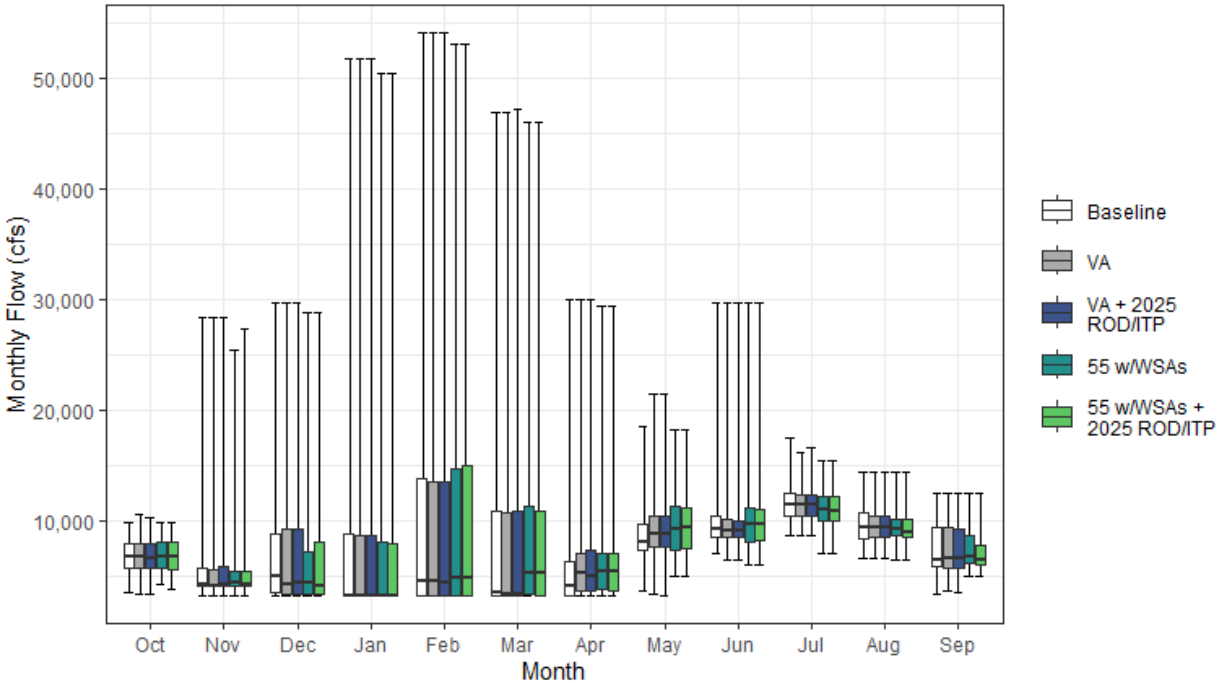

Figure H1a6-3. Monthly Streamflow for the Sacramento River below Keswick Reservoir under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-8. Average Total January-June Flow for the Sacramento River below Keswick Reservoir by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,984	-55	-39	-316	-308
D	2,097	100	108	10	30
BN	2,356	67	67	247	235
AN	3,414	82	84	271	279
W	4,876	-10	-14	82	85
All	3,130	33	37	56	61

Table H1a6-9. Average Total July-December Flow for the Sacramento River below Keswick Reservoir by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	2,456	-12	-18	-220	-210
D	2,642	33	40	-5	-3
BN	2,747	-68	-60	2	-12
AN	2,989	-116	-176	-187	-266
W	3,605	-30	-31	-227	-211
All	2,966	-31	-36	-128	-133

Table H1a6-10. Average Total Annual Flow for the Sacramento River below Keswick Reservoir by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	4,440	-68	-57	-536	-518
D	4,739	133	148	5	26
BN	5,103	-1	7	249	223
AN	6,403	-34	-92	84	13
W	8,481	-41	-45	-145	-126
All	6,096	2	0	-71	-72

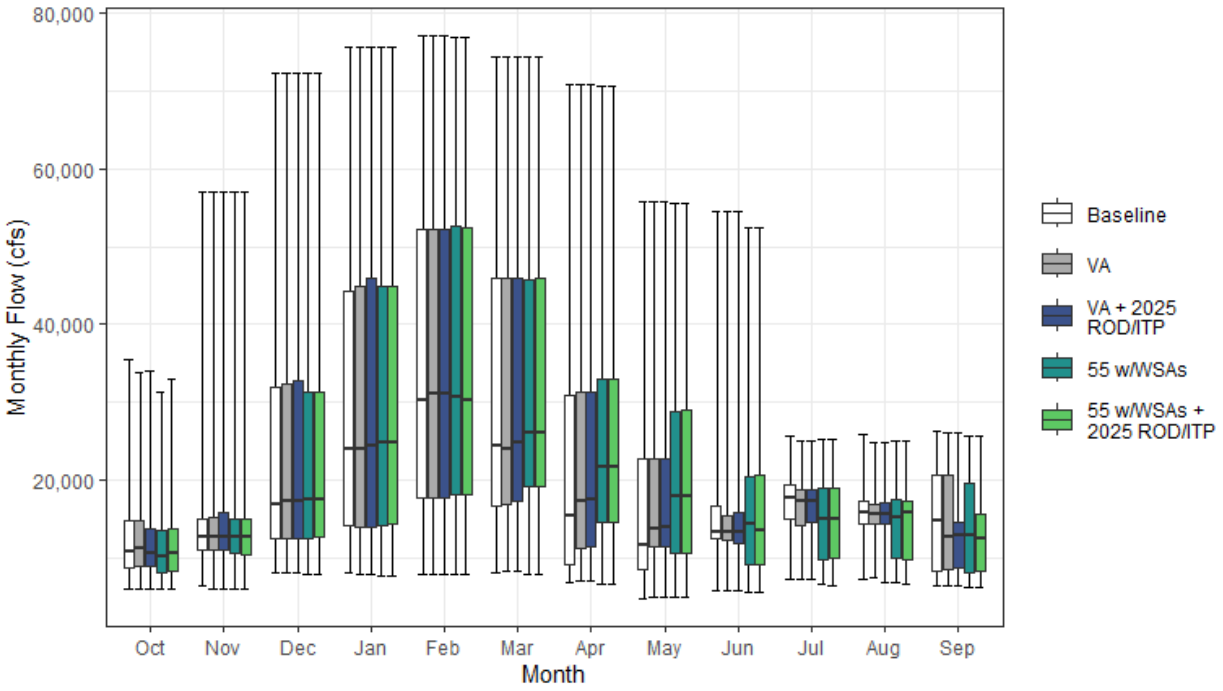

Figure H1a6-4. Monthly Streamflow for the Sacramento River at Freeport under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-11. Average Total January-June Flow for the Sacramento River at Freeport by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	3,998	-2	52	80	86
D	5,410	321	396	499	516
BN	7,470	302	357	862	867
AN	11,206	231	316	805	846
W	14,737	16	28	488	500
All	9,106	162	212	535	549

Table H1a6-12. Average Total July-December Flow for the Sacramento River at Freeport by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	3,618	-19	-22	-286	-277
D	4,986	-27	71	-606	-531
BN	5,606	-161	-136	-544	-528
AN	6,675	-93	-575	-453	-740
W	8,072	-54	-215	-99	-202
All	6,024	-68	-149	-370	-415

Table H1a6-13. Average Total Annual Flow for the Sacramento River at Freeport by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	7,617	-21	30	-206	-191
D	10,397	293	467	-107	-15
BN	13,076	141	221	318	339
AN	17,881	137	-259	352	105
W	22,810	-38	-187	389	298
All	15,130	94	63	164	134

Yuba River

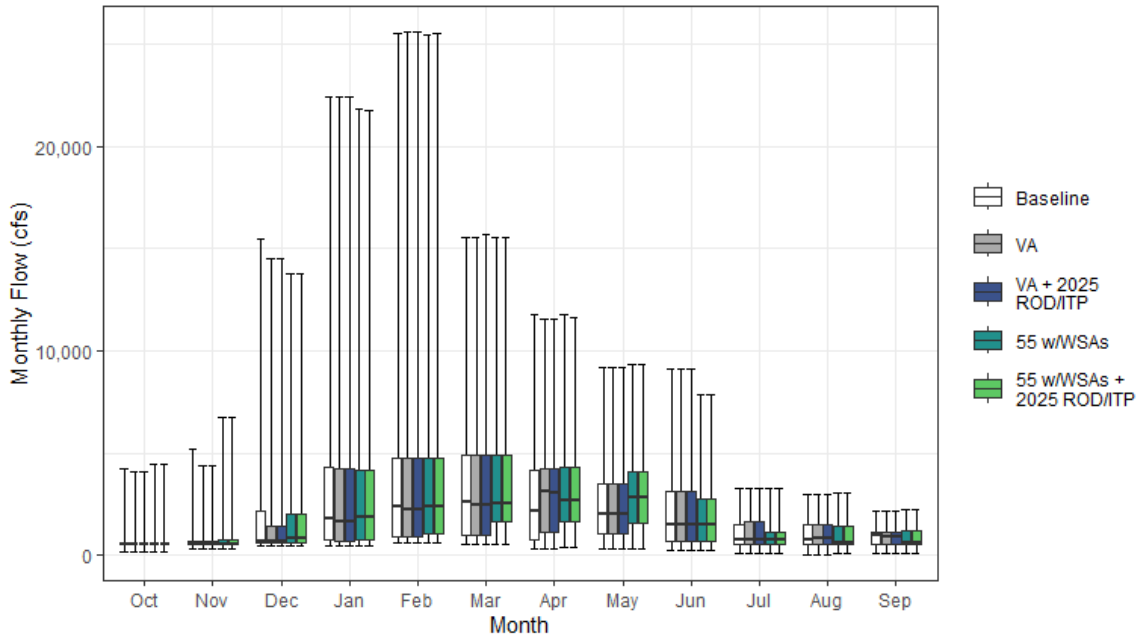

Figure H1a6-5. Monthly Streamflow for the Yuba River above the Feather River under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-14. Average Total January-June Flow for the Yuba River above the Feather River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	253	-9	-9	58	58
D	463	15	14	84	84
BN	804	37	37	63	63
AN	1,263	44	44	57	56
W	2,005	-12	-12	27	26
All	1,059	11	11	55	55

Table H1a6-15. Average Total July-December Flow for the Yuba River above the Feather River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	178	-3	-3	-4	-4
D	244	0	0	-10	-10
BN	295	-10	-10	-12	-12
AN	403	-11	-11	-9	-9
W	658	-20	-20	1	0
All	388	-10	-10	-6	-6

Table H1a6-16. Average Total Annual Flow for the Yuba River above the Feather River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	431	-12	-12	54	54
D	707	15	15	75	75
BN	1,099	27	27	51	51
AN	1,666	33	33	48	47
W	2,664	-32	-32	28	27
All	1,447	1	1	49	49

Bear River

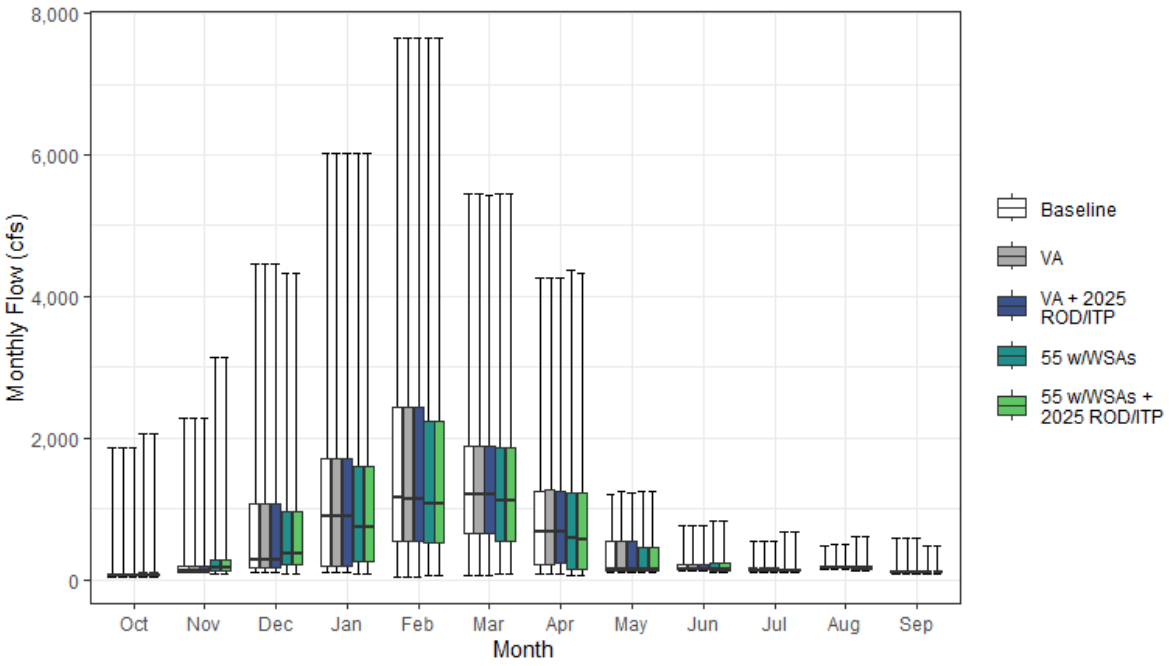

Figure H1a6-6. Monthly Streamflow for the Bear River above the Feather River under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-17. Average Total January-June Flow for the Bear River above the Feather River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	85	0	0	-2	-2
D	168	0	0	-12	-12
BN	282	0	0	-15	-15
AN	466	-1	-1	-20	-20
W	635	0	0	-7	-7
All	354	0	0	-10	-10

Table H1a6-18. Average Total July-December Flow for the Bear River above the Feather River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	54	0	0	1	1
D	68	0	0	2	2
BN	70	0	0	3	3
AN	106	0	0	0	0
W	184	0	0	0	0
All	106	0	0	1	1

Table H1a6-19. Average Total Annual Flow for the Bear River above the Feather River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	140	0	0	-1	-1
D	236	0	0	-10	-10
BN	351	0	0	-12	-12
AN	572	-1	-1	-20	-20
W	819	0	0	-7	-7
All	460	0	0	-9	-9

Mokelumne River

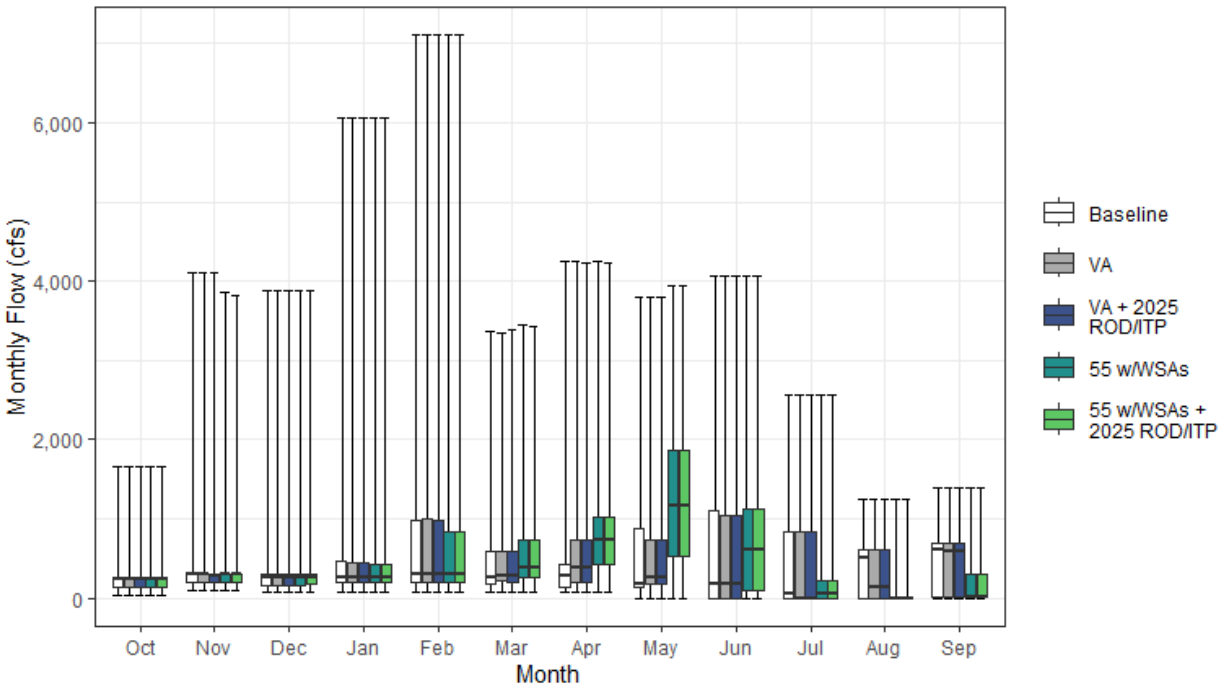

Figure H1a6-7. Monthly Streamflow for the Mokelumne River above the Confluence with the Cosumnes River under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-20. Average Total January-June Flow for the Mokelumne River above the Confluence with the Cosumnes River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	47	1	1	7	7
D	64	7	8	69	69
BN	119	5	5	96	96
AN	231	7	7	97	97
W	521	3	2	57	57
All	230	4	4	64	64

Table H1a6-21. Average Total July-December Flow for the Mokelumne River above the Confluence with the Cosumnes River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	38	0	0	0	0
D	51	-1	-2	-9	-8
BN	113	-4	-4	-53	-53
AN	181	-9	-9	-69	-69
W	274	-4	-4	-67	-67
All	144	-3	-4	-41	-41

Table H1a6-22. Average Total Annual Flow for the Mokelumne River above the Confluence with the Cosumnes River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	85	1	1	7	7
D	115	6	6	61	61
BN	232	1	1	43	43
AN	412	-2	-3	29	29
W	795	-1	-2	-11	-11
All	375	1	1	23	23

Calaveras River

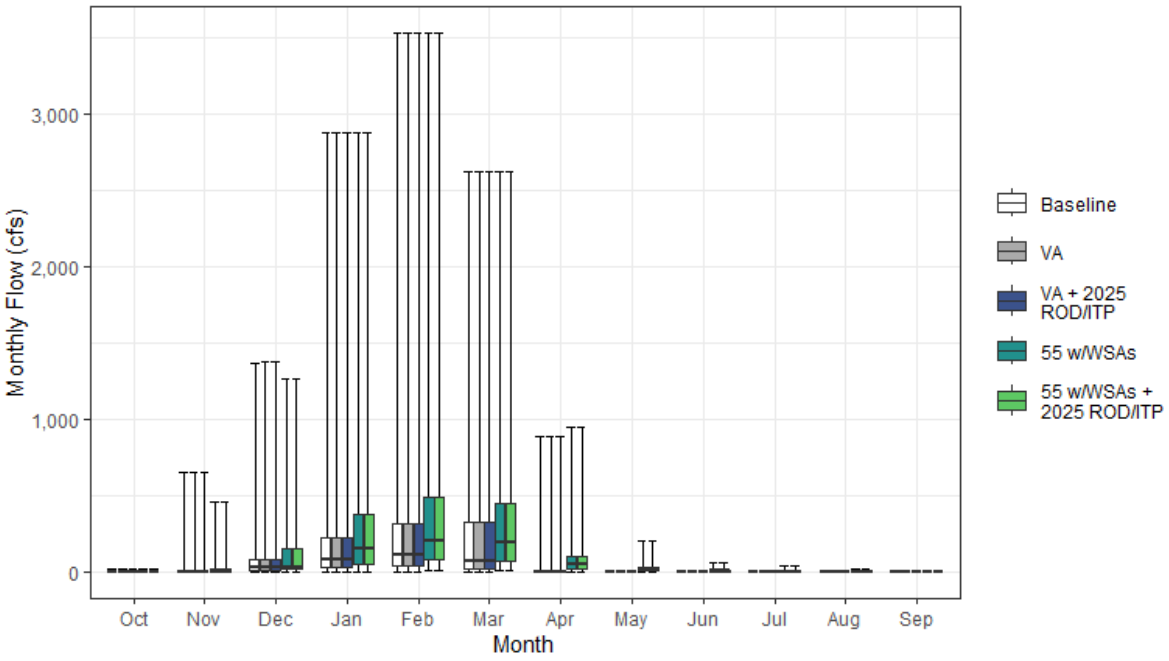

Figure H1a6-8. Monthly Streamflow for the Calaveras River Inflow to the Delta under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-23. Average Total January-June Flow for the Calaveras River Inflow to the Delta by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	7	0	0	6	6
D	12	0	0	15	15
BN	33	0	0	20	20
AN	66	0	0	20	20
W	142	0	0	14	14
All	61	0	0	15	15

Table H1a6-24. Average Total July-December Flow for the Calaveras River Inflow to the Delta by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1	0	0	0	0
D	3	0	0	1	1
BN	4	0	0	2	2
AN	9	0	0	4	4
W	19	0	0	3	3
All	9	0	0	2	2

Table H1a6-25. Average Total Annual Flow for the Calaveras River Inflow to the Delta by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	9	0	0	6	6
D	14	0	0	16	16
BN	37	0	0	22	22
AN	74	0	0	25	25
W	162	0	0	17	17
All	70	0	0	17	17

Putah Creek

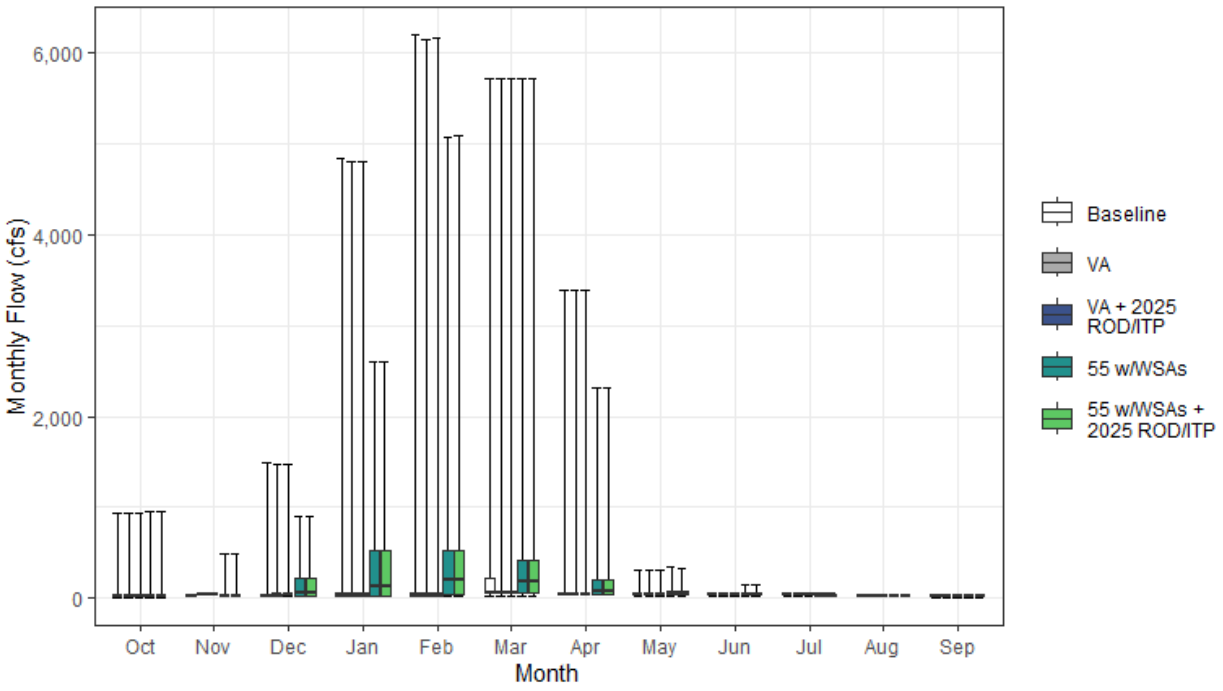

Figure H1a6-9. Monthly Streamflow for Putah Creek above the Yolo Bypass under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-26. Average Total January-June Flow for Putah Creek above the Yolo Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	14	1	1	6	6
D	15	1	1	20	20
BN	23	0	0	20	20
AN	28	-1	-1	53	53
W	190	-5	-5	-19	-19
All	71	-1	-1	10	10

Table H1a6-27. Average Total July-December Flow for Putah Creek above the Yolo Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	8	2	2	1	1
D	8	2	2	5	5
BN	8	2	2	5	5
AN	9	2	1	8	8
W	14	1	1	16	16
All	10	2	2	8	8

Table H1a6-28. Average Total Annual Flow for Putah Creek above the Yolo Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	22	2	2	7	7
D	23	3	3	25	25
BN	31	2	2	25	25
AN	36	0	0	62	62
W	205	-4	-4	-3	-3
All	81	0	0	18	18

Cache Creek

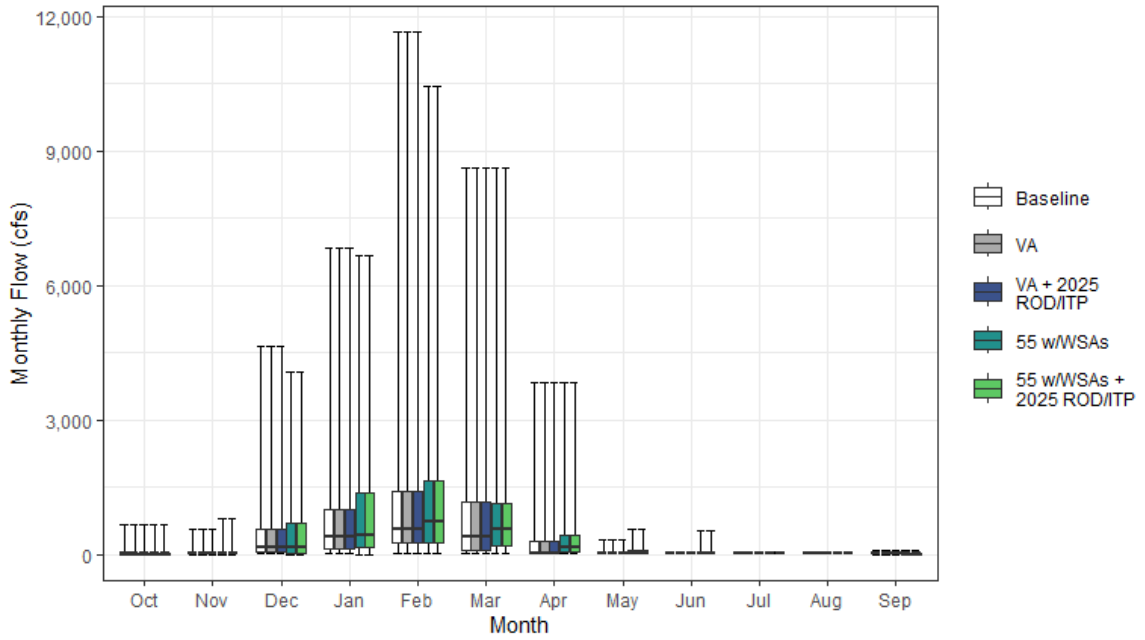

Figure H1a6-10. Monthly Streamflow for Cache Creek above the Yolo Bypass under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-29. Average Total January-June Flow for Cache Creek above the Yolo Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	40	0	0	7	7
D	53	0	0	22	22
BN	101	0	0	31	31
AN	239	0	0	20	20
W	510	0	0	-15	-15
All	221	0	0	10	10

Table H1a6-30. Average Total July-December Flow for Cache Creek above the Yolo Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	14	0	0	-1	-1
D	21	0	0	0	0
BN	18	0	0	2	2
AN	29	0	0	2	2
W	56	0	0	13	13
All	31	0	0	4	4

Table H1a6-31. Average Total Annual Flow for Cache Creek above the Yolo Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	54	0	0	6	6
D	73	0	0	22	22
BN	118	0	0	32	32
AN	268	0	0	23	23
W	566	0	0	-3	-3
All	252	0	0	14	14

Cosumnes River

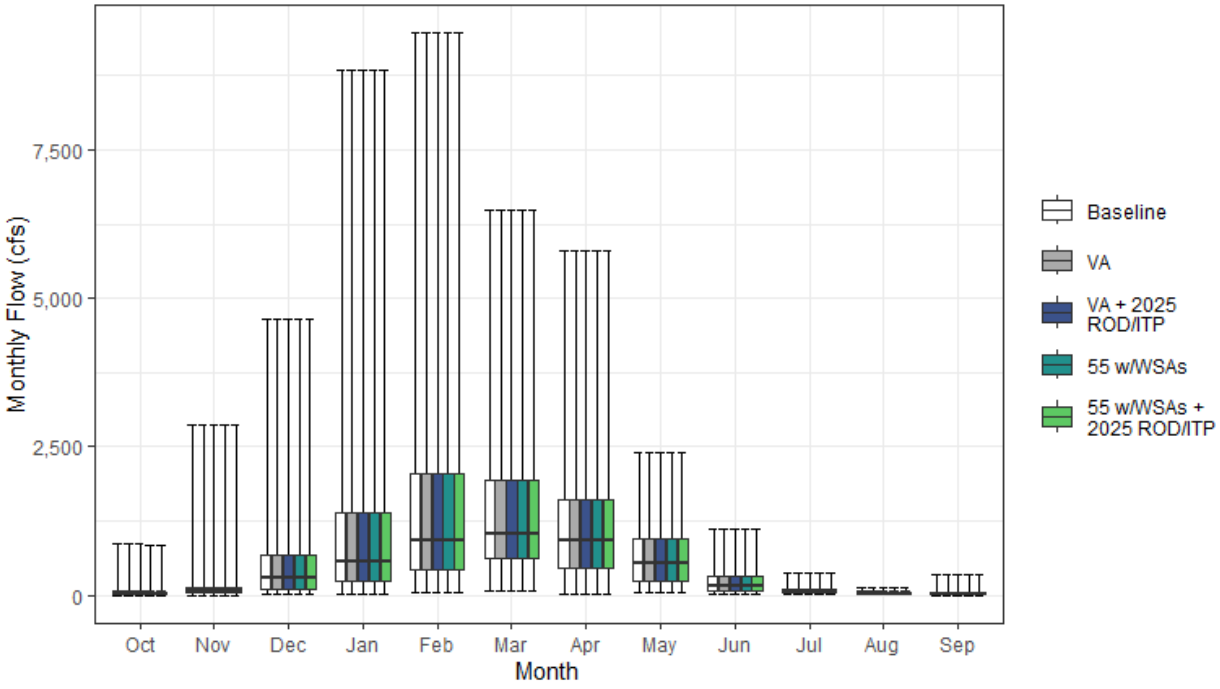

Figure H1a6-11. Monthly Streamflow for the Cosumnes River above the Confluence with the Mokelumne River under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-32. Average Total January-June Flow for the Cosumnes River above the Confluence with the Mokelumne River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	89	0	0	0	0
D	179	0	0	0	0
BN	307	0	0	0	0
AN	462	0	0	0	0
W	673	0	0	0	0
All	373	0	0	0	0

Table H1a6-33. Average Total July-December Flow for the Cosumnes River above the Confluence with the Mokelumne River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	20	0	0	0	0
D	34	0	0	0	0
BN	42	0	0	0	0
AN	68	0	0	0	0
W	122	0	0	0	0
All	64	0	0	0	0

Table H1a6-34. Average Total Annual Flow for the Cosumnes River above the Confluence with the Mokelumne River by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	109	0	0	0	0
D	213	0	0	0	0
BN	349	0	0	0	0
AN	530	0	0	0	0
W	796	0	0	0	0
All	437	0	0	0	0

Mill Creek

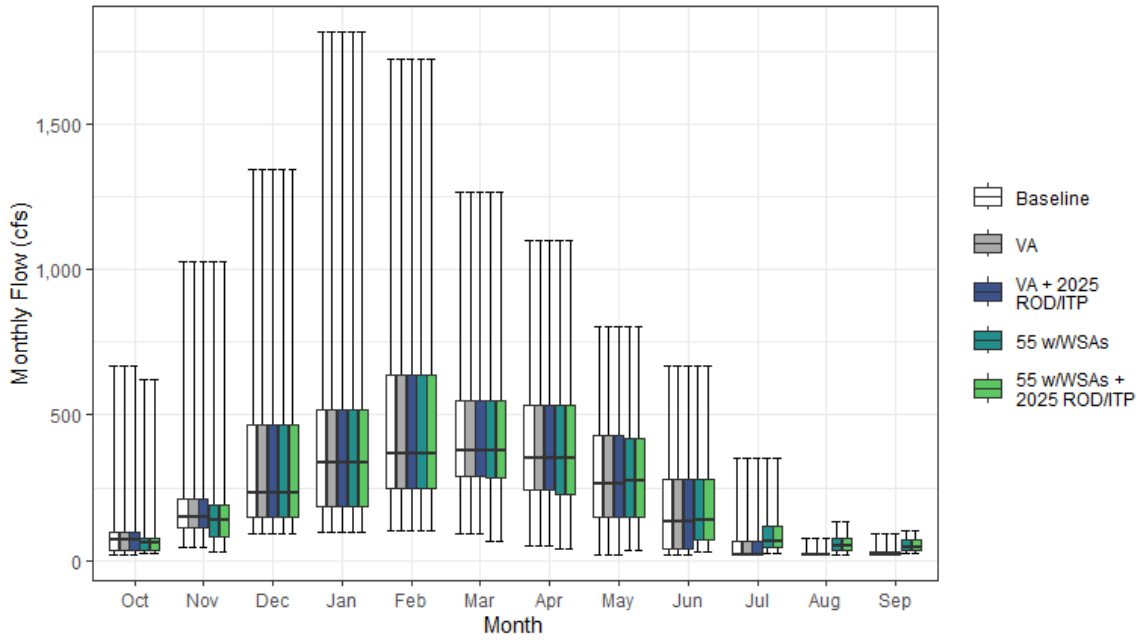

Figure H1a6-12. Monthly Streamflow for Mill Creek under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-35. Average Total January-June Flow for Mill Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	55	0	0	0	0
D	84	0	0	1	1
BN	116	0	0	0	0
AN	165	0	0	0	0
W	208	0	0	0	0
All	133	0	0	0	0

Table H1a6-36. Average Total July-December Flow for Mill Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	25	0	0	0	0
D	32	0	0	1	1
BN	32	0	0	3	3
AN	41	0	0	4	4
W	73	0	0	6	6
All	44	0	0	3	3

Table H1a6-37. Average Total Annual Flow for Mill Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	80	0	0	0	0
D	117	0	0	2	2
BN	149	0	0	3	3
AN	206	0	0	5	5
W	281	0	0	6	6
All	177	0	0	3	3

Deer Creek

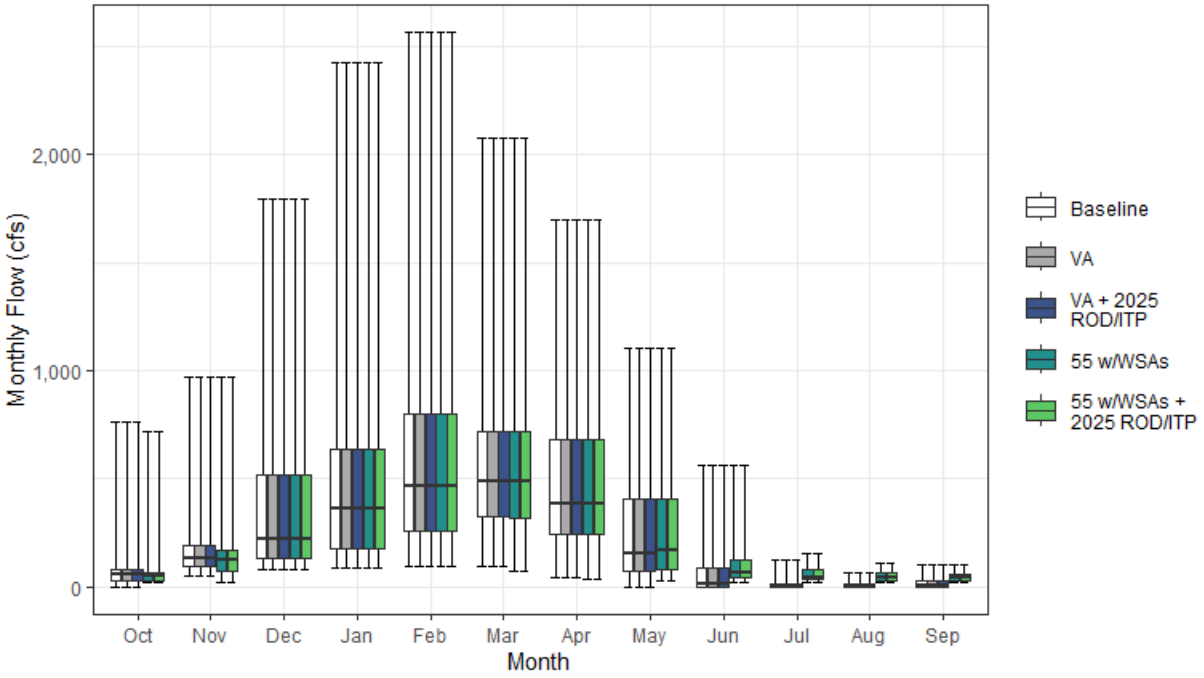

Figure H1a6-13. Monthly Streamflow for Deer Creek under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-38. Average Total January-June Flow for Deer Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	49	0	0	2	2
D	82	0	0	3	3
BN	123	0	0	2	2
AN	186	0	0	2	2
W	261	0	0	1	1
All	152	0	0	2	2

Table H1a6-39. Average Total July-December Flow for Deer Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	18	0	0	3	3
D	28	0	0	4	4
BN	27	0	0	5	5
AN	36	0	0	5	5
W	70	0	0	8	8
All	40	0	0	5	5

Table H1a6-40. Average Total Annual Flow for Deer Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	68	0	0	5	5
D	110	0	0	7	7
BN	150	0	0	7	7
AN	222	0	0	8	8
W	332	0	0	10	10
All	192	0	0	7	7

Antelope Creek

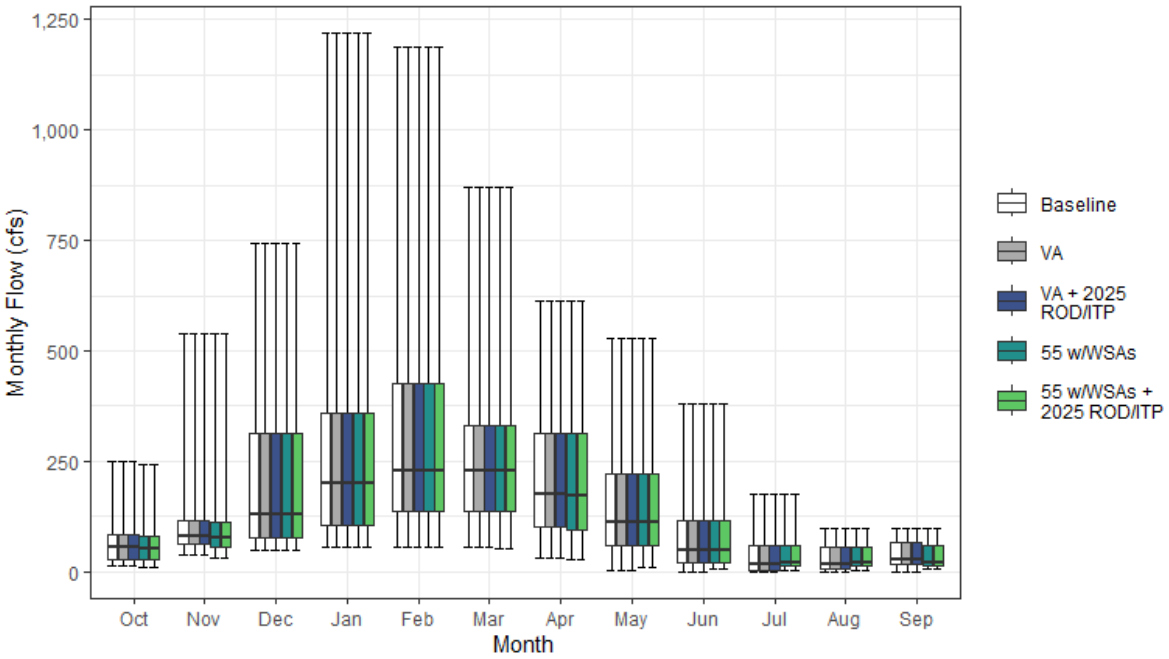

Figure H1a6-14. Monthly Streamflow for Antelope Creek under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-41. Average Total January-June Flow for Antelope Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	26	0	0	0	0
D	44	0	0	0	0
BN	66	0	0	0	0
AN	100	0	0	0	0
W	130	0	0	0	0
All	78	0	0	0	0

Table H1a6-42. Average Total July-December Flow for Antelope Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	12	0	0	1	1
D	19	0	0	0	0
BN	21	0	0	0	0
AN	31	0	0	-1	-1
W	51	0	0	-1	-1
All	29	0	0	0	0

Table H1a6-43. Average Total Annual Flow for Antelope Creek by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	38	0	0	0	0
D	62	0	0	0	0
BN	87	0	0	-1	-1
AN	131	0	0	-1	-1
W	181	0	0	-1	-1
All	108	0	0	0	0

Sacramento Valley Flood Bypasses

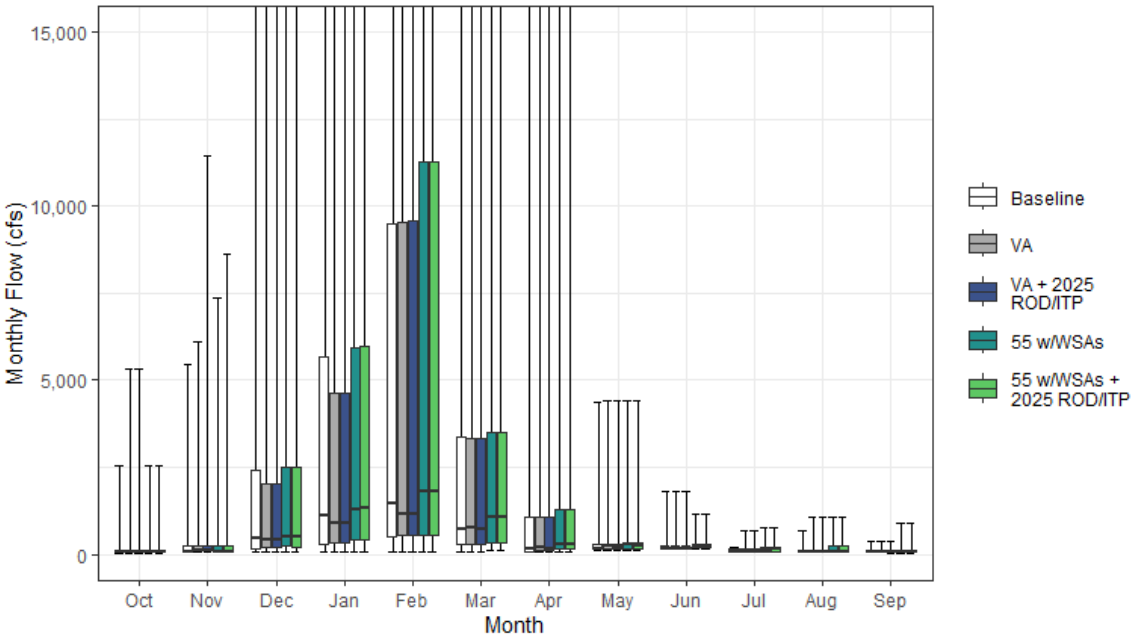

Figure H1a6-15. Monthly Streamflow for the Yolo Bypass below Putah Creek Inflow under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-44. Average Total January-June Flow for the Yolo Bypass below Putah Creek Inflow by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	132	-15	-15	18	14
D	184	-4	-4	75	70
BN	438	-27	-7	135	130
AN	1,797	-1	8	64	92
W	5,134	-7	17	-190	-151
All	1,920	-11	2	-4	8

Table H1a6-45. Average Total July-December Flow for the Yolo Bypass below Putah Creek Inflow by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	68	0	6	22	22
D	88	-2	4	15	12
BN	115	4	3	15	14
AN	203	-7	-13	-30	-18
W	664	-7	33	4	16
All	278	-3	11	8	11

Table H1a6-46. Average Total Annual Flow for the Yolo Bypass below Putah Creek Inflow by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	200	-15	-10	40	36
D	272	-6	0	90	82
BN	554	-23	-4	151	144
AN	2,000	-8	-6	34	73
W	5,797	-14	50	-186	-135
All	2,198	-13	12	3	20

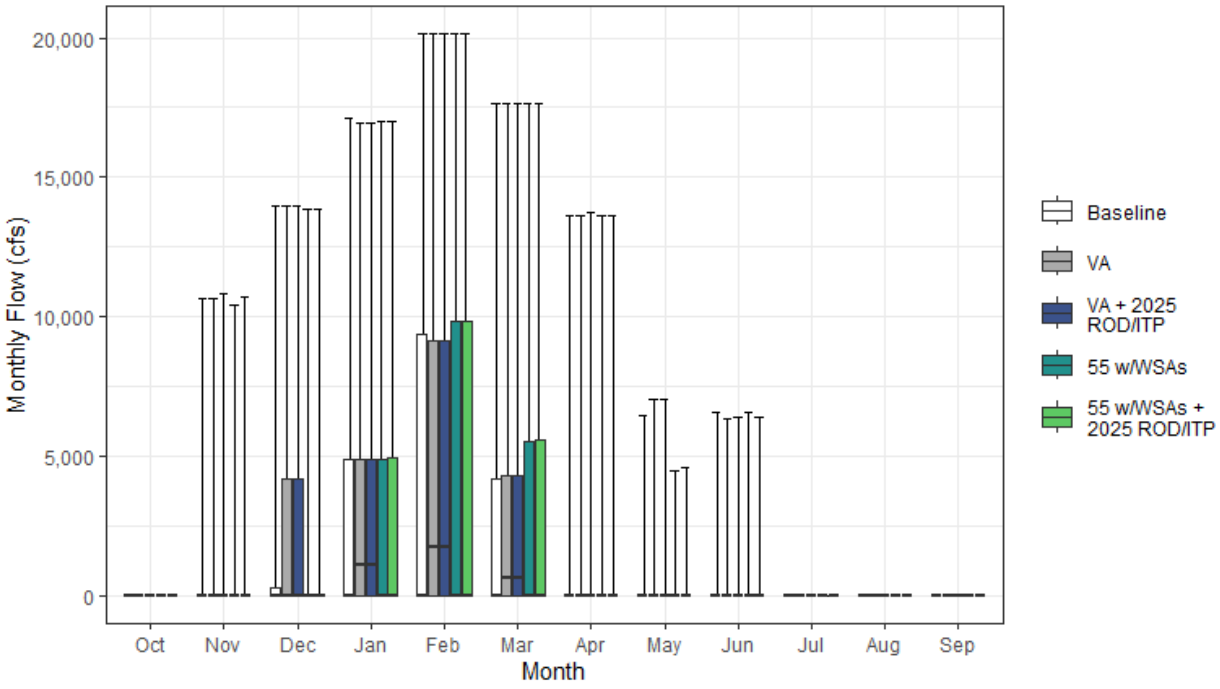

Figure H1a6-16. Monthly Streamflow over the Tisdale Weir into the Sutter Bypass under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-47. Average Total January-June Flow over the Tisdale Weir into the Sutter Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	0	42	43	0	0
D	96	57	58	8	3
BN	209	161	159	7	12
AN	1,028	145	144	40	45
W	1,652	77	81	-6	-4
All	686	91	92	6	7

Table H1a6-48. Average Total July-December Flow over the Tisdale Weir into the Sutter Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	9	14	13	0	0
D	31	23	23	-11	-9
BN	52	5	6	0	-1
AN	91	24	25	-3	-3
W	359	42	42	-49	-32
All	138	24	24	-18	-12

Table H1a6-49. Average Total Annual Flow over the Tisdale Weir into the Sutter Bypass by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	9	56	56	0	0
D	127	80	81	-3	-6
BN	261	166	165	7	12
AN	1,119	168	168	37	42
W	2,011	119	123	-55	-36
All	825	115	116	-11	-5

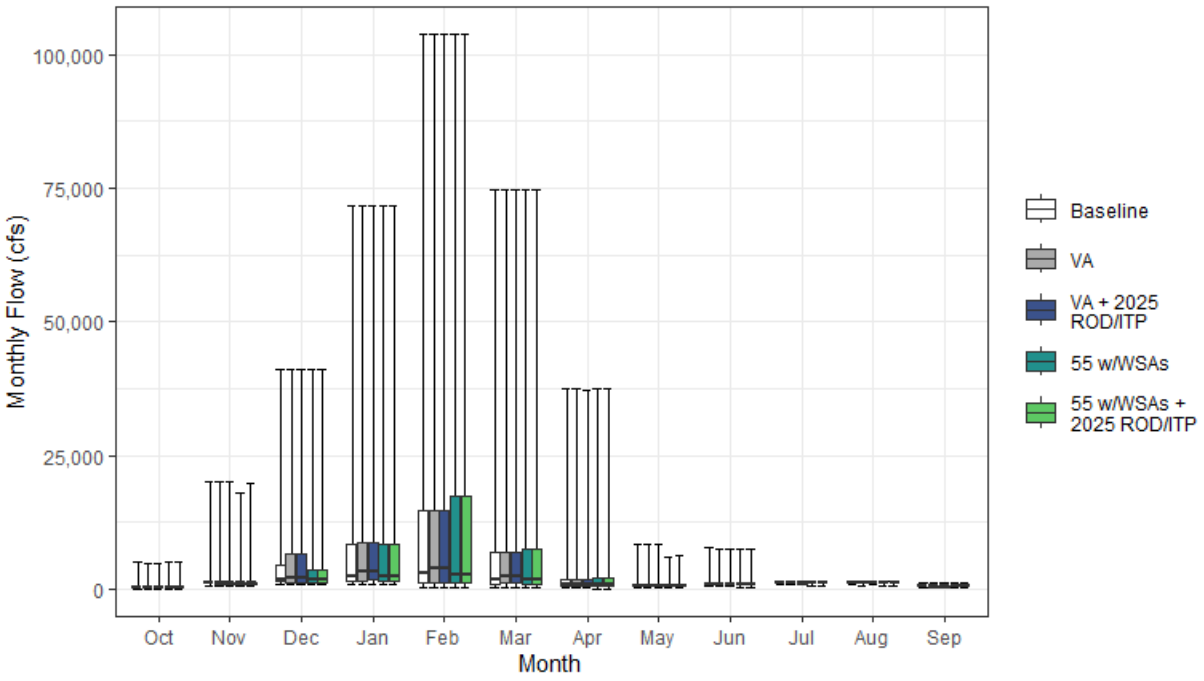

Figure H1a6-17. Monthly Streamflow at Sacramento Slough (downstream end of Sutter Bypass) under Baseline, Voluntary Agreement Pathway, and Regulatory Pathway Agreement Pathway

Table H1a6-50. Average Total January-June Flow at Sacramento Slough (downstream end of Sutter Bypass) by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	373	39	39	-38	-36
D	543	35	32	-5	-7
BN	848	131	128	18	14
AN	2,349	118	115	75	78
W	4,470	67	65	-31	-32
All	1,983	74	72	-4	-5

Table H1a6-51. Average Total July-December Flow at Sacramento Slough (downstream end of Sutter Bypass) by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	332	8	10	-39	-25
D	413	-1	4	-23	-18
BN	454	-15	-15	-10	-13
AN	500	-6	-10	-19	-17
W	1,043	22	23	-97	-80
All	609	4	5	-45	-37

Table H1a6-52. Average Total Annual Flow at Sacramento Slough (downstream end of Sutter Bypass) by Water Year Type, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	704	47	49	-77	-61
D	956	35	36	-28	-25
BN	1,302	116	113	8	1
AN	2,848	112	105	56	61
W	5,513	89	88	-128	-112
All	2,592	78	77	-49	-42

H1a6.4.2 Sacramento San-Joaquin Delta

H1a6.4.2.1 Delta Inflow, Exports, Interior Delta Flows, and Delta Outflow

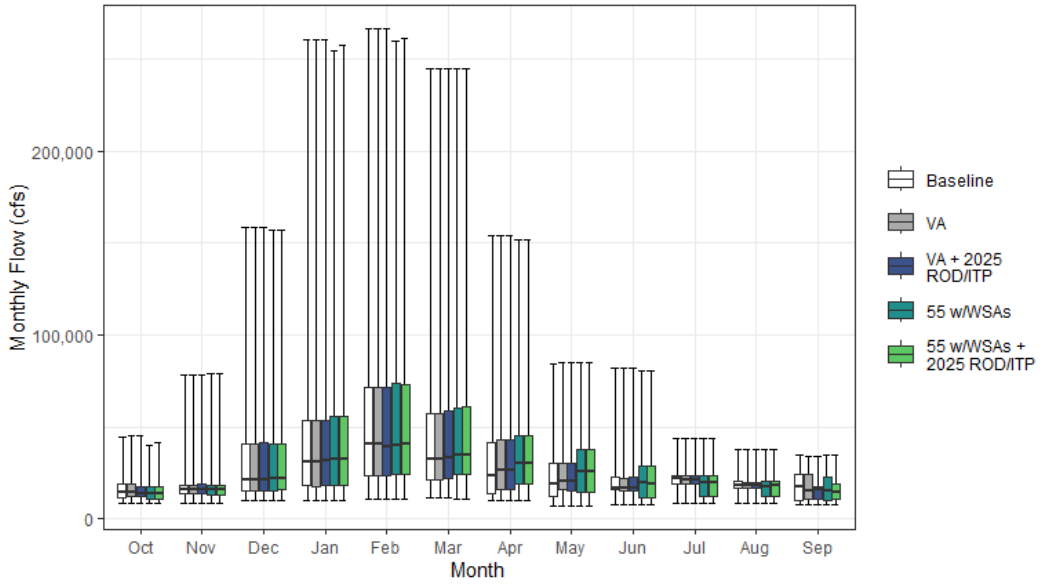

Figure H1a6-18. Monthly Delta Inflow for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Table H1a6-53. Average Total January–June Delta Inflow by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	5,259	-17	37	95	97
D	7,032	324	400	647	660
BN	10,101	281	355	1,105	1,107
AN	16,197	236	331	982	1,051
W	25,324	12	48	364	415
All	13,988	155	218	601	628

Table H1a6-54. Average Total July–December Delta Inflow by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	4,454	-18	-17	-284	-275
D	6,028	-30	73	-611	-539
BN	6,815	-161	-138	-587	-573
AN	8,202	-110	-598	-555	-831
W	10,783	-65	-187	-166	-257
All	7,629	-74	-142	-412	-453

Table H1a6-55. Average Total Annual Delta Inflow by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	9,712	-35	20	-188	-178
D	13,059	294	473	36	121
BN	16,916	119	218	518	534
AN	24,399	127	-268	428	220
W	36,107	-53	-139	198	158
All	21,617	82	76	189	175

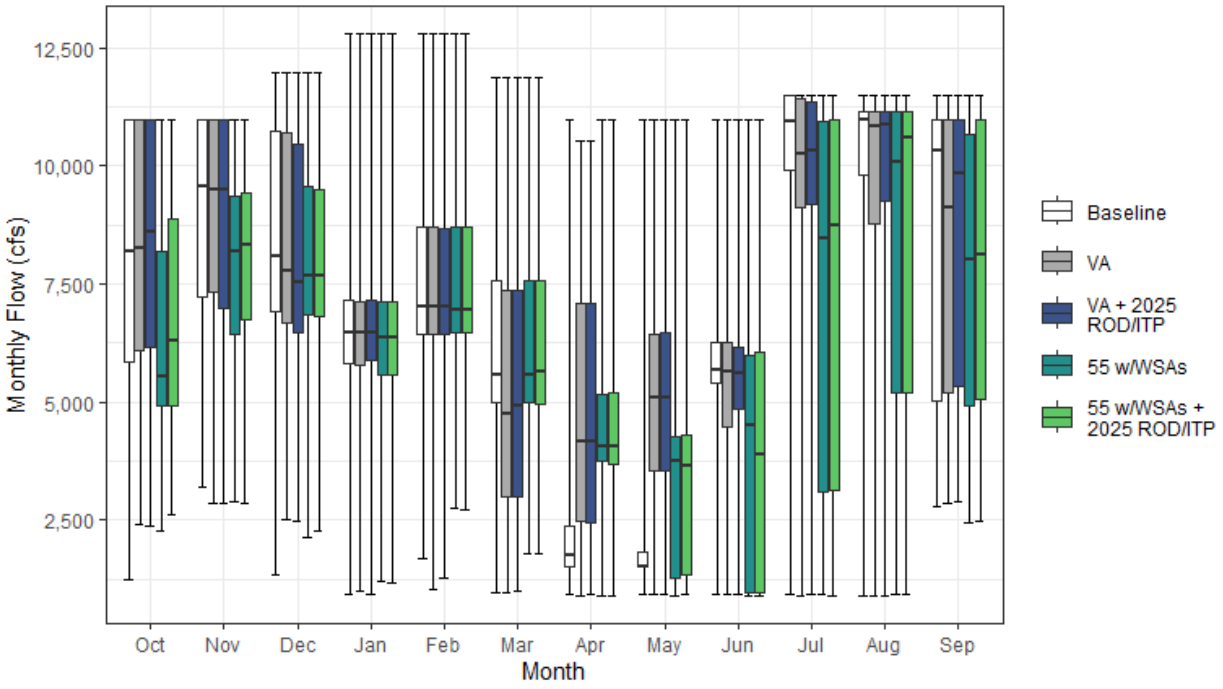

Figure H1a6-19. Monthly South of Delta Exports for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Table H1a6-56. Average Total January–June South of Delta Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,232	-31	-17	-83	-75
D	1,570	115	116	-61	-67
BN	1,694	246	228	174	164
AN	1,918	224	229	248	253
W	2,755	209	204	89	95
All	1,940	158	157	64	64

Table H1a6-57. Average Total July–December South of Delta Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,784	-22	-24	-296	-289
D	2,987	-81	-5	-695	-618
BN	3,457	-129	-131	-562	-537
AN	3,567	-68	-42	-462	-382
W	3,744	-41	-5	-220	-192
All	3,182	-67	-37	-433	-392

Table H1a6-58. Average Total Annual South of Delta Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	3,016	-53	-41	-379	-364
D	4,557	34	110	-756	-685
BN	5,151	117	97	-388	-373
AN	5,485	156	187	-214	-129
W	6,499	167	199	-131	-97
All	5,123	91	119	-369	-328

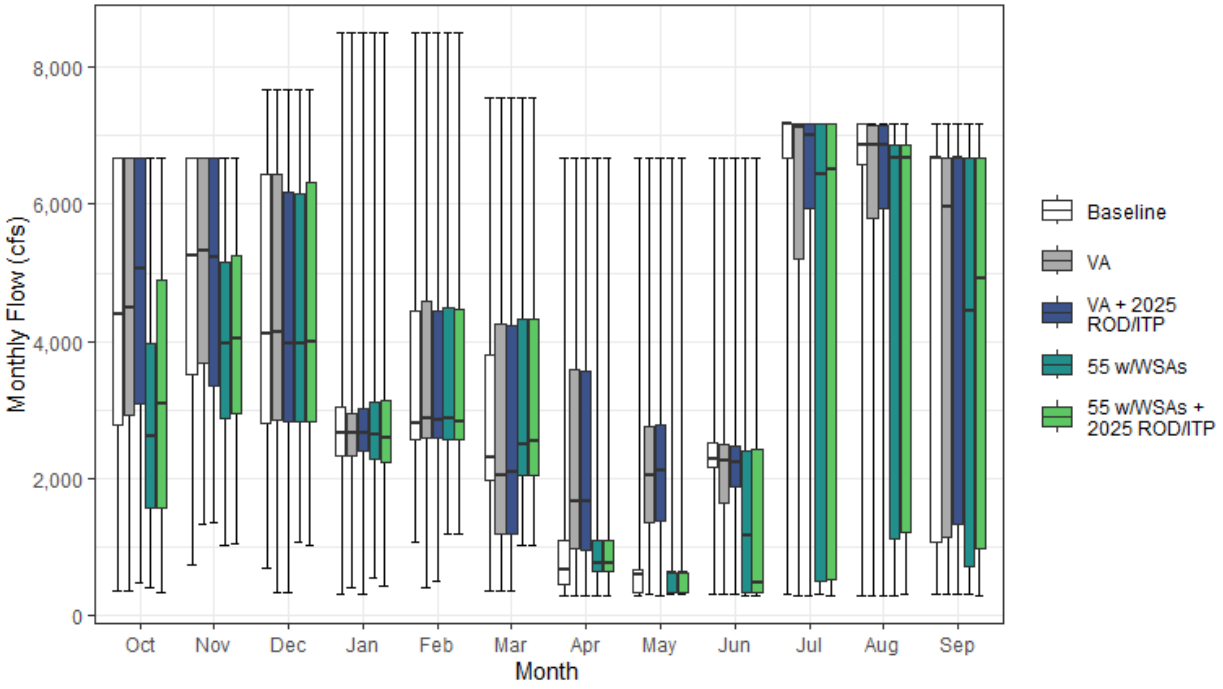

Figure H1a6-20. Monthly SWP Exports for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Table H1a6-59. Average Total January–June SWP Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	476	24	28	40	36
D	609	79	79	-73	-75
BN	713	116	100	-42	-57
AN	878	96	106	-39	-34
W	1,501	104	105	-35	-26
All	910	87	86	-33	-34

Table H1a6-60. Average Total July–December SWP Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	800	7	12	-179	-137
D	1,602	-50	27	-587	-498
BN	2,068	-30	-14	-462	-438
AN	2,129	9	7	-332	-283
W	2,224	-32	1	-201	-171
All	1,814	-24	6	-349	-303

Table H1a6-61. Average Total Annual SWP Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,275	31	40	-138	-101
D	2,211	30	106	-660	-573
BN	2,782	85	86	-504	-495
AN	3,007	105	112	-371	-317
W	3,725	72	105	-236	-197
All	2,724	62	92	-382	-337

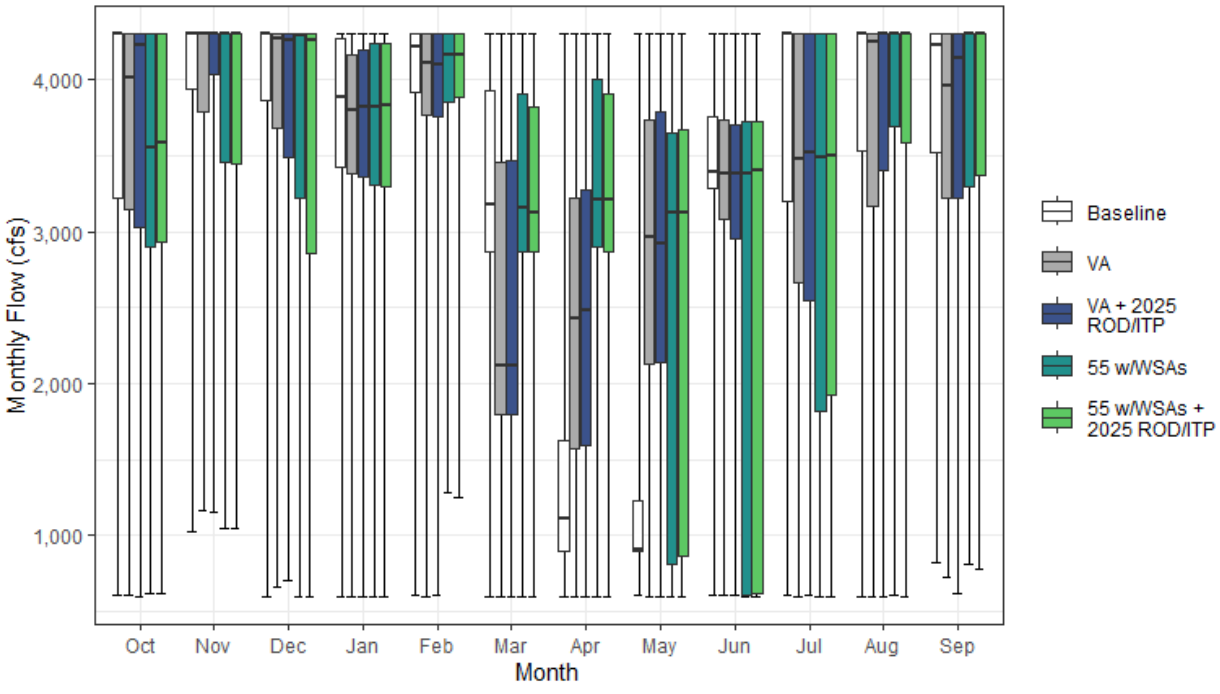

Figure H1a6-21. Monthly CVP Exports for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Table H1a6-62. Average Total January–June CVP Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	757	-55	-44	-123	-111
D	962	35	37	12	9
BN	981	130	128	217	221
AN	1,040	128	123	287	287
W	1,254	105	100	124	122
All	1,030	71	71	97	98

Table H1a6-63. Average Total July–December CVP Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	984	-29	-37	-117	-153
D	1,385	-32	-32	-109	-120
BN	1,389	-99	-117	-100	-99
AN	1,438	-77	-49	-130	-99
W	1,520	-10	-6	-19	-21
All	1,368	-43	-43	-84	-89

Table H1a6-64. Average Total Annual CVP Exports by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,741	-84	-81	-240	-263
D	2,347	4	5	-96	-112
BN	2,370	32	10	116	122
AN	2,478	52	74	157	188
W	2,774	95	94	106	100
All	2,398	29	27	13	9

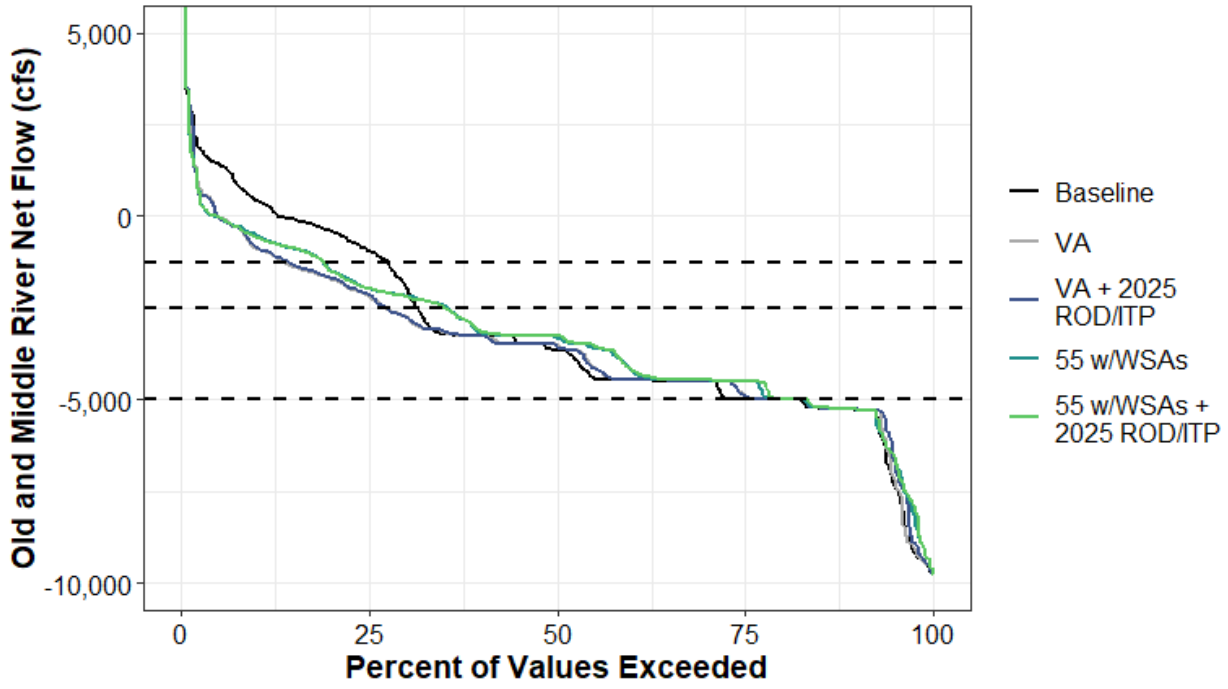

Figure H1a6-22. Monthly Exceedance Frequency Distribution of Old and Middle River Net Flow for December–June under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Table H1a6-65. Frequency of Months Exceeding Old and Middle River Net Flow Thresholds for December–June under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Threshold	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
0	13	5	5	4	5
-1,250	28	14	14	19	19
-2,500	31	27	27	35	35
-5,000	82	83	83	83	83

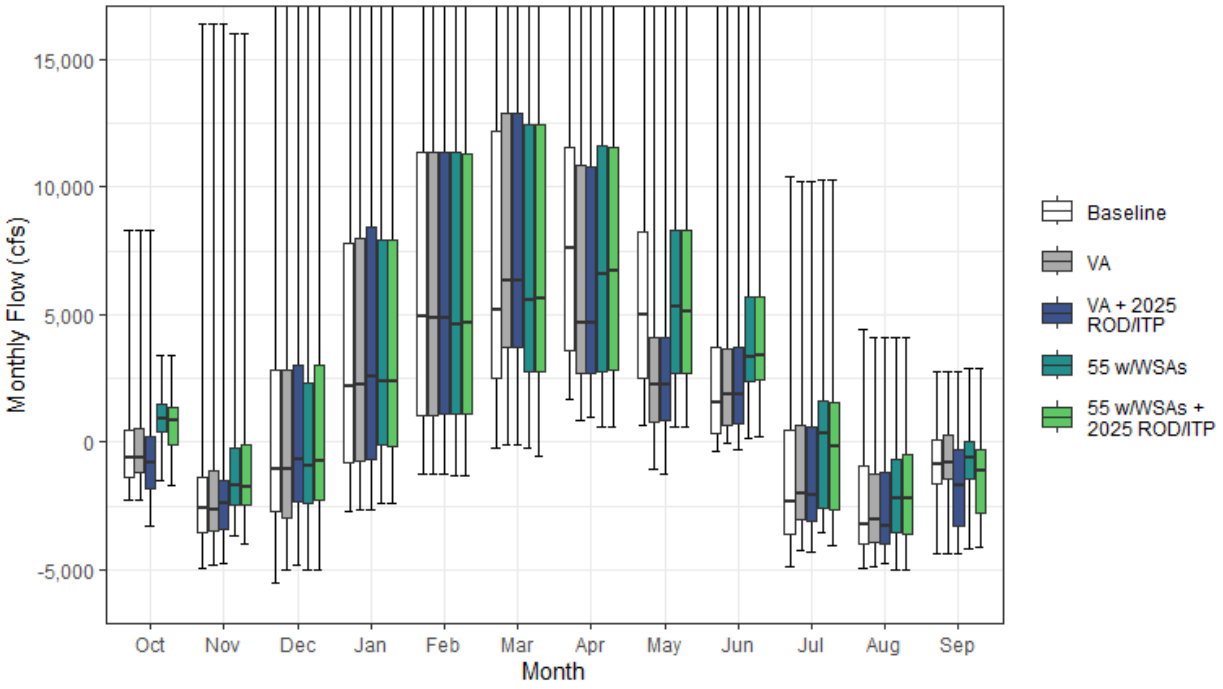

Figure H1a6-23. Monthly Distributions of QWEST under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

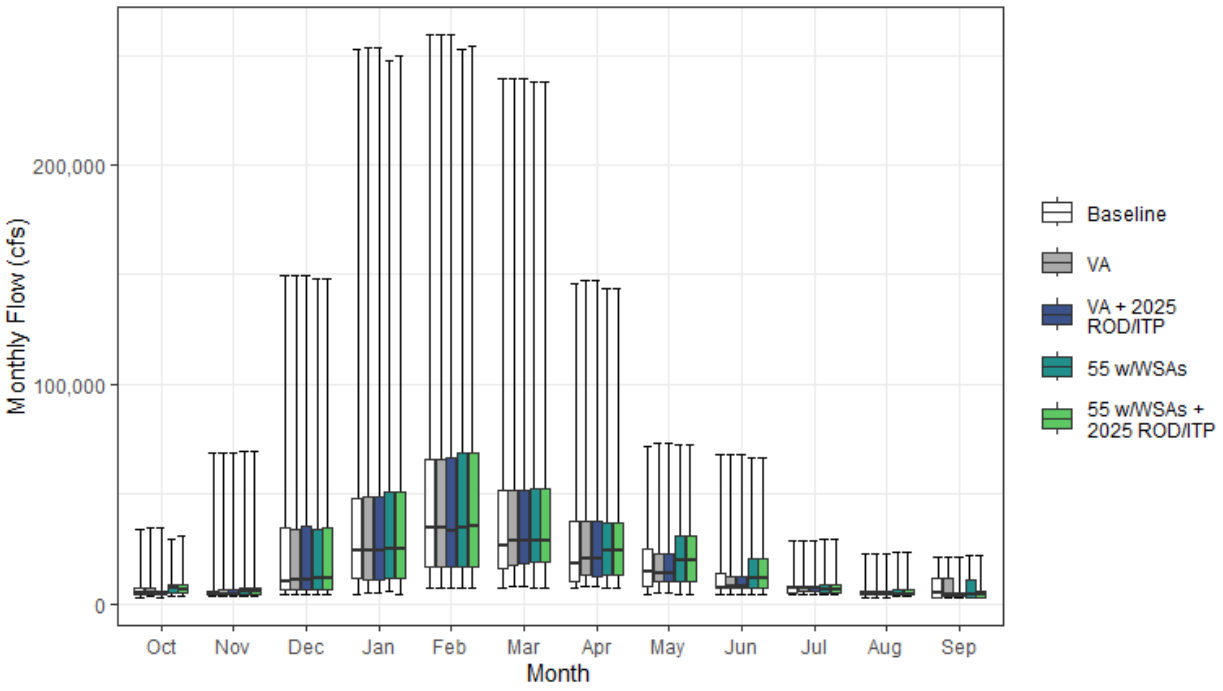

Figure H1a6-24. Monthly Delta Outflow for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

Table H1a6-66. Average Total January–June Delta Outflow by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	3,554	87	127	184	177
D	5,028	389	464	703	721
BN	8,056	124	216	923	934
AN	14,071	163	252	724	788
W	22,452	-68	-28	273	318
All	11,747	123	187	534	560

Table H1a6-67. Average Total July–December Delta Outflow by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,889	4	7	24	26
D	2,293	52	80	92	88
BN	2,603	-32	-6	-22	-33
AN	3,913	-41	-556	-80	-436
W	6,392	-23	-181	59	-60
All	3,726	-6	-104	28	-54

Table H1a6-68. Average Total Annual Delta Outflow by Water Year Type for Baseline, Regulatory Pathway, and Voluntary Agreement Pathway, Baseline and Change from Baseline (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	5,443	91	134	208	203
D	7,321	441	544	796	808
BN	10,659	92	210	901	901
AN	17,984	122	-304	644	352
W	28,844	-92	-209	332	258
All	15,473	117	83	562	506

H1a6.4.3 Reservoir Storage and Elevation

H1a6.4.3.1 Sacramento River Watershed and Delta Eastside Tributaries Rim Reservoirs

Table H1a6-69. Average Baseline End-of-April Storage and Difference and Percent Difference from Baseline [TAF (%)] by Scenario for All Years

Reservoir	Baseline	VA TAF / (%)	VA + 2025 ROD/ITP TAF / (%)	55 w/WSAs TAF / (%)	55 w/WSAs + 2025 ROD/ITP TAF / (%)
Black Butte Reservoir	112	0 / (0)	0 / (0)	-24 / (-22)	-24 / (-22)
Camanche Reservoir	295	-7 / (-2)	-7 / (-2)	-16 / (-6)	-17 / (-6)
Clear Lake	1078	0 / (0)	0 / (0)	-25 / (-2)	-25 / (-2)
Folsom Lake	797	-12 / (-2)	-8 / (-1)	-51 / (-6)	-48 / (-6)
Lake Berryessa	1178	-11 / (-1)	-11 / (-1)	-59 / (-5)	-59 / (-5)
New Bullards Bar Reservoir	818	-27 / (-3)	-27 / (-3)	-34 / (-4)	-34 / (-4)
New Hogan Reservoir	174	-0 / (-0)	-0 / (-0)	-17 / (-10)	-17 / (-10)
Oroville Reservoir	2948	-5 / (-0)	7 / (0)	-300 / (-10)	-253 / (-9)
Pardee Reservoir	174	0 / (0)	0 / (0)	-10 / (-6)	-10 / (-6)
Shasta Lake	4093	-29 / (-1)	-29 / (-1)	-12 / (-0)	-11 / (-0)
Whiskeytown Reservoir	233	-0 / (-0)	-0 / (-0)	-3 / (-1)	-3 / (-1)

Table H1a6-70. Average Baseline End-of-April Storage and Difference and Percent Difference from Baseline [TAF (%)] by Scenario for Critical Years

Reservoir	Baseline	VA TAF / (%)	VA + 2025 ROD/ITP TAF / (%)	55 w/WSAs TAF / (%)	55 w/WSAs + 2025 ROD/ITP TAF / (%)
Black Butte Reservoir	59	0 / (0)	0 / (0)	-24 / (-41)	-24 / (-41)
Camanche Reservoir	174	-3 / (-2)	-3 / (-2)	19 / (11)	19 / (11)
Clear Lake	936	0 / (0)	0 / (0)	-20 / (-2)	-20 / (-2)
Folsom Lake	504	-16 / (-3)	-5 / (-1)	18 / (4)	24 / (5)
Lake Berryessa	808	-14 / (-2)	-14 / (-2)	11 / (1)	11 / (1)
New Bullards Bar Reservoir	663	-20 / (-3)	-20 / (-3)	-67 / (-10)	-67 / (-10)
New Hogan Reservoir	94	-0 / (-0)	-0 / (-0)	8 / (8)	8 / (8)

Reservoir	Baseline	VA TAF / (%)	VA + 2025 ROD/ITP TAF / (%)	55 w/WSAs TAF / (%)	55 w/WSAs + 2025 ROD/ITP TAF / (%)
Oroville Reservoir	1898	13 / (1)	43 / (2)	-77 / (-4)	20 / (1)
Pardee Reservoir	166	1 / (0)	1 / (0)	-29 / (-18)	-29 / (-18)
Shasta Lake	2915	13 / (0)	21 / (1)	269 / (9)	233 / (8)
Whiskeytown Reservoir	228	-0 / (-0)	-0 / (-0)	-2 / (-1)	-2 / (-1)

Table H1a6-71. Average Baseline End-of-September Storage and Difference and Percent Difference from Baseline [TAF (%)] by Scenario for All Years

Reservoir	Baseline	VA TAF / (%)	VA + 2025 ROD/ITP TAF / (%)	55 w/WSAs TAF / (%)	55 w/WSAs + 2025 ROD/ITP TAF / (%)
Black Butte Reservoir	52	0 / (0)	0 / (0)	-10 / (-20)	-10 / (-20)
Camanche Reservoir	243	-3 / (-1)	-3 / (-1)	-11 / (-5)	-11 / (-5)
Clear Lake	876	0 / (0)	0 / (0)	-9 / (-1)	-9 / (-1)
Folsom Lake	606	9 / (1)	23 / (4)	-22 / (-4)	-5 / (-1)
Lake Berryessa	969	-10 / (-1)	-10 / (-1)	-43 / (-4)	-43 / (-4)
New Bullards Bar Reservoir	597	-26 / (-4)	-26 / (-4)	-19 / (-3)	-19 / (-3)
New Hogan Reservoir	99	-0 / (-0)	-0 / (-0)	3 / (3)	3 / (3)
Oroville Reservoir	2056	32 / (2)	124 / (6)	-158 / (-8)	-72 / (-3)
Pardee Reservoir	187	0 / (0)	0 / (0)	-4 / (-2)	-4 / (-2)
Shasta Lake	2880	-31 / (-1)	-26 / (-1)	6 / (0)	13 / (0)
Whiskeytown Reservoir	234	0 / (0)	0 / (0)	0 / (0)	0 / (0)

Table H1a6-72. Average Baseline End-of-September Storage and Difference and Percent Difference from Baseline [TAF (%)] by Scenario for Critical Years

Reservoir	Baseline	VA TAF / (%)	VA + 2025 ROD/ITP TAF / (%)	55 w/WSAs TAF / (%)	55 w/WSAs + 2025 ROD/ITP TAF / (%)
Black Butte Reservoir	25	-0 / (-0)	0 / (0)	-5 / (-19)	-5 / (-19)
Camanche Reservoir	123	-2 / (-2)	-2 / (-2)	27 / (22)	27 / (22)
Clear Lake	807	0 / (0)	0 / (0)	-13 / (-2)	-13 / (-2)
Folsom Lake	366	3 / (1)	8 / (2)	19 / (5)	29 / (8)
Lake Berryessa	610	-13 / (-2)	-13 / (-2)	28 / (5)	28 / (5)

Reservoir	Baseline	VA TAF / (%)	VA + 2025 ROD/ITP TAF / (%)	55 w/WSAs TAF / (%)	55 w/WSAs + 2025 ROD/ITP TAF / (%)
New Bullards Bar Reservoir	463	-10 / (-2)	-10 / (-2)	-44 / (-9)	-44 / (-9)
New Hogan Reservoir	51	-0 / (-0)	-0 / (-0)	25 / (48)	25 / (48)
Oroville Reservoir	967	18 / (2)	27 / (3)	245 / (25)	297 / (31)
Pardee Reservoir	175	0 / (0)	0 / (0)	-14 / (-8)	-14 / (-8)
Shasta Lake	1546	21 / (1)	16 / (1)	717 / (46)	657 / (43)
Whiskeytown Reservoir	234	0 / (0)	0 / (0)	0 / (0)	0 / (0)

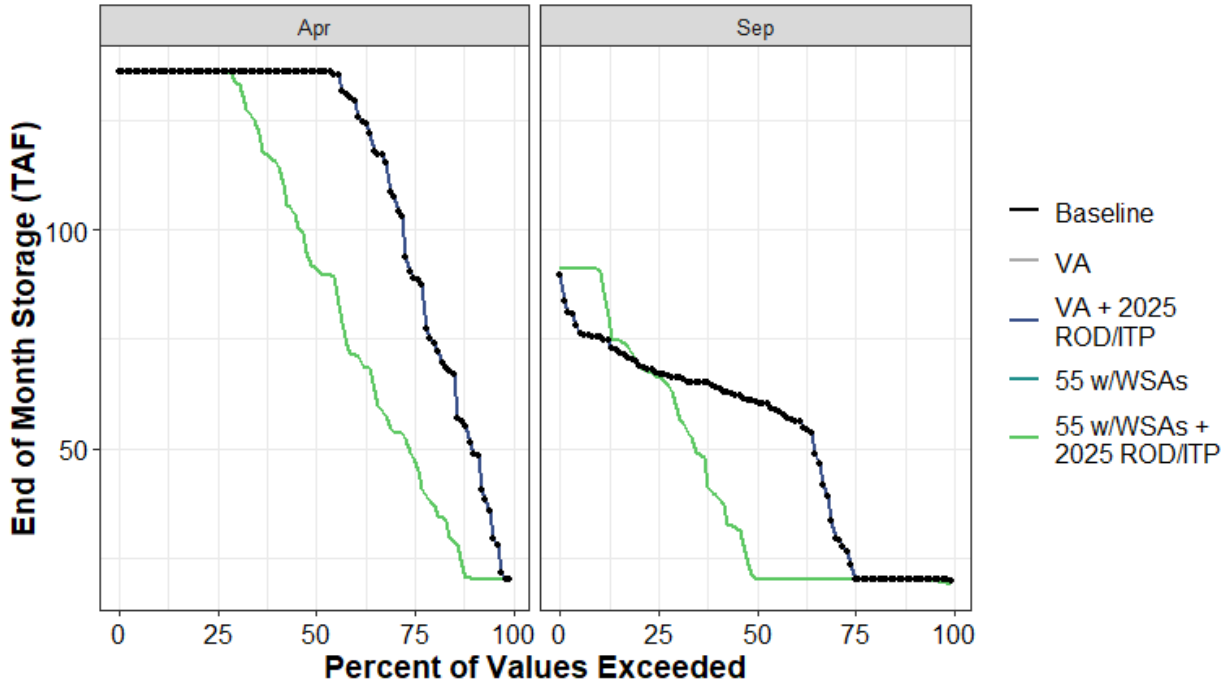

Figure H1a6-25. Black Butte Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

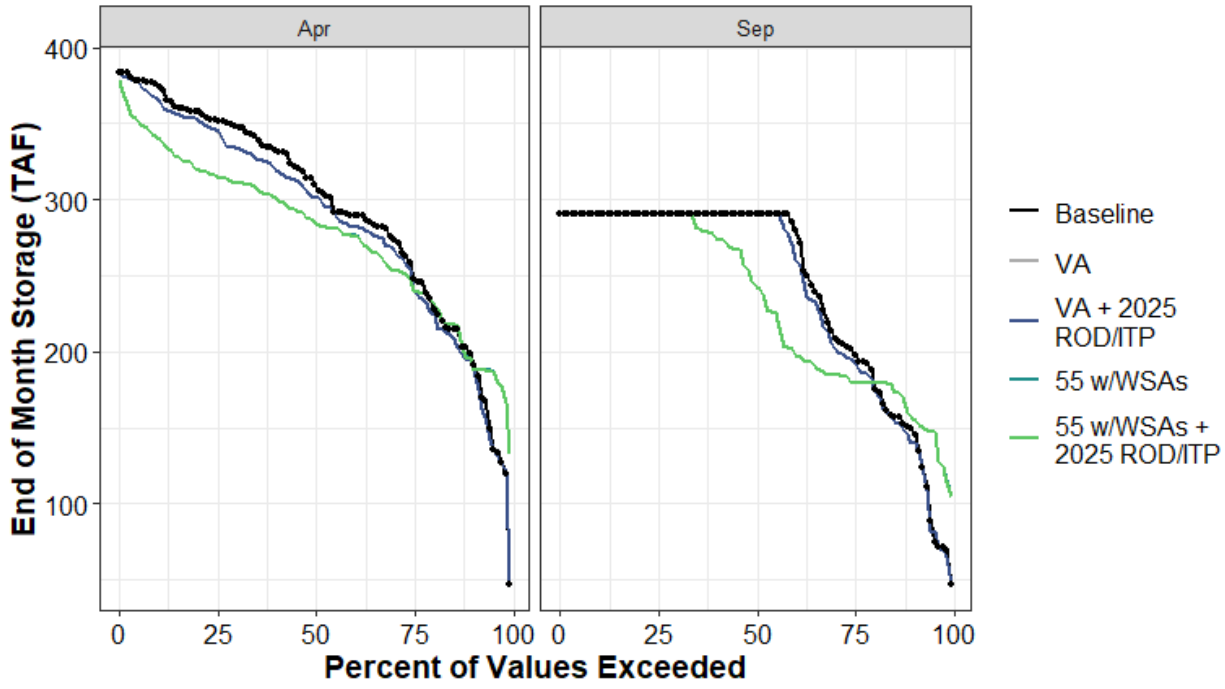

Figure H1a6-26. Camanche Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

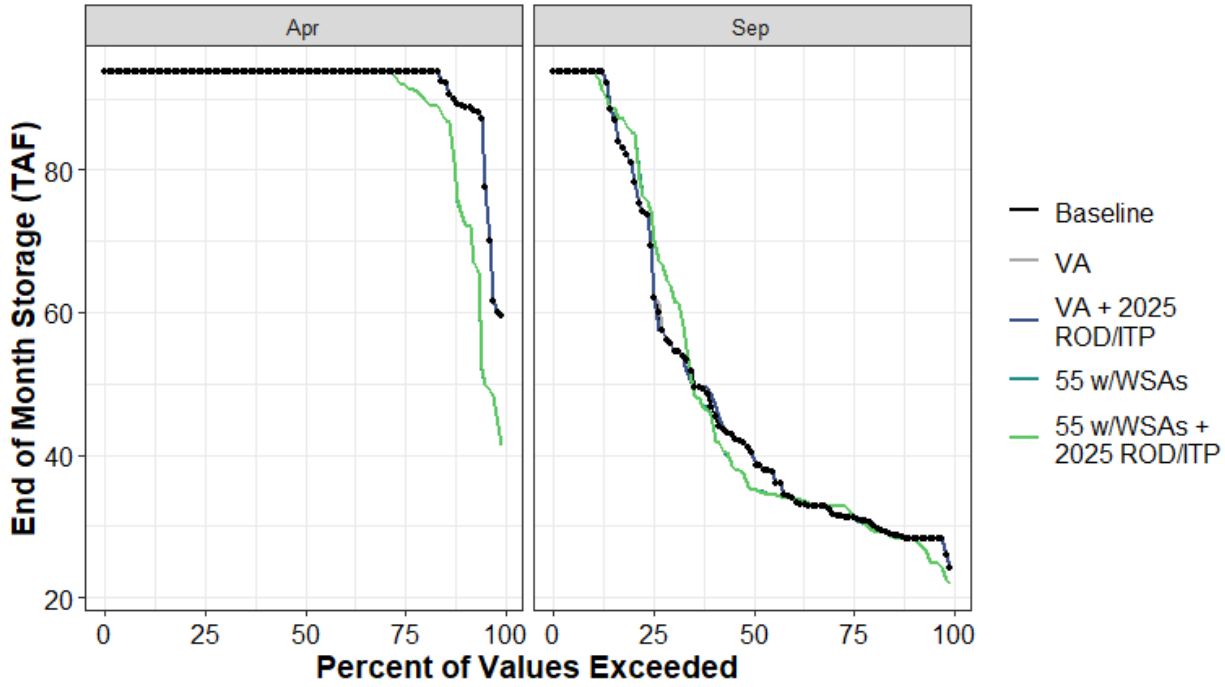

Figure H1a6-27. Camp Far West End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

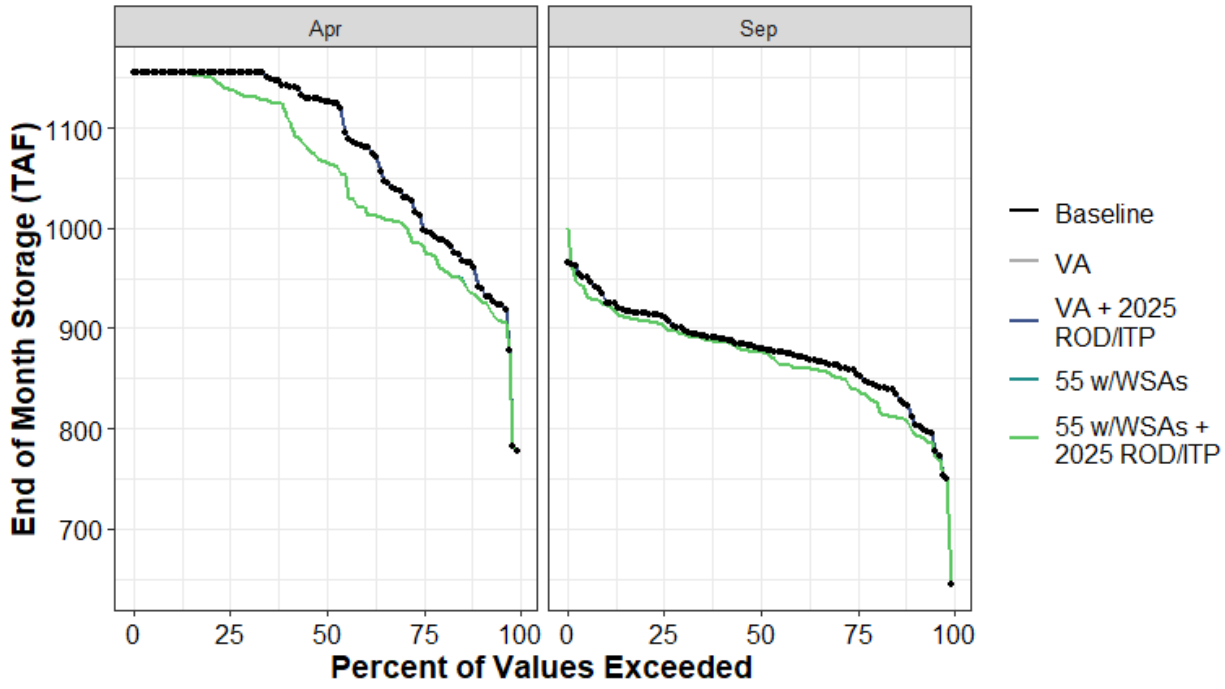

Figure H1a6-28. Clear Lake End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

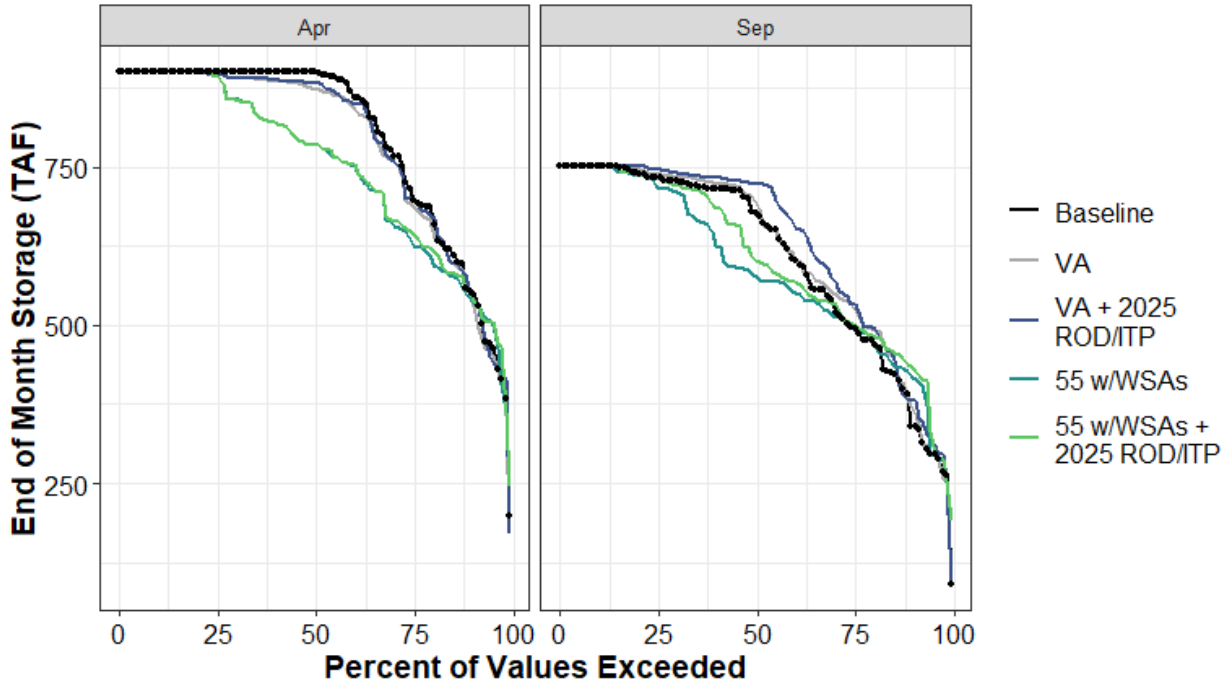

Figure H1a6-29. Folsom Lake End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

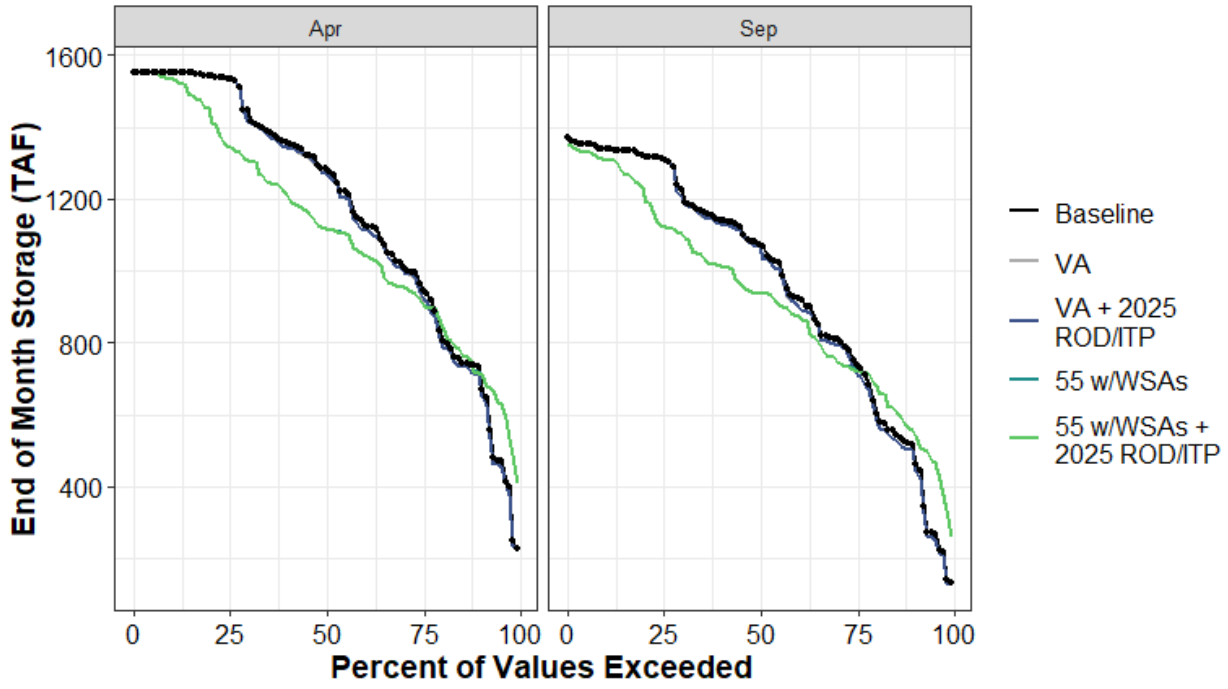

Figure H1a6-30. Lake Berryessa End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

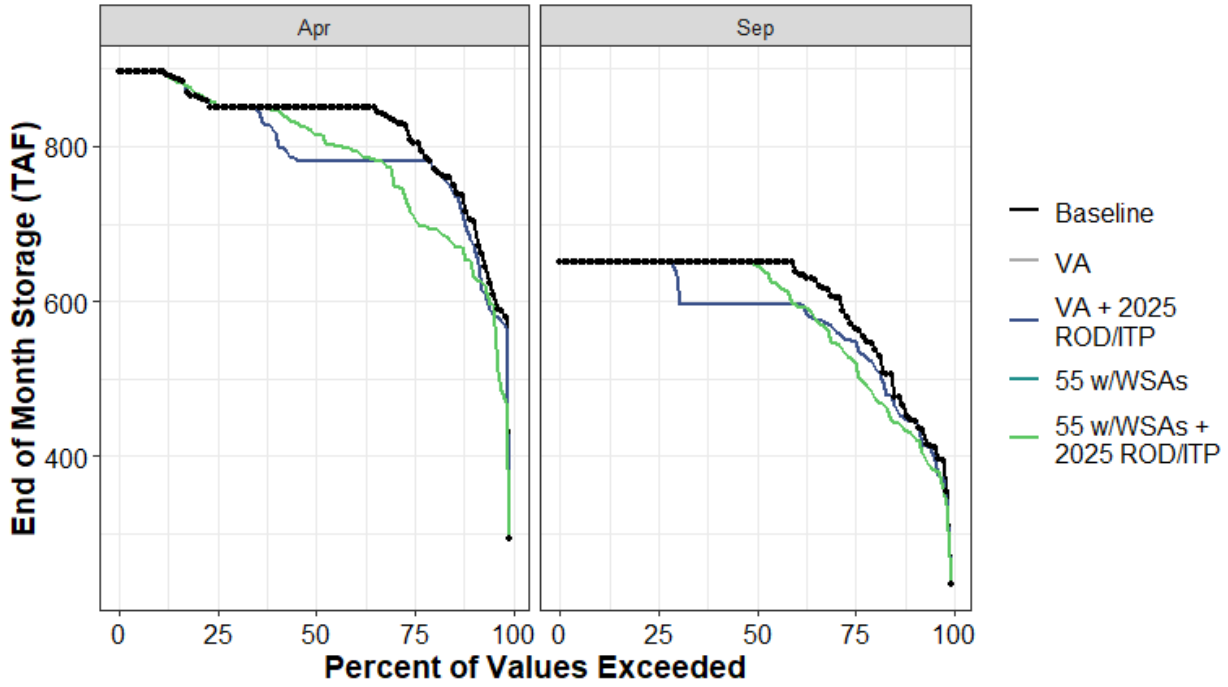

Figure H1a6-31. New Bullards Bar Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

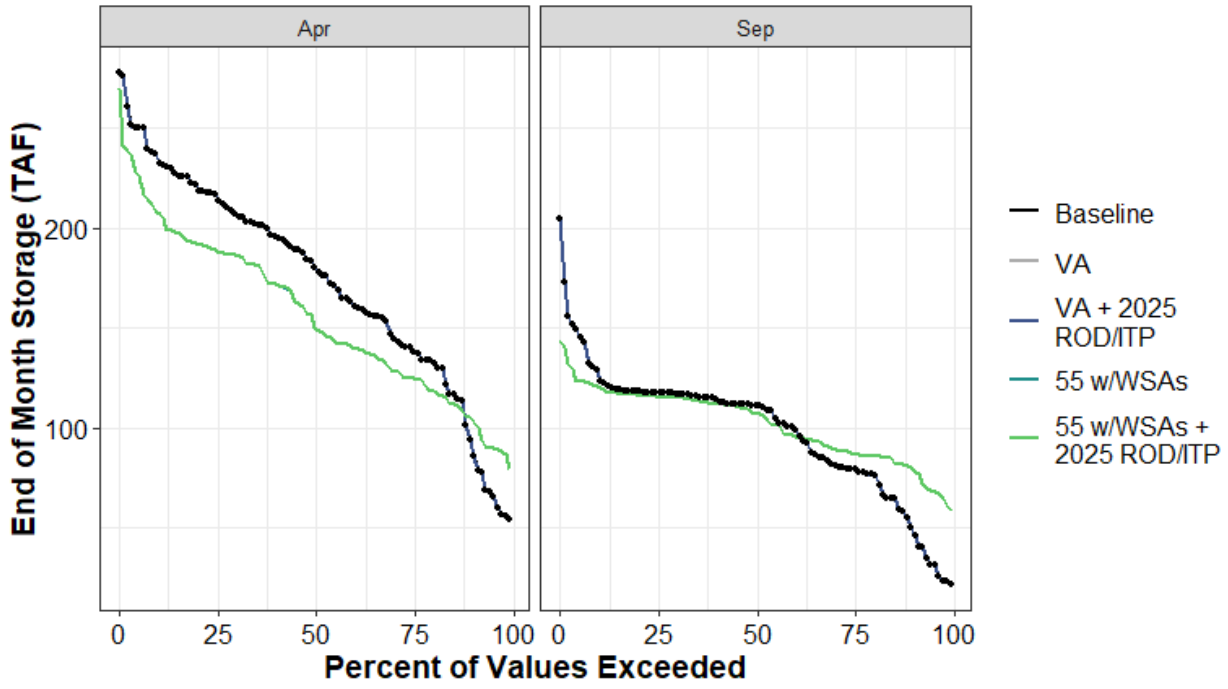

Figure H1a6-32. New Hogan Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

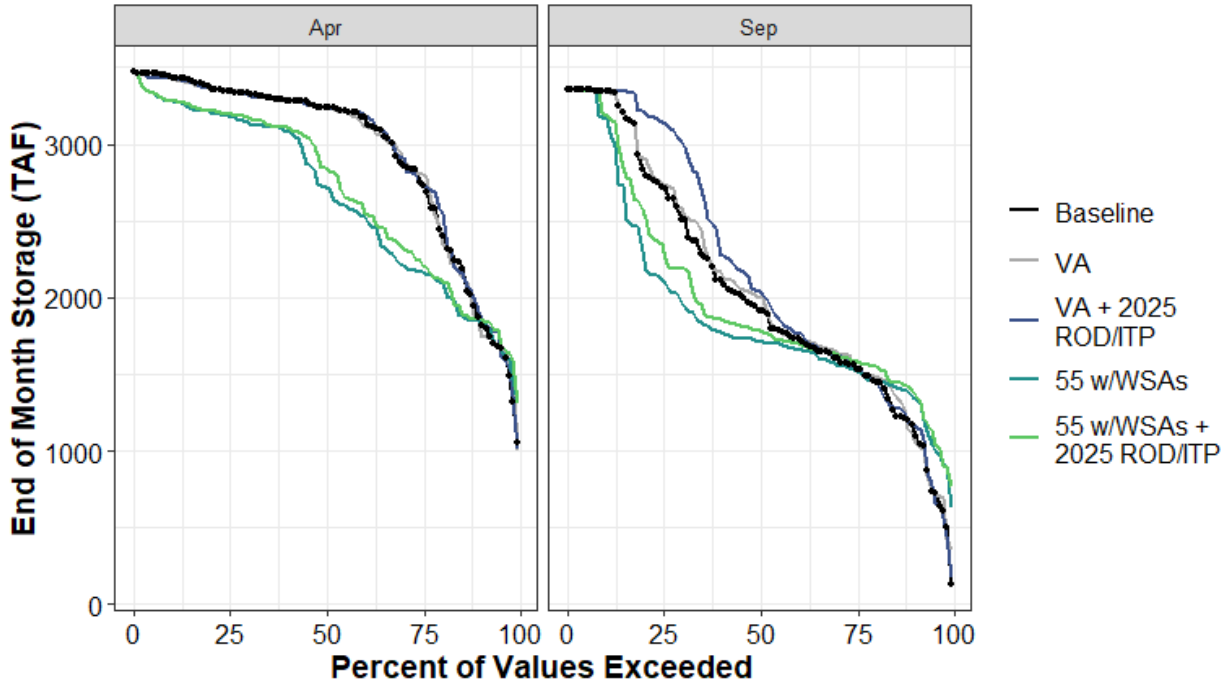

Figure H1a6-33. Oroville Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

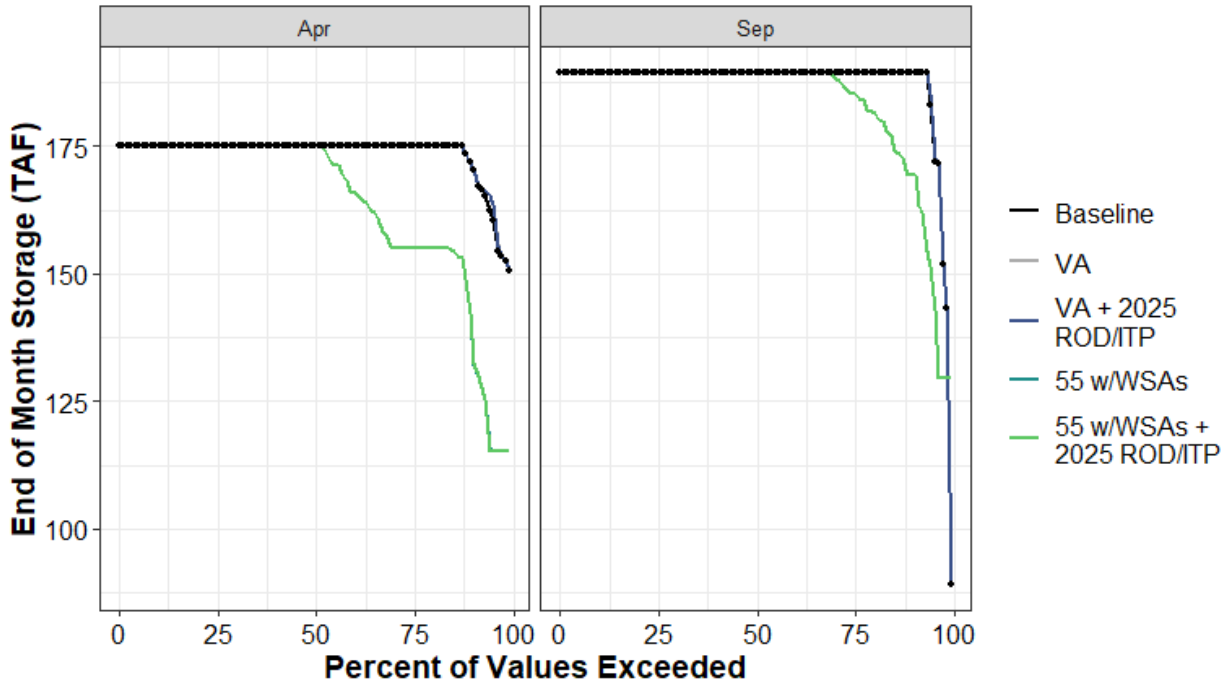

Figure H1a6-34. Pardee Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

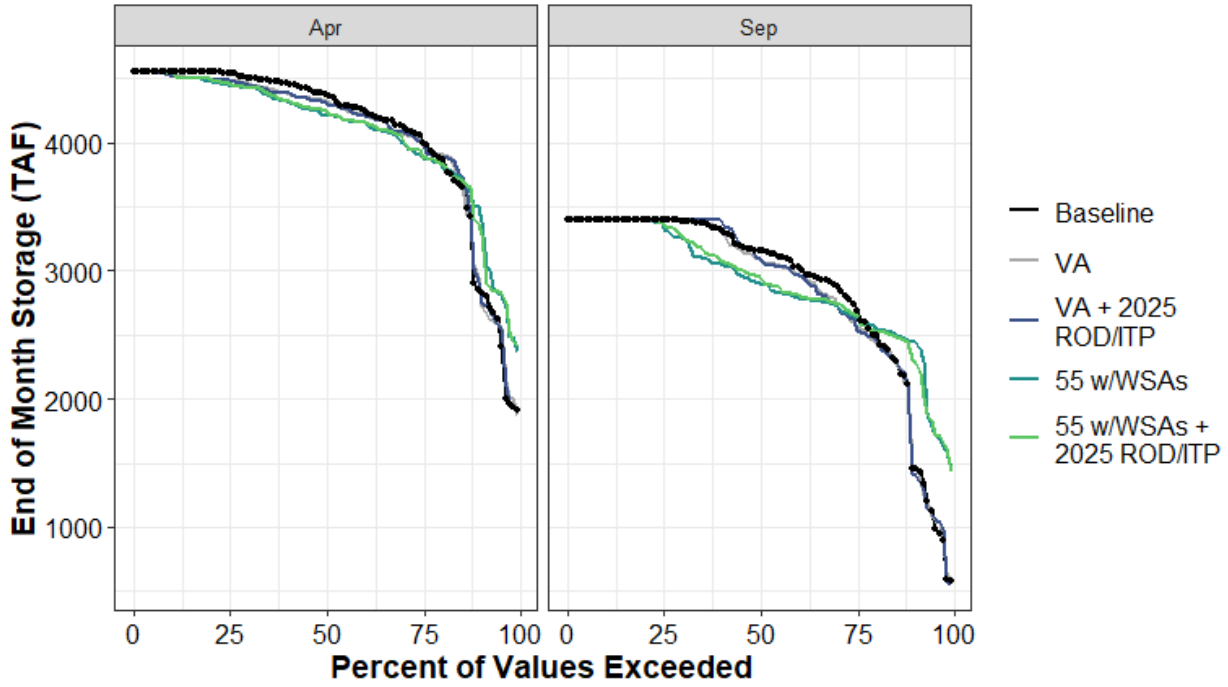

Figure H1a6-35. Shasta Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

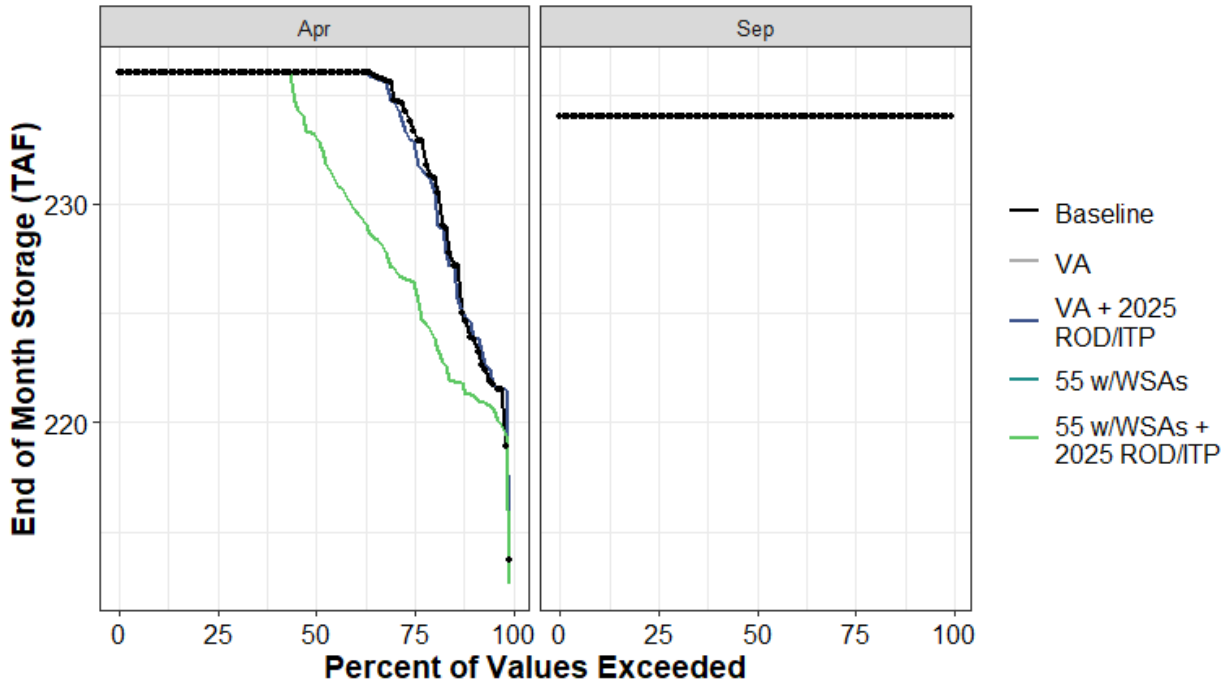

Figure H1a6-36. Whiskeytown Reservoir End-of-April and End-of-September Storage under Baseline, Regulatory Pathway, and Voluntary Agreement Pathway

H1a6.4.3.2 Total Storage by Watershed

Reservoir operations in the SacWAM scenarios reflect only one possible implementation of the flow objectives, and may not represent the ultimate assignment of responsibility. The figures and tables below summarize total end of September storage for the watersheds of the American, Bear, Feather, Mokelumne, and Yuba Rivers, and Stony Creek.

Table H1a6-73. Average End-of-September Watershed Total Storage for Baseline (TAF) and Percent Difference from Baseline

Watershed	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
American	1103	0	2	-2	0
Bear	114	0	0	0	0
Cache	987	0	0	-2	-2
Calaveras	99	0	0	3	3
Clear	234	0	0	0	0
Cosumnes	33	0	0	0	0
Feather	3243	1	4	-5	-2
Mokelumne	643	0	0	-3	-3
Putah	969	-1	-1	-4	-4
Sacramento	2902	-1	-1	0	0
Stony	133	0	0	-18	-18
Yuba	866	-3	-3	-2	-2

Table H1a6-74. Average Critical Year End-of-September Watershed Total Storage for Baseline (TAF) and Percent Difference from Baseline

Watershed	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
American	835	0	1	2	3
Bear	91	0	0	3	3
Cache	836	0	0	-1	-1
Calaveras	51	0	0	48	48
Clear	234	0	0	0	0
Cosumnes	30	0	0	0	0
Feather	1991	1	1	12	15
Mokelumne	469	0	0	2	2
Putah	610	-2	-2	5	5
Sacramento	1568	1	1	46	42
Stony	75	0	0	-38	-38
Yuba	689	-1	-1	-6	-6

H1a6.5 Changes in Water Supply

The effects of the 2025 ROD and ITP amendments on changes in water supply are described qualitatively in Section 13.4.6.2, *Sensitivity Analysis for 2025 Record of Decision and 2025 Incidental Take Permit, Changes in Water Supply*. Graphical and tabular summaries of results are provided below for comparison with results presented in Section 13.4.4, *Changes in Surface Water Supply*.

H1a6.5.1 Total Water Supply

Table H1a6-75. Annual Average Water Supplied to Each Region in the Study Area (TAF/yr)

		Sacramento River Watershed	Delta Eastside Tributaries	Delta	San Francisco Bay Area	Central Coast	San Joaquin Valley	Southern California	Study Area Total
Historical Water Deliveries Data	Total	8,050	986	1,368	1,251	1,334	18,437	9,449	40,875
	Agriculture	6,773	824	1,185	137	1,055	16,803	4,863	31,640
	Municipal	826	154	136	1,089	279	1,053	4,518	8,055
	Wetland	451	8	48	26	0	581	68	1,182
Baseline	Sac/Delta	5,367	206	1,153	697	87	2,845	1,688	12,042
	Agriculture	4,680	125	1,135	27	37	2,445	15	8,465
	Municipal	485	81	18	669	50	100	1,674	3,076
	Refuge	201	0	0	0	0	300	0	501
55 w/ WSAs	Sac/Delta	5,129	182	1,154	647	82	2,776	1,414	11,384
		(-4%)	(-12%)	(0%)	(-7%)	(-6%)	(-2%)	(-16%)	(-5%)
		[-3%]	[-2%]	[0%]	[-4%]	[0%]	[0%]	[-3%]	[-2%]
	Agriculture	4,468	111	1,136	24	39	2,390	12	8,180
	Municipal	461	71	18	623	43	87	1,402	2,706
	Refuge	200	0	0	0	0	298	0	498
55 w/WSAs + 2025 ROD/ITP	Sac/Delta	5,147	182	1,153	651	83	2,782	1,446	11,445
		(-4%)	(-11%)	(0%)	(-7%)	(-5%)	(-2%)	(-14%)	(-5%)
		[-3%]	[-2%]	[0%]	[-4%	[0%]	[0%]	[-3%]	[-1%]
	Agriculture	4,484	111	1,136	24	39	2,396	13	8,202
	Municipal	463	71	18	626	44	89	1,434	2,745
	Refuge	200	0	0	0	0	298	0	498
VA Low Sac/Delta Supply	Sac/Delta	5,145	205	1,154	699	89	2,898	1,716	11,906
		(-4%)	(0%)	(0%)	(0%)	(3%)	(2%)	(2%)	(-1%)
		[-3%]	[0%]	[0%]	[0%]	[0%]	[0%]	[0%]	[0%]
	Agriculture	4,469	125	1,136	28	38	2,495	15	8,305
	Municipal	475	80	18	672	51	103	1,701	3,100
	Refuge	201	0	0	0	0	300	0	501

		Sacramento River Watershed	Delta Eastside Tributaries	Delta	San Francisco Bay Area	Central Coast	San Joaquin Valley	Southern California	Study Area Total
VA High Export Cuts	Sac/Delta	5,258	205	1,154	699	89	2,785	1,716	11,906
		(-2%)	(0%)	(0%)	(0%)	(3%)	(-2%)	(2%)	(-1%)
		[-1%]	[0%]	[0%]	[0%]	[0%]	[0%]	[0%]	[0%]
	Agriculture	4,582	125	1,136	28	38	2,382	15	8,305
	Municipal	475	80	18	672	51	103	1,701	3,100
	Refuge	201	0	0	0	0	300	0	501
VA + 2025 ROD/ITP Low Sac/Delta Supply	Sac/Delta	5,151	205	1,153	702	90	2,896	1,744	11,940
		(-4%)	(0%)	(0%)	(1%)	(3%)	(2%)	(3%)	(-1%)
		[-3%]	[0%]	[0%]	[0%]	[0%]	[0%]		[0%]
	Agriculture	4,474	125	1,136	28	38	2,493	15	8,308
	Municipal	475	80	18	674	51	104	1,729	3,131
	Refuge	202	0	0	0	0	300	0	501
VA + 2025 ROD/ITP High Export Cuts	Sac/Delta	5,264	205	1,153	702	90	2,783	1,744	11,940
		(-2%)	(0%)	(0%)	(1%)	(3%)	(-2%)	(3%)	(-1%)
		[-1%]	[0%]	[0%]	[0%]	[0%]	[0%]	[-1%]	[0%]
	Agriculture	4,587	125	1,136	28	38	2,380	15	8,308
	Municipal	475	80	18	674	51	104	1,729	3,131
	Refuge	202	0	0	0	0	300	0	501

The historical water deliveries data values represent an estimate of the total annual supplies to each region, and the values presented for the 55 w/WSAs and VA scenarios represent the Sacramento/Delta surface water portion as modeled from SacWAM. The percentages in round parentheses represent the estimated reduction in Sacramento/Delta supply relative to baseline, while those in square brackets represent the estimated reduction relative to historical water deliveries for each scenario. When comparing historical water deliveries data estimates to SacWAM results, the reader should keep in mind that they are not meant to be an exact comparison because of differences in methods and time periods. However, these comparisons are presented to give a general idea of the magnitudes of changes relative to the total supply. More information on the differences in the methods can be found in Section 2.8, *Existing Water Supply.*

H1a6.5.2 Sacramento/Delta Water in the Study Area

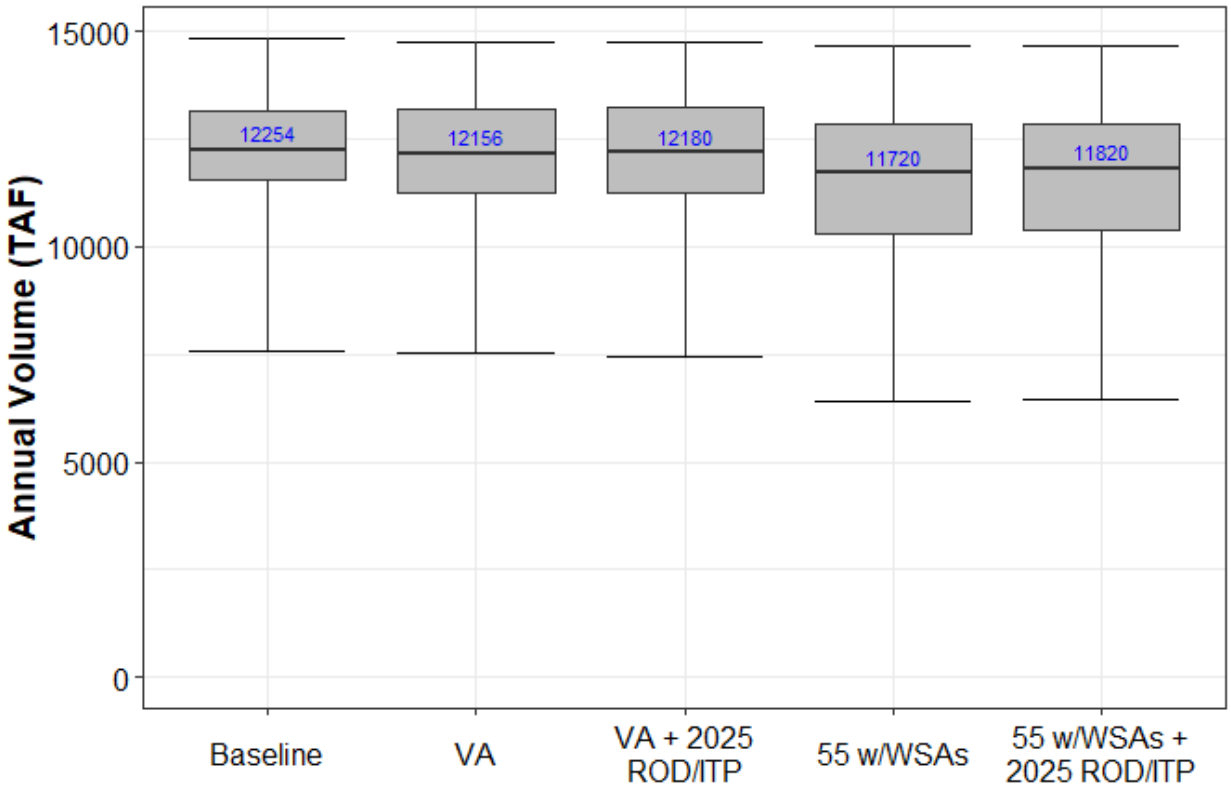

Figure H1a6-37. Annual Total Sacramento/Delta Supply for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-76. Average Annual Total Sacramento/Delta Supply by Water Year Type for the Baseline, VA Pathway, and Regulatory Pathway Scenarios (TAF)

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	9,423	-79	-49	-1,174	-1,083
D	11,605	-337	-240	-1,083	-981
BN	12,188	-145	-143	-587	-531
AN	12,418	-213	-246	-249	-249
W	13,515	20	57	-278	-237
All	12,042	-135	-101	-657	-597

H1a6.5.3 Sacramento/Delta Supply to the Sacramento River Watershed, Delta, and Delta Eastside Tributaries Regions (Sacramento/Delta Watershed)

H1a6.5.3.1 Sacramento/Delta Supply to the Sacramento River Watershed

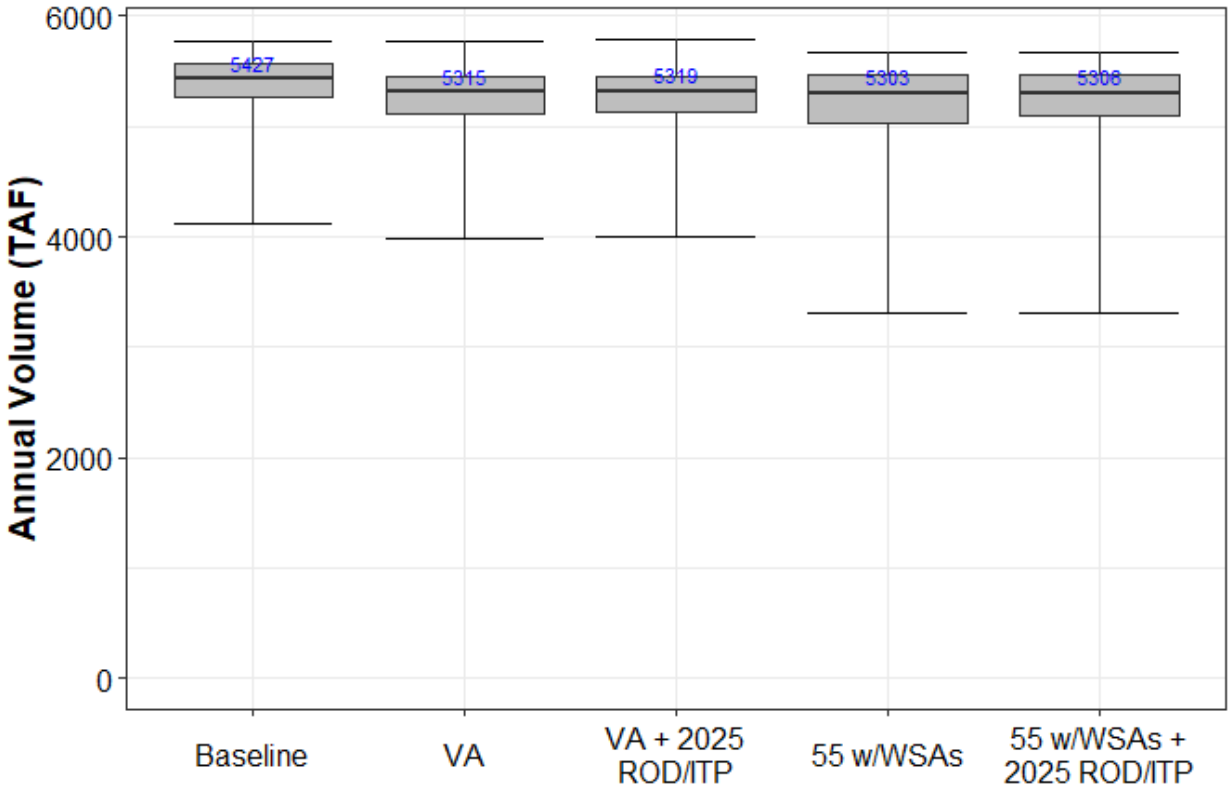

Figure H1a6-38. Annual Total Sacramento/Delta Supply to the Sacramento River Watershed for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-77. Average Annual Total Sacramento/Delta Supply to the Sacramento River Watershed by Water Year Type for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	4,913	-30	-22	-794	-733
D	5,371	-208	-203	-208	-183
BN	5,473	-181	-181	-117	-108
AN	5,470	-183	-173	-68	-67
W	5,497	-2	5	-106	-104
All	5,367	-108	-103	-237	-219

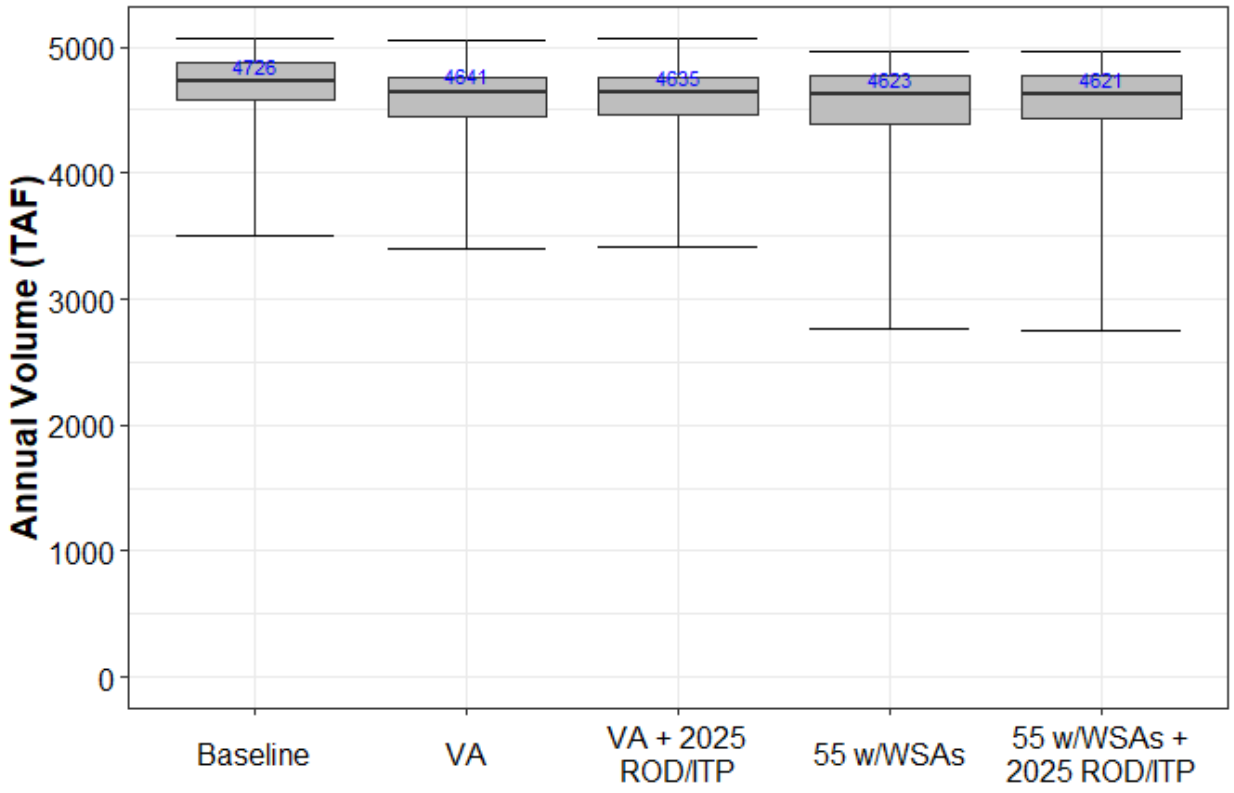

Figure H1a6-39. Annual Total Sacramento/Delta Supply to Agriculture in the Sacramento River Watershed for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-78. Average Annual Sacramento/Delta Supply to Agriculture in the Sacramento River Watershed by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	4,256	-11	-4	-729	-670
D	4,690	-178	-173	-174	-153
BN	4,783	-180	-181	-103	-96
AN	4,777	-179	-170	-55	-55
W	4,796	-2	3	-96	-95
All	4,680	-98	-93	-212	-196

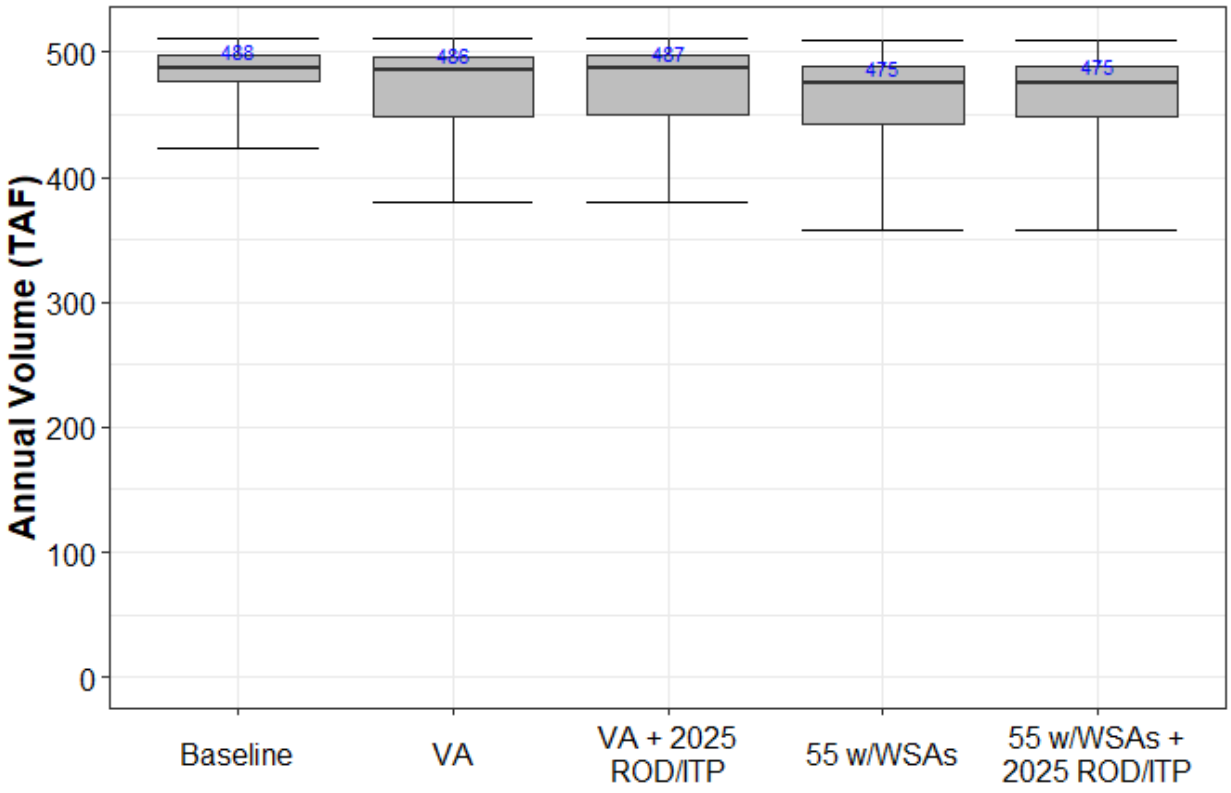

Figure H1a6-40. Annual Sacramento/Delta Supply to Municipal and Industrial Use in the Sacramento River Watershed for Baseline, VA Pathway, Regulatory Pathway Scenarios

Table H1a6-79. Average Annual Sacramento/Delta Supply to Municipal and Industrial Use in the Sacramento River Watershed by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	458	-19	-19	-64	-62
D	477	-30	-30	-33	-29
BN	487	0	0	-13	-12
AN	494	-3	-1	-11	-10
W	500	0	1	-8	-7
All	485	-10	-10	-24	-22

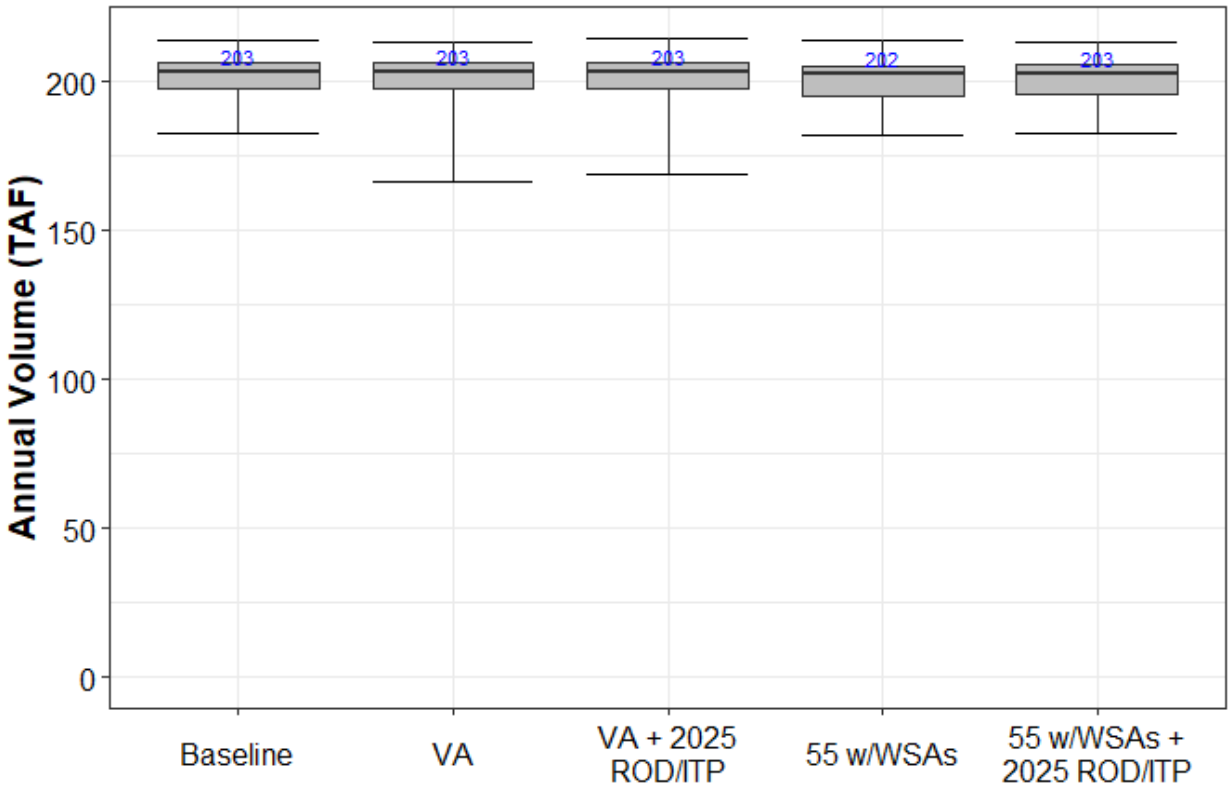

Figure H1a6-41. Average Annual Sacramento/Delta Supply to Wildlife Refuges in the Sacramento River Watershed for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-80. Average Annual Total Sacramento/Delta Supply to Wildlife Refuges in the Sacramento River Watershed by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	200	0	0	0	0
D	203	0	0	-1	-1
BN	203	0	0	0	0
AN	200	-1	-1	-2	-2
W	201	0	1	-2	-2
All	201	0	0	-1	-1

H1a6.5.3.2 Sacramento/Delta Supply to the Delta Eastside Tributaries

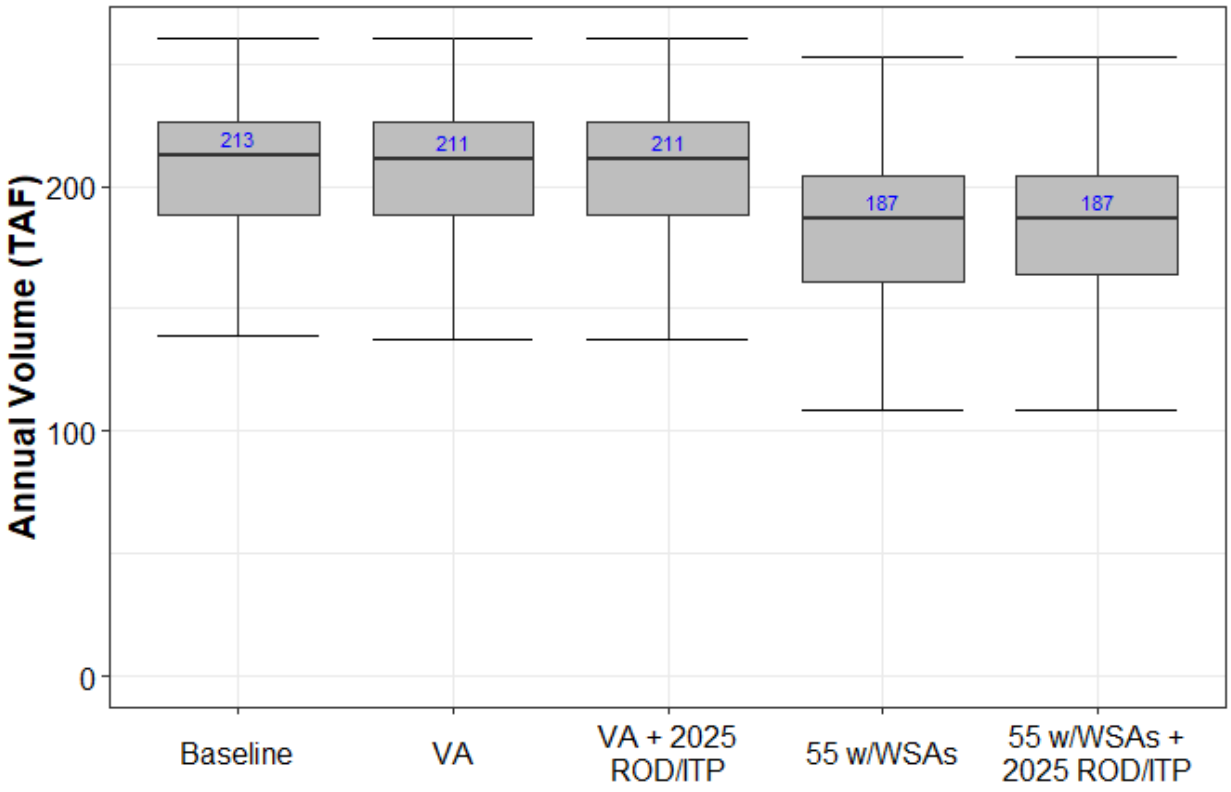

Figure H1a6-42. Annual Total Sacramento/Delta Supply to the Delta Eastside Tributaries Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-81. Average Annual Total Sacramento/Delta Supply to the Delta Eastside Tributaries Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	157	-1	-1	-30	-30
D	193	-1	-1	-25	-24
BN	211	0	0	-27	-27
AN	219	0	0	-23	-23
W	232	0	0	-17	-17
All	206	-1	-1	-24	-23

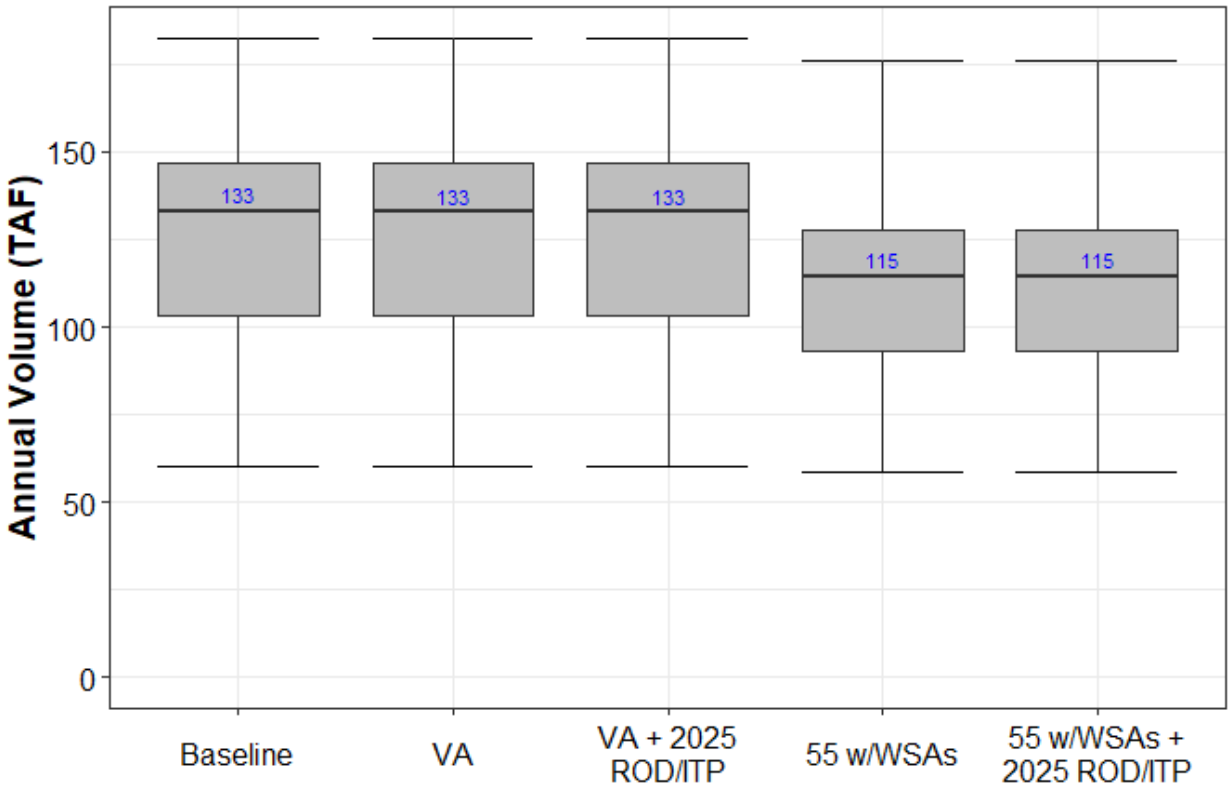

Figure H1a6-43. Annual Total Sacramento/Delta Supply to Agriculture in the Delta Eastside Tributaries Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-82. Average Annual Total Sacramento/Delta Supply to Agriculture in the Delta Eastside Tributaries Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	77	0	0	-5	-5
D	110	0	0	-9	-9
BN	130	0	0	-21	-21
AN	140	0	0	-20	-20
W	153	0	0	-16	-16
All	125	0	0	-14	-14

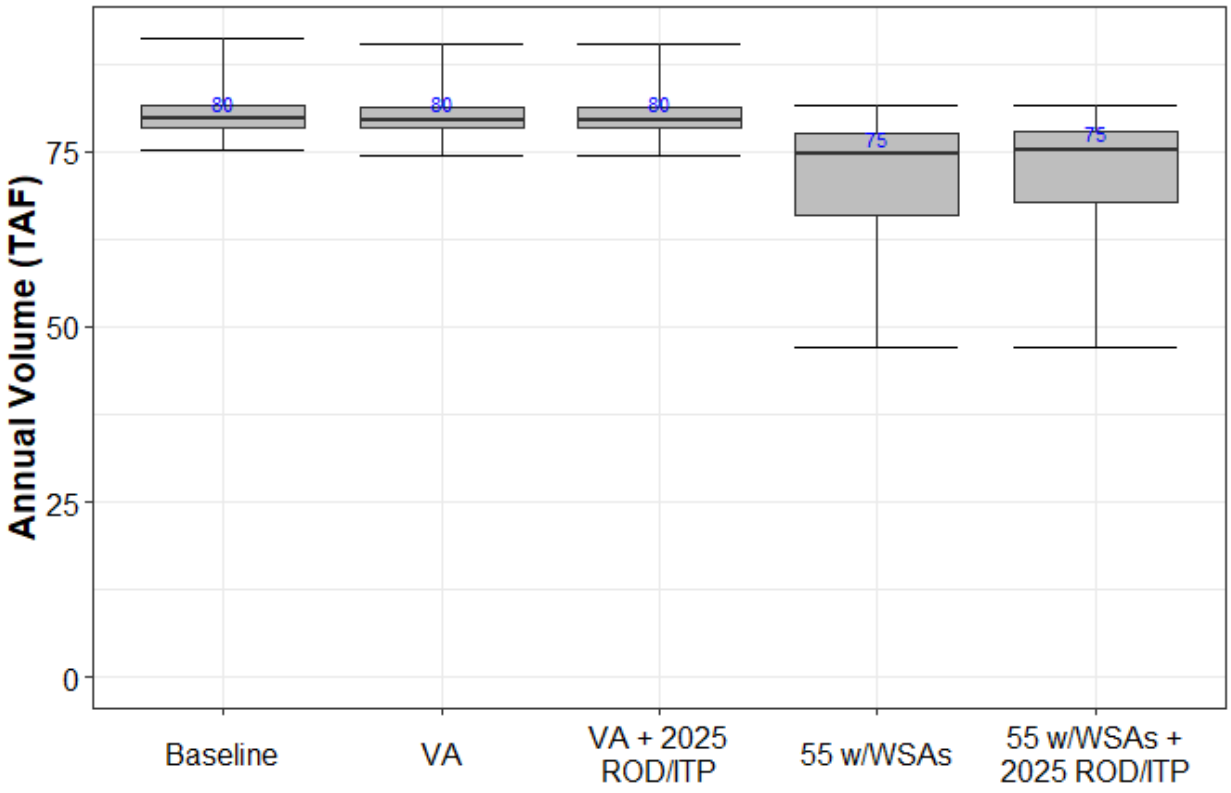

Figure H1a6-44. Annual Total Sacramento/Delta Supply to Municipal and Industrial Use in the Delta Eastside Tributaries Region for Baseline, VA Pathway, Regulatory Pathway Scenarios

Table H1a6-83. Average Annual Total Sacramento/Delta Supply to Municipal and Industrial Use in the Delta Eastside Tributaries Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	80	-1	-1	-25	-25
D	83	-1	-1	-16	-15
BN	81	0	0	-6	-5
AN	79	0	0	-3	-3
W	79	0	0	-2	-2
All	81	0	0	-10	-9

H1a6.5.3.3 Sacramento/Delta Supply to the Delta

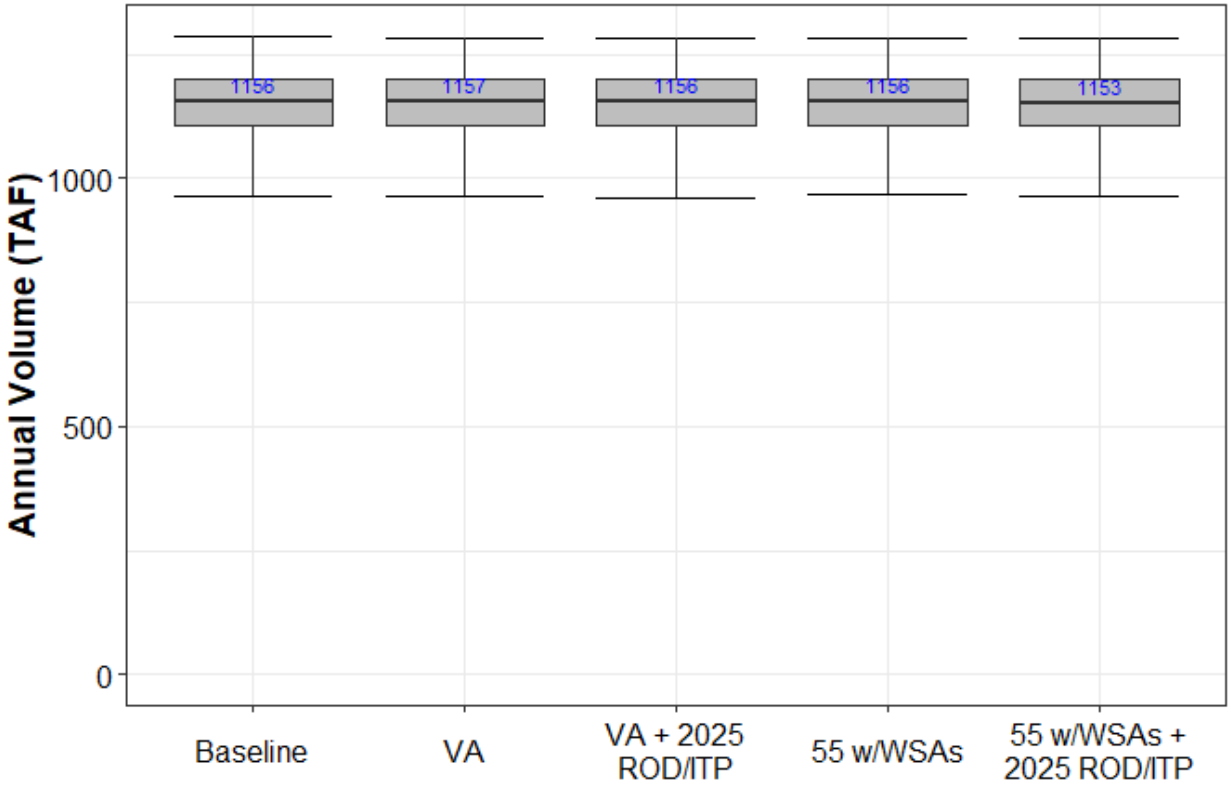

Figure H1a6-45. Annual Total Sacramento/Delta Supply to the Delta Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-84. Average Annual Total Sacramento/Delta Supply to the Delta Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,196	-1	-1	-5	-6
D	1,184	0	0	-1	-2
BN	1,170	1	0	3	3
AN	1,126	0	-2	5	4
W	1,108	2	1	2	1
All	1,153	1	0	1	0

Table H1a6-85. Average Annual Sacramento/Delta Supply to Agriculture in the Delta Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,187	0	0	-3	-4
D	1,169	0	0	0	0
BN	1,153	1	0	2	2
AN	1,105	0	-1	4	4
W	1,083	2	2	1	1
All	1,135	1	1	1	1

Table H1a6-86. Average Annual Sacramento/Delta Supply to Municipal and Industrial Use in the Delta Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	9	0	-1	-2	-2
D	15	0	-1	0	-1
BN	18	0	0	1	1
AN	21	0	-1	1	0
W	25	0	-1	1	0
All	18	0	-1	0	0

H1a6.5.4 Sacramento/Delta Supply to the San Joaquin Valley

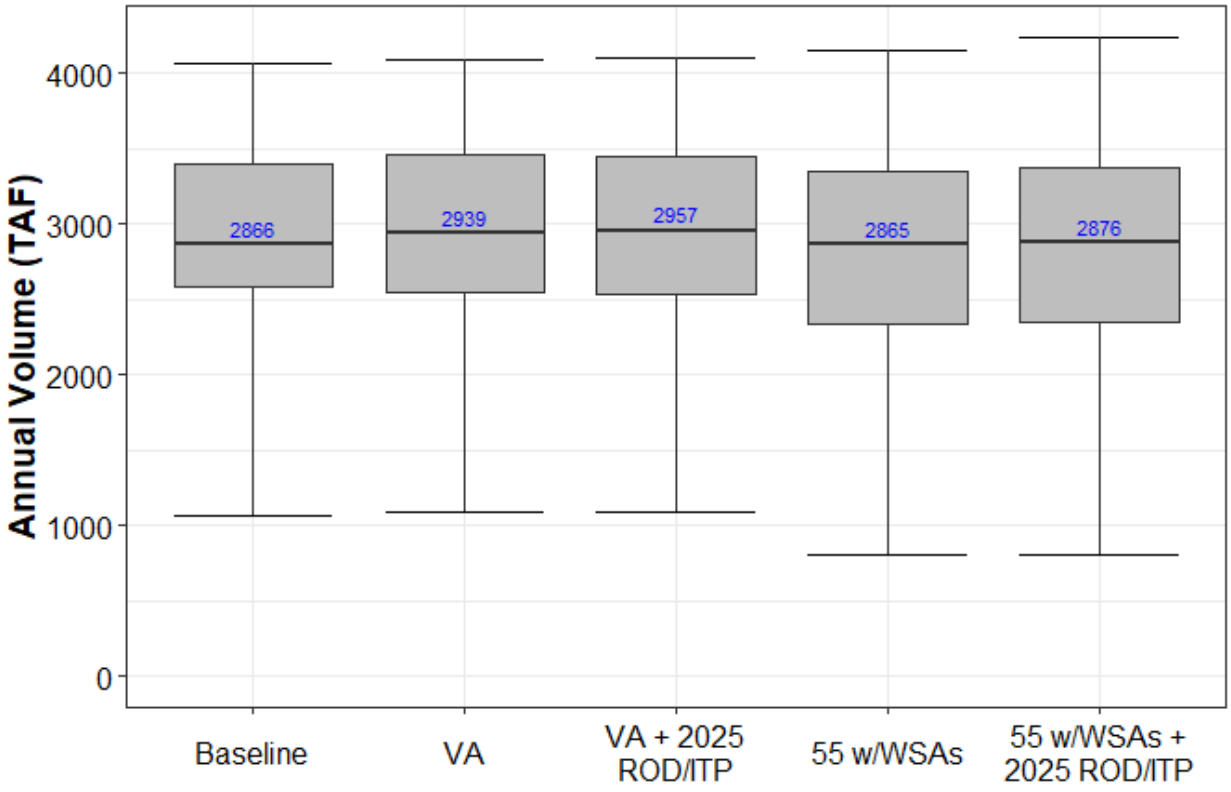

Figure H1a6-46. Annual Total Sacramento/Delta Supply to the San Joaquin Valley Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-87. Average Annual Total Sacramento/Delta Supply to the San Joaquin Valley Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,755	-4	7	-196	-206
D	2,644	21	40	-228	-218
BN	2,822	61	42	-37	-25
AN	2,966	47	16	72	74
W	3,539	105	104	39	51
All	2,845	53	52	-69	-62

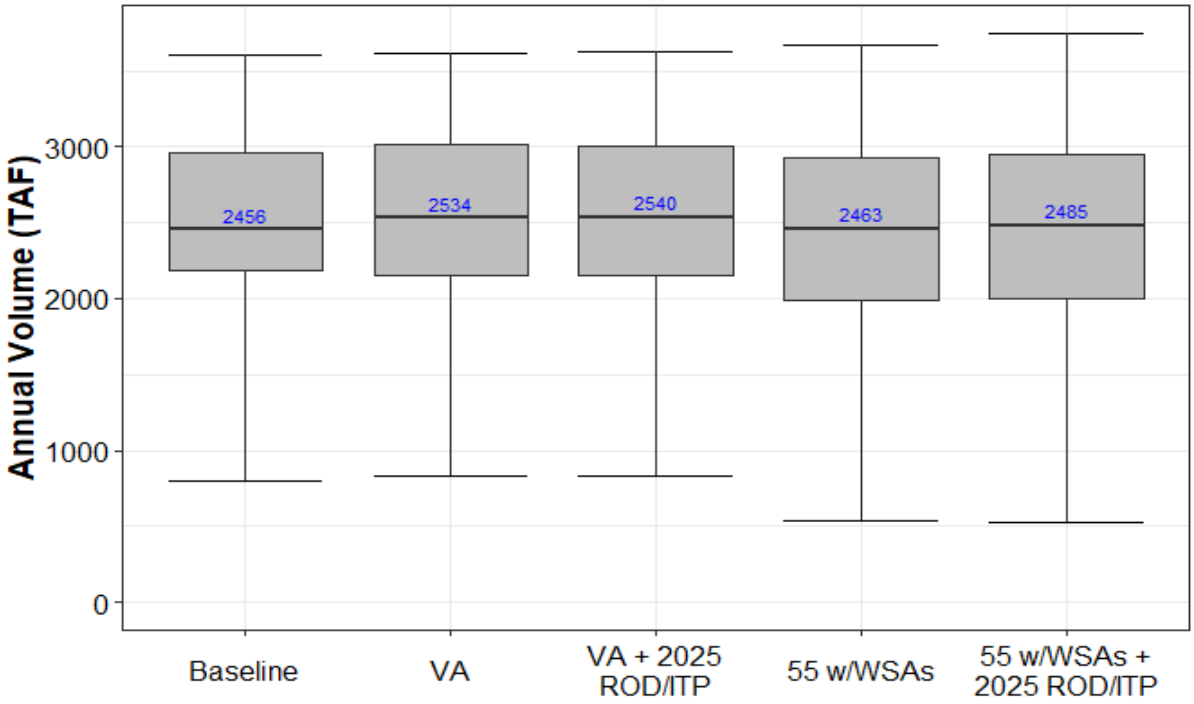

Figure H1a6-47. Annual Sacramento/Delta Supply to Agriculture in the San Joaquin Valley Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-88. Average Annual Sacramento/Delta Supply to Agriculture in the San Joaquin Valley Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	1,436	-4	7	-183	-194
D	2,251	19	36	-198	-191
BN	2,416	58	39	-20	-10
AN	2,556	44	15	83	85
W	3,099	100	99	44	53
All	2,445	50	48	-54	-49

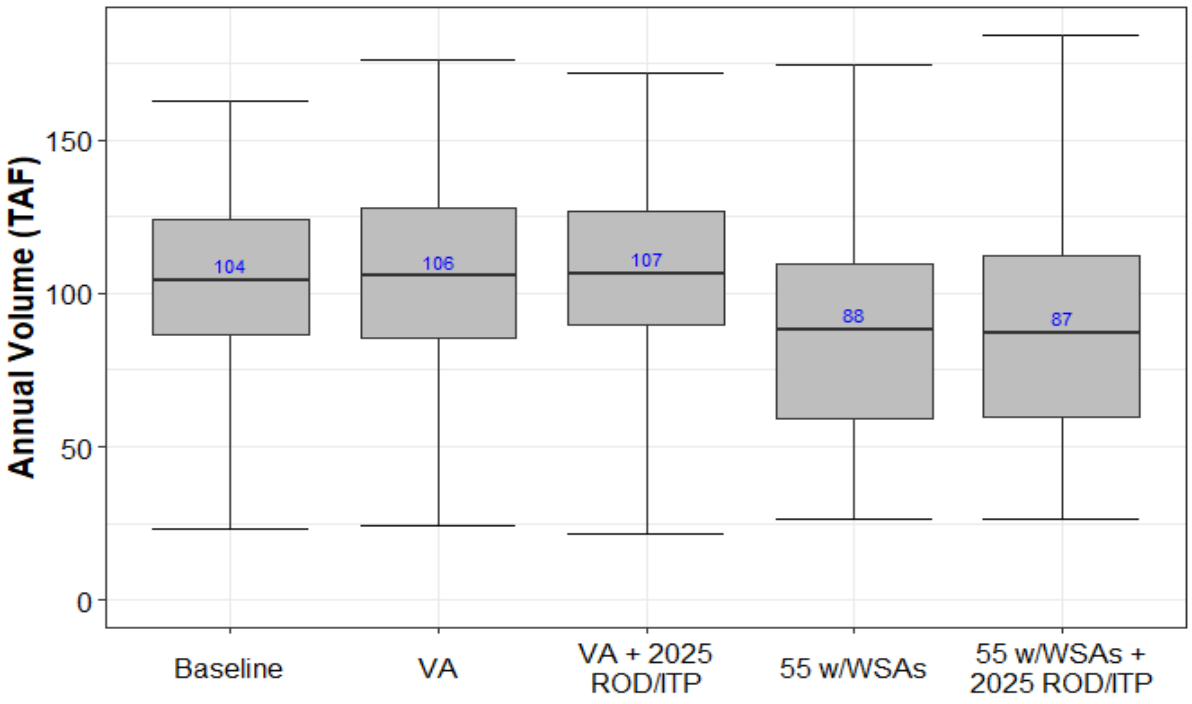

Figure H1a6-48. Annual Sacramento/Delta Supply to Municipal and Industrial Use in the San Joaquin Valley Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-89. Average Annual Sacramento/Delta Supply to Municipal and Industrial Use in the San 9Joaquin Valley Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	47	1	2	-5	-3
D	89	2	4	-29	-25
BN	102	3	4	-16	-15
AN	108	3	1	-11	-11
W	132	4	5	-4	-3
All	100	3	4	-13	-11

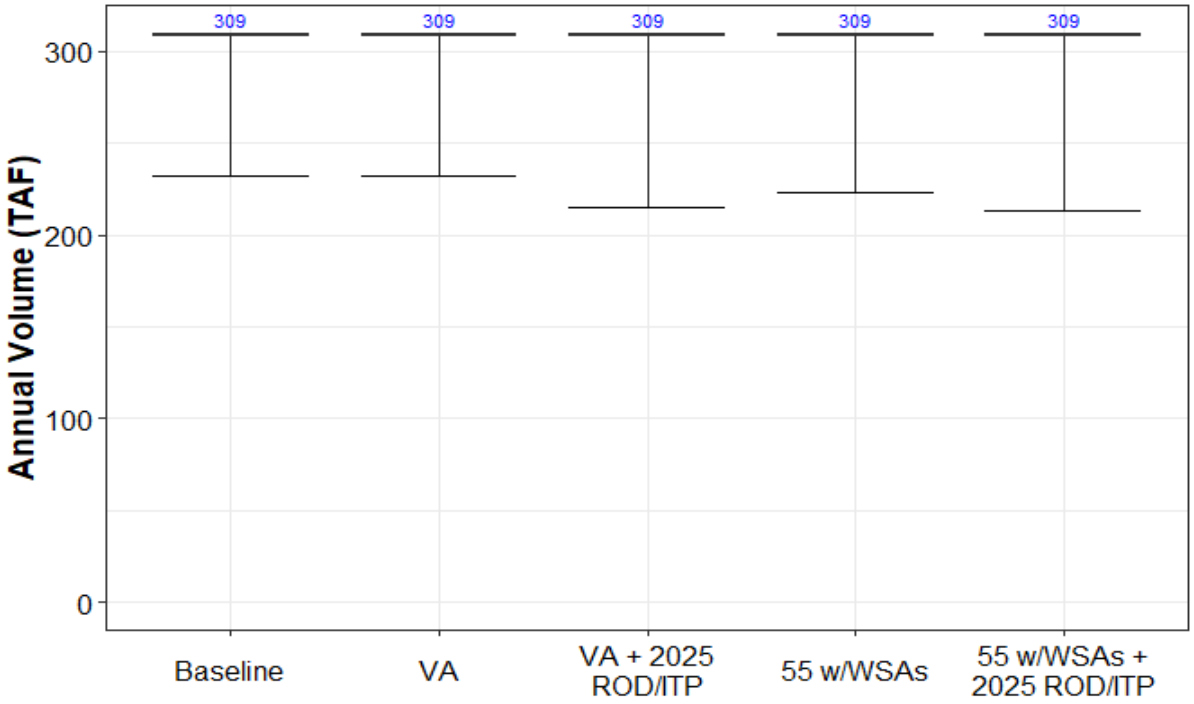

Figure H1a6-49. Annual Sacramento/Delta Supply to Wildlife Refuges in the San Joaquin Valley Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-90. Average Annual Sacramento/Delta Supply to Wildlife Refuges in the San Joaquin Valley Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	272	-1	-2	-9	-10
D	304	0	0	-1	-1
BN	305	0	0	-1	-1
AN	302	0	0	0	0
W	308	0	0	0	0
All	300	0	0	-2	-2

H1a6.5.5 Sacramento/Delta Supply to the San Francisco Bay Area, Central Coast, and Southern California

H1a6.5.5.1 Sacramento/Delta Supply to the San Francisco Bay Area

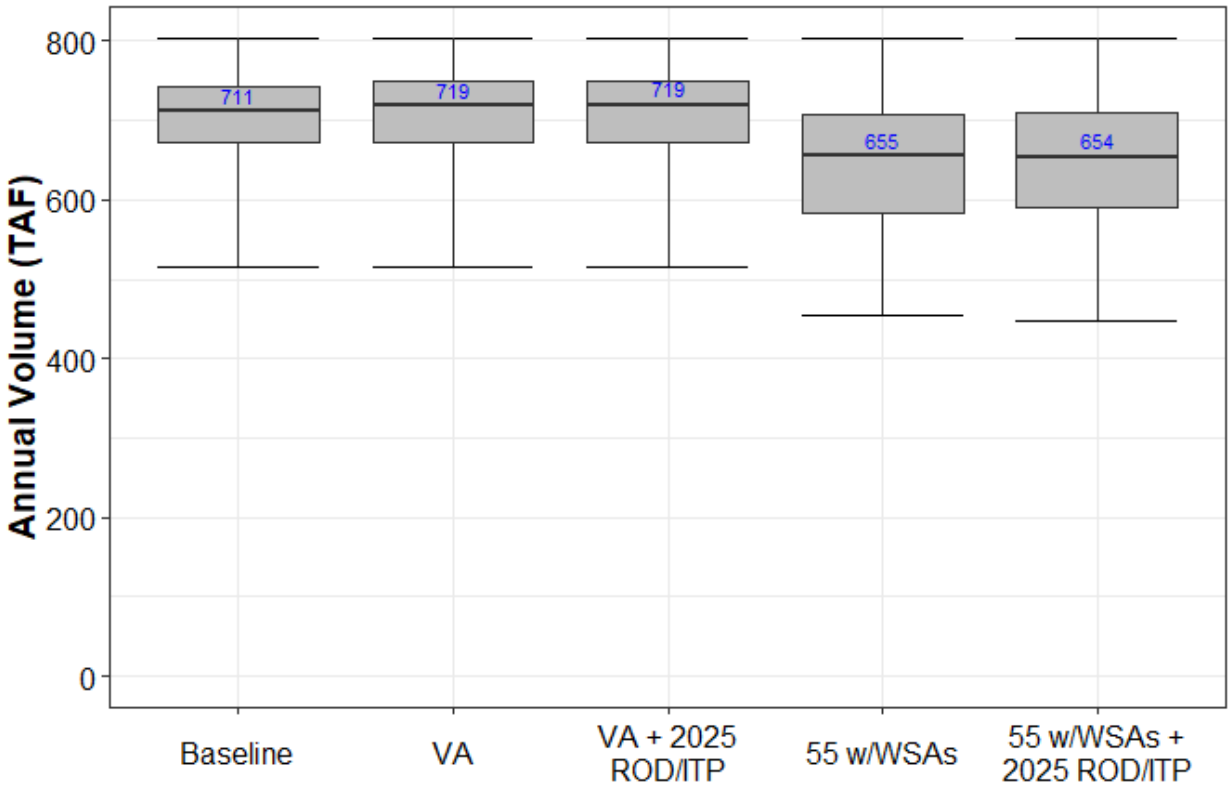

Figure H1a6-50. Annual Total Sacramento/Delta Supply to the San Francisco Bay Area Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-91. Average Annual Total Sacramento/Delta Supply to the San Francisco Bay Area Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	597	-1	0	-62	-57
D	680	-1	5	-87	-83
BN	705	4	4	-55	-52
AN	707	5	5	-28	-25
W	752	6	8	-20	-18
All	697	3	5	-49	-46

Table H1a6-92. Average Annual Sacramento/Delta Supply to Agriculture in the San Francisco Bay Area Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	23	0	0	-3	-3
D	27	0	0	-4	-3
BN	28	0	0	-5	-5
AN	28	0	0	-4	-3
W	29	0	0	-2	-2
All	27	0	0	-3	-3

Table H1a6-93. Average Annual Sacramento/Delta Supply to Municipal and Industrial Use in the San Francisco Bay Area Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	574	-1	0	-59	-54
D	653	-1	5	-83	-79
BN	677	4	4	-50	-47
AN	679	5	5	-25	-22
W	723	6	8	-18	-16
All	669	3	5	-46	-43

H1a6.5.5.2 Sacramento/Delta Supply to the Central Coast

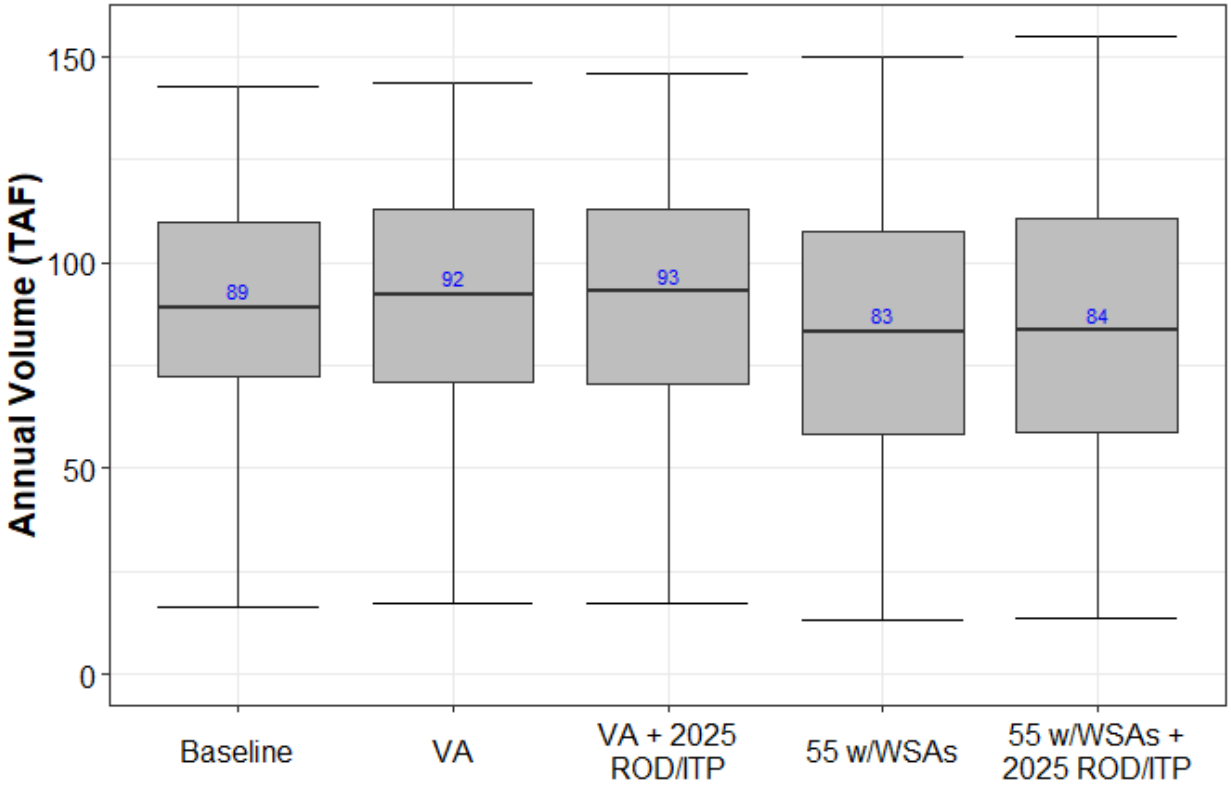

Figure H1a6-51. Annual Total Sacramento/Delta Supply to the Central Coast Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-94. Average Annual Total Sacramento/Delta Supply to the Central Coast Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	42	0	1	-5	-5
D	77	1	2	-15	-14
BN	86	3	3	-5	-4
AN	91	3	2	0	0
W	118	5	5	1	1
All	87	3	3	-5	-4

Table H1a6-95. Average Annual Sacramento/Delta Supply to Agriculture in the Central Coast Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	19	-1	0	-3	-4
D	33	0	0	0	-1
BN	35	2	1	3	3
AN	37	2	1	6	6
W	52	2	3	3	3
All	37	1	1	2	2

Table H1a6-96. Average Annual Sacramento/Delta Supply to Municipal and Industrial Use in the Central Coast Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	23	1	1	-2	-1
D	44	1	2	-15	-13
BN	50	2	2	-8	-8
AN	54	1	0	-6	-6
W	66	2	3	-2	-1
All	50	1	2	-7	-6

H1a6.5.5.3 Sacramento/Delta Supply to Southern California

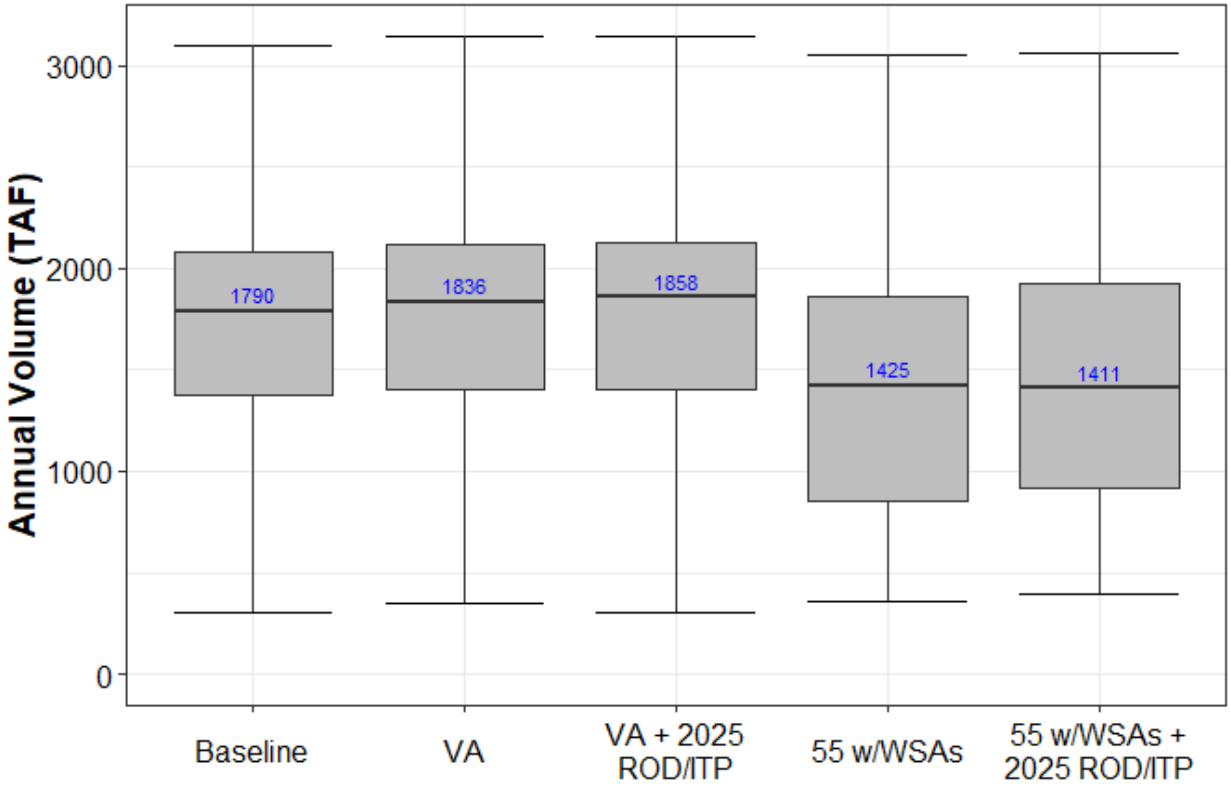

Figure H1a6-52. Annual Total Sacramento/Delta Supply to the Southern California Region for Baseline, VA Pathway, and Regulatory Pathway Scenarios

Table H1a6-97. Average Annual Total Sacramento/Delta Supply to the Southern California Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	762	22	32	-82	-46
D	1,458	10	74	-519	-459
BN	1,721	37	59	-348	-317
AN	1,840	52	42	-207	-212
W	2,270	28	58	-177	-152
All	1,688	28	56	-274	-242

Table H1a6-98. Average Annual Sacramento/Delta Supply to Agriculture in the Southern California Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	7	0	0	-1	0
D	13	0	1	-4	-4
BN	15	0	1	-3	-3
AN	16	0	0	-2	-2
W	20	0	1	-1	-1
All	15	0	0	-2	-2

Table H1a6-99. Average Annual Sacramento/Delta Supply to Municipal and Industrial Use in the Southern California Region by Water Year Type for VA Pathway and Regulatory Pathway Scenarios

Water Year Type	Baseline	VA	VA + 2025 ROD/ITP	55 w/WSAs	55 w/WSAs + 2025 ROD/ITP
C	755	22	32	-81	-46
D	1,446	10	73	-515	-455
BN	1,706	36	58	-345	-314
AN	1,824	52	42	-205	-210
W	2,250	28	57	-175	-151
All	1,674	27	55	-272	-240

H1a6.6 Changes in Water Temperature

There have been no changes to the HEC-5Q model since the release of SacWAM 2025.08.28 used to support the 2025 partially recirculated draft Staff Report. Each SacWAM scenario created for the sensitivity analysis provided input to the HEC-5Q model. Limited output from the scenarios is provided to show the effects of the sensitivity analysis on resulting temperatures.

The HEC-5Q results from the sensitivity analysis are presented in this section primarily to show the differences caused by adding the 2025 ROD/ITP to the 55 w/WSAs and VA scenarios. Because there were some modifications to SacWAM, the Baseline, 55 w/WSAs, and VA scenarios were also re-run through HEC-5Q and are presented here. The tables below can be compared to tables found in Appendix H1b, *Water Temperature Modeling and Fish Assessment for the Sacramento, Feather, American, and Yuba Rivers*, for comparison to the 2025 partially recirculated draft Staff Report.

Table H1a6-100. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Sacramento River below Shasta

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	48.1	49.3	51.7	47.5	45.6	46.5	49.4	49.1	48.3	48.3	48.3	47.5
50	50.6	52.3	53.7	49.9	47.9	48.3	50.9	49.6	48.3	48.3	48.4	49.5
90	55.9	56.5	55.2	51.6	49.6	50.1	52.8	53.5	53.1	52.2	50.4	52.6
55 w/WSAs Minus Baseline (°F)												
10	0.3	0.5	0.5	0.6	0.4	0.3	-0.2	0.1	0.0	0.0	0.0	0.1
50	-0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.2	0.4	0.0	0.0	-0.3
90	-2.8	-1.1	-0.2	-0.1	0.0	0.2	0.0	0.2	-0.7	-0.3	-0.6	-1.7
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.1	0.5	0.5	0.6	0.4	0.3	-0.3	0.1	0.0	0.0	0.0	0.0
50	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.0	0.0	-0.4
90	-2.8	-1.1	0.1	0.0	0.0	0.0	0.0	0.1	-0.4	0.2	-0.6	-1.6
VA Minus Baseline (°F)												
10	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.2	0.2	0.0	-0.1	0.0	-0.1	0.0	0.1	0.0	0.0	0.0	-0.2
90	1.2	0.1	-0.1	-0.1	0.0	0.0	-0.2	0.1	0.0	0.6	0.1	-0.4
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	-0.1	0.0	0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.2	0.3	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	-0.2
90	1.4	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.1	0.3	0.8	-0.2	-0.2

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-101. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Sacramento River below Keswick

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	49.8	49.7	51.2	47.6	45.8	47.2	50.2	50.5	50.0	50.3	50.6	50.3
50	52.3	52.4	53.0	49.6	48.1	49.0	52.1	51.6	50.5	51.0	51.9	52.4
90	56.6	56.5	54.5	51.4	49.8	50.8	54.2	54.9	55.0	54.5	53.9	56.1
55 w/WSAs Minus Baseline (°F)												
10	0.5	0.3	0.6	0.4	0.3	0.1	0.1	0.0	-0.2	-0.1	0.1	0.0
50	-0.1	0.2	0.0	0.1	0.0	0.2	-0.2	0.5	0.6	0.0	-0.2	-0.5
90	-2.2	-1.2	-0.2	0.0	-0.1	0.1	-0.3	0.1	-0.6	0.4	-0.4	-2.1
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.3	0.1	0.6	0.3	0.3	0.1	0.1	-0.1	-0.1	-0.1	0.1	0.1
50	-0.1	-0.1	0.0	0.1	0.0	0.1	-0.2	0.4	0.6	0.1	-0.1	-0.3
90	-2.3	-1.3	0.0	-0.1	-0.1	-0.1	-0.2	0.0	0.0	0.5	-0.2	-2.0

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
VA Minus Baseline (°F)												
10	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1
50	0.0	0.2	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.1	0.0	-0.1	-0.1
90	0.9	0.3	-0.3	0.0	0.0	0.0	-0.3	-0.1	0.1	0.6	0.0	-0.3
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	-0.2	0.0	0.0	-0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1
50	0.1	0.2	-0.1	-0.1	0.0	0.1	-0.1	-0.1	0.1	-0.1	-0.1	0.2
90	1.2	0.0	-0.3	-0.1	0.0	0.0	-0.2	0.0	0.1	0.5	-0.1	-0.2

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-102. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Sacramento River above Clear Creek

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	50.3	49.8	51.0	47.6	46.0	47.5	50.5	51.2	51.1	51.3	51.5	51.0
50	52.7	52.3	52.7	49.4	48.4	49.5	53.1	52.6	51.8	52.0	53.0	53.5
90	57.0	56.4	54.2	51.3	50.0	51.4	55.3	55.7	56.0	55.5	54.9	56.9
55 w/WSAs Minus Baseline (°F)												
10	0.4	0.3	0.6	0.3	0.2	0.1	0.2	-0.1	-0.3	0.0	0.2	0.1
50	-0.2	0.2	0.1	0.2	0.1	0.2	-0.2	0.6	0.7	0.1	-0.1	-0.5
90	-2.2	-1.3	-0.2	0.0	0.0	0.1	-0.6	0.0	-0.4	0.4	-0.3	-2.0
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.2	0.2	0.5	0.3	0.2	0.1	0.2	-0.1	-0.2	-0.1	0.2	0.2
50	-0.2	0.0	0.1	0.2	-0.1	0.2	-0.2	0.4	0.5	0.1	-0.1	-0.4
90	-2.3	-1.2	-0.1	0.0	0.0	0.0	-0.5	0.0	-0.2	0.2	-0.2	-1.9
VA Minus Baseline (°F)												
10	0.0	0.0	-0.1	0.0	-0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-0.1
50	-0.1	0.2	-0.1	0.0	-0.1	0.2	-0.1	0.0	0.1	0.0	-0.1	-0.1
90	0.8	0.1	-0.2	0.1	0.0	0.0	-0.5	-0.2	0.1	0.7	0.0	-0.3
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	-0.2	0.0	-0.1	0.0	-0.1	-0.1	0.1	-0.1	0.0	0.0	0.0	0.0
50	0.0	0.1	-0.1	0.0	0.0	0.2	-0.1	-0.1	0.1	0.0	-0.1	0.1
90	1.0	0.0	-0.3	0.0	0.0	0.1	-0.3	-0.1	0.1	0.5	-0.1	-0.2

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-103. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Sacramento River at Balls Ferry

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	51.4	49.8	48.6	46.2	46.0	47.9	51.5	52.9	52.5	52.5	53.2	52.5
50	53.4	51.7	50.4	47.5	47.6	49.7	54.1	54.3	54.2	53.8	54.2	54.7
90	57.3	55.0	52.2	49.4	49.1	51.6	56.0	57.0	57.2	56.7	56.4	58.3
55 w/WSAs Minus Baseline (°F)												
10	0.1	0.3	-0.2	0.2	0.2	0.0	0.0	-0.1	0.2	0.0	-0.1	0.2
50	-0.1	0.0	-0.2	0.0	-0.1	0.0	-0.3	0.7	0.2	0.2	0.3	-0.3
90	-1.8	-0.9	-0.4	-0.1	0.2	0.0	-0.7	0.0	-0.3	0.4	-0.4	-2.1
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.1	0.2	0.0	0.1	0.2	0.0	0.0	-0.1	0.2	0.0	-0.1	0.2
50	-0.2	0.0	-0.1	0.0	-0.1	0.0	-0.3	0.3	0.1	0.2	0.2	-0.2
90	-1.9	-0.6	-0.4	0.0	0.1	0.0	-0.7	-0.1	-0.2	0.3	-0.3	-1.9
VA Minus Baseline (°F)												
10	-0.1	-0.1	0.1	-0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
50	0.0	0.1	-0.1	0.0	0.0	0.1	-0.3	0.0	0.2	0.1	0.0	-0.1
90	0.7	0.2	0.1	-0.1	0.1	0.0	-0.6	0.0	0.1	0.5	-0.2	-0.4
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	-0.4	-0.2	0.0	-0.1	0.0	0.0	0.1	0.0	-0.1	0.0	0.0	0.1
50	0.0	0.1	0.0	0.0	0.0	0.1	-0.3	0.0	0.0	0.1	0.0	0.0
90	0.8	0.1	0.1	-0.1	0.2	0.0	-0.4	0.1	0.1	0.4	-0.2	-0.5

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-104. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Sacramento River at Red Bluff

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	52.7	50.0	47.8	46.1	46.4	48.8	52.9	55.0	55.3	55.2	55.9	54.8
50	54.2	51.4	49.4	47.1	47.8	50.7	55.6	56.9	57.3	56.9	57.0	57.1
90	58.0	54.3	51.3	48.8	49.7	52.6	57.4	59.0	59.8	59.6	59.2	60.2
55 w/WSAs Minus Baseline (°F)												
10	0.0	0.3	0.0	0.0	0.0	0.0	0.1	-0.2	0.3	0.2	-0.1	0.2
50	0.1	-0.1	-0.2	0.0	-0.1	-0.1	-0.3	0.4	-0.1	0.5	0.4	-0.3
90	-1.7	-0.6	-0.6	-0.1	0.1	-0.1	-0.5	-0.1	0.0	0.6	-0.2	-1.7
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.1	0.1	0.0	0.0	0.0	0.1	-0.2	0.3	0.3	-0.1	0.3
50	0.0	0.0	-0.2	0.0	-0.1	-0.1	-0.3	0.3	-0.1	0.5	0.4	0.0
90	-1.6	-0.5	-0.6	-0.1	0.0	-0.1	-0.4	-0.2	0.0	0.4	-0.2	-1.5

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
VA Minus Baseline (°F)												
10	0.0	-0.2	0.2	0.0	0.0	0.0	-0.2	-0.2	0.0	0.1	0.0	-0.1
50	0.1	0.2	-0.1	0.0	0.0	0.0	-0.4	0.0	0.0	0.2	0.1	-0.1
90	0.2	0.0	0.0	-0.1	0.0	0.1	-0.5	0.0	0.1	0.2	0.0	-0.2
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	-0.3	-0.3	0.1	0.0	0.0	0.0	-0.1	-0.1	-0.3	0.0	0.0	0.1
50	0.1	0.1	0.0	0.0	0.0	0.0	-0.4	-0.1	0.0	0.1	0.1	0.1
90	0.2	0.2	0.0	-0.1	0.0	0.1	-0.3	0.1	0.1	0.2	0.1	-0.3

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-105. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the American River below Folsom Reservoir

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	58.5	57.1	51.4	45.9	46.5	48.7	50.8	53.2	55.0	57.5	59.0	61.5
50	63.2	58.2	54.9	49.8	48.7	50.9	53.0	54.7	56.9	62.2	61.0	63.6
90	67.2	59.7	56.0	52.5	51.3	52.2	58.5	63.4	64.3	65.7	63.8	66.9
55 w/WSAs Minus Baseline (°F)												
10	0.0	0.1	0.1	-0.1	0.0	0.0	0.0	0.1	0.6	-0.1	0.0	0.0
50	0.1	0.0	-0.1	0.0	0.0	0.0	1.0	1.6	3.0	1.2	1.3	0.3
90	0.8	0.7	0.0	-0.1	-0.1	0.0	0.2	0.2	1.0	-0.1	0.0	0.1
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.2	0.1	-0.1	0.0	0.0	0.0	0.1	0.6	-0.1	0.0	0.0
50	0.0	0.0	0.1	0.2	0.1	0.0	1.0	1.8	3.4	1.1	1.2	0.7
90	0.7	0.7	0.0	-0.1	0.1	0.0	0.1	0.2	1.0	0.0	0.0	0.1
VA Minus Baseline (°F)												
10	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
50	0.0	0.0	0.1	0.1	0.0	0.1	0.1	0.3	0.3	0.3	0.0	0.0
90	0.4	0.3	0.0	0.1	0.1	0.0	0.0	0.1	0.7	0.2	0.0	0.2
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
50	0.0	0.1	0.1	0.3	0.1	0.0	0.3	0.2	0.3	0.2	0.4	-0.2
90	0.0	0.1	0.0	0.2	0.2	0.0	0.0	0.4	0.7	-0.1	0.1	0.0

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-106. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the American River at Hazel

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	58.8	56.9	51.1	45.9	46.6	49.1	51.3	53.7	56.0	59.0	60.0	62.5
50	63.2	58.0	54.1	49.2	48.7	51.7	54.7	56.0	58.2	63.4	63.1	64.4
90	66.7	59.6	55.2	52.0	51.5	53.4	59.3	64.7	67.5	67.9	66.0	67.8
55 w/WSAs Minus Baseline (°F)												
10	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.1
50	0.1	0.1	-0.3	0.1	0.1	-0.2	0.3	1.1	3.1	1.3	1.2	0.4
90	0.1	0.2	-0.1	-0.2	-0.2	-0.2	0.2	0.3	-0.2	0.3	0.5	0.3
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.2
50	0.1	0.1	-0.1	0.3	0.1	-0.1	0.3	1.1	3.2	1.5	1.1	1.0
90	0.0	0.1	0.0	-0.2	0.2	-0.1	0.0	0.1	0.3	0.3	0.5	0.2
VA Minus Baseline (°F)												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	-0.1	0.0	0.1	0.3	0.0	-0.1	0.2	0.2	0.3	0.6	0.0	0.0
90	0.1	0.1	0.0	0.1	-0.1	-0.1	0.0	0.0	-0.3	0.8	0.5	0.1
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.1	0.1	0.3	0.2	0.0	0.1	0.2	0.4	0.4	0.1	0.1
90	-0.2	0.0	0.0	0.1	0.0	0.0	-0.2	0.4	-0.1	0.4	0.5	-0.1

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-107. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the American River at Watt Avenue

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	60.2	56.9	51.1	46.1	47.3	50.3	53.1	55.8	58.7	63.3	62.8	65.5
50	64.3	58.1	53.4	49.6	49.9	54.0	58.2	59.4	62.1	66.8	67.2	67.3
90	68.0	59.6	54.7	52.1	53.1	56.7	63.3	69.2	73.6	72.8	70.8	70.7
55 w/WSAs Minus Baseline (°F)												
10	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.3	0.2	0.1	-0.2
50	0.1	0.1	-0.1	-0.1	0.1	-0.3	-0.8	0.6	2.4	1.5	1.7	0.6
90	0.1	0.1	-0.1	-0.1	-0.5	-0.4	-0.9	-0.3	-1.2	0.6	1.2	0.3
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.0	0.2	0.0	-0.1	0.0	0.0	0.0	0.3	0.2	0.1	0.2
50	0.1	0.1	0.1	0.2	0.1	-0.4	-0.8	0.6	2.4	1.5	1.7	0.8
90	0.1	0.0	-0.1	-0.1	-0.2	-0.3	-0.9	-0.7	-0.5	0.6	1.2	0.3

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
VA Minus Baseline (°F)												
10	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2
50	0.0	0.0	0.2	0.2	0.0	-0.2	0.0	0.0	0.5	0.7	0.2	0.0
90	-0.2	0.0	0.1	0.1	0.0	-0.2	-0.8	0.4	-0.8	0.5	0.8	0.2
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	-0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50	0.0	0.0	0.3	0.2	0.0	-0.1	-0.1	0.0	0.4	0.4	0.2	0.3
90	-0.1	0.0	0.1	0.1	0.0	-0.2	-0.9	0.4	-0.3	0.4	0.6	0.1

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-108. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Feather River below Oroville Reservoir

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	50.6	51.7	50.5	46.3	45.2	47.3	49.9	51.0	55.2	56.9	56.2	50.2
50	51.0	52.1	52.4	49.0	48.0	50.5	50.2	51.4	55.6	57.7	56.9	50.7
90	54.3	54.2	53.2	53.1	51.3	53.4	50.6	51.9	56.0	58.6	58.2	52.1
55 w/WSAs Minus Baseline (°F)												
10	0.2	0.0	0.2	-0.6	-0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0
50	0.2	0.1	0.1	0.1	-0.2	-0.8	-0.1	0.0	0.0	-0.3	0.1	0.2
90	3.1	1.0	0.0	-0.2	-0.5	-0.7	0.0	0.1	0.0	-0.1	-0.2	1.5
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.1	0.1	0.5	-0.5	-0.1	0.0	0.0	0.1	0.0	0.0	0.2	0.0
50	0.1	0.1	0.1	0.2	-0.1	-0.7	-0.1	0.0	0.0	-0.3	0.1	0.1
90	2.0	0.7	0.0	-0.3	-0.3	-0.7	0.0	0.1	0.0	-0.1	-0.1	0.5
VA Minus Baseline (°F)												
10	0.0	-0.1	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
50	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
90	-1.4	-0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1	-1.0
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	-0.1	0.4	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
50	0.0	0.0	0.1	0.0	0.0	-0.1	0.0	0.0	0.0	-0.3	-0.1	0.0
90	0.4	0.1	0.0	0.0	0.0	-0.1	0.0	0.0	0.1	0.0	-0.1	1.3

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-109. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Feather River Low Flow Channel below the Fish Barrier Dam

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	51.4	51.9	50.4	46.7	45.4	47.6	50.7	52.5	56.7	58.3	58.0	51.9
50	51.7	52.2	52.0	49.0	49.0	51.5	53.0	53.0	57.1	59.1	59.1	52.4
90	55.6	54.2	52.8	52.3	51.5	54.0	53.9	53.6	57.7	59.6	60.0	55.3
55 w/WSAs Minus Baseline (°F)												
10	0.2	0.0	0.1	-1.0	-0.1	0.0	0.0	0.0	0.0	0.2	0.3	0.1
50	0.5	0.1	0.1	0.0	-0.7	-1.2	-1.6	-0.2	0.1	0.0	0.0	0.8
90	2.4	1.0	0.0	-0.1	-0.2	-0.7	-1.5	-0.4	0.0	0.0	-0.1	0.3
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.1	0.0	0.4	-0.7	-0.1	0.0	0.0	0.0	0.0	0.1	0.3	0.4
50	0.2	0.0	0.0	0.1	-0.7	-1.2	-1.5	-0.2	0.0	0.0	0.1	1.1
90	0.8	0.3	0.0	0.0	-0.3	-0.7	-1.5	-0.3	0.0	0.0	-0.1	0.3
VA Minus Baseline (°F)												
10	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	-0.1	0.0
50	0.0	0.0	0.0	0.2	-0.1	0.1	-0.5	-0.2	0.0	0.0	0.0	0.1
90	-1.9	-0.1	0.0	0.1	0.4	-0.1	-0.7	-0.2	0.1	0.1	-0.1	-0.2
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.0	0.2	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
50	0.0	0.0	0.0	-0.2	-0.1	-0.1	-0.5	-0.2	0.0	0.0	0.0	1.4
90	-0.3	0.2	0.1	0.1	-0.2	-0.1	-0.7	-0.2	0.1	0.0	-0.2	0.4

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-110. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Feather River below Gridley

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	55.5	52.1	48.7	46.0	46.8	49.8	54.3	56.8	62.4	64.0	64.0	57.5
50	56.5	53.1	49.9	48.2	50.1	53.9	59.1	61.4	65.5	64.9	66.0	60.4
90	60.0	54.2	51.7	50.5	52.0	57.5	62.3	63.1	66.7	68.3	68.9	64.0
55 w/WSAs Minus Baseline (°F)												
10	0.3	0.3	0.8	0.4	0.0	0.1	-0.3	0.1	0.3	0.2	0.5	0.5
50	0.5	0.3	0.6	0.5	0.1	0.7	-0.8	-1.5	0.0	2.5	1.4	1.5
90	1.2	0.9	0.1	-0.1	1.1	0.6	0.2	-0.5	0.6	1.2	0.2	1.0
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.2	0.2	0.8	0.5	0.0	0.1	-0.3	0.0	0.1	0.2	0.2	2.4
50	0.5	0.2	0.6	0.5	0.3	0.6	-0.7	-1.6	0.1	2.1	1.3	2.1

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
90	0.2	0.7	0.1	0.2	1.2	0.6	0.2	-0.6	0.4	1.1	0.2	0.8
VA Minus Baseline (°F)												
10	0.0	-0.1	0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
50	0.0	0.1	0.0	0.1	0.1	0.0	1.3	-0.3	0.1	0.2	-0.1	0.5
90	-0.9	0.0	0.1	0.1	0.3	0.7	1.3	-0.3	0.1	0.1	0.2	0.5
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.0	0.0	0.0	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.3
50	0.7	0.0	0.3	0.2	0.0	-0.1	1.3	-0.3	0.1	0.1	-0.2	1.1
90	-0.5	0.4	0.0	0.8	0.3	0.4	1.2	-0.3	0.1	0.1	-0.2	1.2

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-111. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Yuba River at Smartsville

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	52.5	50.2	44.0	41.7	42.7	44.0	46.4	47.8	50.3	50.7	51.6	52.6
50	53.8	51.4	46.2	43.4	44.1	46.3	48.4	49.3	51.3	52.6	53.2	54.2
90	55.3	52.5	48.6	45.5	46.2	48.4	50.8	52.0	53.7	54.9	55.3	56.1
55 w/WSAs Minus Baseline (°F)												
10	0.4	-0.2	-0.6	-0.3	0.0	0.1	0.3	0.6	0.8	1.0	0.4	0.1
50	0.3	-0.1	-0.2	-0.1	0.0	-0.1	0.1	0.4	1.0	0.7	0.6	0.5
90	0.2	0.3	0.3	0.0	-0.3	-0.5	-0.4	0.3	0.8	0.9	0.3	0.5
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.4	-0.2	-0.6	-0.2	0.0	0.1	0.3	0.6	0.8	1.0	0.4	0.1
50	0.3	-0.1	-0.2	-0.2	0.0	-0.1	0.1	0.4	1.0	0.7	0.6	0.5
90	0.2	0.3	0.3	0.0	-0.3	-0.5	-0.4	0.3	0.8	0.8	0.3	0.5
VA Minus Baseline (°F)												
10	0.3	0.2	-0.2	-0.2	-0.1	0.0	-0.2	-0.1	0.0	0.1	0.1	0.3
50	0.2	0.2	0.2	0.0	0.0	0.0	-0.7	-0.1	0.2	0.4	0.2	0.1
90	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.3	0.3
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.3	0.2	-0.2	-0.2	-0.1	0.0	-0.3	-0.1	0.0	0.1	0.1	0.3
50	0.2	0.2	0.2	0.0	0.0	0.0	-0.6	-0.1	0.2	0.4	0.2	0.1
90	0.1	0.2	0.0	0.1	0.0	0.0	0.1	0.1	0.2	0.1	0.3	0.3

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-112. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Yuba River below Daguerre Dam

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	54.5	51.2	44.4	42.1	43.6	45.5	48.2	49.8	52.8	54.5	55.4	55.8
50	55.9	52.4	46.8	44.1	45.4	47.7	50.9	51.9	54.5	57.0	56.8	57.7
90	57.3	53.5	49.0	46.3	48.0	51.2	54.5	55.7	58.4	59.7	60.2	60.3
55 w/WSAs Minus Baseline (°F)												
10	0.3	-0.4	-0.6	-0.2	-0.1	0.0	0.2	0.3	0.8	1.1	0.4	0.0
50	0.2	-0.1	-0.3	-0.2	-0.2	0.2	-0.6	-0.2	1.2	0.9	0.9	0.7
90	0.2	0.2	0.2	-0.2	-0.3	-0.8	-1.2	0.2	1.0	0.8	0.4	0.3
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.3	-0.4	-0.6	-0.2	0.0	0.0	0.1	0.2	0.8	1.1	0.4	0.0
50	0.2	-0.1	-0.3	-0.2	-0.2	0.2	-0.5	-0.2	1.2	0.9	0.9	0.7
90	0.2	0.2	0.2	-0.2	-0.3	-0.8	-1.2	0.2	1.0	0.8	0.4	0.3
VA Minus Baseline (°F)												
10	0.2	0.1	-0.2	-0.1	-0.1	0.0	-0.2	0.0	0.0	0.0	0.1	0.3
50	0.1	0.1	0.2	-0.1	0.0	0.2	-1.2	-0.3	0.2	0.3	0.3	0.0
90	0.2	0.2	0.0	0.1	0.0	0.0	-0.1	0.0	0.1	0.1	0.2	0.4
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.2	0.1	-0.1	-0.1	-0.1	0.0	-0.2	-0.1	0.0	0.0	0.1	0.3
50	0.1	0.1	0.2	-0.1	0.0	0.2	-1.2	-0.3	0.2	0.3	0.3	0.0
90	0.2	0.2	0.0	0.1	0.0	0.0	-0.1	0.0	0.1	0.1	0.2	0.4

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

Table H1a6-113. Comparison of Modeled Baseline and Flow Scenario Monthly Temperature Distributions in the Yuba River at Marysville

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline (°F)												
10	56.0	51.6	44.6	42.3	44.0	46.1	49.2	51.1	54.5	56.9	57.7	57.6
50	57.3	52.9	47.1	44.3	45.9	48.5	52.1	53.5	56.9	60.0	59.8	59.6
90	58.7	54.1	49.1	46.6	48.9	52.5	56.5	58.2	62.2	63.8	63.6	62.7
55 w/WSAs Minus Baseline (°F)												
10	0.2	-0.2	-0.6	-0.2	0.0	0.0	0.2	0.1	0.8	1.2	0.3	0.0
50	0.2	-0.1	-0.4	-0.2	-0.2	0.3	-0.4	-0.2	1.0	1.1	0.9	0.8
90	0.3	0.0	0.2	-0.2	-0.5	-0.9	-1.6	0.2	1.2	0.7	0.5	0.1
55 w/WSAs + 2025 ROD/ITP Minus Baseline (°F)												
10	0.2	-0.2	-0.5	-0.2	0.0	0.0	0.2	0.1	0.8	1.2	0.3	0.0
50	0.2	-0.1	-0.4	-0.2	-0.2	0.3	-0.4	-0.2	1.0	1.0	0.9	0.8
90	0.3	0.0	0.2	-0.2	-0.5	-0.9	-1.6	0.2	1.2	0.7	0.5	0.1

Percentile	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
VA Minus Baseline (°F)												
10	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	-0.1	0.0	-0.1	0.1	0.3
50	0.1	0.1	0.1	-0.1	0.0	0.2	-1.3	-0.2	0.1	0.2	0.1	0.0
90	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.5	0.3
VA + 2025 ROD/ITP Minus Baseline (°F)												
10	0.1	0.1	-0.1	-0.1	0.0	0.0	-0.1	0.0	0.0	-0.1	0.1	0.3
50	0.1	0.1	0.1	-0.1	0.0	0.2	-1.3	-0.3	0.1	0.2	0.1	0.0
90	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.3	0.1	0.5	0.3

°F = degrees Fahrenheit
Shading is provided only to attract attention to the larger deviations from baseline. Shading does not indicate any impact conclusions.

H1a6.7 References Cited

H1a6.7.1 Common References

^SacWAM. 2026. State Water Resources Control Board (SWRCB). 2026. Sacramento Water Allocation Model (SacWAM) Documentation.

H1a6.7.2 Section References

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