Appendix A1

Sacramento Water Allocation Model Methods and Results

A1.1 Introduction

The Sacramento Water Allocation Model (SacWAM) is a hydrologic and system operations model developed by the Stockholm Environment Institute (SEI) and State Water Board to assess the potential effects of revisions to instream flow and other requirements in the Bay-Delta watershed, including potential changes to the 2006 *Water Quality Control Plan for the San Francisco Bay/Sacramento—San Joaquin Delta Estuary* (2006 Bay-Delta Plan) resulting from the Sacramento/Delta update of the Bay-Delta Plan. The Sacramento/Delta update of the Bay-Delta Plan addresses requirements for streamflows and cold water habitat in the Sacramento River, its tributaries, tributaries to the Delta (the Mokelumne, Cosumnes and Calaveras Rivers), Delta outflows, and water project operations in the interior Delta.

In fall 2016, the State Water Board released a preliminary version of SacWAM for public review and review by an independent panel convened by the Delta Stewardship Council's Delta Science Program (DSP) to confirm the appropriateness of the model to inform the update of the Bay-Delta Plan. In late December 2016, the panel released its report (Report). The Report states "SacWAM is a complex model developed with a proven software tool (WEAP) that allows the creation of new scenarios for answering 'what-if' type questions and comparison of results to a base case." While the panel found the approach taken by SacWAM generally appropriate, it raised issues regarding the model in its state of development at the time and included recommendations for model improvements that the panel believed should be completed before the model was used for the Bay-Delta Plan update and those that could be delayed. In response to their comments, several refinements have been made to SacWAM and its documentation, including extension of the model simulation period, recalibration of rainfall runoff processes, addition of upper watershed operations, inclusion of allocation logic for smaller projects, and additional sensitivity analyses and model validation.

This appendix describes the methods and assumptions used to simulate proposed flow and other water quality objectives and model results for various scenarios. SacWAM scenarios are presented as a range of potential instream flow changes in increments of 10, from 35 percent of unimpaired flow up to 75 percent. In this appendix, the scenarios are referred to by the percent of unimpaired flow required in that scenario. For example, "35 scenario" includes flow requirements equal to 35 percent of unimpaired flow at various locations, as described in Section A1.2, *Implementation of Proposed Plan Amendments*. These modeled scenarios are grouped into three alternatives to evaluate the potential environmental impacts associated with the proposed Plan amendments in the main body of the Staff Report. Detailed information on SacWAM and assumptions associated with the baseline simulation can be found in the SacWAM documentation (^SacWAM 2023) and is not repeated here. The work described in this appendix includes changes made to the baseline simulation (sometimes referred to as the "existing scenario") to simulate flow scenarios that inform the discussion and conclusions contained in the main Staff Report.

A1.1.1 Appropriate Use of SacWAM

SacWAM is a monthly time-step model developed for long-term planning-level analyses. The model is run for a 94-year (from water year 1922 to water year 2015) historical hydrologic period at existing levels of land use, population, and water demands and under an assumed framework of regulations. SacWAM uses historical monthly hydrology as inputs; however, SacWAM does not simulate historical operations. The model assumes that facilities, land use, water supply contracts, and regulatory requirements are constant over 94 years, representing a given level of development. SacWAM provides information about simulated Central Valley Project (CVP), State Water Project (SWP), and other local project operations for the assumed water demands and regulatory requirements, under the 1922–2015 quasi-historical hydrologic sequence.

SacWAM uses a set of predefined generalized targets, collectively referred to as *rules*, to guide reservoir operations and releases for flood control, water demands, hydropower, or other purposes. These inputted rules are often specified as a function of water year type or a prior month's simulated storage or flow condition. The model does not adjust these rules to respond to specific events that may have occurred historically (e.g., levee failures, fluctuations in barometric pressure that may have affected Delta tides and salinities, facility outages, regulatory requirement relaxations). These generalized rules have been developed based on historical operational trends and provide only a coarse representation of water operations over the inputted hydrologic conditions. Thus, results should not be expected to match exactly what operators might do in a specific month or year within the simulation period since the latter would be informed by numerous real-time considerations. Rather, model results are intended to be a reasonable representation of long-term operational trends under a repeat of historical hydrologic conditions (precipitation and temperature).

Despite detailed model inputs and assumptions, SacWAM results may differ from real-time operations given that not all the regulatory requirements (e.g., upstream temperature requirements, reservoir release ramping rates) or real-time operations (e.g., adjustments to the Shasta temperature control device [TCD]) are modeled in SacWAM. Upstream reservoir releases in real time are determined based on many factors, such as temperature control requirements, available cold water pool within the reservoirs, in-basin use including Delta flow requirements, forecasted hydrology, and unforeseen demands. Many of the factors involve day-to-day decision-making by the CVP/SWP operators taking into account recommendations from many of the decision-making/advisory teams, such as the Sacramento River Temperature Task Group (SRTTG), Water Operations Management Team (WOMT), B2 Interagency Team (B2IT) and American River Operations Group. SacWAM does not take into account all of these identified factors in its generalized representation of the likely long-term operations.

Under stressed water supply conditions, given the generalized nature of specified operations rules, SacWAM results should be considered only as an indicator of stressed water supply conditions and should not necessarily be understood to reflect literally what would occur in the future under a given scenario. For example, SacWAM simulated operations may result in instances where required minimum instream flows or regulatory flow/salinity requirements cannot be achieved, or where deliveries to senior water rights holders are shorted because of extreme water supply conditions in the reservoirs. SacWAM does not relax standards that the State Water Board, in coordination with other regulatory agencies, has historically modified under extreme dry circumstances. As a result, SacWAM may tend to underestimate reservoir storages and overestimate streamflows during the most severe droughts compared with historical operations. In reality, water operations are managed in close coordination with various regulatory agencies and stakeholders under such extreme circumstances.

Appropriate use of model results is important. While certain components in the model are downscaled to a daily time step (simulated or approximated hydrology), such as an air temperature-based trigger for a fisheries action, the results of those daily conditions are always averaged to a monthly time step. For example, a certain number of days with and without the action is calculated, and the monthly result is calculated using a day-weighted average based on the total number of days in that month. Model operational decisions based on those components are again made on a monthly basis. Therefore, reporting submonthly results from SacWAM or from any other subsequent model that uses monthly SacWAM results as an input is tenuous at best.

Because it is simulating hypothetical conditions, the SacWAM planning model version is not calibrated to be used in a real-time predictive manner. SacWAM results are intended to be used in a comparative analysis, which allows for assessing the changes in CVP/SWP (referred to collectively as the *Projects*) and local system operations and resulting incremental effects between two scenarios.

A1.1.2 Mass Balance Considerations

SacWAM simulates the entire water balance for the Sacramento watershed and Delta eastside tributaries. The primary ways water enters the model domain is via precipitation and upper watershed inflow. The way water leaves the model domain is through evapotranspiration, Delta outflow, and deliveries to CVP and SWP contractors south of the Delta. Because the mass balance must be preserved, each of the scenario simulations shows different uses of the same total volume of water. Under the scenarios reported here, water is assumed to go to different uses at different times, and SacWAM is used as an accounting tool to keep track of the volumes of water within the operational and physical confines of the system.

A1.1.3 Overall Approach

The general approach to using SacWAM to assess the impacts of the proposed Plan amendments is to create new flow requirements as a percentage of unimpaired flow throughout the model domain and adjust carryover storage targets to maintain cold water pools for downstream fisheries. The set of water allocation priorities defined in the baseline model in combination with other assumptions described in the following sections determines the allocation of water to meet competing demands under the flow scenarios.

New instream flow requirements (IFR) were added throughout the model domain to distribute the additional instream demand for water throughout the watershed. Modifications were made to operations within non-Project tributaries specific to each local project and are described in Section A1.11, *Non-Project Tributaries,* and Section A1.3, *Reservoir Carryover Storage Targets*. Modifications to the CVP and SWP operations are described in Section A1.8, *Central Valley Project Operations*, and Section A1.9, *State Water Project Operations*.

A1.1.4 SacWAM Model Version

The results presented throughout the body of the report and this appendix were calculated using SacWAM version 2023.06.12. An initial beta version of SacWAM was released and peer reviewed in September 2016. Based on peer review and public comments, refinements were made to the model and released as SacWAM 1.05 in October 2017. SacWAM 1.2 was released in April 2019. This version included many refinements to non-Project) operations and updated regulations governing Project operations. Since April 2019, additional model refinements have been made to better represent existing conditions and to facilitate the simulation of flow scenarios. For a full description of model assumptions, see the SacWAM documentation (^SacWAM 2023).

A1.1.5 General Model Assumptions

This section lists modeling assumptions for the baseline simulation and the flow scenarios. The following sections, A1.2–A1.11, provide more detail on each of the assumptions listed here.

A1.1.5.1 Baseline Scenario

The process for updating the Bay-Delta Plan has been ongoing since 2009, with a revised Notice of Preparation issued for the Sacramento/Delta Update to the Bay-Delta Plan in 2012. Since the project NOP and revised NOP, there have been changes to regulations that affect reservoir operations, streamflow requirements, and Delta operations. Updates to the Biological Opinions (BiOps) and issuance of an Incidental Take Permit (ITP) have changed the requirements for operation of the SWP and CVP, though under most circumstances actual operations have not significantly changed. The project baseline includes requirements as they have been implemented in recent years in an attempt to represent the existing conditions; these regulatory assumptions are listed in Table A1-1. Changes to Fall X2, San Joaquin inflow to export (I:E) limits, Old and Middle River (OMR) reverse flow limits, and the American River Flow Management Standard (FMS) are discussed briefly below.

The 2008 USFWS BiOp included an action to provide improved Delta smelt habitat in the Delta during September and October following above normal and wet years, commonly known as *Fall X2*. The 2008 BiOp required maintenance of X2 no greater than 74 and 81 kilometers (km) following wet and above normal years, respectively. The action was implemented with various modifications pursuant to litigation in 2011 and reinitiations of consultation in 2017 and 2019 (USFWS 2019), generally resulting in September and October X2 positions of approximately 75 km in those years (DWR 2023). This action was altered in the 2019 Long Term Operations Proposed Action (LTO PA) and USFWS BiOp to require maintenance of X2 at 80 km in September and October following both wet and above normal years. The 2020 ITP added a block of flow to support X2 at 80 km in July and August and Suisun Marsh Salinity Control Gate operations known as the *summer action*. The SacWAM baseline incorporates the new 80-km Fall X2 action and the summer action following wet and above normal years.

Another change in the 2019 NMFS BiOp was removal of the San Joaquin I:E limits that had been included in the 2009 NMFS BiOp. A similar export limit was applied to SWP operations by the 2020 ITP. The new requirement allows greater exports during San Joaquin 60-20-20 index wet years but otherwise requires SWP to limit exports according to its share of the San Joaquin I:E requirement as previously defined in the NMFS 2009 BiOp. During litigation of the 2019 BiOp and the reconsultation process, the CVP has effectively been operating according to the requirement applied to the SWP. The SacWAM baseline incorporates the San Joaquin I:E limit as formulated in the 2020 ITP, but applied to both SWP and CVP exports.

The 2019 BiOp and 2020 ITP include OMR reverse flow limits similar to those previously implemented through the 2008 and 2009 BiOps. The changes consist largely of more prescriptive triggers and formalized procedures for determining allowable OMR reverse flow levels. The SacWAM baseline incorporates OMR limits as defined by the 2019 BiOp and 2020 ITP.

Finally, the 2019 LTO PA included changes to the American River FMS previously implemented by the 2009 NMFS BiOp. These changes are incorporated into the SacWAM baseline.

The baseline from which impacts and benefits are measured for this project represents how the SWP and CVP have been operating in recent years, and how they will likely continue to operate absent any updates to the Water Quality Control Plan. Table A1-2 lists the specific requirements included in the baseline model simulation.

The SacWAM boundary condition at Vernalis was developed using a CalSim 3 simulation based on the *2021 Delivery Capability Report* (DCR) (DWR 2022) specified to include Decision 1641 (D-1641) Vernalis minimum monthly flows and salinity requirements. In the absence of Vernalis Adaptive Management Plan (VAMP) implementation of “pulse flows” in the period April 15–May 15, minimum monthly flows from the February 1–April 14 and May 16–June 30 periods were applied to the April 15–May 15 period, at the tier based on water year type and applicable footnotes. Additionally, reservoir flood-release spills, other instream flow requirements such as BiOp-required flows from the Stanislaus River, Federal Energy Regulatory Commission (FERC) Settlement Agreement flows from the Tuolumne River, FERC instream flows from the Merced River, and other local accretions combine to produce the total resulting flow at Vernalis. The DCR study includes San Joaquin River Restoration flows and recapture above Vernalis.

Table A1-1. SacWAM Baseline Model Assumptions

Regulation	Action/Objective
State Water Board Water Right Decision D-1641	Water quality objectives
	Minimum net Delta outflow index (NDOI)
	Export Limits (E:I)
	Export Limits (SJ I:E)
	Delta Cross Channel (DCC) Closures
	San Joaquin River Vernalis Minimum Flow [a]
	Table 4 (Spring X2)
2019 Biological Opinions	American River Flow Management Standard (FMS)
	Old and Middle Rivers (OMR)
	DCC Closures [b]
	Fall Action (Fall X2)
2020 Incidental Take Permit	Suisun Marsh Salinity Control Gate Operations (Summer)
	Summer Action
	Fall Action (Fall X2)
	OMR
	San Joaquin I:E [c]

[a] Vernalis shoulder flows are assumed to apply for entire pulse period.

[b] The Delta Cross Channel may be closed as early as October pursuant to the 2019 NMFS Biological Opinion.

[c] The 2020 Incidental Take Permit I:E export limit was assumed to apply to SWP *and* CVP.

Water use in the Delta is estimated by including Delta net channel depletions for the heart of the Delta; diversions for the municipalities of Tracy and Antioch as well as agricultural use by Byron Bethany Irrigation District are modeled separately. Other diversions for use outside of the Delta region such as SWP and CVP and Contra Costa Water District are also simulated separate from Delta depletions. The net channel depletions used in SacWAM are based on the Delta Channel Depletions (DCD) model results produced by the California Department of Water Resources (DWR) that have been used in many previous planning studies (e.g., Sites Reservoir, Delta Conveyance, DCR).

Demands in the Sacramento watershed and Delta eastside tributaries assume current land use and existing water supply infrastructure. Limitations on SWP and CVP deliveries are based on current contract amounts. Demands in export regions are based on SWP and CVP contract amounts and estimates of existing demands for non-SWP/CVP water users. SacWAM assumes the 2018 addendum to the CVP/SWP Coordinated Operations Agreement (COA).

A1.1.5.2 Operational Flow Scenarios

The general approach to using SacWAM to assess the effects of proposed Plan amendments is to simulate new flow requirements as a percentage of unimpaired flow throughout the model domain and adjust carryover (end-of-September) storage targets to maintain cold water pools for downstream fisheries. All of the baseline regulatory requirements discussed in Section A1.1.5.2, *Operational Flow Scenarios*, were assumed to apply in the unimpaired flow (UF) scenarios. More detailed descriptions of the model assumptions for each tributary, CVP and SWP operations, and Delta operations can be found in the following sections.

New instream flow requirements based on a percentage of the unimpaired flow were added above rim reservoirs, below rim reservoirs, at the mouths of each major tributary to the Sacramento River and Delta, and at locations along the Sacramento River for each month discussed in Section A1.2.2, *Locations of New Instream Flow Requirements in Each Scenario*. Delta outflow requirements in the flow scenarios include all regulatory requirements included in the baseline scenario described in Section A1.1.5.1, *Baseline Scenario*, in addition to a new inflow-based Delta outflow requirement described in A1.2.3, *Delta Outflow Requirements for UF Scenarios*. The Delta outflow requirement for each of the flow scenarios assumes that the outflow required would be based on the percent of unimpaired tributary flow required to reach the Delta, the same percent of local unimpaired flows into the Delta, and the existing required flow from the San Joaquin River. The percent of unimpaired flow required to reach the Delta includes percent of unimpaired flows from Cache and Putah Creeks, the Sacramento River at Freeport, the Mokelumne River above the Cosumnes River, the Cosumnes River above the Mokelumne River, and the Calaveras River above the Delta. The required flows from the San Joaquin River assume the base flows required under D-1641 without the April-May pulse and without VAMP pulse flows.

No changes to the model scenarios were assumed for Delta operational requirements that affect interior Delta flows, such as OMR requirements and Delta Cross Channel (DCC) gate operations. The baseline simulation includes restrictions on OMR reverse flows implemented in the BiOps for long-term operations of the SWP and CVP that also were included in each of the scenarios. D-1641 and NMFS BiOps include rules for operations of the DCC that are incorporated into the baseline and flow scenario simulations.

Modeling scenarios contain all the baseline scenario assumptions as well as new IFRs and cold water pool targets as described in Section A1.2, *Implementation of Proposed Plan Amendments*. Under some circumstances, in order to meet new IFRs, surface water deliveries are reduced. Groundwater pumping monthly volumes in each scenario are limited based on monthly results from the baseline scenario to prevent groundwater pumping from replacing reduced surface supplies. Because some demand units in the model domain are also constrained by a minimum level of groundwater pumping to represent areas that do not receive surface water, maximum groundwater pumping limits were increased by 0.1 percent over baseline results to avoid over-constraining the model and ensure numerical stability.

- 35 Scenario – This simulation incorporates new instream flow requirements of 35% of unimpaired flow and cold water pool targets in addition to all baseline scenario assumptions.
- 45 Scenario – This simulation incorporates new instream flow requirements of 45% of unimpaired flow and cold water pool targets in addition to all baseline scenario assumptions.
- 55 Scenario – This simulation incorporates new instream flow requirements of 55% of unimpaired flow and cold water pool targets in addition to all baseline scenario assumptions.
- 65 Scenario – This simulation incorporates new instream flow requirements of 65% of unimpaired flow and cold water pool targets in addition to all baseline scenario assumptions.
- 75 Scenario – This simulation incorporates new instream flow requirements of 75% of unimpaired flow and cold water pool targets in addition to all baseline scenario assumptions.
- VA Scenario – Details on implementation of the VA scenario are found in Chapter 9, *Proposed Voluntary Agreements*, and Appendix G3a, *Sacramento Water Allocation Model Methods and Results for the Proposed Voluntary Agreements*.

A1.1.6 Model Limitations

SacWAM has a detailed representation of hydrology and operations of the Sacramento Bay-Delta watershed. However, because it covers such a large extent and includes so many diversions and local project operations, it is not possible to capture all the fine details of the very complex water system. Some specific limitations are the representation of sub-monthly operations and detailed water rights priorities.

SacWAM simulates crop evaporation and soil moisture on a daily time step, but the streamflows and reservoir operations occur on a monthly time step. Therefore, sub-monthly operations such as hydropower peaking operations, flood control measures, Delta operations, and water temperature control have been simplified in the monthly simulations.

In general, water rights priorities are based on the type of water right (pre-1914, riparian, post-1914 appropriative), the date on which water started being diverted, or the date of application. The State Water Board has registered thousands of water rights in the SacWAM domain that are too numerous to include in the model. General relative groupings of priorities have been included in the model, but it was necessary to combine many points of diversion, which makes identifying one priority for each diversion difficult.

A1.2 Implementation of Proposed Plan Amendments

A1.2.1 Calculation of Unimpaired Flow

Estimates of unimpaired flow throughout the watershed are the basis for new IFRs. Unimpaired flow is calculated using the same land use assumptions as the baseline and flow scenario simulations but without reservoir storage or stream diversions. More information on how unimpaired flows are calculated can be found in Appendix A7, *Modeling Approaches Used to Develop Unimpaired Watershed Hydrology*.

A1.2.2 Locations of New Instream Flow Requirements in Each Scenario

New flow requirements were added throughout the watershed (designated in SacWAM with the prefix *SWRCB*) and are referred to throughout the rest of this appendix as SWRCB IFRs. A full list of locations where new IFRs were added is presented in Table A1-2. SWRCB IFRs were added above rim dam locations, below rim dam locations, and at the mouths of major tributaries to require upper watersheds to contribute to the new flow requirements, and to require large projects in the Valley to bypass the percentage of unimpaired flow into the Delta. The same percentage of unimpaired flow was applied to all the locations listed in Table A1-2 under each of the scenarios for all months of the year. As described in Chapter 6, *Changes in Hydrology and Water Supply*, implementation of draft objectives may not follow this representation. Implementation of the proposed Plan amendments may differ from the model assumptions based on the ecological needs in individual tributaries and water rights priorities. How users may respond to the proposed Plan amendments may also differ from modeled responses based on water transfers, conservation, and other unforeseen responses.

Multiple IFRs were added on each tributary to represent the assumption that all users in the watershed, whether upstream or downstream, would be responsible for contributing to the new modeled instream flow requirement. However, proposed Plan amendments may include a requirement only at the bottom of each watershed that could require upstream users to contribute more or less than downstream users based on specific water rights priorities. Additionally, the ecology and the geography of each tributary are different and may have different needs for cold water habitat and timing of flows. This program-level analysis does not incorporate detailed local ecological needs, which may vary from the SacWAM requirements.

Table A1-2. Locations of SWRCB Instream Flow Requirements in SacWAM

SWRCB IFR Name	IFR Location
American River	American River above confluence with Sacramento River
Antelope Creek	Antelope Creek above confluence with Sacramento River
Battle Creek	Battle Creek above confluence with Sacramento River
Bear River	Bear River above confluence with Feather River
Big Chico Creek	Big Chico Creek above confluence with Sacramento River
Black Butte Inflow	Stony Creek above Black Butte Reservoir
Black Butte Outflow	Stony Creek below Black Butte Reservoir
Butte Creek	Butte Creek above Butte Slough
Cache Creek	Cache Creek above Yolo Bypass
Calaveras River	Calaveras River above Delta
Camanche Inflow	Mokelumne River above Camanche Reservoir
Camanche Outflow	Mokelumne River below Camanche Reservoir
Camp Far West Inflow	Bear River above Camp Far West Reservoir
Camp Far West Outflow	Bear River below Camp Far West Reservoir
Clear Creek	Clear Creek above confluence with Sacramento River
Cleark Lake Outflow	Cache Creek below Clear Lake
Cosumnes River	Cosumnes River above confluence with Mokelumne River
Cottonwood Creek	Cottonwood Creek above confluence with Sacramento River
Cow Creek	Cow Creek above confluence with Sacramento River
Deer Creek	Deer Creek above confluence with Sacramento River
Englebright Inflow	Yuba River above Englebright Reservoir
Englebright Outflow	Yuba River below Englebright Reservoir
Feather River	Feather River above confluence with Sacramento River
Folsom Inflow	American River above Folsom Reservoir
Folsom Outflow	American River below Folsom Reservoir
Lake Berryessa Outflow	Putah Creek below Lake Berryessa
Mill Creek	Mill Creek above confluence with Sacramento River
Mokelumne River	Mokelumne River above confluence with Cosumnes River
New Bullards Bar Inflow	North Yuba above New Bullards Bar Reservoir
New Hogan Outflow	Calaveras River below New Hogan Reservoir
Oroville Inflow	Feather River above Oroville Reservoir
Oroville Outflow	Feather River below Oroville Reservoir
Pardee Inflow	Mokelumne River above Pardee Reservoir
Putah Creek	Putah Creek above Yolo Bypass
Sac at Freeport	Sacramento River at Freeport
Sac abv Bend Bridge	Sacramento River above Bend Bridge
Stony Creek	Stony Creek above confluence with Sacramento River
Thomes Creek	Thomes Creek above confluence with Sacramento River

SWRCB IFR Name	IFR Location
Yuba River	Yuba River above confluence with Feather River
S Yuba Inflow	South Fork Yuba above Englebright Reservoir
M Yuba Inflow	Middle Fork above confluence with North Fork Yuba

A1.2.3 Delta Outflow Requirement for UF Scenarios

Modeled Delta outflow requirements include existing Delta outflow requirements established in the 2019 USFWS BiOp, 2020 California Department of Fish and Wildlife ITP, and D-1641 (^SacWAM 2018). In the SacWAM UF scenarios, a new Delta outflow requirement based on the unimpaired flow has been included along with the existing Delta outflow requirements. The existing and new UF outflow requirements are not additive, meaning that they can be simultaneously met with the same volume of water; therefore, the maximum of any of the requirements in any given month is what is required to flow out of the Delta.

The new UF Delta outflow requirement in each of the scenarios is calculated based on the unimpaired Delta inflow (from Yolo Bypass, Sacramento River, Delta eastside tributaries, and runoff entering the Delta) plus the D-1641 *required* San Joaquin River flow at Vernalis minus unimpaired Delta depletions.[1] The alternative Delta outflow requirement, SWRCB Delta, can also be written as:

SWRCB Delta = (Unimpaired Delta outflow – Vernalis baseline flow) * %UF + Vernalis baseline D-1641 requirement

Where:

Unimpaired Delta outflow is calculated in SacWAM in unimpaired mode in the same way that other locations are calculated except San Joaquin River inflows at Vernalis were assumed to be equal to baseline Vernalis inflows. This term includes unimpaired runoff entering the Delta and unimpaired Delta depletions.[1]

Vernalis baseline flow is assumed to be based on D-1641 and is described in detail in Section A1.5, *San Joaquin Inflow at Vernalis.* This Vernalis baseline flow is assumed for each of the UF scenarios.

Vernalis Baseline D-1641 requirement represents the portion of San Joaquin River inflow at Vernalis that is required under D-1641. D-1641 minimum monthly flows are described in D-1641 Table 3 and associated footnotes (SWRCB 2000). In the absence of VAMP implementation of pulse flows in the period April 15-May 15, minimum monthly flows from the time period February 1-April 14 and April 16-June 30 were applied to the period April 15-May 15, at the tier based on water year type and applicable footnotes. This flow is lower than the Vernalis baseline flow because the baseline flow at Vernalis includes flood releases, FERC requirements from the Merced and Tuolumne Rivers and flows for other requirements such as dissolved oxygen. The Vernalis baseline D-1641 requirement does not change between baseline and the UF scenarios.

%UF represents the percent of unimpaired flow being simulated. For example, for the 35 scenario, %UF = 35%, or 0.35.

[1] Unimpaired Delta depletions were assumed to be about one-third of standard modeled Delta depletions, which represents the proportion of Delta land that is below sea level. More information on unimpaired Delta depletions and how unimpaired flows are calculated can be found in Appendix A7, *Modeling Approached Used to Develop Unimpaired Watershed Hydrology*.

A1.3 Reservoir Carryover Storage Targets

To represent the cold water narrative objective, reservoir end-of-September storage was targeted to maintain cold water throughout the year below the rim reservoirs listed in Table A1-3 to protect downstream fisheries. End-of-September storage is a valuable indicator of the volume of cold water available throughout the critical temperature season of summer through early fall. The carryover targets were based on a variety of sources of information and are not meant to represent absolute values required to maintain habitat; rather, they were included in the SacWAM modeling scenarios as a mechanism to roughly represent the narrative objective. Like other modeling constraints that are designed to represent adaptive management such as maximum OMR reverse flow objectives, actual real-time decisions may diverge from monthly modeling scenarios. The carryover storage targets were implemented by adjusting carryover storage targets and allocations with the goal that the resulting end-of-September storage levels in the scenarios were above the carryover target as frequently as or more frequently than the baseline scenario. In some reservoirs and in some scenarios, this goal was not possible to achieve.

Where previous studies have identified carryover storage targets to maintain downstream temperatures for rim reservoirs such as Shasta Reservoir and Camanche Reservoir, these carryover targets were assumed. For reservoirs with no available information describing carryover storage targets to achieve downstream water temperature goals, new reservoir thresholds were assumed. New end-of-September carryover targets were developed by using historical reservoir storage values and historical release temperatures described in Appendix A1c, *Preliminary Assessment of Effect of Reservoir Storage on Reservoir Release Temperatures*. Carryover targets were given a lower priority than other modeling goals such as meeting instream flow requirements. This resulted in the end-of-September carryover storage targets listed in Table A1-3 frequently not met in the 75 scenario for many reservoirs, occasionally not met in the 65 scenario, and rarely not met in the 55 scenario in some reservoirs.

Because Lake Berryessa carryover storage historically has been relatively high, there is a lack of the historical data required to determine appropriate minimum carryover storage using historical storage-to-downstream temperature relationships. The carryover target assumed for Lake Berryessa therefore may be much higher than actually required but was used because of the lack of lower historical carryover storage-to-temperature data available at lower storage. Because of the high carryover target for Lake Berryessa, large reductions in allocations to diverters from Putah Creek were required; nonetheless, the carryover target was rarely met in the 65 and 75 scenarios.

Table A1-3. Assumed Reservoir Carryover Storage Targets to Maintain Downstream Cold Water Habitat

Reservoir	End of September Carryover Storage Target (thousand acre-feet)	Source of Target
Shasta	2,200	2009 NMFS Biological Opinion
Oroville	1,200–1,500	Historical Storage-Temperature Analysis
Folsom	400	Historical Storage-Temperature Analysis
New Bullards Bar	400–550	Historical Storage-Temperature Analysis
Camanche	145	Communications with EBMUD Staff
Lake Berryessa	900	Historical Storage-Temperature Analysis
New Hogan	100	Historical Storage-Temperature Analysis
Camp Far West	20	Historical Storage-Temperature Analysis

A1.4 Updated Flow Requirement below Keswick for WR 90-5 Compliance

This section discusses the development of modeling assumptions to roughly represent operational decisions made to maintain cold water habitat below Keswick Reservoir on the Sacramento River. Although the resulting assumptions are implemented through a minimum instream flow requirement within SacWAM, they do not represent a regulatory flow requirement, *per se*. Rather, the minimum flows identified here are approximations of flows that may be expected to be associated with implementation of the cold water habitat narrative objective and existing regulatory requirements governing water temperature in this reach in the context of the flow scenarios modeled and analyzed in this Staff Report.

Water Rights Order 90-5 (Order 90-5) requires the U.S. Bureau of Reclamation (Reclamation) to maintain stream temperatures conducive to spawning, egg incubation, and rearing on the Sacramento River below Keswick Reservoir. This requirement is managed adaptively by the SRTTG, which considers information such as reservoir storage, reservoir temperature profiles, and weather and hydrologic forecasts. The stream temperature compliance location is determined at the beginning of the temperature season (April or May) and maintained throughout the summer and fall. Over the last decade, the goal has been to maintain daily average temperatures below 56 °F as far downstream as Jellys Ferry and as far upstream as the confluence with Clear Creek. Pursuant to the 2019 NMFS BiOp, collaborative decision-making processes are also implemented by SRTTG to inform a temperature management strategy that typically involves maintaining daily average temperatures below 53.5 °F on the Sacramento River above Clear Creek during this period.

Developing a model assumption for minimum flows needed for temperature management is difficult because historically, Keswick Reservoir has been operated for temperature management in addition to meeting water supply demands, minimum flows at Wilkins Slough, and Delta needs. Additionally, real-time temperature management includes day-to-day decisions on imports from the Trinity River and the configuration of the TCD at Shasta Reservoir. Water warms as it moves downstream in the hot summer months; the rate at which it warms is a function of the release volume from Keswick Reservoir. The same temperature can be maintained at a given compliance point by a higher release of warmer water or a smaller release of colder water. When larger releases are made, it decreases the remaining volume of the hypolimnion and metalimnion to be used for temperature control in future months.

To represent minimum releases from Keswick Reservoir for downstream Sacramento River temperature management in the SacWAM scenarios, the approach is to first set the compliance location based on water year type (WYT). Monthly minimum flows are then applied based on the annual compliance location. For wet years, the temperature compliance point historically has been Jellys Ferry; in above normal – dry year types, the compliance point is typically Balls Ferry; and in critical years, the compliance point is often at Clear Creek. Table A1-4 shows the assumed compliance location for each water year type based on historical operations over the past decade and the approximate flow required to maintain cold water at that location. This new flow requirement was not included in the existing conditions simulation because Keswick releases in this scenario are sufficiently high throughout the summer for downstream deliveries and exports that an additional flow requirement is not needed.

Table A1-4. Sacramento below Keswick Flow Requirement for Temperature Control (cubic feet per second)

Water Year Type	May	June	July	August	September
Wet	6,500	8,000	10,000	9,000	7,000
Dry–Above Normal	6,000	7,000	7,500	7,000	6,000
Critical	5,000	6,000	7,000	6,500	5,000

A1.5 San Joaquin Inflow at Vernalis

The SacWAM boundary condition at Vernalis was developed using a CalSim 3 simulation specified to include D-1641 Vernalis minimum monthly flows and salinity requirements. In the absence of VAMP implementation of pulse flows in the period April 15-May 15, minimum monthly flows from the time period February 1-April 14 and May 16-June 30 were applied to the period April 15-May 15, at the tier based on water year type and applicable footnotes. Additionally, reservoir flood-release spills, other IFRs such as BiOp-required flows from the Stanislaus River, FERC Settlement Agreement flows from the Tuolumne River, FERC instream flows from the Merced River, and other local accretions combine to produce the total resulting flow at Vernalis.

The Vernalis boundary condition streamflow time series for SacWAM was produced by a simulation of CalSim 3 based on the DCR (DWR 2021). The CalSim 3 simulation assumes the following.

- D-1641 Vernalis Flow Requirement:
  - Pulse Period - April-May - Shoulder flows instead of Pulse Flows
  - Non-Pulse Period – D-1641 Requirements
  - October 1000 cubic feet per second (cfs) & 28–12.5 thousand acre-feet (TAF) - Fall Attraction Flows
- Stanislaus - Stepped Release Plan
- Release for WQ from New Melones
- San Joaquin River Restoration flows and recapture above Vernalis

A1.6 Groundwater Pumping

Minimum groundwater pumping limits were established based on DWR land and water use surveys to represent supplies to regions where surface water is not available (^SacWAM 2023). The same values for minimum groundwater pumping limits were applied to the existing conditions simulation and to each of the flow scenarios. Similarly, maximum groundwater pumping limits were established based on land and water use surveys to represent regions where groundwater supplies are limited. These maximum groundwater limits were applied to the baseline model and each of the scenarios.

Groundwater pumping results from the existing conditions were applied to each of the scenarios as an additional upper limit to pumping. Limiting groundwater pumping in each of the scenarios to baseline values was assumed to represent no substitute groundwater pumping to replace reduced surface water supplies.

A1.7 Upper Watershed Operations

Upper watersheds in this Staff Report refer to the portion of each watershed above the valley floor. Typically, these watersheds are defined by the area above the large reservoirs operated for water supply directly above the valley floor also known as "rim reservoirs." SacWAM includes 43 upper watershed reservoirs above the rim reservoirs and the major diversions and hydropower plants associated with them (^SacWAM 2023).

SWRCB IFRs above rim reservoirs (Table A1-2) have the highest priority in the model. The high priority of the rim inflow SWRCB IFRs can cause changes in upper watershed reservoir releases and flows through hydropower conduits if the IFRs are not being met incidentally. Because of the higher priority of upper watershed IFRs and operations, the upper watersheds are essentially operated before the rest of the system; therefore, requirements below the rim reservoirs in the valley floor and Delta do not affect upper watershed operations.

A1.8 Central Valley Project Operations

CVP operations were modified from the baseline simulation to accommodate the new instream flow requirements associated with the proposed Plan amendments. The approach to representing CVP operations is similar to other projects; new instream flow requirements were added on CVP tributaries (Table A1-2), and adjustments were made to allocations and reservoir operations to maintain end-of-September storage to represent the narrative temperature objective.

Reservoir storage was maintained by using reservoir "buffer pools," where thresholds were set for Folsom and Shasta (Table A1-5 and Table A1-6). When the storage dropped below the buffer pool threshold, releases would not be made for south of Delta exports except for minimum health and safety. Model priorities were configured such that deliveries to settlement contractors would be reduced but not completely cut off when Shasta storage was below the buffer pool volume.

Table A1-5. Shasta Buffer Pool for Each Scenario (TAF)

	October	November	December	January	February	March	April	May	June	July	August	September
Existing	1,522	1,509	1,830	2,052	2,380	2,722	2,929	2,856	2,519	2,035	1,688	1,500
35	1,122	1,109	1,430	1,652	1,980	2,322	2,529	2,456	2,119	1,635	1,288	1,100
45	1,322	1,309	1,630	1,852	2,180	2,522	2,729	2,656	2,319	1,835	1,488	1,300
55	1,872	1,859	2,180	2,402	2,730	3,072	3,279	3,206	2,869	2,385	2,038	1,850
65 [a]	2,322	2,309	2,630	2,852	3,180	3,522	3,729	3,656	3,319	2,835	2,488	2,300
75 [b]	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC

[a] For the 65 scenario, the buffer pool was calculated as the minimum of the values in the table and the top of conservation (TOC) which ranges from 3,252 thousand acre-feet (TAF) to 4,552 TAF for Shasta.

[b] For the 75 scenario, the buffer pool was set at the TOC for all months, which ranges from 3,252 TAF to 4,552 TAF for Shasta.

Table A1-6. Folsom Buffer Pool for Each Scenario (TAF)

	Existing	35	45	55 [a]	65 [a]	75 [a]
Folsom Buffer Pool (same for each month)	300	450	550	750	925	TOC

[a] For the 55 and 65 scenarios, the buffer pool is a minimum of the value in the table and the top of conservation (TOC) each month. In the 75 scenario, the buffer pool is equal to the top of conservation.

In addition to reservoir buffers, the CVP allocation logic was modified from the existing scenario by adjusting the WSI-DI curves and reducing the minimum allocations in the 65 and 75 scenarios. Table A1-7 shows the minimum allocation by contract type and scenario.

Table A1-7. Minimum Potential CVP Allocation by Contract Type

CVP Contract Type	Baseline	35	45	55	65	75
Sacramento Valley Settlement Contractors	75%	75%	75%	75%	64%	40%
North-of-Delta M&I Contractors	50%	50%	50%	50%	25%	25%
North-of-Delta Agricultural Contractors	0%	0%	0%	0%	0%	0%
North-of-Delta Wildlife Refuges	75%	75%	75%	75%	64%	40%
San Joaquin Exchange Contractors	77%	77%	77%	77%	40%	40%
South-of-Delta M&I Contractors	50%	50%	50%	50%	25%	25%
South-of-Delta Agricultural Contractors	0%	0%	0%	0%	0%	0%
South-of-Delta Wildlife Refuges	75%	75%	75%	75%	40%	40%

During times of drought or extreme shortage, it is possible for deliveries to contractors to be less than the allocations. When reservoir storage drops below the buffer threshold (Table A1-5), all diversions with a lower priority than the reservoir buffer priority will be reduced.

A1.8.1 Trinity Imports

Trinity imports were limited to baseline conditions in each of the scenarios by constraining flows through the Clear Creek Tunnel. This assumption is a simplified representation that the proposed Plan amendments will not have any redirected effects on Trinity River fisheries.

A1.9 State Water Project Operations

SWP operations were modified using similar methods to those for the CVP described in Section A1.8, *Central Valley Project Operations*. There are new unimpaired flow requirements on the Feather River above Oroville, below Thermalito, and above the confluence with the Sacramento River (Table A1-2), reservoir buffer pools in Oroville (Table A1-8), and adjustments to the WSI-DI curves for the 55–75 scenarios to maintain end-of-September storage to represent the narrative temperature objective.

Table A1-8. Oroville Reservoir Buffer Pool for Each Scenario (TAF)

	October	November	December	January	February	March	April	May	June	July	August	September
Existing	1,374	1,300	1,436	1,566	1,775	2,011	2,222	2,316	2,162	1,810	1,530	1,388
35	1,374	1,300	1,436	1,566	1,775	2,011	2,222	2,316	2,162	1,810	1,530	1,388
45	1,374	1,300	1,436	1,566	1,775	2,011	2,222	2,316	2,162	1,810	1,530	1,388
55	1,624	1,550	1,686	1,816	2,025	2,261	2,472	2,566	2,412	2,060	1,780	1,638
65	2,174	2,100	2,236	2,366	2,575	2,811	3,022	3,116	2,962	2,610	2,330	2,188
75[a]	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC	TOC

[a] In the 75 scenario, the buffer pool for Oroville Reservoir is set at the top of conservation (TOC) for all months.

A1.10 Delta Depletions

Delta depletion values are assumed from DWR's DCD model Version 1.2 (DWR 2019) and do not change in any of the scenarios. The DCD values were aggregated to seven locations in the Delta as in the DCR (DWR 2021). The seven DCD diversions were assumed to have a priority of 35, which is equal to that for Delta exports for health and safety. The high priority of Delta depletions results in very little change in Delta diversions for irrigated agriculture in all of the scenarios.

A1.11 Non-Project Tributaries

Model allocation priorities are specified such that demands on non-project tributaries are higher priority than demands on project tributaries and in the Delta (^SacWAM 2023). The higher priority on non-project tributaries assures that non-project reservoirs will not release water to meet project demands.

Cache Creek, Putah Creek, Calaveras River, Mokelumne River, and Yuba River each include allocation logic that includes new SWRCB IFRs and reservoir carryover targets. The allocation logic determines an annual allocation in April, which accounts for beginning-of-month storage, annual inflow, carryover storage target, existing IFRs, SWRCB IFRs, and stream-groundwater interactions. This portion of the model assumes perfect foresight within the water year for inflows. For example, in the calculation of annual allocation in April, the total annual requirements and inflow and instream flow requirements are assumed to be known for the rest of the year; therefore, the model can properly determine the water available for allocation.

A1.11.1 Yuba River and Bear River Operations

Yuba and Bear River operations are intertwined in that a large portion of the mean annual flow from the Yuba River is transferred through canals to the Bear River watershed. There were modifications required to operations of the Yuba County Water Agency (YCWA) system to maintain end-of-September carryover storage in the scenarios; however, no changes to the model were required for Camp Far West operations.

Changes to the operations of New Bullards Bar Reservoir and diversions by YCWA include increasing the New Bullards Bar carryover storage target and decreasing the minimum allocation to YCWA users for each scenario (Table A1-9). In addition to the modifications to YCWA minimum allocations and carryover target, the buffer pool for New Bullards Bar was increased by 100 TAF, which reduces the discretionary hydropower release in the scenarios to help maintain cold water pool.

Table A1-9. Assumed Minimum YCWA Allocation for Each Scenario

Scenario	Minimum YCWA Allocation (percent)	New Bullards Bar Carryover Target (thousand acre-feet)
Existing	50%	440
35	50%	500
45	45%	500
55	45%	600
65	40%	700
75	30%	800

A1.11.2 Cache Creek, Putah Creek, Calaveras River, and Mokelumne River Operations

Operations on Cache Creek include storage regulation in Clear Lake and Indian Valley Reservoir, minor urban diversions directly from Clear Lake, and agricultural diversions at Capay Diversion Dam. The SWRCB IFRs can reduce the availability of water for diversion. Carryover storage targets were not modified from the existing scenario for Clear Lake because storage regulation is strictly limited by various court orders. Carryover targets also were not modified for Indian Valley Reservoir because downstream temperatures on Cache Creek below Indian Valley have not been identified as a limiting factor for native fishes.

Putah Creek operations include storage regulation in Lake Berryessa and diversions from Putah Creek at the Putah Diversion Dam to Putah South Canal. SWRCB IFRs reduce the amount of water that can be stored in Lake Berryessa in winter and spring, which reduces the ability to deliver stored water to the Putah South Canal. Lake Berryessa carryover targets were increased to 1 million acre-feet (MAF) in all of the UF scenarios to maintain the 900 TAF carryover volume identified in Table A1-3. Additionally, the minimum allocation for the Solano Project was adjusted for each scenario (Table A1-10).

Table A1-10. Solano Project Minimum Allocation

Scenario	Solano Project Minimum Allocation
Existing	47%
35	45%
45	35%
55	25%
65	15%
75	0%

Calaveras River operations include storage regulation in New Hogan Reservoir and downstream diversions to agriculture and urban users. Calaveras River water is supplemented with diversions from the Stanislaus River. The New Hogan Water Supply Index was changed to allow for reductions in diversions to riparian users in order to maintain cold water storage. Correspondingly, the maximum flow volume on the transmission link from the Calaveras River representing riparian diversions also was subject to reductions based on available water supply.

Table A1-11. New Hogan Carryover Target

Scenario	New Hogan Carryover Target (TAF)
Existing [a]	20–100
35	100
45	100
55	130
65 [b]	200 or TOC
75 [b]	200 or TOC

[a] The New Hogan carryover target is dynamically calculated in the existing scenario and changes from year to year. See the SacWAM documentation (^SacWAM 2023) for more details.

[b] The New Hogan carryover target for the 65 and 75 scenarios are the minimum of 200 thousand acre-feet (TAF) or the top of conservation (TOC).

Mokelumne River operations include upper watershed hydropower operations, smaller diversions to foothill communities, storage in Pardee and Camanche Reservoirs, diversions to the Bay Area, and diversions to agricultural and urban uses above the Delta. Changes to Mokelumne River operations in the UF scenarios include adding new flow requirements on the Mokelumne River (Table A1-2) and increasing the maximum cutbacks to East Bay Municipal Utility District (EBMUD) and lower Mokelumne River diverters (Table A1-12). When cutbacks to EBMUD occur that are greater than 25 percent, cutbacks also are triggered for lower Mokelumne diversions. Lower Mokelumne diversions are cut on an annual basis by 25 percent less than the cutbacks by EBMUD. This assumption acknowledges the seniority of downstream users; however, it does explicitly represent the water rights of each user in the watershed.

Table A1-12. Maximum Cutback to EBMUD and Lower Mokelumne Diverters by Scenario

Scenario	Maximum EBMUD Cutback	Maximum Lower Mokelumne Cutback
Existing	15%	0%
35	45%	20%
45	55%	30%
55	80%	55%
65	85%	85%
75	90%	90%

The resulting changes in upper watershed storage and diversions are a result of limited water availability based on assumed baseline model priorities. The resulting carryover storage in Pardee and Camanche Reservoirs and reductions in diversions are calculated by the allocation logic that is described in detail in the SacWAM documentation (^SacWAM 2023).

A1.11.3 Los Vaqueros Project Operations

Los Vaqueros Project operations were modified to reflect the change in Delta water quality that occurs in the scenarios. Generally, water quality improves with the higher percentage of unimpaired flow scenarios, allowing for more frequent pumping operations from Delta intakes. Los Vaqueros operations are determined by a stand-alone module described in the SacWAM documentation (^SacWAM 2023). Water quality and water availability results from an initial SacWAM run are fed to the external Los Vaqueros module that determines the monthly pumping from Contra Costa Water District's Delta intakes. Results from the Los Vaqueros module become inputs to the final SacWAM simulations. This iterative process was completed for each scenario, providing separate results for each.

This method of estimating Los Vaqueros operations assumes that the Contra Costa Water District pumping does not significantly affect Delta water quality.

A1.12 SacWAM Modeling Results

SacWAM results are presented in the following sections without detailed discussion. In the main body of the Staff Report, Chapter 2, *Hydrology and Water Supply*, provides a discussion of existing conditions or baseline results, and Chapter 6, *Changes in Hydrology and Water Supply*, provides a discussion of the changes from baseline for each of the scenarios. That being said, some results presented below are easier to understand with a brief discussion, specifically those related to the change in operations of the CVP and SWP.

Historically CVP and SWP deliveries have been sustained by releases from north-of-Delta (NOD) storage and from exports of excess water in the Delta. CVP deliveries rely more heavily on storage releases because the CVP has a larger NOD storage capacity, a higher portion of deliveries are made NOD, and the CVP has lower export capacity. SWP deliveries rely more heavily on exporting excess Delta water because the SWP has lower NOD storage capacity, a greater portion of south-of-Delta (SOD) contracts, and higher capacity for exports. The baseline modeling reflects these historical patterns of Project operations.

In the SacWAM scenarios, flow requirements and cold water pool carryover targets result in changes to the historical patterns of Project operations, which affect both CVP and SWP, NOD and SOD contractor deliveries non-uniformly. The results show that the flow requirements reduce the ability of Project reservoirs to store runoff in winter and spring, which results in lower end-of-April storage entering the delivery season (shown in Section A1.12.6, *Reservoir Storage*). End-of-September carryover storage targets assumed in the modeling can further reduce the water available for release throughout the irrigation season (Section A1.12.6).

As with the allocations discussed in Section A1.8, *Central Valley Project Operations*, in the flow scenarios, results show reduction in deliveries to CVP contractors NOD and SOD; however, reductions in NOD deliveries can be greater at times than reductions in SOD deliveries. SOD deliveries are supplied through SOD exports that as mentioned above are sustained by releases from NOD storage and by taking advantage of excess water in the Delta under baseline conditions. As the flow requirement increases, the proportion of exports of unstored water increases substantially—to the point in the 75 scenario where a substantial fraction of exports are made during times when excess Delta water is available. This can be shown simply in the timing of exports shown in the monthly distribution of CVP exports (see Section A1.12.4.4, *Jones Pumping Plant (CVP)*). July–August is typically the peak export season where NOD storage is moved to SOD. In the baseline run, exports are at or near maximum modeled capacity of 4,300 cubic feet per second (cfs) in close to 50 percent of the years during these months; in the 75 scenario CVP exports are at minimum health and safety levels in nearly half of all months during the course of the simulation, with higher exports often occurring during October through February than July and August. Even though the new IFRs reduce the amount of excess water in the Delta available for export (Figure A1-1 and Figure A1-2), during times of flood, some excess water still exists. Even in dry years such as 1989 in the midst of an extended drought, large storms that are largely uncapturable in NOD storage, export facilities can still take advantage of this water. The new flow requirements modeled in the flow scenarios are outside of what was considered for SWP and CVP contracts and agreements at the time these agreements were signed by DWR and Reclamation. Therefore, it is possible that deliveries to CVP and SWP contractors in response to the proposed Plan amendments would be different than modeled. The overall effects on water supplies would not be expected to differ substantially, although the distribution of those effects may be different, including the distribution between NOD and SOD and the CVP and SWP.

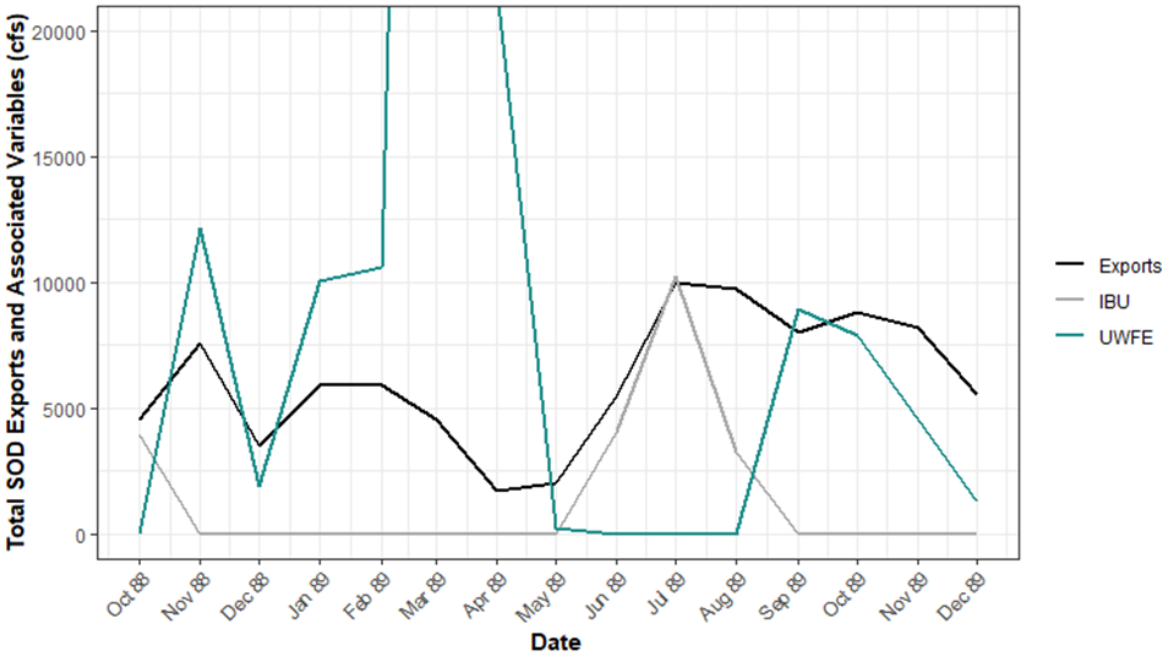

Figure A1-1. Total South-of-Delta (SOD) Exports, In-Basin Use (IBU), and Unstored Water for Export (UWFE) for water year 1989 and the following fall (dry year amid drought) for baseline

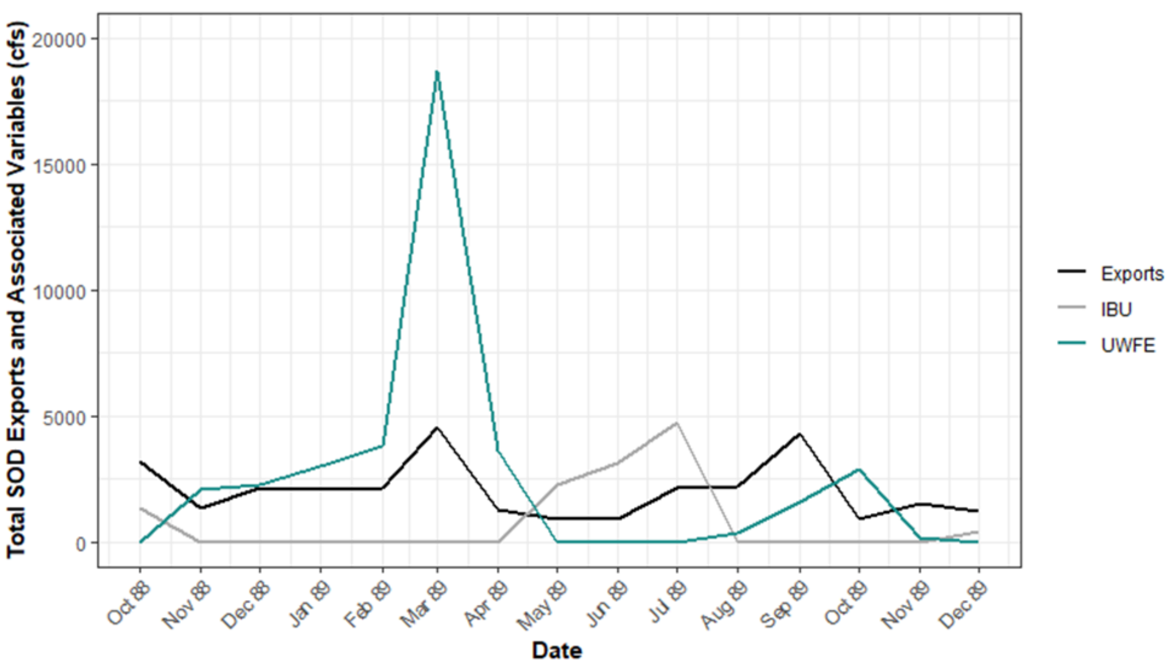

Figure A1-2. Total South-of-Delta (SOD) Exports, In-Basin Use (IBU), and Unstored Water for Export (UWFE) for Water Year 1989 and the following fall (dry year amid drought) for the 75 Scenario

Sections A1.12.3 through A1.12.10 present SacWAM results using figures and tables that summarize model data as follows.

- Section A1.12.3, *Streamflows*
- Section A1.12.4, *Delta Interior Flows*
- Section A1.12.5, *Interbasin Diversions*
- Section A1.12.6, *Reservoir Storage*
- Section A1.12.7, *Flood Risk Indicators*
- Section A1.12.8, *Water Supply*
- Section A1.12.9, *Groundwater Storage and Flows*
- Section A1.12.10, *Unmet Instream Flow Requirements*

In all the figures, baseline is shown in white fill (boxplots) or black (line graphs), the 35 scenario is gray, 45 scenario is dark blue, 55 scenario is light blue, 65 scenario is turquoise, and 75 scenario is green.

A1.12.1 Boxplots

All streamflows are presented using box plots to characterize the range of flows for each month over the 94-year period of simulation. The example boxplot shown below presents information about the data distribution of a single model variable (e.g., reservoir storage or streamflow). This generic example boxplot does not have a defined x-axis (horizontal axis); for the SacWAM results, the x-axis corresponds to the given month. The y-axis (vertical axis) represents a range of values, from low values (bottom of boxplot) to high values (top of boxplot). Minimum and maximum values are shown as horizontal lines, or whiskers, at the boxplot's vertical extremes. These whiskers represent the driest and wettest hydrologic conditions, respectively. The 25th percentile of the streamflow data distribution is the line at the bottom of the grey box, and the 75th percentile of the streamflow data distribution is the line at the top of the grey box. The 25th percentile, corresponding to drier conditions, represents the point at which a quarter of streamflow values are lower than the value shown on the y-axis; the 75th percentile, corresponding to wetter conditions, represents the point at which 75% of streamflow values are lower than the value shown on the y-axis. The colored box between the 25th and 75th percentile represents the central 50% of data, which means that 50% of values fall within the range of the colored box, 25% of the data points fall below the range of the colored box, and 25% of the data points fall above the range of the colored box. The horizontal line inside the grey box is the median line, which represents the 50th percentile, or the point at which 50% of the values are lower. The boxplots have been scaled so that changes in the 25th to 75th percentiles are easier to see in the figures. The scaling causes many of the maximum flows to be off the charts; however, the maximum values are available in the tables as the 100% exceedance.

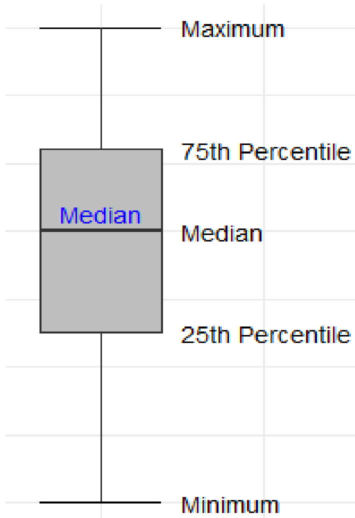

Figure A1-3. Example Generic Boxplot Showing Median and Quartiles

A1.12.2 Cumulative Distribution Tables

Cumulative distribution tables present the frequency in which the value is equal to or below. For example, Table A1-13 shows that for the 45 scenario, the minimum value in October is 485 cfs, or that 0% of all October values are below 485 cfs. 50% represents the median flow and 100% represents the maximum value (or the value which 100% of the distribution is less than or equal to).

Table A1-13. Example Cumulative Distribution of Monthly Flow (cubic feet per second)

	45 Scenario											
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
0%	485	474	611	360	302	302	635	758	401	329	319	404
10%	1,488	1,544	1,512	1,324	1,379	1,443	1,788	1,452	976	1,227	1,399	1,296
25%	1,503	1,878	1,935	1,700	1,691	1,779	2,313	2,191	1,795	1,858	1,799	1,567
50%	1,539	1,934	2,001	1,864	3,097	2,765	3,352	3,835	3,819	2,950	1,801	1,576
75%	1,540	3,068	2,414	5,677	7,461	4,659	5,090	5,817	5,306	3,857	3,035	2,838
90%	1,763	4,160	9,083	10,667	12,173	8,468	7,273	9,045	7,074	4,761	4,471	4,234
100%	3,849	18,417	22,229	31,628	33,233	16,740	16,327	13,142	13,846	6,324	5,342	5,363
Mean	1,591	2,777	3,644	4,457	5,217	4,002	4,143	4,487	3,931	2,977	2,395	2,308

A1.12.3 Streamflows

Simulated streamflow data are presented for each location in which new SWRCB IFRs were added to the model (Table A1-2) and for other locations that may be of interest along the Sacramento River. For each location, a monthly boxplot is presented followed by tables of monthly cumulative distributions for each scenario and results summarized by water year type.

A1.12.3.1 American River below Folsom Reservoir (SWRCB Folsom)

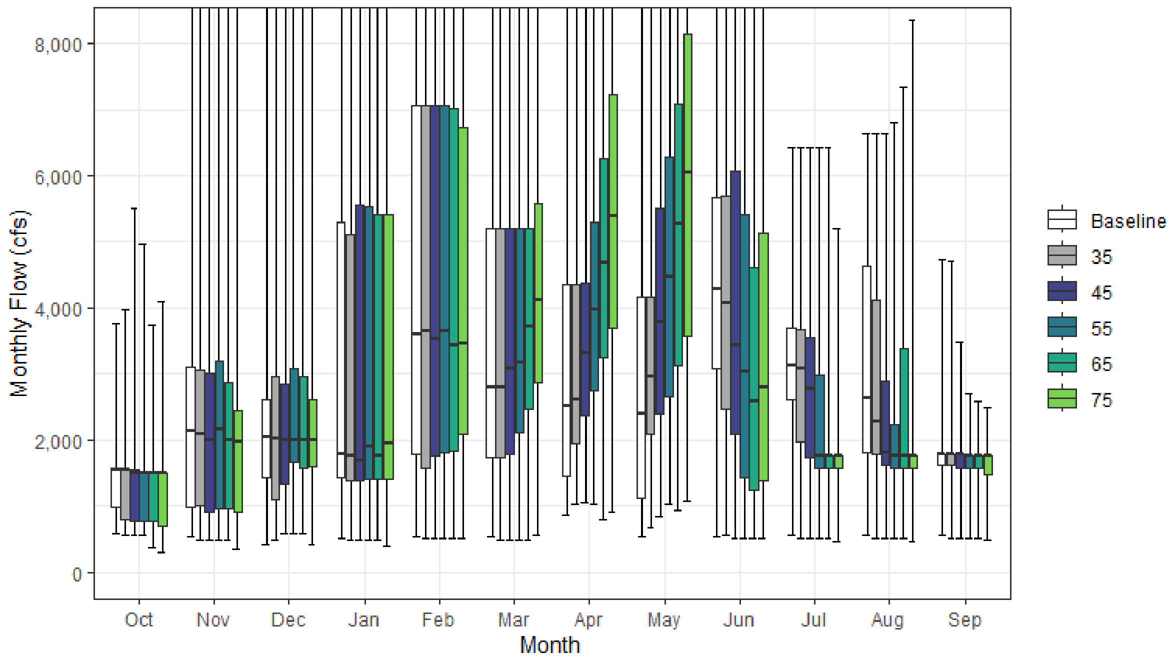

Figure A1-4. American River Streamflow below Folsom Reservoir Monthly Boxplot

Table A1-14. Cumulative Distribution of Monthly Flow (cfs)—American River below Folsom Reservoir (SWRCB Folsom)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (thou)
Baseline													
0%	587	526	428	521	533	525	860	540	545	560	549	551	547
10%	677	646	639	668	1,376	971	988	995	1,292	1,552	1,333	1,249	1,053
25%	994	986	1,435	1,418	1,780	1,742	1,455	1,134	3,075	2,618	1,801	1,614	1,467
50%	1,539	2,130	2,031	1,780	3,598	2,804	2,519	2,387	4,269	3,124	2,625	1,792	1,993
75%	1,540	3,096	2,616	5,282	7,071	5,202	4,353	4,162	5,668	3,696	4,630	1,793	3,249
90%	1,542	4,685	8,851	8,963	11,678	9,175	7,003	7,809	8,016	4,285	4,964	2,258	4,263
100%	3,754	19,533	23,626	28,339	30,926	16,938	15,165	11,887	15,368	6,425	6,645	4,738	6,270
Mean	1,386	2,737	3,585	4,112	5,144	4,151	3,321	3,264	4,621	3,059	2,989	1,830	2,419
35													
0%	550	497	485	495	501	497	1,018	681	547	504	504	513	547
10%	633	616	664	755	1,373	1,222	1,607	1,366	1,078	1,358	1,001	892	1,037
25%	803	1,001	1,104	1,394	1,567	1,744	1,941	2,093	2,461	1,972	1,774	1,614	1,462
50%	1,538	2,085	2,029	1,770	3,644	2,804	2,613	2,963	4,060	3,080	2,275	1,792	2,045
75%	1,541	3,053	2,954	5,115	7,071	5,202	4,352	4,165	5,684	3,668	4,112	1,793	3,253
90%	1,740	4,277	8,748	8,960	11,676	9,351	6,966	7,809	7,656	4,687	4,902	2,796	4,249
100%	3,967	19,447	22,605	28,339	30,926	16,938	15,165	11,887	15,368	6,425	6,644	4,707	6,269
Mean	1,352	2,629	3,533	4,096	5,122	4,218	3,546	3,687	4,490	2,976	2,794	1,824	2,423
45													
0%	550	497	577	495	501	497	1,053	850	504	504	504	513	525
10%	634	616	680	911	1,393	1,531	1,865	1,584	1,100	897	897	721	1,026
25%	765	909	1,346	1,391	1,750	1,780	2,372	2,386	2,092	1,738	1,624	1,567	1,481
50%	1,503	2,001	1,997	1,682	3,526	3,084	3,308	3,797	3,423	2,776	1,800	1,791	2,046
75%	1,540	3,014	2,847	5,545	7,071	5,203	4,383	5,515	6,063	3,559	2,897	1,793	3,310
90%	1,541	4,200	8,824	8,962	11,678	9,358	6,926	7,809	8,318	4,677	4,843	2,746	4,159
100%	5,503	18,925	23,366	28,339	30,926	16,938	15,165	11,887	15,368	6,425	6,644	3,471	6,269
Mean	1,352	2,531	3,556	4,090	5,141	4,296	3,878	4,297	4,271	2,743	2,454	1,739	2,428
55													
0%	550	497	577	495	501	497	1,035	1,020	504	504	504	514	494
10%	633	624	737	1,062	1,387	1,721	2,116	1,692	946	846	721	742	1,068
25%	765	970	1,659	1,394	1,807	2,101	2,757	2,662	1,422	1,576	1,568	1,567	1,472
50%	1,502	2,171	1,998	1,912	3,644	3,165	3,978	4,470	3,025	1,755	1,755	1,754	2,030
75%	1,503	3,194	3,073	5,518	7,071	5,202	5,303	6,283	5,415	2,973	2,236	1,754	3,221
90%	1,504	4,550	8,857	8,959	11,678	9,359	6,976	8,154	8,046	3,848	4,858	1,781	4,238
100%	4,969	19,252	24,929	28,412	30,930	16,938	15,165	11,898	15,301	6,425	6,790	2,701	6,266
Mean	1,328	2,705	3,675	4,218	5,195	4,453	4,347	4,703	3,911	2,210	2,191	1,573	2,438
65													
0%	377	497	589	495	501	499	791	939	504	504	504	514	471
10%	633	646	780	1,142	1,398	1,748	2,477	1,825	820	723	897	997	1,097
25%	765	970	1,581	1,397	1,824	2,462	3,234	3,121	1,239	1,568	1,568	1,567	1,541
50%	1,502	2,001	1,997	1,749	3,438	3,721	4,677	5,258	2,573	1,755	1,754	1,754	2,078
75%	1,503	2,872	2,960	5,415	7,006	5,201	6,258	7,084	4,609	1,756	3,392	1,754	3,205
90%	1,538	4,204	8,597	8,987	11,032	9,361	7,331	9,559	6,203	2,937	5,225	1,755	4,191
100%	3,743	19,125	23,538	28,538	30,873	16,938	15,165	12,230	13,730	6,425	7,348	2,586	6,276
Mean	1,319	2,538	3,574	4,126	5,027	4,634	4,964	5,369	3,333	1,856	2,439	1,584	2,454
75													
0%	294	341	411	386	505	569	911	1,069	505	463	460	490	500
10%	503	552	680	912	1,442	1,930	2,835	2,085	878	661	630	626	1,109
25%	710	909	1,599	1,397	2,095	2,856	3,700	3,580	1,378	1,568	1,568	1,480	1,601
50%	1,502	1,982	1,997	1,944	3,463	4,116	5,377	6,046	2,798	1,754	1,754	1,753	2,227
75%	1,503	2,434	2,608	5,411	6,740	5,571	7,214	8,142	5,139	1,756	1,755	1,754	3,245
90%	1,508	3,675	7,182	9,211	9,673	9,588	8,446	10,339	7,092	2,134	3,545	1,754	4,044
100%	4,093	14,779	20,103	28,886	27,971	16,289	15,945	14,080	12,293	5,188	8,359	2,482	6,293
Mean	1,259	2,170	3,241	4,076	4,766	4,915	5,646	6,114	3,551	1,708	2,019	1,498	2,467

Table A1-15. Water Year Average of Monthly Flows (cfs)—American River below Folsom Reservoir (SWRCB Folsom)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	1,309	1,512	1,246	1,302	1,358	959	1,672	1,246	1,958	1,191	1,343	1,149
D	1,241	2,235	1,910	1,348	2,448	2,559	1,735	1,586	3,506	2,990	2,326	1,585
BN	1,383	2,437	2,454	2,203	4,328	2,916	3,093	2,570	3,985	3,506	2,812	1,826
AN	1,333	3,421	3,070	5,248	6,577	6,269	3,270	3,437	4,439	3,410	3,073	2,647
W	1,559	3,660	7,000	8,361	9,077	6,898	5,554	5,950	7,347	3,691	4,439	2,031
All	1,386	2,737	3,585	4,112	5,144	4,151	3,321	3,264	4,621	3,059	2,989	1,830
35												
C	1,096	1,428	1,282	1,060	1,248	1,247	1,705	1,974	2,269	1,189	1,163	930
D	1,224	2,041	1,878	1,392	2,396	2,644	2,308	2,294	2,713	2,420	2,147	1,522
BN	1,417	2,412	2,407	2,218	4,380	2,917	3,323	2,982	3,865	3,635	2,649	1,769
AN	1,275	3,391	3,059	5,277	6,558	6,269	3,467	3,706	4,607	3,549	2,708	2,890
W	1,579	3,519	6,865	8,383	9,076	6,900	5,630	6,069	7,344	3,704	4,278	2,106
All	1,352	2,629	3,533	4,096	5,122	4,218	3,546	3,687	4,490	2,976	2,794	1,824
45												
C	1,185	1,391	1,309	1,128	1,446	1,418	1,866	2,055	1,971	1,051	937	895
D	1,201	1,903	1,917	1,370	2,453	2,833	2,837	3,242	2,296	2,008	1,653	1,498
BN	1,397	2,152	2,382	2,095	4,249	2,909	3,800	4,011	3,923	3,200	2,098	1,730
AN	1,246	3,231	3,109	5,304	6,540	6,271	3,842	4,454	4,329	3,442	2,477	2,442
W	1,573	3,542	6,892	8,409	9,080	6,930	5,802	6,394	7,172	3,624	4,073	2,078
All	1,352	2,531	3,556	4,090	5,141	4,296	3,878	4,297	4,271	2,743	2,454	1,739
55												
C	1,157	1,442	1,349	1,253	1,483	1,669	2,006	1,960	1,619	967	897	906
D	1,204	2,171	2,004	1,501	2,519	3,063	3,392	3,414	1,889	1,494	1,538	1,488
BN	1,323	2,329	2,404	2,297	4,520	3,101	4,537	4,582	3,676	1,811	1,792	1,707
AN	1,227	3,351	3,266	5,502	6,416	6,307	4,503	5,270	3,654	2,335	2,402	1,756
W	1,557	3,735	7,122	8,460	9,077	7,014	6,135	6,970	6,908	3,603	3,526	1,834
All	1,328	2,705	3,675	4,218	5,195	4,453	4,347	4,703	3,911	2,210	2,191	1,573
65												
C	1,161	1,434	1,407	1,189	1,576	1,875	2,306	2,137	1,330	895	922	1,019
D	1,250	2,037	1,974	1,483	2,451	3,357	3,985	3,834	1,764	1,492	1,491	1,489
BN	1,321	2,180	2,349	2,241	3,946	3,365	5,338	5,381	3,100	1,710	1,710	1,707
AN	1,227	3,263	3,115	5,448	6,120	6,276	5,291	6,160	3,040	1,772	2,479	1,754
W	1,494	3,411	6,876	8,259	8,997	7,137	6,755	7,905	5,850	2,768	4,389	1,811
All	1,319	2,538	3,574	4,126	5,027	4,634	4,964	5,369	3,333	1,856	2,439	1,584
75												
C	947	1,275	1,331	1,110	1,664	2,128	2,523	2,349	1,342	827	780	748
D	1,166	1,736	1,924	1,535	2,703	3,714	4,579	4,401	1,947	1,473	1,459	1,344
BN	1,319	1,826	2,082	2,317	3,981	3,919	6,142	6,048	3,349	1,710	1,709	1,676
AN	1,182	2,383	3,018	5,330	5,394	6,622	6,086	7,081	3,453	1,779	1,789	1,754
W	1,494	3,093	6,050	8,101	8,181	7,182	7,630	9,042	6,102	2,324	3,389	1,797
All	1,259	2,170	3,241	4,076	4,766	4,915	5,646	6,114	3,551	1,708	2,019	1,498

A1.12.3.2 American River above Confluence with Sacramento River (SWRCB American River)

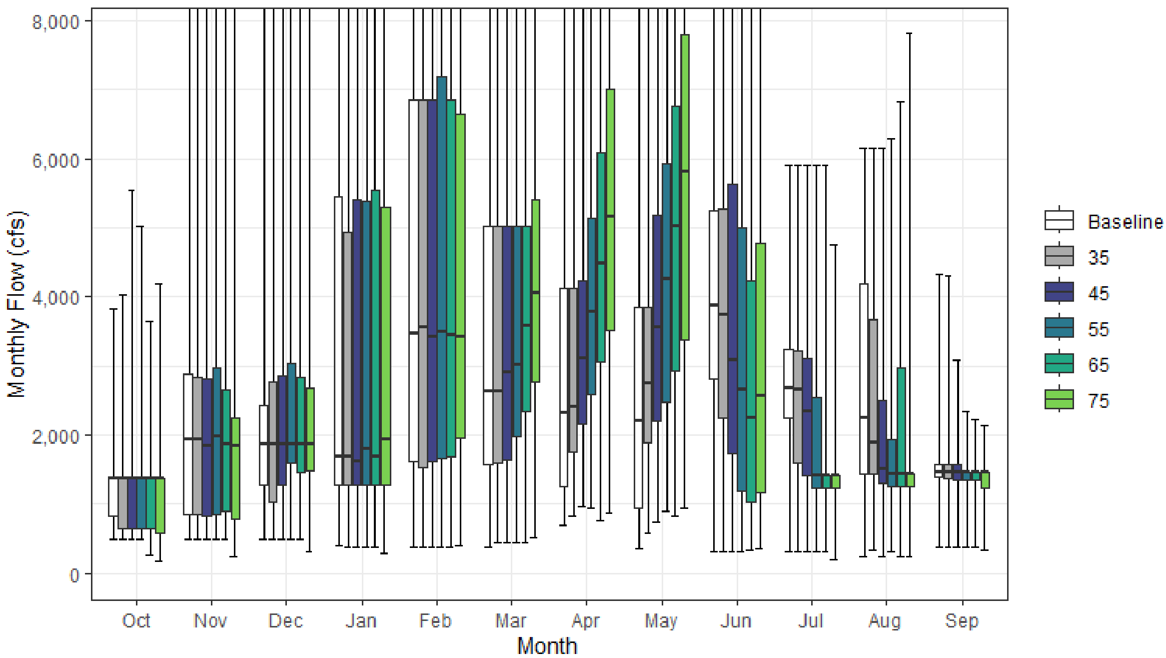

Figure A1-5. American River Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-16. Cumulative Distribution of Monthly Flow (cfs)—American River above Confluence with Sacramento River (SWRCB American River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	500	500	500	388	387	383	688	355	314	303	251	375	432
10%	503	501	528	561	1,277	831	814	807	1,056	1,166	1,028	977	917
25%	829	848	1,278	1,277	1,622	1,581	1,250	945	2,807	2,242	1,430	1,392	1,301
50%	1,365	1,934	1,865	1,680	3,471	2,637	2,321	2,209	3,877	2,686	2,244	1,457	1,819
75%	1,366	2,884	2,433	5,450	6,852	5,019	4,124	3,852	5,251	3,240	4,185	1,571	3,079
90%	1,402	4,478	8,700	9,007	11,538	8,970	6,819	7,510	7,558	3,815	4,510	1,910	4,072
100%	3,828	19,216	23,246	28,322	30,920	16,944	14,755	11,440	14,782	5,900	6,147	4,325	6,067
Mean	1,213	2,572	3,447	4,001	5,025	3,997	3,123	3,008	4,262	2,642	2,608	1,544	2,252
35													
0%	500	500	500	388	386	449	829	572	315	305	341	375	456
10%	500	500	566	704	1,277	1,068	1,412	1,173	845	1,009	792	724	897
25%	643	850	1,039	1,276	1,524	1,592	1,755	1,886	2,242	1,594	1,428	1,358	1,310
50%	1,365	1,926	1,865	1,680	3,547	2,636	2,411	2,740	3,728	2,649	1,890	1,457	1,885
75%	1,366	2,842	2,765	4,937	6,852	5,019	4,123	3,853	5,267	3,213	3,680	1,571	3,083
90%	1,589	4,080	8,632	9,003	11,535	9,132	6,741	7,510	7,205	4,206	4,448	2,434	4,058
100%	4,038	19,132	22,243	28,322	30,920	16,944	14,755	11,440	14,782	5,900	6,147	4,296	6,067
Mean	1,191	2,473	3,402	3,989	5,006	4,064	3,346	3,426	4,139	2,571	2,426	1,547	2,261
45													
0%	500	500	500	388	386	449	962	736	314	302	250	375	435
10%	500	500	641	844	1,279	1,372	1,718	1,388	897	624	697	551	906
25%	642	835	1,277	1,275	1,625	1,651	2,162	2,203	1,738	1,410	1,300	1,355	1,326
50%	1,365	1,836	1,863	1,621	3,432	2,910	3,099	3,561	3,084	2,345	1,501	1,456	1,887
75%	1,366	2,803	2,851	5,414	6,853	5,019	4,223	5,181	5,641	3,109	2,497	1,571	3,135
90%	1,440	3,968	8,673	9,004	11,537	9,131	6,702	7,513	7,855	4,196	4,392	2,386	3,981
100%	5,547	18,618	22,991	28,322	30,920	16,944	14,755	11,440	14,782	5,900	6,147	3,091	6,067
Mean	1,199	2,385	3,436	3,990	5,030	4,145	3,675	4,029	3,930	2,352	2,102	1,472	2,271
55													
0%	500	500	500	388	386	449	935	900	314	303	304	375	406
10%	500	522	650	928	1,279	1,588	1,952	1,539	754	578	513	585	943
25%	642	848	1,597	1,277	1,657	1,974	2,594	2,481	1,183	1,244	1,267	1,355	1,342
50%	1,365	1,974	1,864	1,796	3,488	3,023	3,786	4,259	2,655	1,404	1,428	1,455	1,879
75%	1,365	2,981	3,036	5,387	7,181	5,019	5,139	5,934	5,003	2,537	1,930	1,457	3,057
90%	1,401	4,357	8,705	9,004	11,537	9,133	6,791	7,795	7,595	3,435	4,407	1,569	4,053
100%	5,022	18,940	24,527	28,394	30,924	16,944	14,755	11,451	14,716	5,900	6,288	2,341	6,063
Mean	1,189	2,553	3,555	4,117	5,084	4,309	4,152	4,441	3,585	1,848	1,856	1,326	2,287
65													
0%	254	500	500	388	386	450	754	820	328	302	250	375	384
10%	500	537	669	1,009	1,280	1,621	2,307	1,654	639	468	697	826	976
25%	642	901	1,470	1,277	1,695	2,332	3,066	2,932	1,042	1,236	1,267	1,355	1,411
50%	1,365	1,861	1,864	1,685	3,434	3,570	4,475	5,033	2,248	1,404	1,426	1,455	1,933
75%	1,365	2,663	2,832	5,543	6,852	5,017	6,073	6,757	4,233	1,404	2,978	1,455	3,041
90%	1,440	4,007	8,439	9,064	11,085	9,134	7,123	9,211	5,815	2,502	4,764	1,569	4,002
100%	3,638	18,815	23,161	28,519	30,868	16,944	14,755	11,812	13,172	5,900	6,832	2,230	6,075
Mean	1,181	2,391	3,459	4,029	4,923	4,493	4,764	5,108	3,032	1,516	2,103	1,339	2,308
75													
0%	176	230	308	280	390	520	870	946	363	204	250	328	412
10%	417	500	636	795	1,376	1,797	2,662	1,908	676	416	420	471	991
25%	586	788	1,485	1,276	1,949	2,766	3,519	3,384	1,156	1,236	1,252	1,243	1,466
50%	1,365	1,836	1,864	1,936	3,416	4,051	5,163	5,808	2,573	1,404	1,426	1,455	2,084
75%	1,365	2,252	2,671	5,284	6,647	5,405	7,008	7,796	4,771	1,404	1,427	1,455	3,063
90%	1,411	3,531	6,988	9,026	9,610	9,358	8,219	9,978	6,688	1,772	3,128	1,569	3,866
100%	4,197	14,466	19,784	28,862	28,000	16,185	15,551	13,630	11,799	4,748	7,817	2,128	6,099
Mean	1,125	2,037	3,134	3,985	4,674	4,776	5,439	5,848	3,251	1,380	1,702	1,257	2,325

Table A1-17. Water Year Average of Monthly Flows (cfs)—American River above Confluence with Sacramento River (SWRCB American River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	1,128	1,361	1,130	1,178	1,262	838	1,486	1,045	1,676	886	1,034	923
D	1,074	2,072	1,797	1,230	2,326	2,411	1,555	1,379	3,191	2,571	1,976	1,345
BN	1,222	2,256	2,303	2,082	4,229	2,767	2,901	2,322	3,641	3,071	2,439	1,556
AN	1,162	3,254	2,933	5,200	6,478	6,092	3,067	3,171	4,078	2,963	2,676	2,308
W	1,379	3,494	6,840	8,241	8,927	6,729	5,337	5,627	6,906	3,238	3,999	1,692
All	1,213	2,572	3,447	4,001	5,025	3,997	3,123	3,008	4,262	2,642	2,608	1,544
35												
C	945	1,298	1,184	954	1,167	1,131	1,527	1,773	2,006	927	898	746
D	1,069	1,892	1,774	1,280	2,278	2,495	2,118	2,076	2,419	2,031	1,807	1,298
BN	1,260	2,235	2,260	2,099	4,282	2,768	3,127	2,727	3,523	3,197	2,279	1,500
AN	1,115	3,232	2,930	5,229	6,459	6,092	3,260	3,435	4,243	3,098	2,321	2,545
W	1,403	3,357	6,707	8,263	8,926	6,731	5,412	5,745	6,902	3,251	3,842	1,766
All	1,191	2,473	3,402	3,989	5,006	4,064	3,346	3,426	4,139	2,571	2,426	1,547
45												
C	1,034	1,266	1,219	1,027	1,372	1,310	1,697	1,858	1,724	804	689	717
D	1,055	1,765	1,830	1,271	2,343	2,686	2,640	3,021	2,023	1,650	1,348	1,288
BN	1,251	1,990	2,255	1,987	4,158	2,763	3,596	3,741	3,584	2,779	1,746	1,476
AN	1,095	3,084	2,990	5,257	6,442	6,095	3,628	4,170	3,970	2,993	2,096	2,111
W	1,409	3,389	6,737	8,289	8,930	6,762	5,580	6,064	6,734	3,173	3,642	1,738
All	1,199	2,385	3,436	3,990	5,030	4,145	3,675	4,029	3,930	2,352	2,102	1,472
55												
C	1,014	1,313	1,260	1,154	1,412	1,565	1,837	1,769	1,385	724	652	728
D	1,073	2,024	1,915	1,399	2,411	2,928	3,211	3,207	1,641	1,168	1,251	1,288
BN	1,196	2,161	2,275	2,185	4,424	2,964	4,346	4,327	3,364	1,463	1,470	1,475
AN	1,095	3,198	3,146	5,456	6,319	6,133	4,300	4,984	3,310	1,935	2,034	1,474
W	1,407	3,575	6,965	8,341	8,927	6,850	5,918	6,635	6,474	3,156	3,112	1,522
All	1,189	2,553	3,555	4,117	5,084	4,309	4,152	4,441	3,585	1,848	1,856	1,326
65												
C	1,018	1,307	1,318	1,092	1,508	1,769	2,128	1,942	1,107	656	675	834
D	1,116	1,895	1,889	1,385	2,351	3,224	3,795	3,623	1,519	1,166	1,205	1,288
BN	1,194	2,018	2,224	2,135	3,863	3,236	5,136	5,120	2,809	1,375	1,408	1,475
AN	1,095	3,113	3,003	5,407	6,035	6,110	5,082	5,881	2,741	1,416	2,127	1,474
W	1,345	3,260	6,728	8,145	8,847	6,973	6,542	7,580	5,457	2,368	3,954	1,507
All	1,181	2,391	3,459	4,029	4,923	4,493	4,764	5,108	3,032	1,516	2,103	1,339
75												
C	808	1,162	1,244	1,014	1,602	2,028	2,360	2,189	1,119	592	550	577
D	1,036	1,605	1,842	1,440	2,606	3,579	4,379	4,181	1,698	1,148	1,174	1,148
BN	1,198	1,676	1,964	2,217	3,910	3,784	5,926	5,775	3,054	1,375	1,407	1,446
AN	1,055	2,259	2,911	5,303	5,332	6,467	5,863	6,786	3,148	1,428	1,465	1,474
W	1,348	2,954	5,923	7,994	8,051	7,025	7,407	8,702	5,720	1,958	2,994	1,497
All	1,125	2,037	3,134	3,985	4,674	4,776	5,439	5,848	3,251	1,380	1,702	1,257

A1.12.3.3 Antelope Creek above Confluence with Sacramento River (SWRCB Antelope Creek)

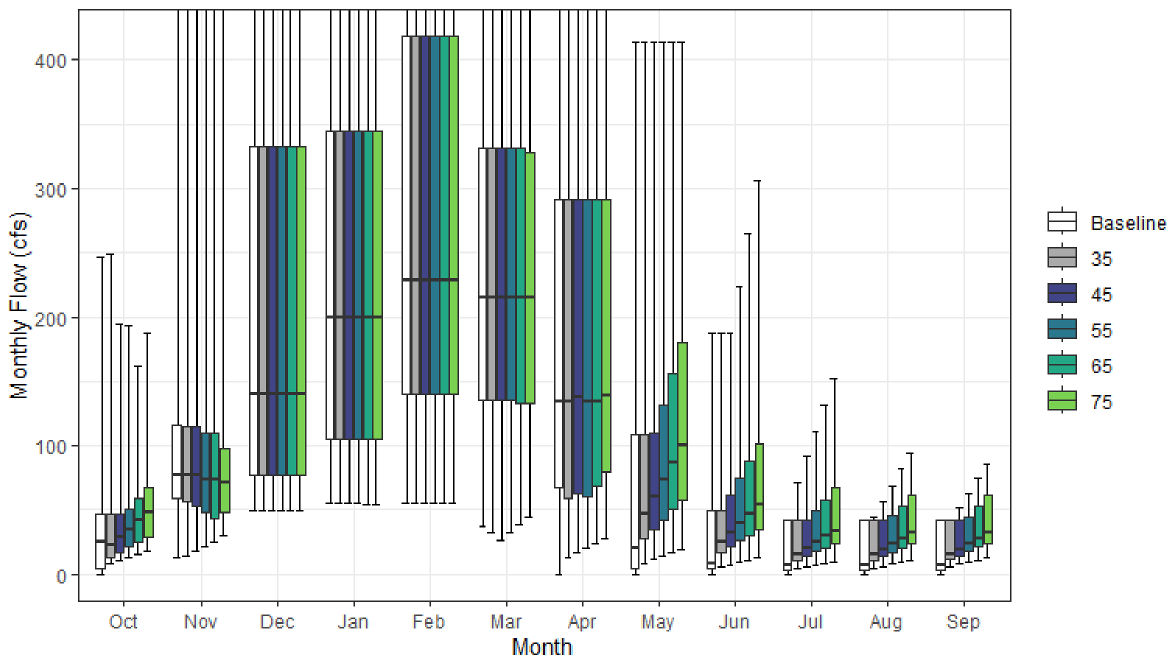

Figure A1-6. Antelope Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-18. Cumulative Distribution of Monthly Flow (cfs)—Antelope Creek above Confluence with Sacramento River (SWRCB Antelope Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	13	49	55	56	37	0	0	0	0	0	0	14
10%	0	48	64	70	97	100	8	0	0	0	0	0	33
25%	4	59	78	105	140	135	67	4	4	4	4	4	48
50%	25	78	140	200	229	215	134	20	8	7	7	7	76
75%	47	116	333	345	419	332	291	108	49	42	42	42	132
90%	66	186	496	564	601	524	425	193	49	42	42	42	177
100%	247	540	743	1,220	1,190	872	611	413	187	42	42	42	210
Mean	32	103	216	275	310	266	188	66	28	19	19	19	92
35													
0%	8	14	49	55	56	32	13	9	6	4	5	6	19
10%	10	40	64	70	97	91	28	19	12	8	8	8	37
25%	13	57	78	105	140	136	59	27	16	11	11	11	52
50%	22	77	140	200	229	215	134	47	26	16	15	15	80
75%	47	115	333	345	419	332	291	108	49	42	42	42	132
90%	52	186	496	564	601	524	425	193	70	42	42	42	177
100%	250	540	743	1,220	1,190	872	611	413	187	71	44	42	210
Mean	35	101	216	275	310	265	189	81	38	24	23	24	95
45													
0%	11	18	49	55	56	26	17	11	7	6	6	8	21
10%	13	27	64	70	97	99	35	24	15	10	10	10	39
25%	17	53	78	105	140	136	62	35	21	14	14	15	54
50%	29	77	140	200	229	215	137	60	33	20	19	19	79
75%	47	115	333	345	419	332	291	110	61	42	42	42	133
90%	52	183	496	564	601	524	425	193	90	46	42	42	180
100%	195	540	743	1,220	1,190	872	611	413	187	91	56	52	212
Mean	36	98	216	275	310	265	191	89	45	28	26	26	96
55													
0%	13	22	49	55	56	32	20	14	9	7	8	9	23
10%	16	30	64	70	97	92	43	30	18	12	12	13	40
25%	21	48	78	105	140	136	60	42	26	17	17	18	56
50%	35	74	140	200	229	215	134	74	40	25	23	23	82
75%	50	110	333	345	419	332	291	132	75	49	45	45	137
90%	58	183	496	564	601	524	425	193	110	56	51	50	183
100%	194	540	743	1,220	1,190	872	611	413	224	111	69	63	215
Mean	39	95	216	275	310	265	192	97	55	34	30	30	98
65													
0%	16	26	49	54	56	38	24	16	11	8	9	11	24
10%	19	34	64	70	97	99	51	35	21	15	14	15	41
25%	25	43	78	105	140	133	69	50	30	21	20	21	58
50%	42	73	140	200	229	215	134	87	47	29	28	28	84
75%	59	110	333	345	419	332	291	156	88	58	53	53	141
90%	64	162	496	564	601	524	425	209	130	67	60	59	187
100%	162	540	743	1,220	1,190	872	611	413	265	132	81	75	220
Mean	44	94	216	275	310	265	194	109	65	40	35	36	101
75													
0%	18	29	49	54	56	44	28	19	12	10	10	13	26
10%	22	39	64	70	97	99	59	40	25	17	17	17	43
25%	28	49	78	105	140	133	80	58	35	24	23	24	59
50%	48	71	140	200	229	215	139	100	55	34	32	32	88
75%	68	98	333	345	419	327	291	180	102	67	62	61	145
90%	74	162	496	564	601	524	425	241	150	77	69	68	189
100%	187	525	743	1,220	1,190	872	611	413	306	152	94	86	225
Mean	50	93	216	275	310	264	198	123	75	46	41	41	104

Table A1-19. Water Year Average of Monthly Flows (cfs)—Antelope Creek above Confluence with Sacramento River (SWRCB Antelope Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	16	51	102	99	115	108	22	2	0	0	0	0
D	24	82	143	126	192	206	85	7	4	4	4	5
BN	29	83	154	194	284	207	182	31	13	7	7	7
AN	34	105	179	361	416	355	238	83	42	34	34	34
W	49	157	386	494	472	393	336	159	65	42	42	42
All	32	103	216	275	310	266	188	66	28	19	19	19
35												
C	22	55	102	99	115	103	29	19	11	7	7	8
D	28	74	143	126	192	204	86	31	16	11	11	12
BN	29	83	154	194	284	207	181	56	28	16	14	14
AN	33	99	179	361	416	355	238	93	45	34	34	34
W	52	157	386	494	472	393	336	163	70	45	42	42
All	35	101	216	275	310	265	189	81	38	24	23	24
45												
C	24	47	102	99	115	103	36	24	14	9	9	10
D	30	75	143	126	192	205	86	40	21	14	14	15
BN	31	79	154	194	284	207	184	65	36	20	18	19
AN	36	97	179	361	416	355	238	104	54	36	35	35
W	51	153	386	494	472	393	336	169	82	50	44	43
All	36	98	216	275	310	265	191	89	45	28	26	26
55												
C	24	44	102	99	116	103	42	29	17	11	11	13
D	33	70	143	126	192	205	89	48	26	18	17	18
BN	36	77	154	194	284	208	181	78	44	25	22	23
AN	39	99	179	361	416	355	238	116	66	44	40	42
W	54	151	386	494	472	393	336	174	98	59	50	49
All	39	95	216	275	310	265	192	97	55	34	30	30
65												
C	31	45	102	99	115	105	48	35	20	14	13	15
D	38	72	143	126	192	204	93	57	31	21	20	22
BN	42	79	154	194	284	208	183	90	52	29	26	27
AN	42	85	179	361	416	355	238	131	78	51	47	49
W	57	149	386	494	472	393	336	188	116	70	59	57
All	44	94	216	275	310	265	194	109	65	40	35	36
75												
C	33	45	102	99	115	103	55	40	24	16	15	17
D	43	71	143	126	192	202	102	66	35	24	23	25
BN	49	78	154	194	284	205	187	103	59	34	30	31
AN	49	88	179	361	416	355	238	152	90	59	54	57
W	65	146	386	494	472	393	337	210	134	81	69	66
All	50	93	216	275	310	264	198	123	75	46	41	41

A1.12.3.4 Battle Creek above Confluence with Sacramento River (SWRCB Battle Creek)

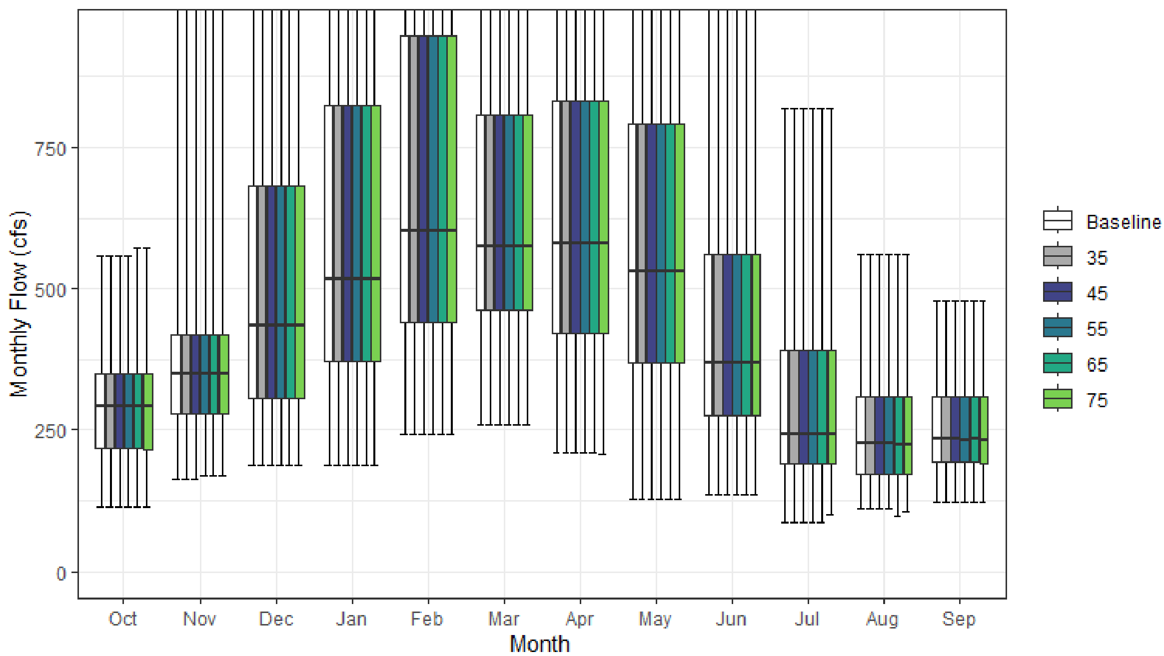

Figure A1-7. Battle Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-20. Cumulative Distribution of Monthly Flow (cfs)—Battle Creek above Confluence with Sacramento River (SWRCB Battle Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	113	163	188	189	243	259	209	127	135	86	112	122	161
10%	185	222	251	282	354	385	342	300	226	164	152	169	206
25%	218	278	307	371	440	463	420	370	275	192	173	193	255
50%	293	351	436	516	602	574	581	532	369	244	225	234	304
75%	350	419	682	825	947	807	831	792	559	392	308	309	427
90%	401	540	1,014	1,134	1,159	1,175	1,049	976	773	468	356	344	529
100%	559	1,041	1,561	2,384	1,886	1,772	1,707	1,590	1,462	819	562	480	678
Mean	288	376	544	657	723	681	649	590	448	295	243	251	346
35													
0%	113	163	188	189	243	259	209	127	135	86	112	122	161
10%	185	222	251	282	354	385	342	300	226	164	152	169	206
25%	218	278	307	371	440	463	420	370	275	192	173	193	255
50%	293	351	436	516	602	574	581	532	369	244	225	234	304
75%	350	419	682	825	947	807	831	792	559	392	308	309	427
90%	401	540	1,014	1,134	1,159	1,175	1,049	976	773	468	356	344	529
100%	559	1,041	1,561	2,384	1,886	1,772	1,707	1,590	1,462	819	562	480	678
Mean	288	376	544	657	723	681	649	590	448	295	243	251	346
45													
0%	113	163	188	189	243	259	209	127	135	86	112	122	161
10%	185	222	251	282	354	385	342	300	226	164	152	169	206
25%	218	278	307	371	440	463	420	370	275	192	173	193	255
50%	293	351	436	516	602	574	581	532	369	244	225	234	304
75%	350	419	682	825	947	807	831	792	559	392	308	309	427
90%	401	540	1,014	1,134	1,159	1,175	1,049	976	773	468	356	344	529
100%	559	1,041	1,561	2,384	1,886	1,772	1,707	1,590	1,462	819	562	480	678
Mean	288	376	544	657	723	681	649	590	448	295	243	251	346
55													
0%	113	169	188	189	243	259	209	127	135	86	112	122	161
10%	185	222	251	282	354	385	342	300	226	164	152	166	206
25%	218	278	307	371	440	463	420	370	275	192	173	193	255
50%	293	351	436	516	602	574	581	532	369	244	225	233	304
75%	350	419	682	825	947	807	831	792	559	392	308	309	427
90%	401	540	1,014	1,134	1,159	1,175	1,049	976	773	468	356	344	529
100%	559	1,041	1,561	2,384	1,886	1,772	1,707	1,590	1,462	819	562	480	678
Mean	288	376	544	657	723	681	649	590	448	295	243	251	346
65													
0%	113	169	188	189	243	259	209	127	135	86	97	121	161
10%	187	222	251	282	354	385	342	300	226	164	150	166	206
25%	218	278	307	371	440	463	420	370	275	192	173	193	255
50%	293	351	436	516	602	574	581	532	369	244	225	234	304
75%	350	419	682	825	947	807	831	792	559	392	308	309	427
90%	401	540	1,014	1,134	1,159	1,175	1,049	976	773	468	356	344	529
100%	573	1,041	1,561	2,384	1,886	1,772	1,707	1,590	1,462	819	562	480	678
Mean	289	376	544	657	723	681	649	590	448	295	243	250	346
75													
0%	113	169	188	189	243	259	206	127	135	100	107	122	160
10%	183	222	251	282	354	385	342	299	226	164	154	166	207
25%	216	278	307	371	440	463	420	370	275	192	173	192	255
50%	293	351	436	516	602	574	581	532	369	244	225	233	304
75%	350	419	682	825	947	807	831	792	559	392	308	309	427
90%	401	540	1,014	1,134	1,159	1,175	1,049	976	773	468	356	344	529
100%	573	1,041	1,561	2,384	1,886	1,772	1,707	1,590	1,462	819	562	480	678
Mean	288	376	544	657	723	681	649	590	448	295	244	250	346

Table A1-21. Water Year Average of Monthly Flows (cfs)—Battle Creek above Confluence with Sacramento River (SWRCB Battle Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	243	260	359	352	398	404	314	279	214	157	152	172
D	279	336	455	400	534	553	500	389	287	197	182	203
BN	272	323	423	521	638	553	630	532	394	244	206	217
AN	275	367	474	769	838	868	717	681	489	324	263	277
W	335	503	814	1,049	1,042	922	923	905	708	461	352	339
All	288	376	544	657	723	681	649	590	448	295	243	251
35												
C	243	260	359	352	398	404	314	279	214	157	152	172
D	279	336	455	400	534	553	500	389	287	197	182	203
BN	272	323	423	521	638	553	630	532	394	244	206	217
AN	275	367	474	769	838	868	717	681	489	324	263	277
W	335	503	814	1,049	1,042	922	923	905	708	461	352	339
All	288	376	544	657	723	681	649	590	448	295	243	251
45												
C	243	260	359	352	398	404	314	279	214	157	152	172
D	279	336	455	400	534	553	500	389	287	197	182	203
BN	272	323	423	521	638	553	630	532	394	244	206	217
AN	275	367	474	769	838	868	717	681	489	324	263	277
W	335	503	814	1,049	1,042	922	923	905	708	461	352	339
All	288	376	544	657	723	681	649	590	448	295	243	251
5												
C	243	260	359	352	398	404	314	279	214	157	152	171
D	279	336	455	400	534	553	500	389	287	197	182	202
BN	272	323	423	521	638	553	630	532	394	244	206	217
AN	275	367	474	769	838	868	717	681	489	324	263	277
W	336	503	814	1,049	1,042	922	923	905	708	461	352	339
All	288	376	544	657	723	681	649	590	448	295	243	251
65												
C	244	260	359	352	398	404	314	279	214	157	150	171
D	279	336	455	400	534	553	500	389	287	197	182	202
BN	272	323	423	521	638	553	630	532	394	244	206	216
AN	275	367	474	769	838	868	717	681	489	324	263	277
W	336	503	814	1,049	1,042	922	923	905	708	461	352	339
All	289	376	544	657	723	681	649	590	448	295	243	250
75												
C	243	260	359	352	398	404	313	279	214	157	154	169
D	279	336	455	400	534	553	500	389	287	197	182	202
BN	271	323	423	521	638	553	630	532	394	244	206	215
AN	273	367	474	769	838	868	717	681	489	324	263	277
W	336	503	814	1,049	1,042	922	923	905	708	461	352	339
All	288	376	544	657	723	681	649	590	448	295	244	250

A1.12.3.5 Bear River above Confluence with Feather River (SWRCB Bear River)

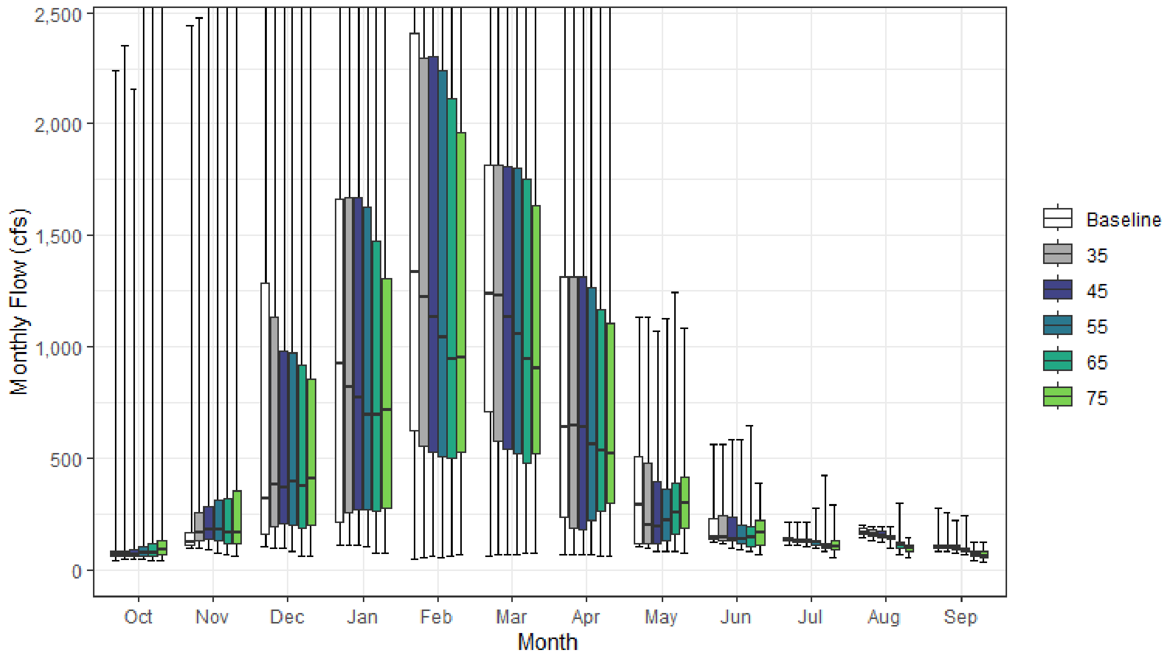

Figure A1-8. Bear River Streamflow above Confluence with Feather River Monthly Boxplot

Table A1-22. Cumulative Distribution of Monthly Flow (cfs)—Bear River above Confluence with Feather River (SWRCB Bear River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	42	94	99	108	47	62	70	102	120	111	142	79	74
10%	52	101	119	157	258	317	104	108	128	123	148	93	136
25%	59	108	155	212	628	709	235	120	137	127	156	96	220
50%	67	123	315	921	1,331	1,237	639	290	147	134	163	104	363
75%	81	165	1,289	1,659	2,407	1,819	1,316	508	227	142	188	111	703
90%	107	491	2,842	3,508	3,700	3,067	1,907	765	372	145	194	119	868
100%	2,242	2,439	4,566	6,016	7,649	5,445	4,271	1,135	563	214	201	277	1,210
Mean	97	255	896	1,323	1,699	1,444	902	362	198	135	169	106	454
35													
0%	46	94	95	108	57	70	68	93	113	111	129	79	74
10%	55	115	142	190	244	227	97	106	124	119	144	89	134
25%	60	131	195	257	555	574	187	117	133	126	152	93	214
50%	66	163	382	816	1,221	1,228	646	201	143	133	158	98	354
75%	82	256	1,134	1,672	2,295	1,817	1,316	479	242	138	179	107	699
90%	107	469	2,665	3,383	3,644	3,059	1,872	755	386	142	187	114	861
100%	2,349	2,474	4,509	6,016	7,649	5,445	4,271	1,135	563	213	195	253	1,196
Mean	99	302	881	1,308	1,651	1,417	887	333	198	133	163	102	448
45													
0%	48	89	97	112	63	69	67	84	98	100	125	75	74
10%	55	113	150	203	252	262	106	104	119	116	137	86	140
25%	62	135	206	268	530	539	180	120	129	124	146	90	198
50%	68	178	367	768	1,135	1,135	637	190	141	131	154	96	342
75%	88	286	981	1,672	2,304	1,806	1,316	394	231	136	169	106	693
90%	113	536	2,579	3,385	3,644	3,067	1,860	747	385	142	183	110	850
100%	2,160	2,568	4,454	6,016	7,643	5,431	4,279	1,072	584	214	196	221	1,190
Mean	100	329	853	1,293	1,626	1,399	870	317	197	132	158	99	442
55													
0%	48	73	83	101	57	67	66	81	91	94	94	68	69
10%	55	101	152	198	259	253	130	102	103	103	122	72	139
25%	62	132	199	272	508	517	220	132	119	112	135	81	185
50%	72	177	395	691	1,046	1,055	561	221	136	122	143	88	319
75%	104	309	971	1,626	2,238	1,802	1,265	363	201	129	151	98	694
90%	119	500	2,302	3,249	3,585	3,050	1,842	693	417	141	163	105	849
100%	2,899	3,013	4,279	6,021	7,632	5,431	4,297	1,125	580	278	196	243	1,189
Mean	112	337	816	1,247	1,578	1,349	867	316	191	127	143	91	430
65													
0%	41	69	60	77	63	71	61	83	83	78	70	42	63
10%	52	86	133	194	256	257	153	100	94	87	85	54	137
25%	62	116	187	259	502	478	260	157	103	93	92	64	175
50%	76	165	374	697	948	942	532	253	144	100	109	71	300
75%	115	319	920	1,474	2,117	1,751	1,171	390	194	117	124	79	661
90%	138	868	2,244	3,008	3,431	2,824	1,885	710	282	148	130	92	802
100%	2,792	2,553	4,018	5,906	7,069	5,463	4,264	1,245	643	421	299	124	1,175
Mean	117	328	767	1,174	1,476	1,283	848	330	178	117	110	72	407
75													
0%	37	62	58	75	69	76	58	76	69	55	57	34	62
10%	52	82	129	195	273	291	175	119	93	83	72	47	144
25%	64	114	199	274	526	522	294	187	110	90	81	52	192
50%	88	167	408	712	955	904	523	298	166	103	98	64	286
75%	133	352	852	1,306	1,964	1,638	1,102	414	222	128	111	78	593
90%	160	763	1,951	2,729	3,082	2,629	1,820	666	305	163	124	99	753
100%	3,080	2,569	3,644	5,787	6,291	5,382	4,209	1,086	391	287	147	120	1,087
Mean	131	329	733	1,073	1,383	1,231	814	345	176	115	97	68	389

Table A1-23. Water Year Average of Monthly Flows (cfs)—Bear River above Confluence with Feather River (SWRCB Bear River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	67	139	222	244	439	393	136	112	135	142	186	109
D	71	161	418	428	853	984	440	209	147	144	193	117
BN	70	137	529	691	1,521	1,100	854	313	175	128	157	99
AN	73	330	712	1,981	2,362	1,962	1,004	473	213	130	152	98
W	161	428	1,918	2,674	2,831	2,339	1,643	592	279	132	157	103
All	97	255	896	1,323	1,699	1,444	902	362	198	135	169	106
35												
C	69	165	273	266	432	352	117	110	127	135	173	101
D	71	179	466	440	757	912	400	166	143	140	186	113
BN	71	177	519	692	1,431	1,081	851	247	173	126	150	96
AN	73	371	694	1,896	2,306	1,950	981	451	223	129	147	96
W	164	515	1,819	2,640	2,828	2,342	1,648	578	281	132	156	101
All	99	302	881	1,308	1,651	1,417	887	333	198	133	163	102
45												
C	73	166	290	292	417	367	121	111	117	125	160	92
D	71	191	453	443	722	876	365	171	139	138	181	110
BN	75	188	512	659	1,401	1,034	817	221	178	126	146	94
AN	85	394	686	1,885	2,252	1,937	961	420	226	128	143	94
W	160	578	1,734	2,599	2,821	2,334	1,643	553	284	135	153	99
All	100	329	853	1,293	1,626	1,399	870	317	197	132	158	99
55												
C	70	135	287	288	388	348	141	114	110	108	139	81
D	72	203	451	400	680	789	367	178	120	120	155	96
BN	80	190	504	625	1,325	959	815	248	150	118	134	86
AN	84	441	598	1,806	2,184	1,874	936	360	212	122	132	88
W	195	592	1,656	2,533	2,784	2,317	1,631	550	304	151	146	96
All	112	337	816	1,247	1,578	1,349	867	316	191	127	143	91
65												
C	72	124	277	288	402	364	166	125	109	96	119	66
D	77	244	434	388	655	743	364	205	112	103	126	79
BN	85	178	477	614	1,160	811	783	271	143	93	90	66
AN	93	426	569	1,688	1,941	1,757	835	362	178	110	99	69
W	201	548	1,541	2,358	2,660	2,264	1,621	554	287	157	111	76
All	117	328	767	1,174	1,476	1,283	848	330	178	117	110	72
75												
C	78	122	286	299	437	396	193	148	117	89	100	53
D	85	250	439	396	711	760	397	241	123	102	109	69
BN	98	207	488	636	1,129	802	722	313	161	98	82	65
AN	106	418	598	1,590	1,770	1,513	746	411	203	120	88	67
W	226	535	1,398	2,039	2,382	2,171	1,544	520	245	148	99	79
All	131	329	733	1,073	1,383	1,231	814	345	176	115	97	68

A1.12.3.6 Bear River below Camp Far West Reservoir (SWRCB Camp Far West)

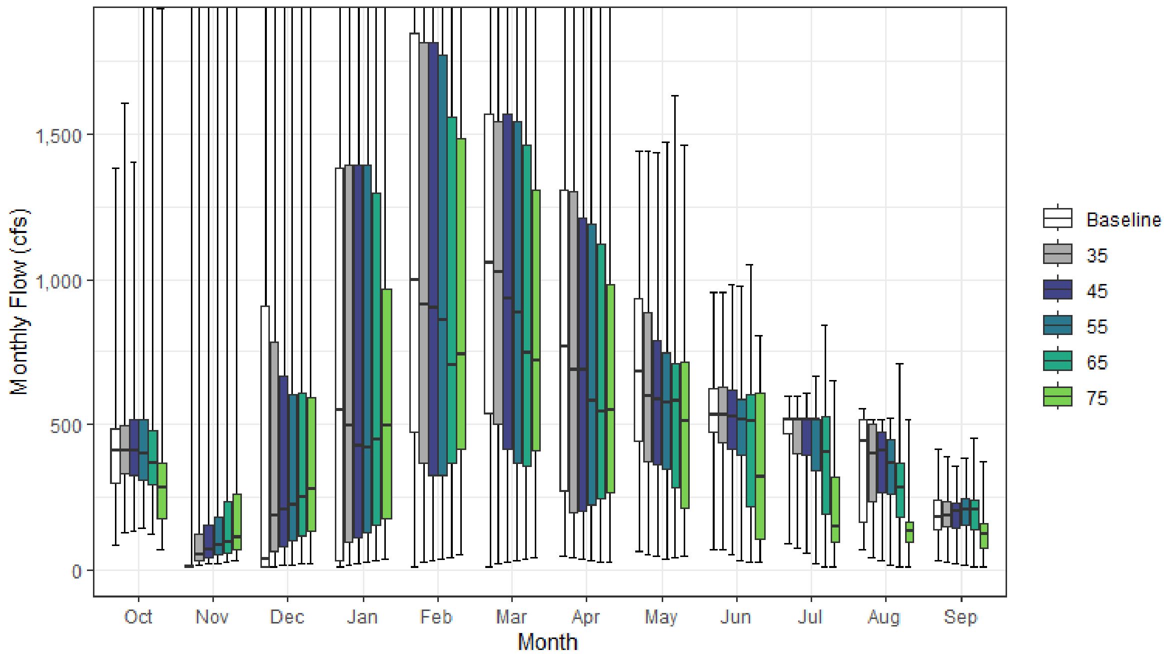

Figure A1-9. Bear River Streamflow below Camp Far West Monthly Boxplot

Table A1-24. Cumulative Distribution of Monthly Flow (cfs)—Bear River below Camp Far West (SWRCB Camp Far West)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	81	10	10	10	10	10	44	63	68	87	66	31	32
10%	222	10	10	10	63	238	135	317	329	286	119	108	150
25%	296	10	10	30	476	537	269	443	474	470	163	139	231
50%	411	10	34	551	999	1,056	767	685	530	515	442	183	392
75%	484	10	905	1,383	1,847	1,569	1,310	933	624	515	515	239	709
90%	515	350	2,314	2,697	2,894	2,594	1,813	1,125	767	534	515	267	834
100%	1,385	2,024	3,876	4,605	6,330	4,155	3,722	1,440	957	596	552	416	1,130
Mean	390	122	615	973	1,296	1,188	900	713	541	464	368	188	467
35													
0%	127	14	10	17	23	20	39	54	67	75	44	23	38
10%	279	19	39	58	119	159	125	291	314	278	136	116	154
25%	330	31	63	96	366	500	199	374	439	401	233	148	221
50%	412	52	184	496	913	1,025	686	595	530	515	398	188	383
75%	497	121	783	1,393	1,817	1,545	1,304	887	630	515	499	231	708
90%	515	270	2,100	2,671	2,887	2,593	1,796	1,107	776	534	515	266	825
100%	1,607	2,062	3,516	4,605	6,330	4,154	3,722	1,440	957	595	515	391	1,116
Mean	415	176	605	961	1,251	1,161	875	658	531	455	360	193	459
45													
0%	134	18	12	21	30	26	34	45	52	59	32	22	35
10%	284	24	50	75	145	180	129	268	279	276	165	120	148
25%	323	40	81	110	327	415	199	363	418	392	267	143	234
50%	411	67	208	428	902	935	689	584	530	515	408	204	375
75%	515	156	665	1,393	1,817	1,569	1,213	789	621	515	473	228	699
90%	521	396	2,011	2,658	2,886	2,594	1,759	1,097	777	534	515	266	815
100%	1,403	2,166	3,401	4,605	6,330	4,140	3,722	1,438	980	605	515	358	1,108
Mean	422	208	581	951	1,231	1,143	847	622	520	451	364	195	453
55													
0%	142	21	15	26	37	32	28	35	32	19	17	14	28
10%	282	29	61	93	168	196	138	230	216	238	161	114	149
25%	308	49	99	129	324	368	221	347	393	339	258	152	218
50%	398	82	221	422	856	884	579	574	515	515	366	207	364
75%	515	179	602	1,393	1,770	1,541	1,193	745	585	515	446	242	692
90%	545	350	1,700	2,649	2,890	2,527	1,746	1,071	804	534	515	271	813
100%	2,188	2,629	3,263	4,611	6,330	4,140	3,722	1,476	978	664	524	385	1,110
Mean	427	230	559	918	1,204	1,094	837	601	502	434	346	199	442
65													
0%	119	25	17	31	43	37	25	41	25	10	10	10	25
10%	268	35	72	108	198	215	148	142	112	117	121	85	124
25%	290	58	115	153	365	354	246	280	216	189	179	137	197
50%	370	97	248	449	706	749	543	581	512	406	284	207	338
75%	481	234	607	1,298	1,561	1,463	1,119	712	604	526	368	240	650
90%	550	771	1,717	2,493	2,735	2,335	1,774	1,067	692	561	492	272	784
100%	2,087	2,229	3,060	4,566	5,879	4,173	3,669	1,636	1,051	842	708	452	1,107
Mean	399	249	547	880	1,144	1,032	816	568	451	365	280	193	416
75													
0%	70	29	20	36	50	43	25	48	25	10	10	10	27
10%	130	40	83	124	225	248	163	92	52	41	47	29	113
25%	176	67	133	176	415	409	266	211	107	95	97	75	173
50%	280	111	278	498	742	721	549	514	317	148	134	122	277
75%	365	259	593	967	1,486	1,307	982	713	605	319	166	158	560
90%	457	680	1,544	1,949	2,443	2,027	1,698	952	696	559	223	209	710
100%	1,931	2,280	2,696	4,500	5,140	4,135	3,599	1,462	804	652	514	373	1,020
Mean	302	264	528	796	1,072	984	771	506	354	222	142	123	364

Table A1-25. Water Year Average of Monthly Flows (cfs)—Bear River below Camp Far West (SWRCB Camp Far West)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	325	38	37	66	252	268	159	328	346	356	173	118
D	364	41	195	239	615	793	464	541	475	425	275	158
BN	386	20	331	448	1,109	914	875	702	552	482	399	186
AN	373	187	466	1,474	1,788	1,652	1,026	867	605	515	435	199
W	455	263	1,475	2,113	2,268	1,946	1,585	990	661	519	495	243
All	390	122	615	973	1,296	1,188	900	713	541	464	368	188
35												
C	371	69	96	94	250	227	139	286	318	328	179	136
D	384	65	252	255	523	719	415	444	452	423	293	164
BN	404	65	324	453	1,020	894	852	611	550	459	376	190
AN	386	235	453	1,390	1,733	1,640	986	834	606	515	404	203
W	479	357	1,376	2,080	2,266	1,949	1,581	971	660	517	479	242
All	415	176	605	961	1,251	1,161	875	658	531	455	360	193
45												
C	380	74	120	127	241	245	131	259	283	304	188	130
D	378	84	248	264	496	684	368	416	424	414	317	173
BN	433	81	322	424	997	846	806	561	549	467	386	200
AN	417	262	450	1,387	1,680	1,626	959	780	613	516	408	206
W	472	426	1,293	2,040	2,261	1,941	1,567	940	660	520	462	237
All	422	208	581	951	1,231	1,143	847	622	520	451	364	195
55												
C	366	61	140	147	246	229	140	225	238	250	178	130
D	365	111	266	238	480	598	364	403	389	372	294	187
BN	413	95	329	406	951	771	798	568	517	458	387	215
AN	420	318	370	1,318	1,623	1,563	923	707	592	515	380	229
W	517	452	1,225	1,982	2,235	1,923	1,551	924	682	530	434	222
All	427	230	559	918	1,204	1,094	837	601	502	434	346	199
65												
C	337	70	154	173	281	253	151	147	132	120	121	98
D	355	177	279	255	489	559	349	353	270	242	212	177
BN	374	113	335	429	845	626	774	555	484	363	265	215
AN	376	342	379	1,247	1,437	1,447	828	673	570	461	350	218
W	489	442	1,160	1,843	2,154	1,871	1,544	918	685	548	397	232
All	399	249	547	880	1,144	1,032	816	568	451	365	280	193
75												
C	243	81	178	200	324	292	161	114	81	51	63	44
D	243	195	299	277	556	584	363	261	137	111	115	95
BN	273	154	358	464	833	624	687	458	266	163	129	131
AN	281	345	424	1,166	1,296	1,201	731	682	543	233	163	164
W	403	448	1,036	1,547	1,907	1,781	1,472	854	636	429	202	163
All	302	264	528	796	1,072	984	771	506	354	222	142	123

A1.12.3.7 Big Chico Creek above Confluence with Sacramento River (SWRCB Big Chico)

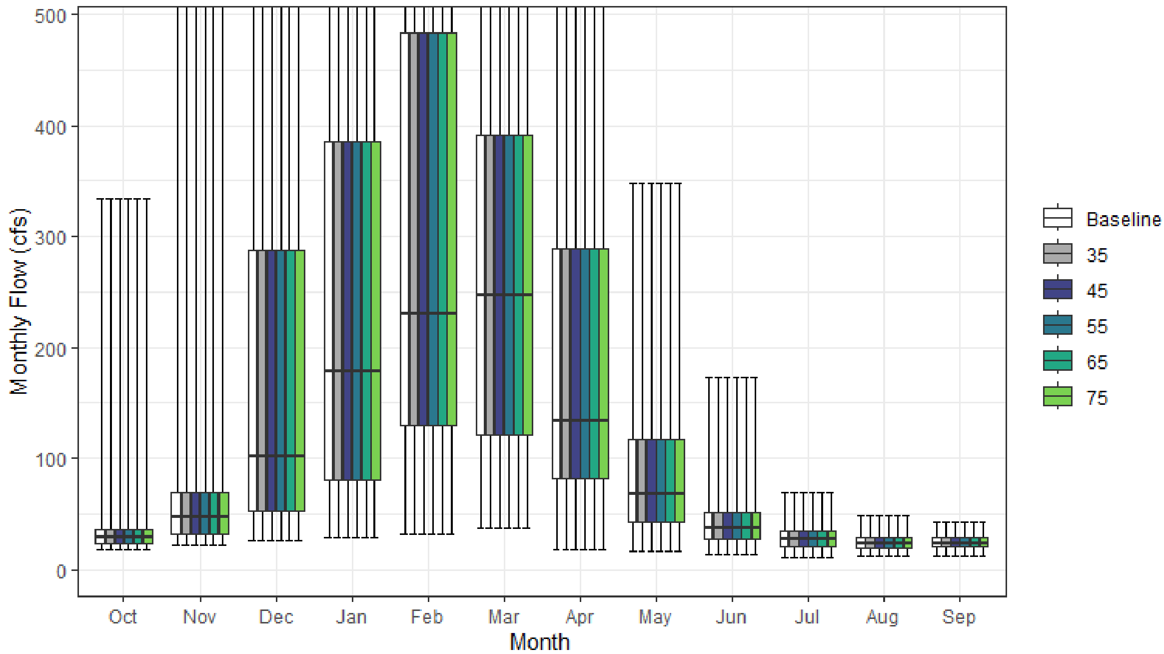

Figure A1-10. Big Chico Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-26. Cumulative Distribution of Monthly Flow (cfs)—Big Chico Creek above Confluence with Sacramento River (SWRCB Big Chico)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	18	22	26	29	31	38	18	16	13	11	12	12	18
10%	21	26	33	48	82	86	58	30	20	17	16	17	38
25%	24	32	53	80	130	122	82	42	28	21	20	20	53
50%	29	47	102	178	230	247	134	68	37	27	23	24	83
75%	36	69	287	385	483	391	290	117	51	34	29	29	135
90%	43	140	510	691	737	628	451	201	74	42	34	34	200
100%	334	651	1,006	1,503	1,421	1,332	875	348	173	70	48	43	246
Mean	34	73	196	289	347	312	207	93	44	29	25	25	100
35													
0%	18	22	26	29	31	38	18	16	13	11	12	12	18
10%	21	26	33	48	82	86	58	30	20	17	16	17	38
25%	24	32	53	80	130	122	82	42	28	21	20	20	53
50%	29	47	102	178	230	247	134	68	37	27	23	24	83
75%	36	69	287	385	483	391	290	117	51	34	29	29	135
90%	43	140	510	691	737	628	451	201	74	42	34	34	200
100%	334	651	1,006	1,503	1,421	1,332	875	348	173	70	48	43	246
Mean	34	73	196	289	347	312	207	93	44	29	25	25	100
45													
0%	18	22	26	29	31	38	18	16	13	11	12	12	18
10%	21	26	33	48	82	86	58	30	20	17	16	17	38
25%	24	32	53	80	130	122	82	42	28	21	20	20	53
50%	29	47	102	178	230	247	134	68	37	27	23	24	83
75%	36	69	287	385	483	391	290	117	51	34	29	29	135
90%	43	140	510	691	737	628	451	201	74	42	34	34	200
100%	334	651	1,006	1,503	1,421	1,332	875	348	173	70	48	43	246
Mean	34	73	196	289	347	312	207	93	44	29	25	25	100
55													
0%	18	22	26	29	31	38	18	16	13	11	12	12	18
10%	21	26	33	48	82	86	58	30	20	17	16	17	38
25%	24	32	53	80	130	122	82	42	28	21	20	20	53
50%	29	47	102	178	230	247	134	68	37	27	23	24	83
75%	36	69	287	385	483	391	290	117	51	34	29	29	135
90%	43	140	510	691	737	628	451	201	74	42	34	34	200
100%	334	651	1,006	1,503	1,421	1,332	875	348	173	70	48	43	246
Mean	34	73	196	289	347	312	207	93	44	29	25	25	100
65													
0%	18	22	26	29	31	38	18	16	13	11	12	12	18
10%	21	26	33	48	82	86	58	30	20	17	16	17	38
25%	24	32	53	80	130	122	82	42	28	21	20	20	53
50%	29	47	102	178	230	247	134	68	37	27	23	24	83
75%	36	69	287	385	483	391	290	117	51	34	29	29	135
90%	43	140	510	691	737	628	451	201	74	42	34	34	200
100%	334	651	1,006	1,503	1,421	1,332	875	348	173	70	48	43	246
Mean	34	73	196	289	347	312	207	93	44	29	25	25	100
75													
0%	18	22	26	29	31	38	18	16	13	11	12	12	18
10%	21	26	33	48	82	86	58	30	20	17	16	17	38
25%	24	32	53	80	130	122	82	42	28	21	20	20	53
50%	29	47	102	178	230	247	134	68	37	27	23	24	83
75%	36	69	287	385	483	391	290	117	51	34	29	29	135
90%	43	140	510	691	737	628	451	201	74	42	34	34	200
100%	334	651	1,006	1,503	1,421	1,332	875	348	173	70	48	43	246
Mean	34	73	196	289	347	312	207	93	44	29	25	25	100

Table A1-27. Water Year Average of Monthly Flows (cfs)—Big Chico Creek above Confluence with Sacramento River (SWRCB Big Chico)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	26	31	70	74	108	111	58	35	21	16	16	17
D	29	55	121	103	180	208	118	55	30	22	20	21
BN	30	52	116	178	316	223	201	78	40	26	23	23
AN	34	71	144	393	469	390	221	116	49	32	27	27
W	44	121	390	569	566	518	350	152	67	40	33	31
All	34	73	196	289	347	312	207	93	44	29	25	25
35												
C	26	31	70	74	108	111	58	35	21	16	16	17
D	29	55	121	103	180	208	118	55	30	22	20	21
BN	30	52	116	178	316	223	201	78	40	26	23	23
AN	34	71	144	393	469	390	221	116	49	32	27	27
W	44	121	390	569	566	518	350	152	67	40	33	31
All	34	73	196	289	347	312	207	93	44	29	25	25
45												
C	26	31	70	74	108	111	58	35	21	16	16	17
D	29	55	121	103	180	208	118	55	30	22	20	21
BN	30	52	116	178	316	223	201	78	40	26	23	23
AN	34	71	144	393	469	390	221	116	49	32	27	27
W	44	121	390	569	566	518	350	152	67	40	33	31
All	34	73	196	289	347	312	207	93	44	29	25	25
55												
C	26	31	70	74	108	111	58	35	21	16	16	17
D	29	55	121	103	180	208	118	55	30	22	20	21
BN	30	52	116	178	316	223	201	78	40	26	23	23
AN	34	71	144	393	469	390	221	116	49	32	27	27
W	44	121	390	569	566	518	350	152	67	40	33	31
All	34	73	196	289	347	312	207	93	44	29	25	25
65												
C	26	31	70	74	108	111	58	35	21	16	16	17
D	29	55	121	103	180	208	118	55	30	22	20	21
BN	30	52	116	178	316	223	201	78	40	26	23	23
AN	34	71	144	393	469	390	221	116	49	32	27	27
W	44	121	390	569	566	518	350	152	67	40	33	31
All	34	73	196	289	347	312	207	93	44	29	25	25
75												
C	26	31	70	74	108	111	58	35	21	16	16	17
D	29	55	121	103	180	208	118	55	30	22	20	21
BN	30	52	116	178	316	223	201	78	40	26	23	23
AN	34	71	144	393	469	390	221	116	49	32	27	27
W	44	121	390	569	566	518	350	152	67	40	33	31
All	34	73	196	289	347	312	207	93	44	29	25	25

A1.12.3.8 Butte Creek above Butte Slough (SWRCB Butte Creek)

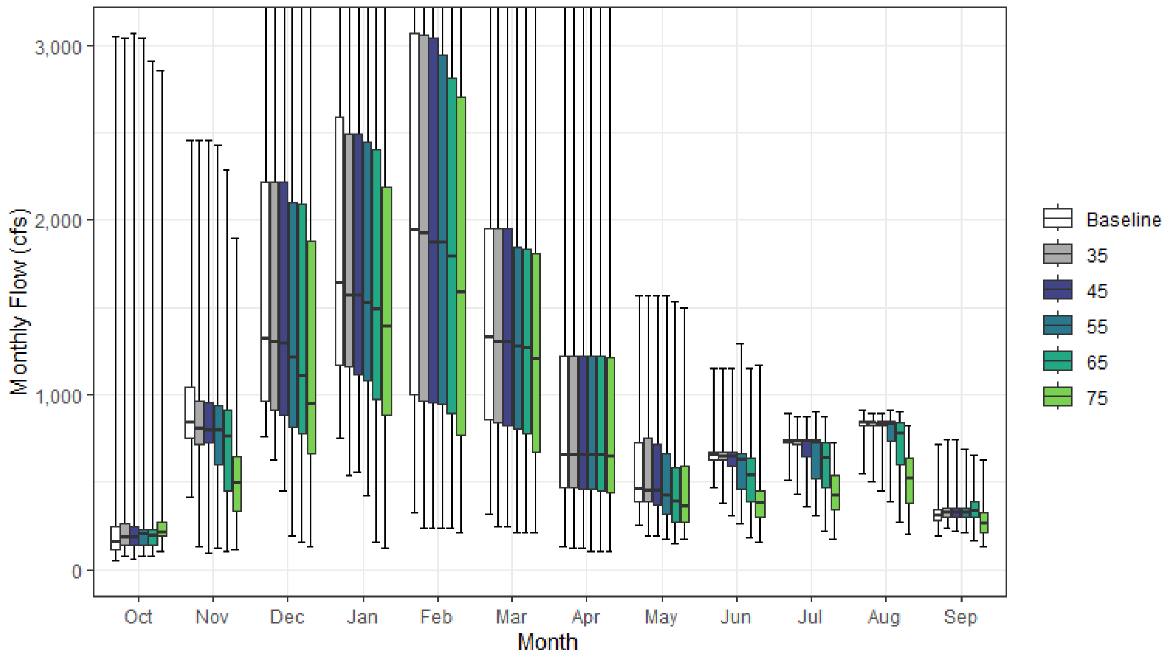

Figure A1-11. Butte Creek Streamflow above Butte Slough Monthly Boxplot

Table A1-28. Cumulative Distribution of Monthly Flow (cfs)—Butte Creek above Butte Slough (SWRCB Butte Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	54	413	758	754	326	317	130	256	468	510	552	196	327
10%	94	696	836	913	579	533	325	363	601	659	756	253	502
25%	115	749	969	1,171	998	855	464	391	631	729	826	285	576
50%	161	839	1,316	1,643	1,944	1,328	657	456	652	736	837	309	704
75%	248	1,048	2,212	2,587	3,067	1,948	1,222	721	670	745	848	345	955
90%	358	1,244	3,232	3,781	4,598	2,944	1,755	1,059	784	769	858	367	1,121
100%	3,048	2,458	5,257	7,888	8,408	6,622	3,531	1,568	1,152	895	909	717	1,526
Mean	227	928	1,733	2,088	2,301	1,589	896	588	671	727	820	322	774
35													
0%	74	134	628	535	240	245	122	193	378	429	505	241	283
10%	103	576	803	842	548	516	323	297	449	524	668	283	480
25%	136	713	915	1,156	962	842	463	384	623	720	826	300	560
50%	180	806	1,301	1,566	1,925	1,305	657	452	647	736	837	325	691
75%	261	962	2,212	2,492	3,059	1,948	1,223	755	670	745	844	349	951
90%	355	1,245	3,217	3,781	4,544	2,891	1,749	1,106	792	759	854	373	1,121
100%	3,044	2,454	5,193	7,795	8,408	6,586	3,530	1,568	1,152	879	890	739	1,496
Mean	240	883	1,692	2,052	2,271	1,567	895	585	649	700	806	337	762
45													
0%	60	90	450	552	239	245	123	194	309	357	452	220	291
10%	105	440	758	838	528	508	323	281	437	495	614	283	456
25%	137	724	885	1,113	954	823	457	374	590	646	823	302	542
50%	182	799	1,293	1,570	1,869	1,300	657	447	642	734	836	326	686
75%	248	953	2,212	2,492	3,038	1,948	1,223	712	670	745	848	349	950
90%	355	1,245	3,214	3,781	4,536	2,878	1,749	1,091	788	766	854	369	1,121
100%	3,065	2,458	5,250	7,746	8,408	6,607	3,530	1,567	1,152	879	892	739	1,466
Mean	241	865	1,663	2,031	2,250	1,561	893	570	634	685	800	337	753
55													
0%	75	123	188	425	238	213	107	179	262	310	387	213	247
10%	112	391	675	746	481	485	320	257	374	449	579	277	438
25%	138	602	810	1,084	943	800	457	320	456	518	730	299	527
50%	198	795	1,210	1,525	1,872	1,279	655	427	630	727	833	324	670
75%	228	941	2,096	2,449	2,940	1,840	1,223	663	667	742	848	354	923
90%	314	1,278	3,192	3,695	4,532	2,870	1,698	1,038	786	767	858	425	1,120
100%	3,042	2,430	5,199	7,614	8,370	6,495	3,530	1,567	1,289	904	910	692	1,445
Mean	237	827	1,600	1,981	2,209	1,545	886	543	597	648	771	339	732
65													
0%	81	104	157	159	238	212	106	148	182	215	276	167	236
10%	101	325	601	682	451	478	317	230	317	384	474	258	390
25%	136	449	780	975	889	779	451	272	391	471	602	299	490
50%	191	760	1,109	1,490	1,786	1,266	652	384	542	638	775	337	624
75%	225	914	2,090	2,398	2,811	1,834	1,223	586	641	724	840	384	873
90%	323	1,173	3,109	3,683	4,556	2,857	1,732	1,034	748	760	861	442	1,105
100%	2,912	2,289	5,131	7,157	8,370	6,484	3,528	1,532	1,152	879	905	657	1,407
Mean	231	749	1,533	1,897	2,149	1,522	878	508	530	588	714	346	699
75													
0%	107	109	131	124	207	206	105	171	153	178	198	128	198
10%	159	201	406	538	379	444	306	237	245	279	304	172	318
25%	195	334	665	882	772	676	445	275	297	341	381	214	421
50%	214	498	943	1,387	1,584	1,201	642	357	381	424	517	268	533
75%	271	648	1,875	2,191	2,701	1,808	1,210	593	447	537	634	322	807
90%	374	785	2,696	3,422	4,352	2,845	1,664	949	605	647	741	398	1,013
100%	2,855	1,897	4,998	6,915	8,253	6,450	3,516	1,497	1,171	729	820	631	1,372
Mean	270	539	1,314	1,727	1,983	1,472	862	466	402	442	511	283	617

Table A1-29. Water Year Average of Monthly Flows (cfs)—Butte Creek above Butte Slough (SWRCB Butte Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	140	738	1,214	1,214	1,158	904	319	347	563	622	707	243
D	163	858	1,432	1,223	1,455	1,244	594	429	642	734	832	344
BN	193	846	1,333	1,715	2,270	1,267	893	538	668	740	837	319
AN	203	881	1,549	2,703	3,084	1,874	1,011	677	669	736	839	353
W	353	1,152	2,557	3,168	3,231	2,287	1,385	828	753	767	854	335
All	227	928	1,733	2,088	2,301	1,589	896	588	671	727	820	322
35												
C	178	655	1,119	1,140	1,116	853	312	286	457	517	638	327
D	185	785	1,398	1,189	1,411	1,216	594	417	613	707	827	344
BN	200	816	1,272	1,664	2,225	1,240	890	541	666	740	840	326
AN	220	838	1,531	2,676	3,063	1,856	1,014	698	680	742	841	353
W	347	1,139	2,543	3,157	3,223	2,287	1,386	849	756	751	846	336
All	240	883	1,692	2,052	2,271	1,567	895	585	649	700	806	337
45												
C	174	639	1,107	1,115	1,101	850	311	275	427	486	600	318
D	183	767	1,338	1,165	1,363	1,203	593	390	584	667	825	351
BN	209	780	1,243	1,645	2,196	1,233	884	533	653	728	838	328
AN	214	832	1,479	2,613	3,051	1,851	1,014	685	669	742	841	353
W	350	1,127	2,539	3,155	3,220	2,285	1,385	836	757	756	848	336
All	241	865	1,663	2,031	2,250	1,561	893	570	634	685	800	337
55												
C	195	533	923	1,026	995	820	305	260	375	437	538	293
D	191	740	1,276	1,116	1,316	1,189	587	332	491	560	748	380
BN	185	747	1,192	1,587	2,173	1,212	873	491	611	691	823	341
AN	207	834	1,444	2,549	3,011	1,839	1,003	671	655	733	844	353
W	339	1,096	2,520	3,138	3,207	2,275	1,379	831	761	764	850	326
All	237	827	1,600	1,981	2,209	1,545	886	543	597	648	771	339
65												
C	208	441	837	855	909	770	294	243	327	387	465	252
D	198	708	1,233	1,094	1,311	1,175	579	287	399	478	647	399
BN	187	624	1,108	1,498	2,035	1,203	863	425	493	577	732	350
AN	173	754	1,387	2,395	2,930	1,804	995	618	584	665	797	389
W	320	1,017	2,453	3,086	3,176	2,260	1,373	819	735	752	851	335
All	231	749	1,533	1,897	2,149	1,522	878	508	530	588	714	346
75												
C	208	326	693	714	819	708	281	243	273	314	357	202
D	240	483	988	930	1,154	1,123	565	296	327	369	433	288
BN	231	445	924	1,314	1,762	1,135	838	398	351	386	450	288
AN	273	480	1,170	2,189	2,785	1,796	975	516	382	441	574	341
W	349	776	2,190	2,921	3,020	2,211	1,361	731	566	602	661	294
All	270	539	1,314	1,727	1,983	1,472	862	466	402	442	511	283

A1.12.3.9 Cache Creek below Clear Lake (SWRCB Clear Lake)

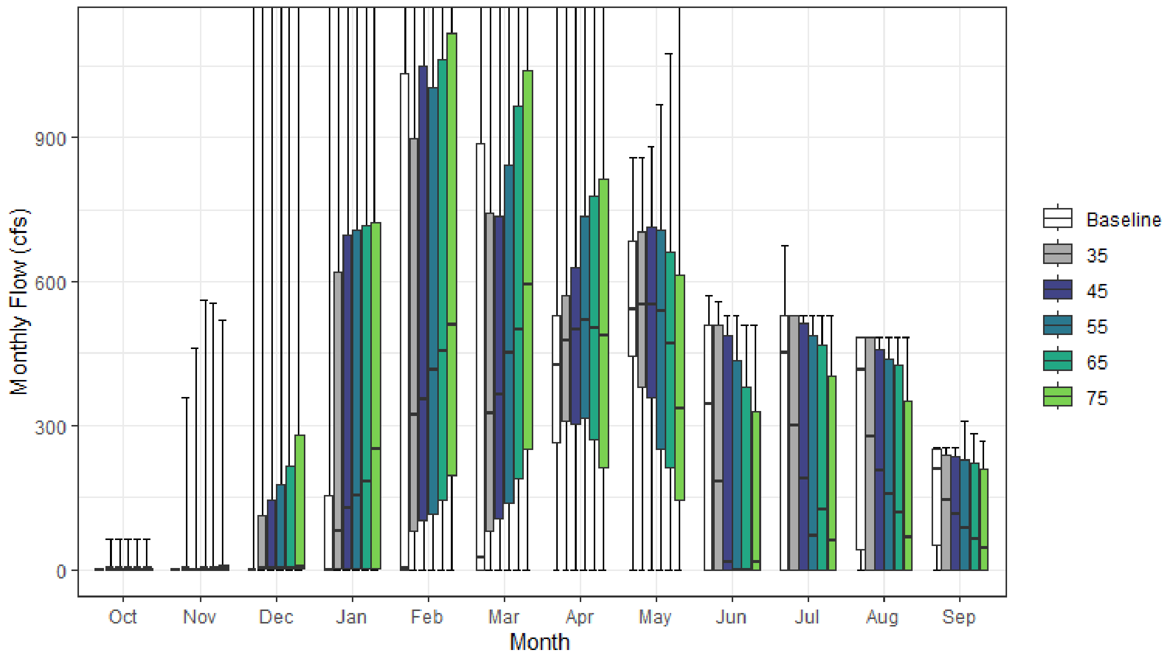

Figure A1-12. Cache Creek Streamflow below Clear Lake Monthly Boxplot

Table A1-30. Cumulative Distribution of Monthly Flow (cfs)—Cache Creek below Clear Lake (SWRCB Clear Lake)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	0	0	0	0	101	169	0	0	0	0	19
25%	0	0	0	0	1	1	263	444	0	0	41	51	64
50%	0	0	0	1	1	26	426	540	345	450	415	208	173
75%	0	0	1	153	1,034	887	530	684	510	529	485	253	381
90%	1	1	1	1,500	3,492	2,149	1,384	800	510	529	485	253	562
100%	1	1	3,382	4,227	7,653	6,032	3,087	858	571	675	485	253	981
Mean	0	0	44	420	832	671	559	525	269	312	295	152	244
35													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	0	1	1	1	99	114	0	0	0	0	24
25%	0	0	1	1	80	81	309	379	0	0	0	0	83
50%	1	1	1	81	323	326	477	552	184	300	277	145	169
75%	1	1	113	621	898	743	570	704	510	529	485	239	370
90%	1	1	392	1,174	2,865	2,109	1,384	814	510	529	485	253	565
100%	64	358	2,963	3,602	7,421	6,032	3,087	858	558	530	485	253	974
Mean	1	7	128	462	846	713	581	518	222	255	243	126	246
45													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	0	1	1	6	118	117	0	0	0	0	26
25%	0	0	1	1	103	106	304	359	0	0	0	0	85
50%	1	1	1	127	355	364	499	552	14	190	205	115	156
75%	1	1	145	697	1,051	736	628	713	486	512	459	233	367
90%	1	2	426	1,106	2,761	2,109	1,173	829	510	529	485	253	565
100%	64	460	2,735	3,585	7,415	6,032	3,087	880	529	529	485	255	986
Mean	2	10	131	484	852	734	598	517	200	239	225	119	246
55													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	0	1	2	20	132	115	0	0	0	0	25
25%	0	0	1	1	116	137	315	252	0	0	0	0	83
50%	1	1	2	156	415	452	520	537	0	71	159	87	158
75%	1	2	177	708	1,002	842	735	708	434	486	437	228	372
90%	2	8	430	1,292	2,659	2,109	1,230	846	510	529	485	253	569
100%	64	561	2,506	3,794	7,372	6,032	3,087	969	529	529	485	309	1,032
Mean	2	14	137	509	865	764	622	496	180	218	206	109	247
65													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	1	1	2	30	104	110	0	0	0	0	30
25%	0	0	1	2	144	188	270	214	0	0	0	0	76
50%	1	2	2	184	454	501	502	470	0	126	118	63	148
75%	2	4	214	718	1,064	966	778	661	380	468	425	221	386
90%	3	22	456	1,253	2,597	2,084	1,254	828	507	527	479	253	586
100%	64	553	2,386	3,779	7,313	6,032	3,087	1,074	510	529	485	283	1,087
Mean	2	18	149	535	891	800	628	453	161	201	188	101	247
75													
0%	0	0	0	0	1	0	0	0	0	0	0	0	0
10%	0	0	1	1	5	47	104	78	0	0	0	0	32
25%	0	1	2	2	197	250	212	146	0	0	0	0	72
50%	1	2	6	250	509	592	487	335	14	62	68	45	160
75%	2	8	279	723	1,117	1,040	814	611	329	402	350	211	381
90%	6	55	473	1,426	2,662	2,109	1,260	819	423	473	435	238	596
100%	64	518	2,285	3,610	7,245	6,032	3,087	1,202	510	529	485	269	1,135
Mean	3	23	169	565	944	849	606	393	141	176	166	93	247

Table A1-31. Water Year Average of Monthly Flows (cfs)—Cache Creek below Clear Lake (SWRCB Clear Lake)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	0	0	0	0	1	1	162	245	1	18	23	13
D	0	0	0	0	5	18	403	537	77	123	150	91
BN	0	0	16	63	331	137	382	601	240	317	303	159
AN	0	0	0	110	1,031	728	591	537	453	496	455	237
W	0	0	135	1,308	2,118	1,820	983	616	495	529	478	232
All	0	0	44	420	832	671	559	525	269	312	295	152
35												
C	0	1	1	40	78	47	155	209	0	0	0	0
D	1	1	21	51	166	206	404	501	35	50	62	33
BN	1	1	61	173	448	253	458	550	130	195	203	115
AN	1	1	68	319	953	676	653	575	347	417	396	206
W	4	20	342	1,232	1,964	1,747	986	654	483	511	468	236
All	1	7	128	462	846	713	581	518	222	255	243	126
45												
C	1	1	1	40	92	67	150	197	0	0	0	0
D	1	1	23	56	209	260	413	487	31	51	52	31
BN	1	1	63	209	457	307	509	517	84	151	161	94
AN	1	2	68	361	998	689	680	597	278	375	351	188
W	4	29	350	1,263	1,917	1,725	997	678	471	504	461	233
All	2	10	131	484	852	734	598	517	200	239	225	119
45												
C	1	1	1	43	98	85	131	162	0	0	0	0
D	1	2	25	64	251	313	396	417	28	50	46	29
BN	1	1	68	245	498	362	558	472	53	112	120	70
AN	1	4	75	392	1,060	746	725	615	242	314	317	170
W	4	41	362	1,305	1,875	1,717	1,049	696	442	483	440	225
All	2	14	137	509	865	764	622	496	180	218	206	109
65												
C	1	2	4	49	100	104	118	144	0	0	2	3
D	1	6	31	76	279	370	377	345	23	38	37	23
BN	2	3	81	289	563	434	543	376	36	101	105	59
AN	1	9	78	402	1,125	840	736	562	201	281	268	151
W	5	49	388	1,347	1,874	1,700	1,094	700	410	458	418	215
All	2	18	149	535	891	800	628	453	161	201	188	101
75												
C	1	3	12	61	125	119	106	118	2	4	10	5
D	2	15	37	99	301	405	327	260	13	21	29	17
BN	2	5	102	325	682	511	521	321	55	104	106	58
AN	2	13	89	415	1,183	955	701	467	173	246	231	134
W	5	55	427	1,393	1,921	1,733	1,092	651	349	398	361	199
All	3	23	169	565	944	849	606	393	141	176	166	93

A1.12.3.10 Cache Creek above Yolo Bypass (SWRCB Cache Creek)

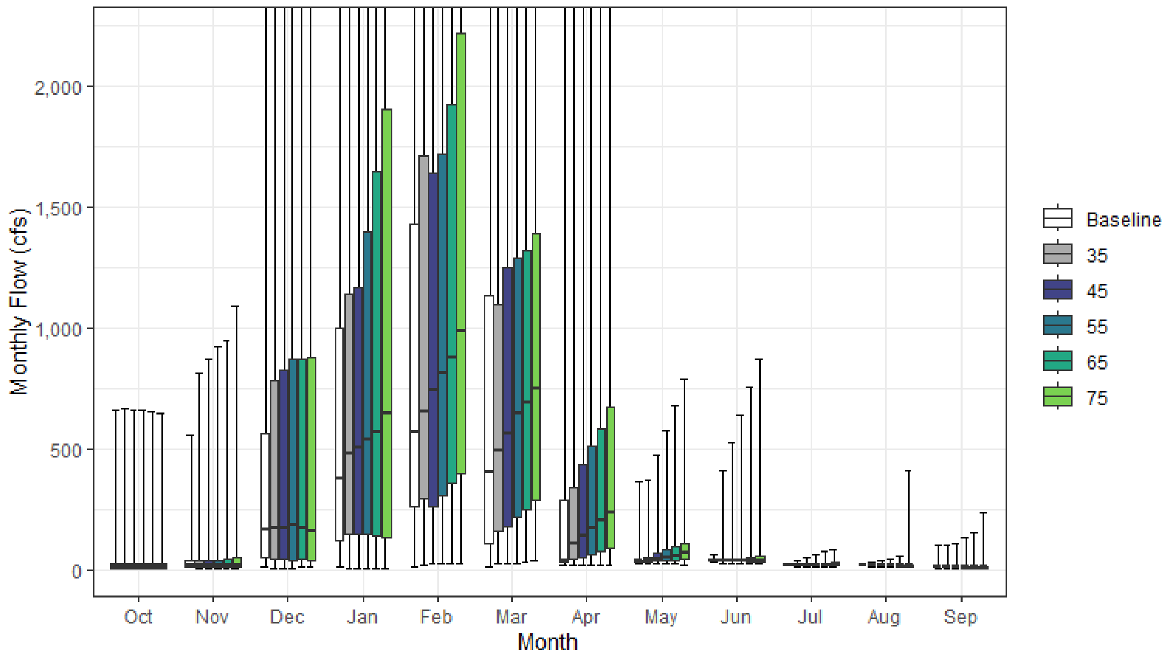

Figure A1-13. Cache Creek Streamflow above Yolo Bypass Monthly Boxplot

Table A1-32. Cumulative Distribution of Monthly Flow (cfs)—Cache Creek above Yolo Bypass (SWRCB Cache Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3	8	8	11	12	11	20	24	27	15	16	7	16
10%	5	9	18	36	59	43	23	29	30	16	17	9	40
25%	6	11	47	122	260	107	31	33	36	17	18	9	68
50%	11	18	167	378	566	404	36	35	37	18	18	9	124
75%	23	39	566	996	1,431	1,135	287	37	39	19	20	10	384
90%	36	124	884	2,646	4,295	2,754	1,467	50	40	19	20	11	638
100%	656	556	4,922	6,895	11,608	8,516	3,761	363	60	26	23	103	1,272
Mean	27	47	388	936	1,413	961	384	47	37	18	19	11	255
35													
0%	2	3	6	5	18	23	19	23	26	11	10	4	17
10%	4	7	16	35	81	67	31	29	29	15	14	7	47
25%	6	10	40	142	292	156	43	33	36	17	16	9	91
50%	11	17	169	477	652	489	109	37	37	18	18	9	164
75%	24	37	781	1,137	1,709	1,096	337	51	39	19	19	10	396
90%	35	122	1,151	2,433	3,916	2,665	1,419	169	41	22	20	11	632
100%	663	813	4,598	6,551	11,425	8,516	3,761	367	406	39	28	103	1,247
Mean	27	49	451	961	1,399	984	407	67	42	18	17	11	264
45													
0%	2	4	6	5	23	23	19	22	25	10	10	3	17
10%	4	6	16	35	97	73	32	30	29	15	13	7	50
25%	6	10	41	142	258	174	51	34	35	17	16	8	98
50%	10	18	168	507	742	562	140	40	37	18	18	9	176
75%	24	37	826	1,162	1,642	1,246	433	65	39	19	19	10	398
90%	35	122	1,258	2,394	3,778	2,577	1,369	211	49	25	20	11	631
100%	661	869	4,421	6,440	10,981	8,516	3,761	472	521	50	36	107	1,269
Mean	27	50	469	979	1,400	991	429	81	45	19	17	12	269
55													
0%	2	3	7	5	22	25	19	25	26	9	8	4	17
10%	5	6	16	40	114	82	33	31	28	14	12	6	55
25%	6	10	40	143	304	213	63	36	34	16	15	7	106
50%	9	17	182	537	813	649	171	50	37	18	17	9	198
75%	24	39	873	1,394	1,718	1,290	513	80	40	20	19	10	425
90%	34	121	1,365	2,646	3,778	2,330	1,313	258	60	30	20	13	622
100%	655	924	4,244	6,398	10,453	8,516	3,761	576	637	61	44	131	1,300
Mean	27	52	500	1,055	1,431	996	455	96	48	20	17	12	281
65													
0%	2	4	8	5	25	29	19	22	24	10	8	4	16
10%	5	6	16	47	134	85	36	32	29	12	10	6	59
25%	6	8	40	138	359	251	74	38	33	15	14	7	117
50%	10	16	170	571	876	691	203	56	37	17	16	9	221
75%	23	42	872	1,647	1,921	1,321	582	94	47	23	19	10	460
90%	34	137	1,613	3,127	3,798	2,467	1,350	305	71	35	23	15	655
100%	653	945	4,101	5,951	9,900	8,516	3,500	681	753	72	53	154	1,329
Mean	27	55	547	1,169	1,501	1,036	490	112	52	21	17	12	300
75													
0%	2	2	9	5	25	33	19	20	22	9	8	4	17
10%	5	5	16	54	155	88	41	34	29	12	9	5	64
25%	6	9	40	134	395	289	85	43	32	14	13	6	128
50%	10	17	161	647	986	746	234	65	38	18	15	8	247
75%	22	48	875	1,900	2,216	1,392	672	108	54	27	19	11	492
90%	39	152	1,861	3,586	3,928	2,432	1,393	352	82	41	27	17	704
100%	648	1,090	4,280	6,866	9,190	8,516	3,340	786	869	83	408	238	1,333
Mean	28	60	602	1,278	1,613	1,099	528	128	57	23	21	13	325

Table A1-33. Water Year Average of Monthly Flows (cfs)—Cache Creek above Yolo Bypass (SWRCB Cache Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	13	13	160	218	254	137	28	31	30	18	19	10
D	11	31	239	191	357	208	110	40	38	18	18	12
BN	31	22	209	406	850	346	122	36	38	18	18	15
AN	25	55	354	960	1,812	1,012	295	57	38	17	19	9
W	44	90	744	2,190	2,997	2,319	977	64	39	18	18	10
All	27	47	388	936	1,413	961	384	47	37	18	19	11
35												
C	13	12	157	244	309	171	34	32	29	17	17	9
D	10	29	251	228	478	354	111	48	37	17	16	12
BN	31	21	238	486	906	434	215	48	59	17	16	14
AN	25	52	399	1,123	1,744	971	343	86	38	20	20	9
W	46	100	911	2,114	2,824	2,230	974	102	42	19	18	12
All	27	49	451	961	1,399	984	407	67	42	18	17	11
45												
C	13	12	157	250	320	186	38	33	29	18	17	9
D	10	29	251	232	528	408	134	55	36	18	16	11
BN	30	20	253	516	911	476	275	53	66	18	16	14
AN	24	52	398	1,197	1,815	981	365	109	41	22	20	9
W	47	103	962	2,118	2,752	2,176	981	131	47	21	18	13
All	27	50	469	979	1,400	991	429	81	45	19	17	12
55												
C	13	11	155	266	340	200	43	35	28	18	17	10
D	10	30	257	249	585	472	163	63	36	18	15	11
BN	30	19	276	558	998	534	335	60	74	18	16	14
AN	24	53	419	1,395	1,922	1,010	386	133	44	25	20	9
W	47	109	1,037	2,237	2,701	2,088	998	159	53	22	18	14
All	27	52	500	1,055	1,431	996	455	96	48	20	17	12
65												
C	13	10	153	279	363	215	49	38	29	18	16	10
D	10	33	270	268	646	548	192	73	38	19	15	11
BN	30	19	305	622	1,120	600	396	68	82	19	15	13
AN	23	55	466	1,616	2,086	1,113	456	157	47	26	20	8
W	48	116	1,146	2,462	2,733	2,074	1,022	188	60	24	17	16
All	27	55	547	1,169	1,501	1,036	490	112	52	21	17	12
75												
C	13	11	159	310	395	237	57	42	30	20	44	10
D	10	37	291	292	711	628	222	83	38	19	15	11
BN	33	20	327	691	1,271	661	456	77	91	20	16	13
AN	24	57	520	1,773	2,259	1,252	527	181	50	29	21	8
W	49	130	1,275	2,682	2,874	2,115	1,053	217	67	26	17	19
All	28	60	602	1,278	1,613	1,099	528	128	57	23	21	13

A1.12.3.11 Calaveras River below New Hogan Reservoir (SWRCB New Hogan)

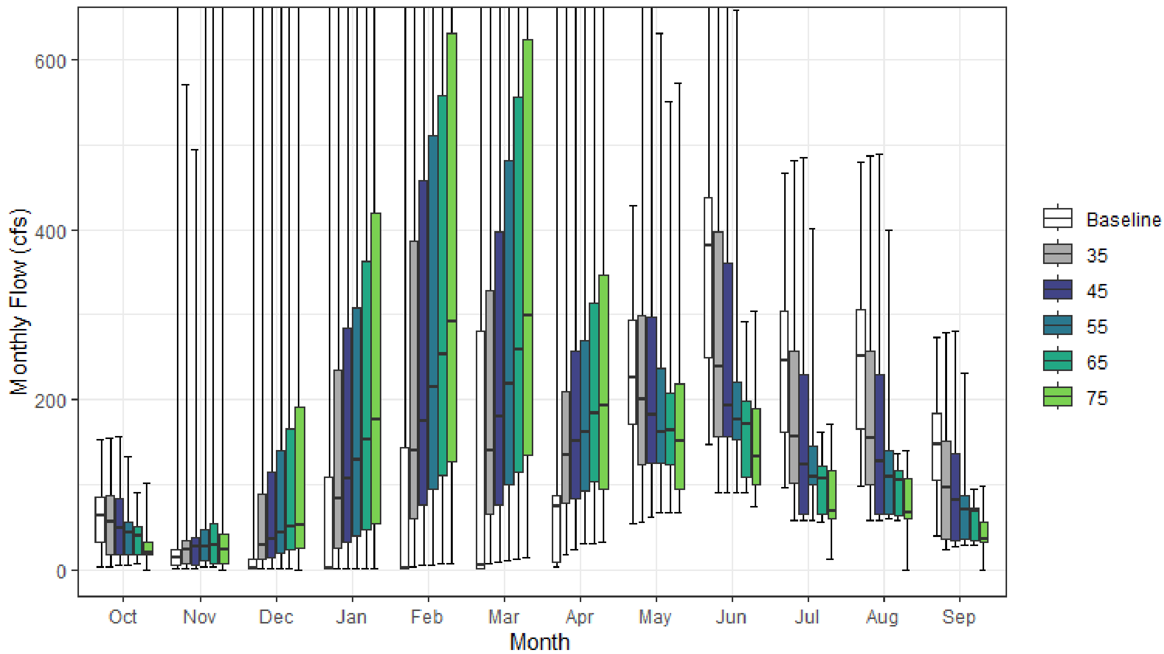

Figure A1-14. Calaveras River Streamflow below New Hogan Reservoir Monthly Boxplot

Table A1-34. Cumulative Distribution of Monthly Flow (cfs)—Calaveras River below New Hogan Reservoir (SWRCB New Hogan)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3	2	1	1	1	2	2	55	147	96	98	39	36
10%	17	2	1	1	2	2	3	128	184	122	122	81	50
25%	33	6	1	1	2	2	8	171	249	162	165	106	62
50%	63	15	2	1	2	4	74	225	380	245	252	147	93
75%	85	23	13	109	143	280	87	293	437	305	306	183	207
90%	113	31	243	779	1,233	1,168	111	355	554	353	341	214	313
100%	152	1,032	1,504	3,005	3,241	2,698	1,372	429	748	467	480	273	533
Mean	63	42	103	211	312	302	91	235	367	240	241	149	142
35													
0%	3	2	1	1	4	7	17	56	91	58	59	24	23
10%	15	3	6	14	22	34	64	108	94	60	60	33	37
25%	18	7	12	25	60	65	77	124	156	101	101	37	58
50%	55	23	29	83	141	141	134	201	238	156	155	96	97
75%	86	34	89	234	387	328	209	299	397	257	257	152	210
90%	100	62	238	614	1,160	1,136	297	381	461	307	293	180	317
100%	155	570	1,348	3,005	3,111	2,698	1,372	674	782	481	486	278	553
Mean	57	40	129	252	367	356	177	224	286	182	179	107	142
45													
0%	4	2	1	1	4	9	24	62	90	57	59	27	24
10%	16	4	7	18	28	43	49	78	94	59	60	33	39
25%	18	5	15	32	77	76	84	125	156	66	65	34	57
50%	48	26	36	106	175	180	151	181	192	124	127	82	97
75%	83	38	114	284	458	397	256	296	360	230	230	136	205
90%	99	73	306	750	1,007	991	363	388	471	298	297	172	318
100%	157	494	1,348	3,005	2,959	2,698	1,372	719	792	485	488	280	548
Mean	54	40	139	274	387	363	205	217	264	165	164	95	142
55													
0%	6	3	1	1	5	11	30	67	91	57	59	28	25
10%	16	4	9	22	34	52	55	79	97	61	60	33	42
25%	18	11	20	39	94	101	93	126	154	100	66	36	67
50%	44	28	44	130	214	219	162	161	176	109	108	70	102
75%	56	46	140	308	510	480	270	237	220	145	140	87	195
90%	72	90	406	911	1,134	1,168	444	303	323	197	195	114	298
100%	132	822	1,543	3,005	3,135	2,698	1,505	631	658	400	399	230	548
Mean	44	51	163	321	441	399	233	193	203	125	120	72	142
65													
0%	7	3	1	1	6	13	31	67	91	57	58	29	26
10%	16	4	11	26	41	61	57	76	94	58	59	33	43
25%	18	6	24	47	111	115	103	123	109	66	63	34	66
50%	39	29	51	153	253	259	184	164	172	108	106	69	112
75%	50	54	165	363	557	555	313	207	199	122	117	72	197
90%	55	124	442	906	1,024	1,002	529	271	214	131	122	82	276
100%	91	1,105	1,631	3,005	2,900	2,698	1,779	551	291	162	136	95	562
Mean	36	79	178	340	467	422	267	176	163	100	95	57	143
75													
0%	0	0	0	1	7	14	32	66	75	12	0	0	27
10%	15	4	11	30	48	65	58	79	92	57	59	32	46
25%	17	6	24	54	127	134	95	94	100	59	59	33	67
50%	20	23	52	177	292	298	192	151	132	69	67	36	114
75%	32	42	190	420	631	624	345	219	190	117	107	56	201
90%	55	115	510	1,045	1,161	995	620	294	221	134	120	77	287
100%	102	925	1,536	2,460	2,674	2,698	2,052	572	304	170	140	98	534
Mean	28	57	191	361	505	447	299	174	147	85	77	45	145

Table A1-35. Water Year Average of Monthly Flows (cfs)—Calaveras River below Confluence New Hogan Reservoir (SWRCB New Hogan)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	51	16	7	1	3	9	63	135	184	122	123	84
D	67	17	6	1	7	16	77	210	293	188	191	118
BN	71	16	51	32	222	115	53	236	370	239	243	142
AN	65	14	109	179	398	280	60	309	434	288	290	172
W	62	104	256	603	724	795	153	275	489	324	320	200
All	63	42	103	211	312	302	91	235	367	240	241	149
35												
C	34	10	15	29	65	49	53	92	107	63	64	34
D	58	23	42	49	139	119	99	144	178	109	106	61
BN	55	26	69	104	324	194	161	202	258	163	164	95
AN	54	45	133	306	452	340	173	292	336	221	224	134
W	71	74	289	592	691	804	314	340	457	295	284	177
All	57	40	129	252	367	356	177	224	286	182	179	107
45												
C	30	9	19	37	83	61	52	88	104	61	62	34
D	54	26	53	63	179	153	109	138	160	92	88	49
BN	54	30	81	127	365	216	189	188	227	142	138	80
AN	47	56	134	361	460	358	205	266	293	192	191	114
W	69	66	304	612	687	774	369	342	436	278	278	164
All	54	40	139	274	387	363	205	217	264	165	164	95
5												
C	28	10	23	45	102	75	57	88	112	70	68	35
D	44	28	65	77	218	187	121	136	151	94	89	54
BN	43	32	98	145	413	256	213	167	183	111	102	61
AN	38	69	130	449	538	423	228	211	206	130	124	79
W	55	94	366	703	767	807	426	299	300	185	179	110
All	44	51	163	321	441	399	233	193	203	125	120	72
65												
C	24	10	27	54	120	86	61	87	108	68	66	35
D	37	61	77	91	258	220	131	128	138	86	85	50
BN	32	59	117	172	467	274	243	160	156	96	93	52
AN	33	82	139	476	581	494	263	204	180	109	101	66
W	44	141	388	724	759	812	496	256	208	126	115	74
All	36	79	178	340	467	422	267	176	163	100	95	57
75												
C	20	9	30	62	139	99	62	80	96	58	50	27
D	33	30	87	105	297	252	135	118	123	67	66	38
BN	23	32	132	198	539	316	264	139	120	71	68	39
AN	25	85	158	549	625	567	296	204	153	84	72	43
W	34	105	406	731	786	809	571	273	208	122	107	64
All	28	57	191	361	505	447	299	174	147	85	77	45

A1.12.3.12 Calaveras River above Delta (SWRCB Calaveras River)

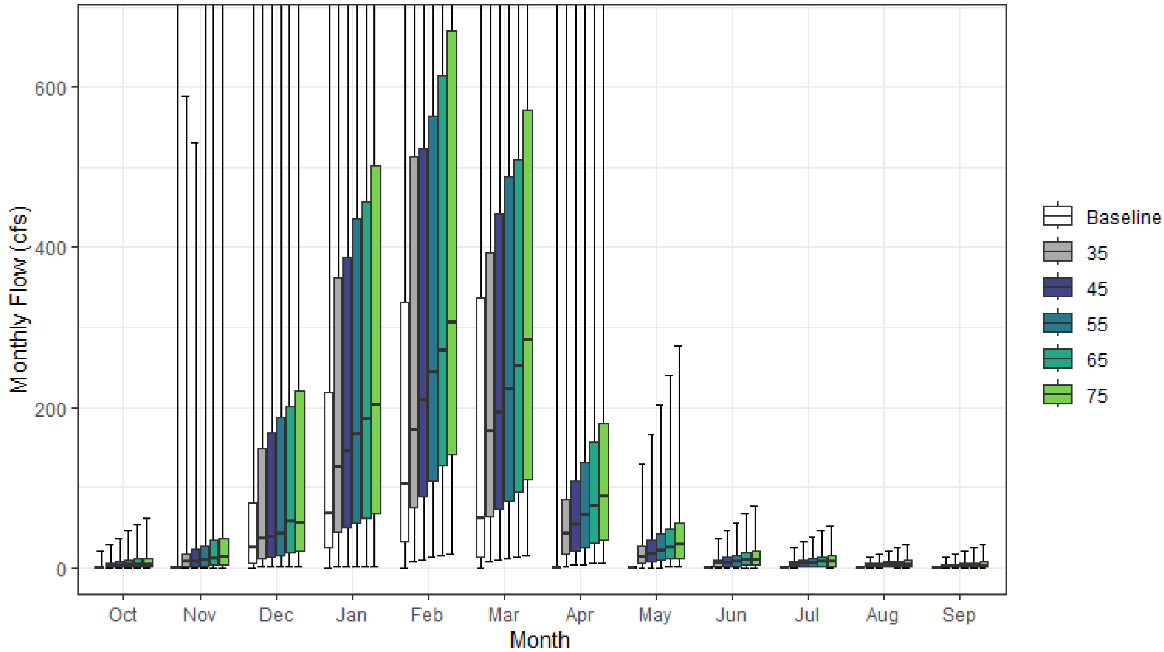

Figure A1-15. Calaveras River Streamflow above Delta Monthly Boxplot

Table A1-36. Cumulative Distribution of Monthly Flow (cfs)—Calaveras River above Delta (SWRCB Calaveras River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	0	0	0	11	10	0	0	0	0	0	0	0	5
25%	0	0	4	25	33	12	0	0	0	0	0	0	11
50%	0	0	25	68	105	61	0	0	0	0	0	0	18
75%	0	1	82	219	332	337	2	0	0	0	0	0	124
90%	0	19	318	848	1,275	1,200	27	0	0	0	0	0	199
100%	20	945	1,509	2,967	3,313	2,608	845	0	0	1	1	1	432
Mean	1	30	134	281	384	324	29	0	0	0	0	0	71
35													
0%	0	0	1	1	8	7	2	0	0	0	0	0	3
10%	0	0	6	24	33	28	9	3	0	1	1	0	14
25%	1	1	12	45	76	63	16	6	1	1	1	0	26
50%	2	6	36	125	172	170	41	14	5	3	2	1	49
75%	6	17	148	361	514	394	84	26	10	7	4	3	129
90%	12	53	343	840	1,195	1,180	169	41	14	11	6	6	208
100%	29	590	1,329	2,966	3,207	2,608	844	129	36	25	13	13	444
Mean	4	30	151	311	428	368	77	20	7	5	3	2	84
45													
0%	0	0	1	1	10	9	3	0	0	0	0	0	3
10%	0	0	8	27	37	35	12	4	0	1	1	0	16
25%	1	2	13	50	89	74	20	7	2	1	1	0	30
50%	2	8	38	146	209	193	53	17	6	5	3	2	57
75%	7	22	168	388	524	442	108	34	13	9	6	4	121
90%	15	62	394	891	1,107	1,105	210	53	18	14	8	8	207
100%	37	530	1,300	2,965	3,085	2,608	843	167	46	32	17	17	443
Mean	5	31	159	329	443	374	93	26	8	6	4	3	88
55													
0%	0	0	2	1	12	11	4	0	0	0	0	0	4
10%	0	1	10	29	42	43	15	4	1	1	1	0	19
25%	1	2	15	55	108	82	25	9	2	1	1	1	35
50%	3	10	41	166	243	222	65	21	7	6	3	2	66
75%	9	27	188	435	563	488	132	41	15	11	7	5	141
90%	18	73	447	1,003	1,186	1,198	250	65	22	17	10	10	220
100%	45	774	1,530	2,962	3,227	2,608	907	204	56	39	21	21	463
Mean	6	39	177	365	486	402	110	32	10	8	5	4	98
65													
0%	0	0	2	1	14	13	4	1	0	1	0	0	5
10%	0	1	10	32	47	51	17	5	1	1	1	0	22
25%	1	3	19	61	127	95	30	10	2	2	1	1	40
50%	3	12	57	186	271	252	76	25	8	7	4	2	75
75%	10	34	202	458	615	509	156	49	18	13	8	6	153
90%	22	107	496	989	1,115	1,058	288	76	26	20	12	11	224
100%	53	990	1,595	2,961	3,036	2,608	1,031	240	67	46	24	25	492
Mean	7	62	188	380	506	420	129	38	12	9	5	4	105
75													
0%	0	0	2	1	17	15	5	0	0	0	0	0	6
10%	0	1	12	37	54	59	20	6	0	1	1	0	24
25%	1	3	21	67	140	109	34	12	3	2	1	1	43
50%	3	13	56	203	307	285	88	29	9	7	4	2	84
75%	12	36	221	502	670	572	180	56	21	15	9	7	170
90%	25	99	548	1,099	1,209	1,066	332	88	29	23	14	13	238
100%	61	852	1,475	2,519	2,854	2,608	1,164	277	77	53	28	28	468
Mean	8	48	200	397	538	441	147	43	14	10	6	5	111

Table A1-37. Water Year Average of Monthly Flows (cfs) at Calaveras River - above Delta (SWRCB Calaveras River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	1	1	19	32	51	19	0	0	0	0	0	0
D	0	2	35	48	88	56	1	0	0	0	0	0
BN	0	2	75	95	327	149	5	0	0	0	0	0
AN	0	17	141	318	482	329	5	0	0	0	0	0
W	1	89	302	685	778	792	91	0	0	0	0	0
All	1	30	134	281	384	324	29	0	0	0	0	0
35												
C	4	3	28	53	101	57	10	4	2	3	2	1
D	4	10	59	83	193	138	25	8	3	2	3	2
BN	3	13	88	150	406	212	60	14	5	4	2	2
AN	3	44	156	418	525	377	67	25	7	5	3	3
W	6	64	323	674	750	799	166	40	13	9	4	3
All	4	30	151	311	428	368	77	20	7	5	3	2
45												
C	5	4	31	59	116	68	12	5	3	4	3	2
D	5	13	68	94	224	165	32	11	4	3	3	2
BN	4	16	97	168	439	229	76	19	7	5	3	3
AN	4	53	157	462	531	391	85	32	8	7	4	4
W	7	59	334	689	746	775	194	51	16	11	5	4
All	5	31	159	329	443	374	93	26	8	6	4	3
55												
C	6	5	34	65	130	79	15	7	3	4	3	2
D	6	15	77	105	255	191	39	13	4	4	4	3
BN	4	19	110	183	477	261	93	23	8	6	3	3
AN	5	62	152	532	592	443	103	39	10	8	4	4
W	9	79	380	762	810	800	228	62	20	14	7	5
All	6	39	177	365	486	402	110	32	10	8	5	4
65												
C	6	6	37	72	145	90	18	8	4	5	4	2
D	7	42	86	116	287	219	46	15	5	4	5	3
BN	5	41	125	203	521	274	109	27	10	7	4	4
AN	5	74	159	553	627	500	122	46	12	9	5	5
W	10	116	397	778	803	802	264	73	23	16	8	6
All	7	62	188	380	506	420	129	38	12	9	5	4
75												
C	7	6	41	79	161	101	21	9	4	6	5	3
D	8	21	95	127	319	247	53	17	6	4	5	3
BN	6	25	138	225	579	309	125	31	11	8	4	5
AN	6	79	176	613	662	559	141	53	14	11	6	5
W	12	93	411	783	825	800	302	84	27	19	9	7
All	8	48	200	397	538	441	147	43	14	10	6	5

A1.12.3.13 Clear Creek above Confluence with Sacramento River (SWRCB Clear Creek)

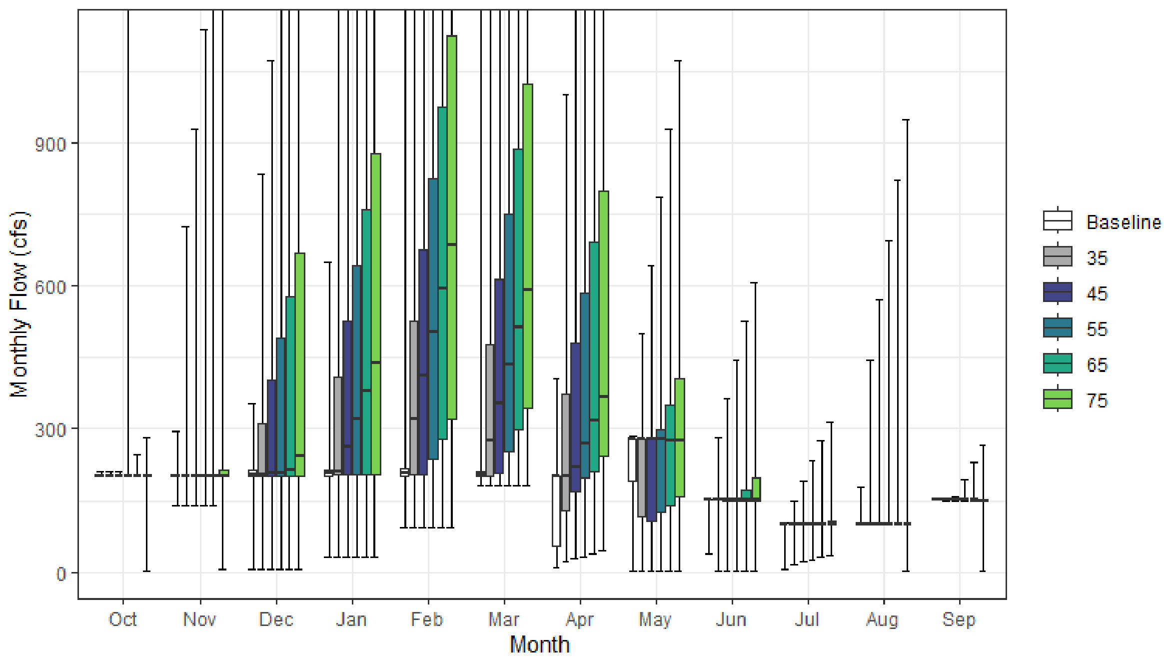

Figure A1-16. Clear Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-38. Cumulative Distribution of Monthly Flow (cfs)—Clear Creek above Confluence with Sacramento River (SWRCB Clear Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	200	139	6	33	92	181	9	1	39	7	100	150	88
10%	200	199	103	200	200	200	30	20	89	100	100	150	104
25%	200	200	200	202	202	201	53	190	150	101	101	150	118
50%	201	201	204	206	206	203	200	278	150	101	101	151	129
75%	201	202	212	212	218	209	202	278	151	101	101	151	140
90%	203	205	224	289	355	292	217	278	151	101	101	152	150
100%	209	293	354	651	1,572	1,342	406	284	153	102	178	156	228
Mean	201	200	194	224	256	234	145	219	140	99	101	151	130
35													
0%	200	139	6	33	92	181	21	2	2	17	100	150	88
10%	200	199	103	200	201	201	75	45	85	100	100	150	111
25%	200	200	200	203	204	202	130	116	150	100	100	150	130
50%	201	201	204	211	321	276	201	278	150	101	101	151	152
75%	201	202	311	409	524	478	372	278	151	101	101	151	194
90%	203	226	513	676	837	715	533	278	152	101	101	151	234
100%	209	723	833	1,511	2,023	1,960	1,000	501	283	148	443	156	380
Mean	201	213	264	347	425	380	262	219	141	100	105	151	169
45													
0%	200	139	6	33	92	181	27	2	2	21	100	150	89
10%	200	199	103	200	201	201	97	57	81	100	100	150	118
25%	200	200	200	203	205	207	167	107	150	100	100	150	133
50%	201	201	206	263	412	354	219	278	150	101	101	151	172
75%	202	202	401	526	674	615	479	278	151	101	101	151	230
90%	203	290	659	870	1,076	919	685	319	184	101	101	152	281
100%	210	930	1,071	1,943	2,601	2,520	1,285	644	364	190	570	160	477
Mean	201	225	310	419	528	471	332	228	146	102	107	151	193
55													
0%	200	139	6	33	92	181	33	2	3	26	100	150	91
10%	200	199	103	200	201	201	118	66	73	100	100	150	125
25%	200	200	200	203	236	253	198	126	150	100	100	150	144
50%	201	201	207	322	504	433	268	278	150	101	101	151	190
75%	202	203	489	643	824	751	585	297	152	101	101	151	269
90%	203	354	806	1,063	1,315	1,123	838	390	224	114	101	152	332
100%	2,151	1,137	1,310	2,375	3,179	3,080	1,571	787	445	232	696	196	575
Mean	222	239	358	494	635	566	403	247	153	105	111	151	221
65													
0%	200	139	6	33	92	181	39	3	3	31	100	150	95
10%	200	199	103	200	201	201	140	78	76	100	100	150	130
25%	200	200	200	203	279	299	210	140	150	100	100	150	158
50%	201	201	212	381	595	512	317	274	150	100	100	150	209
75%	201	204	578	760	974	888	692	351	171	101	101	151	309
90%	203	419	953	1,256	1,554	1,326	990	460	265	135	110	152	386
100%	245	1,343	1,547	2,806	3,757	3,640	1,856	930	526	274	823	231	675
Mean	202	254	407	571	743	662	474	274	163	110	114	152	248
75													
0%	3	5	7	33	92	181	45	3	3	35	1	1	98
10%	200	199	103	200	201	203	150	90	87	100	100	150	134
25%	200	200	200	204	322	345	243	157	150	100	100	150	172
50%	200	201	242	439	687	591	365	275	150	100	100	150	233
75%	201	214	667	877	1,124	1,024	798	405	197	105	101	150	353
90%	203	483	1,099	1,449	1,792	1,531	1,142	531	306	155	126	152	440
100%	282	1,550	1,785	3,238	4,335	4,200	2,142	1,073	607	316	949	267	775
Mean	198	268	458	650	853	760	546	306	177	115	118	150	276

Table A1-39. Water Year Average of Monthly Flows (cfs)—Clear Creek above Confluence with Sacramento River (SWRCB Clear Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	201	194	154	186	189	201	85	172	143	101	101	151
D	201	199	181	200	215	210	79	178	147	101	101	151
BN	201	195	170	202	219	203	139	209	127	96	101	151
AN	201	201	212	242	265	227	191	272	142	101	101	151
W	202	206	233	270	342	293	209	259	140	97	103	151
All	201	200	194	224	256	234	145	219	140	99	101	151
35												
C	201	194	177	195	240	223	112	176	135	101	100	151
D	201	204	204	221	302	306	145	155	147	101	101	151
BN	201	204	195	273	355	260	239	186	126	98	101	151
AN	201	208	258	441	575	466	299	287	153	101	103	151
W	202	239	401	529	594	555	429	282	145	100	113	151
All	201	213	264	347	425	380	262	219	141	100	105	151
45												
C	201	194	192	205	273	240	134	176	127	101	100	151
D	201	210	225	235	357	377	186	150	147	100	101	151
BN	201	210	213	322	433	315	303	186	127	100	101	151
AN	201	220	296	562	737	597	379	313	166	101	106	151
W	202	266	502	670	761	706	545	304	159	105	120	151
All	201	225	310	419	528	471	332	228	146	102	107	151
55												
C	331	194	207	220	311	268	158	179	121	102	100	150
D	201	219	250	252	416	448	228	154	147	101	100	151
BN	201	216	231	373	518	375	367	203	129	103	103	151
AN	202	234	339	683	901	729	460	340	180	102	110	151
W	202	294	604	814	930	858	663	339	177	113	128	152
All	222	239	358	494	635	566	403	247	153	105	111	151
65												
C	201	194	222	238	350	298	182	186	121	103	101	150
D	201	230	275	274	478	520	269	167	146	102	100	151
BN	201	224	253	428	605	440	433	221	135	107	104	150
AN	205	249	386	804	1,064	862	540	374	196	108	115	154
W	202	324	708	959	1,099	1,013	781	391	201	123	138	153
All	202	254	407	571	743	662	474	274	163	110	114	152
75												
C	188	183	235	259	394	332	204	195	125	102	97	131
D	201	242	302	300	544	594	311	186	147	103	100	153
BN	189	233	277	485	692	506	500	246	146	112	106	151
AN	208	266	438	925	1,228	994	621	426	219	115	121	156
W	204	356	813	1,104	1,268	1,167	901	442	228	134	150	155
All	198	268	458	650	853	760	546	306	177	115	118	150

A1.12.3.14 Cosumnes River above Confluence with Delta (SWRCB Cosumnes River)

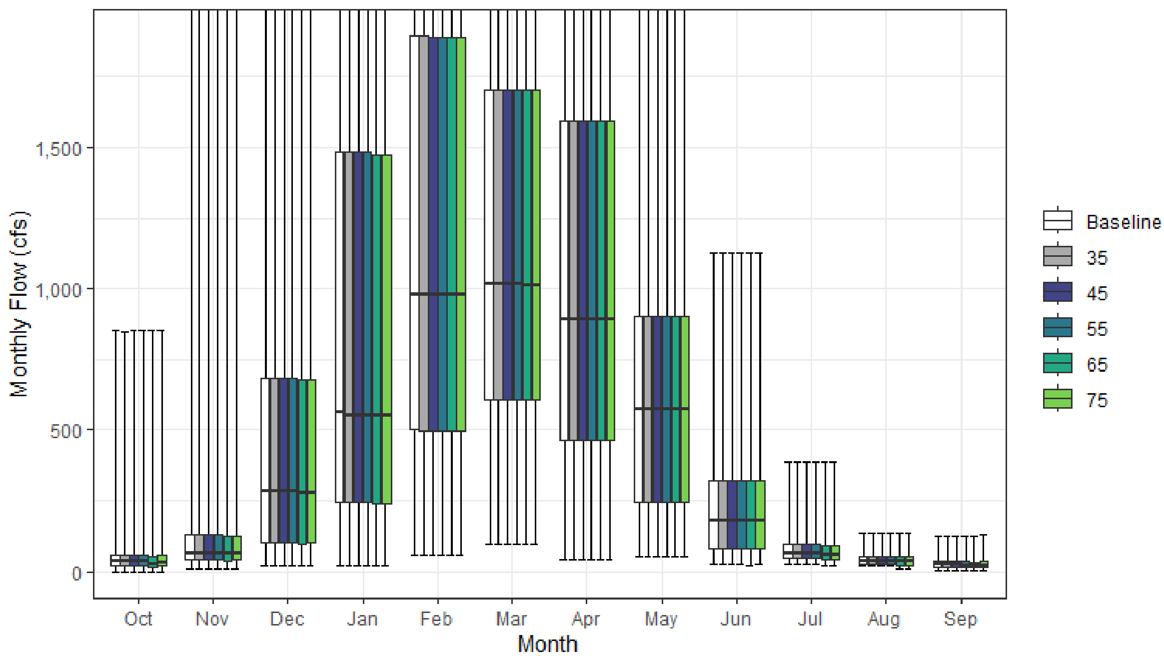

Figure A1-17. Cosumnes River Streamflow above Confluence with Delta Monthly Boxplot

Table A1-40. Cumulative Distribution of Monthly Flow (cfs)—Cosumnes River above Confluence with Delta (SWRCB Cosumnes River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	1	7	22	22	59	95	42	53	26	24	18	5	30
10%	10	23	61	142	229	327	291	116	55	30	22	14	129
25%	19	40	103	244	501	608	463	244	83	45	26	17	185
50%	35	66	281	563	979	1,018	892	573	178	62	35	23	341
75%	60	130	684	1,485	1,894	1,705	1,595	904	324	94	55	38	603
90%	120	331	2,085	3,168	3,133	2,993	2,181	1,399	571	139	65	49	859
100%	851	2,859	4,614	8,841	9,142	6,477	5,806	2,403	1,126	386	134	126	1,530
Mean	59	173	684	1,162	1,455	1,409	1,132	682	253	82	41	30	429
35													
0%	1	8	21	21	58	96	42	53	26	24	18	5	29
10%	11	24	60	141	227	327	291	116	55	29	22	14	129
25%	19	39	103	244	499	608	462	244	82	45	26	17	183
50%	36	66	281	554	979	1,016	892	573	177	62	35	23	340
75%	60	129	684	1,485	1,892	1,705	1,595	905	324	94	54	38	603
90%	120	330	2,085	3,168	3,132	2,992	2,181	1,399	571	139	65	49	858
100%	846	2,856	4,608	8,841	9,142	6,477	5,806	2,403	1,126	386	134	126	1,530
Mean	58	173	683	1,161	1,454	1,408	1,132	682	253	82	41	30	429
45													
0%	0	8	21	21	58	96	42	53	26	24	18	5	29
10%	10	24	60	139	227	327	291	116	55	30	22	14	129
25%	18	39	103	244	499	608	462	244	82	45	26	17	183
50%	35	66	281	554	979	1,016	892	573	177	62	35	23	339
75%	60	130	684	1,485	1,891	1,705	1,595	904	324	94	55	38	603
90%	120	331	2,085	3,168	3,132	2,992	2,181	1,399	571	139	65	49	859
100%	853	2,857	4,612	8,841	9,142	6,477	5,806	2,403	1,126	386	134	126	1,530
Mean	59	173	683	1,161	1,454	1,408	1,132	682	253	82	41	30	429
5													
0%	0	8	21	21	58	96	42	53	26	24	18	5	29
10%	10	24	60	138	225	327	291	116	55	29	22	12	129
25%	18	39	103	244	497	608	462	244	82	45	26	15	183
50%	36	66	281	554	979	1,017	892	573	177	62	35	23	340
75%	59	129	684	1,485	1,891	1,705	1,595	904	323	94	55	38	603
90%	120	329	2,085	3,168	3,132	2,992	2,181	1,399	571	139	65	48	858
100%	852	2,855	4,608	8,841	9,142	6,477	5,806	2,403	1,126	386	134	126	1,530
Mean	58	172	682	1,161	1,454	1,408	1,132	682	253	82	41	29	429
65													
0%	0	8	21	21	56	94	42	52	18	19	12	5	28
10%	10	24	60	138	225	327	291	115	48	27	15	11	128
25%	16	37	100	240	497	608	462	244	82	41	23	12	181
50%	27	64	280	553	979	1,011	892	572	177	61	34	19	339
75%	54	123	678	1,475	1,890	1,705	1,595	904	323	93	54	31	602
90%	116	325	2,085	3,166	3,130	2,989	2,181	1,399	570	137	64	43	858
100%	854	2,856	4,599	8,840	9,139	6,477	5,805	2,402	1,126	386	134	123	1,529
Mean	55	170	680	1,158	1,452	1,407	1,132	682	251	80	39	25	427
75													
0%	1	8	21	21	56	94	42	53	23	19	12	5	28
10%	10	24	60	136	224	327	291	115	49	28	15	11	128
25%	18	41	100	242	498	608	463	244	82	43	21	13	181
50%	33	66	279	554	978	1,011	892	572	177	60	34	20	339
75%	58	123	680	1,475	1,890	1,705	1,595	904	324	94	53	37	602
90%	122	329	2,085	3,167	3,123	2,989	2,181	1,399	570	137	64	48	858
100%	854	2,856	4,612	8,840	9,140	6,477	5,806	2,402	1,126	385	134	129	1,530
Mean	57	171	681	1,159	1,452	1,407	1,132	682	252	80	39	27	428

Table A1-41. Water Year Average of Monthly Flows (cfs)—Cosumnes River above Confluence with Delta (SWRCB Cosumnes River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	46	42	180	226	436	409	259	175	83	38	26	17
D	42	93	307	362	742	818	606	374	112	45	29	24
BN	43	103	440	615	1,346	1,028	1,197	628	228	68	37	29
AN	52	317	606	1,748	1,897	1,883	1,167	747	237	80	41	30
W	90	283	1,419	2,345	2,414	2,415	1,941	1,191	473	143	61	42
All	59	173	684	1,162	1,455	1,409	1,132	682	253	82	41	30
35												
C	45	42	178	224	434	410	259	174	82	37	26	17
D	42	93	306	361	741	817	606	374	112	45	29	24
BN	43	103	439	613	1,344	1,028	1,197	628	228	68	37	29
AN	52	316	604	1,746	1,896	1,883	1,167	747	237	80	41	30
W	90	283	1,418	2,345	2,413	2,415	1,941	1,191	472	143	60	42
All	58	173	683	1,161	1,454	1,408	1,132	682	253	82	41	30
45												
C	45	42	178	224	433	409	259	174	82	37	26	17
D	42	94	306	361	741	817	606	374	112	45	29	24
BN	43	103	439	613	1,343	1,027	1,197	628	228	68	37	29
AN	52	316	604	1,746	1,896	1,883	1,167	747	237	80	41	30
W	91	283	1,418	2,345	2,413	2,415	1,940	1,191	472	143	61	42
All	59	173	683	1,161	1,454	1,408	1,132	682	253	82	41	30
55												
C	45	42	178	223	432	409	259	174	82	37	25	16
D	41	93	305	361	740	817	606	374	111	44	29	22
BN	43	102	439	613	1,344	1,027	1,197	627	228	68	37	29
AN	52	316	603	1,745	1,896	1,883	1,167	746	237	80	41	30
W	90	282	1,417	2,345	2,413	2,415	1,940	1,191	472	143	61	42
All	58	172	682	1,161	1,454	1,408	1,132	682	253	82	41	29
65												
C	44	41	175	221	431	408	258	173	77	30	19	14
D	38	91	303	359	738	816	605	374	110	43	27	19
BN	40	100	438	611	1,342	1,026	1,197	627	227	67	36	24
AN	48	314	602	1,742	1,894	1,882	1,167	747	236	80	40	23
W	86	279	1,414	2,343	2,412	2,414	1,940	1,190	472	143	60	36
All	55	170	680	1,158	1,452	1,407	1,132	682	251	80	39	25
75												
C	45	42	176	222	431	408	259	173	78	32	19	14
D	41	93	303	359	738	816	605	374	111	43	26	19
BN	42	102	438	611	1,342	1,026	1,196	627	227	66	35	26
AN	50	315	602	1,741	1,894	1,882	1,167	747	236	80	41	28
W	89	281	1,415	2,343	2,412	2,414	1,940	1,190	472	143	60	42
All	57	171	681	1,159	1,452	1,407	1,132	682	252	80	39	27

A1.12.3.15 Cottonwood Creek above Confluence with Sacramento River (SWRCB Cottonwood Creek)

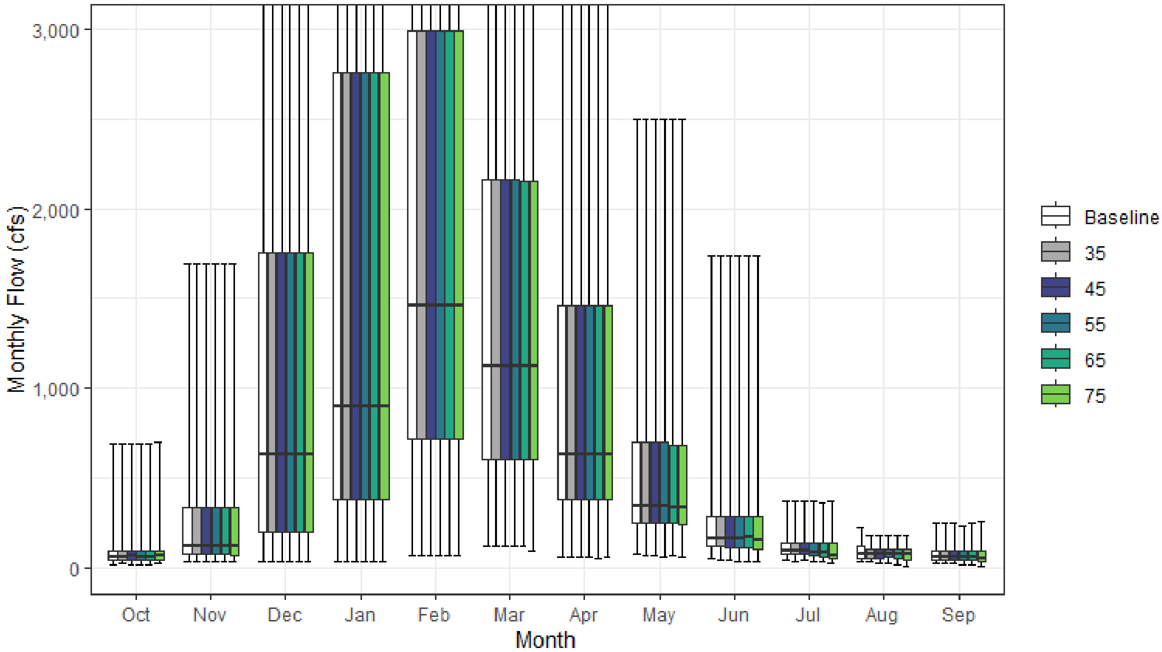

Figure A1-18. Cottonwood Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-42. Cumulative Distribution of Monthly Flow (cfs)—Cottonwood Creek above Confluence with Sacramento River (SWRCB Cottonwood Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	18	32	34	28	63	116	54	72	51	40	36	20	51
10%	32	48	82	187	320	325	237	152	80	54	45	32	157
25%	42	74	194	380	716	606	377	251	121	73	51	40	256
50%	60	122	626	899	1,462	1,123	627	345	164	89	75	54	423
75%	96	335	1,753	2,758	2,990	2,156	1,460	696	280	135	116	92	753
90%	144	684	3,303	4,296	4,764	3,506	2,141	1,013	440	186	133	102	1,049
100%	686	1,693	5,158	10,169	12,295	10,471	4,887	2,499	1,733	367	221	250	1,896
Mean	90	278	1,222	1,813	2,180	1,643	986	529	238	112	83	69	553
35													
0%	19	32	34	28	63	116	54	67	38	36	30	20	49
10%	32	48	82	187	320	325	237	152	80	54	46	32	157
25%	42	74	194	380	716	606	377	251	114	73	51	39	256
50%	61	122	626	899	1,462	1,123	627	345	163	89	75	54	424
75%	96	335	1,753	2,758	2,990	2,156	1,460	696	280	135	100	92	753
90%	144	684	3,303	4,296	4,764	3,506	2,141	1,013	440	184	121	110	1,048
100%	686	1,693	5,158	10,169	12,295	10,471	4,887	2,499	1,733	372	181	250	1,892
Mean	90	278	1,222	1,813	2,180	1,643	986	529	237	111	79	69	553
45													
0%	13	32	34	28	63	116	54	63	39	38	27	19	49
10%	29	49	82	187	320	325	237	152	80	55	46	31	157
25%	42	74	194	380	716	606	377	251	114	72	51	39	256
50%	62	122	626	899	1,462	1,123	627	345	163	89	75	54	423
75%	96	335	1,753	2,758	2,990	2,156	1,460	700	280	135	100	93	753
90%	144	684	3,303	4,296	4,764	3,506	2,141	1,013	440	175	121	110	1,048
100%	686	1,693	5,158	10,169	12,295	10,471	4,887	2,499	1,733	371	181	250	1,893
Mean	90	278	1,222	1,813	2,180	1,643	986	529	237	111	78	70	553
55													
0%	15	32	34	28	64	116	54	61	31	30	25	17	48
10%	27	49	82	187	320	324	237	150	80	50	46	31	157
25%	40	74	194	380	716	606	377	250	113	66	54	41	256
50%	62	122	626	899	1,462	1,123	627	342	163	86	77	62	423
75%	96	335	1,753	2,758	2,990	2,156	1,460	697	280	135	100	93	753
90%	144	684	3,303	4,296	4,764	3,506	2,141	1,013	440	181	121	108	1,048
100%	686	1,693	5,158	10,169	12,295	10,471	4,887	2,500	1,733	367	181	228	1,893
Mean	89	278	1,222	1,813	2,180	1,643	986	528	236	109	79	69	553
65													
0%	16	32	34	28	64	116	52	63	34	32	15	14	49
10%	32	49	82	187	320	325	237	147	74	50	43	24	155
25%	42	74	194	380	716	606	377	248	108	61	52	40	256
50%	61	122	626	899	1,462	1,123	627	339	171	84	73	54	418
75%	96	335	1,753	2,757	2,990	2,156	1,460	682	280	135	100	92	755
90%	144	683	3,303	4,296	4,764	3,506	2,141	1,013	440	175	120	98	1,048
100%	686	1,693	5,158	10,169	12,295	10,471	4,887	2,499	1,733	357	181	252	1,892
Mean	90	278	1,221	1,813	2,180	1,643	986	526	234	107	78	68	552
75													
0%	19	32	34	29	63	94	54	61	34	25	8	8	49
10%	32	49	83	187	320	324	237	144	78	38	32	22	152
25%	44	71	194	380	718	606	377	237	99	51	43	31	255
50%	64	122	626	899	1,462	1,123	627	332	155	71	73	52	414
75%	89	334	1,753	2,757	2,990	2,156	1,460	682	284	133	103	93	755
90%	165	685	3,303	4,296	4,764	3,506	2,141	1,012	423	178	121	97	1,049
100%	695	1,693	5,158	10,168	12,295	10,471	4,887	2,499	1,733	367	181	255	1,893
Mean	93	278	1,221	1,813	2,180	1,643	985	523	229	101	75	64	551

Table A1-43. Water Year Average of Monthly Flows (cfs)—Cottonwood Creek above Confluence with Sacramento River (SWRCB Cottonwood Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	68	78	466	524	782	560	268	184	104	58	54	40
D	63	249	700	639	1,263	1,045	485	276	134	73	54	58
BN	74	190	637	1,204	1,719	995	802	389	186	84	61	46
AN	113	287	1,232	2,589	2,954	2,127	1,108	810	302	141	96	91
W	122	456	2,368	3,423	3,565	2,857	1,805	868	391	174	126	99
All	90	278	1,222	1,813	2,180	1,643	986	529	238	112	83	69
35												
C	68	77	466	524	782	562	268	181	98	57	52	39
D	65	250	700	639	1,263	1,045	485	276	134	73	54	58
BN	74	190	637	1,204	1,719	995	802	389	186	84	61	46
AN	115	287	1,232	2,589	2,954	2,127	1,108	810	305	141	96	91
W	121	456	2,368	3,423	3,565	2,857	1,805	869	391	173	114	99
All	90	278	1,222	1,813	2,180	1,643	986	529	237	111	79	69
45												
C	70	78	466	524	782	560	268	179	96	57	51	38
D	66	249	700	639	1,263	1,045	485	275	134	72	54	59
BN	73	190	637	1,203	1,719	995	802	389	186	84	61	46
AN	112	287	1,232	2,589	2,954	2,127	1,108	810	302	141	94	91
W	121	456	2,368	3,423	3,565	2,857	1,805	872	391	171	114	100
All	90	278	1,222	1,813	2,180	1,643	986	529	237	111	78	70
55												
C	67	78	465	524	782	561	268	177	92	53	48	36
D	66	250	700	639	1,263	1,045	485	274	133	70	60	60
BN	69	190	637	1,203	1,719	995	802	389	186	83	63	46
AN	111	288	1,232	2,589	2,954	2,127	1,108	810	302	141	94	91
W	122	456	2,368	3,423	3,565	2,857	1,805	868	391	170	114	99
All	89	278	1,222	1,813	2,180	1,643	986	528	236	109	79	69
65												
C	69	79	465	524	781	561	268	174	88	48	44	32
D	66	250	700	639	1,263	1,045	485	272	132	67	62	57
BN	70	190	637	1,203	1,719	995	802	387	183	83	60	47
AN	108	288	1,231	2,589	2,954	2,127	1,108	810	302	140	94	90
W	123	456	2,368	3,423	3,565	2,857	1,805	868	391	170	114	98
All	90	278	1,221	1,813	2,180	1,643	986	526	234	107	78	68
75												
C	66	78	465	523	781	561	266	171	83	40	34	27
D	69	250	700	638	1,262	1,045	486	265	122	57	48	52
BN	76	190	637	1,203	1,719	995	802	382	176	68	58	42
AN	117	288	1,231	2,589	2,954	2,127	1,108	807	298	135	105	81
W	127	456	2,368	3,423	3,565	2,857	1,805	867	390	171	116	98
All	93	278	1,221	1,813	2,180	1,643	985	523	229	101	75	64

A1.12.3.16 Cow Creek above Confluence with Sacramento River (SWRCB Cow Creek)

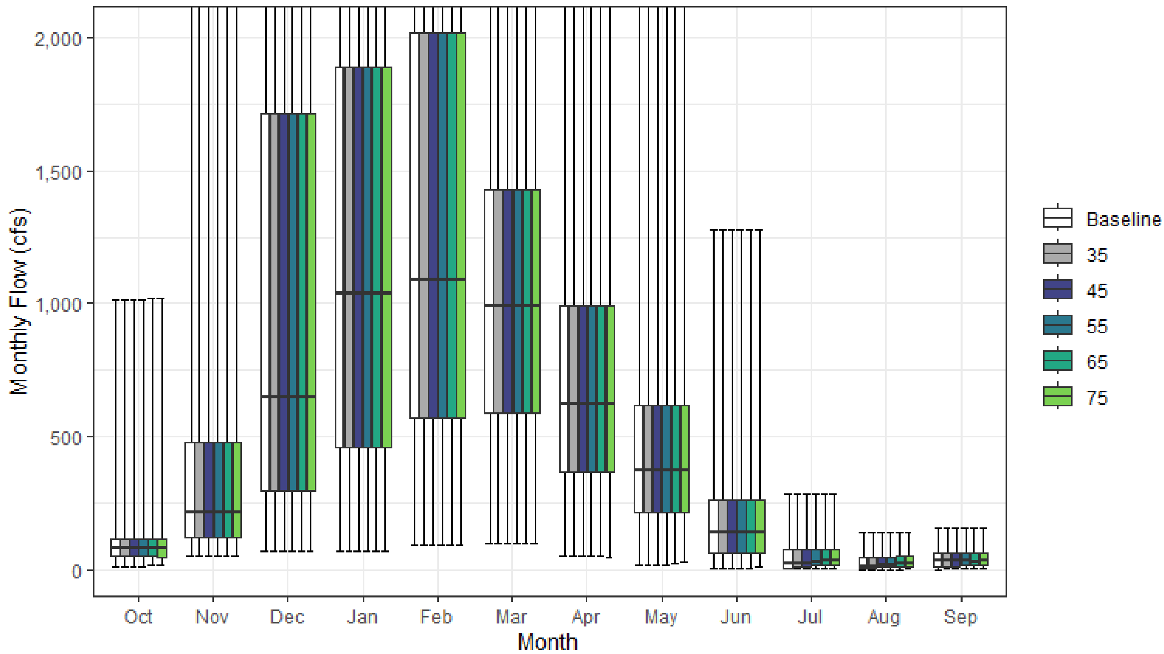

Figure A1-19. Cow Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-44. Cumulative Distribution of Monthly Flow (cfs)—Cow Creek above Confluence with Sacramento River (SWRCB Cow Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	10	51	67	66	94	98	52	17	1	1	1	1	43
10%	31	90	122	254	351	333	237	108	24	2	2	4	166
25%	52	123	296	461	571	587	367	212	63	5	4	8	233
50%	79	216	645	1,040	1,090	990	621	373	137	22	11	30	366
75%	115	476	1,714	1,889	2,018	1,427	992	618	261	74	46	64	569
90%	164	674	2,555	2,798	3,001	2,360	1,526	962	409	108	67	78	751
100%	1,012	2,304	3,707	5,391	5,418	4,973	3,217	2,185	1,276	284	139	158	1,108
Mean	99	354	1,044	1,339	1,450	1,173	782	472	188	43	28	39	420
35													
0%	10	51	67	66	94	98	52	17	3	1	1	1	43
10%	31	90	122	253	351	333	237	108	24	5	4	5	167
25%	52	123	296	461	571	587	367	212	63	9	6	9	234
50%	79	216	645	1,040	1,090	990	621	373	137	22	11	30	366
75%	115	476	1,714	1,889	2,018	1,427	992	618	261	74	46	64	569
90%	164	674	2,555	2,798	3,001	2,360	1,526	962	409	108	67	78	751
100%	1,012	2,304	3,707	5,391	5,418	4,973	3,217	2,185	1,276	284	139	158	1,108
Mean	99	354	1,044	1,339	1,450	1,173	782	472	189	44	29	40	421
45													
0%	10	51	67	66	94	98	52	17	4	2	1	1	43
10%	31	90	122	253	351	333	237	108	24	6	4	7	167
25%	52	123	296	461	571	587	367	212	63	11	7	11	234
50%	79	216	645	1,040	1,090	990	621	373	137	22	14	30	367
75%	115	476	1,714	1,889	2,018	1,427	992	618	261	74	46	64	569
90%	164	674	2,555	2,798	3,001	2,360	1,526	962	409	108	67	78	751
100%	1,011	2,304	3,707	5,391	5,418	4,973	3,217	2,185	1,276	284	139	158	1,108
Mean	99	354	1,044	1,339	1,450	1,173	782	472	189	46	29	40	421
55													
0%	13	51	67	66	94	98	52	18	5	2	1	2	43
10%	31	90	122	253	351	333	237	108	25	8	5	8	167
25%	49	123	296	461	571	587	367	212	63	14	9	14	234
50%	79	216	645	1,040	1,090	990	621	373	137	27	17	30	367
75%	115	476	1,714	1,888	2,018	1,427	992	618	261	74	46	64	569
90%	164	674	2,555	2,798	3,001	2,360	1,526	962	409	108	67	78	751
100%	1,011	2,304	3,707	5,391	5,418	4,973	3,217	2,185	1,276	284	139	158	1,108
Mean	99	354	1,044	1,339	1,450	1,173	782	472	189	47	30	41	421
65													
0%	15	51	67	66	94	98	52	22	6	2	1	2	43
10%	31	90	122	253	351	333	237	108	29	9	6	10	168
25%	49	123	296	461	571	587	367	212	63	16	11	15	235
50%	79	216	645	1,040	1,090	990	621	373	137	31	21	30	368
75%	115	476	1,714	1,888	2,018	1,427	992	618	261	74	49	64	569
90%	163	674	2,554	2,798	3,001	2,360	1,526	962	409	108	67	78	751
100%	1,021	2,304	3,707	5,391	5,418	4,973	3,217	2,185	1,276	284	139	158	1,108
Mean	99	354	1,043	1,339	1,450	1,173	782	472	189	49	32	42	421
75													
0%	15	51	67	66	94	98	48	25	7	2	1	2	43
10%	31	90	122	253	351	332	237	111	34	10	7	11	169
25%	47	123	296	461	571	587	367	212	63	19	12	17	235
50%	79	216	645	1,040	1,090	990	621	373	137	36	24	33	368
75%	115	475	1,714	1,888	2,018	1,427	992	618	261	74	52	64	569
90%	164	674	2,554	2,798	3,001	2,360	1,526	962	409	108	67	78	751
100%	1,021	2,304	3,707	5,391	5,418	4,973	3,217	2,185	1,276	284	139	158	1,108
Mean	99	354	1,043	1,339	1,450	1,173	781	472	190	51	34	43	422

Table A1-45. Water Year Average of Monthly Flows (cfs)—Cow Creek above Confluence with Sacramento River (SWRCB Cow Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	84	118	450	455	601	474	227	153	50	4	5	7
D	72	327	728	557	945	861	495	233	68	6	4	21
BN	82	225	649	1,050	1,384	890	794	404	141	18	12	21
AN	108	316	969	1,854	1,822	1,583	876	636	227	53	39	63
W	134	595	1,870	2,354	2,164	1,776	1,246	792	365	102	62	71
All	99	354	1,044	1,339	1,450	1,173	782	472	188	43	28	39
35												
C	84	118	450	455	601	475	227	153	51	6	6	9
D	72	327	728	557	945	861	495	233	68	9	6	22
BN	82	225	649	1,050	1,384	890	794	404	141	20	13	21
AN	108	316	969	1,854	1,822	1,583	876	636	227	53	39	63
W	134	595	1,870	2,354	2,164	1,776	1,246	792	365	102	62	71
All	99	354	1,044	1,339	1,450	1,173	782	472	189	44	29	40
45												
C	84	118	450	455	601	474	227	153	51	8	7	10
D	72	327	728	557	945	861	495	233	68	12	8	23
BN	82	225	649	1,050	1,384	890	794	404	141	22	15	22
AN	108	316	969	1,854	1,822	1,583	876	636	227	53	39	63
W	134	595	1,869	2,354	2,164	1,776	1,246	792	365	102	62	71
All	99	354	1,044	1,339	1,450	1,173	782	472	189	46	29	40
55												
C	84	118	450	455	601	474	227	153	52	9	8	11
D	72	327	728	557	945	861	495	233	68	15	10	24
BN	82	225	649	1,050	1,384	890	794	404	141	24	16	23
AN	108	316	969	1,854	1,822	1,583	876	636	227	53	40	63
W	134	595	1,869	2,354	2,164	1,776	1,246	792	365	102	62	71
All	99	354	1,044	1,339	1,450	1,173	782	472	189	47	30	41
65												
C	84	118	450	455	601	474	227	154	54	11	9	12
D	73	327	728	557	945	861	495	233	69	17	11	26
BN	82	225	649	1,050	1,384	890	794	404	141	27	19	24
AN	108	316	969	1,854	1,822	1,583	876	636	227	55	42	63
W	134	595	1,869	2,354	2,164	1,776	1,246	792	365	103	63	71
All	99	354	1,043	1,339	1,450	1,173	782	472	189	49	32	42
75												
C	84	118	450	455	601	474	227	155	56	13	10	13
D	73	327	728	557	945	861	495	233	72	20	13	28
BN	81	225	649	1,050	1,384	890	794	404	142	31	21	27
AN	107	316	969	1,854	1,822	1,583	876	636	227	60	45	64
W	134	595	1,869	2,354	2,164	1,776	1,246	792	365	104	65	71
All	99	354	1,043	1,339	1,450	1,173	781	472	190	51	34	43

A1.12.3.17 Deer Creek above Confluence with Sacramento River (SWRCB Deer Creek)

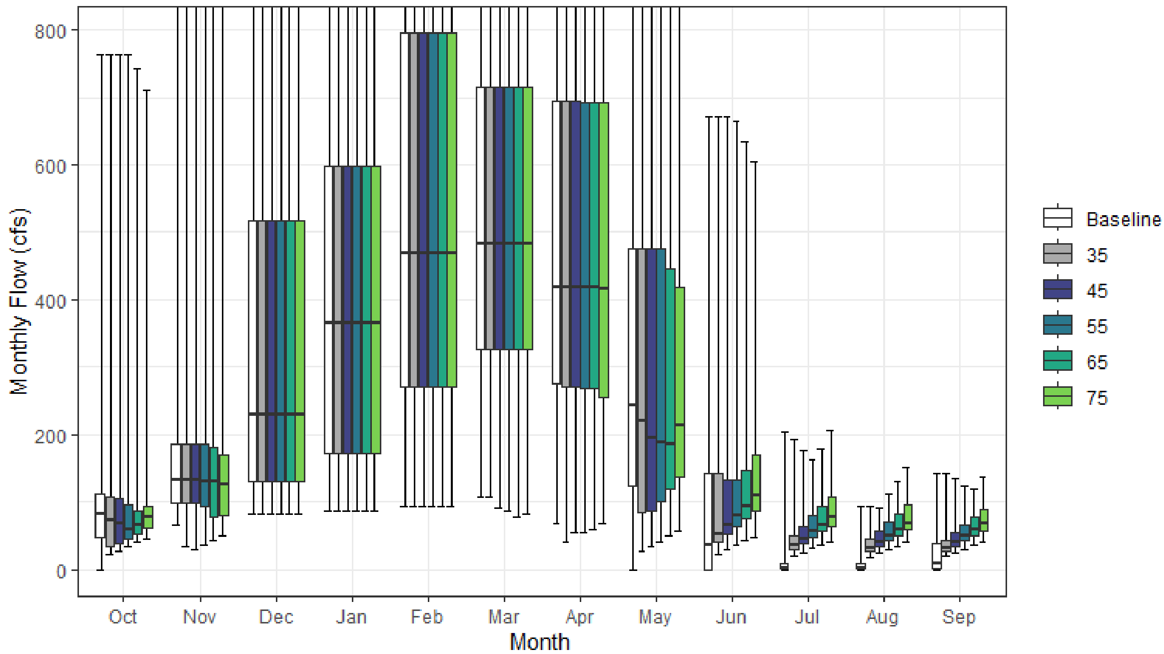

Figure A1-20. Deer Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-46. Cumulative Distribution of Monthly Flow (cfs)—Deer Creek above Confluence with Sacrameto River (SWRCB Deer Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	65	83	87	95	109	69	0	0	0	0	0	40
10%	25	83	98	128	162	236	184	18	0	0	0	0	80
25%	47	97	130	171	270	326	275	124	0	1	1	1	109
50%	82	132	229	365	469	482	419	243	36	1	1	8	168
75%	113	185	517	599	796	715	694	477	143	9	9	39	269
90%	134	334	891	1,160	1,245	1,121	1,012	768	366	51	17	63	366
100%	763	969	1,797	2,427	2,567	2,079	1,696	1,184	671	204	93	142	486
Mean	88	182	385	503	604	583	518	330	103	18	9	24	201
35													
0%	22	34	83	87	95	109	42	27	23	19	19	19	40
10%	25	76	98	128	162	236	168	46	33	25	23	23	83
25%	35	97	130	171	270	326	272	85	40	30	27	27	115
50%	72	132	229	365	469	482	419	220	52	36	32	32	167
75%	106	185	517	599	796	715	694	477	143	50	44	43	271
90%	123	334	891	1,160	1,245	1,121	1,012	768	349	67	53	61	367
100%	763	969	1,797	2,427	2,567	2,079	1,696	1,184	671	192	93	142	486
Mean	82	181	385	503	604	583	514	322	118	46	36	39	205
45													
0%	28	29	83	87	95	91	54	34	29	25	24	25	42
10%	31	64	98	128	162	236	162	58	42	33	29	29	84
25%	38	97	130	171	270	326	271	87	52	39	35	35	116
50%	68	132	229	365	469	482	419	194	65	46	41	41	166
75%	106	185	517	599	796	715	694	477	133	65	57	54	271
90%	122	334	891	1,160	1,245	1,121	1,012	768	327	86	67	65	368
100%	763	969	1,797	2,427	2,567	2,079	1,696	1,184	671	177	91	135	486
Mean	82	178	385	503	604	583	512	317	122	56	46	46	206
55													
0%	34	36	83	87	95	87	54	42	36	30	29	30	43
10%	38	49	98	128	162	236	146	71	52	40	36	36	86
25%	45	95	130	171	270	326	269	101	64	47	43	42	118
50%	58	131	229	365	469	482	419	187	80	56	50	50	169
75%	96	185	517	599	796	715	693	477	134	79	70	66	273
90%	122	334	891	1,160	1,245	1,121	1,012	763	305	105	82	75	369
100%	763	969	1,797	2,427	2,567	2,079	1,696	1,184	665	162	111	125	485
Mean	80	174	385	503	604	583	510	316	127	67	56	54	208
65													
0%	40	42	83	87	95	77	60	49	42	36	34	36	46
10%	45	57	98	128	162	233	146	84	61	47	42	42	90
25%	53	78	130	171	270	326	269	119	75	56	50	50	118
50%	67	131	229	365	469	482	419	187	94	67	59	59	172
75%	87	180	517	599	796	715	693	447	146	94	82	78	276
90%	99	334	891	1,160	1,245	1,121	1,012	751	285	124	97	89	370
100%	742	969	1,797	2,427	2,567	2,079	1,696	1,184	635	179	131	119	485
Mean	80	171	385	503	604	582	507	316	136	79	66	63	210
75													
0%	46	49	83	87	95	81	69	57	49	42	40	41	50
10%	52	63	98	128	162	231	153	97	71	55	49	49	93
25%	61	80	130	171	270	326	255	137	87	64	58	58	120
50%	78	126	229	365	469	482	416	213	109	77	68	68	173
75%	93	169	517	599	796	715	693	418	169	108	95	90	279
90%	107	328	891	1,160	1,245	1,121	1,012	725	297	143	112	102	373
100%	711	969	1,797	2,427	2,567	2,079	1,696	1,171	605	206	152	137	485
Mean	86	167	385	503	604	582	503	319	149	91	76	73	213

Table A1-47. Water Year Average of Monthly Flows (cfs)—Deer Creek above Confluence with Sacramento River (SWRCB Deer Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	55	94	172	171	244	261	171	61	1	0	0	2
D	69	153	258	211	363	429	336	142	6	1	1	9
BN	81	139	242	335	514	436	530	276	66	2	2	10
AN	88	183	312	642	800	748	575	399	90	8	11	28
W	124	278	713	943	949	889	809	620	258	53	23	52
All	88	182	385	503	604	583	518	330	103	18	9	24
35												
C	49	95	172	171	244	261	150	59	33	25	23	23
D	66	149	258	211	363	429	331	136	41	30	27	28
BN	75	138	242	335	514	436	530	254	74	36	31	30
AN	77	179	312	642	800	748	575	389	103	44	38	41
W	117	278	713	943	949	889	809	616	255	76	53	59
All	82	181	385	503	604	583	514	322	118	46	36	39
45												
C	51	87	172	171	244	260	147	65	42	32	29	30
D	68	148	258	211	363	429	329	132	52	39	35	36
BN	73	135	242	335	514	436	530	245	85	47	40	39
AN	79	175	312	642	800	748	575	378	106	57	48	49
W	115	277	713	943	949	889	809	610	247	87	65	64
All	82	178	385	503	604	583	512	317	122	56	46	46
55												
C	56	78	172	171	244	260	140	74	51	39	36	36
D	69	145	258	211	363	429	325	134	64	48	43	44
BN	66	130	242	335	514	436	526	245	98	57	49	48
AN	73	174	312	642	800	748	575	368	114	69	59	59
W	114	275	713	943	949	889	809	604	238	101	79	73
All	80	174	385	503	604	583	510	316	127	67	56	54
65												
C	62	76	172	171	244	259	140	87	60	46	43	43
D	68	139	258	211	363	429	317	141	76	56	51	52
BN	70	130	242	335	514	436	520	250	111	67	58	56
AN	72	171	312	642	800	748	575	356	128	82	70	70
W	106	271	713	943	949	889	809	594	242	118	93	84
All	80	171	385	503	604	582	507	316	136	79	66	63
75												
C	70	76	172	171	244	257	144	100	70	53	49	49
D	74	133	258	211	363	429	309	157	87	65	59	60
BN	77	128	242	335	514	436	510	261	123	78	67	65
AN	81	166	312	642	800	748	574	346	144	95	81	81
W	112	266	713	943	949	889	808	582	254	136	107	97
All	86	167	385	503	604	582	503	319	149	91	76	73

A1.12.3.18 Elder Creek above Confluence with Sacramento River

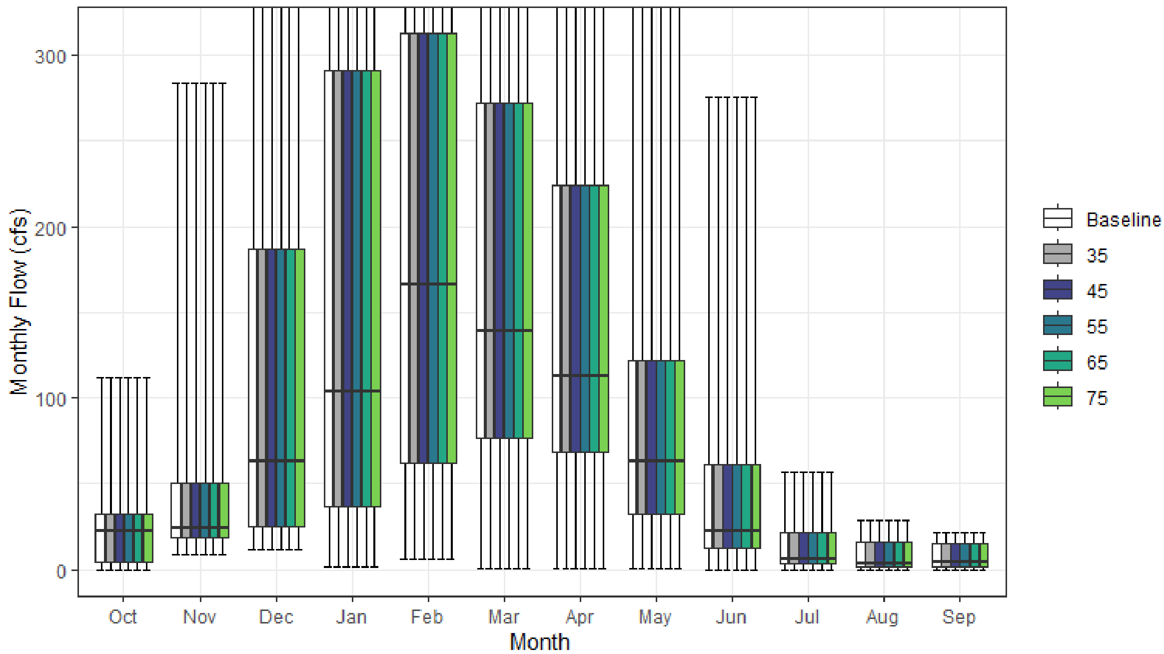

Figure A1-21. Elder Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-48. Cumulative Distribution of Monthly Flow (cfs)—Elder Creek above Confluence with Sacramento River

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	8	11	1	6	1	1	0	0	0	0	0	3
10%	2	14	18	14	26	39	29	15	7	1	0	0	16
25%	4	18	25	37	62	76	68	32	12	3	1	1	30
50%	22	24	63	104	167	139	113	63	22	6	4	4	52
75%	32	51	187	291	313	272	224	122	61	22	16	15	94
90%	35	110	318	417	533	396	317	198	82	29	19	17	130
100%	112	284	580	1,118	1,513	1,088	666	462	276	56	28	21	213
Mean	19	46	126	187	236	194	155	89	42	13	8	8	67
35													
0%	0	8	11	1	6	1	1	0	0	0	0	0	3
10%	2	14	18	14	26	39	29	15	7	1	0	0	16
25%	4	18	25	37	62	76	68	32	12	3	1	1	30
50%	22	24	63	104	167	139	113	63	22	6	4	4	52
75%	32	51	187	291	313	272	224	122	61	22	16	15	94
90%	35	110	318	417	533	396	317	198	82	29	19	17	130
100%	112	284	580	1,118	1,513	1,088	666	462	276	56	28	21	213
Mean	19	46	126	187	236	194	155	89	42	13	8	8	67
45													
0%	0	8	11	1	6	1	1	0	0	0	0	0	3
10%	2	14	18	14	26	39	29	15	7	1	0	0	16
25%	4	18	25	37	62	76	68	32	12	3	1	1	30
50%	22	24	63	104	167	139	113	63	22	6	4	4	52
75%	32	51	187	291	313	272	224	122	61	22	16	15	94
90%	35	110	318	417	533	396	317	198	82	29	19	17	130
100%	112	284	580	1,118	1,513	1,088	666	462	276	56	28	21	213
Mean	19	46	126	187	236	194	155	89	42	13	8	8	67
55													
0%	0	8	11	1	6	1	1	0	0	0	0	0	3
10%	2	14	18	14	26	39	29	15	7	1	0	0	16
25%	4	18	25	37	62	76	68	32	12	3	1	1	30
50%	22	24	63	104	167	139	113	63	22	6	4	4	52
75%	32	51	187	291	313	272	224	122	61	22	16	15	94
90%	35	110	318	417	533	396	317	198	82	29	19	17	130
100%	112	284	580	1,118	1,513	1,088	666	462	276	56	28	21	213
Mean	19	46	126	187	236	194	155	89	42	13	8	8	67
65													
0%	0	8	11	1	6	1	1	0	0	0	0	0	3
10%	2	14	18	14	26	39	29	15	7	1	0	0	16
25%	4	18	25	37	62	76	68	32	12	3	1	1	30
50%	22	24	63	104	167	139	113	63	22	6	4	4	52
75%	32	51	187	291	313	272	224	122	61	22	16	15	94
90%	35	110	318	417	533	396	317	198	82	29	19	17	130
100%	112	284	580	1,118	1,513	1,088	666	462	276	56	28	21	213
Mean	19	46	126	187	236	194	155	89	42	13	8	8	67
75													
0%	0	8	11	1	6	1	1	0	0	0	0	0	3
10%	2	14	18	14	26	39	29	15	7	1	0	0	16
25%	4	18	25	37	62	76	68	32	12	3	1	1	30
50%	22	24	63	104	167	139	113	63	22	6	4	4	52
75%	32	51	187	291	313	272	224	122	61	22	16	15	94
90%	35	110	318	417	533	396	317	198	82	29	19	17	130
100%	112	284	580	1,118	1,513	1,088	666	462	276	56	28	21	213
Mean	19	46	126	187	236	194	155	89	42	13	8	8	67

Table A1-49. Water Year Average of Monthly Flows (cfs)—Elder Creek above Confluence with Sacramento River

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	9	15	54	46	75	75	44	26	9	2	0	0
D	16	39	72	69	132	133	75	37	13	4	2	3
BN	19	38	68	128	166	112	140	55	22	6	3	3
AN	20	51	134	288	364	258	186	137	65	20	14	14
W	27	70	236	342	387	326	268	163	84	26	18	17
All	19	46	126	187	236	194	155	89	42	13	8	8
35												
C	9	15	54	46	75	75	44	26	9	2	0	0
D	16	39	72	69	132	133	75	37	13	4	2	3
BN	19	38	68	128	166	112	140	55	22	6	3	3
AN	20	51	134	288	364	258	186	137	65	20	14	14
W	27	70	236	342	387	326	268	163	84	26	18	17
All	19	46	126	187	236	194	155	89	42	13	8	8
45												
C	9	15	54	46	75	75	44	26	9	2	0	0
D	16	39	72	69	132	133	75	37	13	4	2	3
BN	19	38	68	128	166	112	140	55	22	6	3	3
AN	20	51	134	288	364	258	186	137	65	20	14	14
W	27	70	236	342	387	326	268	163	84	26	18	17
All	19	46	126	187	236	194	155	89	42	13	8	8
55												
C	9	15	54	46	75	75	44	26	9	2	0	0
D	16	39	72	69	132	133	75	37	13	4	2	3
BN	19	38	68	128	166	112	140	55	22	6	3	3
AN	20	51	134	288	364	258	186	137	65	20	14	14
W	27	70	236	342	387	326	268	163	84	26	18	17
All	19	46	126	187	236	194	155	89	42	13	8	8
65												
C	9	15	54	46	75	75	44	26	9	2	0	0
D	16	39	72	69	132	133	75	37	13	4	2	3
BN	19	38	68	128	166	112	140	55	22	6	3	3
AN	20	51	134	288	364	258	186	137	65	20	14	14
W	27	70	236	342	387	326	268	163	84	26	18	17
All	19	46	126	187	236	194	155	89	42	13	8	8
75												
C	9	15	54	46	75	75	44	26	9	2	0	0
D	16	39	72	69	132	133	75	37	13	4	2	3
BN	19	38	68	128	166	112	140	55	22	6	3	3
AN	20	51	134	288	364	258	186	137	65	20	14	14
W	27	70	236	342	387	326	268	163	84	26	18	17
All	19	46	126	187	236	194	155	89	42	13	8	8

A1.12.3.19 Feather River below Oroville Reservoir (SWRCB Oroville)

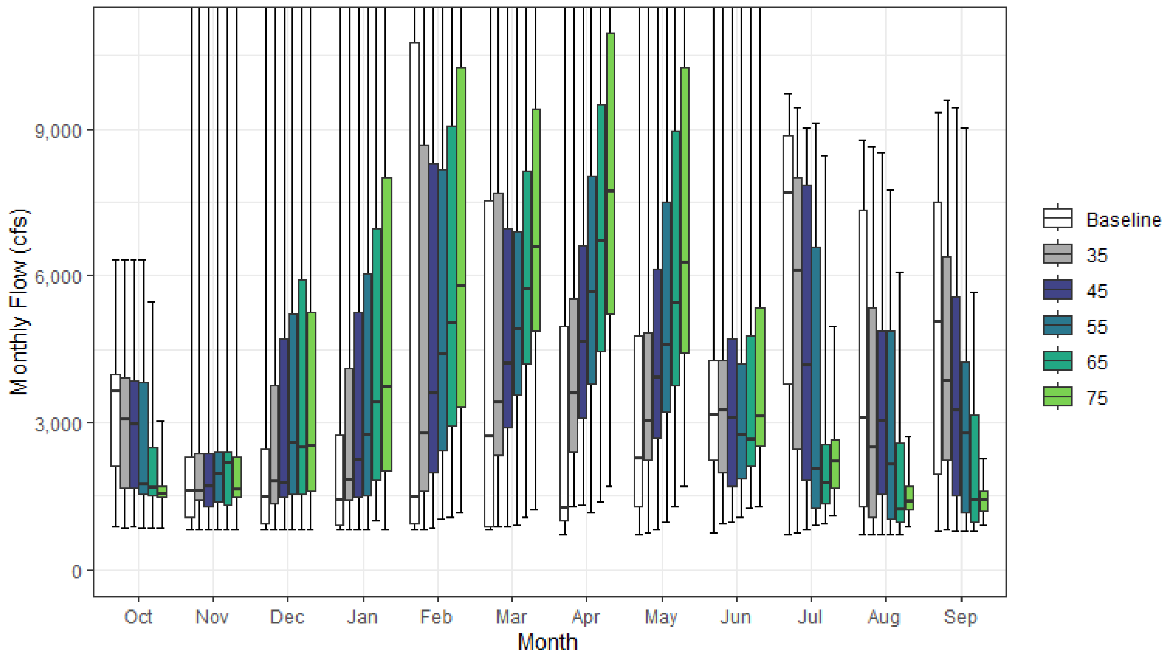

Figure A1-22. Feather River Streamflow below Oroville Reservoir Monthly Boxplot

Table A1-50. Cumulative Distribution of Monthly Flow (cfs)—Feather River below Oroville Reservoir (SWRCB Oroville)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	864	811	811	810	813	810	719	724	734	721	716	788	897
10%	1,099	831	836	834	841	820	768	981	1,309	2,463	719	1,026	1,334
25%	2,124	1,074	942	924	948	883	993	1,276	2,251	3,790	1,299	1,957	1,961
50%	3,634	1,593	1,489	1,426	1,487	2,705	1,250	2,259	3,160	7,674	3,100	5,061	2,612
75%	3,973	2,311	2,446	2,743	10,744	7,515	4,961	4,781	4,254	8,849	7,352	7,497	4,150
90%	4,586	2,402	8,664	13,528	16,882	15,868	11,161	10,159	6,831	9,168	8,054	8,769	5,584
100%	6,310	15,550	24,368	38,949	27,289	34,340	22,060	21,076	13,409	9,710	8,751	9,321	8,223
Mean	3,181	1,870	3,321	4,374	5,828	6,014	3,762	4,045	3,802	6,532	4,069	4,886	3,118
35													
0%	839	808	808	808	810	884	1,289	745	937	755	714	815	1,055
10%	955	827	837	959	1,301	1,647	1,811	1,582	1,224	1,459	772	1,263	1,262
25%	1,665	1,410	1,337	1,428	1,610	2,329	2,405	2,238	1,999	2,450	1,066	2,224	1,991
50%	3,069	1,611	1,809	1,840	2,789	3,425	3,612	3,018	3,266	6,112	2,492	3,845	2,827
75%	3,904	2,370	3,767	4,092	8,683	7,701	5,520	4,823	4,257	8,015	5,332	6,393	4,032
90%	4,027	2,401	7,498	13,528	12,567	13,997	11,161	9,676	6,793	8,901	7,438	8,709	5,586
100%	6,310	15,550	24,368	38,949	23,694	30,850	22,060	20,830	13,409	9,426	8,630	9,595	8,226
Mean	2,868	2,019	3,503	4,673	5,633	6,285	5,035	4,527	3,740	5,501	3,545	4,536	3,128
45													
0%	871	808	808	808	854	887	1,327	821	984	806	711	784	1,021
10%	1,145	840	896	1,108	1,472	2,007	2,187	1,796	1,268	967	953	957	1,383
25%	1,671	1,296	1,493	1,489	1,991	2,915	3,094	2,686	1,690	1,837	1,554	1,498	1,707
50%	2,952	1,689	1,753	2,244	3,586	4,192	4,643	3,913	3,096	4,186	3,023	3,249	2,699
75%	3,869	2,364	4,720	5,258	8,300	6,957	6,599	6,141	4,714	7,857	4,872	5,566	4,087
90%	4,011	2,402	8,248	12,102	12,366	13,639	10,353	8,914	7,031	8,358	7,013	8,535	5,566
100%	6,310	15,550	24,368	38,949	22,631	30,850	22,060	20,830	13,409	9,012	8,495	9,432	8,223
Mean	2,836	2,038	3,718	4,976	5,770	6,296	5,612	5,064	3,708	4,750	3,496	3,830	3,141
55													
0%	837	808	807	808	1,043	901	1,170	986	1,071	916	711	784	912
10%	986	848	1,075	1,372	1,649	2,452	2,672	1,925	1,455	1,009	908	926	1,420
25%	1,534	1,388	1,555	1,516	2,432	3,562	3,783	3,232	1,872	1,250	1,031	1,157	1,768
50%	1,744	1,953	2,590	2,739	4,383	4,903	5,666	4,581	2,733	2,060	2,151	2,790	2,626
75%	3,812	2,393	5,221	6,036	8,160	6,892	8,032	7,505	4,198	6,570	4,864	4,250	4,361
90%	3,875	2,403	9,553	12,961	12,552	13,504	11,103	10,137	7,755	8,075	6,875	6,312	5,543
100%	6,310	15,550	24,368	36,847	26,636	30,850	22,060	18,192	12,976	9,119	7,764	9,031	8,224
Mean	2,418	2,100	4,138	5,262	6,219	6,689	6,411	5,717	3,644	3,640	3,165	3,159	3,168
65													
0%	859	808	808	1,009	1,073	1,065	1,385	1,294	1,267	936	711	784	966
10%	1,036	928	1,119	1,509	1,949	2,898	3,158	2,156	1,721	1,150	934	925	1,613
25%	1,499	1,321	1,555	1,817	2,926	4,210	4,468	3,767	2,102	1,360	970	959	1,923
50%	1,680	2,161	2,482	3,411	5,031	5,715	6,696	5,424	2,664	1,763	1,237	1,416	2,569
75%	2,503	2,394	5,908	6,944	9,050	8,146	9,493	8,949	4,761	2,542	2,586	3,158	4,426
90%	3,859	2,405	10,752	12,679	13,918	14,630	12,600	11,840	8,305	6,234	4,955	4,099	5,721
100%	5,470	15,550	24,368	36,847	31,479	30,850	22,060	19,711	11,725	8,460	6,071	5,672	7,754
Mean	2,046	2,218	4,618	5,706	6,807	7,489	7,415	6,627	3,877	2,584	2,029	2,068	3,220
75													
0%	853	818	808	823	1,164	1,229	1,691	1,687	1,283	1,112	881	917	1,032
10%	1,058	1,080	1,240	1,518	2,250	3,348	3,840	2,556	2,108	1,477	1,062	1,103	1,812
25%	1,487	1,471	1,590	2,021	3,307	4,858	5,206	4,409	2,540	1,653	1,210	1,203	2,158
50%	1,553	1,641	2,520	3,730	5,798	6,594	7,731	6,267	3,123	2,192	1,388	1,408	2,878
75%	1,706	2,289	5,235	8,012	10,252	9,399	10,946	10,249	5,337	2,638	1,716	1,613	4,459
90%	2,023	2,388	11,323	14,505	15,058	16,262	14,532	13,594	8,235	3,063	2,139	1,847	5,536
100%	3,019	14,533	24,460	36,834	36,322	30,887	23,109	20,984	13,576	4,952	2,700	2,282	8,236
Mean	1,609	2,046	4,847	6,175	7,534	8,297	8,490	7,588	4,345	2,267	1,500	1,444	3,378

Table A1-51. Water Year Average of Monthly Flows (cfs)—Feather River below Oroville Reservoir (SWRCB Oroville)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	2,950	1,443	1,133	1,179	1,067	1,100	1,528	1,826	3,145	4,192	2,654	1,964
D	2,955	1,555	1,554	1,165	1,707	1,471	1,007	1,840	3,435	8,159	6,249	2,764
BN	3,510	1,673	2,164	1,926	2,983	3,130	1,745	1,832	2,562	8,654	6,646	5,257
AN	2,956	1,458	2,393	3,061	7,069	7,731	2,712	3,652	2,696	7,746	4,192	8,621
W	3,370	2,632	6,918	10,543	12,664	13,067	8,701	8,400	5,655	4,757	1,576	6,216
All	3,181	1,870	3,321	4,374	5,828	6,014	3,762	4,045	3,802	6,532	4,069	4,886
35												
C	2,615	1,573	1,428	1,315	1,480	1,885	1,775	1,630	1,989	2,672	2,053	1,572
D	2,756	1,720	2,050	1,419	2,628	2,944	2,829	2,507	2,365	4,553	4,168	3,169
BN	2,942	1,693	2,297	2,290	3,675	3,214	4,156	3,398	3,607	8,126	6,426	3,621
AN	2,379	1,687	2,138	3,916	6,748	8,271	4,596	3,845	3,036	7,454	4,715	8,106
W	3,254	2,824	7,023	10,683	10,822	12,161	9,158	8,572	6,092	5,298	1,627	6,174
All	2,868	2,019	3,503	4,673	5,633	6,285	5,035	4,527	3,740	5,501	3,545	4,536
45												
C	2,847	1,439	1,452	1,323	1,807	2,244	2,099	1,909	1,885	2,318	1,899	1,449
D	2,727	1,780	2,280	1,623	3,084	3,663	3,635	3,015	1,890	3,093	2,964	1,790
BN	2,683	1,685	2,348	2,597	4,287	3,792	5,214	4,423	3,242	6,208	5,753	2,814
AN	2,396	1,639	2,548	4,740	6,656	7,668	5,601	4,955	3,687	7,211	5,334	7,537
W	3,193	2,937	7,345	10,992	10,428	11,373	9,222	8,727	6,339	5,357	2,594	5,665
All	2,836	2,038	3,718	4,976	5,770	6,296	5,612	5,064	3,708	4,750	3,496	3,830
55												
C	2,010	1,286	1,572	1,542	2,159	2,706	2,490	2,207	1,878	1,988	1,830	1,394
D	2,371	1,857	2,674	1,865	3,356	4,465	4,452	3,504	1,907	1,562	1,326	1,544
BN	2,389	1,780	2,772	2,843	4,903	4,545	6,373	5,263	3,125	3,541	3,795	2,677
AN	2,110	1,790	3,368	5,745	6,965	7,928	6,708	6,066	3,240	4,902	4,553	4,490
W	2,820	3,046	7,771	11,064	11,020	11,263	9,876	9,385	6,379	5,602	4,281	5,038
All	2,418	2,100	4,138	5,262	6,219	6,689	6,411	5,717	3,644	3,640	3,165	3,159
65												
C	2,020	1,255	1,760	2,023	2,539	3,198	2,932	2,622	2,281	2,195	1,934	1,506
D	1,952	1,874	3,171	2,150	3,960	5,277	5,254	4,068	2,054	1,297	935	975
BN	2,119	1,801	3,080	3,331	5,154	5,296	7,542	6,044	3,137	1,516	1,432	1,475
AN	1,764	1,795	3,388	6,776	8,045	9,366	7,923	7,132	3,354	1,679	1,645	2,746
W	2,206	3,425	8,694	11,329	11,702	11,974	11,142	10,828	6,773	4,793	3,427	3,259
All	2,046	2,218	4,618	5,706	6,807	7,489	7,415	6,627	3,877	2,584	2,029	2,068
75												
C	1,979	1,300	1,970	1,907	2,925	3,651	3,448	3,102	2,700	2,380	2,068	1,683
D	1,417	1,733	3,065	2,455	4,570	6,089	6,070	4,692	2,621	1,905	1,297	1,291
BN	1,452	1,633	2,652	3,829	6,076	6,079	8,692	7,008	3,799	1,975	1,245	1,194
AN	1,570	1,774	3,868	7,626	9,097	10,819	9,144	8,245	3,886	1,832	1,232	1,682
W	1,665	3,048	9,479	12,053	12,442	12,707	12,603	12,235	7,046	2,840	1,619	1,482
All	1,609	2,046	4,847	6,175	7,534	8,297	8,490	7,588	4,345	2,267	1,500	1,444

A1.12.3.20 Feather River above Confluence with Sacramento River (SWRCB Feather River)

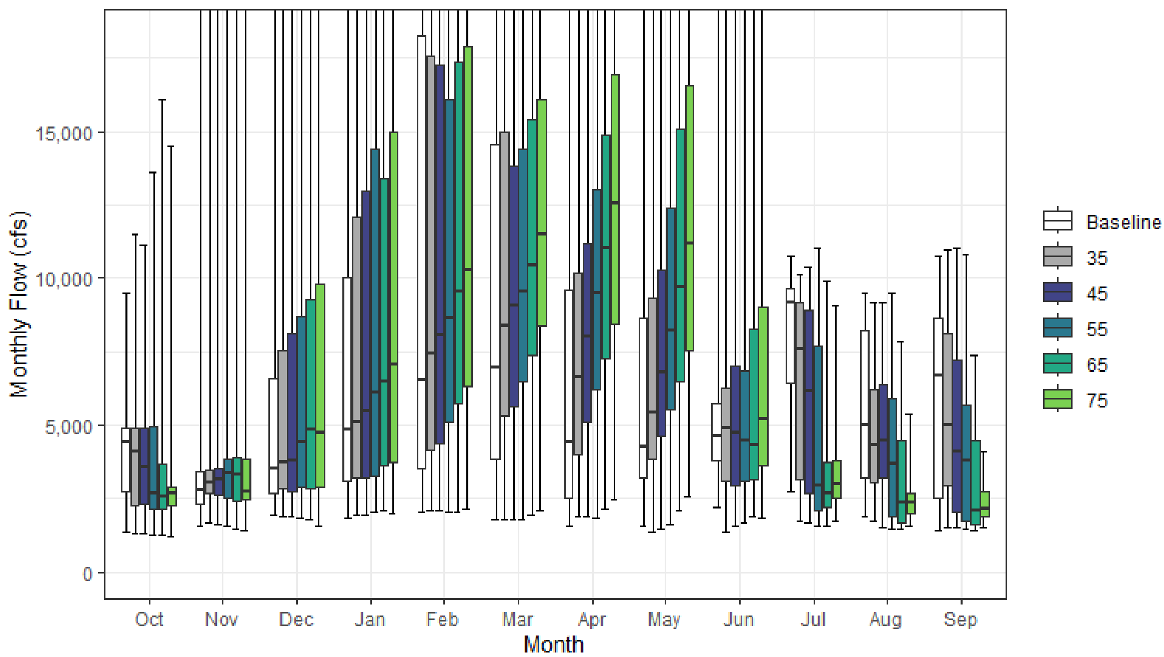

Figure A1-23. Feather River Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-52. Cumulative Distribution of Monthly Flow (cfs)—Feather River above Confluence with Sacramento River (SWRCB Feather River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	1,347	1,543	1,910	1,852	2,052	1,755	1,569	1,554	2,182	2,735	1,872	1,406	1,600
10%	1,822	1,871	2,106	2,471	2,984	2,820	1,983	2,427	2,879	3,720	2,985	1,968	2,161
25%	2,728	2,313	2,698	3,108	3,505	3,815	2,497	3,229	3,764	6,410	3,191	2,505	3,121
50%	4,399	2,807	3,522	4,864	6,509	6,939	4,411	4,237	4,605	9,151	5,012	6,710	4,233
75%	4,868	3,410	6,585	10,038	18,242	14,558	9,601	8,632	5,758	9,626	8,230	8,639	7,001
90%	5,702	3,809	19,339	22,604	27,057	26,986	17,413	16,042	11,212	9,990	8,946	10,384	8,903
100%	9,481	21,639	40,167	66,475	54,456	54,566	36,622	29,766	22,510	10,744	9,467	10,729	13,307
Mean	4,016	3,321	6,865	9,554	11,549	11,234	7,341	6,984	6,048	7,921	5,573	6,098	5,211
35													
0%	1,304	1,649	1,896	1,938	2,070	1,760	1,891	1,342	1,376	1,708	1,701	1,523	1,493
10%	1,647	1,897	2,213	2,581	3,142	3,435	2,990	2,521	2,121	2,080	2,547	1,946	2,065
25%	2,250	2,649	2,831	3,211	4,155	5,296	4,005	3,844	3,076	3,145	3,069	2,913	3,017
50%	4,080	3,048	3,713	5,105	7,447	8,388	6,624	5,394	4,909	7,584	4,336	5,006	4,355
75%	4,868	3,481	7,547	12,071	17,585	14,976	10,194	9,302	6,240	9,151	6,198	8,124	6,972
90%	5,173	4,110	17,682	23,908	23,310	23,014	17,667	16,240	11,324	9,606	8,369	10,168	9,008
100%	11,516	22,347	41,014	66,488	52,521	50,410	36,669	29,722	22,173	10,096	9,187	10,983	13,304
Mean	3,738	3,578	7,073	9,810	11,442	11,755	8,700	7,727	5,974	6,589	4,883	5,659	5,235
45													
0%	1,322	1,609	1,900	1,929	2,077	1,765	1,891	1,458	1,588	1,652	1,523	1,494	1,478
10%	1,743	1,941	2,231	2,602	3,193	3,691	3,708	2,901	2,115	1,911	2,312	1,662	2,273
25%	2,315	2,630	2,752	3,190	4,390	5,639	5,104	4,651	2,921	2,684	3,223	2,064	2,963
50%	3,587	3,146	3,774	5,498	8,041	9,062	7,983	6,768	4,753	6,161	4,493	4,086	4,337
75%	4,889	3,536	8,096	12,958	17,257	13,807	11,155	10,254	6,994	8,906	6,359	7,230	6,961
90%	5,129	4,569	17,545	25,587	23,816	23,218	17,868	15,833	11,218	9,412	8,213	9,918	9,037
100%	11,135	22,621	40,722	66,454	50,829	49,996	36,627	29,721	21,744	10,382	9,166	11,036	13,303
Mean	3,709	3,697	7,197	10,083	11,594	11,765	9,483	8,443	5,875	5,855	4,794	4,936	5,265
55													
0%	1,268	1,567	1,853	2,030	2,039	1,765	1,849	1,638	1,688	1,585	1,451	1,443	1,388
10%	1,541	1,853	2,187	2,845	3,253	4,317	4,527	3,091	2,085	1,779	1,656	1,603	2,358
25%	2,167	2,507	2,895	3,282	5,105	6,496	6,211	5,526	3,084	2,069	1,867	1,744	3,110
50%	2,690	3,374	4,404	6,114	8,665	9,534	9,463	8,216	4,495	2,949	3,687	3,794	4,390
75%	4,924	3,827	8,707	14,389	16,078	14,404	13,022	12,395	6,834	7,705	5,918	5,705	7,571
90%	5,118	4,860	16,740	23,174	24,633	24,555	18,152	17,423	11,661	9,322	8,203	7,905	9,233
100%	13,608	22,777	40,592	62,210	53,840	49,980	36,436	27,694	20,922	10,995	9,463	10,804	13,312
Mean	3,357	3,871	7,556	10,201	11,952	12,206	10,619	9,494	5,857	4,767	4,338	4,208	5,323
65													
0%	1,249	1,438	1,785	2,104	2,044	1,928	2,150	2,111	1,863	1,584	1,451	1,400	1,441
10%	1,575	1,868	2,181	3,058	3,646	4,952	5,345	3,435	2,338	1,841	1,628	1,599	2,617
25%	2,173	2,389	2,811	3,600	5,724	7,350	7,285	6,499	3,143	2,185	1,675	1,624	3,246
50%	2,574	3,297	4,831	6,482	9,516	10,428	11,010	9,691	4,324	2,656	2,355	2,070	4,377
75%	3,699	3,882	9,247	13,390	17,326	15,405	14,883	15,072	8,279	3,719	4,473	4,449	7,653
90%	4,973	5,664	18,270	21,420	25,566	26,187	20,078	19,832	13,346	8,379	6,480	5,566	9,167
100%	16,086	22,802	40,628	63,296	58,349	49,992	36,609	29,725	20,488	9,916	7,872	7,357	12,979
Mean	3,044	3,959	8,060	10,595	12,552	13,021	12,033	10,898	6,263	3,734	3,157	3,085	5,440
75													
0%	1,202	1,406	1,560	1,980	2,134	2,105	2,487	2,559	1,825	1,729	1,561	1,514	1,520
10%	1,561	1,928	2,332	3,053	4,128	5,582	6,333	3,966	2,931	2,099	1,744	1,725	2,800
25%	2,229	2,462	2,908	3,712	6,341	8,352	8,417	7,513	3,603	2,491	1,977	1,877	3,455
50%	2,690	2,721	4,725	7,080	10,279	11,465	12,567	11,180	5,196	3,005	2,343	2,148	4,805
75%	2,886	3,856	9,777	14,985	17,885	16,063	16,938	16,575	8,993	3,786	2,671	2,726	7,641
90%	3,250	6,533	18,665	24,292	26,527	26,623	22,815	22,557	13,600	5,069	3,038	3,088	9,493
100%	14,498	22,019	42,339	60,522	61,966	50,006	36,854	31,454	22,266	9,078	5,357	4,082	13,380
Mean	2,654	3,924	8,449	10,980	13,282	13,951	13,561	12,438	6,983	3,439	2,406	2,341	5,679

Table A1-53. Water Year Average of Monthly Flows (cfs)—Feather River above Confluence with Sacramento River (SWRCB Feather River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	3,471	2,506	2,596	2,922	3,032	2,796	2,249	2,561	3,593	4,520	3,202	2,479
D	3,681	2,772	3,516	3,471	4,831	4,927	2,852	3,385	4,434	8,775	7,085	3,607
BN	4,261	2,795	4,257	5,311	8,042	6,676	5,290	4,380	4,435	9,547	7,797	6,207
AN	3,660	3,187	5,620	9,757	14,341	15,044	6,873	7,155	5,041	9,378	6,083	10,120
W	4,564	4,546	13,780	20,159	22,082	21,619	14,880	13,559	9,985	7,491	4,142	8,116
All	4,016	3,321	6,865	9,554	11,549	11,234	7,341	6,984	6,048	7,921	5,573	6,098
35												
C	3,167	2,647	2,943	2,991	3,494	3,689	2,844	2,647	2,638	3,152	2,662	2,103
D	3,501	2,974	4,068	3,587	5,563	6,633	4,968	4,322	3,520	5,236	4,950	3,863
BN	3,742	2,853	4,380	5,574	8,593	7,336	7,774	6,236	5,441	8,826	7,311	4,534
AN	3,154	3,565	5,346	10,749	13,991	15,967	8,429	7,618	5,240	8,669	6,352	9,451
W	4,469	4,975	13,913	20,300	20,746	20,794	15,314	13,955	10,240	7,194	3,917	7,968
All	3,738	3,578	7,073	9,810	11,442	11,755	8,700	7,727	5,974	6,589	4,883	5,659
45												
C	3,396	2,518	3,012	3,064	3,871	4,236	3,417	3,069	2,562	2,767	2,455	1,951
D	3,472	3,057	4,297	3,785	6,106	7,234	6,089	5,099	3,009	3,793	3,746	2,489
BN	3,502	2,863	4,421	5,796	9,182	7,892	9,023	7,425	5,060	6,975	6,579	3,635
AN	3,173	3,579	5,675	11,607	13,867	15,225	9,591	8,876	5,814	8,435	6,901	8,888
W	4,411	5,366	13,951	20,517	20,339	20,064	15,512	14,264	10,320	7,269	4,846	7,465
All	3,709	3,697	7,197	10,083	11,594	11,765	9,483	8,443	5,875	5,855	4,794	4,936
55												
C	2,632	2,309	3,107	3,266	4,258	4,875	4,074	3,573	2,607	2,399	2,313	1,855
D	3,137	3,163	4,732	3,929	6,546	8,212	7,319	5,990	3,068	2,257	2,094	2,220
BN	3,230	2,959	4,797	5,929	9,664	8,584	10,661	8,842	5,062	4,378	4,589	3,386
AN	2,921	3,884	6,332	12,463	14,299	15,434	11,106	10,478	5,456	6,204	5,814	5,635
W	4,176	5,787	14,258	20,244	20,512	19,946	16,367	15,268	10,345	7,539	6,320	6,845
All	3,357	3,871	7,556	10,201	11,952	12,206	10,619	9,494	5,857	4,767	4,338	4,208
65												
C	2,640	2,219	3,292	3,732	4,752	5,577	4,784	4,215	3,079	2,549	2,333	1,878
D	2,744	3,270	5,267	4,188	7,309	9,304	8,555	6,972	3,315	1,952	1,642	1,631
BN	2,980	2,930	5,136	6,420	9,921	9,335	12,361	10,228	5,202	2,312	2,157	2,146
AN	2,618	4,126	6,321	13,305	15,025	16,915	12,778	12,235	5,742	3,035	2,890	3,937
W	3,707	5,962	15,229	20,451	21,201	20,366	18,007	17,255	11,046	6,869	5,457	5,026
All	3,044	3,959	8,060	10,595	12,552	13,021	12,033	10,898	6,263	3,734	3,157	3,085
75												
C	2,627	2,241	3,514	3,659	5,307	6,273	5,564	4,930	3,590	2,725	2,372	1,964
D	2,264	3,307	5,313	4,535	8,233	10,475	9,837	8,037	4,026	2,538	1,956	1,897
BN	2,398	2,859	4,875	6,970	11,114	10,409	14,046	11,831	6,140	2,790	1,945	1,873
AN	2,490	4,051	7,003	14,371	16,053	18,200	14,492	14,114	6,564	3,289	2,379	2,871
W	3,185	5,880	16,234	20,718	21,469	21,001	19,946	19,412	11,711	4,957	3,053	2,934
All	2,654	3,924	8,449	10,980	13,282	13,951	13,561	12,438	6,983	3,439	2,406	2,341

A1.12.3.21 Mill Creek above Confluence with Sacramento River (SWRCB Mill Creek)

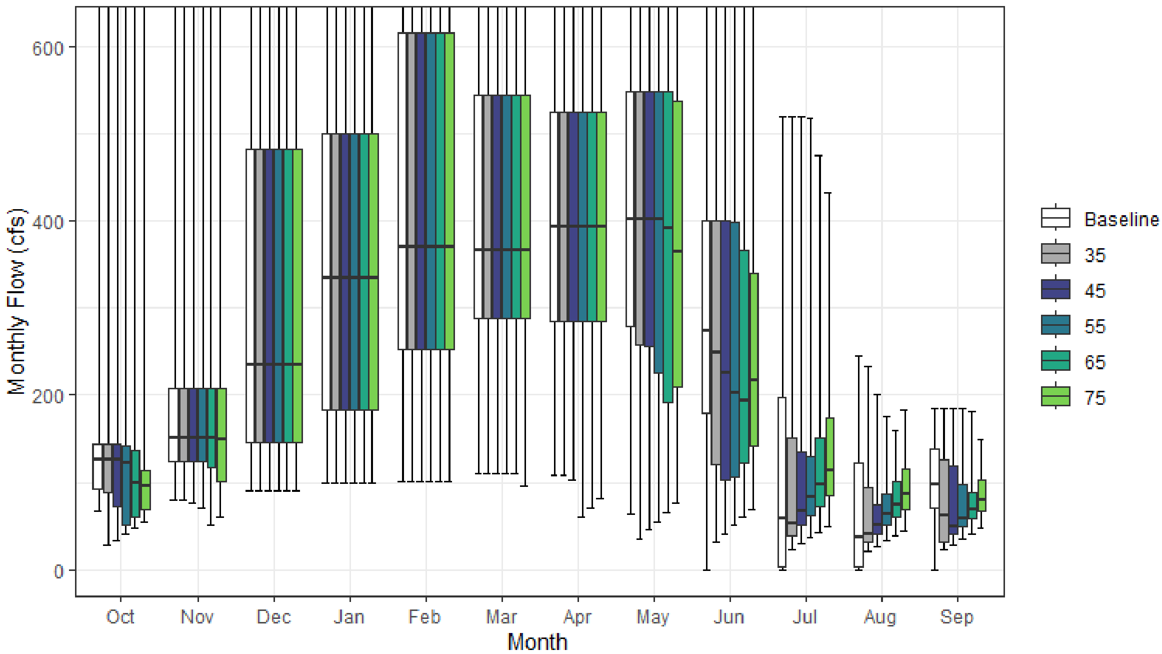

Figure A1-24. Mill Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-54. Cumulative Distribution of Monthly Flow (cfs)—Mill Creek above Confluence with Sacramento River (SWRCB Mill Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	68	79	91	100	101	109	108	64	0	0	0	0	53
10%	82	100	119	140	176	221	237	219	86	0	0	29	105
25%	91	124	145	183	253	288	285	279	179	3	3	70	135
50%	126	150	234	334	369	367	393	402	274	58	37	97	178
75%	143	209	483	499	616	544	524	547	401	197	122	138	274
90%	161	316	763	877	866	789	701	678	567	308	172	151	337
100%	673	1,026	1,345	1,816	1,725	1,266	1,101	921	790	520	245	184	419
Mean	128	197	352	416	468	444	430	424	302	117	64	97	207
35													
0%	28	79	91	100	101	109	108	35	32	23	21	22	54
10%	62	100	119	140	176	221	237	193	54	34	28	27	104
25%	88	124	145	183	253	288	285	257	121	39	32	31	130
50%	126	150	234	334	369	367	393	402	249	53	40	61	174
75%	143	209	483	499	616	544	524	547	401	152	93	126	269
90%	161	316	763	877	866	789	701	678	567	278	141	150	334
100%	673	1,026	1,345	1,816	1,725	1,266	1,101	921	790	520	232	184	415
Mean	123	197	352	416	468	444	430	418	277	113	64	79	203
45													
0%	33	75	91	100	101	109	103	45	41	30	27	29	55
10%	45	100	119	140	176	221	237	178	64	44	35	35	103
25%	73	124	145	183	253	288	285	255	103	51	41	40	132
50%	126	150	234	334	369	367	393	402	226	68	52	49	172
75%	143	209	483	499	616	544	524	547	401	134	73	118	266
90%	161	316	763	877	866	789	701	678	567	254	127	148	332
100%	673	1,026	1,345	1,816	1,725	1,266	1,101	921	790	520	200	184	413
Mean	118	197	352	416	468	444	429	414	270	115	67	77	203
55													
0%	40	70	91	100	101	109	59	55	50	36	33	35	50
10%	45	99	119	140	176	221	237	150	75	54	43	42	103
25%	52	124	145	183	253	288	285	226	106	62	50	49	132
50%	122	150	234	334	369	367	393	402	203	83	63	58	172
75%	143	209	483	499	616	544	524	547	399	129	87	98	263
90%	156	316	763	877	866	789	701	678	566	230	108	126	330
100%	673	1,026	1,345	1,816	1,725	1,266	1,101	921	790	518	176	184	408
Mean	112	197	352	416	468	444	429	406	264	118	72	75	202
65													
0%	47	51	91	100	101	109	70	66	60	43	39	41	52
10%	53	86	119	140	176	221	231	153	88	64	51	50	106
25%	59	117	145	183	253	288	285	193	123	73	60	58	135
50%	99	150	234	334	369	367	393	392	194	98	75	69	172
75%	137	209	483	499	616	544	524	547	367	151	100	89	265
90%	155	316	763	877	866	789	701	678	552	202	113	104	325
100%	673	1,026	1,345	1,816	1,725	1,266	1,101	921	790	475	159	180	401
Mean	107	194	352	416	468	444	427	398	260	124	81	76	201
75													
0%	55	59	91	100	101	96	81	76	69	49	45	48	56
10%	62	75	119	140	176	221	207	168	102	74	59	58	108
25%	69	101	145	183	253	288	285	209	142	85	69	67	136
50%	96	149	234	334	369	367	393	364	216	113	86	79	177
75%	113	209	483	499	616	544	524	537	340	174	116	103	267
90%	136	316	763	877	866	789	701	678	505	231	131	113	323
100%	673	1,026	1,345	1,816	1,725	1,266	1,101	921	790	432	183	149	400
Mean	103	189	352	416	468	444	424	392	262	137	93	84	202

Table A1-55. Water Year Average of Monthly Flows (cfs)—Mill Creek above Confluence with Sacramento River (SWRCB Mill Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	106	115	191	180	235	254	211	193	96	1	7	33
D	115	165	247	212	326	367	337	300	174	16	11	72
BN	120	154	239	315	414	351	441	403	291	74	36	89
AN	125	196	301	535	597	566	483	499	354	141	84	120
W	156	292	609	706	678	608	587	621	491	270	144	145
All	128	197	352	416	468	444	430	424	302	117	64	97
35												
C	93	115	191	180	235	254	209	177	64	32	28	29
D	108	165	247	212	326	367	337	286	126	41	33	41
BN	116	154	239	315	414	351	441	401	263	62	42	57
AN	122	196	301	535	597	566	483	499	338	111	73	102
W	155	292	609	706	678	608	587	621	488	243	117	137
All	123	197	352	416	468	444	430	418	277	113	64	79
45												
C	87	115	191	180	235	254	208	166	71	42	36	35
D	100	165	247	212	326	367	337	279	113	52	42	45
BN	112	154	239	315	414	351	441	397	244	73	49	49
AN	118	196	301	535	597	566	483	499	326	107	75	99
W	153	292	609	706	678	608	587	621	485	230	110	131
All	118	197	352	416	468	444	429	414	270	115	67	77
55												
C	81	113	191	180	235	254	204	147	80	51	44	43
D	97	165	247	212	326	367	337	266	117	64	51	52
BN	101	154	239	315	414	351	441	391	225	86	60	55
AN	111	195	301	535	597	566	483	497	304	110	79	88
W	148	292	609	706	678	608	587	620	478	216	106	116
All	112	197	352	416	468	444	429	406	264	118	72	75
65												
C	81	106	191	180	235	254	197	145	94	60	52	50
D	94	162	247	212	326	367	335	248	134	75	61	59
BN	97	151	239	315	414	351	441	376	214	102	71	65
AN	100	191	301	535	597	566	483	494	287	130	89	86
W	139	292	609	706	678	608	587	617	458	206	114	104
All	107	194	352	416	468	444	427	398	260	124	81	76
75												
C	83	96	191	180	235	253	187	154	109	69	60	58
D	90	158	247	212	326	367	330	246	154	87	70	69
BN	94	145	239	315	414	351	440	362	229	117	82	74
AN	96	188	301	535	597	566	483	482	284	150	103	97
W	132	289	609	706	678	608	587	607	435	218	129	110
All	103	189	352	416	468	444	424	392	262	137	93	84

A1.12.3.22 Mokelumne River above Pardee Reservoir (SWRCB Pardee Inflow)

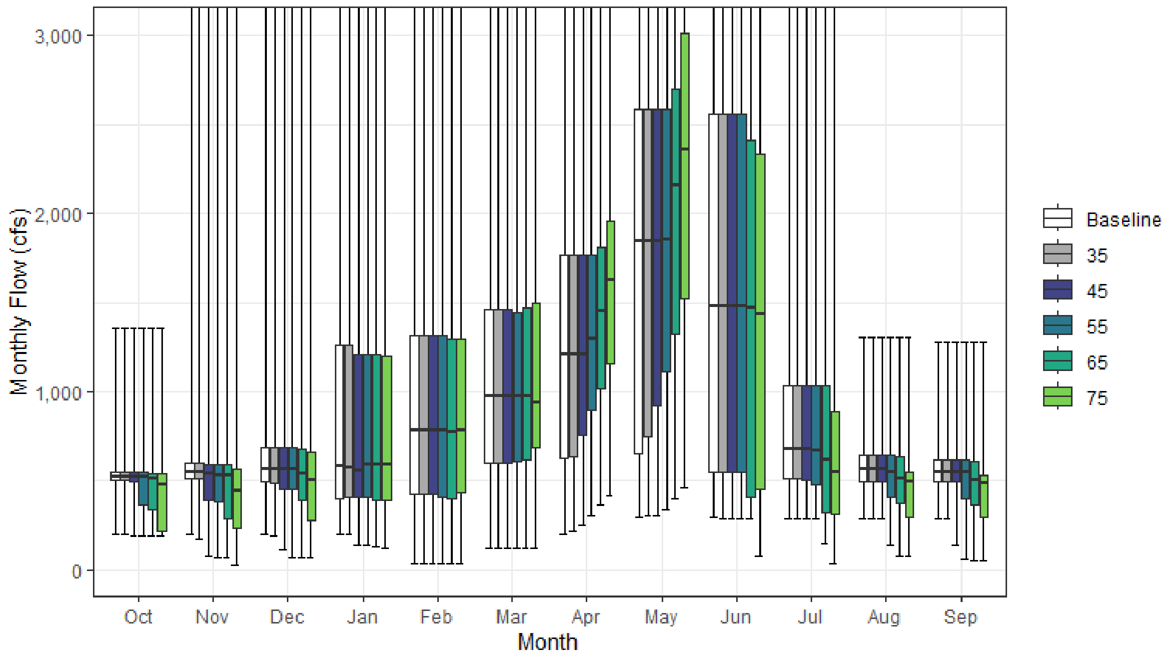

Figure A1-25. Mokelumne River above Pardee Reservoir Monthly Boxplot

Table A1-56. Cumulative Distribution of Monthly Flow (cfs)—Mokelumne River above Pardee Reservoir (SWRCB Pardee Inflow)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	196	201	200	194	33	117	201	295	291	287	285	288	170
10%	368	363	328	270	264	369	350	324	501	493	486	444	303
25%	506	515	494	394	427	595	628	652	544	507	497	498	407
50%	521	543	566	581	778	974	1,210	1,844	1,479	678	566	547	660
75%	543	595	687	1,263	1,317	1,464	1,763	2,590	2,560	1,035	643	615	956
90%	559	785	1,796	1,904	1,952	2,049	2,094	3,206	3,353	1,427	780	714	1,246
100%	1,357	3,383	3,948	5,738	4,798	3,379	4,519	4,717	6,512	3,645	1,301	1,280	1,862
Mean	518	615	816	926	990	1,105	1,274	1,776	1,785	868	596	573	714
35													
0%	196	175	189	194	33	117	211	305	288	287	285	288	169
10%	335	267	316	270	264	369	468	447	498	458	383	365	304
25%	506	515	482	404	427	595	631	745	544	507	497	497	411
50%	521	543	566	575	778	974	1,210	1,844	1,479	678	566	547	658
75%	543	595	687	1,263	1,317	1,464	1,763	2,590	2,560	1,035	643	615	956
90%	559	780	1,796	1,890	1,942	2,049	2,094	3,205	3,353	1,427	780	714	1,246
100%	1,357	3,384	3,947	5,738	4,798	3,379	4,519	4,674	6,512	3,645	1,301	1,280	1,862
Mean	510	603	809	926	990	1,105	1,297	1,807	1,777	862	591	566	714
45													
0%	192	73	111	134	33	117	249	304	288	287	285	139	164
10%	328	225	287	270	264	369	573	575	343	322	359	345	303
25%	495	388	451	404	427	595	758	920	544	506	495	496	423
50%	521	538	566	558	778	974	1,210	1,844	1,479	678	566	547	658
75%	543	587	683	1,212	1,317	1,464	1,763	2,590	2,560	1,035	643	615	956
90%	556	778	1,796	1,890	1,887	2,049	2,094	3,195	3,351	1,427	780	714	1,232
100%	1,357	3,383	3,947	5,738	4,793	3,379	4,519	4,674	6,512	3,645	1,301	1,280	1,862
Mean	496	578	800	921	987	1,104	1,339	1,860	1,769	853	584	555	715
55													
0%	192	71	70	134	33	117	304	334	288	287	140	56	155
10%	277	215	284	265	261	387	640	702	311	298	291	294	313
25%	360	383	451	404	408	603	894	1,117	544	476	410	396	427
50%	516	533	560	587	778	974	1,292	1,852	1,479	671	544	545	647
75%	543	587	683	1,212	1,317	1,448	1,763	2,590	2,560	1,035	640	615	948
90%	556	778	1,796	1,890	1,885	2,049	2,094	3,174	3,351	1,427	780	714	1,225
100%	1,357	3,383	3,948	5,738	4,783	3,379	4,519	4,674	6,512	3,645	1,301	1,280	1,862
Mean	472	563	791	922	985	1,105	1,401	1,941	1,746	833	562	527	715
65													
0%	192	71	70	127	33	117	359	395	288	144	73	51	155
10%	202	204	239	264	261	412	747	830	305	296	289	289	318
25%	333	287	390	390	399	616	1,016	1,320	408	322	372	365	436
50%	513	525	538	587	770	974	1,449	2,163	1,473	616	515	506	648
75%	539	587	679	1,212	1,295	1,471	1,811	2,701	2,412	1,035	636	606	930
90%	556	778	1,796	1,890	1,885	2,049	2,097	3,409	3,338	1,427	780	714	1,225
100%	1,357	3,384	3,947	5,738	4,783	3,379	4,519	4,673	6,512	3,645	1,301	1,280	1,862
Mean	454	541	768	917	981	1,114	1,492	2,098	1,660	798	530	499	715
75													
0%	192	27	70	115	34	117	415	456	78	31	73	47	157
10%	199	148	209	250	261	420	862	958	304	292	155	81	321
25%	219	234	272	390	432	686	1,160	1,523	455	307	297	298	436
50%	476	437	506	590	782	940	1,626	2,362	1,440	546	495	489	671
75%	535	567	664	1,201	1,295	1,496	1,956	3,012	2,335	888	543	525	928
90%	555	732	1,781	1,884	1,883	2,079	2,334	3,594	3,143	1,390	755	714	1,210
100%	1,357	3,462	3,684	5,728	4,783	3,379	4,519	4,707	6,464	3,645	1,301	1,280	1,862
Mean	412	490	727	915	981	1,146	1,626	2,326	1,617	717	466	434	715

Table A1-57. Water Year Average of Monthly Flows (cfs)—Mokelumne River above Pardee Reservoir (SWRCB Pardee Inflow)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	482	453	400	330	272	362	346	409	603	440	417	411
D	494	525	561	453	575	749	804	961	931	558	507	507
BN	514	544	625	558	919	915	1,233	1,563	1,546	721	564	550
AN	496	745	833	1,239	1,263	1,482	1,515	2,260	1,878	892	599	591
W	566	758	1,339	1,690	1,613	1,722	2,045	3,041	3,162	1,408	777	716
All	518	615	816	926	990	1,105	1,274	1,776	1,785	868	596	573
35												
C	475	425	390	334	272	364	444	518	572	415	390	381
D	479	507	547	453	574	749	836	1,020	922	549	503	496
BN	507	544	615	558	919	915	1,237	1,571	1,546	721	564	550
AN	489	730	828	1,239	1,263	1,482	1,515	2,260	1,878	892	599	591
W	564	752	1,339	1,686	1,611	1,721	2,043	3,039	3,161	1,408	777	716
All	510	603	809	926	990	1,105	1,297	1,807	1,777	862	591	566
45												
C	436	381	369	333	279	372	537	636	535	382	374	346
D	461	474	527	450	573	748	927	1,149	916	534	483	472
BN	505	533	609	557	911	914	1,278	1,603	1,546	720	563	549
AN	489	721	828	1,230	1,260	1,480	1,513	2,259	1,876	892	599	591
W	553	728	1,339	1,678	1,608	1,717	2,042	3,034	3,159	1,408	777	716
All	496	578	800	921	987	1,104	1,339	1,860	1,769	853	584	555
55												
C	406	358	361	323	287	394	643	772	517	353	315	270
D	434	456	516	449	567	751	1,060	1,317	879	483	448	431
BN	488	523	600	573	905	912	1,345	1,714	1,499	703	540	518
AN	478	701	809	1,225	1,250	1,471	1,531	2,269	1,852	891	597	589
W	525	718	1,337	1,678	1,607	1,712	2,041	3,033	3,159	1,408	777	716
All	472	563	791	922	985	1,105	1,401	1,941	1,746	833	562	527
65												
C	389	323	324	314	293	433	758	913	495	299	258	225
D	420	433	495	447	563	761	1,222	1,535	779	436	385	372
BN	468	494	574	569	903	919	1,480	1,969	1,333	632	504	492
AN	433	672	774	1,224	1,231	1,467	1,587	2,476	1,748	868	584	564
W	515	710	1,327	1,671	1,604	1,711	2,055	3,070	3,106	1,407	776	715
All	454	541	768	917	981	1,114	1,492	2,098	1,660	798	530	499
75												
C	334	260	272	307	312	485	875	1,053	520	229	173	130
D	369	387	451	435	563	811	1,409	1,771	749	352	314	282
BN	447	438	542	588	885	951	1,695	2,272	1,369	500	424	422
AN	404	653	715	1,221	1,230	1,511	1,726	2,770	1,703	786	523	517
W	468	652	1,295	1,667	1,604	1,714	2,106	3,268	2,968	1,355	739	683
All	412	490	727	915	981	1,146	1,626	2,326	1,617	717	466	434

A1.12.3.23 Mokelumne River below Camanche Reservoir (SWRCB Camanche)

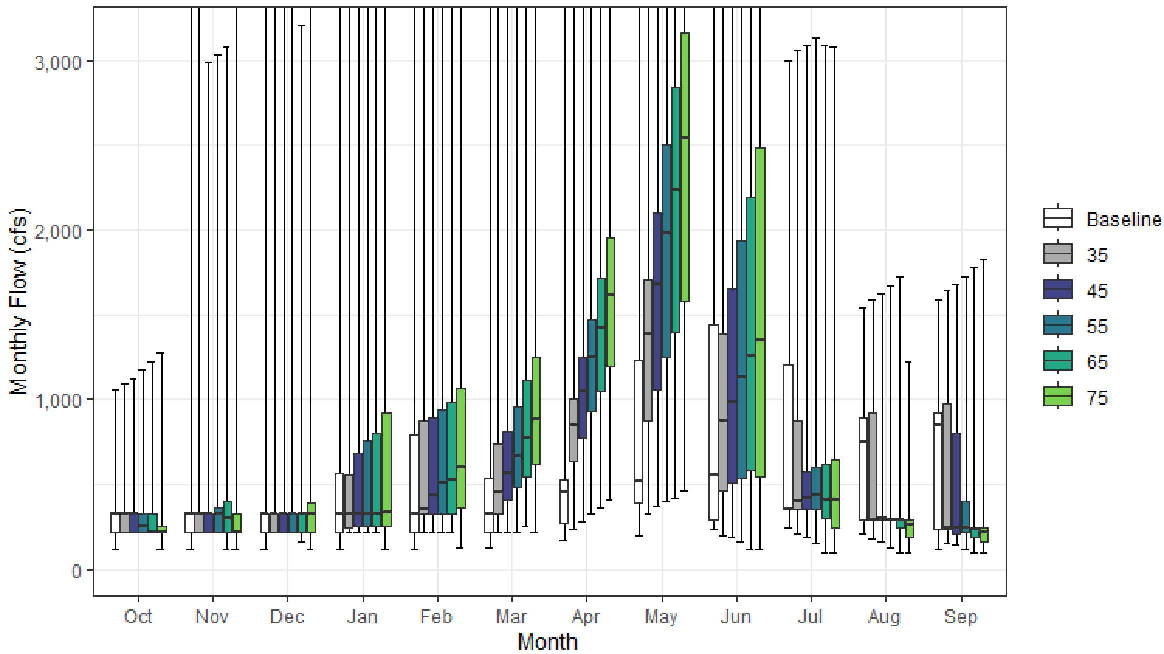

Figure A1-26. Mokelumne River Streamflow below Camanche Reservoir Monthly Boxplot

Table A1-58. Cumulative Distribution of Monthly Flow (cfs)—Mokelumne River below Camanche Reservoir (SWRCB Camanche)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	115	115	115	115	115	127	169	198	234	245	204	115	150
10%	220	220	220	220	220	220	170	198	234	286	233	190	176
25%	220	221	220	220	221	221	270	387	292	355	287	239	229
50%	326	326	326	326	326	326	450	518	553	356	751	851	356
75%	326	326	326	567	795	541	526	1,236	1,445	1,201	897	925	656
90%	326	371	1,174	1,629	1,750	1,465	1,429	2,788	2,063	1,544	1,014	1,028	974
100%	1,056	4,049	3,787	6,357	5,587	3,528	4,470	4,056	4,439	3,000	1,545	1,587	1,657
Mean	297	384	539	681	694	597	631	1,006	942	813	624	638	473
35													
0%	220	220	220	220	220	220	239	330	201	210	177	153	170
10%	220	220	220	220	221	306	480	524	310	263	209	178	229
25%	220	221	220	245	326	328	637	877	468	350	287	239	290
50%	326	326	326	326	358	455	850	1,383	876	401	288	240	386
75%	326	326	326	554	872	737	1,001	1,712	1,389	876	921	971	678
90%	326	460	1,173	1,630	1,566	1,528	1,437	2,792	2,060	1,557	1,062	1,088	989
100%	1,096	3,984	3,786	6,357	5,466	3,529	4,470	4,077	4,477	3,060	1,592	1,647	1,673
Mean	293	393	543	701	714	692	949	1,466	1,041	688	526	576	518
45													
0%	220	220	220	220	220	220	284	371	191	192	163	143	181
10%	220	221	220	220	221	326	591	652	338	268	205	174	245
25%	221	221	221	251	326	404	774	1,059	512	356	287	207	328
50%	325	326	326	326	433	562	1,047	1,684	982	417	288	240	434
75%	326	326	326	687	890	816	1,249	2,105	1,655	572	312	801	709
90%	326	470	1,056	1,630	1,512	1,522	1,565	2,815	2,156	1,531	1,054	1,080	1,003
100%	1,126	2,987	3,786	6,357	5,138	3,528	4,470	4,109	4,507	3,089	1,623	1,677	1,684
Mean	285	377	535	712	723	752	1,114	1,698	1,165	612	462	492	539
55													
0%	220	220	220	220	220	221	326	396	159	148	129	116	187
10%	220	220	220	220	240	335	700	778	346	202	173	150	262
25%	221	221	221	252	326	480	926	1,246	533	350	287	219	351
50%	251	326	326	326	506	661	1,252	1,984	1,135	434	288	240	491
75%	327	364	326	755	936	955	1,474	2,500	1,940	598	300	402	729
90%	358	516	1,104	1,629	1,568	1,574	1,786	2,940	2,479	1,271	1,017	1,106	993
100%	1,176	3,033	3,654	6,357	4,862	3,528	4,470	4,156	4,557	3,140	1,672	1,727	1,703
Mean	288	386	530	714	763	834	1,281	1,936	1,314	581	388	434	570
65													
0%	220	115	163	220	220	250	367	415	117	100	100	100	194
10%	220	220	220	220	227	361	781	897	302	129	104	102	255
25%	220	220	221	252	326	543	1,045	1,398	587	303	244	185	372
50%	221	300	326	326	528	775	1,420	2,237	1,256	407	287	239	549
75%	326	401	340	798	989	1,116	1,718	2,847	2,197	623	292	245	773
90%	407	463	1,250	1,637	1,750	1,672	2,038	3,358	2,844	880	440	1,135	995
100%	1,226	3,084	3,204	6,356	4,965	3,528	4,470	4,317	4,712	3,088	1,723	1,777	1,732
Mean	291	389	533	714	810	926	1,435	2,178	1,458	540	322	374	601
75													
0%	115	115	115	115	123	221	413	462	116	100	100	100	204
10%	220	220	220	220	236	413	887	1,013	305	107	101	101	273
25%	220	220	221	258	362	617	1,191	1,577	544	241	191	164	382
50%	221	221	326	335	605	884	1,617	2,537	1,353	408	263	216	584
75%	251	326	392	921	1,065	1,252	1,957	3,162	2,482	646	292	240	844
90%	326	489	1,442	1,360	1,663	1,927	2,337	3,830	3,225	960	326	245	1,048
100%	1,275	3,478	3,697	6,347	4,853	3,528	4,154	4,937	5,352	3,079	1,220	1,827	1,761
Mean	257	367	560	728	854	1,049	1,625	2,448	1,619	546	259	241	637

Table A1-59. Water Year Average of Monthly Flows (cfs)—Mokelumne River below Camanche Reservoir (SWRCB Camanche)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	257	257	255	255	255	255	203	259	242	282	230	189
D	271	295	275	275	276	276	298	426	372	377	325	317
BN	303	312	377	366	437	378	443	600	740	666	582	638
AN	283	592	570	743	709	629	537	1,004	1,026	917	764	851
W	340	475	975	1,379	1,391	1,139	1,265	2,088	1,830	1,467	1,024	1,027
All	297	384	539	681	694	597	631	1,006	942	813	624	638
35												
C	259	263	257	257	272	300	462	583	398	263	215	182
D	273	306	294	283	323	410	748	1,017	569	352	274	258
BN	289	304	362	349	440	463	906	1,328	888	438	332	423
AN	284	605	581	809	786	834	897	1,610	1,065	665	558	702
W	333	491	975	1,420	1,380	1,192	1,408	2,296	1,820	1,329	983	1,066
All	293	393	543	701	714	692	949	1,466	1,041	688	526	576
45												
C	255	258	250	250	283	338	576	717	446	257	207	176
D	273	307	298	286	351	497	935	1,252	657	355	271	220
BN	276	289	349	348	498	551	1,124	1,612	1,045	435	289	276
AN	267	509	570	876	799	886	1,116	1,937	1,203	569	393	502
W	324	490	964	1,428	1,344	1,229	1,531	2,509	1,989	1,120	877	991
All	285	377	535	712	723	752	1,114	1,698	1,165	612	462	492
55												
C	256	259	250	249	303	384	674	849	475	225	181	155
D	273	312	302	289	387	586	1,109	1,472	723	342	261	215
BN	276	308	338	361	567	656	1,332	1,897	1,199	446	288	238
AN	274	481	569	885	850	1,050	1,333	2,275	1,387	549	297	334
W	330	517	950	1,423	1,371	1,276	1,681	2,744	2,245	1,047	696	911
All	288	386	530	714	763	834	1,281	1,936	1,314	581	388	434
65												
C	243	258	250	249	321	434	771	954	463	157	130	121
D	277	298	303	291	427	664	1,264	1,677	780	312	241	202
BN	280	313	340	365	651	747	1,520	2,160	1,344	433	282	232
AN	273	513	498	902	913	1,212	1,527	2,593	1,544	563	288	257
W	342	522	989	1,413	1,410	1,374	1,828	3,044	2,532	970	524	776
All	291	389	533	714	810	926	1,435	2,178	1,458	540	322	374
75												
C	215	216	232	229	329	488	879	1,083	514	151	127	117
D	247	277	309	298	480	759	1,437	1,873	830	276	210	171
BN	239	291	355	401	730	851	1,732	2,437	1,488	419	255	211
AN	229	510	541	957	990	1,390	1,738	2,910	1,715	563	270	229
W	309	501	1,057	1,417	1,434	1,541	2,051	3,420	2,840	1,029	363	384
All	257	367	560	728	854	1,049	1,625	2,448	1,619	546	259	241

A1.12.3.24 Mokelumne River above Confluence with Delta (SWRCB Mokelumne River)

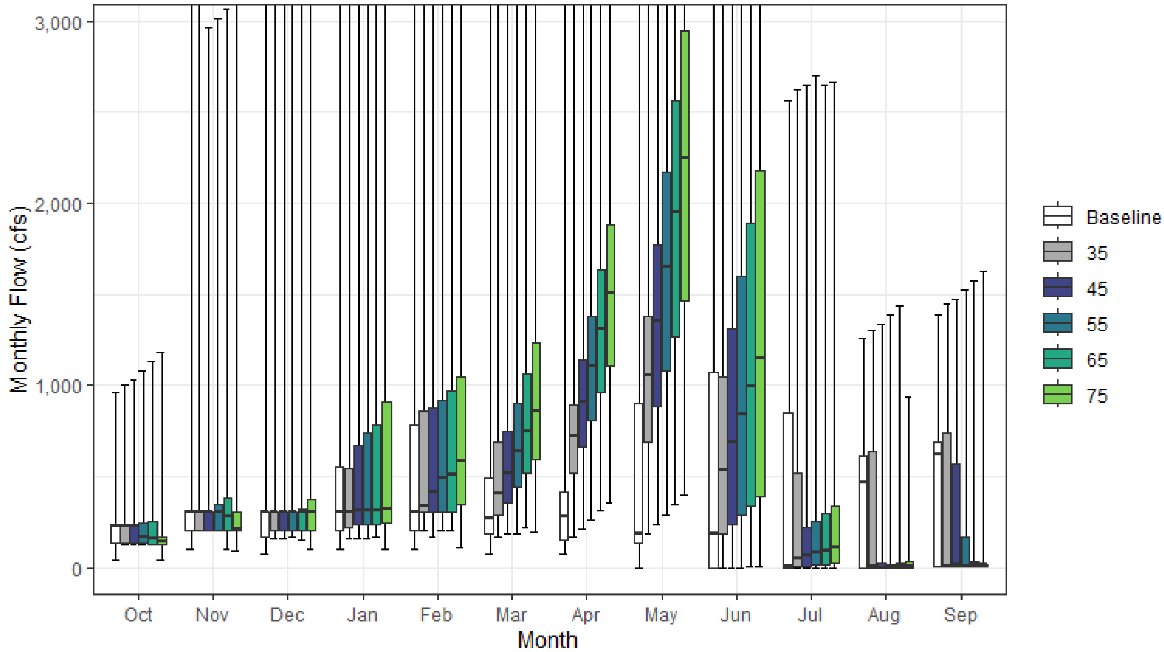

Figure A1-27. Mokelumne River Streamflow above Confluence with Delta Monthly Boxplot

Table A1-60. Cumulative Distribution of Monthly Flow (cfs)—Mokelumne River above Confluence with Delta (SWRCB Mokelumn River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	42	98	75	100	99	75	72	0	0	0	0	2	67
10%	126	200	162	165	202	168	72	1	1	0	0	7	81
25%	136	203	164	205	205	182	147	135	1	1	0	7	119
50%	231	305	307	308	308	274	280	186	182	3	464	618	244
75%	238	306	308	550	779	488	414	903	1,073	845	610	692	539
90%	261	352	1,156	1,611	1,709	1,412	1,313	2,508	1,689	1,141	727	811	855
100%	961	3,984	3,767	6,335	5,565	3,474	4,364	3,721	4,063	2,562	1,257	1,385	1,537
Mean	210	360	505	652	672	545	506	708	617	464	348	421	362
35													
0%	125	200	162	163	203	169	166	185	0	0	0	2	105
10%	126	201	164	203	204	266	377	420	69	0	0	7	151
25%	136	203	203	215	308	287	516	684	181	7	0	7	193
50%	231	305	307	308	340	405	718	1,050	537	51	4	10	270
75%	234	307	308	539	854	685	892	1,379	1,048	520	633	739	566
90%	249	442	1,155	1,612	1,541	1,473	1,312	2,510	1,687	1,201	775	871	875
100%	1,000	3,959	3,766	6,335	5,445	3,475	4,365	3,741	4,101	2,622	1,304	1,445	1,551
Mean	205	373	514	675	695	642	832	1,201	740	349	253	360	412
45													
0%	125	200	162	163	164	182	214	238	1	0	0	2	119
10%	126	201	192	203	205	287	485	539	87	1	0	7	167
25%	136	203	204	233	308	359	663	880	232	9	1	7	224
50%	230	305	307	308	415	518	906	1,350	690	65	1	10	334
75%	232	307	308	670	872	747	1,138	1,772	1,307	216	25	568	598
90%	249	450	1,038	1,612	1,490	1,467	1,395	2,553	1,782	1,140	766	847	890
100%	1,030	2,965	3,766	6,335	5,117	3,474	4,365	3,774	4,131	2,651	1,335	1,475	1,564
Mean	197	357	512	689	704	702	996	1,434	871	275	192	278	434
55													
0%	126	200	164	163	203	186	261	291	0	0	0	4	137
10%	126	200	203	204	225	298	592	659	106	1	0	7	191
25%	136	203	205	235	308	438	811	1,075	284	11	0	7	257
50%	164	305	308	309	488	633	1,108	1,651	842	79	6	9	395
75%	247	343	308	737	918	903	1,379	2,167	1,597	249	17	170	608
90%	265	497	1,085	1,611	1,549	1,521	1,667	2,643	2,133	915	729	873	878
100%	1,080	3,010	3,634	6,336	4,841	3,474	4,364	3,821	4,181	2,701	1,384	1,525	1,583
Mean	202	367	511	693	745	788	1,168	1,678	1,037	257	126	226	470
65													
0%	126	101	149	164	203	222	309	344	4	0	0	7	160
10%	126	200	203	204	212	339	699	779	125	1	0	7	210
25%	127	202	206	236	308	517	957	1,271	335	18	0	7	290
50%	162	281	307	309	510	747	1,308	1,950	995	93	7	12	460
75%	254	381	323	782	971	1,067	1,629	2,559	1,886	293	24	30	669
90%	314	443	1,232	1,619	1,731	1,651	1,970	3,070	2,520	548	169	902	887
100%	1,130	3,061	3,184	6,313	4,944	3,474	4,364	4,028	4,336	2,650	1,435	1,575	1,614
Mean	206	370	516	696	792	896	1,347	1,954	1,218	253	78	177	512
75													
0%	42	95	97	98	105	193	356	397	4	0	0	7	168
10%	126	200	203	204	221	391	806	898	145	6	0	7	226
25%	126	200	206	240	344	597	1,105	1,466	386	24	1	7	314
50%	143	206	307	319	588	861	1,509	2,250	1,148	107	9	12	520
75%	164	307	376	905	1,043	1,231	1,880	2,945	2,177	339	29	17	741
90%	241	470	1,424	1,340	1,645	1,906	2,273	3,542	2,908	632	60	36	952
100%	1,180	3,454	3,678	6,326	4,832	3,474	4,085	4,648	5,002	2,666	932	1,625	1,647
Mean	173	348	543	709	836	1,024	1,544	2,244	1,406	288	36	59	555

Table A1-61. Water Year Average of Monthly Flows (cfs)—Mokelumne River above Confluence with Delta (SWRCB Mokelumn River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	170	238	211	214	230	215	102	54	1	1	2	6
D	184	270	234	249	256	224	159	140	82	32	45	99
BN	217	290	338	328	419	324	303	282	405	311	295	411
AN	195	569	538	716	690	576	413	671	667	555	477	629
W	251	447	952	1,358	1,366	1,083	1,145	1,758	1,457	1,091	736	801
All	210	360	505	652	672	545	506	708	617	464	348	421
35												
C	171	244	219	214	255	266	381	464	194	12	2	7
D	186	287	265	253	305	359	632	799	306	21	1	40
BN	204	284	330	327	422	407	768	1,034	589	84	45	194
AN	196	585	550	789	768	782	771	1,277	733	309	271	481
W	243	471	954	1,402	1,357	1,138	1,289	1,966	1,453	953	696	838
All	205	373	514	675	695	642	832	1,201	740	349	253	360
45												
C	168	239	217	215	258	303	490	597	250	15	3	8
D	186	288	275	263	334	447	813	1,027	393	27	1	8
BN	189	269	321	329	480	498	987	1,329	756	82	2	48
AN	181	489	553	859	781	834	992	1,603	891	213	106	281
W	234	470	946	1,408	1,325	1,176	1,411	2,178	1,625	744	590	764
All	197	357	512	689	704	702	996	1,434	871	275	192	278
55												
C	172	240	228	218	287	354	599	729	305	20	5	10
D	189	293	285	269	370	542	993	1,256	480	33	2	9
BN	190	288	318	342	550	608	1,206	1,624	924	100	3	8
AN	189	461	551	865	832	1,000	1,212	1,959	1,088	196	10	113
W	240	497	932	1,404	1,352	1,223	1,561	2,415	1,893	674	408	685
All	202	367	511	693	745	788	1,168	1,678	1,037	257	126	226
65												
C	166	240	234	228	304	411	708	862	361	28	16	21
D	193	280	286	274	410	639	1,173	1,483	567	39	4	10
BN	194	294	322	348	633	718	1,425	1,919	1,091	118	3	8
AN	190	494	481	886	896	1,183	1,431	2,315	1,286	231	11	37
W	252	502	970	1,394	1,391	1,334	1,737	2,758	2,215	624	241	549
All	206	370	516	696	792	896	1,347	1,954	1,218	253	78	177
75												
C	139	198	216	205	313	467	817	994	416	35	21	25
D	163	259	292	282	463	737	1,353	1,712	655	47	7	13
BN	153	272	338	384	712	829	1,644	2,214	1,259	136	4	8
AN	147	491	524	940	972	1,366	1,651	2,671	1,483	267	12	19
W	220	481	1,039	1,399	1,414	1,511	1,969	3,148	2,555	706	96	161
All	173	348	543	709	836	1,024	1,544	2,244	1,406	288	36	59

A1.12.3.25 Paynes Creek above Confluence with Sacramento River

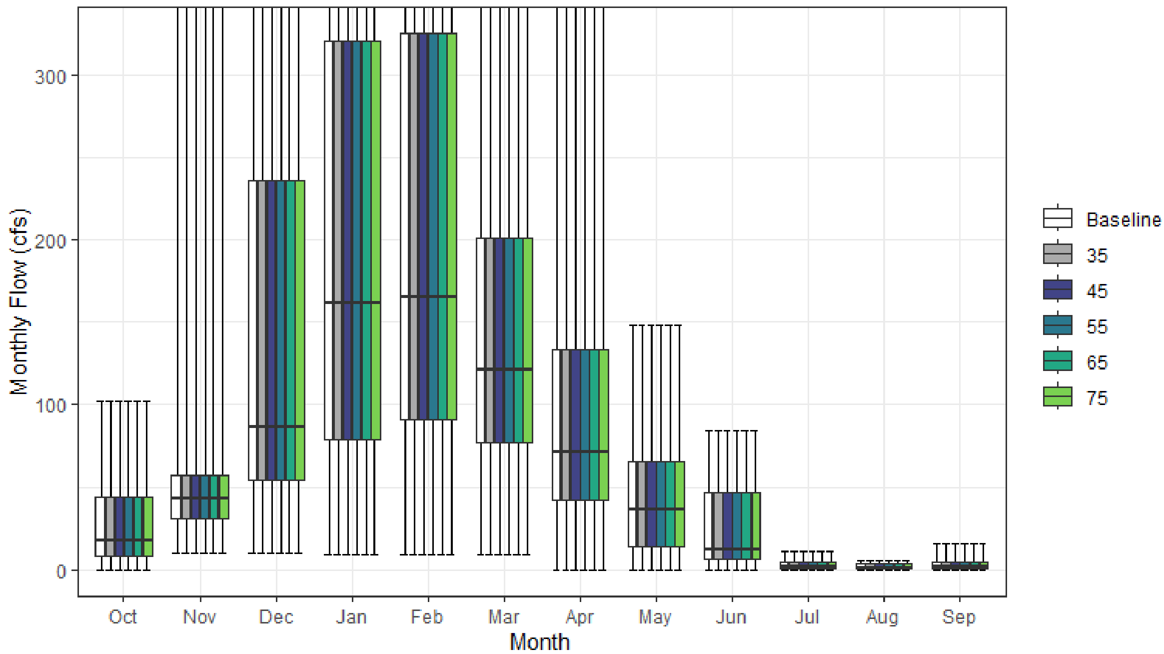

Figure A1-28. Paynes Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-62. Cumulative Distribution of Monthly Flow (cfs)—Paynes Creek above Confluence with Sacramento River

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	10	10	9	9	9	0	0	0	0	0	0	3
10%	5	23	36	48	64	51	23	8	3	0	0	0	23
25%	8	31	55	79	91	77	42	13	6	1	1	1	35
50%	17	43	86	161	165	121	71	36	12	2	1	2	52
75%	44	57	236	321	325	201	133	66	47	4	4	5	85
90%	48	102	367	463	466	330	180	92	54	5	4	5	109
100%	102	381	572	934	900	594	430	148	84	11	5	16	136
Mean	26	58	152	213	230	159	95	45	26	3	2	3	61
35													
0%	0	10	10	9	9	9	0	0	0	0	0	0	3
10%	5	23	36	48	64	51	23	8	3	0	0	0	23
25%	8	31	55	79	91	77	42	13	6	1	1	1	35
50%	17	43	86	161	165	121	71	36	12	2	1	2	52
75%	44	57	236	321	325	201	133	66	47	4	4	5	85
90%	48	102	367	463	466	330	180	92	54	5	4	5	109
100%	102	381	572	934	900	594	430	148	84	11	5	16	136
Mean	26	58	152	213	230	159	95	45	26	3	2	3	61
45													
0%	0	10	10	9	9	9	0	0	0	0	0	0	3
10%	5	23	36	48	64	51	23	8	3	0	0	0	23
25%	8	31	55	79	91	77	42	13	6	1	1	1	35
50%	17	43	86	161	165	121	71	36	12	2	1	2	52
75%	44	57	236	321	325	201	133	66	47	4	4	5	85
90%	48	102	367	463	466	330	180	92	54	5	4	5	109
100%	102	381	572	934	900	594	430	148	84	11	5	16	136
Mean	26	58	152	213	230	159	95	45	26	3	2	3	61
55													
0%	0	10	10	9	9	9	0	0	0	0	0	0	3
10%	5	23	36	48	64	51	23	8	3	0	0	0	23
25%	8	31	55	79	91	77	42	13	6	1	1	1	35
50%	17	43	86	161	165	121	71	36	12	2	1	2	52
75%	44	57	236	321	325	201	133	66	47	4	4	5	85
90%	48	102	367	463	466	330	180	92	54	5	4	5	109
100%	102	381	572	934	900	594	430	148	84	11	5	16	136
Mean	26	58	152	213	230	159	95	45	26	3	2	3	61
65													
0%	0	10	10	9	9	9	0	0	0	0	0	0	3
10%	5	23	36	48	64	51	23	8	3	0	0	0	23
25%	8	31	55	79	91	77	42	13	6	1	1	1	35
50%	17	43	86	161	165	121	71	36	12	2	1	2	52
75%	44	57	236	321	325	201	133	66	47	4	4	5	85
90%	48	102	367	463	466	330	180	92	54	5	4	5	109
100%	102	381	572	934	900	594	430	148	84	11	5	16	136
Mean	26	58	152	213	230	159	95	45	26	3	2	3	61
75													
0%	0	10	10	9	9	9	0	0	0	0	0	0	3
10%	5	23	36	48	64	51	23	8	3	0	0	0	23
25%	8	31	55	79	91	77	42	13	6	1	1	1	35
50%	17	43	86	161	165	121	71	36	12	2	1	2	52
75%	44	57	236	321	325	201	133	66	47	4	4	5	85
90%	48	102	367	463	466	330	180	92	54	5	4	5	109
100%	102	381	572	934	900	594	430	148	84	11	5	16	136
Mean	26	58	152	213	230	159	95	45	26	3	2	3	61

Table A1-63. Water Year Average of Monthly Flows (cfs)—Paynes Creek above Confluence with Sacramento River

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	14	32	63	63	72	59	22	9	2	1	0	1
D	23	51	106	95	149	121	47	18	7	1	1	1
BN	25	43	105	151	228	136	100	32	13	2	1	2
AN	23	51	119	280	294	205	105	63	40	4	3	5
W	37	88	277	390	348	236	162	85	54	6	4	5
All	26	58	152	213	230	159	95	45	26	3	2	3
35												
C	14	32	63	63	72	59	22	9	2	1	0	1
D	23	51	106	95	149	121	47	18	7	1	1	1
BN	25	43	105	151	228	136	100	32	13	2	1	2
AN	23	51	119	280	294	205	105	63	40	4	3	5
W	37	88	277	390	348	236	162	85	54	6	4	5
All	26	58	152	213	230	159	95	45	26	3	2	3
45												
C	14	32	63	63	72	59	22	9	2	1	0	1
D	23	51	106	95	149	121	47	18	7	1	1	1
BN	25	43	105	151	228	136	100	32	13	2	1	2
AN	23	51	119	280	294	205	105	63	40	4	3	5
W	37	88	277	390	348	236	162	85	54	6	4	5
All	26	58	152	213	230	159	95	45	26	3	2	3
55												
C	14	32	63	63	72	59	22	9	2	1	0	1
D	23	51	106	95	149	121	47	18	7	1	1	1
BN	25	43	105	151	228	136	100	32	13	2	1	2
AN	23	51	119	280	294	205	105	63	40	4	3	5
W	37	88	277	390	348	236	162	85	54	6	4	5
All	26	58	152	213	230	159	95	45	26	3	2	3
65												
C	14	32	63	63	72	59	22	9	2	1	0	1
D	23	51	106	95	149	121	47	18	7	1	1	1
BN	25	43	105	151	228	136	100	32	13	2	1	2
AN	23	51	119	280	294	205	105	63	40	4	3	5
W	37	88	277	390	348	236	162	85	54	6	4	5
All	26	58	152	213	230	159	95	45	26	3	2	3
75												
C	14	32	63	63	72	59	22	9	2	1	0	1
D	23	51	106	95	149	121	47	18	7	1	1	1
BN	25	43	105	151	228	136	100	32	13	2	1	2
AN	23	51	119	280	294	205	105	63	40	4	3	5
W	37	88	277	390	348	236	162	85	54	6	4	5
All	26	58	152	213	230	159	95	45	26	3	2	3

A1.12.3.26 Putah Creek below Lake Berryessa (SWRCB Lake Berryessa)

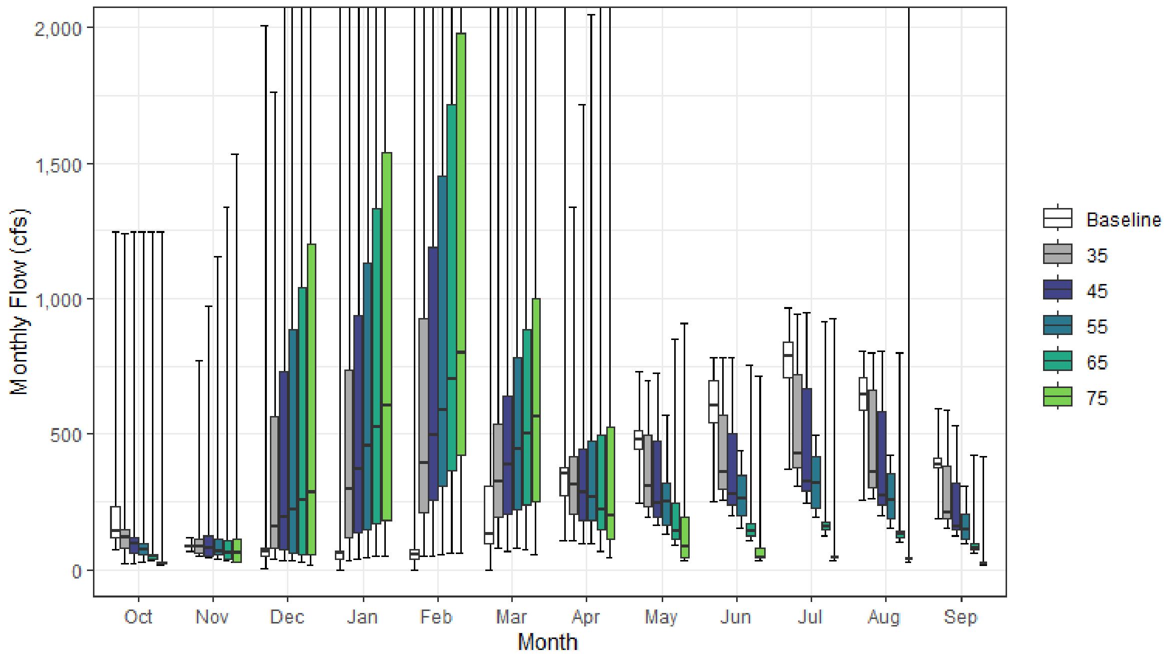

Figure A1-29. Putah Creek Streamflow below Lake Berryessa Monthly Boxplot

Table A1-64. Cumulative Distribution of Monthly Flow (cfs)—Putah Creek below Lake Berryessa (SWRCB Lake Berryessa)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	70	65	2	0	0	0	109	246	252	371	259	186	118
10%	95	79	24	13	7	70	138	406	517	666	546	343	219
25%	117	81	52	39	36	96	271	444	544	707	586	374	226
50%	143	86	65	61	56	131	353	479	605	787	646	390	232
75%	232	91	76	69	72	310	378	511	698	839	709	408	251
90%	263	102	79	314	842	991	640	598	742	868	742	436	521
100%	1,246	120	2,011	5,159	6,696	6,318	3,624	730	781	963	803	591	1,051
Mean	177	88	80	228	381	460	474	484	619	771	641	390	289
35													
0%	19	49	40	30	51	79	108	194	255	308	259	153	129
10%	63	54	50	68	90	148	183	217	269	342	281	180	146
25%	76	60	76	116	210	194	206	234	297	374	300	187	180
50%	117	84	161	296	393	325	311	310	357	426	357	211	232
75%	145	113	568	737	925	534	416	498	574	722	665	381	368
90%	226	256	899	1,304	1,365	898	648	593	714	846	721	417	480
100%	1,243	770	1,760	2,635	4,820	6,318	1,339	695	783	945	803	589	1,023
Mean	135	124	347	517	679	490	375	375	446	553	461	280	288
45													
0%	24	43	35	35	53	69	93	165	197	242	200	122	102
10%	52	47	44	76	99	150	154	179	219	270	222	143	128
25%	63	52	75	135	259	202	182	191	238	291	237	149	170
50%	97	80	192	371	498	389	283	244	277	326	274	158	230
75%	119	124	729	935	1,187	639	447	475	502	665	581	321	376
90%	168	305	1,155	1,677	1,757	1,122	680	617	648	817	706	415	524
100%	1,246	973	2,261	3,388	3,870	5,236	1,714	725	783	947	804	529	902
Mean	117	135	433	652	780	546	379	330	369	457	381	230	289
55													
0%	28	38	30	42	57	76	97	129	150	190	151	97	90
10%	45	42	42	71	112	152	130	144	170	209	172	108	122
25%	57	53	61	147	310	223	183	162	198	228	186	113	173
50%	74	65	219	455	585	444	270	251	261	321	255	148	239
75%	94	112	885	1,132	1,451	781	476	321	348	417	352	207	378
90%	139	363	1,413	2,049	2,147	1,363	781	424	395	448	379	223	501
100%	1,246	1,152	2,761	4,141	4,729	5,239	2,048	572	441	496	421	306	872
Mean	92	144	521	792	948	638	391	263	268	320	265	162	288
65													
0%	30	33	26	50	61	71	69	91	109	121	103	61	62
10%	33	35	35	85	122	139	96	104	117	139	112	70	106
25%	36	37	58	169	366	238	144	114	124	145	119	75	147
50%	50	62	254	524	702	505	223	143	141	159	131	78	231
75%	58	110	1,042	1,331	1,715	888	494	243	172	177	143	97	410
90%	116	409	1,668	2,421	2,534	1,618	900	445	348	356	338	164	587
100%	1,246	1,340	3,262	4,894	5,586	4,142	2,457	852	752	915	802	424	953
Mean	73	154	606	929	1,114	705	401	217	190	220	182	108	293
75													
0%	15	25	18	51	63	54	46	33	33	33	27	15	33
10%	20	25	28	90	134	132	54	43	43	43	29	17	83
25%	22	28	57	182	422	248	114	44	45	44	35	21	144
50%	22	58	285	605	798	565	196	87	45	45	36	22	233
75%	29	111	1,202	1,536	1,979	1,001	527	190	78	46	36	23	425
90%	83	459	1,924	2,793	2,924	1,855	1,015	321	154	108	122	55	619
100%	1,246	1,533	3,764	5,647	6,444	4,776	2,797	911	712	923	2,168	415	1,061
Mean	48	162	692	1,068	1,281	799	412	149	88	85	92	40	294

Table A1-65. Water Year Average of Monthly Flows (cfs)—Putah Creek below Lake Berryessa (SWRCB Lake Berryessa)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	151	91	65	55	51	206	306	463	573	691	602	374
D	167	89	62	60	54	148	323	473	651	777	615	377
BN	185	85	66	49	171	153	307	475	629	791	635	395
AN	145	90	59	35	41	286	315	463	666	757	671	403
W	206	86	119	640	1,076	1,091	848	520	593	804	672	398
All	177	88	80	228	381	460	474	484	619	771	641	390
35												
C	104	67	141	169	212	237	187	257	312	371	317	200
D	117	106	220	191	351	286	269	311	403	472	380	231
BN	142	87	222	336	536	305	306	312	384	478	379	242
AN	98	123	353	738	799	451	367	378	515	582	512	306
W	176	191	627	962	1,212	908	601	524	560	745	627	372
All	135	124	347	517	679	490	375	375	446	553	461	280
45												
C	84	58	164	207	263	249	157	201	242	287	245	153
D	98	112	269	234	441	338	249	244	308	361	288	174
BN	113	85	268	422	679	368	297	241	282	347	276	178
AN	82	132	438	943	1,018	560	380	322	383	440	386	232
W	167	225	800	1,219	1,269	964	643	520	528	696	586	345
All	117	135	433	652	780	546	379	330	369	457	381	230
55												
C	70	54	190	248	317	271	148	183	216	252	216	136
D	74	114	317	278	533	388	250	214	257	298	236	145
BN	88	84	315	510	824	422	319	216	241	295	234	150
AN	70	146	525	1,148	1,241	669	371	277	286	315	274	165
W	128	249	975	1,488	1,549	1,140	678	363	314	391	327	194
All	92	144	521	792	948	638	391	263	268	320	265	162
65												
C	44	43	212	287	368	282	115	117	131	148	125	78
D	59	119	367	322	625	440	221	132	138	155	122	76
BN	56	81	361	597	967	479	312	144	137	160	129	80
AN	46	153	612	1,351	1,461	772	370	218	162	169	143	87
W	122	284	1,142	1,749	1,821	1,240	756	377	305	366	308	176
All	73	154	606	929	1,114	705	401	217	190	220	182	108
75												
C	25	35	238	328	422	300	83	54	50	46	179	23
D	31	121	415	365	716	486	206	75	48	45	34	22
BN	29	78	408	686	1,112	538	314	88	50	47	38	23
AN	29	163	701	1,557	1,685	885	375	177	62	53	39	25
W	93	310	1,311	2,014	2,095	1,422	819	280	172	174	144	80
All	48	162	692	1,068	1,281	799	412	149	88	85	92	40

A1.12.3.27 Putah Creek above Yolo Bypass (SWRCB Putah Creek)

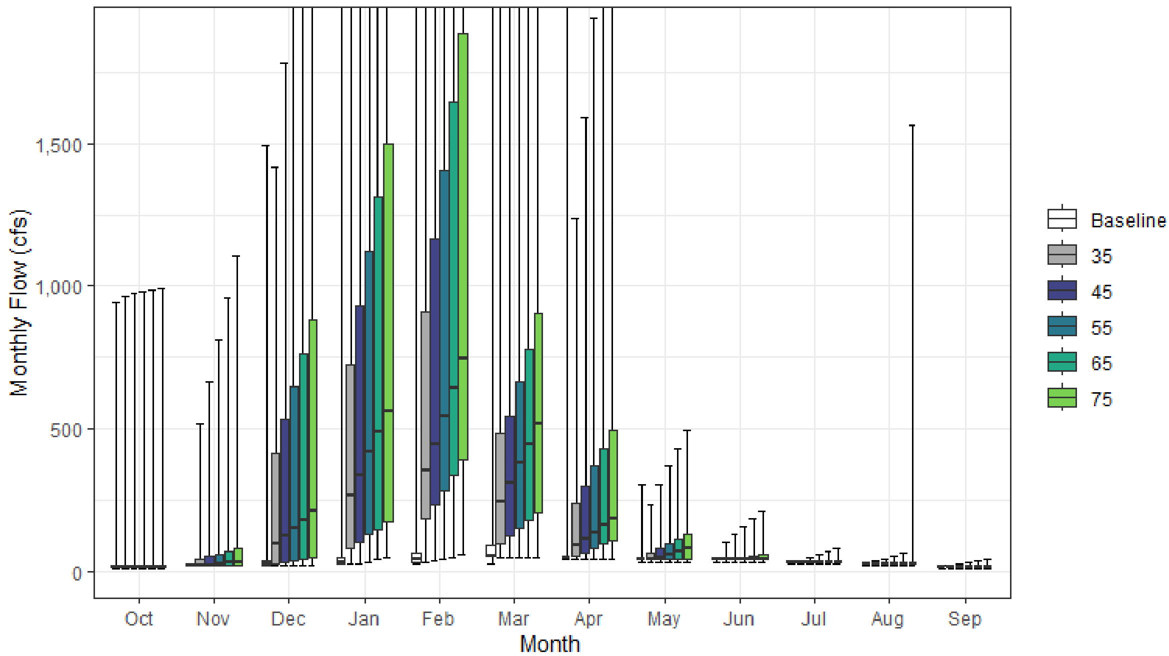

Figure A1-30. Putah Creek Streamflow above Yolo Bypass Monthly Boxplot

Table A1-66. Cumulative Distribution of Monthly Flow (cfs)—Putah Creek above Yolo Bypass (SWRCB Putah Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	11	18	19	24	23	24	44	32	31	24	19	11	18
10%	14	19	20	25	26	50	45	36	34	26	21	13	22
25%	16	20	21	27	29	52	46	43	42	32	26	16	23
50%	16	20	25	33	40	53	47	44	43	33	26	16	24
75%	17	21	35	50	65	92	48	44	44	34	27	17	49
90%	18	21	51	271	715	863	320	45	45	34	27	17	309
100%	941	24	1,495	4,813	6,187	5,725	3,390	306	45	35	28	21	774
Mean	27	20	49	206	345	350	228	47	42	32	25	16	83
35													
0%	12	18	19	25	29	50	45	33	32	25	20	12	23
10%	15	20	20	43	63	55	46	42	42	32	25	16	40
25%	16	20	25	81	183	99	54	43	42	33	26	16	65
50%	16	21	99	268	353	244	88	44	43	33	26	16	102
75%	17	39	411	722	911	484	236	63	44	33	27	17	184
90%	18	158	666	1,184	1,245	798	556	135	45	34	27	17	264
100%	967	519	1,415	2,536	4,508	5,725	1,239	235	101	38	34	22	741
Mean	28	60	252	475	623	400	207	67	45	33	26	16	133
45													
0%	11	18	18	27	34	48	43	31	31	24	19	11	23
10%	15	19	20	53	78	68	44	40	42	32	25	15	48
25%	16	20	29	105	233	125	66	42	42	32	26	16	78
50%	16	21	125	337	445	312	112	50	43	33	26	16	127
75%	17	51	531	930	1,164	541	300	80	44	33	27	16	232
90%	19	202	856	1,522	1,595	1,001	571	173	55	34	27	17	321
100%	974	666	1,780	3,213	3,683	4,757	1,592	301	128	48	43	25	630
Mean	28	73	319	602	718	459	240	78	46	32	26	16	158
55													
0%	11	18	19	33	42	50	43	31	31	24	19	11	25
10%	16	19	21	65	95	86	45	40	42	32	25	15	57
25%	16	20	35	127	285	153	81	43	42	32	26	16	94
50%	16	26	153	418	544	382	136	61	43	33	26	16	152
75%	17	60	647	1,123	1,404	663	367	96	45	33	27	17	280
90%	21	246	1,044	1,859	1,945	1,223	698	211	67	34	27	17	390
100%	978	813	2,145	3,891	4,471	4,780	1,944	368	154	58	52	30	694
Mean	29	87	389	734	876	556	289	92	50	33	26	16	190
65													
0%	11	18	19	39	49	50	43	31	31	24	19	11	27
10%	15	19	20	77	113	98	45	40	38	30	22	13	65
25%	16	20	41	148	336	180	95	42	42	32	26	16	108
50%	16	30	181	487	643	448	160	71	43	32	26	16	177
75%	17	70	764	1,312	1,644	781	431	112	53	33	26	16	329
90%	24	289	1,233	2,195	2,299	1,444	777	248	81	33	27	17	457
100%	983	960	2,509	4,569	5,251	3,781	2,298	431	182	68	61	35	672
Mean	29	101	454	862	1,029	628	334	105	53	33	26	16	219
75													
0%	11	18	19	45	57	50	43	31	31	24	19	11	29
10%	15	18	22	91	130	113	51	40	41	31	21	13	75
25%	16	20	48	171	392	208	108	42	42	32	26	16	123
50%	16	33	210	562	744	516	183	82	43	32	26	16	203
75%	17	80	885	1,497	1,886	904	497	129	61	33	26	16	377
90%	32	333	1,423	2,534	2,654	1,667	893	284	91	35	26	17	524
100%	991	1,107	2,876	5,248	6,025	4,365	2,646	496	209	79	1,566	40	773
Mean	30	115	523	993	1,186	726	385	119	56	34	42	16	252

Table A1-67. Water Year Average of Monthly Flows (cfs)—Putah Creek above Yolo Bypass (SWRCB Putah Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	15	20	28	36	36	48	46	39	38	29	23	14
D	16	20	28	31	37	51	47	43	42	33	26	16
BN	17	20	25	37	157	82	47	42	41	31	25	16
AN	16	20	36	59	57	216	48	65	43	33	26	17
W	51	20	96	595	979	957	648	48	44	33	26	17
All	27	20	49	206	345	350	228	47	42	32	25	16
35												
C	16	21	97	153	195	134	53	43	42	32	25	16
D	16	47	154	160	315	206	100	50	43	32	26	16
BN	17	32	146	303	493	229	142	52	42	32	26	16
AN	17	59	260	700	747	377	167	81	43	33	26	16
W	53	107	471	893	1,110	803	424	95	50	33	26	17
All	28	60	252	475	623	400	207	67	45	33	26	16
45												
C	16	21	118	192	246	167	57	41	41	31	25	15
D	16	56	194	204	400	261	122	53	43	32	26	16
BN	18	38	185	387	628	291	180	58	42	32	26	16
AN	18	73	327	890	950	483	213	101	45	33	26	16
W	54	135	599	1,126	1,164	857	475	120	55	33	26	16
All	28	73	319	602	718	459	240	78	46	32	26	16
55												
C	17	23	140	233	298	203	63	44	43	32	26	16
D	16	66	234	249	489	320	147	59	44	33	26	16
BN	19	43	225	472	763	356	219	66	44	33	27	17
AN	19	89	395	1,078	1,155	590	260	122	49	33	26	16
W	55	163	734	1,377	1,425	1,029	573	145	62	33	27	17
All	29	87	389	734	876	556	289	92	50	33	26	16
65												
C	17	24	163	274	351	239	69	47	43	31	25	16
D	16	75	274	293	576	376	171	64	44	33	25	16
BN	19	49	264	556	898	420	258	74	46	34	27	17
AN	20	104	464	1,268	1,359	696	306	143	53	34	26	16
W	56	192	857	1,613	1,671	1,123	657	170	68	33	26	16
All	29	101	454	862	1,029	628	334	105	53	33	26	16
75												
C	18	25	187	317	405	277	78	51	47	33	129	17
D	16	85	316	339	665	436	196	70	45	33	25	17
BN	21	54	304	642	1,035	486	298	83	47	34	27	17
AN	22	119	534	1,459	1,566	805	352	165	56	35	26	16
W	57	220	986	1,858	1,925	1,295	757	195	76	34	26	16
All	30	115	523	993	1,186	726	385	119	56	34	42	16

A1.12.3.28 Sacramento River below Shasta Reservoir (SWRCB Shasta)

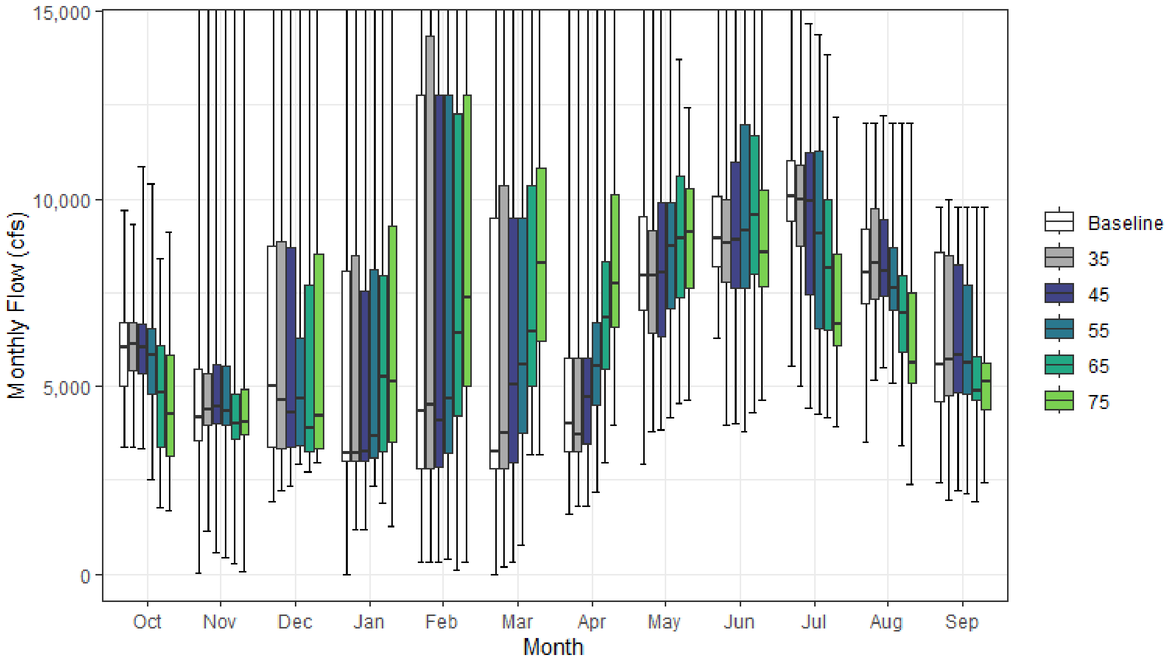

Figure A1-31. Sacramento River Streamflow below Shasta Reservoir Monthly Boxplot

Table A1-68. Cumulative Distribution of Monthly Flow (cfs)—Sacramento River below Shasta Reservoir (SWRCB Shasta)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3,409	19	1,953	0	329	3	1,594	2,945	6,314	5,553	3,521	2,436	3,137
10%	4,372	3,002	2,989	2,428	1,931	2,401	3,145	5,831	7,613	8,696	5,869	3,922	3,803
25%	5,002	3,574	3,388	3,018	2,800	2,811	3,254	7,052	8,186	9,409	7,221	4,608	4,168
50%	6,050	4,180	5,020	3,238	4,346	3,259	4,013	7,973	8,942	10,081	8,048	5,586	4,966
75%	6,689	5,462	8,744	8,080	12,760	9,476	5,734	9,519	10,081	11,025	9,213	8,559	6,524
90%	7,148	7,721	16,284	19,420	28,033	17,835	10,251	11,035	11,364	12,444	10,958	8,871	8,196
100%	9,708	26,389	27,665	48,623	49,683	44,066	28,865	17,625	29,675	16,020	12,027	9,776	10,674
Mean	5,912	4,823	7,316	7,487	9,610	7,633	5,719	8,333	9,517	10,346	8,193	6,258	5,500
35													
0%	3,383	1,136	2,215	1,193	329	191	1,794	3,824	3,985	4,992	5,192	1,973	3,131
10%	4,690	3,271	3,090	2,573	2,200	2,575	3,196	5,211	6,032	6,293	6,211	4,418	3,564
25%	5,427	3,962	3,366	3,028	2,825	2,825	3,253	6,428	7,784	8,730	7,324	4,777	4,067
50%	6,146	4,373	4,648	3,236	4,525	3,764	3,714	7,950	8,835	10,007	8,265	5,697	5,131
75%	6,689	5,356	8,883	8,482	14,339	10,355	5,734	9,173	10,007	10,919	9,734	8,490	6,564
90%	7,245	7,408	16,284	19,420	27,847	17,835	10,251	11,037	11,614	12,759	10,905	8,869	8,223
100%	9,312	26,095	27,665	48,623	49,683	44,066	28,865	17,625	29,675	16,588	12,027	9,986	10,674
Mean	6,074	4,984	7,203	7,623	9,799	7,859	5,615	8,178	9,102	9,808	8,415	6,381	5,493
45													
0%	3,341	559	2,353	1,196	332	305	1,796	3,828	4,014	4,429	5,511	2,230	3,001
10%	4,702	3,305	3,227	2,633	2,368	2,716	3,250	5,502	6,533	6,127	6,456	4,505	3,632
25%	5,322	4,014	3,392	3,024	2,862	2,963	3,491	6,325	7,632	7,470	7,423	4,854	4,063
50%	6,025	4,484	4,293	3,255	4,081	5,050	4,727	8,053	8,916	9,934	8,085	5,833	5,016
75%	6,685	5,586	8,682	7,558	12,760	9,476	5,734	9,908	11,001	11,218	9,448	8,244	6,512
90%	7,125	6,755	15,382	19,420	27,847	17,835	10,251	10,973	12,872	12,549	11,091	8,844	8,158
100%	10,868	23,945	27,665	48,623	49,683	44,066	28,865	17,625	29,675	14,672	12,211	9,776	10,674
Mean	6,011	5,014	6,980	7,526	9,578	7,884	5,967	8,303	9,467	9,441	8,451	6,388	5,491
55													
0%	2,529	431	2,913	2,332	404	766	2,202	4,164	3,784	4,267	5,089	2,136	3,021
10%	3,778	3,254	3,228	2,889	2,891	3,179	3,729	6,022	6,665	5,867	6,117	4,488	3,650
25%	4,782	3,962	3,430	3,107	3,231	3,747	4,529	7,085	7,602	6,555	7,026	4,786	4,000
50%	5,838	4,359	4,655	3,686	4,664	5,586	5,551	8,726	9,171	9,076	7,638	5,615	4,817
75%	6,541	5,544	6,284	8,120	12,760	9,475	6,706	9,888	11,982	11,267	8,691	7,718	6,594
90%	7,151	6,573	14,041	17,443	27,177	16,932	9,767	11,299	13,849	12,764	10,444	8,781	8,246
100%	10,402	17,347	27,643	48,623	49,683	44,066	28,865	17,572	29,675	14,386	12,027	9,776	10,674
Mean	5,634	4,895	6,596	7,415	9,769	8,394	6,655	8,697	9,950	9,036	7,919	6,131	5,494
65													
0%	1,767	269	2,709	1,909	111	3,192	2,981	4,552	4,288	4,183	3,433	1,933	3,190
10%	2,645	3,252	3,171	3,092	3,220	4,615	4,621	6,435	6,970	5,692	5,111	4,253	3,689
25%	3,377	3,576	3,254	3,255	4,201	5,020	5,448	7,355	8,014	6,517	5,925	4,613	3,995
50%	4,859	4,019	3,873	5,268	6,430	6,474	6,823	8,967	9,581	8,152	6,976	4,892	5,038
75%	6,095	4,784	7,687	7,952	12,275	10,380	8,327	10,591	11,675	9,996	7,945	5,805	6,786
90%	7,030	7,016	13,766	17,533	24,605	16,634	10,742	11,587	14,328	10,885	9,132	8,183	8,232
100%	8,420	23,361	27,648	48,624	49,684	44,067	28,867	13,714	28,468	13,860	12,031	9,779	10,652
Mean	4,897	4,713	6,355	8,121	10,360	9,233	7,677	9,013	10,171	8,271	7,115	5,427	5,506
75													
0%	1,674	57	2,973	1,253	301	3,191	3,980	4,619	4,644	3,940	2,382	2,422	3,013
10%	2,381	3,156	3,240	3,230	3,282	4,943	5,417	6,677	6,956	5,498	4,293	4,079	3,721
25%	3,156	3,719	3,352	3,497	5,013	6,222	6,602	7,636	7,650	6,068	5,107	4,397	4,032
50%	4,264	4,059	4,201	5,121	7,356	8,276	7,765	9,105	8,590	6,670	5,609	5,119	5,068
75%	5,843	4,917	8,541	9,300	12,760	10,797	10,131	10,264	10,218	8,525	7,490	5,615	6,697
90%	6,345	6,771	15,588	19,650	24,720	17,534	12,582	11,556	11,189	9,990	8,163	7,354	8,078
100%	9,109	26,467	27,665	48,623	49,684	41,792	26,941	12,436	26,388	12,174	12,027	9,776	10,781
Mean	4,465	4,861	7,090	8,634	10,924	9,988	8,794	8,989	8,978	7,145	6,261	5,255	5,505

Table A1-69. Water Year Average of Monthly Flows (cfs)—Sacramento River below Shasta Reservoir (SWRCB Shasta)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	5,448	3,766	3,931	3,568	2,915	3,738	4,089	7,698	9,283	8,978	7,636	4,685
D	6,119	3,904	4,958	3,401	2,801	3,724	4,089	8,052	10,184	10,159	7,636	4,535
BN	5,815	4,578	5,653	3,748	7,729	3,846	4,439	7,598	9,673	11,615	7,724	5,084
AN	5,655	5,200	5,749	6,886	13,873	8,867	4,936	9,152	8,662	11,506	7,224	7,564
W	6,173	6,064	12,580	15,178	17,618	14,423	8,929	8,980	9,416	9,951	9,608	8,547
All	5,912	4,823	7,316	7,487	9,610	7,633	5,719	8,333	9,517	10,346	8,193	6,258
35												
C	5,456	4,413	4,289	3,915	3,016	3,941	3,588	5,782	6,790	6,635	8,132	4,587
D	5,992	4,596	4,871	3,620	2,929	4,206	3,762	8,143	9,340	9,372	8,198	5,155
BN	6,162	4,538	5,357	3,886	8,476	3,894	4,674	7,855	9,877	11,645	7,930	5,300
AN	6,222	4,959	5,672	7,019	14,309	9,349	4,944	9,168	8,938	11,340	7,225	7,439
W	6,349	5,863	12,289	15,140	17,455	14,465	8,948	9,258	9,762	10,064	9,535	8,464
All	6,074	4,984	7,203	7,623	9,799	7,859	5,615	8,178	9,102	9,808	8,415	6,381
45												
C	5,408	4,447	3,879	3,397	3,289	4,409	4,029	5,970	6,706	6,343	8,069	4,598
D	5,795	4,451	4,648	3,532	2,821	4,119	4,636	7,840	8,706	8,716	8,645	5,360
BN	6,052	4,638	5,414	3,899	7,743	4,044	4,856	8,385	10,368	11,123	8,394	5,192
AN	6,296	4,867	5,916	6,884	13,830	8,829	4,991	9,389	10,360	10,703	7,094	7,874
W	6,349	6,032	11,797	15,209	17,306	14,497	9,097	9,386	10,588	10,082	9,127	8,210
All	6,011	5,014	6,980	7,526	9,578	7,884	5,967	8,303	9,467	9,441	8,451	6,388
55												
C	4,970	4,417	3,774	3,275	3,718	4,648	4,546	6,332	6,765	5,810	6,463	4,592
D	5,166	4,059	4,273	3,544	3,747	5,127	5,754	7,965	8,708	6,959	7,658	5,174
BN	5,601	4,332	5,403	4,213	7,172	4,879	5,649	8,990	9,916	10,426	8,573	5,129
AN	6,242	4,676	6,173	6,855	13,854	9,043	5,632	10,168	11,643	11,433	7,341	7,463
W	6,100	6,214	10,755	14,721	17,353	14,706	9,509	9,705	11,884	10,452	8,744	7,713
All	5,634	4,895	6,596	7,415	9,769	8,394	6,655	8,697	9,950	9,036	7,919	6,131
65												
C	4,052	4,432	3,741	4,367	4,028	5,178	5,122	6,713	7,136	5,721	5,667	4,509
D	4,650	3,932	4,417	4,032	5,190	6,596	6,374	8,053	8,466	6,467	6,237	4,765
BN	5,305	3,868	4,692	4,990	8,372	6,686	7,134	9,013	9,792	8,282	7,146	4,849
AN	4,884	4,102	5,016	7,745	14,124	9,205	7,077	10,678	12,051	9,977	6,317	5,154
W	5,293	6,224	10,793	15,261	17,223	14,942	10,611	10,250	12,499	10,253	8,871	6,883
All	4,897	4,713	6,355	8,121	10,360	9,233	7,677	9,013	10,171	8,271	7,115	5,427
75												
C	3,969	3,651	4,139	3,928	4,533	5,690	5,871	6,989	7,010	5,313	4,964	4,281
D	4,215	4,077	4,779	4,015	5,747	8,005	7,315	8,272	8,171	6,099	5,216	4,675
BN	4,651	4,181	5,145	5,646	8,835	7,659	8,608	9,108	9,120	6,774	5,406	4,689
AN	4,251	4,821	5,675	9,859	15,589	10,980	8,465	9,834	9,659	6,706	5,837	5,302
W	4,895	6,526	12,190	15,908	17,500	14,766	11,724	10,165	10,260	9,326	8,441	6,536
All	4,465	4,861	7,090	8,634	10,924	9,988	8,794	8,989	8,978	7,145	6,261	5,255

A1.12.3.29 Sacramento River above Bend Bridge

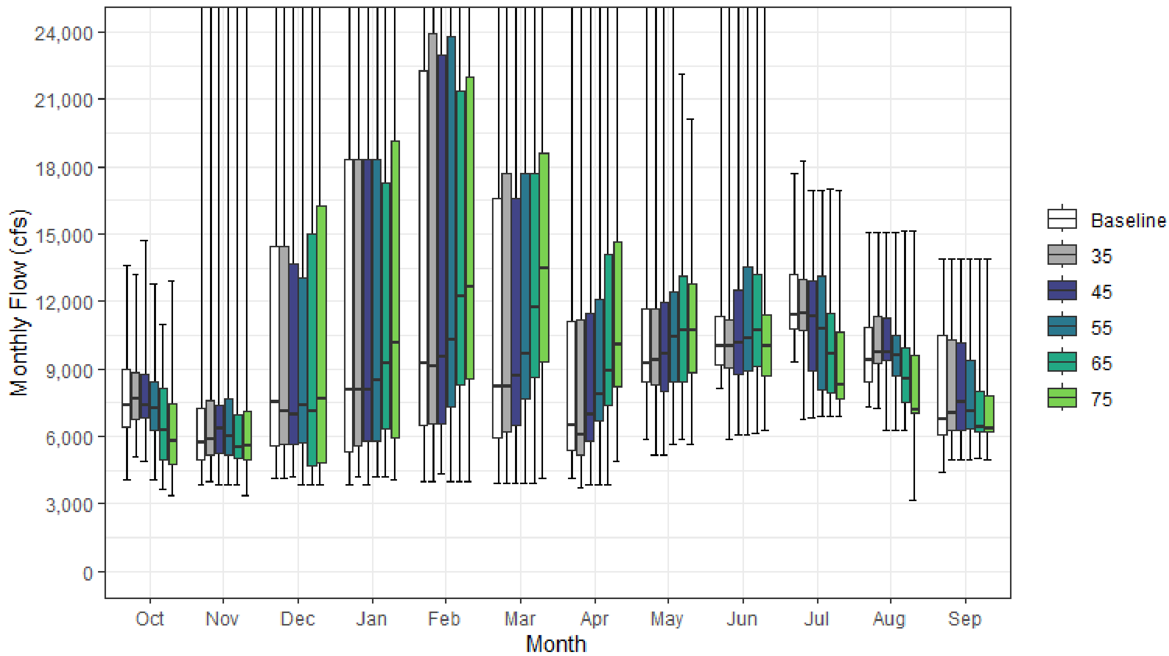

Figure A1-32. Sacramento River Streamflow above Bend Bridge Monthly Boxplot

Table A1-70. Cumulative Distribution of Monthly Flow (cfs)—Sacramento River above Bend Bridge

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	4,056	3,846	4,152	3,872	4,006	3,926	4,157	5,844	8,118	9,302	7,314	4,416	4,283
10%	5,546	4,173	4,667	4,509	5,487	5,164	4,721	7,311	8,850	10,009	7,989	5,332	5,131
25%	6,422	4,934	5,597	5,326	6,517	5,953	5,357	8,456	9,175	10,767	8,424	6,049	5,656
50%	7,377	5,704	7,546	8,090	9,245	8,182	6,487	9,276	10,009	11,425	9,422	6,751	7,181
75%	8,956	7,269	14,427	18,337	22,263	16,591	11,148	11,692	11,350	13,177	10,817	10,500	9,727
90%	9,881	10,524	28,094	33,689	43,402	30,508	17,804	15,048	13,291	14,739	12,765	11,353	12,411
100%	13,597	35,380	42,072	74,706	83,602	73,278	44,412	26,531	30,912	17,723	15,099	13,908	17,715
Mean	7,688	6,960	12,082	14,243	17,626	14,000	9,537	10,405	10,804	12,024	9,950	8,047	8,034
35													
0%	5,104	3,993	4,139	4,224	3,989	3,917	3,741	5,169	5,871	6,781	7,235	4,983	3,952
10%	5,848	4,841	4,758	4,550	5,695	5,194	4,702	6,433	6,794	7,865	8,220	5,878	4,850
25%	6,732	5,187	5,625	5,560	6,579	6,180	5,195	8,275	9,016	10,727	9,242	6,281	5,662
50%	7,658	5,831	7,094	8,048	9,126	8,238	6,084	9,369	10,009	11,441	9,742	7,059	7,301
75%	8,816	7,585	14,411	18,337	23,922	17,676	11,203	11,692	11,216	13,003	11,328	10,300	9,767
90%	9,886	10,544	27,149	33,689	43,402	30,504	17,878	15,048	13,696	14,660	12,619	11,378	12,438
100%	13,209	35,092	42,072	74,706	83,602	73,278	44,412	26,531	30,912	18,278	15,101	13,908	17,715
Mean	7,845	7,118	11,970	14,376	17,812	14,220	9,461	10,248	10,405	11,516	10,174	8,173	8,031
45													
0%	4,900	3,857	4,181	3,886	4,313	3,914	3,842	5,197	6,092	6,845	6,272	4,994	4,086
10%	5,742	4,861	4,510	4,547	5,787	5,458	5,101	6,565	7,179	7,618	8,280	5,930	4,849
25%	6,859	5,230	5,645	5,794	6,522	6,506	5,764	7,988	8,791	8,907	9,417	6,311	5,678
50%	7,361	6,348	6,982	8,099	9,518	8,712	6,939	9,703	10,167	11,334	9,720	7,544	7,101
75%	8,767	7,389	13,669	18,337	22,987	16,591	11,454	11,921	12,479	12,924	11,251	10,132	9,830
90%	9,931	10,245	27,092	33,689	43,402	30,463	17,804	14,929	13,815	14,480	12,628	11,353	12,456
100%	14,742	32,979	42,072	74,706	83,602	73,278	44,412	26,486	30,912	16,962	15,101	13,908	17,715
Mean	7,782	7,148	11,751	14,280	17,594	14,247	9,825	10,367	10,765	11,162	10,214	8,182	8,031
55													
0%	4,043	3,850	3,839	4,227	3,989	3,915	3,853	5,631	6,056	6,868	6,301	4,955	3,922
10%	5,356	4,825	4,429	4,620	6,125	6,371	5,583	6,886	7,559	7,624	7,971	5,875	4,781
25%	6,299	5,160	5,740	5,794	7,310	7,675	6,680	8,432	8,911	8,073	8,699	6,365	5,723
50%	7,226	6,008	7,370	8,509	10,260	9,701	7,844	10,430	10,335	10,806	9,622	7,136	6,934
75%	8,424	7,634	13,030	18,337	23,791	17,676	12,118	12,427	13,534	13,105	10,495	9,373	9,861
90%	9,889	9,174	24,847	31,356	43,402	30,198	17,256	14,507	15,345	14,612	12,123	11,111	12,831
100%	12,769	26,496	42,072	74,706	83,602	73,278	44,412	26,372	30,912	16,963	15,101	13,908	17,715
Mean	7,415	7,030	11,373	14,172	17,782	14,747	10,525	10,752	11,244	10,784	9,698	7,937	8,037
65													
0%	3,652	3,855	3,842	4,222	3,990	3,935	3,863	5,858	6,138	6,929	6,268	5,015	4,081
10%	4,582	4,836	4,270	4,973	4,954	6,747	6,320	7,299	7,901	7,604	6,743	5,815	4,793
25%	4,980	5,027	4,653	6,319	8,305	8,603	7,365	8,398	9,115	7,917	7,502	6,235	5,653
50%	6,309	5,489	7,078	9,248	12,212	11,763	8,932	10,689	10,713	9,658	8,592	6,447	6,946
75%	8,150	6,955	15,028	17,286	21,382	17,676	14,088	13,112	13,221	11,483	9,940	7,981	9,899
90%	9,603	9,743	23,028	33,386	40,609	29,677	19,125	15,209	15,619	13,557	11,149	10,068	12,747
100%	10,974	32,404	42,072	74,705	83,602	73,278	44,413	22,151	29,727	16,984	15,127	13,897	17,696
Mean	6,695	6,850	11,135	14,865	18,362	15,573	11,559	11,069	11,468	10,052	8,935	7,269	8,056
75													
0%	3,389	3,340	3,841	4,077	3,996	4,102	4,886	5,665	6,252	6,914	3,170	4,968	4,113
10%	4,282	4,348	4,222	4,665	5,617	6,691	6,991	7,532	7,831	7,081	6,486	5,586	4,936
25%	4,748	4,981	4,846	5,958	8,570	9,310	8,209	8,811	8,697	7,645	7,015	6,188	5,650
50%	5,784	5,552	7,678	10,172	12,657	13,487	10,096	10,717	10,023	8,313	7,178	6,350	7,078
75%	7,428	7,086	16,276	19,118	21,957	18,567	14,686	12,753	11,382	10,632	9,570	7,810	9,979
90%	9,359	10,604	26,782	37,175	41,443	29,595	21,755	15,242	12,617	10,974	9,893	9,007	12,409
100%	12,907	35,456	42,072	74,705	83,602	73,278	44,412	20,134	27,664	16,962	15,118	13,886	17,666
Mean	6,258	6,982	11,856	15,368	18,916	16,315	12,698	11,068	10,324	9,004	8,145	7,145	8,068

Table A1-71. Water Year Average of Monthly Flows (cfs)—Sacramento River above Bend Bridge

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	6,758	4,943	6,097	5,906	6,121	6,015	4,965	8,247	9,857	10,616	8,749	5,682
D	7,596	6,110	8,013	6,117	8,450	8,143	5,821	8,960	11,149	11,576	9,313	6,066
BN	7,597	6,125	8,510	8,960	14,540	8,536	7,890	9,159	10,661	12,736	9,285	6,611
AN	7,489	7,195	10,270	16,322	23,567	17,376	9,577	12,143	10,013	13,194	9,242	9,610
W	8,397	9,083	21,284	27,119	29,998	24,540	15,756	12,655	11,477	12,179	11,780	11,003
All	7,688	6,960	12,082	14,243	17,626	14,000	9,537	10,405	10,804	12,024	9,950	8,047
35												
C	6,770	5,580	6,448	6,247	6,219	6,208	4,503	6,421	7,484	8,416	9,277	5,627
D	7,467	6,789	7,927	6,332	8,576	8,617	5,551	9,022	10,314	10,825	9,861	6,671
BN	7,933	6,085	8,219	9,096	15,275	8,583	8,155	9,386	10,856	12,764	9,485	6,822
AN	8,033	6,958	10,195	16,452	23,996	17,851	9,593	12,151	10,283	13,031	9,243	9,486
W	8,569	8,886	20,998	27,081	29,838	24,582	15,786	12,925	11,815	12,289	11,706	10,922
All	7,845	7,118	11,970	14,376	17,812	14,220	9,461	10,248	10,405	11,516	10,174	8,173
45												
C	6,710	5,612	6,045	5,737	6,488	6,676	4,946	6,609	7,412	8,139	9,228	5,648
D	7,266	6,648	7,708	6,245	8,470	8,531	6,442	8,717	9,692	10,203	10,316	6,869
BN	7,831	6,184	8,275	9,109	14,554	8,730	8,356	9,903	11,336	12,252	9,941	6,715
AN	8,115	6,866	10,434	16,319	23,524	17,339	9,662	12,351	11,682	12,406	9,115	9,912
W	8,571	9,052	20,515	27,150	29,692	24,613	15,940	13,048	12,628	12,304	11,304	10,673
All	7,782	7,148	11,751	14,280	17,594	14,247	9,825	10,367	10,765	11,162	10,214	8,182
55												
C	6,297	5,581	5,941	5,616	6,909	6,905	5,470	6,965	7,485	7,653	7,700	5,653
D	6,646	6,261	7,339	6,257	9,381	9,524	7,576	8,852	9,687	8,526	9,349	6,711
BN	7,404	5,883	8,264	9,417	13,992	9,552	9,158	10,508	10,902	11,586	10,113	6,656
AN	8,063	6,676	10,685	16,291	23,548	17,549	10,329	13,082	12,948	13,122	9,356	9,509
W	8,320	9,231	19,491	26,669	29,737	24,819	16,358	13,355	13,902	12,666	10,925	10,185
All	7,415	7,030	11,373	14,172	17,782	14,747	10,525	10,752	11,244	10,784	9,698	7,937
65												
C	5,395	5,593	5,906	6,689	7,212	7,428	6,045	7,352	7,864	7,597	6,966	5,598
D	6,144	6,135	7,480	6,736	10,800	10,969	8,224	8,962	9,426	8,066	7,969	6,345
BN	7,114	5,427	7,564	10,181	15,171	11,331	10,647	10,557	10,808	9,511	8,770	6,407
AN	6,748	6,112	9,546	17,165	23,813	17,708	11,795	13,559	13,364	11,705	8,365	7,276
W	7,526	9,240	19,527	27,200	29,609	25,051	17,466	13,885	14,517	12,477	11,061	9,379
All	6,695	6,850	11,135	14,865	18,362	15,573	11,559	11,069	11,468	10,052	8,935	7,269
75												
C	5,332	4,819	6,293	6,249	7,701	7,928	6,794	7,605	7,761	7,318	6,398	5,448
D	5,712	6,277	7,836	6,719	11,348	12,356	9,187	9,226	9,150	7,763	7,049	6,289
BN	6,463	5,666	8,009	10,825	15,627	12,288	12,146	10,680	10,185	8,096	7,092	6,303
AN	6,082	6,822	10,195	19,245	25,255	19,455	13,224	12,756	11,053	8,562	7,894	7,502
W	7,116	9,537	20,900	27,837	29,882	24,877	18,604	13,817	12,348	11,580	10,649	9,054
All	6,258	6,982	11,856	15,368	18,916	16,315	12,698	11,068	10,324	9,004	8,145	7,145

A1.12.3.30 Sacramento River below Wilkins Slough

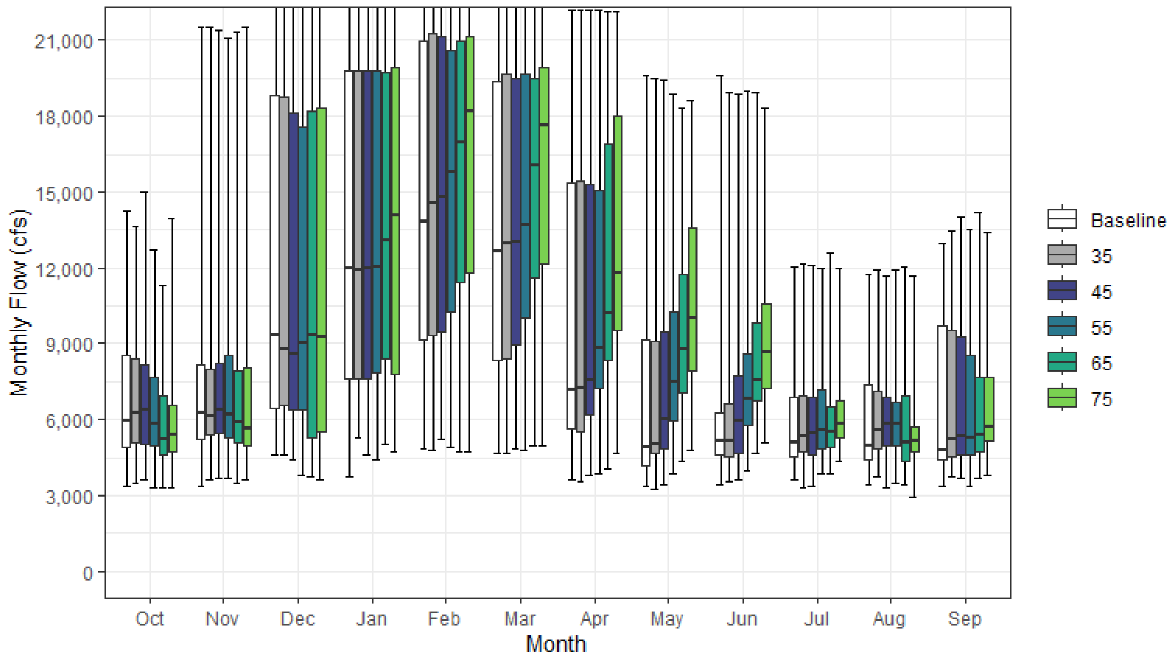

Figure A1-33. Sacramento River Streamflow below Wilkins Slough Monthly Boxplot

Table A1-72. Cumulative Distribution of Monthly Flow (cfs)—Sacramento River below Wilkins Slough

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3,364	3,358	4,570	3,764	4,827	4,682	3,601	3,364	3,457	3,637	3,401	3,336	3,244
10%	4,218	4,253	5,405	5,773	7,261	6,890	4,803	3,640	3,683	3,789	3,732	3,461	4,031
25%	4,920	5,204	6,423	7,630	9,178	8,334	5,665	4,182	4,585	4,535	4,394	4,420	4,845
50%	5,919	6,246	9,355	12,001	13,824	12,685	7,152	4,903	5,159	5,102	4,935	4,765	6,217
75%	8,531	8,156	18,788	19,771	20,971	19,391	15,362	9,159	6,270	6,873	7,395	9,678	8,048
90%	9,626	12,225	21,302	21,827	22,429	21,620	19,212	14,161	8,134	8,853	9,239	10,536	9,573
100%	14,251	21,517	22,570	23,658	24,653	23,824	22,173	19,619	19,610	12,043	11,712	12,976	11,913
Mean	6,648	7,475	11,738	13,367	14,807	13,676	10,029	7,146	5,868	5,841	5,816	6,660	6,566
35													
0%	3,502	3,630	4,582	5,260	4,796	4,681	3,572	3,266	3,535	3,287	3,727	3,713	3,531
10%	4,585	4,722	5,610	6,006	7,465	7,425	4,500	3,703	4,052	4,037	4,355	4,206	4,260
25%	5,084	5,410	6,538	7,603	9,343	8,414	5,524	4,663	4,511	4,736	4,855	4,551	4,978
50%	6,264	6,158	8,787	11,928	14,539	12,954	7,225	5,002	5,173	5,342	5,605	5,206	6,385
75%	8,382	8,006	18,763	19,764	21,266	19,657	15,443	9,090	6,650	6,959	7,143	9,517	8,099
90%	9,580	12,078	21,250	21,856	22,467	21,630	19,200	14,183	8,287	8,702	9,084	10,519	9,649
100%	13,650	21,499	22,618	23,608	24,652	23,824	22,173	19,505	18,907	12,189	11,927	13,484	11,976
Mean	6,827	7,504	11,655	13,413	14,937	13,845	9,974	7,283	6,002	5,949	6,187	6,880	6,650
45													
0%	3,597	3,667	4,418	4,582	5,200	4,868	3,784	3,433	3,591	3,352	3,315	3,694	3,659
10%	4,583	4,787	5,349	5,890	7,563	7,614	5,406	4,111	4,145	4,014	4,633	4,300	4,376
25%	5,055	5,436	6,390	7,589	9,442	8,941	6,188	4,823	4,680	4,620	4,986	4,607	5,099
50%	6,355	6,367	8,612	11,995	14,827	12,996	7,564	5,987	5,941	5,475	5,832	5,312	6,456
75%	8,176	8,240	18,107	19,764	21,119	19,484	15,288	9,455	7,749	6,889	6,868	9,283	8,323
90%	9,686	12,046	21,218	21,825	22,438	21,630	19,219	14,097	8,839	7,872	8,828	10,394	9,635
100%	14,999	21,384	22,618	23,608	24,654	23,824	22,173	19,442	18,872	12,120	11,646	13,990	12,004
Mean	6,810	7,527	11,588	13,351	14,966	14,038	10,378	7,633	6,606	5,908	6,209	6,869	6,735
55													
0%	3,315	3,671	3,789	4,407	4,918	4,769	3,884	3,837	3,978	3,851	3,512	3,345	3,367
10%	4,547	4,580	4,713	5,820	8,063	8,463	6,067	5,162	4,790	4,348	4,561	4,130	4,666
25%	4,962	5,269	6,400	7,871	10,236	10,000	7,256	5,940	5,756	4,847	4,946	4,599	5,316
50%	5,802	6,216	8,997	12,055	15,772	13,714	8,863	7,509	6,828	5,610	5,826	5,255	6,652
75%	7,645	8,508	17,596	19,809	20,619	19,653	15,077	10,279	8,609	7,207	6,690	8,513	8,453
90%	9,933	11,207	21,156	21,829	22,428	21,620	19,260	13,456	10,548	8,639	7,567	10,246	9,611
100%	12,747	21,081	22,618	23,608	24,654	23,824	22,173	18,894	18,991	11,984	11,929	13,509	12,005
Mean	6,557	7,392	11,543	13,395	15,281	14,542	11,071	8,474	7,507	6,107	6,000	6,615	6,891
65													
0%	3,302	3,507	3,722	5,049	4,722	4,946	4,062	4,336	4,687	3,843	3,439	3,663	3,480
10%	4,070	4,405	4,583	6,137	7,034	8,399	6,960	6,036	6,257	4,717	3,981	4,363	4,679
25%	4,602	5,105	5,264	8,440	11,405	11,635	8,361	7,059	6,749	4,931	4,344	4,711	5,615
50%	5,214	5,875	9,339	13,091	16,992	16,044	10,184	8,808	7,530	5,526	5,086	5,418	6,839
75%	6,919	7,907	18,218	19,717	20,993	19,512	16,886	11,716	9,832	6,520	6,964	7,643	8,638
90%	9,529	11,167	20,946	21,823	22,379	21,604	19,772	14,249	11,697	7,943	7,797	9,596	9,673
100%	11,326	21,349	22,567	23,608	24,654	23,824	22,157	18,314	18,921	12,604	12,069	14,174	12,052
Mean	5,967	7,138	11,320	13,885	15,838	15,343	12,154	9,555	8,443	5,982	5,764	6,355	7,085
75													
0%	3,323	3,633	3,632	4,729	4,745	4,989	4,644	4,786	5,059	4,379	2,947	3,775	3,652
10%	4,509	4,633	4,605	5,594	7,682	8,658	7,687	6,596	6,439	4,967	4,194	4,634	4,940
25%	4,741	4,937	5,491	7,774	11,784	12,136	9,511	7,918	7,215	5,264	4,730	5,178	5,874
50%	5,415	5,667	9,272	14,086	18,170	17,633	11,788	10,000	8,674	5,801	5,150	5,721	7,238
75%	6,539	8,024	18,305	19,904	21,149	19,946	18,004	13,582	10,581	6,738	5,673	7,668	8,925
90%	9,606	12,756	21,163	22,164	22,284	21,621	20,196	16,121	11,990	7,659	7,237	9,324	9,860
100%	13,938	21,548	22,618	23,608	24,651	23,824	22,137	18,637	18,314	12,009	11,688	13,393	11,699
Mean	6,116	7,218	11,597	13,939	16,051	15,956	13,279	10,767	9,053	6,166	5,489	6,622	7,358

Table A1-73. Water Year Average of Monthly Flows (cfs)—Sacramento River below Wilkins Slough

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	5,176	4,943	7,257	7,809	8,387	7,790	4,711	4,039	4,593	3,989	4,164	3,634
D	6,253	6,689	9,399	8,186	11,256	10,757	6,071	4,685	5,470	4,833	4,683	4,371
BN	6,684	6,636	8,895	12,712	14,817	12,026	9,471	5,585	5,484	5,990	4,694	4,929
AN	6,515	8,057	11,350	17,523	18,605	18,234	12,156	8,757	5,378	7,338	5,659	8,684
W	7,768	9,680	17,784	18,847	19,275	18,068	15,274	10,913	7,292	6,859	8,299	10,183
All	6,648	7,475	11,738	13,367	14,807	13,676	10,029	7,146	5,868	5,841	5,816	6,660
35												
C	5,413	5,345	7,545	8,065	8,569	8,042	4,449	3,862	4,661	4,451	5,994	4,201
D	6,245	7,132	9,256	8,331	11,435	11,037	5,880	4,802	5,285	4,879	4,770	4,892
BN	6,926	6,543	8,596	12,635	15,120	12,178	9,640	5,861	5,642	6,004	4,964	5,080
AN	6,892	7,569	11,199	17,482	18,650	18,413	12,159	8,757	5,453	7,204	5,677	8,606
W	7,933	9,496	17,708	18,818	19,273	18,114	15,270	11,208	7,713	6,984	8,314	10,159
All	6,827	7,504	11,655	13,413	14,937	13,845	9,974	7,283	6,002	5,949	6,187	6,880
45												
C	5,346	5,346	7,097	7,600	8,856	8,571	4,985	4,460	4,781	4,562	6,197	4,268
D	6,094	7,020	9,153	8,270	11,461	11,301	6,807	5,108	5,207	5,009	5,228	4,870
BN	6,846	6,574	8,740	12,746	15,013	12,430	9,971	6,426	6,438	5,873	5,092	4,978
AN	7,135	7,401	11,208	17,452	18,622	18,279	12,208	9,019	7,109	6,629	5,604	9,005
W	7,969	9,708	17,711	18,851	19,272	18,179	15,409	11,365	8,519	7,015	7,889	9,995
All	6,810	7,527	11,588	13,351	14,966	14,038	10,378	7,633	6,606	5,908	6,209	6,869
55												
C	5,361	5,262	6,896	7,514	9,295	8,842	5,699	5,410	5,433	4,608	4,991	4,327
D	5,668	6,555	9,083	8,292	12,238	12,208	7,978	6,376	6,270	4,916	5,438	4,674
BN	6,513	6,283	8,780	13,010	15,029	13,248	10,629	7,624	6,658	6,054	5,203	4,821
AN	6,967	7,324	11,607	17,369	18,601	18,400	12,819	9,672	8,448	7,221	5,786	8,612
W	7,714	9,865	17,527	18,902	19,499	18,477	15,788	11,693	9,659	7,357	7,538	9,528
All	6,557	7,392	11,543	13,395	15,281	14,542	11,071	8,474	7,507	6,107	6,000	6,615
65												
C	4,802	5,258	6,642	8,508	9,621	9,396	6,393	6,176	6,162	4,826	4,690	4,411
D	5,276	6,408	9,002	8,781	13,119	13,471	9,172	7,498	7,095	5,027	4,824	4,957
BN	6,331	5,829	8,175	13,375	15,706	14,715	12,101	8,962	7,942	5,392	4,613	4,960
AN	5,669	6,812	11,036	18,001	19,271	18,865	14,108	10,820	9,102	6,420	5,098	7,017
W	7,014	9,627	17,597	19,140	19,818	18,806	16,671	12,724	10,698	7,487	8,027	9,007
All	5,967	7,138	11,320	13,885	15,838	15,343	12,154	9,555	8,443	5,982	5,764	6,355
75												
C	5,114	4,909	6,971	8,124	9,959	10,009	7,205	6,868	6,481	5,205	4,761	4,518
D	5,619	6,507	9,149	8,710	13,248	14,403	10,348	8,419	7,613	5,405	4,987	5,398
BN	6,263	6,033	8,491	13,746	15,755	15,418	13,793	10,343	9,018	5,871	4,899	5,510
AN	5,986	7,287	11,435	18,122	19,661	19,498	15,445	12,542	9,911	6,443	5,188	7,968
W	6,994	9,677	17,868	19,299	20,048	19,115	17,492	14,113	11,163	7,313	6,743	8,767
All	6,116	7,218	11,597	13,939	16,051	15,956	13,279	10,767	9,053	6,166	5,489	6,622

A1.12.3.31 Sacramento River at Knights Landing

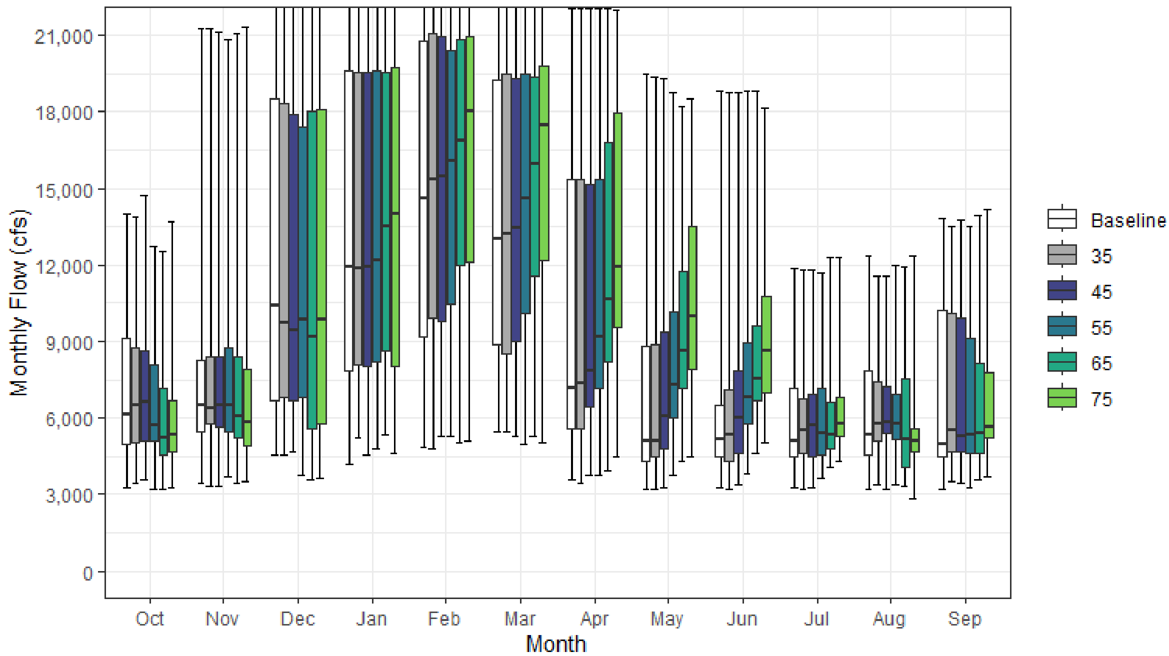

Figure A1-34. Sacramento River Streamflow at Knights Landing Monthly Boxplot

Table A1-74. Cumulative Distribution of Monthly Flow (cfs)—Sacramento River at Knights Landing

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3,264	3,483	4,530	4,206	4,835	5,457	3,565	3,237	3,244	3,278	3,213	3,213	3,326
10%	4,126	4,335	5,722	6,128	7,303	7,402	4,828	3,503	3,644	3,559	4,062	3,557	4,239
25%	4,966	5,466	6,708	7,823	9,194	8,854	5,558	4,279	4,521	4,471	4,556	4,482	4,992
50%	6,122	6,530	10,405	11,955	14,602	13,028	7,196	5,112	5,178	5,115	5,325	4,992	6,271
75%	9,097	8,269	18,527	19,576	20,772	19,218	15,338	8,799	6,526	7,195	7,836	10,220	8,238
90%	10,057	12,601	21,019	21,599	22,207	21,411	19,126	14,065	7,958	9,066	10,097	11,296	9,648
100%	14,007	21,263	22,301	23,406	24,394	23,579	22,033	19,495	18,829	11,857	12,335	13,799	12,006
Mean	6,881	7,702	12,040	13,546	15,016	13,820	10,070	7,161	5,830	5,842	6,208	6,986	6,689
35													
0%	3,451	3,333	4,542	5,226	4,804	5,452	3,457	3,234	3,234	3,213	3,393	3,527	3,553
10%	4,380	4,618	5,912	6,544	7,697	7,745	4,465	3,601	3,873	3,697	4,545	4,115	4,515
25%	5,067	5,747	6,812	8,098	9,896	8,526	5,559	4,501	4,305	4,630	5,107	4,702	5,106
50%	6,493	6,395	9,732	11,863	15,318	13,212	7,336	5,074	5,333	5,522	5,779	5,509	6,422
75%	8,780	8,388	18,327	19,569	21,063	19,480	15,323	8,866	7,094	6,729	7,444	10,117	8,289
90%	10,055	12,430	20,995	21,627	22,244	21,421	19,115	14,086	8,056	8,548	9,316	11,110	9,623
100%	13,888	21,245	22,349	23,357	24,394	23,579	22,033	19,381	18,758	11,811	11,531	13,504	11,958
Mean	7,007	7,718	11,970	13,705	15,210	13,995	10,023	7,214	6,031	5,882	6,447	7,183	6,766
45													
0%	3,567	3,357	4,688	4,555	5,313	5,277	3,766	3,282	3,410	3,276	3,240	3,481	3,679
10%	4,461	4,765	5,698	5,986	7,834	7,931	5,298	4,046	4,250	3,895	4,696	4,320	4,498
25%	5,089	5,648	6,713	8,046	9,822	9,025	6,442	4,801	4,614	4,507	5,394	4,665	5,175
50%	6,598	6,526	9,420	11,927	15,487	13,449	7,823	6,050	6,020	5,708	5,853	5,260	6,476
75%	8,620	8,410	17,906	19,569	20,918	19,286	15,168	9,346	7,848	6,949	7,243	9,910	8,392
90%	10,204	12,511	20,946	21,597	22,215	21,421	19,131	14,001	8,768	7,737	8,966	10,952	9,705
100%	14,741	21,132	22,348	23,357	24,395	23,579	22,033	19,319	18,722	11,818	11,530	13,740	11,981
Mean	7,000	7,695	11,869	13,545	15,215	14,170	10,420	7,609	6,548	5,886	6,433	7,153	6,835
55													
0%	3,195	3,670	3,738	4,792	5,262	4,961	3,766	3,789	3,850	3,619	3,389	3,251	3,412
10%	4,487	4,661	5,107	6,229	8,145	8,653	6,089	5,016	4,733	4,221	4,048	3,989	4,717
25%	5,092	5,490	6,833	8,187	10,465	10,121	7,144	6,019	5,749	4,568	5,139	4,624	5,354
50%	5,735	6,497	9,885	12,186	16,101	14,611	9,170	7,298	6,830	5,425	5,774	5,322	6,739
75%	8,097	8,786	17,416	19,614	20,426	19,475	15,369	10,165	8,928	7,174	6,954	9,131	8,568
90%	10,236	11,156	20,880	21,584	22,205	21,411	19,126	13,350	11,052	8,744	8,147	10,947	9,711
100%	12,692	20,835	22,348	23,357	24,395	23,579	22,033	18,774	18,841	11,684	12,016	13,529	11,981
Mean	6,689	7,567	11,767	13,549	15,400	14,621	11,084	8,436	7,537	6,035	6,111	6,883	6,963
65													
0%	3,198	3,440	3,606	5,332	5,069	5,290	3,934	4,291	4,642	4,049	3,362	3,581	3,551
10%	4,142	4,383	4,698	6,752	7,540	8,810	6,871	5,885	6,122	4,421	3,708	4,354	4,850
25%	4,560	5,193	5,566	8,636	11,978	11,589	8,238	7,144	6,673	4,801	4,083	4,627	5,656
50%	5,193	6,048	9,206	13,519	16,858	15,926	10,631	8,644	7,551	5,366	5,151	5,402	6,857
75%	7,149	8,392	18,027	19,522	20,794	19,337	16,772	11,772	9,631	6,650	7,567	8,154	8,761
90%	9,898	11,552	20,673	21,596	22,158	21,365	19,652	14,243	11,709	8,184	8,773	10,111	9,684
100%	12,509	21,098	22,298	23,357	24,395	23,579	22,017	18,197	18,792	12,297	11,949	13,921	12,033
Mean	6,065	7,259	11,502	14,073	15,974	15,355	12,147	9,509	8,390	5,896	5,833	6,490	7,130
75													
0%	3,256	3,530	3,642	4,627	5,078	5,016	4,519	4,520	5,011	4,281	2,873	3,690	3,702
10%	4,420	4,530	4,813	6,304	7,735	8,613	7,580	6,471	6,376	4,839	4,066	4,493	4,903
25%	4,662	4,933	5,787	8,023	12,119	12,194	9,526	7,885	7,003	5,271	4,656	5,210	5,866
50%	5,356	5,807	9,852	13,983	18,017	17,482	11,948	9,951	8,643	5,783	5,100	5,676	7,281
75%	6,659	7,931	18,100	19,709	20,947	19,764	17,953	13,488	10,775	6,789	5,569	7,757	8,900
90%	9,621	13,177	20,873	21,901	22,064	21,368	20,055	16,119	11,975	7,500	6,991	9,379	9,879
100%	13,713	21,289	22,348	23,357	24,392	23,579	21,997	18,518	18,159	12,317	12,364	14,193	11,869
Mean	6,136	7,236	11,631	13,946	16,137	15,881	13,237	10,738	9,061	6,125	5,458	6,651	7,356

Table A1-75. Water Year Average of Monthly Flows (cfs)—Sacramento River at Knights Landing

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	5,275	5,155	7,619	8,334	8,769	8,064	4,673	3,799	4,291	3,764	4,296	3,574
D	6,452	6,843	9,954	8,516	11,624	11,106	6,110	4,669	5,342	4,693	5,001	4,509
BN	6,867	6,942	9,404	13,073	15,171	12,306	9,575	5,552	5,311	5,852	4,914	5,047
AN	6,735	8,306	11,555	17,425	18,813	18,208	12,241	8,946	5,490	7,475	6,178	9,298
W	8,133	9,912	17,782	18,737	19,186	17,978	15,302	11,041	7,481	7,111	8,935	10,857
All	6,881	7,702	12,040	13,546	15,016	13,820	10,070	7,161	5,830	5,842	6,208	6,986
35												
C	5,468	5,479	8,033	8,568	9,333	8,343	4,412	3,790	4,524	4,275	5,849	4,061
D	6,378	7,275	9,778	8,763	11,895	11,381	5,968	4,711	5,240	4,662	4,897	5,117
BN	7,067	6,783	8,793	13,132	15,444	12,567	9,729	5,858	5,529	5,905	5,295	5,273
AN	7,002	7,831	11,903	17,562	18,729	18,255	12,249	8,642	5,763	7,237	6,428	9,065
W	8,269	9,770	17,681	18,858	19,195	18,024	15,293	11,136	7,851	7,062	8,636	10,759
All	7,007	7,718	11,970	13,705	15,210	13,995	10,023	7,214	6,031	5,882	6,447	7,183
45												
C	5,366	5,452	7,539	7,919	9,669	8,999	4,923	4,380	4,676	4,366	5,935	4,148
D	6,201	7,119	9,688	8,694	11,944	11,566	6,927	4,997	5,117	4,838	5,289	5,000
BN	7,080	6,714	9,155	13,176	15,271	12,789	10,018	6,422	6,250	5,733	5,468	5,184
AN	7,304	7,661	11,417	17,469	18,584	18,123	12,290	9,186	7,023	6,777	6,083	9,640
W	8,294	9,938	17,666	18,738	19,162	18,039	15,425	11,342	8,599	7,197	8,295	10,507
All	7,000	7,695	11,869	13,545	15,215	14,170	10,420	7,609	6,548	5,886	6,433	7,153
55												
C	5,335	5,334	7,104	7,853	9,672	9,214	5,619	5,293	5,328	4,387	4,759	4,217
D	5,763	6,790	9,391	8,700	12,450	12,465	7,989	6,295	6,179	4,783	5,241	4,650
BN	6,637	6,533	9,097	13,258	15,325	13,320	10,753	7,570	6,577	5,829	5,351	5,072
AN	7,123	7,501	11,983	17,275	18,666	18,336	12,815	9,753	8,579	7,327	6,201	9,055
W	7,954	10,003	17,577	18,818	19,325	18,333	15,791	11,688	9,875	7,427	7,909	10,156
All	6,689	7,567	11,767	13,549	15,400	14,621	11,084	8,436	7,537	6,035	6,111	6,883
65												
C	4,807	5,229	6,996	8,912	9,961	9,624	6,288	6,033	6,012	4,635	4,479	4,297
D	5,329	6,576	9,270	9,219	13,514	13,550	9,153	7,421	7,036	4,960	4,696	4,822
BN	6,367	6,058	8,415	13,608	15,711	14,741	12,148	8,876	7,877	5,144	4,469	4,958
AN	5,699	6,966	11,236	18,067	19,444	18,696	14,089	10,779	9,050	6,345	5,373	7,258
W	7,266	9,713	17,579	19,049	19,713	18,721	16,698	12,776	10,709	7,538	8,437	9,515
All	6,065	7,259	11,502	14,073	15,974	15,355	12,147	9,509	8,390	5,896	5,833	6,490
75												
C	5,078	4,855	6,980	8,210	10,294	10,115	7,088	6,714	6,364	5,008	4,578	4,396
D	5,603	6,467	9,290	8,945	13,424	14,308	10,271	8,326	7,533	5,336	4,948	5,339
BN	6,253	6,179	8,731	13,806	15,883	15,337	13,754	10,313	8,929	5,791	4,874	5,492
AN	5,891	7,239	11,420	17,997	19,667	19,314	15,473	12,627	9,975	6,567	5,099	7,939
W	7,135	9,729	17,728	19,117	19,944	19,010	17,483	14,151	11,342	7,328	6,819	8,995
All	6,136	7,236	11,631	13,946	16,137	15,881	13,237	10,738	9,061	6,125	5,458	6,651

A1.12.3.32 Sacramento River at Freeport (SWRCB Sac at Freeport)

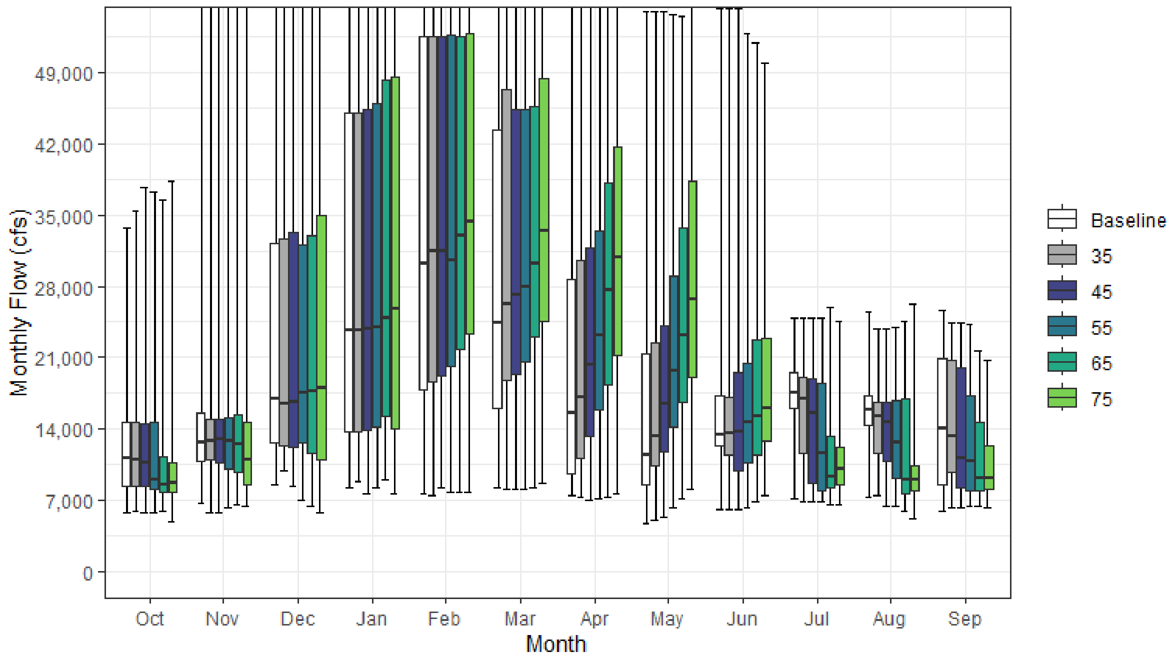

Figure A1-35. Sacramento River Streamflow at Freeport Monthly Boxplot

Table A1-76. Cumulative Distribution of Monthly Flow (cfs)—Sacramento River at Freeport (SWRCB Sac at Freeport)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	5,756	6,618	8,452	8,220	7,648	8,190	7,435	4,723	6,139	7,192	7,346	5,942	5,627
10%	6,759	8,284	11,422	11,469	13,066	12,110	8,346	7,881	10,421	8,492	9,272	6,682	7,791
25%	8,383	10,764	12,586	13,741	17,823	15,996	9,518	8,579	12,393	15,977	14,288	8,575	10,048
50%	11,164	12,655	16,865	23,656	30,265	24,479	15,546	11,488	13,331	17,533	15,799	14,043	12,852
75%	14,674	15,527	32,139	45,108	52,614	43,383	28,686	21,420	17,280	19,484	17,257	20,860	19,579
90%	17,414	22,966	54,310	60,168	66,637	58,163	49,752	39,162	26,619	21,810	19,193	22,655	24,154
100%	33,745	59,464	73,148	75,875	76,658	74,551	70,300	54,967	55,367	24,933	25,417	25,653	32,250
Mean	12,050	14,944	25,480	30,273	35,305	30,879	21,794	17,239	16,483	16,714	15,207	14,882	15,121
35													
0%	5,904	5,711	9,934	8,846	7,474	8,094	7,238	4,928	6,003	6,889	7,511	6,200	5,546
10%	6,630	8,454	11,222	11,705	12,892	13,301	8,981	8,006	8,617	7,441	9,595	6,699	8,098
25%	8,296	10,979	12,375	13,769	18,533	18,724	11,043	10,295	11,436	11,531	11,632	9,734	10,337
50%	10,932	12,862	16,452	23,636	31,491	26,263	17,038	13,279	13,535	16,972	15,226	13,269	13,104
75%	14,682	14,973	32,702	44,983	52,604	47,324	30,528	22,403	17,069	19,074	16,578	20,713	19,799
90%	16,657	22,762	53,745	60,365	65,183	58,172	49,766	39,059	26,195	20,212	18,332	22,349	23,996
100%	35,356	59,616	73,288	75,875	76,510	74,552	70,310	54,985	55,363	24,843	23,793	24,444	32,113
Mean	11,863	14,988	25,411	30,511	35,670	31,727	23,336	18,444	16,451	15,331	14,506	14,623	15,216
45													
0%	5,816	5,770	8,372	7,594	8,264	8,033	6,939	5,256	5,998	6,865	6,434	6,259	5,576
10%	6,715	8,104	10,398	11,293	13,827	15,009	10,515	8,547	8,602	7,319	9,357	6,704	8,374
25%	8,314	10,593	12,241	13,895	19,154	19,344	13,274	11,653	9,824	8,678	10,883	8,147	10,255
50%	10,641	12,909	16,621	23,870	31,396	27,138	20,351	16,431	13,683	15,611	14,562	11,115	13,351
75%	14,520	14,961	33,284	45,418	52,617	45,368	31,817	24,107	19,512	18,894	16,644	19,921	19,879
90%	16,317	22,255	54,047	60,390	65,224	58,162	49,768	39,519	25,708	19,990	18,089	21,972	23,997
100%	37,788	59,678	73,109	75,874	76,375	74,551	70,298	54,991	55,280	24,858	23,829	24,393	32,123
Mean	11,826	14,902	25,339	30,469	35,825	32,137	24,857	20,143	16,624	14,361	14,045	13,802	15,304
55													
0%	5,817	6,193	7,035	8,215	7,699	8,125	7,195	6,174	6,184	6,810	6,430	6,331	5,571
10%	6,510	8,064	9,670	11,376	14,460	16,731	12,463	9,419	8,719	7,149	7,685	6,628	8,367
25%	7,990	10,011	12,600	14,196	20,172	20,526	15,910	14,105	10,672	7,861	9,117	7,839	10,427
50%	8,911	12,861	17,539	23,998	30,540	27,926	23,245	19,605	14,658	11,509	12,703	10,738	13,636
75%	14,553	15,147	32,119	45,917	52,704	45,364	33,493	28,994	20,513	18,505	16,727	17,206	20,442
90%	16,321	22,502	53,174	59,095	65,259	58,450	50,734	40,626	28,480	20,000	18,374	20,059	23,982
100%	37,272	59,629	73,311	75,759	76,349	74,550	70,239	54,741	52,822	24,929	23,987	24,289	32,103
Mean	11,145	15,022	25,345	30,628	36,216	33,196	27,075	22,403	17,194	12,893	12,973	12,676	15,448
65													
0%	5,844	6,539	6,335	8,918	7,700	8,282	7,295	7,171	6,809	6,511	5,905	6,346	5,618
10%	6,496	7,816	8,838	12,324	14,153	16,694	14,189	10,812	9,074	7,327	7,188	6,662	8,819
25%	7,821	9,739	11,504	15,214	21,792	23,014	18,334	16,628	11,345	8,142	7,527	7,966	10,908
50%	8,538	12,510	17,662	24,863	32,937	30,171	27,613	23,132	15,263	9,278	9,027	9,081	13,667
75%	11,246	15,385	32,986	48,337	52,546	45,729	38,186	33,729	22,696	13,201	16,873	14,611	20,220
90%	15,986	23,081	53,219	58,891	64,683	58,310	51,982	44,239	30,469	19,040	19,506	17,121	24,615
100%	36,468	59,057	73,133	75,799	76,531	74,545	70,178	54,523	51,950	25,894	24,571	21,646	31,737
Mean	10,234	14,536	25,256	31,287	37,021	34,822	30,005	25,413	17,808	11,340	11,664	11,185	15,674
75													
0%	4,791	6,401	5,833	7,524	7,773	8,713	7,658	7,992	7,408	6,584	5,170	6,176	5,629
10%	6,479	7,706	8,476	10,513	14,429	17,461	16,009	12,261	9,647	7,664	7,171	6,678	9,123
25%	7,816	8,489	10,935	14,075	23,380	24,533	21,216	19,103	12,759	8,522	7,881	8,010	11,081
50%	8,695	11,031	17,987	25,857	34,277	33,416	30,782	26,691	16,050	9,984	8,994	9,144	14,273
75%	10,702	14,628	34,899	48,508	52,840	48,440	41,617	38,354	22,899	12,253	10,408	12,341	20,807
90%	14,061	23,242	53,375	59,880	63,091	58,896	54,005	49,607	33,122	14,580	14,258	14,020	24,531
100%	38,261	58,144	72,912	75,742	76,340	74,513	70,847	57,039	49,945	24,497	26,274	20,683	31,994
Mean	9,825	13,792	25,106	31,280	37,486	36,505	33,045	28,752	19,163	10,932	9,900	10,380	16,010

Table A1-77. Water Year Average of Monthly Flows (cfs)—Sacramento River at Freeport (SWRCB Sac at Freeport)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	9,583	9,940	13,367	14,315	15,065	12,927	8,533	7,154	9,607	9,011	8,879	6,834
D	11,015	12,740	17,913	15,336	21,815	20,723	11,077	9,283	13,211	16,308	14,846	9,721
BN	12,250	13,080	18,749	23,238	33,157	23,405	18,819	12,183	13,642	18,728	15,989	13,079
AN	11,422	15,771	22,707	40,373	46,915	42,718	23,491	19,761	14,890	20,280	15,938	22,063
W	14,295	20,056	42,921	49,968	52,593	47,576	38,015	30,596	25,028	18,395	18,078	21,082
All	12,050	14,944	25,480	30,273	35,305	30,879	21,794	17,239	16,483	16,714	15,207	14,882
35												
C	9,288	10,179	13,996	14,299	15,911	14,335	8,874	7,849	9,018	8,125	9,548	6,756
D	10,764	13,064	18,127	15,731	22,600	22,552	13,558	10,991	11,333	12,209	12,441	10,517
BN	11,943	12,872	17,930	23,603	33,828	24,308	21,762	14,714	14,733	18,168	15,656	11,574
AN	11,147	15,628	23,078	40,637	47,280	43,811	25,260	20,179	15,558	19,473	16,072	21,397
W	14,326	20,019	42,530	50,136	52,200	47,252	38,547	31,233	25,698	18,036	17,342	20,866
All	11,863	14,988	25,411	30,511	35,670	31,727	23,336	18,444	16,451	15,331	14,506	14,623
45												
C	9,489	9,967	13,626	13,710	16,774	15,648	10,086	8,922	8,724	7,672	9,116	6,632
D	10,537	12,779	18,122	15,782	23,039	23,451	16,138	12,909	10,257	10,523	11,139	9,062
BN	11,692	12,494	18,164	23,572	33,515	25,005	23,656	17,568	15,064	15,731	14,535	10,574
AN	11,410	15,267	22,784	40,853	47,077	43,466	26,836	22,713	17,067	18,652	16,010	20,939
W	14,303	20,444	42,479	50,199	52,200	46,961	39,191	32,043	26,388	18,151	17,725	20,100
All	11,826	14,902	25,339	30,469	35,825	32,137	24,857	20,143	16,624	14,361	14,045	13,802
55												
C	8,669	9,503	13,114	13,828	17,017	16,715	11,480	10,200	9,020	7,164	7,738	6,563
D	9,759	12,772	18,007	15,956	23,958	25,368	18,986	15,143	10,800	8,348	9,187	8,458
BN	10,915	12,510	18,410	23,921	34,203	26,416	26,772	20,606	15,117	11,969	12,154	10,285
AN	10,970	15,480	23,977	41,286	46,823	43,828	29,574	25,782	17,564	15,939	15,002	16,564
W	13,726	20,994	42,198	50,138	52,370	47,457	40,610	34,029	27,469	18,626	18,245	18,901
All	11,145	15,022	25,345	30,628	36,216	33,196	27,075	22,403	17,194	12,893	12,973	12,676
65												
C	8,188	9,240	13,214	15,112	17,790	17,953	13,111	11,771	9,850	7,375	7,322	6,686
D	9,019	12,506	18,315	16,657	25,945	27,730	21,822	17,589	11,580	8,100	7,934	8,031
BN	10,423	11,701	17,780	24,858	34,309	29,071	30,553	23,956	15,824	9,030	8,684	8,891
AN	9,351	14,996	22,900	42,483	47,522	45,010	33,562	29,100	17,755	11,340	11,382	13,228
W	12,504	20,420	42,461	50,030	52,776	48,303	43,337	37,894	27,971	17,297	18,719	16,476
All	10,234	14,536	25,256	31,287	37,021	34,822	30,005	25,413	17,808	11,340	11,664	11,185
75												
C	8,246	8,447	13,105	13,956	18,741	19,206	14,839	13,407	10,690	7,800	7,293	6,575
D	8,696	11,733	17,991	16,511	26,901	30,026	24,729	20,178	12,955	8,844	8,174	8,365
BN	9,711	11,088	17,231	25,610	35,144	31,445	34,323	27,721	17,870	9,815	8,334	8,882
AN	9,277	13,969	23,190	42,776	47,688	47,294	37,622	33,439	19,474	11,426	9,504	12,661
W	11,823	19,764	42,474	50,154	52,516	49,078	46,297	42,020	29,009	14,642	13,712	13,862
All	9,825	13,792	25,106	31,280	37,486	36,505	33,045	28,752	19,163	10,932	9,900	10,380

A1.12.3.33 Sacramento River at Rio Vista

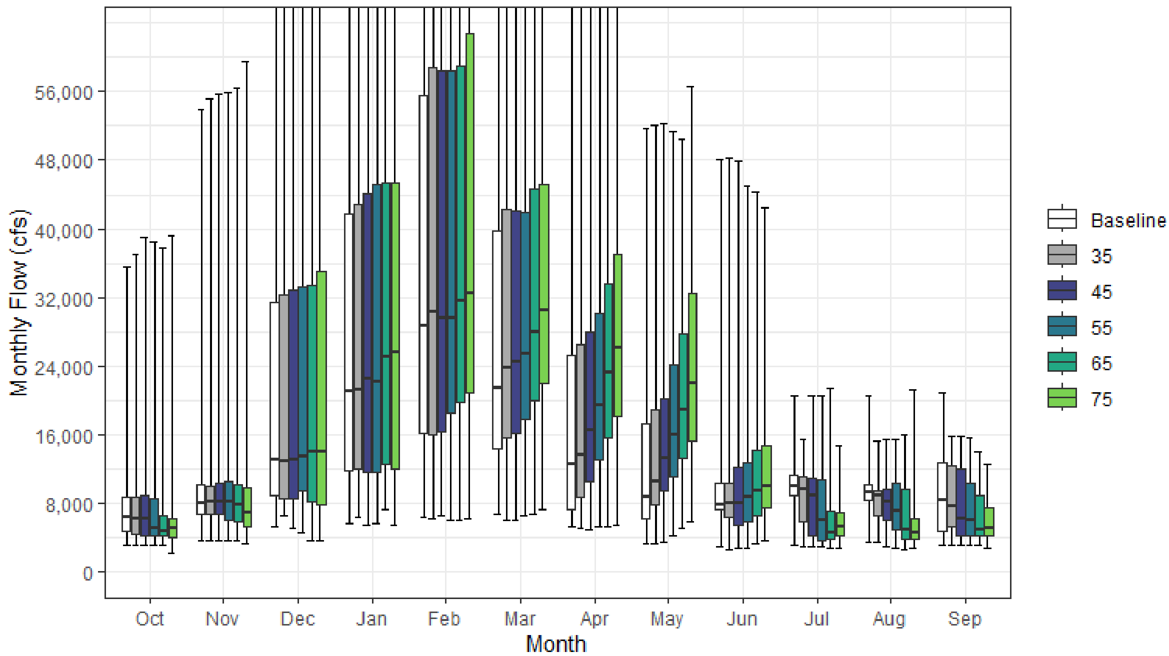

Figure A1-36. Sacramento River Streamflow at Rio Vista Monthly Boxplot

Table A1-78. Cumulative Distribution of Monthly Flow (cfs)—Sacramento River at Rio Vista

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3,000	3,548	5,208	5,656	6,344	6,582	5,227	3,216	2,780	2,971	3,409	3,007	3,548
10%	3,150	4,638	7,520	9,040	11,185	9,811	6,191	5,631	5,848	3,949	4,456	3,177	5,724
25%	4,582	6,632	8,928	11,705	16,082	14,326	7,166	6,084	7,138	8,879	8,229	4,660	7,085
50%	6,319	7,932	12,953	20,952	28,660	21,397	12,471	8,673	7,782	9,958	9,120	8,210	9,642
75%	8,630	10,161	31,311	41,803	55,557	39,820	25,122	17,247	10,383	11,193	10,038	12,607	18,631
90%	10,346	15,896	60,107	78,366	103,587	74,379	45,527	32,947	21,475	12,742	11,155	13,795	25,032
100%	35,537	53,931	121,967	179,656	195,908	177,642	108,021	51,638	48,153	20,397	20,431	20,875	39,859
Mean	7,050	10,437	24,795	34,958	43,299	33,728	20,129	13,867	10,794	9,509	8,696	8,774	13,562
35													
0%	3,000	3,529	6,432	6,309	6,173	6,019	5,028	3,209	2,554	2,905	3,477	3,000	3,425
10%	3,178	4,989	7,716	9,320	10,974	10,775	6,660	5,714	4,557	3,188	5,036	3,090	5,814
25%	4,277	6,613	8,531	11,883	15,985	15,492	8,664	7,785	6,343	5,835	6,486	5,275	7,399
50%	6,191	8,082	12,797	21,141	30,341	23,707	13,656	10,453	7,869	9,507	8,759	7,623	9,921
75%	8,651	9,901	32,221	42,862	58,729	42,190	26,416	18,837	10,245	11,080	9,442	12,381	18,671
90%	9,872	16,208	59,937	79,737	99,947	74,454	45,133	33,165	21,099	11,705	11,206	13,671	25,135
100%	36,926	55,206	121,974	176,535	190,651	177,654	106,334	52,077	48,252	15,456	15,286	15,717	38,967
Mean	6,944	10,475	24,944	35,428	43,522	34,494	21,429	15,023	10,765	8,570	8,253	8,519	13,702
45													
0%	3,000	3,544	4,978	5,443	6,424	5,953	4,891	3,358	2,669	2,875	2,812	3,000	3,461
10%	3,141	4,508	6,919	8,870	11,590	12,138	8,090	6,210	4,521	3,099	4,813	3,034	5,953
25%	4,173	6,658	8,559	11,591	16,346	16,064	10,526	9,340	5,358	4,157	5,942	4,145	7,577
50%	6,109	8,052	12,964	22,462	29,594	24,426	16,503	13,168	7,888	8,906	8,134	6,115	10,263
75%	8,847	10,272	32,821	44,142	58,428	42,070	27,852	20,188	12,037	10,923	9,639	12,017	18,701
90%	9,810	16,504	60,056	79,856	97,560	74,534	44,178	33,630	21,139	11,652	10,758	13,395	25,243
100%	39,002	55,641	121,798	176,919	186,740	176,676	106,573	52,225	47,964	20,393	15,309	15,742	39,185
Mean	6,913	10,399	24,908	35,684	43,545	34,643	22,759	16,480	11,007	7,955	7,977	7,966	13,816
55													
0%	3,000	3,539	4,537	5,650	5,980	6,536	5,182	4,137	2,745	2,815	2,685	3,000	3,465
10%	3,007	4,539	6,655	8,692	12,713	13,880	9,797	6,930	4,594	3,080	3,625	3,016	6,136
25%	4,128	5,949	9,323	11,614	18,432	17,826	13,062	11,035	5,838	3,626	4,917	4,040	7,789
50%	5,099	8,159	13,394	22,193	29,482	25,306	19,324	15,960	8,657	5,944	7,034	6,026	10,808
75%	8,404	10,502	33,120	45,261	58,362	41,969	30,013	24,041	12,598	10,730	10,279	10,225	18,833
90%	9,742	16,627	56,315	78,806	98,681	69,585	47,553	34,934	23,581	11,666	11,011	12,055	25,477
100%	38,550	55,849	121,869	176,424	187,019	176,665	106,645	51,398	44,914	20,419	15,373	15,641	39,269
Mean	6,495	10,532	24,902	35,881	44,178	35,668	24,840	18,465	11,415	7,032	7,354	7,203	14,038
65													
0%	3,000	3,504	3,650	7,220	5,978	6,741	5,148	5,004	3,206	2,716	2,499	3,000	3,482
10%	3,006	4,522	5,949	9,724	12,193	13,640	11,297	8,250	4,772	3,197	3,348	3,013	6,394
25%	4,059	5,710	8,090	12,538	19,799	19,931	15,648	13,183	6,415	3,778	3,842	4,134	8,169
50%	4,626	7,801	13,880	24,967	31,501	27,867	23,114	18,860	9,413	4,506	4,870	4,889	11,003
75%	6,447	10,128	33,370	45,279	59,027	44,558	33,518	27,784	14,203	7,115	9,651	8,872	19,211
90%	9,733	17,413	58,672	81,999	101,560	70,475	50,319	37,352	25,124	11,320	11,699	10,100	26,484
100%	37,774	56,371	121,911	178,168	195,736	175,644	106,343	50,519	44,311	21,380	15,857	13,932	38,874
Mean	5,868	10,253	25,040	36,746	45,148	37,309	27,726	21,096	12,122	6,064	6,524	6,353	14,414
75													
0%	2,040	3,199	3,549	5,429	6,039	7,125	5,481	5,713	3,627	2,731	2,647	2,677	3,538
10%	3,004	4,502	5,877	8,834	12,313	14,463	12,879	9,365	5,128	3,361	3,362	3,008	6,653
25%	4,001	5,288	7,802	12,021	20,900	21,979	18,178	15,284	7,338	4,038	3,686	4,121	8,647
50%	5,099	6,850	14,018	25,473	32,538	30,501	26,161	22,010	9,999	5,153	4,526	4,966	11,853
75%	6,195	9,668	34,992	45,306	62,789	45,204	36,991	32,433	14,718	6,823	6,110	7,468	20,391
90%	8,491	17,217	60,094	84,783	99,687	73,595	55,824	41,982	27,513	8,335	8,673	8,488	26,675
100%	39,144	59,582	121,879	176,538	200,853	175,940	106,824	56,705	42,544	14,643	21,165	12,460	39,217
Mean	5,693	9,814	25,564	37,355	46,064	39,078	30,899	24,125	13,244	5,686	5,369	5,828	14,923

Table A1-79. Water Year Average of Monthly Flows (cfs)—Sacramento River at Rio Vista

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	5,127	5,963	10,569	12,625	14,145	11,087	6,284	5,008	5,119	4,199	4,248	3,336
D	6,083	8,476	14,653	13,374	20,448	18,105	8,730	6,784	7,658	9,121	8,341	5,362
BN	7,074	8,335	15,811	21,239	33,729	20,652	15,555	9,341	7,930	10,721	9,237	7,599
AN	6,469	11,108	20,922	42,489	55,862	43,525	19,890	16,066	8,867	12,238	9,250	13,476
W	9,040	15,293	47,136	68,213	76,481	61,315	38,974	25,731	18,752	10,739	10,778	12,945
All	7,050	10,437	24,795	34,958	43,299	33,728	20,129	13,867	10,794	9,509	8,696	8,774
35												
C	4,941	6,063	10,903	12,728	14,636	12,342	6,590	5,587	4,688	3,674	4,857	3,218
D	5,921	8,624	15,117	13,730	21,500	20,407	10,848	8,300	6,300	6,467	6,871	5,704
BN	6,891	8,227	15,813	21,730	35,263	21,536	18,271	11,457	8,705	10,330	8,855	6,526
AN	6,359	10,994	20,347	44,153	56,356	44,832	21,555	16,713	9,371	11,369	9,088	13,136
W	9,067	15,368	47,350	68,438	75,028	60,364	39,177	26,560	19,216	10,501	10,384	12,701
All	6,944	10,475	24,944	35,428	43,522	34,494	21,429	15,023	10,765	8,570	8,253	8,519
45												
C	5,087	5,966	10,698	12,447	15,374	13,382	7,659	6,530	4,511	3,380	4,592	3,083
D	5,791	8,297	15,129	13,826	22,036	21,149	13,090	10,039	5,670	5,402	6,021	4,818
BN	6,671	8,043	15,807	21,862	35,201	22,253	20,042	13,933	8,980	8,758	8,113	5,826
AN	6,457	10,706	20,943	45,012	56,067	43,807	22,976	18,659	10,586	10,733	9,297	12,649
W	9,074	15,650	47,078	68,921	74,468	59,750	39,658	27,253	19,901	10,644	10,611	12,235
All	6,913	10,399	24,908	35,684	43,545	34,643	22,759	16,480	11,007	7,955	7,977	7,966
55												
C	4,602	5,597	10,449	12,543	16,069	14,405	8,894	7,663	4,721	3,025	3,595	3,023
D	5,279	8,178	15,187	14,044	23,311	23,140	15,689	12,043	6,036	3,975	4,953	4,491
BN	6,149	7,939	15,984	22,426	35,486	23,838	22,895	16,614	9,000	6,359	6,680	5,562
AN	6,204	10,984	21,600	46,113	56,675	44,333	25,471	21,397	11,204	8,962	8,716	9,884
W	8,757	16,322	46,759	68,546	74,808	59,923	41,155	28,935	20,591	11,052	10,995	11,323
All	6,495	10,532	24,902	35,881	44,178	35,668	24,840	18,465	11,415	7,032	7,354	7,203
65												
C	4,269	5,477	10,343	13,594	16,799	15,629	10,326	9,004	5,292	3,163	3,265	3,075
D	4,856	8,020	15,677	14,638	25,200	25,684	18,242	14,147	6,619	3,764	4,078	4,345
BN	5,917	7,327	15,570	23,339	36,288	26,245	26,618	19,605	10,139	4,450	4,596	4,891
AN	5,171	10,641	20,641	47,429	57,431	45,975	29,009	24,439	11,577	6,133	6,457	7,909
W	7,753	16,096	47,570	69,293	75,410	60,645	44,282	32,258	21,346	10,295	11,303	9,838
All	5,868	10,253	25,040	36,746	45,148	37,309	27,726	21,096	12,122	6,064	6,524	6,353
75												
C	4,337	4,923	10,890	12,905	17,605	16,855	11,823	10,375	5,868	3,456	3,369	2,988
D	4,703	7,583	15,659	14,716	26,681	28,233	20,860	16,327	7,494	4,183	3,984	4,409
BN	5,604	6,922	15,365	24,244	37,685	28,487	30,546	22,808	11,608	4,859	4,151	4,778
AN	5,304	9,886	21,562	50,067	59,214	49,174	32,892	28,218	12,745	6,125	5,351	7,582
W	7,384	15,833	48,761	69,945	75,298	61,219	48,006	36,383	22,714	8,323	8,225	8,299
All	5,693	9,814	25,564	37,355	46,064	39,078	30,899	24,125	13,244	5,686	5,369	5,828

A1.12.3.34 Stony Creek below Black Butte Reservoir (SWRCB Black Butte)

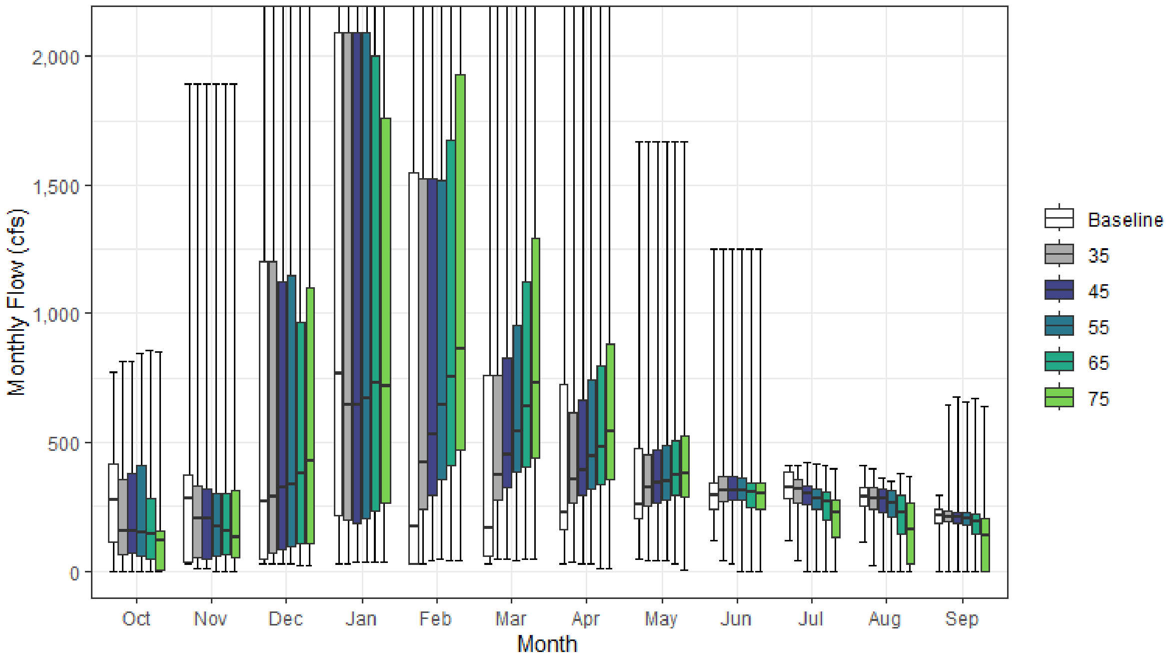

Figure A1-37. Stony Creek Streamflow below Black Butte Reservoir Monthly Boxplot

Table A1-80. Cumulative Distribution of Monthly Flow (cfs)—Stony Creek below Black Butte Reservoir (SWRCB Black Butte)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	30	30	30	30	30	30	48	121	122	116	0	46
10%	60	30	30	75	30	54	90	188	215	252	221	118	126
25%	113	37	45	214	30	60	160	205	239	281	250	188	168
50%	279	285	272	766	171	166	231	258	296	327	286	215	287
75%	418	373	1,201	2,092	1,551	762	727	476	344	387	323	240	576
90%	535	711	2,350	3,947	3,141	1,694	1,358	913	386	410	382	258	748
100%	774	1,896	4,949	8,485	9,017	6,741	3,879	1,672	1,252	410	410	294	1,396
Mean	291	330	818	1,402	1,072	669	581	411	310	329	291	202	404
35													
0%	0	13	30	30	30	47	35	41	41	41	23	0	26
10%	46	31	37	88	121	179	209	221	227	233	216	165	154
25%	63	53	73	197	243	274	263	253	271	262	243	192	193
50%	156	202	286	647	421	370	353	324	313	318	281	211	296
75%	356	330	1,201	2,092	1,522	762	617	455	367	353	323	233	588
90%	606	508	2,136	3,743	3,058	1,659	1,334	840	400	370	342	261	732
100%	816	1,896	4,949	8,032	9,017	6,741	3,879	1,672	1,252	408	399	643	1,383
Mean	236	264	790	1,359	1,174	773	616	432	331	305	272	208	406
45													
0%	0	10	30	32	38	44	30	38	30	0	0	0	22
10%	8	31	45	104	150	214	217	216	224	196	116	141	158
25%	70	49	83	183	295	326	292	264	279	256	228	187	201
50%	153	202	326	647	533	455	394	340	315	300	283	208	304
75%	379	317	1,126	2,092	1,522	826	663	470	364	332	322	228	595
90%	664	453	2,136	3,703	3,043	1,602	1,334	757	390	357	336	287	725
100%	816	1,896	4,949	7,921	9,017	6,741	3,879	1,672	1,252	421	361	674	1,388
Mean	242	244	772	1,341	1,211	823	634	438	328	284	257	213	408
55													
0%	0	0	31	35	46	43	30	40	0	0	0	0	22
10%	2	31	55	114	198	248	232	221	224	93	32	0	167
25%	61	57	94	203	354	384	316	274	275	243	209	180	216
50%	148	175	340	672	644	541	446	348	315	282	264	203	312
75%	412	302	1,150	2,092	1,519	957	742	489	361	319	312	228	615
90%	756	443	2,039	3,682	3,015	1,584	1,302	765	401	340	324	263	729
100%	845	1,896	4,949	7,824	9,017	6,741	3,879	1,672	1,252	418	347	659	1,398
Mean	246	234	744	1,327	1,257	877	661	446	326	261	234	211	410
65													
0%	0	0	25	32	38	44	12	30	0	0	0	0	17
10%	0	23	56	129	189	276	232	222	207	89	4	0	162
25%	46	62	104	234	412	406	339	292	246	195	144	146	217
50%	146	158	377	733	755	638	479	372	304	268	227	190	338
75%	282	302	964	2,004	1,674	1,122	795	504	343	305	293	221	577
90%	770	498	1,974	3,650	3,021	1,725	1,204	844	401	327	314	282	739
100%	858	1,896	4,949	7,619	9,017	6,741	3,574	1,672	1,252	408	381	670	1,398
Mean	236	236	729	1,302	1,326	954	678	459	316	238	204	192	412
75													
0%	0	0	25	32	38	47	9	6	0	0	0	0	15
10%	0	15	61	144	207	298	254	215	174	21	0	0	155
25%	4	50	106	265	471	443	355	287	240	132	31	0	215
50%	118	129	430	718	867	731	540	379	299	227	160	139	347
75%	157	310	1,098	1,762	1,927	1,295	882	527	345	274	267	206	591
90%	720	514	2,078	3,207	3,088	1,970	1,361	872	414	305	298	266	744
100%	854	1,896	4,949	7,560	8,750	6,741	3,191	1,672	1,252	396	366	641	1,399
Mean	189	231	782	1,275	1,414	1,036	727	462	305	202	153	148	415

Table A1-81. Water Year Average of Monthly Flows (cfs)—Stony Creek below Black Butte Reservoir (SWRCB Black Butte)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	170	117	161	309	129	138	139	192	237	297	255	166
D	250	270	380	392	250	191	215	260	273	318	271	182
BN	318	304	451	795	606	193	369	280	294	313	299	211
AN	283	343	852	2,086	1,749	863	561	478	314	350	299	222
W	373	498	1,707	2,820	2,186	1,516	1,229	693	384	355	316	224
All	291	330	818	1,402	1,072	669	581	411	310	329	291	202
35												
C	101	82	146	261	269	255	211	227	236	272	198	114
D	219	203	366	384	390	362	292	296	288	303	283	204
BN	249	227	438	732	719	346	431	329	320	318	291	211
AN	144	221	790	2,001	1,760	915	582	449	359	332	311	229
W	354	446	1,666	2,785	2,270	1,557	1,202	699	408	305	277	250
All	236	264	790	1,359	1,174	773	616	432	331	305	272	208
45												
C	128	84	171	251	304	303	217	229	227	251	154	91
D	215	193	360	393	448	438	333	303	301	292	283	194
BN	258	191	414	688	761	414	460	344	320	299	314	208
AN	136	185	716	1,957	1,774	943	581	482	343	322	287	224
W	360	426	1,644	2,769	2,300	1,586	1,210	690	401	270	244	293
All	242	244	772	1,341	1,211	823	634	438	328	284	257	213
55												
C	134	85	202	264	352	343	220	229	218	190	131	84
D	218	194	345	394	512	517	376	322	288	298	276	167
BN	251	182	374	697	832	496	533	343	335	300	276	210
AN	137	186	677	1,854	1,809	979	589	497	347	296	276	211
W	370	395	1,586	2,754	2,323	1,619	1,219	697	398	234	215	313
All	246	234	744	1,327	1,257	877	661	446	326	261	234	211
65												
C	98	78	230	302	404	390	230	227	200	158	111	70
D	183	178	363	405	599	598	409	340	284	274	220	124
BN	229	183	372	715	933	585	590	375	317	291	262	168
AN	120	193	696	1,734	1,898	1,078	620	510	342	267	257	205
W	402	415	1,501	2,682	2,360	1,693	1,196	703	390	208	184	316
All	236	236	729	1,302	1,326	954	678	459	316	238	204	192
75												
C	89	54	259	343	456	424	247	213	179	114	51	12
D	150	172	410	397	687	676	446	339	271	225	128	72
BN	151	183	413	718	1,044	670	665	386	316	258	210	111
AN	102	188	765	1,747	2,033	1,234	692	530	325	237	225	175
W	332	419	1,571	2,568	2,431	1,770	1,247	705	383	183	160	290
All	189	231	782	1,275	1,414	1,036	727	462	305	202	153	148

A1.12.3.35 Stony Creek above Confluence with Sacramento River (SWRCB Stony Creek)

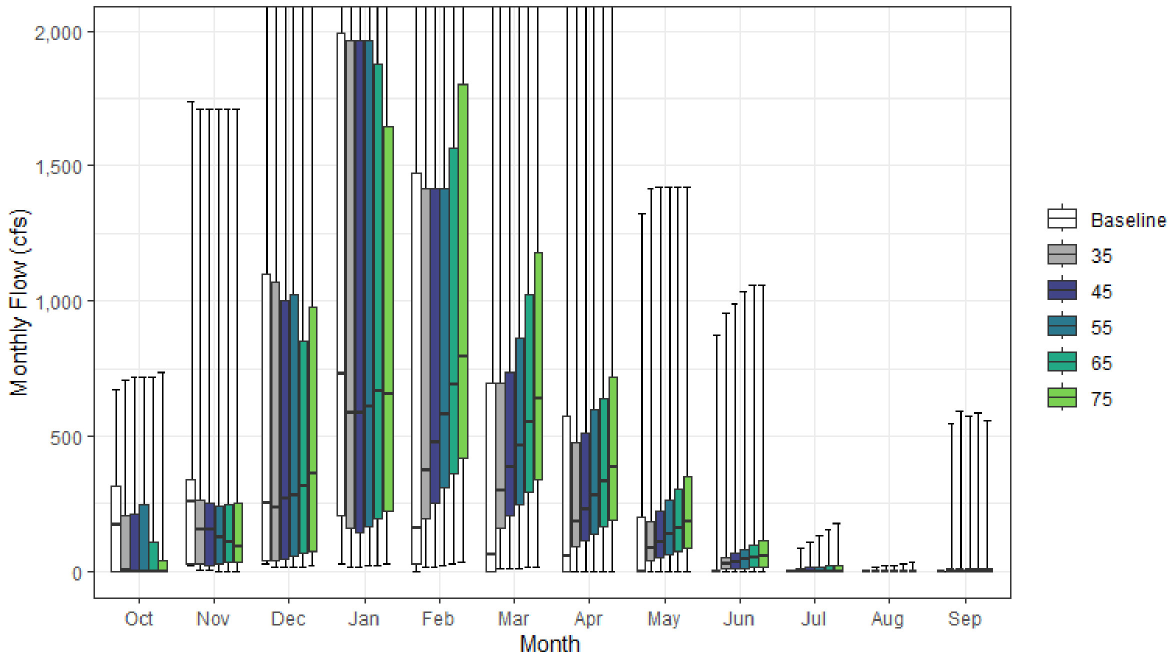

Figure A1-38. Stony Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-82. Cumulative Distribution of Monthly Flow (cfs) Stony Creek above Confluence with Sacramento River (SWRCB Stony Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	23	27	29	0	0	0	0	0	0	0	0	5
10%	0	27	27	71	29	0	0	0	0	0	0	0	32
25%	0	28	41	204	29	0	0	0	0	0	0	0	69
50%	171	260	249	729	162	62	57	1	0	0	0	0	180
75%	313	341	1,101	1,992	1,476	697	572	199	1	0	0	0	442
90%	435	651	2,155	3,758	2,991	1,584	1,114	570	12	0	0	0	602
100%	670	1,739	4,539	8,078	8,585	6,390	3,343	1,324	873	0	0	0	1,205
Mean	189	301	750	1,335	1,017	580	404	164	23	0	0	0	286
35													
0%	0	5	14	15	15	7	1	1	0	0	0	0	6
10%	0	15	18	54	73	85	43	19	1	0	0	0	49
25%	0	25	36	158	195	158	88	39	8	0	0	1	82
50%	3	155	232	586	371	297	181	86	27	0	0	3	175
75%	207	264	1,071	1,962	1,419	696	476	185	52	10	0	5	455
90%	437	435	1,928	3,534	2,882	1,533	1,101	505	111	18	3	10	590
100%	709	1,708	4,509	7,617	8,555	6,388	3,339	1,414	955	82	14	547	1,253
Mean	124	217	697	1,265	1,083	679	430	202	58	6	1	14	286
45													
0%	0	6	14	15	18	10	1	1	0	0	0	0	6
10%	0	16	20	69	93	109	55	24	1	0	0	0	61
25%	0	23	45	145	251	203	113	49	10	0	0	0	90
50%	1	155	269	586	477	382	230	110	35	1	0	3	184
75%	214	254	1,002	1,962	1,419	737	511	224	67	13	0	6	455
90%	493	384	1,928	3,496	2,868	1,495	1,108	522	143	23	4	15	586
100%	721	1,708	4,509	7,512	8,555	6,388	3,339	1,422	989	106	19	591	1,263
Mean	129	197	679	1,247	1,118	724	449	219	70	8	1	31	292
55													
0%	0	0	14	18	22	12	1	1	0	0	0	0	7
10%	0	15	25	79	114	133	67	29	1	0	0	0	71
25%	0	26	55	163	307	248	138	60	13	0	0	0	105
50%	0	124	282	610	583	467	281	135	42	1	0	4	193
75%	247	243	1,024	1,962	1,416	865	595	264	82	16	0	8	478
90%	582	370	1,840	3,476	2,841	1,478	1,088	532	178	28	5	20	593
100%	721	1,708	4,509	7,419	8,555	6,388	3,339	1,422	1,035	129	23	577	1,274
Mean	138	187	653	1,234	1,163	776	476	239	80	10	2	45	300
65													
0%	0	0	16	22	26	14	0	1	0	0	0	0	8
10%	0	15	29	93	135	157	79	34	1	0	0	0	79
25%	0	30	66	193	362	293	163	71	15	0	0	0	121
50%	0	106	315	668	689	551	333	159	50	1	0	5	216
75%	108	243	853	1,878	1,564	1,023	638	304	96	19	0	11	458
90%	631	416	1,780	3,445	2,846	1,609	1,016	589	213	33	6	91	607
100%	721	1,709	4,509	7,224	8,555	6,388	3,074	1,422	1,058	153	27	587	1,276
Mean	139	189	640	1,210	1,229	846	497	257	89	12	2	53	309
75													
0%	0	0	18	25	30	16	0	0	0	0	0	0	9
10%	0	13	34	107	155	181	92	40	0	0	0	0	89
25%	0	31	76	223	418	338	188	82	17	0	0	0	138
50%	0	89	364	653	795	636	384	184	58	1	0	2	235
75%	39	251	977	1,648	1,804	1,180	717	351	111	21	0	10	478
90%	590	441	1,875	3,024	2,910	1,845	1,151	638	239	38	7	27	622
100%	738	1,708	4,509	7,168	8,301	6,388	2,742	1,422	1,058	176	31	559	1,279
Mean	115	188	690	1,185	1,314	925	543	277	98	14	2	50	323

Table A1-83. Water Year Average of Monthly Flows (cfs)—Stony Creek above Confluence with Sacramento River (SWRCB Stony Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	88	105	147	294	108	27	2	4	1	0	0	0
D	157	246	348	373	238	110	73	38	0	0	0	0
BN	209	277	413	757	571	139	203	49	1	0	0	0
AN	188	313	780	1,986	1,665	786	401	215	8	0	0	0
W	257	456	1,565	2,685	2,081	1,409	990	391	71	0	0	0
All	189	301	750	1,335	1,017	580	404	164	23	0	0	0
35												
C	36	60	112	223	210	148	53	28	10	0	0	3
D	109	162	308	336	339	267	127	74	14	2	1	3
BN	126	183	376	667	649	280	250	100	30	3	0	2
AN	43	175	695	1,875	1,645	837	421	218	49	7	1	4
W	216	380	1,497	2,621	2,132	1,447	972	447	137	15	3	41
All	124	217	697	1,265	1,083	679	430	202	58	6	1	14
45												
C	52	60	132	212	243	191	68	37	12	0	0	3
D	102	151	301	344	395	336	163	86	18	2	1	3
BN	131	146	352	625	687	343	283	122	38	4	0	2
AN	45	144	626	1,833	1,659	865	425	249	63	9	1	5
W	225	359	1,477	2,607	2,159	1,473	980	463	162	19	3	97
All	129	197	679	1,247	1,118	724	449	219	70	8	1	31
55												
C	67	61	160	224	290	233	83	45	15	0	0	3
D	105	150	287	345	457	411	199	105	22	2	1	4
BN	132	136	314	634	752	417	342	138	47	4	0	2
AN	35	145	590	1,735	1,692	897	437	281	77	11	1	6
W	250	331	1,424	2,592	2,182	1,505	991	488	180	24	4	142
All	138	187	653	1,234	1,163	776	476	239	80	10	2	45
65												
C	53	57	190	261	343	276	98	53	17	0	0	3
D	87	134	303	355	540	486	235	124	25	3	1	4
BN	135	137	313	650	851	492	404	163	55	5	0	3
AN	19	149	608	1,621	1,777	990	469	305	92	14	1	14
W	278	348	1,346	2,524	2,217	1,576	976	504	193	28	5	163
All	139	189	640	1,210	1,229	846	497	257	89	12	2	53
75												
C	48	37	219	301	396	318	114	61	20	0	0	2
D	80	134	347	349	623	560	271	143	29	3	2	4
BN	84	142	354	654	960	568	466	188	63	6	0	3
AN	18	146	672	1,633	1,905	1,137	538	341	105	16	1	8
W	238	354	1,411	2,415	2,285	1,650	1,025	522	208	32	6	157
All	115	188	690	1,185	1,314	925	543	277	98	14	2	50

A1.12.3.36 Sutter Bypass

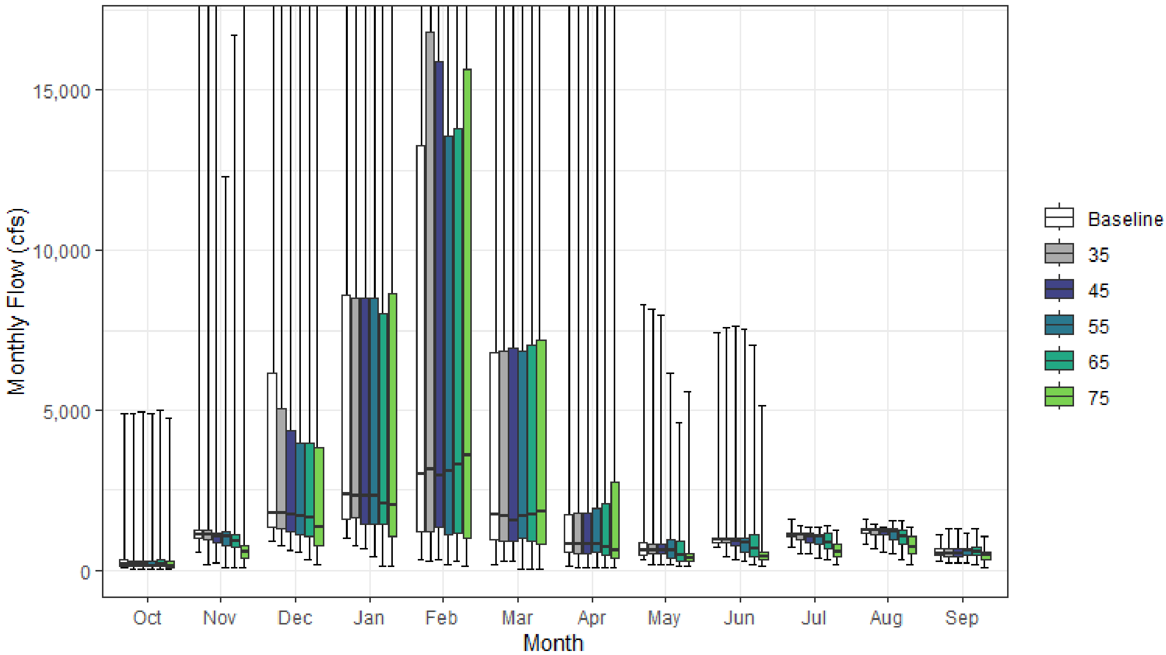

Figure A1-39. Sutter Bypass Streamflow Monthly Boxplot

Table A1-84. Cumulative Distribution of Monthly Flow (cfs) Sutter Bypass above Confluence with Sacramento River (SWRCB Sutter Bypass)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	67	586	909	1,003	347	180	128	329	728	731	831	300	466
10%	106	878	1,097	1,164	715	585	317	429	794	890	1,074	366	682
25%	127	1,025	1,348	1,577	1,223	934	573	494	856	1,075	1,129	462	835
50%	168	1,122	1,805	2,350	2,989	1,744	826	593	938	1,099	1,271	541	1,400
75%	338	1,262	6,180	8,588	13,274	6,791	1,731	860	1,006	1,154	1,316	643	3,533
90%	539	1,514	18,807	26,572	38,388	22,405	6,526	1,186	1,120	1,206	1,398	762	6,278
100%	4,920	20,037	41,296	71,719	103,961	74,848	37,266	8,315	7,427	1,598	1,572	1,114	10,137
Mean	302	1,471	5,672	9,166	12,145	7,091	2,878	865	1,066	1,095	1,243	564	2,600
35													
0%	45	193	760	772	277	297	85	193	438	523	647	246	370
10%	102	704	1,120	1,053	760	607	347	316	539	790	970	395	665
25%	121	951	1,281	1,616	1,223	910	509	501	836	958	1,084	445	771
50%	181	1,086	1,784	2,311	3,138	1,687	825	617	939	1,089	1,256	500	1,463
75%	278	1,252	5,027	8,510	16,816	6,864	1,774	835	1,006	1,135	1,288	655	3,536
90%	471	1,543	18,403	26,504	38,312	22,317	6,467	1,168	1,137	1,178	1,331	743	6,141
100%	4,908	19,750	41,220	71,738	103,930	74,847	37,263	8,143	7,589	1,387	1,464	1,307	10,105
Mean	289	1,382	5,536	9,140	12,211	7,189	2,894	859	1,023	1,035	1,186	555	2,584
45													
0%	53	213	635	676	341	296	89	189	343	502	586	222	344
10%	99	576	943	1,044	727	519	283	305	514	706	853	371	650
25%	121	880	1,210	1,448	1,358	892	529	520	780	840	1,081	438	750
50%	166	1,068	1,751	2,297	2,930	1,565	835	627	912	1,070	1,222	525	1,317
75%	261	1,175	4,372	8,522	15,913	6,931	1,769	835	991	1,135	1,282	656	3,516
90%	531	1,545	16,543	26,519	38,321	22,320	6,482	1,189	1,139	1,177	1,315	754	6,088
100%	4,931	17,917	41,220	71,698	103,875	74,847	37,263	7,959	7,635	1,339	1,358	1,305	10,092
Mean	286	1,311	5,331	9,061	11,985	7,061	2,882	848	993	999	1,163	558	2,535
55													
0%	46	94	569	429	161	56	91	169	291	361	540	210	293
10%	91	515	911	1,020	594	504	255	261	429	606	799	354	588
25%	112	772	1,121	1,429	1,080	1,011	568	362	544	806	969	479	727
50%	142	1,037	1,675	2,297	3,087	1,678	822	606	874	1,050	1,196	597	1,218
75%	275	1,224	3,953	8,521	13,554	6,855	1,935	959	983	1,125	1,285	673	3,494
90%	504	1,560	15,511	26,477	38,292	22,282	6,687	1,244	1,180	1,171	1,306	738	6,050
100%	4,891	12,304	41,220	71,699	103,832	74,847	37,262	6,146	7,548	1,339	1,523	1,140	10,101
Mean	275	1,244	4,892	8,844	11,834	7,065	2,935	827	937	955	1,117	573	2,476
65													
0%	53	89	327	125	272	48	77	134	172	321	313	162	287
10%	89	349	774	928	569	504	209	211	332	473	611	291	515
25%	108	699	1,063	1,443	1,155	922	475	276	440	665	831	450	712
50%	200	908	1,624	2,092	3,308	1,718	717	464	653	862	1,078	593	1,271
75%	311	1,104	3,954	8,011	13,812	7,039	2,068	924	1,084	1,135	1,253	692	3,467
90%	505	1,479	13,963	26,513	36,762	22,009	7,765	1,244	1,191	1,276	1,314	778	6,094
100%	5,011	16,723	41,244	71,666	103,707	74,847	37,008	4,628	7,034	1,387	1,553	1,286	10,138
Mean	290	1,202	4,751	8,857	11,807	7,089	3,073	688	858	888	1,020	574	2,451
75													
0%	56	69	177	119	120	36	64	121	148	184	182	97	222
10%	77	206	462	658	426	353	187	203	232	325	370	192	391
25%	101	354	760	1,052	986	808	357	279	323	442	529	307	584
50%	145	577	1,363	2,021	3,582	1,833	609	366	429	582	737	463	1,216
75%	260	775	3,815	8,669	15,638	7,185	2,736	516	551	822	1,049	589	3,447
90%	430	950	16,674	31,440	35,704	21,936	8,768	1,172	742	1,091	1,242	665	6,009
100%	4,738	18,905	41,166	71,602	103,263	74,800	36,671	5,582	5,136	1,239	1,369	1,078	10,366
Mean	254	947	4,845	8,965	11,971	7,189	3,259	604	536	641	781	453	2,411

Table A1-85. Water Year Average of Monthly Flows (cfs)—Sutter Bypass above Confluence with Sacramento River (SWRCB Sutter Bypass)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	162	989	1,915	1,736	1,693	1,170	352	509	839	925	1,080	390
D	222	1,128	2,695	1,956	2,937	2,157	721	565	961	1,112	1,295	542
BN	266	1,147	3,493	2,624	7,322	1,573	1,208	613	936	1,106	1,316	567
AN	233	1,057	3,739	10,770	16,719	8,310	1,542	1,182	947	1,169	1,261	641
W	487	2,361	12,071	21,839	25,617	16,792	7,436	1,297	1,395	1,137	1,238	641
All	302	1,471	5,672	9,166	12,145	7,091	2,878	865	1,066	1,095	1,243	564
35												
C	169	866	1,779	1,673	1,654	1,138	330	360	576	758	924	404
D	211	1,018	2,654	1,945	2,917	2,421	681	608	857	1,032	1,275	567
BN	242	1,073	3,414	2,670	7,721	1,567	1,320	600	944	1,085	1,270	550
AN	252	1,053	3,687	10,782	17,021	8,596	1,574	1,180	988	1,154	1,265	628
W	457	2,261	11,789	21,759	25,500	16,818	7,449	1,333	1,452	1,103	1,175	599
All	289	1,382	5,536	9,140	12,211	7,189	2,894	859	1,023	1,035	1,186	555
45												
C	169	853	1,805	1,598	1,634	1,086	308	318	504	717	837	391
D	212	941	2,454	1,894	2,786	2,143	687	513	801	965	1,231	593
BN	226	1,012	3,254	2,502	7,158	1,507	1,226	710	881	1,044	1,252	555
AN	221	1,003	3,760	10,568	16,609	8,273	1,595	1,201	957	1,125	1,248	605
W	468	2,146	11,314	21,770	25,378	16,802	7,466	1,315	1,483	1,094	1,195	604
All	286	1,311	5,331	9,061	11,985	7,061	2,882	848	993	999	1,163	558
55												
C	150	681	1,610	1,476	1,484	1,063	245	269	432	587	765	356
D	183	928	2,064	1,829	2,865	2,227	708	380	620	840	1,063	613
BN	213	963	3,067	2,469	6,650	1,517	1,422	621	813	1,037	1,225	638
AN	228	983	3,509	10,441	16,634	8,364	1,651	1,322	942	1,129	1,279	631
W	470	2,065	10,472	21,237	25,196	16,720	7,516	1,373	1,517	1,114	1,213	595
All	275	1,244	4,892	8,844	11,834	7,065	2,935	827	937	955	1,117	573
65												
C	135	595	1,584	1,307	1,372	995	214	237	368	499	590	294
D	211	902	2,201	1,780	3,389	2,398	572	290	452	711	873	613
BN	236	806	2,843	2,654	6,986	1,780	1,640	458	606	864	1,082	594
AN	287	894	3,002	10,287	16,189	8,106	1,952	992	959	1,116	1,261	719
W	465	2,124	10,267	21,365	24,761	16,660	7,830	1,236	1,536	1,146	1,219	620
All	290	1,202	4,751	8,857	11,807	7,089	3,073	688	858	888	1,020	574
75												
C	145	327	1,422	1,034	1,409	837	194	213	284	377	459	236
D	164	531	2,047	1,543	3,636	2,763	522	285	358	497	640	419
BN	198	513	2,737	2,624	7,078	1,973	1,804	456	364	492	589	397
AN	207	548	2,898	11,714	17,075	9,216	2,395	641	473	672	852	535
W	434	2,025	10,891	21,454	24,664	16,210	8,208	1,127	936	966	1,147	594
All	254	947	4,845	8,965	11,971	7,189	3,259	604	536	641	781	453

A1.12.3.37 Thomes Creek above Confluence with Sacramento River (SWRCB Thomes Creek)

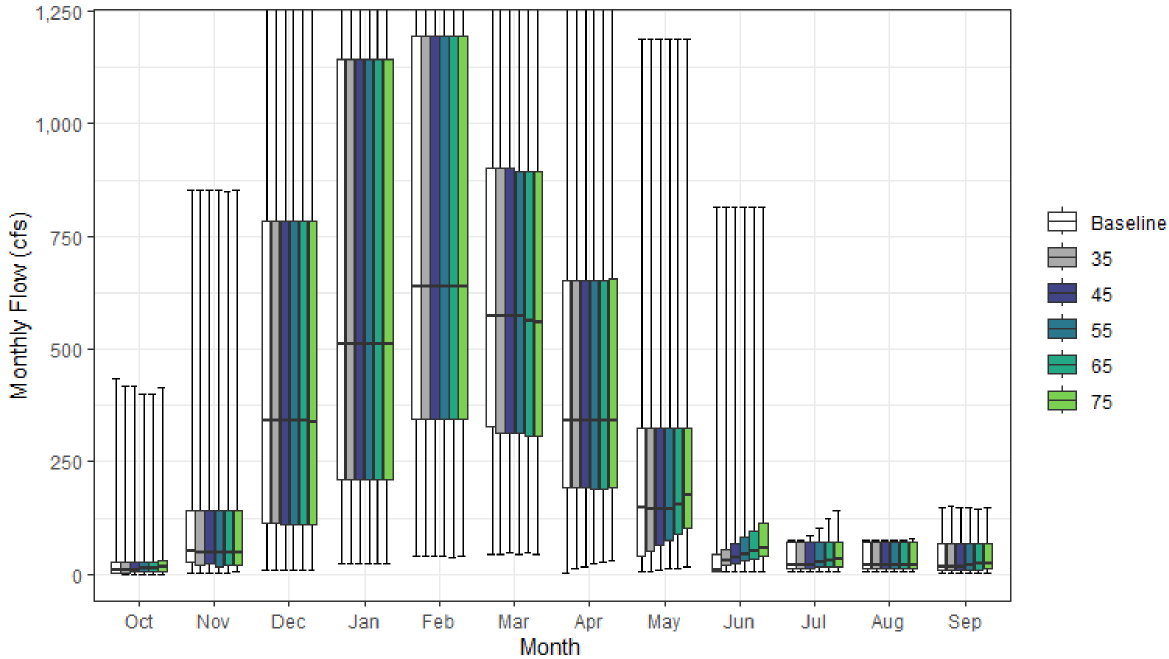

Figure A1-40. Thomes Creek Streamflow above Confluence with Sacramento River Monthly Boxplot

Table A1-86. Cumulative Distribution of Monthly Flow (cfs)—Thomes Creek above Confluence with Sacramento River (SWRCB Thomes Creek)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	1	4	9	25	39	43	3	5	6	6	5	4	20
10%	2	13	34	109	164	214	92	14	6	8	7	5	75
25%	3	27	113	211	343	329	192	42	7	14	14	11	131
50%	10	52	341	509	640	572	341	147	9	18	19	17	193
75%	26	141	784	1,144	1,195	900	652	323	43	72	71	69	330
90%	73	298	1,251	1,765	2,011	1,418	925	611	144	73	72	70	445
100%	434	854	2,757	4,180	5,326	2,975	2,054	1,187	816	75	75	148	699
Mean	30	124	537	773	925	692	464	247	52	37	37	38	237
35													
0%	1	3	10	22	39	43	14	7	6	6	5	4	22
10%	3	11	34	109	163	213	92	36	12	8	7	5	74
25%	4	19	113	211	343	314	192	49	19	14	14	11	131
50%	10	48	341	509	640	572	341	144	28	19	18	17	196
75%	25	140	784	1,145	1,195	900	653	323	53	72	71	69	330
90%	65	298	1,250	1,765	2,011	1,418	924	611	144	73	72	70	446
100%	418	854	2,757	4,180	5,326	2,975	2,054	1,187	816	76	74	151	699
Mean	29	121	535	773	924	692	462	250	63	38	37	38	237
45													
0%	1	3	9	24	39	48	18	9	7	6	6	4	22
10%	3	11	34	109	163	213	92	45	15	8	7	5	77
25%	4	22	110	210	343	313	192	63	24	14	14	11	134
50%	11	48	341	509	640	572	341	144	35	20	18	17	196
75%	25	140	784	1,145	1,195	899	652	325	67	72	71	69	330
90%	64	298	1,249	1,765	2,011	1,418	924	611	145	73	72	70	447
100%	419	853	2,756	4,180	5,326	2,975	2,054	1,187	816	84	74	148	699
Mean	29	121	535	773	923	692	462	254	69	38	37	38	238
55													
0%	1	4	9	23	39	42	22	11	7	6	6	4	23
10%	3	11	33	109	163	216	92	55	19	9	8	5	76
25%	5	18	110	211	343	314	189	76	29	15	14	11	134
50%	12	48	341	509	639	571	341	144	45	26	19	20	198
75%	26	140	784	1,144	1,195	896	652	323	82	72	71	69	331
90%	60	298	1,246	1,765	2,011	1,418	924	611	143	73	72	69	448
100%	399	853	2,757	4,178	5,326	2,975	2,054	1,187	816	103	74	147	700
Mean	30	119	535	772	923	690	463	258	76	40	37	38	238
65													
0%	1	4	8	22	39	48	26	13	7	6	6	4	24
10%	3	12	32	109	163	216	102	65	22	10	8	5	78
25%	6	19	110	210	343	308	189	90	34	16	14	11	135
50%	13	47	340	509	638	561	341	154	50	28	19	21	198
75%	28	140	784	1,144	1,195	896	652	325	97	73	71	69	332
90%	66	295	1,247	1,765	2,011	1,418	924	611	166	77	72	69	450
100%	400	850	2,757	4,176	5,326	2,975	2,054	1,187	816	122	74	145	700
Mean	31	119	534	772	923	689	463	264	85	42	38	38	239
75													
0%	1	5	9	22	39	43	29	15	7	6	6	4	25
10%	3	12	32	108	163	216	111	75	25	10	8	5	81
25%	7	21	110	210	343	308	191	104	40	16	14	11	138
50%	15	48	339	509	638	560	341	174	58	33	20	25	200
75%	32	140	784	1,142	1,195	896	655	325	112	73	71	69	334
90%	74	296	1,247	1,764	2,011	1,418	924	611	191	89	73	69	451
100%	413	852	2,758	4,175	5,326	2,975	2,055	1,187	816	141	78	146	702
Mean	33	119	534	772	923	688	465	273	94	46	38	38	241

Table A1-87. Water Year Average of Monthly Flows (cfs)—Thomes Creek above Confluence with Sacramento River (SWRCB Thomes Creek)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	17	25	266	295	407	304	124	50	14	7	7	6
D	14	110	337	290	606	487	267	106	9	14	14	20
BN	25	68	280	595	683	509	466	154	26	18	19	20
AN	34	129	556	1,116	1,246	896	500	336	55	61	60	59
W	51	218	978	1,354	1,450	1,075	777	477	120	72	72	70
All	30	124	537	773	925	692	464	247	52	37	37	38
35												
C	16	19	264	293	406	300	124	56	17	8	7	6
D	12	107	336	289	604	485	260	111	23	15	14	20
BN	23	66	280	594	681	515	465	156	38	19	19	20
AN	32	129	555	1,115	1,246	896	500	336	72	61	60	59
W	50	215	978	1,354	1,450	1,077	777	478	129	72	72	69
All	29	121	535	773	924	692	462	250	63	38	37	38
45												
C	17	21	264	293	405	304	125	62	22	8	7	6
D	14	107	335	289	603	485	260	118	29	16	14	20
BN	23	67	280	594	681	512	465	159	45	20	19	20
AN	33	127	554	1,115	1,246	896	499	338	79	61	60	59
W	49	216	977	1,354	1,450	1,076	777	479	135	73	72	69
All	29	121	535	773	923	692	462	254	69	38	37	38
55												
C	16	20	264	293	405	300	127	67	27	9	7	6
D	15	103	335	288	603	483	261	124	36	17	14	20
BN	25	66	279	594	681	511	464	164	51	21	19	20
AN	32	126	554	1,115	1,246	896	498	340	87	61	60	59
W	49	215	977	1,353	1,450	1,076	777	481	143	75	72	69
All	30	119	535	772	923	690	463	258	76	40	37	38
65												
C	17	22	263	293	405	301	130	75	32	10	8	6
D	17	102	334	288	602	482	263	132	42	19	15	20
BN	24	64	279	594	680	506	461	174	60	22	19	20
AN	34	126	553	1,114	1,246	895	498	344	95	64	60	59
W	51	213	976	1,353	1,450	1,076	777	484	155	79	72	69
All	31	119	534	772	923	689	463	264	85	42	38	38
75												
C	19	22	263	293	405	302	136	85	36	10	8	6
D	18	104	335	288	603	481	268	146	48	21	15	20
BN	26	66	279	594	681	506	464	189	70	25	20	20
AN	35	124	552	1,114	1,245	893	496	352	105	67	60	59
W	54	214	975	1,353	1,450	1,074	777	487	169	86	72	69
All	33	119	534	772	923	688	465	273	94	46	38	38

A1.12.3.38 Trinity River below Lewiston Reservoir

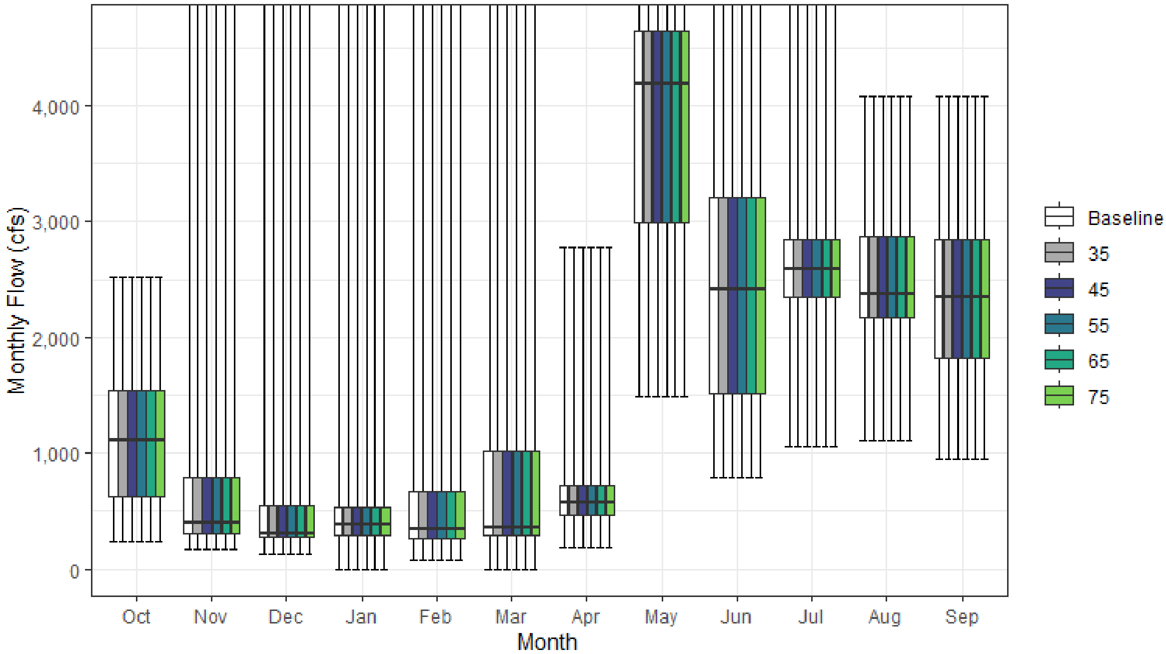

Figure A1-41. Trinity River Streamflow below Lewiston Reservoir Monthly Boxplot

Table A1-88. Cumulative Distribution of Monthly Flow (cfs)—Trinity River below Lewiston Reservoir

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	239	164	124	0	74	0	177	1,481	786	1,055	1,117	954	657
10%	370	278	242	231	181	215	396	2,833	1,026	1,111	1,863	1,267	821
25%	625	300	284	288	260	294	464	2,990	1,519	2,353	2,174	1,822	965
50%	1,114	401	307	381	350	364	568	4,193	2,409	2,585	2,377	2,350	1,083
75%	1,536	795	546	539	666	1,018	724	4,645	3,206	2,852	2,867	2,842	1,355
90%	2,185	1,944	1,763	2,262	2,870	2,071	1,458	4,814	4,477	3,946	3,329	2,924	1,695
100%	2,525	6,121	5,264	7,952	9,484	6,173	2,784	8,635	7,810	6,616	4,078	4,075	2,828
Mean	1,187	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263	1,210
35													
0%	239	164	124	0	74	0	177	1,481	786	1,055	1,117	954	657
10%	370	278	242	231	181	215	396	2,833	1,026	1,111	1,863	1,267	821
25%	625	300	284	288	260	294	464	2,990	1,519	2,353	2,174	1,822	965
50%	1,114	401	307	381	350	364	568	4,193	2,409	2,585	2,377	2,350	1,083
75%	1,536	795	546	539	666	1,018	724	4,645	3,206	2,852	2,867	2,842	1,355
90%	2,185	1,944	1,763	2,262	2,870	2,071	1,458	4,814	4,477	3,946	3,329	2,924	1,695
100%	2,525	6,121	5,264	7,952	9,484	6,173	2,784	8,635	7,810	6,616	4,078	4,075	2,828
Mean	1,187	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263	1,210
45													
0%	239	164	124	0	74	0	177	1,481	786	1,055	1,117	954	657
10%	370	278	242	231	181	215	396	2,833	1,026	1,111	1,863	1,267	821
25%	625	300	284	288	260	294	464	2,990	1,519	2,353	2,174	1,822	965
50%	1,114	401	307	381	350	364	568	4,193	2,409	2,585	2,377	2,350	1,083
75%	1,536	795	546	539	666	1,018	724	4,645	3,206	2,852	2,867	2,842	1,355
90%	2,185	1,944	1,763	2,262	2,870	2,071	1,458	4,814	4,477	3,946	3,329	2,924	1,695
100%	2,525	6,121	5,264	7,952	9,484	6,173	2,784	8,635	7,810	6,616	4,078	4,075	2,828
Mean	1,187	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263	1,210
55													
0%	239	164	124	0	74	0	177	1,481	786	1,055	1,117	954	657
10%	370	278	242	231	181	215	396	2,833	1,026	1,111	1,863	1,267	821
25%	625	300	284	288	260	294	464	2,990	1,519	2,353	2,174	1,822	965
50%	1,114	401	307	381	350	364	568	4,193	2,409	2,585	2,377	2,350	1,083
75%	1,536	795	546	539	666	1,018	724	4,645	3,206	2,852	2,867	2,842	1,355
90%	2,185	1,944	1,763	2,262	2,870	2,071	1,458	4,814	4,477	3,946	3,329	2,924	1,695
100%	2,525	6,121	5,264	7,952	9,484	6,173	2,784	8,635	7,810	6,616	4,078	4,075	2,828
Mean	1,188	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263	1,210
65													
0%	239	164	124	0	74	0	177	1,481	786	1,055	1,117	954	657
10%	370	278	242	231	181	215	396	2,833	1,026	1,111	1,863	1,267	821
25%	625	300	284	288	260	294	464	2,990	1,519	2,353	2,174	1,822	965
50%	1,114	401	307	381	350	364	568	4,193	2,409	2,585	2,377	2,350	1,083
75%	1,536	795	546	539	666	1,018	724	4,645	3,206	2,852	2,867	2,842	1,355
90%	2,185	1,944	1,763	2,262	2,870	2,071	1,458	4,814	4,477	3,946	3,329	2,924	1,695
100%	2,525	6,121	5,264	7,952	9,484	6,173	2,784	8,635	7,810	6,616	4,078	4,075	2,828
Mean	1,188	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263	1,210
75													
0%	239	164	124	0	74	0	177	1,481	786	1,055	1,117	954	657
10%	370	278	242	231	181	215	396	2,833	1,026	1,111	1,863	1,267	821
25%	625	300	284	288	260	294	464	2,990	1,519	2,353	2,174	1,822	965
50%	1,114	401	307	381	350	364	568	4,193	2,409	2,585	2,377	2,350	1,083
75%	1,536	795	546	539	666	1,018	724	4,645	3,206	2,852	2,867	2,842	1,355
90%	2,185	1,944	1,763	2,262	2,870	2,071	1,458	4,814	4,477	3,946	3,329	2,924	1,695
100%	2,525	6,121	5,264	7,952	9,484	6,173	2,784	8,635	7,810	6,616	4,078	4,075	2,828
Mean	1,188	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263	1,210

Table A1-89. Water Year Average of Monthly Flows (cfs)—Trinity River below Lewiston Reservoir

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
C	947	642	408	432	562	421	761	2,346	1,492	2,970	2,381	1,971
D	1,010	970	351	363	878	364	554	3,236	1,957	2,609	2,746	2,261
BN	1,256	558	465	573	804	801	665	3,878	2,220	2,308	2,545	2,261
AN	1,191	667	432	609	696	655	787	4,583	2,736	2,424	2,460	2,270
W	1,407	909	1,523	1,810	1,169	1,635	991	5,058	3,654	2,729	2,290	2,419
All	1,187	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263
35												
C	947	642	408	432	562	421	761	2,346	1,492	2,970	2,381	1,971
D	1,010	970	351	363	878	364	554	3,236	1,957	2,609	2,746	2,261
BN	1,256	558	465	573	804	801	665	3,878	2,220	2,308	2,545	2,261
AN	1,191	667	432	609	696	655	787	4,583	2,736	2,424	2,460	2,270
W	1,407	909	1,523	1,810	1,169	1,635	991	5,058	3,654	2,729	2,290	2,419
All	1,187	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263
45												
C	947	642	408	432	562	421	761	2,346	1,492	2,970	2,381	1,971
D	1,010	970	351	363	878	364	554	3,236	1,957	2,609	2,746	2,261
BN	1,256	558	465	573	804	801	665	3,878	2,220	2,308	2,545	2,261
AN	1,191	667	432	609	696	655	787	4,583	2,736	2,424	2,460	2,270
W	1,407	909	1,523	1,810	1,169	1,635	991	5,058	3,654	2,729	2,290	2,419
All	1,187	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263
55												
C	947	642	408	432	562	421	761	2,346	1,492	2,970	2,381	1,971
D	1,010	970	351	363	878	364	554	3,236	1,957	2,609	2,746	2,261
BN	1,256	558	465	573	804	801	665	3,878	2,220	2,308	2,545	2,261
AN	1,191	667	432	609	696	655	787	4,583	2,736	2,424	2,460	2,270
W	1,407	909	1,523	1,810	1,169	1,635	991	5,058	3,654	2,729	2,290	2,419
All	1,188	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263
65												
C	947	642	408	432	562	421	761	2,346	1,492	2,970	2,381	1,971
D	1,010	970	351	363	878	364	554	3,236	1,957	2,609	2,746	2,261
BN	1,256	558	465	573	804	801	665	3,878	2,220	2,308	2,545	2,261
AN	1,191	667	432	609	696	655	787	4,583	2,736	2,424	2,460	2,270
W	1,407	909	1,523	1,810	1,169	1,635	991	5,058	3,654	2,729	2,290	2,419
All	1,188	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263
75												
C	947	642	408	432	562	421	761	2,346	1,492	2,970	2,381	1,971
D	1,011	970	351	363	878	364	554	3,236	1,957	2,609	2,746	2,261
BN	1,256	558	465	573	804	801	665	3,878	2,220	2,308	2,545	2,261
AN	1,191	667	432	609	696	655	787	4,583	2,736	2,424	2,460	2,270
W	1,407	909	1,523	1,810	1,169	1,635	991	5,058	3,654	2,729	2,290	2,419
All	1,188	784	744	880	878	873	769	3,932	2,542	2,624	2,476	2,263

A1.12.3.39 Yuba River, North Fork above New Bullards Bar Reservoir (SWRCB New Bullards Bar Inflow)

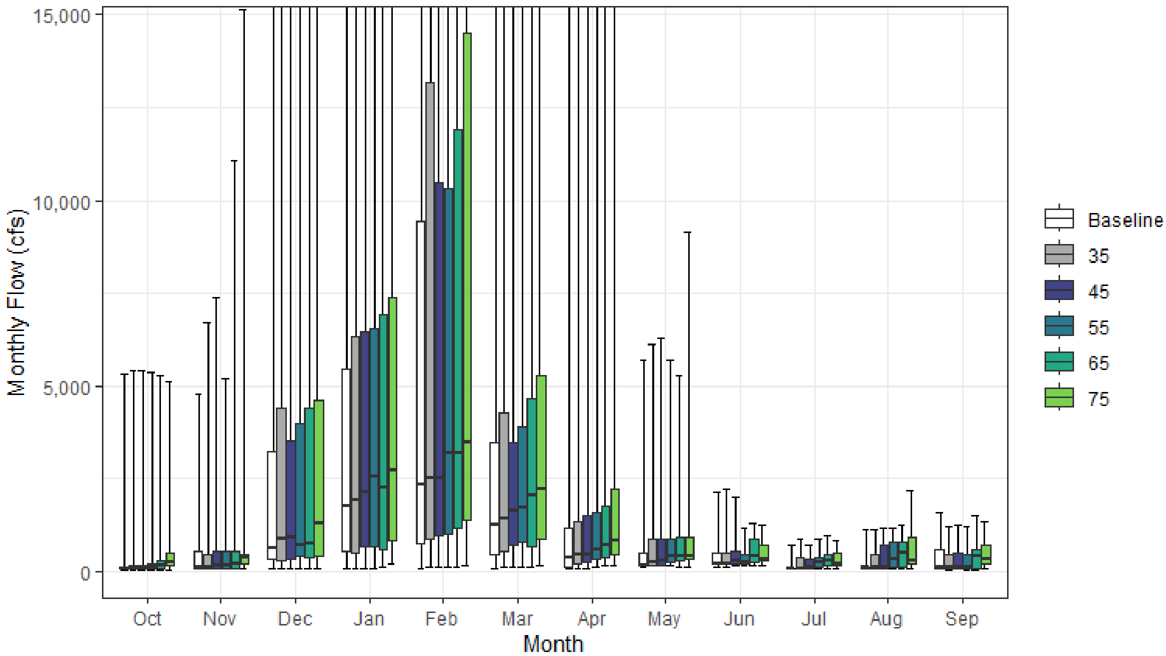

Figure A1-42. Yuba River, North Fork Streamflow above New Bullards Bar Reservoir Monthly Boxplot

Table A1-90. Cumulative Distribution of Monthly Flow (cfs)—Yuba River, North Fork above New Bullards Bar Reservoir (SWRCB New Bullards Bar Inflow)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	48	73	76	82	72	87	66	127	126	59	71	64	129
10%	51	78	101	195	252	168	85	147	173	67	77	78	230
25%	55	81	327	513	760	429	105	155	179	68	79	89	336
50%	64	109	630	1,744	2,333	1,233	344	163	187	69	95	95	668
75%	103	517	3,218	5,454	9,443	3,454	1,163	472	481	69	111	558	2,889
90%	217	758	14,031	27,343	47,053	26,977	4,281	863	851	386	904	610	7,924
100%	5,332	4,773	58,709	111,355	125,897	111,615	48,205	5,693	2,126	703	1,141	1,567	12,475
Mean	172	383	4,304	9,172	12,741	7,687	2,454	420	340	127	251	295	2,281
35													
0%	49	64	69	90	101	108	65	135	125	59	62	37	146
10%	52	75	96	246	390	179	109	146	175	67	77	77	289
25%	57	80	292	508	870	518	189	156	180	68	80	88	390
50%	92	125	855	1,921	2,510	1,429	429	246	190	85	105	95	782
75%	159	467	4,391	6,344	13,165	4,269	1,343	867	483	364	446	444	2,912
90%	334	783	12,537	26,431	44,338	23,571	4,122	1,037	857	662	1,069	786	7,829
100%	5,402	6,687	58,558	110,651	120,766	111,627	46,510	6,116	2,228	888	1,136	1,211	12,582
Mean	204	403	4,533	9,454	12,668	7,737	2,441	556	350	236	344	281	2,334
45													
0%	49	63	71	77	105	109	83	135	168	61	67	61	180
10%	52	76	102	248	470	203	135	150	178	67	79	75	281
25%	57	83	332	652	972	704	232	170	187	69	91	83	439
50%	98	162	932	2,133	2,497	1,634	464	276	264	120	125	95	826
75%	159	525	3,522	6,436	10,497	3,488	1,490	874	521	337	691	479	3,029
90%	264	811	13,030	26,597	42,616	23,422	3,333	1,093	902	426	1,060	753	7,802
100%	5,392	7,387	58,440	110,296	116,964	110,649	46,765	6,267	2,011	710	1,157	1,226	12,490
Mean	193	464	4,553	9,755	12,564	7,536	2,465	556	432	216	373	279	2,346
55													
0%	50	60	69	83	108	112	118	137	157	64	63	41	138
10%	53	72	109	244	480	322	204	180	177	68	78	74	346
25%	59	80	404	675	989	775	337	231	188	110	95	84	543
50%	109	168	705	2,553	3,191	1,691	583	426	247	221	316	100	931
75%	194	528	3,962	6,546	10,316	3,889	1,592	861	463	380	785	434	3,286
90%	467	745	11,432	28,292	43,616	21,792	4,543	1,180	897	674	1,107	747	7,785
100%	5,371	5,182	58,627	110,608	117,310	110,653	46,905	5,683	1,176	886	1,180	1,225	12,613
Mean	236	466	4,561	9,820	12,865	7,658	2,650	610	397	281	473	267	2,399
65													
0%	48	60	71	98	122	123	149	133	169	66	58	41	145
10%	55	70	101	311	556	261	239	221	185	96	84	70	345
25%	76	79	360	589	1,151	649	379	266	228	143	119	86	596
50%	147	215	734	2,274	3,179	2,064	709	427	391	274	493	426	1,090
75%	277	540	4,396	6,924	11,904	4,660	1,765	930	868	460	778	595	3,185
90%	520	885	11,715	29,602	42,411	23,818	6,752	1,210	1,001	765	1,114	865	8,109
100%	5,266	11,070	58,574	112,325	125,891	109,625	46,641	5,264	1,278	955	1,243	1,493	12,758
Mean	269	546	4,708	10,123	13,146	7,905	3,025	661	517	354	515	410	2,513
75													
0%	48	61	81	204	148	136	167	121	159	67	61	57	203
10%	82	72	140	490	649	552	261	226	212	107	99	123	373
25%	136	178	417	820	1,364	875	461	306	261	153	192	211	635
50%	218	352	1,297	2,713	3,478	2,206	812	419	342	203	297	334	1,298
75%	499	463	4,613	7,368	14,512	5,270	2,232	925	698	474	904	699	3,580
90%	592	780	14,532	32,223	43,739	24,212	10,629	1,382	807	655	1,005	770	8,187
100%	5,100	15,151	58,479	110,819	131,180	109,959	46,579	9,135	1,228	837	2,156	1,315	12,875
Mean	361	631	5,268	10,738	13,665	8,227	3,593	827	454	301	481	423	2,680

Table A1-91. Water Year Average of Monthly Flows (cfs)—Yuba River, North Fork above New Bullards Bar Reservoir (SWRCB New Bullards Bar Inflow)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	80	228	1,003	1,095	1,379	699	128	190	209	82	122	331
D	78	345	1,180	1,015	1,797	946	338	185	295	115	210	420
BN	193	182	1,576	1,718	4,999	1,160	463	249	288	108	327	374
AN	105	311	2,949	7,294	14,978	7,264	806	468	351	161	343	210
W	308	647	10,654	24,946	30,776	20,632	7,202	802	472	157	265	170
All	172	383	4,304	9,172	12,741	7,687	2,454	420	340	127	251	295
35												
C	119	169	864	1,236	1,172	769	161	199	219	176	320	297
D	101	283	1,374	1,049	2,194	1,688	340	249	266	229	361	240
BN	227	234	2,230	1,915	5,974	1,279	665	216	320	110	176	328
AN	191	305	2,310	8,754	15,175	7,644	962	774	402	262	100	325
W	319	765	11,217	25,039	29,671	19,967	6,950	1,090	481	340	551	255
All	204	403	4,533	9,454	12,668	7,737	2,441	556	350	236	344	281
45												
C	125	230	934	1,467	1,179	683	194	217	239	172	343	244
D	124	333	1,380	1,111	2,358	1,660	357	338	380	289	376	323
BN	176	334	2,036	2,084	6,189	1,402	808	245	362	167	174	301
AN	115	302	3,133	9,432	15,064	6,916	1,034	552	568	176	349	146
W	324	836	11,007	25,472	29,115	19,606	6,881	1,091	559	231	518	307
All	193	464	4,553	9,755	12,564	7,536	2,465	556	432	216	373	279
55												
C	179	198	1,068	1,465	1,657	784	232	255	242	159	282	234
D	140	222	1,537	1,179	2,851	2,014	518	428	364	312	621	372
BN	179	217	2,028	2,352	5,886	1,783	994	317	340	293	331	203
AN	155	424	2,866	10,168	15,893	7,135	1,188	660	469	222	430	321
W	407	961	10,966	25,163	29,322	19,363	7,175	1,093	509	342	569	221
All	236	466	4,561	9,820	12,865	7,658	2,650	610	397	281	473	267
65												
C	162	270	860	1,412	1,721	953	268	249	231	147	225	180
D	205	256	1,773	1,171	3,031	2,530	637	432	394	270	576	506
BN	272	201	2,098	2,466	6,607	1,912	1,474	439	433	358	582	451
AN	208	418	2,760	10,467	16,058	7,766	1,311	859	710	485	598	580
W	398	1,175	11,390	26,006	29,574	19,360	7,968	1,104	731	469	548	363
All	269	546	4,708	10,123	13,146	7,905	3,025	661	517	354	515	410
75												
C	186	302	1,325	1,715	1,713	1,105	283	223	215	152	319	158
D	268	388	1,982	1,368	3,687	3,101	762	389	309	187	310	347
BN	426	246	2,302	2,719	7,288	2,099	2,169	407	399	232	369	348
AN	386	466	3,274	12,863	17,707	9,008	1,711	925	615	419	760	642
W	474	1,295	12,500	26,557	29,690	19,274	9,161	1,692	657	458	643	574
All	361	631	5,268	10,738	13,665	8,227	3,593	827	454	301	481	423

A1.12.3.40 Yuba River below Englebright Reservoir (SWRCB Englebright)

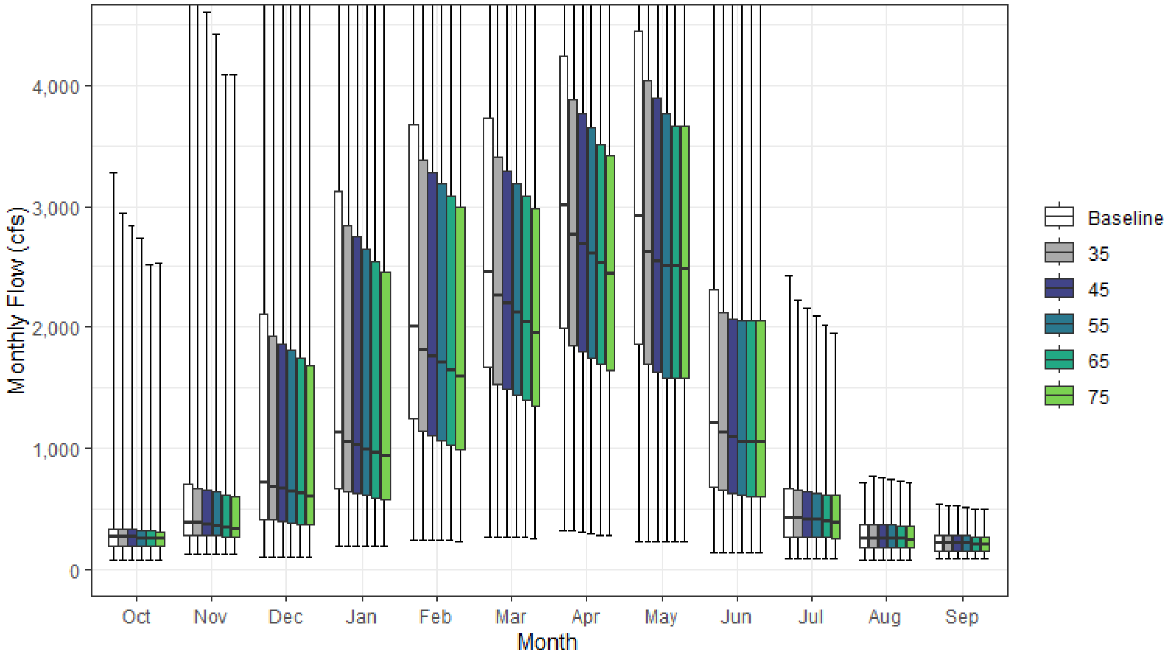

Figure A1-43. Yuba River Streamflow below Englebright Reservoir Monthly Boxplot

Table A1-92. Cumulative Distribution of Monthly Flow (cfs)—Yuba River below Englebright Reservoir (SWRCB Engelbright)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	76	128	102	195	240	271	314	226	143	83	67	85	141
10%	163	214	282	358	667	1,075	1,361	727	273	158	131	121	424
25%	195	283	402	663	1,249	1,668	1,989	1,856	676	268	182	145	669
50%	260	383	718	1,131	2,004	2,448	3,007	2,920	1,203	422	252	210	1,046
75%	327	705	2,100	3,123	3,682	3,729	4,247	4,447	2,318	666	371	275	1,664
90%	445	1,326	4,631	5,472	5,276	5,420	5,189	6,004	3,640	1,043	471	328	1,927
100%	3,272	5,167	9,326	11,386	10,903	7,962	7,315	7,518	6,189	2,424	721	531	2,648
Mean	310	702	1,670	2,150	2,619	2,829	3,195	3,214	1,690	546	280	219	1,169
35													
0%	76	128	102	195	240	271	314	226	143	83	67	85	140
10%	163	214	282	358	631	988	1,236	691	273	158	131	121	402
25%	195	283	402	645	1,143	1,533	1,847	1,695	648	268	182	145	623
50%	260	383	681	1,052	1,812	2,256	2,760	2,625	1,122	421	252	210	971
75%	327	669	1,929	2,841	3,376	3,402	3,888	4,040	2,119	646	371	275	1,584
90%	443	1,218	4,302	5,278	5,013	5,201	4,877	5,713	3,302	990	471	328	1,810
100%	2,943	4,776	9,326	11,386	10,903	7,539	7,315	7,345	6,023	2,222	768	529	2,597
Mean	305	665	1,578	2,044	2,464	2,629	2,951	2,957	1,561	527	282	219	1,094
45													
0%	76	128	102	195	240	271	307	226	143	83	67	85	139
10%	163	214	281	350	606	952	1,193	664	273	159	131	121	392
25%	195	283	393	627	1,104	1,486	1,795	1,633	629	268	182	145	605
50%	260	371	662	1,021	1,758	2,193	2,684	2,549	1,089	413	252	210	944
75%	327	650	1,868	2,744	3,279	3,289	3,766	3,900	2,067	633	369	275	1,554
90%	435	1,179	4,191	5,148	4,872	5,064	4,732	5,500	3,194	967	465	328	1,798
100%	2,840	4,602	9,326	11,386	10,711	7,620	7,315	7,127	5,713	2,155	754	520	2,532
Mean	302	643	1,556	2,006	2,401	2,568	2,864	2,859	1,510	517	281	219	1,066
55													
0%	76	128	102	195	240	270	293	226	143	83	67	85	137
10%	163	214	280	341	581	917	1,157	653	272	158	131	121	384
25%	195	278	384	608	1,065	1,439	1,743	1,582	610	268	182	145	588
50%	259	359	642	991	1,703	2,119	2,609	2,503	1,056	404	252	209	917
75%	322	633	1,807	2,647	3,183	3,184	3,644	3,761	2,061	621	365	274	1,515
90%	426	1,139	4,080	5,018	4,731	4,925	4,588	5,286	3,122	943	457	327	1,770
100%	2,737	4,428	9,326	11,386	10,708	7,546	7,315	6,915	5,448	2,089	740	510	2,525
Mean	298	622	1,533	1,964	2,346	2,502	2,774	2,773	1,469	507	278	218	1,040
65													
0%	76	128	102	195	240	263	284	226	143	83	67	85	134
10%	163	213	274	332	560	881	1,134	653	265	158	131	121	377
25%	195	271	375	590	1,026	1,393	1,692	1,582	605	263	179	145	572
50%	253	347	621	960	1,649	2,038	2,533	2,503	1,052	395	250	205	893
75%	314	619	1,746	2,550	3,087	3,083	3,510	3,660	2,061	616	361	270	1,488
90%	417	1,099	3,969	4,887	4,590	4,765	4,444	5,094	3,122	928	450	322	1,756
100%	2,516	4,083	9,961	11,386	10,703	8,057	7,315	6,692	5,277	2,022	726	501	2,445
Mean	292	609	1,501	1,924	2,271	2,439	2,688	2,711	1,454	498	275	216	1,016
75													
0%	76	128	102	195	234	255	284	226	143	83	67	85	133
10%	163	207	267	322	542	847	1,131	653	258	158	131	121	370
25%	191	264	367	571	987	1,348	1,640	1,582	598	255	177	145	561
50%	247	336	602	929	1,594	1,957	2,445	2,485	1,052	387	246	205	875
75%	307	605	1,685	2,453	2,991	2,982	3,417	3,660	2,061	616	356	265	1,455
90%	408	1,060	3,858	4,757	4,449	4,606	4,300	5,037	3,123	928	442	316	1,736
100%	2,531	4,083	9,326	11,386	10,901	7,889	7,909	6,708	5,277	1,956	721	492	2,443
Mean	288	591	1,454	1,874	2,208	2,371	2,627	2,707	1,453	493	272	214	996

Table A1-93. Water Year Average of Monthly Flows (cfs)—Yuba River below Englebright Reservoir (SWRCB Engelbright)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	250	294	534	519	901	1,268	1,312	1,069	497	177	132	116
D	235	529	910	770	1,666	2,237	2,486	2,071	806	284	189	166
BN	263	413	873	1,303	2,188	2,286	3,649	3,266	1,489	440	264	206
AN	300	892	1,313	3,083	3,287	4,049	3,474	3,772	1,577	531	314	250
W	430	1,144	3,486	4,174	4,232	3,917	4,342	4,952	3,162	1,010	424	310
All	310	702	1,670	2,150	2,619	2,829	3,195	3,214	1,690	546	280	219
35												
C	248	290	508	498	838	1,170	1,204	986	467	177	132	116
D	235	508	859	730	1,545	2,077	2,263	1,883	759	284	189	166
BN	263	404	824	1,206	2,024	2,094	3,364	2,966	1,381	436	264	206
AN	300	842	1,260	2,836	3,090	3,740	3,167	3,433	1,453	519	314	250
W	415	1,065	3,284	4,028	4,024	3,673	4,061	4,609	2,905	957	429	310
All	305	665	1,578	2,044	2,464	2,629	2,951	2,957	1,561	527	282	219
45												
C	246	288	496	485	811	1,133	1,161	948	453	175	132	116
D	235	496	836	708	1,496	2,012	2,187	1,816	737	282	189	166
BN	262	398	803	1,170	1,962	2,030	3,261	2,867	1,339	429	264	206
AN	296	818	1,237	2,769	3,016	3,701	3,068	3,320	1,409	510	314	250
W	409	1,016	3,258	3,976	3,934	3,594	3,954	4,461	2,803	933	425	309
All	302	643	1,556	2,006	2,401	2,568	2,864	2,859	1,510	517	281	219
55												
C	244	284	483	472	783	1,096	1,119	915	441	173	132	116
D	233	483	814	687	1,448	1,947	2,113	1,759	717	278	189	166
BN	260	390	781	1,134	1,900	1,967	3,157	2,790	1,311	421	264	206
AN	293	793	1,260	2,714	2,941	3,635	2,969	3,230	1,373	499	312	249
W	402	975	3,209	3,905	3,872	3,510	3,840	4,322	2,720	912	419	307
All	298	622	1,533	1,964	2,346	2,502	2,774	2,773	1,469	507	278	218
65												
C	240	280	469	458	756	1,058	1,090	899	433	171	132	116
D	231	469	791	665	1,399	1,883	2,043	1,738	710	273	188	165
BN	257	382	758	1,098	1,838	1,903	3,057	2,748	1,303	413	262	206
AN	288	754	1,219	2,675	2,866	3,541	2,870	3,183	1,366	490	308	246
W	389	967	3,157	3,834	3,745	3,449	3,728	4,187	2,690	897	412	302
All	292	609	1,501	1,924	2,271	2,439	2,688	2,711	1,454	498	275	216
75												
C	236	274	456	445	731	1,024	1,071	898	429	168	131	116
D	228	456	767	643	1,351	1,818	2,005	1,738	708	268	186	164
BN	254	373	735	1,062	1,776	1,839	2,971	2,741	1,302	407	259	204
AN	282	743	1,178	2,587	2,778	3,475	2,795	3,183	1,366	484	303	243
W	384	931	3,060	3,752	3,661	3,358	3,645	4,180	2,689	891	405	297
All	288	591	1,454	1,874	2,208	2,371	2,627	2,707	1,453	493	272	214

A1.12.3.41 Yuba River above Confluence with Feather River (SWRCB Yuba River)

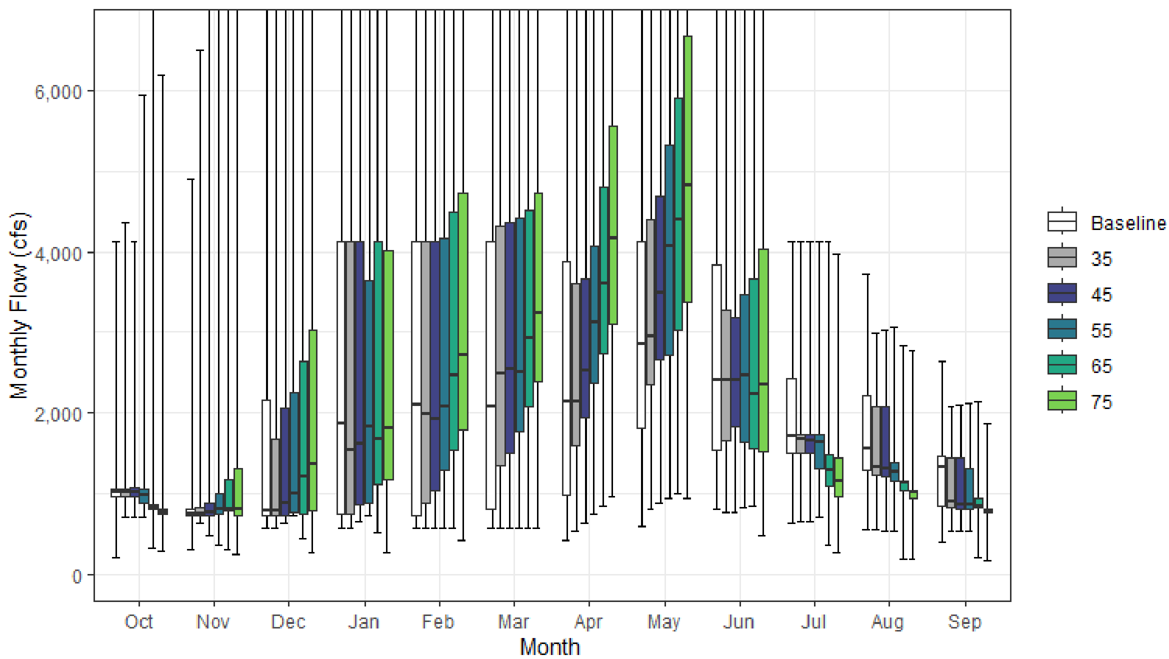

Figure A1-44. Yuba River Streamflow above Confluence with Feather River Monthly Boxplot

Table A1-94. Cumulative Distribution of Monthly Flow (cfs)—Yuba River above Confluence with Feather River (SWRCB Yuba River)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	202	305	580	581	581	581	412	593	803	640	553	404	471
10%	913	731	731	731	731	731	870	1,669	1,336	1,465	1,182	780	746
25%	953	731	731	749	731	796	983	1,801	1,545	1,497	1,282	835	900
50%	1,019	741	779	1,862	2,108	2,089	2,146	2,860	2,411	1,721	1,561	1,333	1,375
75%	1,064	796	2,151	4,121	4,121	4,121	3,877	4,120	3,835	2,435	2,212	1,458	2,328
90%	1,101	963	4,121	5,429	5,591	6,455	4,183	6,324	5,378	3,269	2,334	1,617	2,991
100%	4,120	4,901	14,920	20,088	17,286	13,604	10,523	9,753	10,043	4,120	3,723	2,635	3,896
Mean	1,034	945	2,063	2,969	2,899	3,005	2,581	3,414	3,019	2,100	1,771	1,216	1,630
35													
0%	712	630	581	581	581	581	526	813	773	649	553	531	504
10%	912	731	731	731	731	790	1,215	1,770	1,361	1,462	1,173	780	815
25%	955	731	731	742	877	1,349	1,588	2,341	1,660	1,506	1,233	822	981
50%	1,020	746	791	1,534	1,988	2,479	2,129	2,947	2,411	1,667	1,331	896	1,401
75%	1,064	822	1,676	4,121	4,121	4,322	3,602	4,394	3,284	1,725	2,077	1,442	2,263
90%	1,101	1,142	4,992	6,592	7,379	7,142	4,768	6,830	5,431	1,886	2,308	1,551	3,006
100%	4,353	6,498	16,299	20,102	18,790	13,604	10,530	10,039	9,694	4,120	2,983	2,076	3,826
Mean	1,042	1,030	2,128	2,966	3,034	3,322	2,733	3,725	2,988	1,734	1,576	1,111	1,652
45													
0%	706	475	640	659	581	580	627	891	767	647	536	530	515
10%	903	731	731	731	731	1,022	1,523	1,841	1,346	1,382	1,156	750	835
25%	953	731	731	854	1,046	1,498	1,945	2,668	1,821	1,491	1,216	813	1,010
50%	1,025	759	884	1,621	1,925	2,549	2,525	3,499	2,411	1,661	1,300	854	1,381
75%	1,067	879	2,051	4,121	4,122	4,350	3,659	4,685	3,181	1,725	2,077	1,438	2,303
90%	1,107	1,375	4,419	6,557	7,299	6,519	4,866	7,118	5,116	1,889	2,326	1,569	2,976
100%	4,121	9,290	15,352	20,067	18,884	13,685	10,542	10,040	9,248	4,120	3,017	2,098	3,814
Mean	1,036	1,118	2,082	2,978	3,088	3,341	2,987	3,931	2,904	1,712	1,534	1,074	1,676
55													
0%	706	352	730	730	581	580	750	937	829	708	528	530	538
10%	836	731	731	731	768	1,224	1,820	1,706	1,131	1,132	1,079	748	857
25%	885	754	759	890	1,286	1,769	2,369	2,725	1,634	1,312	1,157	813	1,073
50%	974	795	998	1,828	2,083	2,506	3,116	4,064	2,457	1,634	1,274	872	1,464
75%	1,060	997	2,250	3,646	4,167	4,422	4,069	5,325	3,475	1,727	1,382	1,313	2,322
90%	1,112	1,669	4,124	6,005	6,262	6,921	5,092	7,380	4,909	1,915	2,154	1,552	2,942
100%	5,934	12,139	14,507	19,669	17,314	13,357	10,014	10,152	8,768	4,120	3,060	2,121	3,763
Mean	1,020	1,264	2,121	2,898	3,105	3,472	3,355	4,273	2,886	1,632	1,406	1,025	1,716
65													
0%	319	297	441	517	580	581	849	994	852	370	195	214	549
10%	732	733	731	731	870	1,445	2,085	1,715	1,028	989	938	741	888
25%	804	776	755	1,111	1,540	2,077	2,734	3,029	1,556	1,088	1,040	823	1,116
50%	831	813	1,210	1,673	2,462	2,928	3,607	4,398	2,227	1,281	1,127	851	1,558
75%	856	1,175	2,635	4,121	4,496	4,520	4,809	5,912	3,656	1,490	1,151	938	2,361
90%	961	2,033	4,948	6,656	6,835	6,481	5,499	7,462	5,246	1,841	2,205	1,560	2,901
100%	8,687	11,113	13,575	19,356	18,074	12,410	10,333	10,653	9,205	4,121	2,827	2,144	3,884
Mean	918	1,340	2,309	3,029	3,339	3,622	3,805	4,560	2,860	1,406	1,279	988	1,775
75													
0%	285	254	260	260	426	580	956	933	484	262	182	167	545
10%	485	558	731	763	1,015	1,663	2,381	1,846	957	689	586	342	884
25%	747	731	793	1,173	1,797	2,397	3,112	3,381	1,522	968	935	758	1,187
50%	774	809	1,371	1,815	2,711	3,243	4,161	4,823	2,341	1,157	1,010	790	1,656
75%	799	1,309	3,031	4,008	4,719	4,718	5,548	6,674	4,023	1,438	1,037	798	2,521
90%	949	2,734	5,771	6,407	6,855	6,749	6,345	8,359	5,884	1,849	1,047	964	3,001
100%	6,188	9,911	15,854	19,851	18,018	12,400	10,552	11,144	9,348	3,971	2,765	1,860	3,872
Mean	823	1,441	2,555	3,109	3,519	3,869	4,339	5,107	3,005	1,265	952	780	1,853

Table A1-95. Water Year Average of Monthly Flows (cfs)—Yuba River above Confluence with Feather River (SWRCB Yuba River)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	1,003	769	772	869	761	763	788	1,470	1,303	1,354	1,108	797
D	1,011	821	947	1,234	1,253	1,537	1,451	2,136	1,833	1,605	1,399	1,007
BN	1,024	754	1,107	1,883	2,166	1,606	2,592	3,040	2,640	1,897	1,735	1,181
AN	947	1,087	2,000	3,349	3,480	4,540	2,985	3,783	3,017	2,124	1,876	1,369
W	1,110	1,189	4,199	5,890	5,476	5,499	4,208	5,484	5,060	2,984	2,382	1,551
All	1,034	945	2,063	2,969	2,899	3,005	2,581	3,414	3,019	2,100	1,771	1,216
35												
C	999	775	812	791	855	977	1,186	1,697	1,381	1,342	1,094	778
D	1,015	856	1,005	1,101	1,221	1,964	1,862	2,486	1,954	1,543	1,280	872
BN	1,025	755	1,123	1,805	2,164	2,248	2,754	3,465	2,639	1,683	1,460	1,092
AN	989	1,237	1,980	3,650	3,491	5,002	2,740	4,095	2,874	1,688	1,638	1,194
W	1,121	1,376	4,350	5,943	5,893	5,529	4,198	5,739	4,885	2,138	2,102	1,442
All	1,042	1,030	2,128	2,966	3,034	3,322	2,733	3,725	2,988	1,734	1,576	1,111
45												
C	1,007	766	859	836	945	1,185	1,467	1,763	1,342	1,223	1,042	768
D	997	897	1,046	1,112	1,392	1,930	2,255	2,782	1,897	1,511	1,226	831
BN	1,014	765	1,123	1,783	2,216	2,311	3,027	3,698	2,603	1,683	1,380	971
AN	968	1,279	1,939	3,776	3,509	4,829	2,953	4,319	2,813	1,690	1,592	1,183
W	1,123	1,618	4,156	5,909	5,858	5,543	4,340	5,930	4,717	2,153	2,097	1,435
All	1,036	1,118	2,082	2,978	3,088	3,341	2,987	3,931	2,904	1,712	1,534	1,074
55												
C	915	790	905	908	1,103	1,429	1,725	1,841	1,290	1,053	963	783
D	946	963	1,164	1,095	1,660	2,264	2,674	2,985	1,797	1,328	1,174	863
BN	970	809	1,139	1,747	2,242	2,380	3,553	4,231	2,690	1,607	1,289	875
AN	951	1,408	1,939	3,796	3,739	4,858	3,445	4,878	2,880	1,657	1,273	894
W	1,190	1,960	4,164	5,629	5,513	5,543	4,581	6,308	4,680	2,175	1,944	1,425
All	1,020	1,264	2,121	2,898	3,105	3,472	3,355	4,273	2,886	1,632	1,406	1,025
65												
C	802	756	956	971	1,262	1,678	2,018	2,074	1,318	899	783	638
D	817	1,086	1,325	1,178	1,961	2,684	3,112	3,246	1,721	1,117	1,052	842
BN	826	863	1,293	1,883	2,540	2,600	4,140	4,539	2,550	1,243	1,104	843
AN	808	1,793	2,005	3,889	3,801	5,126	4,036	5,338	2,843	1,415	1,176	937
W	1,158	1,940	4,520	5,846	5,773	5,341	4,979	6,558	4,736	1,991	1,863	1,397
All	918	1,340	2,309	3,029	3,339	3,622	3,805	4,560	2,860	1,406	1,279	988
75												
C	689	672	963	998	1,436	1,942	2,302	2,243	1,259	620	456	413
D	729	1,232	1,494	1,255	2,292	3,112	3,587	3,639	1,775	989	904	736
BN	784	885	1,425	1,952	2,941	2,982	4,780	5,134	2,729	1,123	983	786
AN	793	1,737	2,268	4,312	4,066	5,306	4,652	5,999	2,964	1,284	1,031	828
W	1,000	2,220	5,011	5,816	5,670	5,391	5,593	7,343	5,049	1,895	1,203	986
All	823	1,441	2,555	3,109	3,519	3,869	4,339	5,107	3,005	1,265	952	780

A1.12.3.42 Yuba River, Middle Fork above Confluence with North Fork Yuba (SWRCB M Yuba Inflow)

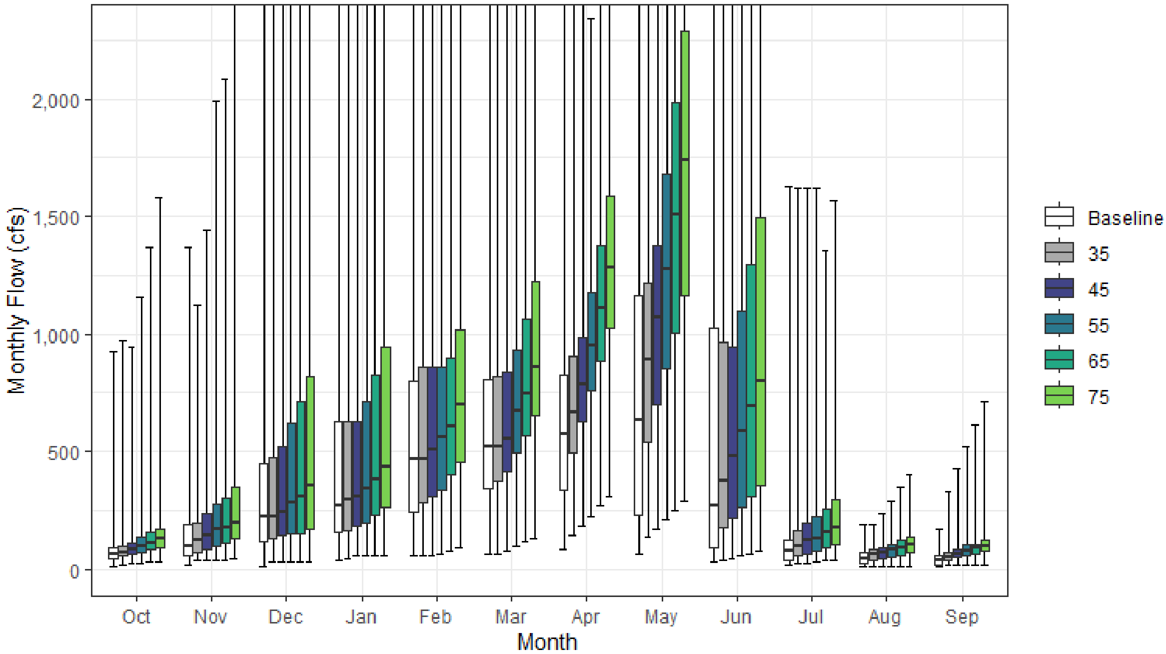

Figure A1-45. Yuba River, Middle Fork Streamflow above Confluence with North Fork Yuba Monthly Boxplot

Table A1-96. Cumulative Distribution of Monthly Flow (cfs)—Yuba River, Middle Fork above Confluence with North Fork Yuba (SWRCB M Yuba Inflow)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	7	27	28	28	31	31	35	47	21	13	16	13	23
10%	27	29	31	31	31	31	40	47	38	27	25	24	23
25%	28	31	31	31	31	31	40	47	39	28	27	27	24
50%	29	31	31	31	31	31	40	48	39	30	27	27	26
75%	31	31	32	36	42	36	47	56	39	31	29	28	63
90%	31	36	103	267	380	166	189	184	44	31	30	29	167
100%	41	217	2,982	3,087	3,164	2,173	2,132	718	648	35	96	33	400
Mean	29	35	156	198	155	154	100	86	49	29	29	27	63
35													
0%	18	27	28	28	31	42	54	61	21	13	16	13	27
10%	27	29	31	31	70	118	152	98	43	28	25	24	51
25%	28	31	35	66	122	165	223	208	65	29	27	27	69
50%	29	36	71	121	197	233	313	320	128	31	28	27	106
75%	31	66	214	289	337	348	421	467	230	52	29	28	177
90%	36	123	404	481	560	478	503	657	377	83	31	29	272
100%	360	608	2,982	3,087	3,164	2,449	2,132	787	731	233	49	33	451
Mean	34	73	248	304	310	355	344	349	176	48	28	27	138
45													
0%	18	27	28	28	31	42	60	63	21	13	16	13	29
10%	27	29	31	40	90	152	195	126	48	28	26	24	63
25%	28	31	42	85	157	212	286	268	84	31	27	27	87
50%	29	42	91	156	253	300	402	411	165	37	27	27	135
75%	32	85	275	372	433	448	541	600	296	67	29	28	226
90%	41	158	519	619	719	615	647	845	485	107	36	30	296
100%	463	1,179	2,982	3,087	3,164	2,449	2,132	1,011	940	299	63	42	516
Mean	37	94	270	342	371	416	432	448	224	58	29	27	165
55													
0%	18	27	28	28	37	43	73	63	23	14	16	16	31
10%	27	29	31	49	110	186	238	154	52	29	26	24	74
25%	28	35	51	104	192	259	350	327	102	33	27	27	105
50%	29	48	111	190	309	367	492	503	201	45	28	27	164
75%	36	104	336	455	529	547	662	734	362	82	33	29	272
90%	50	193	635	756	879	752	791	1,033	593	131	43	33	339
100%	566	1,179	2,982	3,087	3,164	2,449	2,132	1,236	1,149	366	77	51	523
Mean	41	115	293	384	426	482	522	547	273	69	31	28	193
65													
0%	18	27	28	29	42	51	87	67	28	16	16	18	34
10%	27	32	34	58	130	219	281	182	59	31	26	24	85
25%	28	40	60	122	227	306	414	387	121	37	27	27	124
50%	33	57	132	225	366	434	581	594	238	53	30	28	193
75%	41	122	397	537	626	647	782	867	428	97	39	33	326
90%	60	228	750	894	1,039	889	935	1,220	700	154	51	39	390
100%	786	1,301	2,347	3,087	3,164	2,449	2,132	1,461	1,358	432	91	60	603
Mean	47	128	325	424	501	545	613	647	322	81	34	30	222
75													
0%	18	27	28	33	49	59	100	77	32	18	16	17	37
10%	28	35	39	67	150	253	324	210	67	32	26	24	97
25%	29	45	69	141	262	353	477	446	139	43	28	27	142
50%	38	66	152	260	422	500	670	686	274	62	34	29	222
75%	48	141	459	620	722	746	902	1,000	493	112	45	38	359
90%	69	263	866	1,031	1,198	1,026	1,078	1,408	808	178	58	44	443
100%	771	1,303	2,982	3,087	3,164	2,173	1,931	1,686	1,567	499	105	70	628
Mean	52	146	371	474	567	614	701	746	372	93	38	32	253

Table A1-97. Water Year Average of Monthly Flows (cfs)—Yuba River, Middle Fork above Confluence with North Fork Yuba (SWRCB M Yuba Inflow)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	29	31	31	32	37	37	47	56	41	28	25	24
D	30	32	33	36	49	66	43	49	40	30	27	27
BN	29	31	36	31	54	31	78	48	39	29	27	27
AN	29	48	176	165	150	310	40	66	39	29	27	28
W	29	38	379	524	361	291	210	161	70	30	35	28
All	29	35	156	198	155	154	100	86	49	29	29	27
35												
C	31	34	56	54	100	134	155	139	71	28	25	24
D	30	53	83	76	170	227	265	237	87	30	27	27
BN	29	39	85	128	217	223	363	347	147	34	27	27
AN	30	97	229	412	347	620	347	404	163	40	27	28
W	44	117	581	669	569	535	492	523	320	84	31	28
All	34	73	248	304	310	355	344	349	176	48	28	27
45												
C	33	37	69	66	127	171	198	177	85	29	25	24
D	30	65	106	97	219	292	341	305	109	32	27	27
BN	30	45	106	164	279	286	466	447	189	41	27	27
AN	33	122	252	479	421	659	446	520	210	49	28	28
W	51	166	607	721	652	617	598	671	412	107	35	29
All	37	94	270	342	371	416	432	448	224	58	29	27
55												
C	36	40	82	79	154	209	242	215	99	31	25	24
D	31	78	129	119	267	356	417	373	132	36	27	27
BN	32	53	128	200	342	350	570	546	231	49	28	27
AN	37	147	228	534	495	724	545	635	257	60	30	29
W	58	207	656	792	713	698	713	820	503	131	41	31
All	41	115	293	384	426	482	522	547	273	69	31	28
65												
C	39	45	95	93	182	247	286	254	116	34	25	24
D	34	92	152	140	316	421	492	440	156	41	28	28
BN	35	61	151	237	404	413	674	645	273	58	30	28
AN	41	186	269	573	570	819	645	750	303	71	33	31
W	71	215	708	863	841	759	829	969	595	155	47	35
All	47	128	325	424	501	545	613	647	322	81	34	30
75												
C	43	51	109	106	210	285	330	293	133	37	25	24
D	37	105	175	162	365	486	568	508	180	46	30	29
BN	39	71	174	273	466	477	777	744	315	67	33	29
AN	47	197	311	661	658	884	744	866	350	82	38	35
W	77	253	805	948	931	853	936	1,118	686	179	55	41
All	52	146	371	474	567	614	701	746	372	93	38	32

A1.12.3.43 Yuba River, South Fork above Englebright Reservoir (SWRCB S Yuba Inflow)

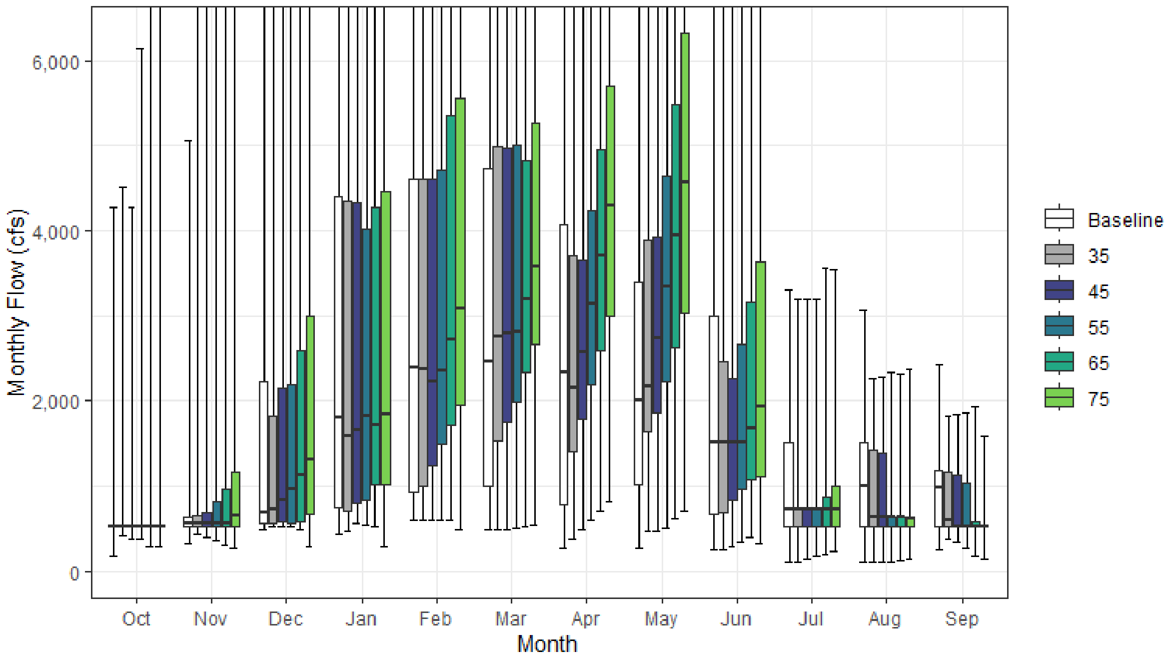

Figure A1-46. Yuba River, South Fork Streamflow above Englebright Reservoir Monthly Boxplot

Table A1-98. Cumulative Distribution of Monthly Flow (cfs)—Yuba River, South Fork above Englebright Reservoir (SWRCB S Yuba Inflow)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	169	322	496	426	601	495	269	270	250	99	100	259	261
10%	517	523	524	617	786	817	715	910	519	525	525	525	471
25%	523	524	568	736	933	993	772	1,019	673	528	528	528	630
50%	523	560	686	1,812	2,398	2,464	2,331	2,007	1,513	727	992	990	1,139
75%	524	640	2,225	4,407	4,608	4,727	4,080	3,388	2,996	1,504	1,515	1,175	2,173
90%	524	832	4,591	5,943	6,693	7,508	4,738	5,688	4,481	2,411	1,730	1,334	2,889
100%	4,278	5,063	15,368	22,279	19,091	15,119	11,621	9,325	9,194	3,300	3,073	2,426	3,934
Mean	554	789	2,076	3,150	3,359	3,445	2,647	2,681	2,143	1,155	1,093	926	1,445
35													
0%	419	425	523	466	601	495	381	470	251	108	99	376	293
10%	517	523	524	627	786	854	1,056	937	525	525	525	525	528
25%	523	524	570	717	1,004	1,528	1,394	1,643	691	528	528	528	708
50%	524	561	721	1,579	2,367	2,764	2,158	2,179	1,513	727	627	594	1,166
75%	524	656	1,831	4,343	4,606	4,984	3,704	3,884	2,461	727	1,425	1,157	2,134
90%	524	1,090	5,518	7,015	8,356	8,192	5,168	6,185	4,515	945	1,621	1,273	2,921
100%	4,508	6,636	16,728	22,293	20,581	15,119	11,628	9,607	8,849	3,192	2,253	1,822	3,862
Mean	560	869	2,137	3,144	3,488	3,754	2,797	2,991	2,114	793	899	820	1,466
45													
0%	371	400	523	563	601	495	491	470	278	139	99	349	311
10%	517	523	524	642	810	1,050	1,356	999	520	525	525	524	572
25%	523	524	571	791	1,239	1,744	1,793	1,863	842	528	528	528	749
50%	524	561	827	1,667	2,219	2,790	2,576	2,736	1,513	727	627	528	1,198
75%	524	697	2,147	4,333	4,607	4,970	3,656	3,918	2,256	727	1,375	1,133	2,166
90%	524	1,295	4,724	7,015	8,296	7,573	5,443	6,565	4,222	1,005	1,640	1,293	2,881
100%	4,279	9,451	15,794	22,259	20,674	15,216	11,639	9,609	8,409	3,190	2,289	1,850	3,850
Mean	559	955	2,091	3,158	3,542	3,773	3,050	3,211	2,045	785	862	782	1,493
55													
0%	371	368	523	541	601	508	599	514	338	170	102	267	331
10%	517	523	524	611	893	1,283	1,657	1,105	525	525	524	524	640
25%	523	524	565	844	1,485	1,993	2,192	2,222	965	528	528	527	847
50%	524	565	960	1,831	2,358	2,812	3,142	3,345	1,513	727	627	528	1,251
75%	524	822	2,197	4,010	4,706	4,999	4,239	4,636	2,668	736	628	1,029	2,214
90%	524	1,583	4,548	6,822	7,195	7,806	5,547	6,674	4,017	1,042	1,472	1,270	2,872
100%	6,140	12,506	14,946	21,864	19,119	14,891	11,118	9,412	7,935	3,186	2,331	1,868	3,799
Mean	588	1,094	2,124	3,076	3,558	3,904	3,434	3,651	2,115	791	758	715	1,553
65													
0%	288	311	479	525	600	527	708	608	390	200	121	174	354
10%	420	523	525	615	1,004	1,517	1,959	1,306	530	426	426	426	697
25%	523	524	584	1,013	1,711	2,328	2,590	2,626	1,065	528	528	527	929
50%	524	570	1,134	1,709	2,722	3,188	3,712	3,953	1,674	726	627	528	1,409
75%	524	971	2,596	4,280	5,359	4,813	4,944	5,477	3,153	870	628	588	2,342
90%	585	1,875	5,234	7,076	7,945	7,547	5,945	7,068	4,726	1,298	1,666	1,238	2,897
100%	8,878	11,126	14,027	21,603	19,872	14,363	11,443	10,246	8,687	3,567	2,316	1,939	3,938
Mean	624	1,150	2,313	3,200	3,791	4,051	3,922	4,198	2,344	839	767	682	1,678
75													
0%	294	269	294	281	481	535	816	700	331	230	139	142	381
10%	420	503	552	658	1,140	1,750	2,259	1,507	565	425	282	319	775
25%	523	524	663	1,025	1,946	2,664	2,987	3,030	1,115	528	527	527	1,038
50%	523	647	1,309	1,836	3,088	3,584	4,283	4,560	1,930	726	624	528	1,556
75%	547	1,161	2,995	4,465	5,553	5,261	5,700	6,320	3,638	1,002	627	528	2,517
90%	674	2,617	6,039	7,130	8,093	7,751	6,791	8,154	5,454	1,417	628	718	3,024
100%	6,918	9,920	16,183	22,098	19,800	14,334	11,691	10,908	8,923	3,540	2,365	1,583	4,036
Mean	619	1,319	2,572	3,286	3,968	4,295	4,461	4,817	2,614	858	586	556	1,802

Table A1-99. Water Year Average of Monthly Flows (cfs)—Yuba River, South Fork above Englebright Reservoir (SWRCB S Yuba Inflow)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	508	536	636	790	890	855	615	734	491	441	455	506
D	508	643	881	1,169	1,459	1,799	1,341	1,372	924	656	709	712
BN	523	567	1,014	1,890	2,569	1,914	2,613	2,283	1,754	928	1,043	883
AN	493	973	1,955	3,660	4,081	5,119	3,072	3,059	2,143	1,160	1,221	1,083
W	657	1,088	4,442	6,445	6,277	6,280	4,555	4,785	4,179	2,048	1,697	1,271
All	554	789	2,076	3,150	3,359	3,445	2,647	2,681	2,143	1,155	1,093	926
35												
C	508	536	673	714	978	1,066	1,012	982	577	441	441	478
D	508	675	935	1,036	1,425	2,219	1,747	1,717	1,044	594	591	578
BN	523	568	1,026	1,810	2,563	2,543	2,773	2,703	1,753	715	771	794
AN	514	1,109	1,939	3,952	4,088	5,570	2,824	3,366	2,002	727	984	910
W	667	1,274	4,582	6,491	6,685	6,301	4,543	5,036	4,006	1,207	1,419	1,163
All	560	869	2,137	3,144	3,488	3,754	2,797	2,991	2,114	793	899	820
45												
C	515	533	719	763	1,069	1,274	1,295	1,152	624	414	411	459
D	506	708	976	1,053	1,594	2,183	2,133	2,007	989	556	542	537
BN	518	573	1,027	1,788	2,612	2,608	3,041	2,933	1,717	715	691	674
AN	509	1,154	1,896	4,079	4,105	5,397	3,040	3,587	1,941	729	939	898
W	670	1,514	4,392	6,457	6,651	6,315	4,689	5,225	3,841	1,223	1,414	1,155
All	559	955	2,091	3,158	3,542	3,773	3,050	3,211	2,045	785	862	782
55												
C	532	541	761	819	1,224	1,517	1,582	1,401	719	409	395	443
D	504	759	1,084	1,037	1,859	2,515	2,594	2,433	1,089	551	537	528
BN	519	609	1,040	1,744	2,639	2,675	3,579	3,531	1,876	711	616	567
AN	523	1,297	1,886	4,099	4,335	5,426	3,526	4,204	2,046	753	627	597
W	752	1,849	4,393	6,184	6,307	6,317	4,928	5,605	3,808	1,242	1,262	1,143
All	588	1,094	2,124	3,076	3,558	3,904	3,434	3,651	2,115	791	758	715
65												
C	531	541	826	876	1,386	1,768	1,870	1,655	819	376	349	383
D	503	874	1,245	1,106	2,159	2,924	3,066	2,874	1,219	556	537	529
BN	519	648	1,195	1,863	2,934	2,889	4,215	4,173	2,043	682	586	528
AN	540	1,638	1,965	4,175	4,393	5,698	4,159	4,968	2,295	801	627	612
W	865	1,779	4,738	6,411	6,566	6,118	5,386	6,240	4,208	1,410	1,333	1,082
All	624	1,150	2,313	3,200	3,791	4,051	3,922	4,198	2,344	839	767	682
75												
C	538	549	889	933	1,558	2,027	2,157	1,909	932	374	274	306
D	504	1,072	1,426	1,186	2,483	3,349	3,537	3,316	1,368	544	513	504
BN	531	732	1,362	1,957	3,333	3,265	4,859	4,815	2,318	678	568	529
AN	576	1,638	2,234	4,596	4,657	5,876	4,793	5,732	2,568	850	627	577
W	821	2,136	5,214	6,367	6,463	6,169	6,006	7,109	4,649	1,467	800	735
All	619	1,319	2,572	3,286	3,968	4,295	4,461	4,817	2,614	858	586	556

A1.12.3.44 Total Delta Inflow

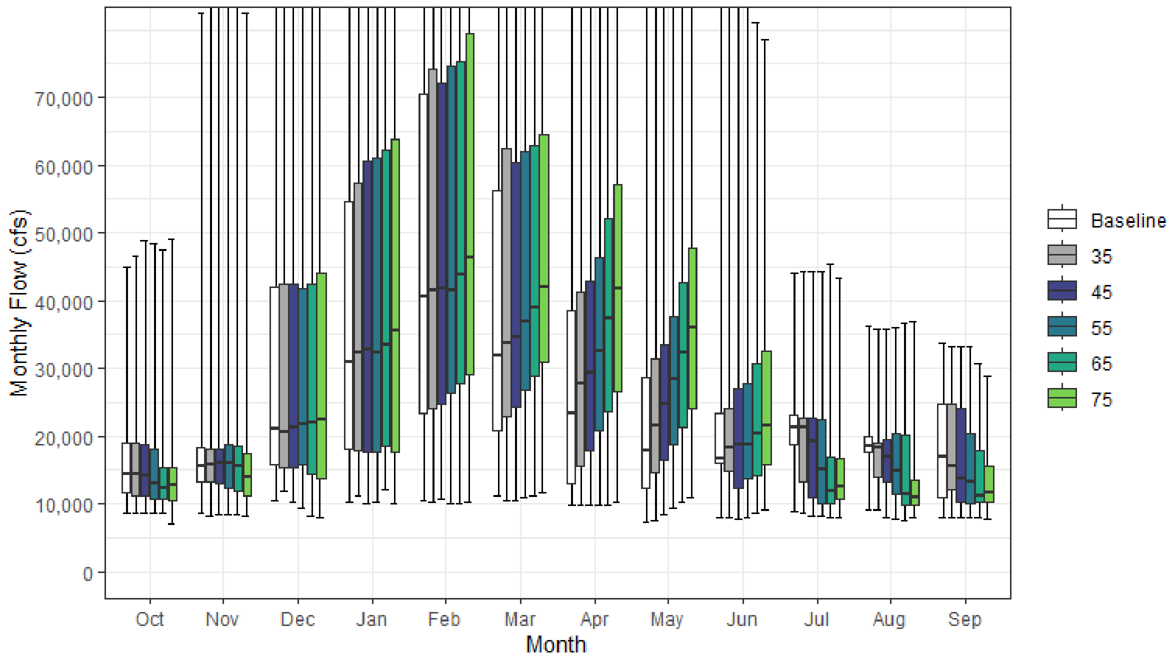

Figure A1-47. Total Delta Inflow Monthly Boxplot

Table A1-100. Cumulative Distribution of Monthly Flow (cfs)—Total Delta Inflow

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	8,670	8,715	10,527	10,310	10,491	11,145	9,838	7,284	8,011	8,796	9,189	7,916	7,273
10%	9,560	10,508	13,785	14,694	16,411	15,199	11,734	10,924	12,625	10,031	10,845	8,689	10,225
25%	11,601	13,265	15,873	18,098	23,376	20,798	13,126	12,410	15,907	18,743	17,626	11,044	12,938
50%	14,503	15,445	21,175	30,900	40,695	31,835	23,314	17,768	16,762	21,299	18,469	16,959	16,949
75%	18,927	18,283	42,020	54,677	70,532	56,169	38,648	28,731	23,383	23,037	20,036	24,739	28,873
90%	21,554	26,830	75,556	106,258	130,014	97,910	70,994	54,982	41,023	25,236	23,275	25,992	38,882
100%	45,029	82,392	160,399	263,573	243,155	248,232	154,285	84,828	84,760	44,128	36,315	33,683	64,071
Mean	15,800	18,417	34,952	47,231	57,607	47,756	32,697	25,146	22,560	20,570	18,265	17,957	21,575
35													
0%	8,645	8,313	11,845	11,117	10,278	10,528	9,776	7,603	7,877	8,655	9,066	7,977	7,149
10%	9,437	10,888	13,648	14,624	16,200	16,505	12,112	11,780	11,275	8,965	11,311	8,570	10,349
25%	11,159	13,339	15,292	17,965	24,163	22,990	15,658	14,639	14,883	13,328	13,841	12,220	13,161
50%	14,332	15,707	20,689	32,246	41,582	33,779	27,812	21,491	18,426	21,193	18,352	15,568	17,221
75%	18,902	18,009	42,399	57,380	74,121	62,525	41,292	31,486	24,127	22,769	19,088	24,636	28,531
90%	21,095	27,191	77,447	108,067	129,622	97,111	71,542	55,358	41,259	23,347	22,886	25,735	38,628
100%	46,596	83,384	160,450	260,448	237,586	248,244	152,593	85,397	84,689	44,186	35,726	33,250	64,068
Mean	15,623	18,472	35,095	47,774	57,937	48,773	34,577	26,981	22,645	19,161	17,543	17,605	21,768
45													
0%	8,643	8,379	10,206	9,932	10,626	10,472	9,801	8,342	7,835	8,196	7,990	7,962	7,194
10%	9,339	10,087	12,843	14,108	17,186	17,965	13,863	12,426	11,131	8,747	11,177	8,371	10,537
25%	11,109	13,046	15,320	17,543	24,764	24,291	17,962	16,545	12,410	11,012	13,151	10,325	13,239
50%	14,262	15,946	21,293	32,767	41,770	34,740	29,347	24,721	18,836	19,263	16,821	13,815	17,650
75%	18,667	18,157	42,560	60,697	72,063	60,441	42,830	33,442	27,034	22,764	19,573	24,081	28,767
90%	20,714	27,045	78,799	105,008	128,137	96,565	71,672	55,863	40,967	23,532	22,643	25,293	38,757
100%	48,914	83,766	160,264	260,826	233,221	247,265	152,827	85,618	84,346	44,239	35,794	33,317	63,997
Mean	15,558	18,423	35,033	48,051	58,001	49,042	36,296	28,907	23,020	18,086	17,040	16,688	21,886
55													
0%	8,615	8,453	9,298	10,363	10,117	11,035	9,765	9,297	7,930	8,277	7,855	7,986	7,212
10%	9,193	10,198	12,420	14,184	19,103	19,999	15,929	13,272	11,276	8,745	9,289	8,367	10,842
25%	10,838	12,447	15,778	17,715	26,328	26,927	20,888	18,887	13,789	9,994	11,345	10,094	13,484
50%	13,119	15,946	21,829	32,342	41,465	36,853	32,490	28,422	18,882	15,131	14,981	13,189	17,907
75%	18,066	18,689	41,817	61,166	74,732	61,889	46,451	37,513	27,810	22,366	20,486	20,447	29,427
90%	20,881	27,228	74,176	104,694	128,285	93,925	71,899	57,080	40,293	25,329	22,298	23,842	39,285
100%	48,387	84,157	160,329	257,114	233,455	247,266	152,955	84,865	83,537	44,368	35,993	33,262	64,132
Mean	14,913	18,555	35,051	48,305	58,767	50,319	38,868	31,450	23,703	16,648	15,986	15,478	22,118
65													
0%	8,597	8,486	8,265	12,079	10,141	11,217	9,788	10,370	8,567	7,981	7,525	7,980	7,264
10%	9,126	10,098	11,255	15,437	17,781	19,936	17,772	15,015	11,399	8,919	8,968	8,394	11,041
25%	10,693	11,980	14,521	18,640	27,640	28,884	23,557	21,410	14,272	10,044	9,799	10,219	13,725
50%	12,344	15,515	21,886	33,414	43,909	38,944	37,285	32,315	20,343	11,778	11,516	11,231	18,131
75%	15,311	18,585	42,512	62,272	75,307	62,956	52,119	42,595	30,828	16,887	20,118	17,763	28,786
90%	20,804	28,127	75,394	105,296	128,556	94,402	77,180	62,883	41,807	24,827	22,899	21,424	40,085
100%	47,493	83,871	160,407	257,896	242,053	246,235	152,640	84,701	81,165	45,384	36,688	30,710	63,964
Mean	14,031	18,166	35,112	49,273	59,907	52,296	42,338	34,758	24,595	15,143	14,656	14,067	22,493
75													
0%	6,950	8,246	8,049	9,945	10,183	11,628	10,231	10,851	9,158	8,033	7,892	7,756	7,297
10%	9,102	10,183	11,265	13,945	18,334	21,207	19,836	16,572	11,605	9,306	8,963	8,317	11,583
25%	10,590	11,107	13,612	17,693	29,101	31,027	26,618	24,093	15,731	10,719	9,780	10,248	14,280
50%	12,836	13,945	22,415	35,447	46,338	42,082	41,794	36,038	21,582	12,634	11,004	11,540	18,952
75%	15,229	17,381	43,971	63,713	79,429	64,527	57,046	47,667	32,542	16,620	13,571	15,653	29,752
90%	18,319	27,131	77,299	107,541	127,727	94,488	82,708	68,099	45,752	20,820	18,767	17,633	40,249
100%	49,137	82,470	160,436	255,633	247,219	246,534	153,035	91,435	78,468	43,307	36,866	28,970	64,333
Mean	13,668	17,460	35,555	49,903	60,958	54,432	46,139	38,532	26,046	14,693	12,798	13,137	23,033

Table A1-101. Water Year Average of Monthly Flows (cfs)—Total Delta Inflow

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	12,726	12,411	17,015	18,546	20,363	16,907	11,440	10,061	11,553	10,527	10,370	8,731
D	14,327	15,627	22,313	19,887	28,163	25,942	15,485	13,483	16,051	18,442	16,908	12,177
BN	16,093	16,060	23,954	29,666	46,155	30,664	25,988	18,277	17,702	21,512	18,621	15,987
AN	14,793	19,431	30,678	56,756	73,130	60,109	33,058	28,029	20,918	24,086	19,130	25,258
W	18,805	24,725	62,551	89,687	99,941	85,727	60,913	44,910	36,991	25,466	22,926	25,304
All	15,800	18,417	34,952	47,231	57,607	47,756	32,697	25,146	22,560	20,570	18,265	17,957
35												
C	12,433	12,562	17,473	18,651	21,032	18,439	12,057	11,109	11,092	9,669	11,163	8,555
D	14,082	15,890	22,732	20,323	29,466	28,697	18,441	15,897	14,345	14,412	14,586	12,706
BN	15,796	15,894	23,766	30,246	47,846	31,808	29,631	21,527	19,004	20,720	17,875	14,210
AN	14,589	19,300	30,387	58,615	73,796	61,821	35,385	29,379	21,703	23,134	18,806	24,554
W	18,825	24,786	62,705	89,959	98,391	84,790	61,400	46,080	37,675	25,159	22,435	25,211
All	15,623	18,472	35,095	47,774	57,937	48,773	34,577	26,981	22,645	19,161	17,543	17,605
45												
C	12,634	12,402	17,163	18,289	21,904	19,701	13,397	12,323	10,865	9,203	10,746	8,368
D	13,871	15,649	22,730	20,441	30,116	29,672	21,222	18,106	13,441	12,767	13,270	11,282
BN	15,469	15,594	23,782	30,388	47,825	32,729	31,900	24,695	19,530	18,327	16,702	13,017
AN	14,751	18,839	30,902	59,615	73,488	60,805	37,268	32,022	23,531	22,126	18,826	23,708
W	18,790	25,268	62,434	90,471	97,795	84,150	62,122	47,115	38,617	24,956	22,680	24,421
All	15,558	18,423	35,033	48,051	58,001	49,042	36,296	28,907	23,020	18,086	17,040	16,688
55												
C	11,864	11,906	16,790	18,405	22,663	20,916	14,929	13,767	11,214	8,684	9,306	8,287
D	13,101	15,535	22,782	20,692	31,579	32,040	24,388	20,623	14,023	10,598	11,541	10,710
BN	14,678	15,516	24,022	31,024	48,309	34,645	35,410	28,071	19,692	14,671	14,454	12,566
AN	14,347	19,140	31,813	60,846	74,161	61,599	40,360	35,545	24,115	19,425	17,789	19,309
W	18,290	25,978	62,120	90,150	98,250	84,462	64,012	49,340	39,913	25,461	23,056	23,033
All	14,913	18,555	35,051	48,305	58,767	50,319	38,868	31,450	23,703	16,648	15,986	15,478
65												
C	11,349	11,707	16,679	19,638	23,518	22,372	16,695	15,453	12,079	8,875	8,823	8,354
D	12,422	15,308	23,327	21,394	33,808	35,010	27,494	23,281	14,908	10,301	10,232	10,403
BN	14,279	14,710	23,471	32,086	49,245	37,520	39,874	31,791	20,618	11,783	11,203	11,404
AN	12,772	18,684	30,553	62,368	75,108	63,624	44,682	39,382	24,704	15,095	14,322	16,137
W	17,063	25,647	62,847	90,880	98,935	85,407	67,699	53,527	40,934	24,193	23,339	20,606
All	14,031	18,166	35,112	49,273	59,907	52,296	42,338	34,758	24,595	15,143	14,656	14,067
75												
C	11,401	10,890	17,018	18,772	24,482	23,832	18,542	17,176	12,956	9,308	8,884	8,221
D	12,119	14,616	23,221	21,459	35,502	37,988	30,699	26,050	16,278	10,960	10,201	10,565
BN	13,659	14,095	23,148	33,141	50,886	40,208	44,545	35,812	22,792	12,444	10,627	11,265
AN	12,811	17,693	31,410	65,152	77,017	67,361	49,349	44,098	26,484	15,101	12,569	15,587
W	16,416	25,054	64,044	91,555	98,824	86,254	72,097	58,599	42,174	21,568	18,258	17,786
All	13,668	17,460	35,555	49,903	60,958	54,432	46,139	38,532	26,046	14,693	12,798	13,137

A1.12.3.45 Delta Outflow

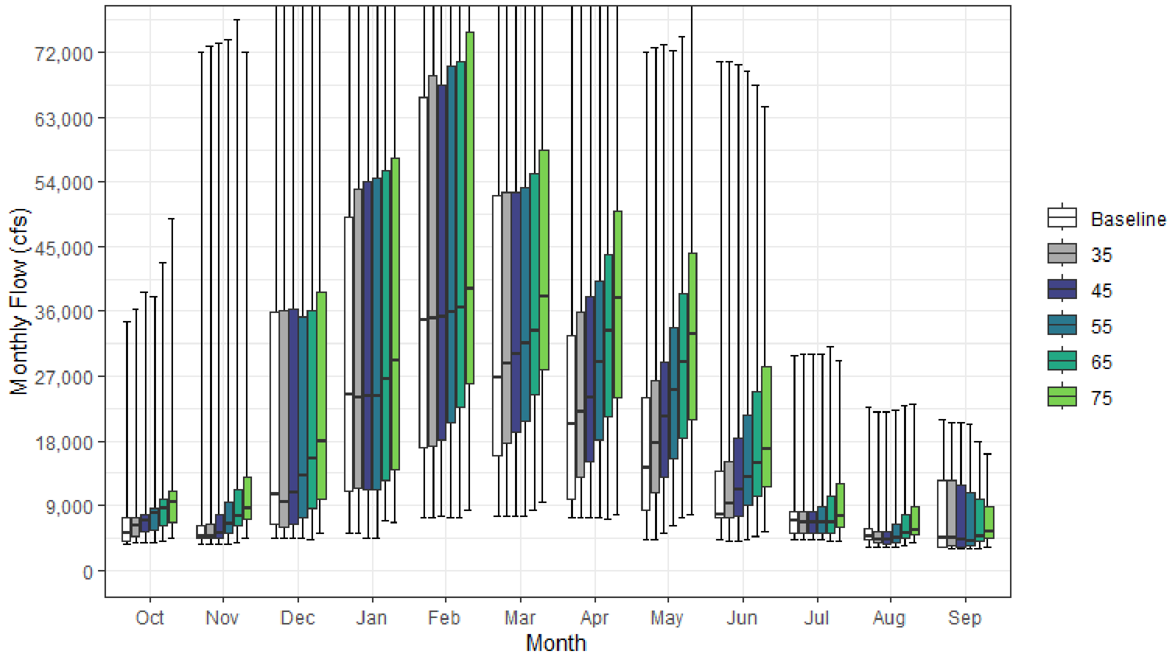

Figure A1-48. Delta Outflow Monthly Boxplot

Table A1-102. Cumulative Distribution of Monthly Flow (cfs)—Delta Outflow

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	3,638	3,568	4,562	5,038	7,242	7,518	7,208	4,223	4,220	4,197	3,219	3,078	3,986
10%	4,055	3,641	4,642	6,871	10,861	10,212	8,485	7,333	7,332	4,222	3,757	3,115	5,510
25%	4,111	4,573	6,442	11,071	16,964	16,011	9,987	8,323	7,368	5,199	4,239	3,148	7,133
50%	5,121	4,600	10,648	24,354	34,712	26,817	20,233	14,315	7,694	6,786	4,790	4,570	10,561
75%	7,252	6,145	35,871	49,063	65,766	52,110	32,683	24,017	13,843	8,240	5,849	12,438	21,544
90%	9,257	15,108	68,664	99,123	123,716	90,747	61,237	45,791	29,387	10,820	9,263	13,097	31,560
100%	34,611	71,971	151,227	255,993	237,025	243,221	146,102	72,102	70,789	29,894	22,559	20,836	56,060
Mean	6,519	8,338	26,218	40,606	51,243	41,790	28,508	20,212	13,701	7,816	5,899	7,479	15,489
35													
0%	3,932	3,560	4,549	5,118	7,224	7,500	7,187	4,273	4,139	4,162	3,213	3,066	3,985
10%	4,254	3,920	4,730	7,571	10,044	11,022	9,319	7,344	7,287	4,191	3,676	3,102	5,652
25%	4,734	4,560	6,097	11,451	17,340	17,699	12,954	10,714	7,346	5,188	3,863	3,419	7,477
50%	6,166	4,656	9,485	24,047	35,035	28,696	21,929	17,730	9,302	6,723	4,234	4,524	11,494
75%	7,381	6,488	36,190	53,057	68,815	52,495	35,925	26,451	15,030	8,225	5,244	12,442	21,991
90%	9,006	15,468	69,163	100,531	122,603	89,942	61,777	45,640	29,481	8,930	8,653	13,018	31,220
100%	36,233	72,964	151,287	252,869	231,459	241,280	144,413	72,671	70,718	29,952	21,970	20,404	55,827
Mean	6,818	8,475	26,233	41,228	51,473	42,673	30,152	22,079	14,316	7,510	5,454	7,427	15,822
45													
0%	3,845	3,540	4,560	4,543	7,435	7,496	7,188	5,237	4,145	4,160	3,163	3,064	4,155
10%	4,591	4,512	4,952	7,229	11,249	11,969	10,694	8,206	7,256	4,185	3,631	3,092	6,199
25%	5,247	4,560	6,398	11,244	18,051	19,244	15,157	13,015	7,587	5,178	3,716	3,222	7,880
50%	6,917	5,180	10,778	24,261	35,295	30,120	24,019	21,272	11,260	6,706	4,363	4,272	11,883
75%	7,829	7,827	36,408	54,030	67,453	52,470	38,008	28,946	18,293	8,224	5,407	11,773	22,330
90%	9,086	15,538	70,761	97,763	119,057	89,543	60,806	46,163	29,208	8,925	8,616	12,523	31,317
100%	38,585	73,345	150,295	253,246	227,098	242,267	144,648	73,095	70,375	30,006	22,038	20,470	55,981
Mean	7,264	9,008	26,498	41,431	51,719	42,976	31,865	24,157	15,456	7,447	5,469	7,234	16,225
55													
0%	3,862	3,550	4,560	4,533	7,216	7,490	7,187	6,230	4,166	4,160	3,142	3,052	4,294
10%	4,906	4,510	5,515	8,339	12,293	14,050	12,883	9,852	7,243	4,189	3,697	3,120	6,798
25%	5,549	5,172	7,191	11,233	20,455	20,775	18,209	15,621	8,953	5,178	3,898	3,395	8,787
50%	7,913	6,320	13,167	24,107	35,816	31,526	29,047	25,008	13,005	6,703	4,564	3,958	12,721
75%	8,664	9,560	35,165	54,502	70,125	53,205	40,149	33,616	21,598	8,769	6,484	10,831	23,118
90%	9,830	17,476	66,411	97,821	119,398	85,546	62,853	48,634	29,244	10,674	7,873	11,314	32,052
100%	38,126	73,716	151,154	249,523	227,329	242,055	144,765	72,318	69,532	30,099	22,205	20,387	56,006
Mean	7,922	10,030	27,249	41,758	52,469	44,434	34,556	26,844	17,010	7,739	5,741	6,858	16,955
65													
0%	4,047	3,803	4,361	6,923	7,343	8,438	7,185	7,234	4,729	4,143	3,380	3,049	4,379
10%	5,269	4,756	6,424	9,848	14,270	16,460	15,081	11,494	7,318	4,234	3,962	3,265	7,756
25%	6,128	6,113	8,501	12,496	22,729	24,345	21,262	18,246	10,322	5,182	4,527	3,975	9,904
50%	8,493	7,461	15,555	26,615	36,434	33,335	33,241	28,841	14,900	6,694	5,079	4,669	14,292
75%	9,811	11,292	36,182	55,604	70,707	55,189	43,810	38,574	24,903	10,363	7,663	9,905	24,628
90%	11,127	20,650	70,299	99,135	121,355	88,050	65,957	55,171	33,939	12,614	8,814	10,524	33,612
100%	42,697	76,538	153,704	250,299	235,918	242,454	145,430	74,096	67,580	31,162	22,932	17,864	56,790
Mean	8,688	11,387	28,811	42,964	54,099	46,870	38,224	30,462	18,850	8,390	6,401	6,671	18,114
75													
0%	4,493	4,372	5,024	6,647	8,364	9,510	7,628	7,711	5,347	4,143	3,928	3,094	4,963
10%	5,736	5,461	7,405	10,651	16,137	18,870	17,279	13,094	7,526	4,829	4,383	3,699	8,801
25%	6,682	7,053	9,801	14,008	25,875	27,915	24,036	20,832	11,692	5,891	4,994	4,552	11,345
50%	9,363	8,591	17,914	29,244	39,021	37,938	37,721	32,752	16,865	7,539	5,660	5,397	15,929
75%	11,013	13,025	38,752	57,246	74,829	58,304	50,024	44,158	28,208	11,957	8,842	8,893	26,583
90%	12,529	20,605	72,104	101,409	119,761	88,241	75,159	63,073	38,634	14,555	9,677	9,835	34,900
100%	48,958	72,049	151,263	248,035	241,078	239,232	143,245	81,935	64,529	29,086	23,109	16,131	55,975
Mean	9,566	12,710	30,551	44,634	56,244	49,799	42,162	34,435	20,944	9,268	6,930	6,718	19,449

Table A1-103. Water Year Average of Monthly Flows (cfs)—Delta Outflow

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	5,413	4,460	9,272	12,826	15,019	12,006	8,525	6,424	6,469	4,310	4,056	3,234
D	5,442	5,922	13,162	12,794	22,406	21,092	12,494	9,515	7,762	5,203	4,748	3,436
BN	6,456	5,798	14,595	22,976	39,979	25,140	23,210	14,606	8,800	7,209	4,863	4,380
AN	5,684	9,401	21,236	51,036	66,786	53,891	29,188	24,373	11,243	9,805	4,939	12,693
W	8,315	13,315	54,278	82,583	92,454	78,191	54,150	37,241	26,057	11,168	8,791	12,432
All	6,519	8,338	26,218	40,606	51,243	41,790	28,508	20,212	13,701	7,816	5,899	7,479
35												
C	5,684	4,421	9,285	12,949	15,276	13,004	8,874	7,650	6,581	4,217	3,772	3,302
D	5,683	6,176	13,329	13,489	23,669	23,802	15,288	11,973	7,782	5,189	3,958	3,622
BN	6,713	5,829	14,502	23,645	41,690	26,290	26,487	17,851	10,318	6,880	4,609	4,056
AN	6,090	9,297	20,841	52,890	67,496	55,654	30,918	25,714	12,035	8,876	4,732	12,225
W	8,653	13,626	54,425	82,859	90,789	77,105	54,597	38,399	26,764	10,812	8,298	12,481
All	6,818	8,475	26,233	41,228	51,473	42,673	30,152	22,079	14,316	7,510	5,454	7,427
45												
C	5,767	4,442	9,799	12,607	16,834	14,374	10,250	9,080	6,718	4,181	3,801	3,386
D	6,092	6,756	13,820	13,307	24,357	24,809	18,098	14,481	8,541	5,183	3,719	3,505
BN	7,223	6,142	14,856	23,703	41,723	27,220	28,754	21,112	12,172	6,702	4,461	3,832
AN	6,619	9,726	21,653	53,921	67,478	54,660	32,534	28,343	14,029	8,360	4,855	12,061
W	9,247	14,576	54,099	83,376	90,243	76,481	55,370	39,547	27,927	10,955	8,549	12,089
All	7,264	9,008	26,498	41,431	51,719	42,976	31,865	24,157	15,456	7,447	5,469	7,234
55												
C	6,284	4,838	10,550	12,590	17,330	16,340	12,042	10,679	7,399	4,197	4,090	3,243
D	6,761	7,674	14,872	13,967	25,888	27,276	21,331	17,279	9,650	5,189	3,830	3,610
BN	7,754	6,849	15,838	24,338	42,367	29,171	32,312	24,649	14,306	6,740	4,291	3,902
AN	7,552	10,696	23,212	55,190	68,151	55,620	36,164	31,952	16,486	8,445	5,737	10,885
W	9,930	16,223	54,136	83,046	90,643	76,826	57,211	41,821	29,546	11,855	8,941	11,299
All	7,922	10,030	27,249	41,758	52,469	44,434	34,556	26,844	17,010	7,739	5,741	6,858
65												
C	6,874	5,576	11,732	14,058	19,276	18,786	13,945	12,391	8,249	4,293	4,149	3,286
D	7,512	9,015	16,946	15,101	29,018	30,970	24,712	20,107	10,936	5,392	4,366	4,246
BN	8,265	7,985	17,166	25,607	43,672	32,454	36,981	28,561	16,492	6,930	4,890	4,558
AN	8,531	12,087	24,456	56,642	68,870	57,657	40,656	35,777	19,029	9,051	6,782	10,165
W	10,866	18,045	55,797	84,022	91,564	77,971	61,079	46,785	31,821	13,437	9,887	10,088
All	8,688	11,387	28,811	42,964	54,099	46,870	38,224	30,462	18,850	8,390	6,401	6,671
75												
C	7,574	6,401	13,191	14,908	21,699	21,168	15,916	14,136	9,137	4,662	4,331	3,681
D	8,296	10,388	19,081	17,047	32,537	35,025	28,141	22,917	12,360	6,018	5,003	4,887
BN	9,134	9,193	18,702	27,919	46,626	36,687	41,802	32,446	18,671	7,487	5,617	5,256
AN	9,547	13,779	26,771	59,925	71,403	61,784	45,540	40,428	21,568	10,165	7,819	9,631
W	11,858	19,510	57,267	84,843	91,875	79,042	65,511	52,587	34,820	14,870	10,185	9,356
All	9,566	12,710	30,551	44,634	56,244	49,799	42,162	34,435	20,944	9,268	6,930	6,718

A1.12.4 Delta Interior Flows

A1.12.4.1 Banks Pumping Plant (SWP)

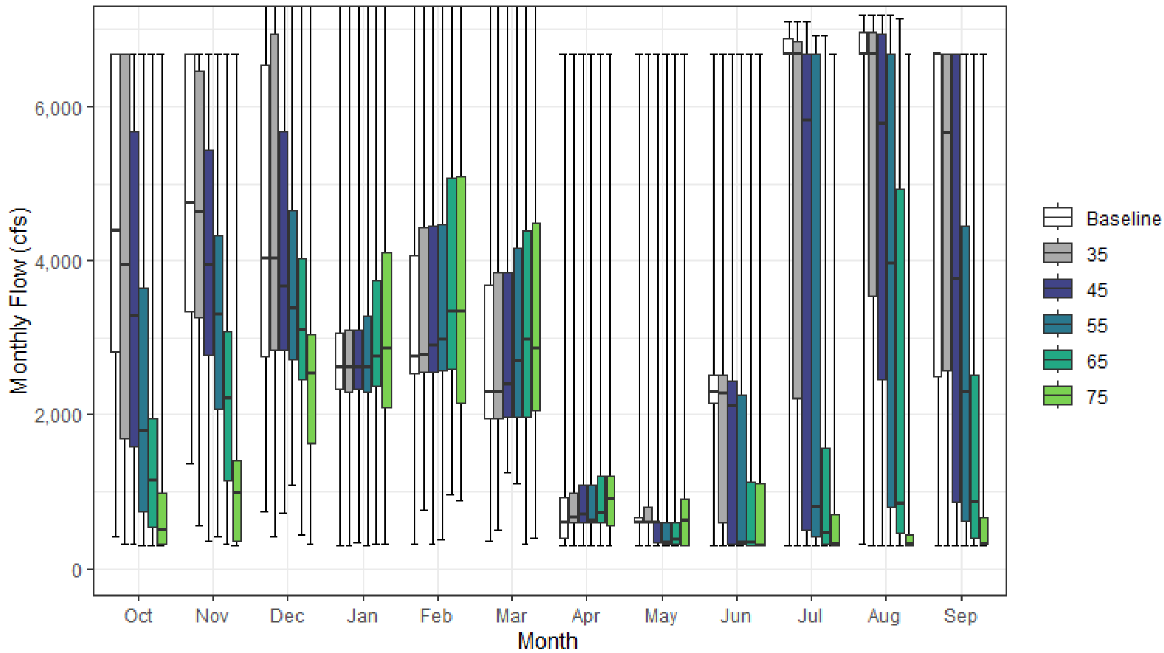

Figure A1-49. Banks Pumping Plant (SWP) Monthly Boxplot

Table A1-104. Cumulative Distribution of Monthly Flow (cfs) – Banks Pumping Plant (SWP)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	427	1,363	740	302	307	356	301	301	304	305	307	304	724
10%	1,243	2,151	2,094	1,955	2,390	1,806	317	312	321	313	800	527	1,240
25%	2,808	3,348	2,750	2,331	2,525	1,951	401	596	2,146	6,680	6,680	2,486	2,155
50%	4,390	4,753	4,032	2,615	2,760	2,283	605	601	2,293	6,680	6,680	6,680	2,767
75%	6,680	6,680	6,535	3,057	4,070	3,675	916	665	2,520	6,879	6,966	6,680	3,253
90%	6,680	6,680	7,043	4,342	6,772	7,134	5,580	4,426	5,202	6,928	7,030	6,680	3,895
100%	6,680	6,680	7,678	8,500	8,500	7,561	6,680	6,680	6,680	7,116	7,180	6,680	4,904
Mean	4,400	4,688	4,401	2,948	3,620	3,129	1,579	1,279	2,494	5,652	5,613	4,765	2,694
35													
0%	312	549	423	305	751	499	300	301	300	301	300	304	665
10%	789	1,862	2,240	1,853	2,402	1,813	334	320	324	309	1,235	509	1,253
25%	1,686	3,252	2,826	2,287	2,557	1,950	601	600	600	2,204	3,547	2,576	1,805
50%	3,936	4,625	4,021	2,612	2,770	2,290	658	601	2,275	6,680	6,680	5,649	2,658
75%	6,680	6,457	6,940	3,091	4,434	3,842	988	797	2,515	6,842	6,960	6,680	3,252
90%	6,680	6,680	7,043	4,343	6,772	7,153	6,036	4,425	5,202	6,928	7,030	6,680	3,820
100%	6,680	6,680	7,678	8,500	8,500	7,561	6,680	6,680	6,680	7,116	7,180	6,680	5,006
Mean	3,883	4,536	4,421	2,917	3,694	3,169	1,742	1,285	2,305	4,853	5,199	4,557	2,571
45													
0%	310	348	726	346	308	1,245	300	300	300	300	302	301	695
10%	735	1,538	2,477	1,955	2,389	1,905	420	310	316	308	683	459	1,048
25%	1,595	2,766	2,830	2,331	2,556	1,967	602	330	326	498	2,450	858	1,412
50%	3,277	3,943	3,671	2,615	2,886	2,393	693	601	2,118	5,813	5,784	3,769	2,383
75%	5,679	5,439	5,674	3,090	4,456	3,843	1,085	604	2,435	6,680	6,944	6,680	3,090
90%	6,680	6,680	7,015	4,453	6,768	7,007	5,355	4,425	5,203	6,872	7,029	6,680	3,591
100%	6,680	6,680	7,678	8,500	8,500	7,561	6,680	6,680	6,680	7,104	7,180	6,680	4,908
Mean	3,481	4,024	4,274	2,978	3,635	3,235	1,726	1,192	1,957	4,071	4,625	3,775	2,354
55													
0%	305	425	1,086	302	382	1,112	300	300	300	300	300	301	583
10%	453	1,355	2,130	1,861	2,444	1,904	332	301	301	303	414	307	993
25%	747	2,065	2,706	2,287	2,566	1,970	594	320	320	409	796	615	1,184
50%	1,785	3,302	3,375	2,615	2,968	2,690	614	336	337	798	3,958	2,293	1,743
75%	3,639	4,333	4,643	3,281	4,472	4,171	1,075	601	2,245	6,680	6,680	4,451	2,765
90%	6,680	6,379	6,995	4,343	6,768	6,952	5,496	4,128	5,101	6,684	7,008	6,680	3,389
100%	6,680	6,680	7,678	8,500	8,500	7,561	6,680	6,680	6,680	6,925	7,180	6,680	4,995
Mean	2,576	3,363	3,867	3,023	3,750	3,351	1,683	1,140	1,513	2,946	3,734	2,844	2,038
65													
0%	301	311	436	308	965	310	303	300	300	300	300	300	592
10%	325	695	1,667	2,159	2,069	1,599	344	301	300	300	304	309	818
25%	541	1,146	2,447	2,382	2,597	1,979	601	316	301	306	452	404	962
50%	1,136	2,206	3,096	2,750	3,347	2,973	711	369	341	458	840	851	1,202
75%	1,957	3,087	4,030	3,750	5,077	4,396	1,196	601	1,119	1,572	4,939	2,514	2,376
90%	5,533	5,006	6,346	4,984	7,837	7,005	5,030	3,020	3,636	6,680	6,680	6,680	3,289
100%	6,680	6,680	7,678	8,500	8,500	7,561	6,680	6,680	6,680	6,925	7,152	6,680	4,994
Mean	1,729	2,433	3,529	3,276	4,058	3,440	1,627	1,108	1,277	1,674	2,514	1,969	1,724
75													
0%	300	300	311	309	871	387	300	300	300	300	300	300	437
10%	302	308	1,055	1,700	1,516	1,139	301	300	300	300	300	302	651
25%	320	354	1,633	2,091	2,154	2,059	566	300	300	300	304	317	766
50%	495	990	2,534	2,849	3,340	2,859	900	617	304	308	324	325	995
75%	986	1,399	3,043	4,106	5,089	4,479	1,205	900	1,096	702	446	653	1,563
90%	1,562	2,216	4,988	4,894	6,772	7,001	5,369	2,516	3,229	1,058	2,472	2,882	2,436
100%	6,680	6,680	7,678	8,500	8,500	7,561	6,680	6,680	6,680	6,680	6,680	6,680	5,035
Mean	851	1,255	2,719	3,218	3,809	3,366	1,616	1,099	1,123	725	975	976	1,306

Table A1-105. Water Year Average of Monthly Flows (cfs) – Banks Pumping Plant (SWP)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	2,854	3,021	3,243	1,912	2,422	1,951	425	416	560	1,153	997	973
D	3,992	4,330	4,473	2,570	2,603	1,959	504	575	1,883	6,037	5,426	3,002
BN	4,646	4,464	4,666	2,532	3,302	2,383	678	598	2,329	6,855	6,877	5,924
AN	4,446	4,836	4,849	2,830	3,857	3,251	1,284	582	2,773	6,763	6,951	6,680
W	5,364	5,921	4,614	4,089	5,115	5,039	3,677	2,982	3,970	6,568	6,885	6,593
All	4,400	4,688	4,401	2,948	3,620	3,129	1,579	1,279	2,494	5,652	5,613	4,765
35												
C	2,487	2,926	3,306	1,922	2,625	2,210	627	462	598	921	1,457	573
D	3,503	4,063	4,686	2,426	2,610	2,041	637	576	1,171	2,918	3,753	3,506
BN	3,855	4,275	4,378	2,533	3,396	2,366	931	582	2,196	6,477	6,273	4,975
AN	3,716	4,940	5,069	2,830	3,805	3,218	1,687	582	2,757	6,736	6,951	6,329
W	5,004	5,737	4,567	4,089	5,212	4,997	3,683	2,986	3,941	6,618	6,885	6,467
All	3,883	4,536	4,421	2,917	3,694	3,169	1,742	1,285	2,305	4,853	5,199	4,557
45												
C	2,519	2,730	2,914	2,021	2,451	2,431	649	390	446	605	946	585
D	2,925	3,590	4,531	2,653	2,645	2,121	638	422	527	1,814	2,457	1,817
BN	3,195	3,795	4,345	2,526	3,454	2,354	809	483	1,587	4,680	5,185	3,869
AN	3,502	4,060	4,852	2,792	3,517	3,196	1,968	581	2,594	6,303	6,951	5,700
W	4,577	5,168	4,519	4,089	5,173	5,053	3,573	2,890	3,792	6,295	6,885	6,068
All	3,481	4,024	4,274	2,978	3,635	3,235	1,726	1,192	1,957	4,071	4,625	3,775
55												
C	1,636	2,121	2,470	2,288	2,929	2,441	625	354	306	303	914	389
D	2,058	2,832	3,936	2,668	2,799	2,353	625	398	412	774	1,029	1,168
BN	2,387	3,230	3,911	2,548	3,420	2,752	862	412	787	2,338	3,330	2,746
AN	2,373	3,549	4,551	2,776	3,518	3,123	1,640	480	1,416	4,032	5,211	2,807
W	3,669	4,428	4,245	4,077	5,204	5,048	3,560	2,842	3,469	5,895	6,885	5,490
All	2,576	3,363	3,867	3,023	3,750	3,351	1,683	1,140	1,513	2,946	3,734	2,844
65												
C	978	1,271	2,163	2,364	2,801	1,974	532	326	301	302	523	563
D	1,358	2,142	3,498	2,633	3,193	2,445	679	399	353	371	558	519
BN	1,950	2,303	3,338	3,174	3,444	2,930	846	386	403	405	1,006	1,068
AN	1,101	2,378	3,581	2,906	4,041	3,427	1,392	537	916	835	1,885	1,424
W	2,544	3,375	4,378	4,468	5,760	5,287	3,499	2,743	3,179	4,517	6,234	4,592
All	1,729	2,433	3,529	3,276	4,058	3,440	1,627	1,108	1,277	1,674	2,514	1,969
75												
C	413	668	1,679	1,949	2,314	1,569	414	303	300	301	332	411
D	468	912	2,334	2,473	2,913	2,328	585	375	301	303	343	324
BN	944	1,112	2,016	3,402	3,383	2,732	1,000	620	467	355	465	383
AN	645	844	2,761	3,387	4,228	4,221	1,475	884	1,082	660	592	673
W	1,404	2,089	3,973	4,272	5,361	5,126	3,469	2,452	2,595	1,520	2,268	2,259
All	851	1,255	2,719	3,218	3,809	3,366	1,616	1,099	1,123	725	975	976

A1.12.4.2 Delta Cross Channel

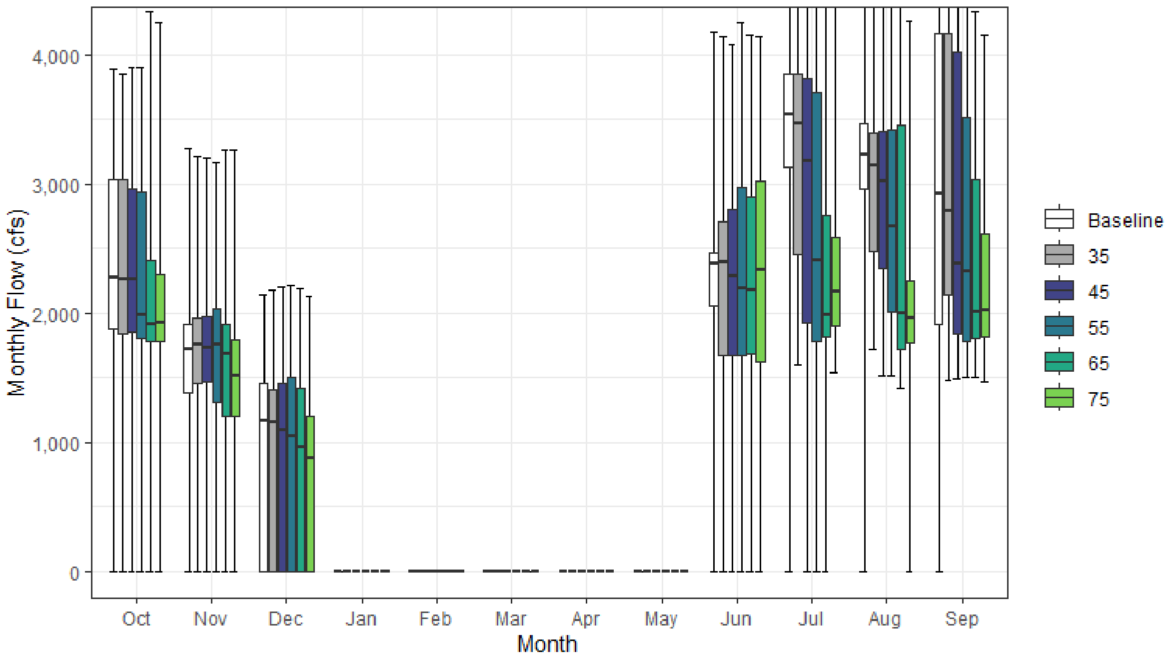

Figure A1-50. Delta Cross Channel Monthly Boxplot

Table A1-106. Cumulative Distribution of Monthly Flow (cfs)—Delta Cross Channel

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	0	0	0	0	0	0	0	0	0	0	0	0
10%	1,555	1,037	0	0	0	0	0	0	0	1,853	1,954	1,564	729
25%	1,881	1,377	0	0	0	0	0	0	2,051	3,132	2,964	1,912	955
50%	2,277	1,723	1,166	0	0	0	0	0	2,386	3,539	3,231	2,927	1,042
75%	3,030	1,917	1,456	0	0	0	0	0	2,465	3,856	3,468	4,166	1,123
90%	3,355	2,278	1,723	0	0	0	0	0	3,081	4,279	3,825	4,509	1,196
100%	3,892	3,278	2,146	0	0	0	0	0	4,181	4,630	4,632	4,784	1,296
Mean	2,444	1,625	934	0	0	0	0	0	2,127	3,311	3,088	3,033	1,005
35													
0%	0	0	0	0	0	0	0	0	0	1,599	1,715	1,484	595
10%	1,547	1,028	0	0	0	0	0	0	0	1,699	2,098	1,570	731
25%	1,837	1,450	0	0	0	0	0	0	1,670	2,460	2,483	2,136	840
50%	2,263	1,756	1,154	0	0	0	0	0	2,398	3,466	3,144	2,789	1,019
75%	3,039	1,965	1,404	0	0	0	0	0	2,705	3,851	3,396	4,163	1,110
90%	3,326	2,240	1,715	0	0	0	0	0	3,149	4,063	3,720	4,467	1,194
100%	3,859	3,217	2,173	0	0	0	0	0	4,147	4,919	4,729	4,852	1,342
Mean	2,405	1,633	930	0	0	0	0	0	2,124	3,161	3,012	3,039	989
45													
0%	0	0	0	0	0	0	0	0	0	0	1,516	1,492	579
10%	1,538	1,028	0	0	0	0	0	0	0	1,670	2,057	1,570	690
25%	1,848	1,465	0	0	0	0	0	0	1,669	1,925	2,341	1,840	773
50%	2,264	1,733	1,098	0	0	0	0	0	2,287	3,179	3,024	2,388	1,002
75%	2,963	1,975	1,455	0	0	0	0	0	2,808	3,818	3,410	4,017	1,110
90%	3,296	2,344	1,744	0	0	0	0	0	3,415	4,018	3,675	4,396	1,188
100%	3,897	3,200	2,202	0	0	0	0	0	4,081	4,468	4,736	4,844	1,363
Mean	2,392	1,690	920	0	0	0	0	0	2,113	2,928	2,926	2,887	962
55													
0%	0	0	0	0	0	0	0	0	0	0	1,516	1,502	574
10%	1,528	1,027	0	0	0	0	0	0	0	1,641	1,748	1,557	661
25%	1,809	1,309	0	0	0	0	0	0	1,676	1,775	2,012	1,782	755
50%	1,982	1,761	1,046	0	0	0	0	0	2,189	2,412	2,676	2,318	918
75%	2,931	2,033	1,503	0	0	0	0	0	2,973	3,709	3,421	3,512	1,086
90%	3,332	2,371	1,847	0	0	0	0	0	3,567	3,998	3,728	4,040	1,159
100%	3,899	3,161	2,208	0	0	0	0	0	4,253	4,515	4,765	4,825	1,328
Mean	2,266	1,660	936	0	0	0	0	0	2,154	2,656	2,727	2,677	914
65													
0%	0	0	0	0	0	0	0	0	0	0	1,420	1,507	567
10%	1,529	1,037	0	0	0	0	0	0	0	1,664	1,658	1,564	654
25%	1,780	1,204	0	0	0	0	0	0	1,682	1,819	1,720	1,805	719
50%	1,911	1,686	964	0	0	0	0	0	2,174	1,982	1,997	2,011	827
75%	2,412	1,913	1,413	0	0	0	0	0	2,896	2,760	3,450	3,032	968
90%	3,278	2,349	1,850	0	0	0	0	0	3,526	3,761	3,936	3,496	1,051
100%	4,334	3,261	2,195	0	0	0	0	0	4,153	4,749	4,873	4,337	1,180
Mean	2,153	1,605	868	0	0	0	0	0	2,095	2,366	2,485	2,401	847
75													
0%	0	0	0	0	0	0	0	0	0	1,544	0	1,471	567
10%	1,527	1,035	0	0	0	0	0	0	0	1,738	1,651	1,567	636
25%	1,777	1,206	0	0	0	0	0	0	1,619	1,899	1,765	1,814	722
50%	1,924	1,516	870	0	0	0	0	0	2,331	2,170	1,963	2,020	786
75%	2,300	1,794	1,203	0	0	0	0	0	3,022	2,586	2,247	2,609	881
90%	2,906	2,210	1,695	0	0	0	0	0	3,713	3,019	2,704	2,923	923
100%	4,247	3,260	2,135	0	0	0	0	0	4,148	4,851	4,266	4,157	1,129
Mean	2,073	1,487	775	0	0	0	0	0	2,072	2,344	2,103	2,250	794

Table A1-107. Water Year Average of Monthly Flows (cfs)—Delta Cross Channel

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	2,112	1,446	1,078	0	0	0	0	0	1,827	1,995	1,974	1,601
D	2,376	1,615	1,302	0	0	0	0	0	2,403	3,342	3,076	2,136
BN	2,606	1,833	1,095	0	0	0	0	0	2,472	3,789	3,287	2,756
AN	2,455	1,684	1,063	0	0	0	0	0	2,672	3,664	3,278	4,413
W	2,570	1,577	428	0	0	0	0	0	1,638	3,553	3,493	4,051
All	2,444	1,625	934	0	0	0	0	0	2,127	3,311	3,088	3,033
35												
C	2,054	1,474	1,118	0	0	0	0	0	1,728	1,826	2,093	1,582
D	2,328	1,669	1,192	0	0	0	0	0	2,101	2,584	2,631	2,281
BN	2,549	1,807	1,032	0	0	0	0	0	2,647	3,685	3,225	2,479
AN	2,403	1,651	1,286	0	0	0	0	0	2,779	3,927	3,303	4,290
W	2,565	1,578	419	0	0	0	0	0	1,755	3,662	3,537	4,192
All	2,405	1,633	930	0	0	0	0	0	2,124	3,161	3,012	3,039
45												
C	2,091	1,447	1,073	0	0	0	0	0	1,680	1,742	2,012	1,558
D	2,286	1,797	1,174	0	0	0	0	0	1,927	2,271	2,389	2,011
BN	2,501	1,760	1,034	0	0	0	0	0	2,699	3,235	3,018	2,292
AN	2,451	1,620	1,258	0	0	0	0	0	3,020	3,775	3,291	4,205
W	2,542	1,729	433	0	0	0	0	0	1,741	3,508	3,608	4,051
All	2,392	1,690	920	0	0	0	0	0	2,113	2,928	2,926	2,887
55												
C	1,939	1,390	1,020	0	0	0	0	0	1,727	1,648	1,758	1,546
D	2,141	1,797	1,175	0	0	0	0	0	2,012	1,867	2,026	1,898
BN	2,356	1,762	1,062	0	0	0	0	0	2,705	2,537	2,576	2,237
AN	2,368	1,651	1,359	0	0	0	0	0	2,735	3,273	3,104	3,394
W	2,436	1,644	453	0	0	0	0	0	1,905	3,595	3,703	3,827
All	2,266	1,660	936	0	0	0	0	0	2,154	2,656	2,727	2,677
65												
C	1,850	1,357	1,008	0	0	0	0	0	1,860	1,687	1,680	1,567
D	2,004	1,763	1,189	0	0	0	0	0	2,136	1,821	1,794	1,818
BN	2,265	1,662	1,004	0	0	0	0	0	2,268	1,993	1,933	1,979
AN	2,069	1,571	1,285	0	0	0	0	0	2,757	2,422	2,434	2,778
W	2,395	1,598	290	0	0	0	0	0	1,801	3,341	3,791	3,379
All	2,153	1,605	868	0	0	0	0	0	2,095	2,366	2,485	2,401
75												
C	1,860	1,258	834	0	0	0	0	0	1,994	1,765	1,675	1,547
D	1,943	1,668	1,140	0	0	0	0	0	2,356	1,958	1,839	1,879
BN	2,132	1,586	943	0	0	0	0	0	2,531	2,137	1,868	1,975
AN	2,054	1,492	1,127	0	0	0	0	0	2,975	2,435	2,086	2,670
W	2,257	1,412	216	0	0	0	0	0	1,236	3,031	2,680	2,893
All	2,073	1,487	775	0	0	0	0	0	2,072	2,344	2,103	2,250

A1.12.4.3 Georgiana Slough

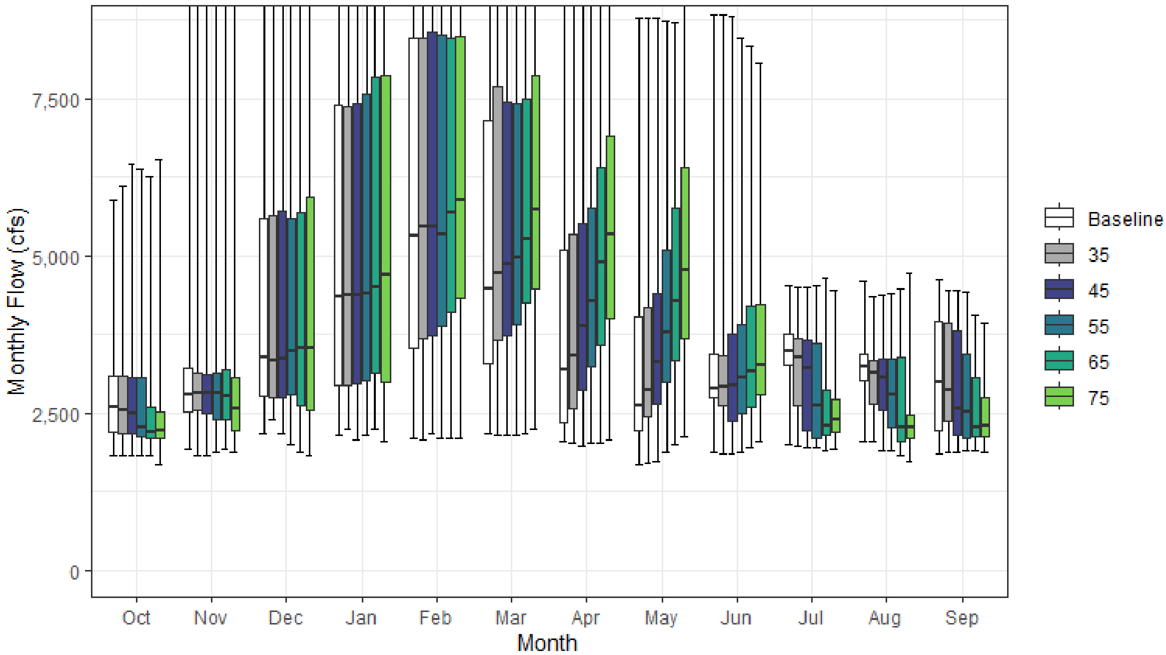

Figure A1-51. Georgiana Slough Monthly Boxplot

Table A1-108. Cumulative Distribution of Monthly Flow (cfs)—Georgiana Slough

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	1,830	1,930	2,184	2,151	2,094	2,166	2,051	1,668	1,863	2,010	2,036	1,841	1,519
10%	1,955	2,171	2,608	2,627	2,863	2,721	2,181	2,111	2,470	2,194	2,306	1,945	1,833
25%	2,200	2,524	2,772	2,940	3,540	3,290	2,349	2,209	2,749	3,253	3,018	2,211	2,149
50%	2,593	2,795	3,394	4,355	5,324	4,473	3,198	2,622	2,880	3,475	3,231	2,988	2,547
75%	3,077	3,211	5,587	7,394	8,461	7,150	5,082	4,029	3,440	3,749	3,436	3,950	3,505
90%	3,464	4,252	8,758	9,567	10,472	9,258	8,040	6,538	4,762	4,079	3,712	4,206	4,150
100%	5,885	9,453	11,477	11,870	12,014	11,644	10,958	8,776	8,831	4,521	4,593	4,630	5,306
Mean	2,708	3,116	4,619	5,303	6,033	5,386	4,091	3,436	3,327	3,358	3,147	3,106	2,869
35													
0%	1,832	1,816	2,397	2,241	2,066	2,149	2,019	1,693	1,839	1,964	2,053	1,876	1,505
10%	1,942	2,184	2,595	2,647	2,837	2,885	2,271	2,123	2,213	2,041	2,347	1,942	1,872
25%	2,173	2,544	2,748	2,943	3,683	3,656	2,562	2,451	2,613	2,624	2,642	2,376	2,190
50%	2,544	2,812	3,341	4,365	5,468	4,727	3,412	2,875	2,910	3,395	3,149	2,877	2,579
75%	3,079	3,127	5,635	7,376	8,471	7,705	5,341	4,183	3,410	3,691	3,342	3,930	3,536
90%	3,357	4,223	8,644	9,600	10,283	9,258	8,042	6,524	4,702	3,853	3,590	4,162	4,127
100%	6,113	9,474	11,497	11,870	11,993	11,628	10,960	8,779	8,830	4,509	4,363	4,458	5,287
Mean	2,681	3,122	4,609	5,337	6,084	5,506	4,308	3,606	3,322	3,161	3,047	3,068	2,882
45													
0%	1,835	1,825	2,170	2,061	2,177	2,137	1,977	1,735	1,840	1,960	1,901	1,882	1,509
10%	1,945	2,132	2,464	2,589	2,965	3,128	2,488	2,202	2,208	2,022	2,315	1,942	1,913
25%	2,175	2,485	2,742	2,962	3,722	3,743	2,873	2,640	2,379	2,215	2,533	2,149	2,177
50%	2,505	2,819	3,356	4,375	5,455	4,869	3,878	3,321	2,927	3,202	3,056	2,569	2,616
75%	3,056	3,124	5,715	7,421	8,560	7,436	5,507	4,400	3,756	3,667	3,352	3,817	3,540
90%	3,320	4,202	8,687	9,558	10,312	9,257	8,043	6,588	4,633	3,822	3,555	4,108	4,131
100%	6,458	9,483	11,472	11,870	11,974	11,628	10,958	8,779	8,819	4,511	4,368	4,451	5,288
Mean	2,675	3,109	4,598	5,330	6,106	5,563	4,523	3,846	3,345	3,024	2,982	2,951	2,894
55													
0%	1,831	1,885	1,987	2,148	2,098	2,154	2,026	1,865	1,865	1,952	1,900	1,890	1,508
10%	1,916	2,128	2,364	2,601	3,082	3,369	2,762	2,323	2,223	2,001	2,078	1,932	1,907
25%	2,128	2,405	2,791	3,016	3,873	3,910	3,246	2,988	2,500	2,101	2,281	2,104	2,200
50%	2,266	2,809	3,483	4,399	5,334	4,959	4,287	3,770	3,066	2,620	2,790	2,515	2,655
75%	3,057	3,133	5,580	7,573	8,501	7,428	5,758	5,102	3,896	3,609	3,361	3,430	3,619
90%	3,306	4,234	8,563	9,438	10,321	9,297	8,197	6,752	5,024	3,823	3,596	3,835	4,128
100%	6,384	9,476	11,500	11,854	11,970	11,628	10,949	8,744	8,471	4,521	4,391	4,437	5,286
Mean	2,578	3,126	4,599	5,353	6,161	5,712	4,836	4,165	3,425	2,815	2,829	2,791	2,914
65													
0%	1,826	1,914	1,887	2,257	2,098	2,175	2,025	2,005	1,953	1,911	1,827	1,893	1,515
10%	1,914	2,097	2,243	2,741	3,020	3,364	3,006	2,519	2,274	2,025	2,009	1,937	1,975
25%	2,103	2,388	2,622	3,149	4,095	4,262	3,594	3,344	2,594	2,141	2,057	2,122	2,267
50%	2,205	2,762	3,540	4,506	5,683	5,277	4,905	4,267	3,152	2,301	2,269	2,280	2,660
75%	2,600	3,181	5,688	7,841	8,452	7,498	6,414	5,765	4,204	2,860	3,383	3,062	3,592
90%	3,260	4,314	8,569	9,406	10,234	9,277	8,356	7,256	5,304	3,700	3,756	3,418	4,217
100%	6,268	9,395	11,469	11,859	11,996	11,627	10,941	8,707	8,347	4,658	4,473	4,063	5,234
Mean	2,448	3,057	4,586	5,445	6,275	5,942	5,249	4,589	3,511	2,594	2,643	2,579	2,945
75													
0%	1,668	1,879	1,816	2,050	2,107	2,236	2,076	2,122	2,038	1,922	1,723	1,866	1,516
10%	1,912	2,100	2,190	2,484	3,053	3,472	3,263	2,724	2,354	2,070	2,006	1,939	2,011
25%	2,101	2,212	2,536	2,984	4,318	4,475	4,001	3,692	2,794	2,194	2,104	2,129	2,293
50%	2,226	2,560	3,540	4,696	5,889	5,736	5,354	4,767	3,261	2,402	2,263	2,287	2,746
75%	2,509	3,059	5,944	7,862	8,495	7,860	6,899	6,415	4,230	2,720	2,466	2,739	3,670
90%	2,986	4,316	8,578	9,492	9,974	9,368	8,640	8,038	5,674	3,052	3,012	2,979	4,202
100%	6,521	9,266	11,372	11,851	11,969	11,623	11,033	9,060	8,061	4,457	4,714	3,925	5,269
Mean	2,390	2,950	4,564	5,444	6,340	6,179	5,678	5,059	3,701	2,535	2,393	2,463	2,992

Table A1-109. Water Year Average of Monthly Flows (cfs)—Georgiana Slough

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	2,357	2,401	2,896	3,029	3,161	2,840	2,210	2,009	2,354	2,268	2,252	1,966
D	2,560	2,801	3,546	3,175	4,114	3,945	2,570	2,310	2,864	3,301	3,096	2,376
BN	2,736	2,846	3,656	4,298	5,733	4,325	3,669	2,721	2,925	3,643	3,258	2,851
AN	2,620	3,237	4,223	6,756	7,685	7,063	4,328	3,794	3,102	3,862	3,251	4,121
W	3,028	3,848	7,103	8,106	8,485	7,755	6,392	5,328	4,537	3,596	3,554	3,982
All	2,708	3,116	4,619	5,303	6,033	5,386	4,091	3,436	3,327	3,358	3,147	3,106
35												
C	2,313	2,433	2,984	3,026	3,280	3,038	2,256	2,104	2,267	2,138	2,343	1,951
D	2,523	2,846	3,575	3,230	4,225	4,204	2,921	2,551	2,597	2,719	2,755	2,487
BN	2,692	2,816	3,540	4,350	5,827	4,453	4,085	3,079	3,079	3,564	3,211	2,638
AN	2,580	3,216	4,275	6,794	7,737	7,218	4,579	3,853	3,196	3,748	3,270	4,027
W	3,032	3,843	7,047	8,130	8,430	7,709	6,468	5,418	4,631	3,546	3,450	3,952
All	2,681	3,122	4,609	5,337	6,084	5,506	4,308	3,606	3,322	3,161	3,047	3,068
45												
C	2,342	2,403	2,931	2,942	3,401	3,223	2,426	2,255	2,224	2,074	2,281	1,933
D	2,491	2,805	3,573	3,236	4,286	4,331	3,286	2,820	2,443	2,479	2,569	2,280
BN	2,656	2,762	3,572	4,344	5,783	4,551	4,353	3,482	3,125	3,218	3,052	2,496
AN	2,617	3,164	4,232	6,824	7,708	7,169	4,802	4,211	3,409	3,632	3,261	3,962
W	3,028	3,902	7,040	8,138	8,430	7,668	6,559	5,532	4,729	3,562	3,504	3,843
All	2,675	3,109	4,598	5,330	6,106	5,563	4,523	3,846	3,345	3,024	2,982	2,951
55												
C	2,225	2,337	2,858	2,958	3,435	3,373	2,623	2,435	2,266	2,002	2,086	1,923
D	2,380	2,804	3,557	3,261	4,416	4,601	3,686	3,134	2,518	2,170	2,292	2,194
BN	2,545	2,764	3,607	4,394	5,880	4,750	4,792	3,910	3,131	2,683	2,713	2,453
AN	2,554	3,194	4,401	6,885	7,672	7,220	5,187	4,645	3,479	3,247	3,118	3,340
W	2,945	3,980	7,000	8,130	8,454	7,738	6,759	5,813	4,882	3,629	3,577	3,672
All	2,578	3,126	4,599	5,353	6,161	5,712	4,836	4,165	3,425	2,815	2,829	2,791
65												
C	2,156	2,299	2,872	3,139	3,544	3,547	2,853	2,657	2,384	2,031	2,026	1,940
D	2,275	2,766	3,600	3,359	4,696	4,934	4,086	3,479	2,628	2,135	2,114	2,132
BN	2,475	2,649	3,517	4,526	5,894	5,124	5,326	4,381	3,229	2,266	2,220	2,255
AN	2,324	3,125	4,248	7,054	7,770	7,386	5,751	5,112	3,504	2,595	2,605	2,868
W	2,772	3,899	7,037	8,114	8,511	7,857	7,143	6,358	4,951	3,440	3,644	3,328
All	2,448	3,057	4,586	5,445	6,275	5,942	5,249	4,589	3,511	2,594	2,643	2,579
75												
C	2,164	2,185	2,856	2,976	3,678	3,724	3,097	2,887	2,502	2,091	2,023	1,924
D	2,228	2,656	3,554	3,338	4,831	5,258	4,497	3,845	2,822	2,240	2,148	2,179
BN	2,373	2,562	3,439	4,632	6,012	5,460	5,857	4,913	3,518	2,377	2,170	2,252
AN	2,313	2,978	4,289	7,094	7,792	7,708	6,323	5,722	3,745	2,605	2,337	2,785
W	2,675	3,805	7,038	8,131	8,474	7,966	7,560	6,939	5,093	3,062	2,935	2,956
All	2,390	2,950	4,564	5,444	6,340	6,179	5,678	5,059	3,701	2,535	2,393	2,463

A1.12.4.4 Jones Pumping Plant (CVP)

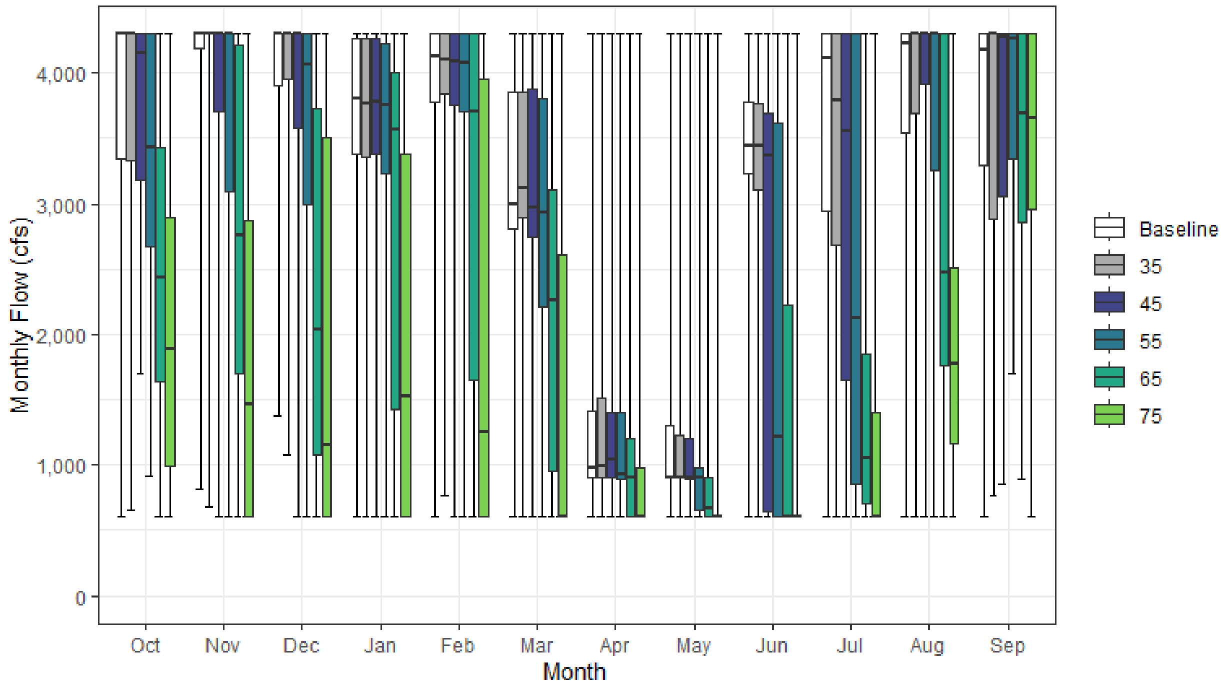

Figure A1-52. Jones Pumping Plant (CVP) Monthly Boxplot

Table A1-110. Cumulative Distribution of Monthly Flow (cfs)–Jones Pumping Plant (CVP)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	600	818	1,382	600	600	600	600	601	601	600	600	603	953
10%	2,521	2,085	2,691	2,769	3,578	2,184	600	898	2,125	1,992	2,486	2,708	1,812
25%	3,342	4,191	3,897	3,381	3,782	2,812	898	899	3,229	2,939	3,538	3,288	2,280
50%	4,297	4,298	4,297	3,798	4,131	2,996	982	904	3,437	4,116	4,230	4,173	2,446
75%	4,300	4,300	4,298	4,267	4,297	3,847	1,410	1,301	3,777	4,300	4,300	4,300	2,575
90%	4,300	4,300	4,300	4,298	4,298	4,278	3,227	4,097	4,299	4,300	4,300	4,300	2,894
100%	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,299	4,300	4,300	4,300	4,300	3,089
Mean	3,704	3,818	3,898	3,600	3,940	3,122	1,457	1,513	3,307	3,520	3,759	3,725	2,374
35													
0%	651	684	1,082	600	763	600	600	600	600	600	604	773	1,006
10%	2,602	2,594	3,321	2,284	3,618	2,519	666	755	604	685	3,047	2,285	1,837
25%	3,328	4,297	3,947	3,356	3,841	2,897	898	899	3,106	2,682	3,695	2,878	2,160
50%	4,298	4,298	4,297	3,768	4,102	3,121	996	899	3,437	3,785	4,299	4,298	2,401
75%	4,299	4,298	4,298	4,269	4,297	3,851	1,517	1,226	3,771	4,300	4,300	4,300	2,578
90%	4,300	4,300	4,300	4,297	4,298	4,297	3,287	4,100	4,299	4,300	4,300	4,300	2,940
100%	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,299	4,300	4,300	4,300	4,300	3,089
Mean	3,754	3,887	4,001	3,556	3,964	3,213	1,513	1,468	2,967	3,225	3,891	3,644	2,358
45													
0%	1,699	600	600	600	600	600	600	600	600	600	603	856	988
10%	2,321	2,350	2,506	2,561	3,260	2,145	632	654	603	635	3,421	2,387	1,659
25%	3,182	3,706	3,578	3,381	3,757	2,747	898	898	639	1,645	3,920	3,061	2,070
50%	4,151	4,298	4,297	3,773	4,083	2,976	1,035	899	3,366	3,551	4,300	4,282	2,350
75%	4,299	4,298	4,298	4,268	4,297	3,873	1,406	1,199	3,692	4,300	4,300	4,300	2,546
90%	4,300	4,300	4,299	4,297	4,298	4,297	3,543	4,097	4,298	4,300	4,300	4,300	2,936
100%	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,299	4,300	4,300	4,300	4,300	3,082
Mean	3,660	3,808	3,818	3,566	3,845	3,119	1,545	1,424	2,561	3,015	3,960	3,709	2,294
55													
0%	918	600	600	600	600	600	600	600	600	600	611	1,700	823
10%	1,794	1,851	1,591	1,719	2,521	798	601	602	600	602	1,446	2,756	1,246
25%	2,669	3,096	2,990	3,235	3,706	2,207	898	660	603	856	3,261	3,343	1,814
50%	3,433	4,297	4,065	3,754	4,083	2,933	926	899	1,220	2,128	4,299	4,259	2,101
75%	4,297	4,298	4,298	4,231	4,297	3,809	1,406	980	3,613	4,299	4,300	4,300	2,521
90%	4,299	4,299	4,298	4,298	4,298	4,297	3,689	4,096	4,298	4,300	4,300	4,300	2,893
100%	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,299	4,300	4,300	4,300	4,300	3,112
Mean	3,285	3,570	3,471	3,438	3,743	2,831	1,486	1,350	2,146	2,436	3,549	3,817	2,117
65													
0%	600	600	600	600	600	600	600	600	600	600	602	895	667
10%	704	861	692	1,001	827	600	600	600	600	602	1,154	2,254	1,006
25%	1,643	1,704	1,083	1,423	1,654	955	602	601	600	707	1,765	2,864	1,289
50%	2,438	2,754	2,037	3,562	3,702	2,257	898	672	612	1,054	2,477	3,697	1,565
75%	3,430	4,215	3,731	4,000	4,297	3,104	1,205	899	2,220	1,856	4,299	4,298	2,000
90%	4,298	4,298	4,298	4,298	4,298	4,298	4,207	2,587	3,775	4,253	4,300	4,300	2,483
100%	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,299	4,300	4,300	4,300	4,300	2,908
Mean	2,489	2,748	2,312	2,948	2,950	2,291	1,373	1,097	1,452	1,576	2,802	3,476	1,658
75													
0%	600	600	600	600	600	600	600	600	600	600	600	601	434
10%	600	600	600	600	600	600	600	600	600	600	610	2,382	782
25%	986	600	600	600	601	600	600	600	600	600	1,169	2,960	928
50%	1,888	1,468	1,156	1,524	1,247	603	600	600	600	605	1,774	3,649	1,111
75%	2,900	2,869	3,503	3,385	3,949	2,613	978	603	601	1,398	2,510	4,299	1,589
90%	4,298	3,977	4,298	4,298	4,298	4,297	4,299	1,445	2,783	2,803	4,299	4,300	2,224
100%	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	3,113
Mean	2,127	1,893	1,848	1,983	2,116	1,589	1,265	924	991	1,219	1,983	3,504	1,292

Table A1-111. Water Year Average of Monthly Flows (cfs)–Jones Pumping Plant (CVP)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	3,268	2,882	3,363	2,732	3,292	2,551	851	1,065	1,588	1,522	2,301	2,564
D	3,679	3,727	3,979	3,576	3,934	2,822	1,053	1,143	3,316	3,581	3,708	3,740
BN	3,753	4,090	3,893	3,678	4,119	3,159	908	918	3,421	3,796	3,874	3,758
AN	3,553	3,778	4,010	3,809	4,092	3,570	1,425	931	3,741	3,885	4,243	3,860
W	3,991	4,239	4,078	3,946	4,116	3,439	2,432	2,639	3,967	4,219	4,300	4,257
All	3,704	3,818	3,898	3,600	3,940	3,122	1,457	1,513	3,307	3,520	3,759	3,725
35												
C	3,093	3,178	3,749	2,704	3,494	2,820	900	865	1,000	1,012	2,915	2,736
D	3,688	4,000	4,013	3,465	3,969	2,784	1,040	1,084	2,299	2,715	3,831	3,605
BN	4,001	4,079	4,089	3,600	4,009	3,177	1,003	918	3,324	3,708	3,990	3,242
AN	3,693	3,642	3,895	3,809	4,092	3,546	1,599	931	3,740	3,883	4,119	3,993
W	4,033	4,171	4,117	3,946	4,129	3,626	2,469	2,644	3,972	4,217	4,300	4,252
All	3,754	3,887	4,001	3,556	3,964	3,213	1,513	1,468	2,967	3,225	3,891	3,644
45												
C	3,193	3,176	3,331	2,582	2,995	2,504	856	728	791	930	2,992	2,472
D	3,663	3,651	3,671	3,533	3,900	2,676	1,026	985	1,314	2,216	4,053	3,992
BN	3,838	3,944	3,785	3,675	3,906	3,189	1,125	935	2,620	3,329	4,069	3,381
AN	3,546	3,610	3,808	3,809	4,092	3,547	1,602	932	3,738	3,827	4,061	3,955
W	3,850	4,267	4,213	3,947	4,117	3,554	2,533	2,634	3,903	4,194	4,300	4,254
All	3,660	3,808	3,818	3,566	3,845	3,119	1,545	1,424	2,561	3,015	3,960	3,709
55												
C	2,826	2,920	2,640	2,447	2,796	1,771	649	606	602	675	1,287	2,705
D	3,108	3,382	3,256	3,086	3,661	2,355	991	769	937	1,126	3,681	3,971
BN	3,346	3,678	3,449	3,652	3,778	2,764	1,042	874	1,489	2,033	3,880	4,018
AN	3,374	3,432	3,403	3,801	4,092	3,455	1,439	988	3,060	3,381	3,926	3,656
W	3,589	4,051	4,120	3,946	4,140	3,528	2,595	2,628	3,886	4,201	4,300	4,244
All	3,285	3,570	3,471	3,438	3,743	2,831	1,486	1,350	2,146	2,436	3,549	3,817
65												
C	2,390	2,836	1,667	2,143	1,832	1,260	609	615	603	768	1,155	2,583
D	2,380	2,471	2,135	2,685	2,373	1,552	714	616	611	1,045	2,358	3,672
BN	2,864	2,672	2,133	2,797	3,390	2,190	895	752	657	921	2,383	3,877
AN	2,110	2,774	1,932	3,734	3,797	3,146	1,532	967	1,636	1,692	2,754	2,618
W	2,558	2,944	3,060	3,332	3,353	3,092	2,500	1,980	2,942	2,756	4,294	3,930
All	2,489	2,748	2,312	2,948	2,950	2,291	1,373	1,097	1,452	1,576	2,802	3,476
75												
C	2,291	1,769	1,046	849	882	755	607	609	601	815	1,245	2,164
D	2,183	1,626	1,090	994	838	609	601	601	614	1,148	1,917	3,372
BN	2,413	2,028	1,630	1,321	2,145	879	646	660	600	1,083	1,641	3,754
AN	1,589	1,656	1,328	2,760	3,003	1,982	1,251	715	756	813	1,302	3,380
W	2,054	2,179	3,203	3,401	3,337	3,034	2,497	1,586	1,820	1,745	2,928	4,221
All	2,127	1,893	1,848	1,983	2,116	1,589	1,265	924	991	1,219	1,983	3,504

A1.12.4.5 San Joaquin River at Jersey Point (QWEST)

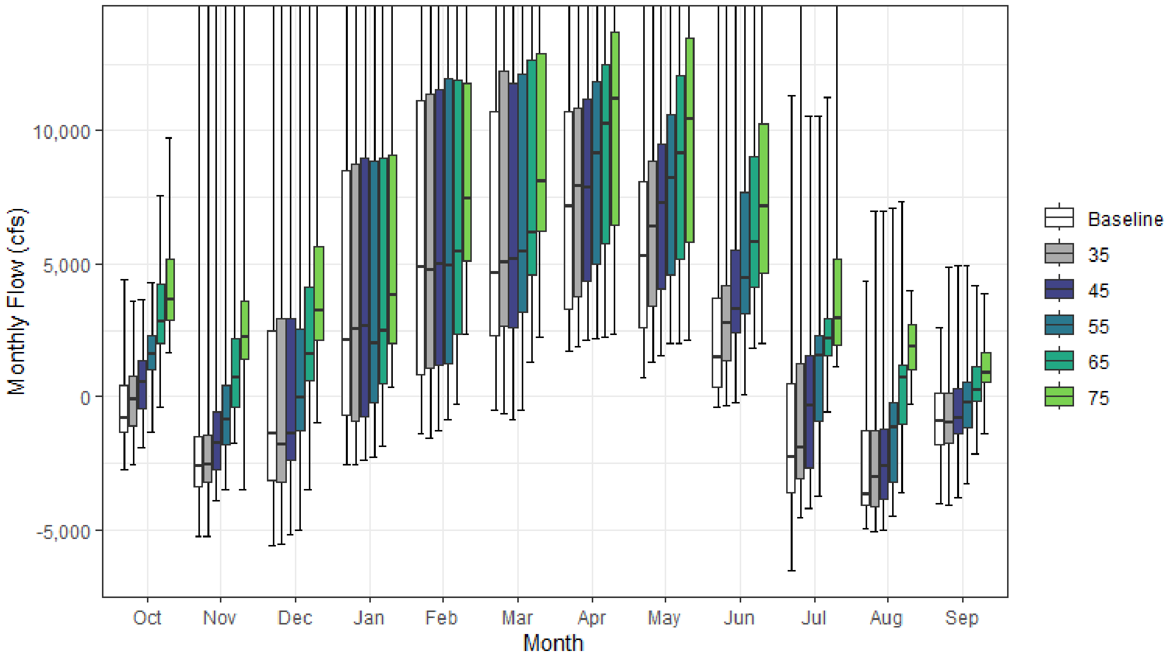

Figure A1-53. San Joaquin River at Jersey Point (QWEST) Monthly Boxplot

Table A1-112. Cumulative Distribution of Monthly Flow (cfs)—San Joaquin River at Jersey Point (QWEST)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	-2,709	-5,235	-5,567	-2,536	-1,408	-498	1,709	721	-403	-6,512	-4,970	-4,025	-799
10%	-1,753	-3,986	-3,915	-1,602	-619	580	2,385	1,588	-87	-4,181	-4,410	-3,464	-434
25%	-1,346	-3,345	-3,121	-704	818	2,296	3,321	2,614	348	-3,633	-4,060	-1,823	39
50%	-780	-2,592	-1,390	2,141	4,894	4,630	7,167	5,287	1,457	-2,246	-3,651	-944	1,035
75%	455	-1,478	2,468	8,470	11,144	10,697	10,715	8,092	3,709	503	-1,260	144	3,279
90%	1,143	78	8,727	15,648	20,939	18,873	16,195	13,507	9,473	1,790	890	561	5,489
100%	4,396	18,013	29,038	75,680	45,117	64,775	37,842	27,723	27,285	11,276	4,319	2,609	16,191
Mean	-416	-1,975	1,447	5,621	7,827	8,054	8,516	6,584	3,206	-1,373	-2,514	-1,084	2,024
35													
0%	-2,526	-5,228	-5,559	-2,535	-1,546	-637	1,870	1,318	-315	-4,537	-5,054	-4,066	-639
10%	-1,527	-3,859	-4,185	-1,569	-574	317	2,397	1,899	101	-3,755	-4,513	-2,476	59
25%	-1,109	-3,186	-3,182	-944	1,056	2,640	3,779	3,421	1,352	-3,109	-4,157	-1,753	302
50%	-88	-2,541	-1,808	2,536	4,752	5,033	7,937	6,401	2,760	-1,883	-3,044	-979	1,183
75%	791	-1,459	2,936	8,752	11,351	12,247	10,829	8,860	4,159	1,222	-1,273	113	3,272
90%	1,875	179	9,039	15,559	20,626	18,767	16,529	13,414	9,331	1,761	-203	845	5,461
100%	3,587	17,731	29,091	75,676	43,642	62,822	37,839	27,716	27,326	14,794	6,956	4,897	16,849
Mean	-10	-1,876	1,313	5,773	7,833	8,172	8,860	7,296	3,851	-740	-2,517	-881	2,217
45													
0%	-1,912	-3,902	-5,185	-2,401	-1,262	-833	2,127	1,541	-235	-4,205	-5,028	-3,787	-493
10%	-1,242	-3,258	-3,239	-1,658	-338	1,009	2,785	2,353	1,083	-3,179	-4,387	-1,952	233
25%	-471	-2,737	-2,398	-740	1,165	2,614	4,354	4,041	2,443	-2,647	-3,830	-1,368	756
50%	519	-1,764	-1,357	2,648	4,974	5,183	7,865	7,256	3,309	-354	-2,615	-813	1,503
75%	1,365	-539	2,960	8,963	11,556	11,755	11,199	9,516	5,506	1,513	-1,210	311	3,605
90%	1,739	248	9,179	15,581	20,540	18,595	17,113	13,639	9,340	2,145	196	1,182	5,695
100%	3,651	17,677	28,275	75,669	43,333	64,788	37,836	28,045	27,305	10,532	7,000	4,939	16,785
Mean	467	-1,268	1,615	5,719	8,056	8,325	9,242	7,917	4,750	-188	-2,227	-521	2,507
55													
0%	-1,330	-3,507	-5,032	-2,250	-834	-523	2,211	1,982	85	-3,732	-4,460	-3,264	19
10%	-416	-2,399	-2,143	-1,552	-31	1,890	3,478	3,006	2,157	-2,860	-3,808	-1,751	788
25%	999	-1,797	-1,282	-211	1,243	3,158	4,998	4,590	3,130	-897	-3,184	-1,131	1,252
50%	1,619	-840	-21	2,023	4,916	5,432	9,145	8,233	4,476	1,562	-1,180	-199	2,114
75%	2,272	413	2,537	8,874	11,967	12,152	11,814	10,631	7,675	2,295	-227	519	4,072
90%	3,131	1,471	9,228	15,771	20,684	18,569	17,045	13,851	10,812	3,124	1,612	1,680	6,196
100%	4,261	17,840	29,063	75,641	43,374	64,587	37,880	28,119	27,237	10,545	7,103	4,957	16,726
Mean	1,544	-379	2,371	5,849	8,174	8,759	9,853	8,618	5,896	1,029	-1,332	-133	3,015
65													
0%	-369	-1,707	-3,479	-1,867	-285	1,316	2,243	2,025	1,817	-539	-3,592	-2,154	911
10%	1,040	-915	-110	-973	1,681	3,065	4,206	3,337	3,004	1,217	-2,629	-447	1,492
25%	1,987	-417	602	466	2,331	4,562	5,736	5,160	4,091	1,548	-1,017	-163	1,897
50%	2,800	738	1,591	2,482	5,469	6,167	10,249	9,145	5,819	2,175	722	246	3,262
75%	4,212	2,204	4,109	8,990	11,895	12,668	12,482	12,071	9,048	2,934	1,161	1,101	5,013
90%	4,989	3,708	9,411	15,574	21,564	18,624	17,752	16,034	12,871	4,741	1,685	2,417	6,862
100%	7,586	21,065	31,572	75,613	43,177	66,006	38,847	30,342	27,411	11,243	7,347	4,143	17,905
Mean	2,940	1,259	3,796	6,190	8,834	9,555	10,635	9,605	7,029	2,650	160	529	3,798
75													
0%	1,635	-3,517	-1,004	390	2,379	2,246	2,353	2,139	2,014	1,120	-272	-1,403	1,468
10%	2,285	778	1,435	1,408	3,535	4,165	4,691	3,723	3,108	1,493	607	183	2,205
25%	2,889	1,427	2,138	1,978	5,124	6,199	6,467	5,779	4,623	1,948	1,024	553	2,748
50%	3,643	2,252	3,231	3,841	7,432	8,077	11,196	10,419	7,167	2,940	1,918	895	4,086
75%	5,170	3,586	5,617	9,055	11,795	12,865	13,698	13,496	10,235	5,141	2,682	1,644	6,056
90%	5,819	5,863	9,445	15,516	20,355	18,789	18,629	18,610	14,193	7,611	3,089	2,440	7,712
100%	9,730	17,767	29,162	75,176	42,837	62,490	36,182	29,206	27,331	14,741	3,989	3,882	16,747
Mean	3,992	3,025	5,012	7,252	10,063	10,715	11,399	10,549	8,001	3,907	1,848	1,102	4,624

Table A1-113. Water Year Average of Monthly Flows (cfs)—San Joaquin River at Jersey Point (QWEST)

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	411	-1,346	-1,213	284	871	992	2,437	1,658	1,645	437	92	114
D	-522	-2,423	-1,436	-506	1,911	3,041	3,941	2,981	412	-3,599	-3,311	-1,718
BN	-499	-2,405	-1,159	1,761	6,136	4,519	7,808	5,510	1,175	-3,193	-4,090	-3,010
AN	-675	-1,596	337	8,412	10,745	10,330	9,443	8,548	2,683	-2,112	-4,032	-575
W	-618	-1,877	7,091	14,222	15,765	16,769	15,238	11,738	7,596	747	-1,706	-299
All	-416	-1,975	1,447	5,621	7,827	8,054	8,516	6,584	3,206	-1,373	-2,514	-1,084
35												
C	869	-1,484	-1,535	304	636	734	2,478	2,304	2,188	868	-801	300
D	-117	-2,319	-1,734	-168	2,121	3,450	4,617	3,923	1,791	-959	-2,631	-1,874
BN	-61	-2,265	-1,253	1,939	6,312	4,785	8,369	6,638	1,918	-3,130	-3,962	-2,261
AN	-158	-1,588	518	8,603	10,960	10,785	9,508	9,242	2,971	-2,177	-4,076	-703
W	-306	-1,641	7,024	14,273	15,554	16,634	15,483	12,067	7,839	628	-1,804	-6
All	-10	-1,876	1,313	5,773	7,833	8,172	8,860	7,296	3,851	-740	-2,517	-881
45												
C	805	-1,367	-816	244	1,457	1,068	2,786	2,792	2,503	1,126	-507	519
D	422	-1,410	-1,255	-445	2,273	3,714	5,186	4,691	3,182	101	-2,020	-1,104
BN	670	-1,772	-894	1,864	6,408	4,997	8,865	7,423	3,498	-1,735	-3,369	-1,785
AN	268	-871	733	8,774	11,231	10,817	9,702	9,925	3,750	-2,054	-4,160	-380
W	283	-974	6,970	14,307	15,567	16,624	15,774	12,522	8,317	630	-1,781	67
All	467	-1,268	1,615	5,719	8,056	8,325	9,242	7,917	4,750	-188	-2,227	-521
55												
C	1,806	-602	185	131	1,258	2,010	3,342	3,260	2,975	1,497	778	436
D	1,607	-371	-261	-3	2,529	4,189	5,819	5,483	3,923	1,536	-841	-673
BN	1,725	-961	-88	1,935	6,767	5,364	9,569	8,278	5,611	703	-2,105	-1,452
AN	1,457	-180	1,635	8,942	11,297	11,251	10,837	10,795	5,588	-197	-2,699	1,210
W	1,284	1	7,325	14,353	15,627	16,796	16,118	13,114	9,245	1,122	-1,775	191
All	1,544	-379	2,371	5,849	8,174	8,759	9,853	8,618	5,896	1,029	-1,332	-133
65												
C	2,731	257	1,473	548	2,474	3,235	3,814	3,630	3,257	1,457	1,168	427
D	2,781	1,126	1,326	536	3,772	5,340	6,645	6,207	4,627	1,951	571	110
BN	2,472	789	1,654	2,290	7,271	6,239	10,515	9,198	6,656	2,806	581	-124
AN	3,473	1,558	3,839	9,079	11,259	11,647	11,793	11,578	7,758	3,243	611	2,465
W	3,227	2,052	8,176	14,581	15,946	17,219	16,859	14,755	10,765	3,465	-1,137	464
All	2,940	1,259	3,796	6,190	8,834	9,555	10,635	9,605	7,029	2,650	160	529
75												
C	3,362	1,638	2,386	2,087	4,091	4,391	4,289	4,006	3,568	1,533	1,246	909
D	3,717	2,941	3,478	2,406	5,809	6,847	7,456	6,840	5,177	2,160	1,302	686
BN	3,649	2,407	3,396	3,699	8,828	8,230	11,406	9,882	7,367	2,955	1,755	687
AN	4,353	4,008	5,234	9,724	12,009	12,574	12,790	12,449	9,130	4,364	2,754	2,258
W	4,588	3,784	8,456	14,750	16,369	17,715	17,566	16,428	12,395	6,869	2,247	1,274
All	3,992	3,025	5,012	7,252	10,063	10,715	11,399	10,549	8,001	3,907	1,848	1,102

A1.12.4.6 Old and Middle Rivers

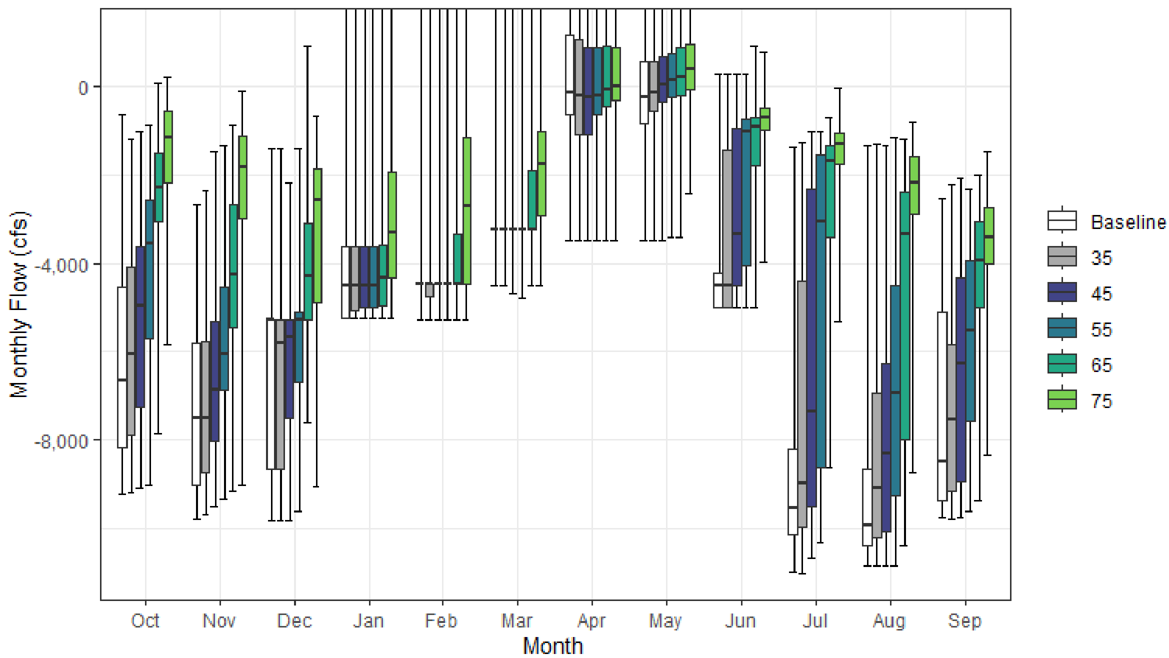

Figure A1-54. Old and Middle Rivers Monthly Boxplot

Table A1-114. Cumulative Distribution of Monthly Flow (cfs)—Old and Middle Rivers

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	-9,221	-9,776	-9,819	-5,242	-5,268	-4,516	-3,500	-3,500	-5,000	-10,990	-10,847	-9,750	-4,596
10%	-8,493	-9,294	-9,493	-5,242	-5,000	-3,500	-2,743	-1,944	-5,000	-10,470	-10,533	-9,645	-4,291
25%	-8,158	-9,012	-8,675	-5,241	-4,483	-3,258	-627	-862	-5,000	-10,120	-10,397	-9,356	-4,179
50%	-6,672	-7,486	-5,300	-4,516	-4,464	-3,258	-161	-255	-4,500	-9,523	-9,934	-8,477	-3,846
75%	-4,559	-5,814	-5,290	-3,645	-4,464	-3,258	1,150	555	-4,225	-8,193	-8,650	-5,102	-3,460
90%	-3,211	-3,713	-4,425	-3,349	-3,668	-2,188	1,701	1,447	-1,588	-2,706	-4,526	-2,862	-2,264
100%	-650	-2,687	-1,430	19,429	6,048	17,668	8,057	4,018	259	-1,380	-1,361	-2,528	280
Mean	-6,221	-7,124	-6,459	-4,058	-4,149	-2,839	-11	-220	-4,165	-8,245	-8,664	-7,282	-3,595
35													
0%	-9,184	-9,680	-9,815	-5,242	-5,268	-4,516	-3,500	-3,500	-5,000	-11,004	-10,847	-9,787	-4,595
10%	-8,486	-9,246	-9,557	-5,242	-5,000	-3,686	-3,407	-1,948	-5,000	-10,262	-10,532	-9,528	-4,245
25%	-7,901	-8,722	-8,661	-5,060	-4,748	-3,258	-1,115	-562	-5,000	-9,963	-10,199	-9,153	-4,122
50%	-6,067	-7,497	-5,807	-4,516	-4,464	-3,258	-213	-152	-4,500	-8,967	-9,087	-7,529	-3,599
75%	-4,100	-5,761	-5,290	-3,645	-4,464	-3,258	1,039	555	-1,466	-4,397	-6,949	-5,859	-3,021
90%	-2,687	-3,633	-4,991	-3,074	-4,028	-2,602	1,636	1,449	-944	-1,473	-4,916	-2,837	-2,268
100%	-1,212	-2,369	-1,421	19,430	4,435	15,831	8,035	3,811	259	-1,286	-1,318	-2,208	64
Mean	-5,785	-7,047	-6,570	-3,988	-4,239	-2,960	-224	-186	-3,673	-7,220	-8,406	-7,013	-3,465
45													
0%	-9,079	-9,509	-9,813	-5,242	-5,268	-4,674	-3,500	-3,500	-5,000	-10,655	-10,847	-9,749	-4,567
10%	-8,371	-8,956	-9,049	-5,242	-5,000	-3,500	-2,985	-1,891	-5,000	-10,190	-10,457	-9,331	-4,128
25%	-7,258	-8,024	-7,497	-5,000	-4,483	-3,258	-1,082	-362	-4,500	-9,505	-10,065	-8,933	-3,925
50%	-4,980	-6,880	-5,687	-4,516	-4,464	-3,258	-244	35	-3,359	-7,348	-8,308	-6,274	-3,349
75%	-3,638	-5,308	-5,290	-3,645	-4,464	-3,258	887	647	-955	-2,342	-6,255	-4,334	-2,690
90%	-2,588	-3,415	-4,373	-3,556	-3,085	-2,310	1,488	1,447	-715	-1,451	-4,829	-2,820	-2,034
100%	-1,040	-1,471	-2,179	19,429	5,957	17,680	8,168	4,016	259	-1,029	-1,346	-2,098	282
Mean	-5,326	-6,502	-6,269	-4,047	-4,075	-2,933	-236	-57	-2,976	-6,292	-7,932	-6,365	-3,205
55													
0%	-9,026	-9,337	-9,592	-5,242	-5,268	-4,790	-3,492	-3,430	-5,000	-10,318	-10,846	-9,623	-4,239
10%	-7,892	-8,028	-7,922	-5,242	-5,000	-3,413	-2,643	-1,715	-4,801	-10,000	-10,430	-9,111	-3,925
25%	-5,701	-6,883	-6,692	-5,000	-4,483	-3,258	-642	-255	-4,036	-8,615	-9,246	-7,576	-3,451
50%	-3,566	-6,069	-5,290	-4,516	-4,464	-3,258	-207	149	-1,039	-3,080	-6,949	-5,518	-2,642
75%	-2,564	-4,545	-5,108	-3,645	-4,463	-3,241	887	721	-763	-1,539	-4,525	-3,935	-2,227
90%	-1,789	-2,822	-3,419	-3,115	-3,011	-1,791	1,485	1,455	-496	-1,301	-2,769	-2,787	-1,614
100%	-883	-1,348	-1,421	19,430	4,616	17,491	8,034	4,005	259	-1,019	-1,179	-2,334	188
Mean	-4,149	-5,667	-5,589	-3,969	-4,086	-2,776	-137	62	-2,180	-4,701	-6,717	-5,624	-2,750
65													
0%	-7,854	-9,136	-7,612	-5,242	-5,268	-4,516	-3,492	-3,430	-5,000	-8,610	-10,387	-9,368	-3,456
10%	-6,582	-6,130	-6,161	-5,224	-4,558	-3,258	-2,032	-653	-2,894	-6,743	-9,440	-7,932	-3,123
25%	-3,056	-5,474	-5,290	-4,984	-4,464	-3,258	-471	-205	-1,788	-3,429	-8,004	-4,999	-2,493
50%	-2,301	-4,262	-4,281	-4,334	-4,464	-3,258	-83	209	-919	-1,688	-3,349	-3,943	-1,908
75%	-1,520	-2,668	-3,108	-3,612	-3,333	-1,924	892	879	-705	-1,338	-2,413	-3,055	-1,587
90%	-707	-1,696	-2,350	-2,438	-1,558	-1,112	1,457	1,537	-281	-1,115	-1,921	-2,660	-1,319
100%	79	-892	892	19,429	7,191	18,826	9,044	5,414	907	-713	-1,193	-2,027	1,064
Mean	-2,682	-4,084	-4,202	-3,744	-3,641	-2,366	26	321	-1,321	-2,725	-4,875	-4,496	-2,038
75													
0%	-5,836	-9,000	-9,055	-5,242	-5,268	-4,516	-3,483	-2,422	-3,973	-5,307	-8,714	-8,348	-2,684
10%	-3,723	-4,095	-5,290	-4,516	-4,476	-3,258	-650	-300	-1,228	-2,461	-5,470	-5,105	-1,984
25%	-2,182	-3,013	-4,882	-4,334	-4,464	-2,934	-326	-63	-1,009	-1,751	-2,895	-4,028	-1,450
50%	-1,176	-1,845	-2,568	-3,330	-2,714	-1,782	10	390	-722	-1,320	-2,205	-3,404	-1,227
75%	-588	-1,141	-1,886	-1,959	-1,160	-1,027	884	950	-498	-1,076	-1,573	-2,760	-1,056
90%	-138	-736	-1,354	-1,472	-664	-616	1,457	1,428	109	-726	-1,199	-2,310	-942
100%	211	-121	-667	19,429	4,435	15,525	6,717	3,727	781	-50	-804	-1,475	105
Mean	-1,593	-2,269	-3,037	-2,803	-2,652	-1,659	129	482	-752	-1,531	-2,683	-3,646	-1,326

Table A1-115. Water Year Average of Monthly Flows (cfs)—Old and Middle Rivers

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	-4,644	-5,072	-5,603	-3,620	-4,116	-3,210	-466	-723	-2,141	-3,024	-3,553	-3,107
D	-5,932	-6,866	-7,082	-4,870	-4,720	-3,247	-294	-495	-4,657	-9,260	-8,766	-5,916
BN	-6,471	-7,189	-7,082	-4,658	-4,643	-3,287	533	359	-4,853	-10,053	-10,164	-8,522
AN	-6,296	-7,292	-7,083	-4,181	-4,179	-3,258	427	983	-4,875	-9,663	-10,390	-9,196
W	-7,099	-8,305	-5,805	-3,267	-3,425	-1,883	-74	-612	-4,158	-8,576	-9,676	-8,970
All	-6,221	-7,124	-6,459	-4,058	-4,149	-2,839	-11	-220	-4,165	-8,245	-8,664	-7,282
35												
C	-4,130	-5,242	-6,010	-3,614	-4,489	-3,692	-719	-583	-1,623	-2,339	-4,552	-2,900
D	-5,488	-6,877	-7,310	-4,634	-4,758	-3,286	-438	-450	-3,060	-5,527	-7,333	-6,235
BN	-5,967	-7,009	-6,992	-4,585	-4,623	-3,287	204	373	-4,641	-9,609	-9,703	-7,195
AN	-5,740	-7,266	-7,174	-4,181	-4,133	-3,205	-110	991	-4,860	-9,623	-10,294	-8,990
W	-6,804	-8,070	-5,800	-3,260	-3,528	-2,020	-109	-620	-4,136	-8,622	-9,679	-8,843
All	-5,785	-7,047	-6,570	-3,988	-4,239	-2,960	-224	-186	-3,673	-7,220	-8,406	-7,013
45												
C	-4,245	-5,075	-5,262	-3,586	-3,870	-3,606	-689	-393	-1,283	-1,973	-4,146	-2,663
D	-4,929	-6,101	-6,863	-4,901	-4,727	-3,261	-424	-211	-1,555	-4,022	-6,339	-5,068
BN	-5,211	-6,443	-6,689	-4,642	-4,577	-3,287	196	448	-3,427	-7,554	-8,765	-6,326
AN	-5,410	-6,450	-6,895	-4,142	-3,869	-3,186	-355	995	-4,707	-9,182	-10,204	-8,380
W	-6,239	-7,626	-5,841	-3,251	-3,479	-2,003	-62	-518	-3,933	-8,305	-9,676	-8,482
All	-5,326	-6,502	-6,269	-4,047	-4,075	-2,933	-236	-57	-2,976	-6,292	-7,932	-6,365
55												
C	-3,091	-4,262	-4,241	-3,697	-4,123	-2,947	-464	-248	-964	-1,460	-2,533	-2,720
D	-3,632	-5,137	-5,932	-4,520	-4,650	-3,180	-379	17	-1,100	-2,025	-4,665	-4,493
BN	-4,021	-5,700	-5,996	-4,622	-4,429	-3,263	220	561	-1,643	-4,196	-6,874	-5,893
AN	-4,189	-5,809	-6,289	-4,097	-3,870	-3,036	124	1,049	-2,992	-6,632	-8,466	-5,477
W	-5,164	-6,738	-5,508	-3,249	-3,529	-1,974	-110	-462	-3,619	-7,923	-9,652	-7,928
All	-4,149	-5,667	-5,589	-3,969	-4,086	-2,776	-137	62	-2,180	-4,701	-6,717	-5,624
65												
C	-2,117	-3,420	-3,046	-3,492	-3,120	-2,056	-343	-231	-960	-1,550	-2,045	-2,771
D	-2,370	-3,724	-4,511	-4,118	-3,831	-2,533	-162	155	-745	-1,570	-3,001	-3,645
BN	-3,210	-3,936	-4,287	-4,412	-4,090	-2,902	386	686	-519	-1,360	-3,316	-4,241
AN	-1,891	-4,128	-3,972	-4,145	-4,086	-3,031	272	1,007	-1,213	-2,120	-4,301	-3,228
W	-3,237	-4,780	-4,637	-3,020	-3,313	-1,795	39	225	-2,479	-5,307	-8,988	-6,759
All	-2,682	-4,084	-4,202	-3,744	-3,641	-2,366	26	321	-1,321	-2,725	-4,875	-4,496
75												
C	-1,548	-1,936	-2,038	-1,926	-1,810	-1,227	-234	-205	-958	-1,579	-1,955	-2,297
D	-1,420	-1,865	-2,491	-2,417	-2,177	-1,566	27	190	-700	-1,611	-2,355	-3,200
BN	-1,904	-2,309	-2,597	-3,279	-2,901	-1,528	478	554	-526	-1,490	-2,106	-3,474
AN	-1,069	-1,739	-2,678	-3,690	-3,517	-2,694	446	918	-554	-1,172	-1,734	-3,257
W	-1,782	-2,951	-4,403	-2,893	-2,937	-1,598	53	839	-903	-1,624	-4,077	-4,975
All	-1,593	-2,269	-3,037	-2,803	-2,652	-1,659	129	482	-752	-1,531	-2,683	-3,646

A1.12.5 Interbasin Diversions

Interbasin diversions are diversions that divert water from one basin into a neighboring basin. Some interbasin diversions presented below move water from one fork to another within the same major tributary, others move water from one major tributary to another. Results for all major interbasin diversions are presented in this section.

A12.1.5.1 Bowman-Spaulding Conduit

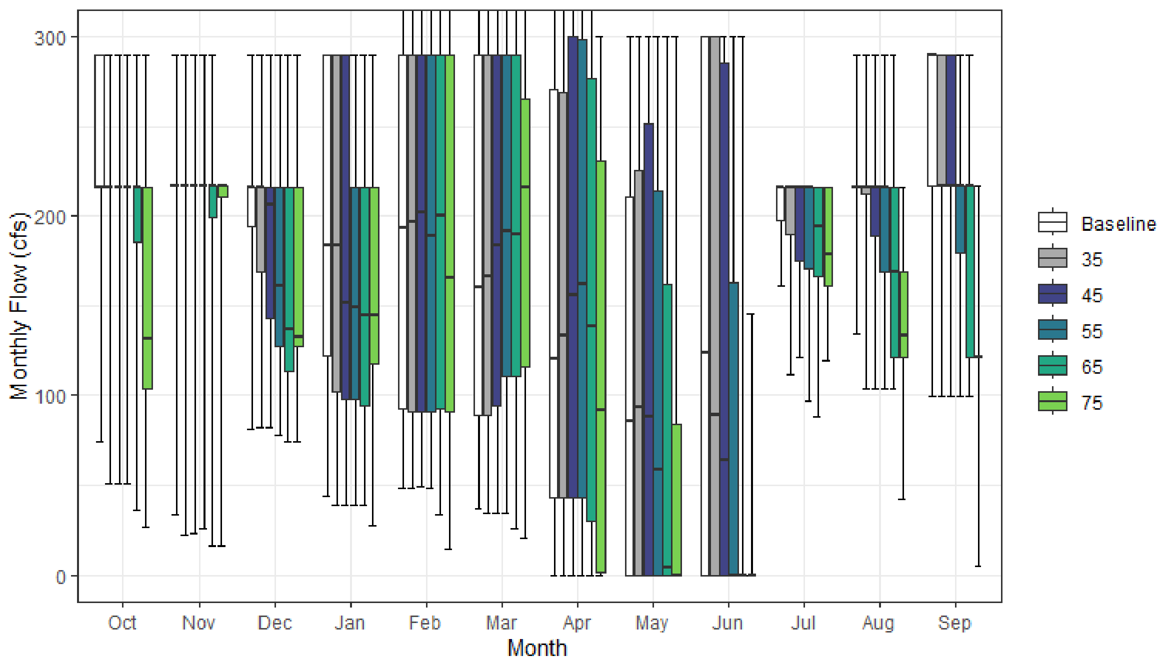

Figure A1-55. Bowman-Spaulding Conduit Monthly Boxplot

Table A1-116. Cumulative Distribution of Monthly Flow (cfs)—Bowman-Spaulding Conduit

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	74	33	81	44	48	37	0	0	0	161	134	100	72
10%	151	217	127	72	72	47	0	0	0	176	166	123	89
25%	216	217	194	122	93	89	43	0	0	198	216	217	101
50%	216	217	216	184	193	161	120	86	124	216	216	290	134
75%	290	217	216	290	290	290	271	211	300	216	216	290	177
90%	290	217	290	290	314	290	325	300	300	216	290	290	194
100%	290	290	290	290	325	325	325	300	300	216	290	290	207
Mean	231	219	213	190	190	177	145	117	144	204	222	238	138
35													
0%	51	22	82	39	48	34	0	0	0	111	104	100	67
10%	121	198	127	63	73	47	0	0	0	171	134	100	84
25%	216	217	169	102	91	89	43	0	0	190	212	217	96
50%	216	217	216	183	197	166	134	94	89	216	216	217	127
75%	216	217	216	290	290	290	269	226	300	216	216	290	175
90%	290	217	290	290	313	291	325	300	300	216	290	290	191
100%	290	290	290	290	325	325	325	300	300	216	290	290	208
Mean	215	215	201	181	190	176	147	120	134	201	217	221	134
45													
0%	51	23	82	39	50	34	0	0	0	121	104	100	65
10%	104	189	115	62	73	47	0	0	0	165	134	100	79
25%	216	217	143	98	91	95	43	0	0	175	189	217	91
50%	216	217	206	152	202	184	156	88	64	216	216	217	121
75%	216	217	216	290	290	290	300	251	285	216	216	290	170
90%	290	217	290	290	313	292	300	300	300	216	290	290	193
100%	290	290	290	290	325	325	325	300	300	216	290	290	208
Mean	208	211	190	174	189	177	155	121	119	198	214	217	131
55													
0%	51	26	78	39	48	34	0	0	0	97	104	100	64
10%	83	182	96	64	74	50	0	0	0	139	104	100	74
25%	216	217	127	98	91	111	43	0	0	171	169	180	87
50%	216	217	161	149	189	192	162	59	0	216	216	217	112
75%	216	217	216	216	290	290	299	214	163	216	216	217	157
90%	290	217	216	290	308	290	300	300	300	216	216	290	184
100%	290	290	290	290	325	325	325	300	300	216	290	290	208
Mean	205	209	170	168	188	180	157	104	79	193	195	200	124
65													
0%	36	16	74	39	34	26	0	0	0	88	104	100	62
10%	75	160	91	65	82	63	0	0	0	135	104	100	71
25%	185	199	113	95	93	111	30	0	0	167	121	121	80
50%	216	217	137	145	201	189	138	4	0	194	169	217	104
75%	216	217	216	216	290	290	277	162	0	216	216	217	142
90%	216	217	216	290	308	290	300	283	121	216	216	217	165
100%	290	290	290	290	325	325	325	300	300	216	290	290	194
Mean	187	202	159	161	188	186	148	80	32	185	171	179	113
75													
0%	26	16	74	27	15	20	0	0	0	120	42	5	47
10%	73	191	109	83	88	111	0	0	0	134	104	100	71
25%	104	211	127	118	91	116	1	0	0	162	121	121	76
50%	132	217	132	145	166	216	92	0	0	179	133	121	93
75%	216	217	216	216	290	266	231	84	0	216	169	121	125
90%	216	217	216	290	292	290	299	192	0	216	210	210	141
100%	290	217	290	290	325	325	300	300	146	216	216	217	165
Mean	144	207	155	159	179	190	123	52	2	181	143	130	101

Table A1-117. Water Year Average of Monthly Flows (cfs)—Bowman-Spaulding Conduit

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	216	222	187	121	98	97	11	0	3	200	173	154
D	219	218	198	146	123	110	54	28	47	206	197	202
BN	235	217	202	170	151	130	103	93	157	203	218	263
AN	219	203	215	205	231	202	200	189	204	195	235	272
W	251	227	243	265	297	288	286	229	260	210	263	281
All	231	219	213	190	190	177	145	117	144	204	222	238
35												
C	198	213	181	109	98	93	11	0	1	198	154	142
D	198	208	191	138	127	114	63	24	38	199	191	185
BN	234	217	181	149	150	131	103	96	134	209	218	224
AN	202	198	203	198	226	196	202	191	177	182	229	253
W	232	227	232	265	294	285	285	239	258	208	264	273
All	215	215	201	181	190	176	147	120	134	201	217	221
45												
C	182	198	171	103	99	94	11	0	0	186	151	142
D	191	208	172	131	126	115	63	25	22	205	188	179
BN	221	215	174	143	149	136	127	88	98	198	211	224
AN	199	198	193	185	228	196	215	177	163	187	229	247
W	230	222	224	258	293	286	293	252	249	204	263	267
All	208	211	190	174	189	177	155	121	119	198	214	217
55												
C	185	193	145	109	99	103	9	0	0	159	134	129
D	187	207	150	122	121	112	63	12	4	201	167	171
BN	220	212	148	132	147	148	134	63	28	194	202	205
AN	197	198	162	182	231	195	221	144	94	200	216	217
W	223	221	214	250	291	287	292	236	204	202	236	251
All	205	209	170	168	188	180	157	104	79	193	195	200
65												
C	165	204	123	107	102	98	7	0	0	157	113	115
D	175	199	140	113	123	113	55	4	0	188	136	141
BN	198	196	139	136	144	163	126	34	0	186	177	194
AN	171	189	154	166	235	221	201	95	2	193	185	214
W	207	212	207	241	290	286	282	201	104	194	218	219
All	187	202	159	161	188	186	148	80	32	185	171	179
75												
C	135	209	124	130	89	115	1	0	0	166	108	102
D	137	203	132	124	113	127	31	0	0	193	123	117
BN	156	211	142	129	133	169	99	8	0	189	141	126
AN	130	198	153	140	219	229	171	55	0	187	147	124
W	153	211	199	227	289	273	250	143	8	174	177	161
All	144	207	155	159	179	190	123	52	2	181	143	130

A12.1.5.2 Drum Canal

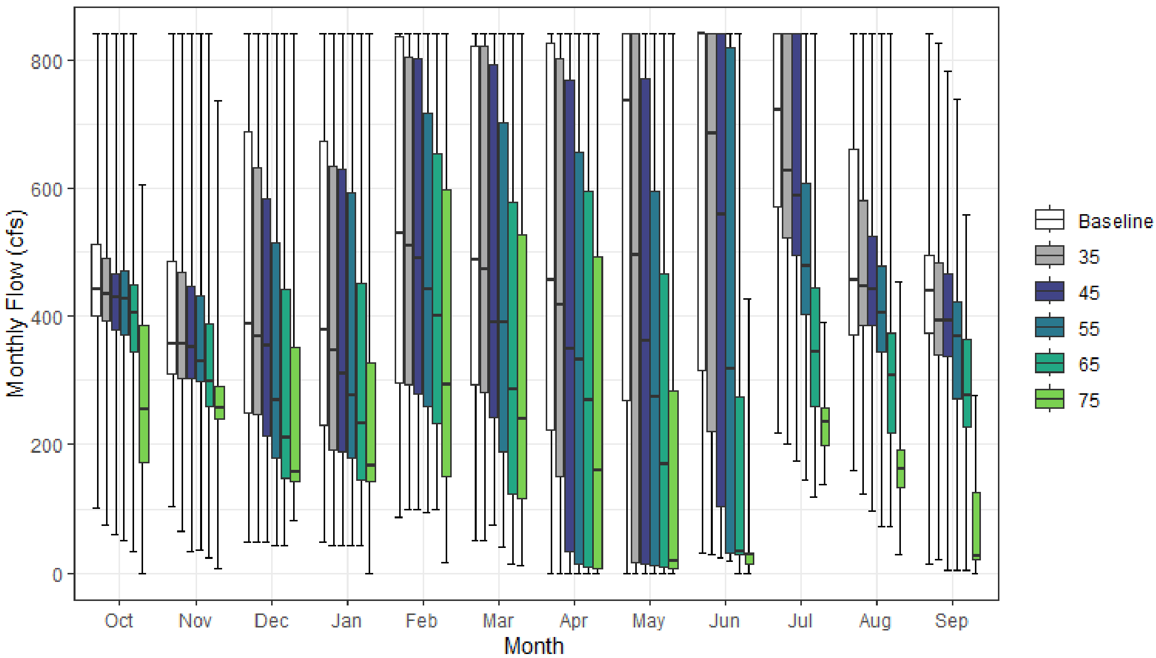

Figure A1-56. Drum Canal Monthly Boxplot

Table A1-118. Cumulative Distribution of Monthly Flow (cfs)—Drum Canal

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	101	103	49	48	87	51	0	0	31	219	160	15	83
10%	348	286	187	125	181	188	92	8	68	341	273	131	183
25%	401	310	250	230	296	294	222	270	314	570	371	374	264
50%	441	357	387	378	530	488	457	737	840	721	456	440	353
75%	512	484	688	672	834	821	825	840	840	840	660	496	480
90%	592	642	840	840	840	840	840	840	840	840	832	559	530
100%	840	840	840	840	840	840	840	840	840	840	840	840	575
Mean	456	417	454	447	527	516	482	555	597	665	503	407	364
35													
0%	75	65	49	44	98	51	0	0	28	200	124	21	84
10%	347	270	162	100	178	176	12	6	34	273	208	257	164
25%	393	304	248	190	292	281	149	16	221	522	385	341	229
50%	435	357	369	348	508	473	416	496	685	625	447	393	342
75%	490	468	631	634	803	821	802	840	840	840	581	483	474
90%	585	626	840	840	840	840	840	840	840	840	754	549	520
100%	840	840	840	840	840	840	840	840	840	840	840	827	563
Mean	446	406	437	430	517	501	441	462	561	623	482	396	344
45													
0%	60	32	49	44	98	75	0	0	23	174	96	4	79
10%	326	270	138	96	169	136	0	4	32	257	210	254	145
25%	380	304	214	189	279	242	33	14	104	495	385	336	204
50%	430	351	355	309	490	391	349	361	559	587	442	392	307
75%	467	446	582	628	802	791	767	770	840	840	524	467	457
90%	560	603	840	840	840	840	840	840	840	840	695	533	510
100%	840	840	840	840	840	840	840	840	840	840	840	782	558
Mean	434	394	413	410	507	476	397	398	509	585	463	385	324
55													
0%													
10%	51	35	43	44	94	42	0	0	20	146	72	4	74
25%	265	246	128	84	157	122	0	1	30	216	175	181	126
50%	372	299	178	180	258	188	15	13	32	402	345	271	172
75%	428	330	269	277	442	390	333	274	318	478	406	369	258
90%	471	433	516	593	716	701	656	595	818	607	477	423	418
100%	566	528	829	840	840	840	840	840	840	833	560	510	490
Mean	840	840	840	840	840	840	840	840	840	840	840	737	546
65	423	373	365	380	483	435	368	325	394	503	403	348	290
0%	33	24	43	44	98	15	0	0	0	119	71	4	66
10%	236	218	103	80	146	92	0	1	21	194	117	44	101
25%	344	260	148	146	232	122	10	10	29	259	217	227	133
50%	405	297	212	232	401	286	270	170	34	344	308	277	206
75%	450	388	441	451	653	579	594	466	275	444	374	364	346
90%	520	472	708	840	840	798	820	722	532	529	452	388	404
100%	840	840	840	840	840	840	840	840	840	840	839	558	498
Mean	391	336	314	326	445	372	325	255	187	369	298	272	235
75													
0%	0	6	81	0	17	11	0	0	0	138	28	0	53
10%	66	225	115	97	99	93	0	0	1	167	95	18	83
25%	172	240	142	142	150	116	6	6	15	199	133	21	92
50%	255	257	158	166	294	240	160	18	28	235	162	26	126
75%	385	290	351	327	597	527	492	283	31	258	191	127	239
90%	443	361	578	566	786	699	689	512	34	268	218	229	291
100%	606	736	840	840	840	840	840	840	427	390	454	276	363
Mean	268	284	260	251	380	323	266	158	37	230	170	77	163

Table A1-119. Water Year Average of Monthly Flows (cfs)—Drum Canal

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	419	337	300	192	295	285	115	118	231	409	289	167
D	442	397	350	262	390	354	328	341	455	575	386	358
BN	433	364	345	362	423	433	397	620	642	728	519	464
AN	447	414	472	580	614	627	665	786	712	710	541	460
W	505	507	673	717	782	763	769	812	824	813	678	513
All	456	417	454	447	527	516	482	555	597	665	503	407
35												
C	415	328	291	178	285	256	46	34	185	352	263	209
D	419	383	340	250	386	339	251	186	380	496	386	355
BN	441	357	311	328	409	418	363	450	602	692	490	414
AN	437	400	449	554	579	609	626	732	687	675	519	435
W	490	497	658	710	780	759	765	789	819	798	651	498
All	446	406	437	430	517	501	441	462	561	623	482	396
45												
C	395	311	265	168	261	202	12	8	122	324	248	192
D	408	369	309	235	375	311	169	143	261	459	383	341
BN	428	348	295	304	399	385	288	316	572	601	460	409
AN	426	389	419	522	566	593	598	612	635	670	495	435
W	482	488	641	686	779	751	756	756	809	773	628	486
All	434	394	413	410	507	476	397	398	509	585	463	385
55												
C	388	290	217	157	223	154	9	7	51	263	207	160
D	394	349	274	199	332	249	125	87	136	389	335	318
BN	425	328	246	265	383	332	258	213	364	474	419	369
AN	417	373	343	482	554	549	537	446	510	604	444	379
W	466	462	595	661	764	740	735	691	739	693	532	446
All	423	373	365	380	483	435	368	325	394	503	403	348
65												
C	346	278	163	135	182	96	8	7	27	208	145	104
D	356	303	232	157	272	163	103	56	36	282	229	243
BN	399	287	203	215	347	278	222	135	109	362	322	314
AN	382	343	293	412	532	475	419	296	197	406	362	336
W	440	420	533	585	739	690	685	593	428	509	391	331
All	391	336	314	326	445	372	325	255	187	369	298	272
75												
C	236	253	132	145	100	101	2	7	27	208	103	20
D	240	264	180	144	192	120	56	9	26	234	139	41
BN	268	258	177	148	285	223	169	45	17	240	169	76
AN	244	292	253	251	463	399	327	144	21	237	194	109
W	316	328	443	452	694	622	598	424	71	232	219	122
All	268	284	260	251	380	323	266	158	37	230	170	77

A12.1.5.3 Hell Hole Tunnel

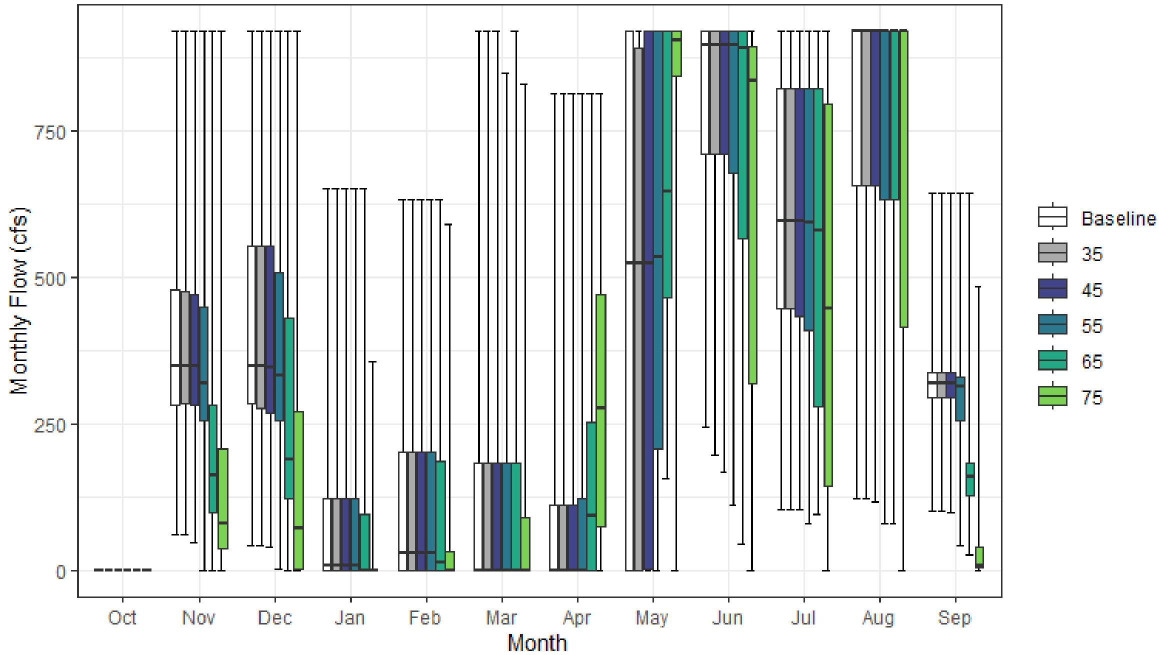

Figure A1-57. Hell Hole Tunnel Monthly Boxplot

Table A1-120. Cumulative Distribution of Monthly Flow (cfs)—Hell Hole Tunnel

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	61	41	0	0	0	0	0	244	102	123	99	53
10%	0	219	235	0	0	0	0	0	409	317	300	214	121
25%	0	282	283	0	0	0	0	0	710	446	657	296	173
50%	0	347	348	6	29	0	0	524	897	596	920	319	254
75%	0	478	552	121	201	182	111	920	920	822	920	338	332
90%	0	668	920	244	339	385	500	920	920	893	920	419	389
100%	0	920	920	650	634	920	814	920	920	920	920	643	470
Mean	0	401	447	80	115	112	116	484	788	618	766	317	257
35													
0%	0	62	40	0	0	0	0	0	197	102	123	99	53
10%	0	205	233	0	0	0	0	0	409	317	300	171	121
25%	0	283	277	0	0	0	0	0	710	446	657	296	173
50%	0	347	348	6	29	0	0	524	897	596	920	319	253
75%	0	475	552	121	201	182	111	891	920	822	920	338	331
90%	0	669	880	244	339	385	500	920	920	893	920	419	389
100%	0	920	920	650	634	920	814	920	920	920	920	643	475
Mean	0	397	441	80	115	112	116	485	787	617	767	313	256
45													
0%	0	47	40	0	0	0	0	0	168	102	117	99	53
10%	0	190	208	0	0	0	0	0	409	317	300	147	121
25%	0	280	268	0	0	0	0	1	710	433	657	296	172
50%	0	347	346	6	29	0	0	524	897	596	920	319	253
75%	0	470	552	121	201	182	111	920	920	822	920	338	331
90%	0	669	880	244	339	385	500	920	920	893	920	419	389
100%	0	920	920	650	634	920	814	920	920	920	920	643	471
Mean	0	394	439	80	115	112	116	491	786	617	766	310	256
55													
0%	0	0	2	0	0	0	0	0	111	80	80	42	56
10%	0	109	133	0	0	0	0	93	396	291	275	102	115
25%	0	254	255	0	0	0	0	208	679	409	634	256	169
50%	0	317	332	6	29	0	0	533	897	593	920	314	253
75%	0	449	508	121	201	182	121	920	920	822	920	330	329
90%	0	654	845	244	339	385	500	920	920	893	920	363	384
100%	0	920	920	650	634	849	814	920	920	920	920	643	466
Mean	0	368	409	79	114	111	121	540	776	606	755	283	252
65													
0%	0	0	0	0	0	0	0	157	44	95	80	25	60
10%	0	27	25	0	0	0	0	320	278	169	178	78	106
25%	0	97	121	0	0	0	0	466	565	279	634	126	160
50%	0	161	188	0	12	0	92	646	892	580	920	158	224
75%	0	282	430	96	185	182	253	920	920	822	920	183	303
90%	0	572	819	237	337	385	500	920	920	893	920	236	352
100%	0	920	920	650	634	920	814	920	920	920	920	643	452
Mean	0	235	304	69	106	112	169	664	739	567	737	160	234
75													
0%	0	0	0	0	0	0	0	0	0	0	0	0	68
10%	0	5	0	0	0	0	0	672	17	100	102	0	106
25%	0	37	2	0	0	0	75	843	319	143	415	4	155
50%	0	80	70	0	0	0	275	905	835	446	920	7	214
75%	0	206	270	0	31	89	469	920	893	795	920	38	260
90%	0	516	813	7	211	302	657	920	920	891	920	86	309
100%	0	920	920	356	589	831	814	920	920	920	920	484	420
Mean	0	188	216	17	51	87	292	839	623	459	690	31	212

Table A1-121. Water Year Average of Monthly Flows (cfs)—Hell Hole Tunnel

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	0	305	334	2	0	0	0	0	495	304	349	275
D	0	400	339	31	31	9	22	207	727	494	686	319
BN	0	362	381	60	68	50	0	466	841	653	868	338
AN	0	386	441	92	199	110	133	735	889	690	920	280
W	0	485	633	165	232	287	313	852	914	827	920	340
All	0	401	447	80	115	112	116	484	788	618	766	317
35												
C	0	298	327	2	0	0	0	19	492	301	355	268
D	0	393	330	31	31	9	22	209	726	494	686	312
BN	0	361	382	60	68	50	0	464	842	653	868	338
AN	0	382	428	92	199	110	133	728	889	690	920	276
W	0	482	627	165	232	287	313	849	914	827	920	339
All	0	397	441	80	115	112	116	485	787	617	767	313
45												
C	0	292	321	2	0	0	0	41	488	298	357	262
D	0	387	324	31	31	9	22	213	726	493	683	307
BN	0	362	380	60	68	50	0	464	842	653	868	338
AN	0	379	434	92	199	110	133	746	889	690	920	274
W	0	481	627	165	232	287	313	849	914	827	920	338
All	0	394	439	80	115	112	116	491	786	617	766	310
55												
C	0	253	278	2	0	0	25	185	453	266	328	218
D	0	357	290	31	31	9	26	322	706	470	652	276
BN	0	341	366	59	67	49	3	474	838	650	871	325
AN	0	352	388	92	195	110	133	741	889	690	920	249
W	0	460	604	162	230	284	312	849	914	827	920	311
All	0	368	409	79	114	111	121	540	776	606	755	283
65												
C	0	165	187	2	0	5	155	471	358	186	251	124
D	0	229	184	27	28	9	103	587	638	384	640	156
BN	0	184	236	57	61	49	57	558	807	619	857	192
AN	0	222	279	84	175	110	145	758	887	686	920	157
W	0	313	510	138	219	284	303	851	913	827	920	166
All	0	235	304	69	106	112	169	664	739	567	737	160
75												
C	0	100	94	1	28	62	377	690	165	161	173	48
D	0	178	95	9	10	16	420	851	426	209	509	25
BN	0	128	123	3	17	17	277	895	681	411	830	44
AN	0	197	150	22	80	62	153	812	815	568	920	26
W	0	277	457	39	103	206	220	886	898	789	920	21
All	0	188	216	17	51	87	292	839	623	459	690	31

A12.1.5.4 Jenkinson Lake Camino Conduit

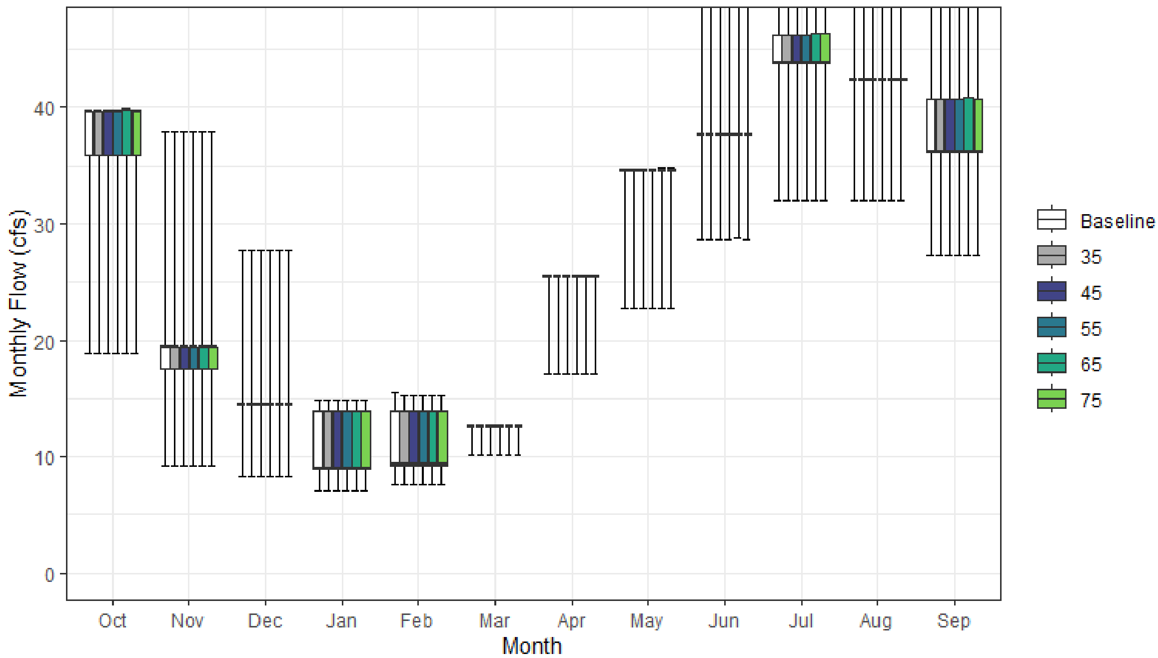

Figure A1-58. Jenkinson Lake Camino Conduit Monthly Boxplot

Table A1-122. Cumulative Distribution of Monthly Flow (cfs)—Jenkinson Lake Camino Conduit

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	19	9	8	7	8	10	17	23	29	32	32	27	16
10%	30	15	13	9	9	13	25	34	38	44	42	36	19
25%	36	18	14	9	9	13	25	35	38	44	42	36	20
50%	40	19	14	9	9	13	25	35	38	44	42	36	20
75%	40	19	14	14	14	13	25	35	38	46	42	41	21
90%	40	19	27	15	14	13	25	35	38	66	42	47	22
100%	40	38	28	15	16	13	25	35	49	67	67	57	24
Mean	37	19	16	11	11	13	25	34	38	47	43	39	20
35													
0%	19	9	8	7	8	10	17	23	29	32	32	27	16
10%	30	15	13	9	9	13	25	34	38	44	42	36	19
25%	36	18	14	9	9	13	25	35	38	44	42	36	20
50%	40	19	14	9	9	13	25	35	38	44	42	36	20
75%	40	19	14	14	14	13	25	35	38	46	42	41	21
90%	40	19	27	15	14	13	25	35	38	66	42	47	22
100%	40	38	28	15	15	13	25	35	49	67	67	57	24
Mean	37	19	16	11	11	13	25	34	38	47	43	39	20
45													
0%	19	9	8	7	8	10	17	23	29	32	32	27	16
10%	30	15	13	9	9	13	25	34	38	44	42	36	19
25%	36	18	14	9	9	13	25	35	38	44	42	36	20
50%	40	19	14	9	9	13	25	35	38	44	42	36	20
75%	40	19	14	14	14	13	25	35	38	46	42	41	21
90%	40	19	27	15	14	13	25	35	38	66	42	47	22
100%	40	38	28	15	15	13	25	35	49	67	67	57	24
Mean	37	19	16	11	11	13	25	34	38	47	43	39	20
55													
0%	19	9	8	7	8	10	17	23	29	32	32	27	16
10%	30	15	13	9	9	13	25	34	38	44	42	36	19
25%	36	18	14	9	9	13	25	35	38	44	42	36	20
50%	40	19	14	9	9	13	25	35	38	44	42	36	20
75%	40	19	14	14	14	13	25	35	38	46	42	41	21
90%	40	19	27	15	14	13	25	35	38	66	42	47	22
100%	40	38	28	15	15	13	25	35	49	67	67	57	24
Mean	37	19	16	11	11	13	25	34	38	47	43	39	20
65													
0%	19	9	8	7	8	10	17	23	29	32	32	27	16
10%	30	15	13	9	9	13	25	35	38	44	42	36	19
25%	36	18	14	9	9	13	25	35	38	44	42	36	20
50%	40	19	14	9	9	13	25	35	38	44	42	36	20
75%	40	19	14	14	14	13	25	35	38	46	42	41	21
90%	40	19	27	15	14	13	25	35	38	66	42	47	22
100%	40	38	28	15	15	13	25	35	49	67	67	57	24
Mean	37	19	16	11	11	13	25	34	38	47	43	39	20
75													
0%	19	9	8	7	8	10	17	23	29	32	32	27	16
10%	30	15	13	9	9	13	25	35	38	44	42	36	19
25%	36	18	14	9	9	13	25	35	38	44	42	36	20
50%	40	19	14	9	9	13	25	35	38	44	42	36	20
75%	40	19	14	14	14	13	25	35	38	46	42	41	21
90%	40	19	27	15	14	13	25	35	38	66	42	47	22
100%	40	38	28	15	15	13	25	35	49	67	67	57	24
Mean	37	19	16	11	11	13	25	34	38	47	43	39	20

Table A1-123. Water Year Average of Monthly Flows (cfs)—Jenkinson Lake Camino Conduit

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	35	17	14	10	10	12	24	32	38	45	42	36
D	37	18	14	9	9	13	25	34	38	49	44	39
BN	38	19	16	10	10	13	25	35	38	47	44	41
AN	36	19	15	11	11	13	25	35	38	57	44	45
W	39	19	18	12	14	13	25	35	38	44	42	38
All	37	19	16	11	11	13	25	34	38	47	43	39
35												
C	35	17	14	10	10	12	24	32	38	45	42	36
D	37	18	14	9	9	13	25	34	38	49	44	39
BN	38	19	16	10	10	13	25	35	38	47	44	41
AN	36	19	15	11	11	13	25	35	38	57	44	45
W	39	19	18	12	14	13	25	35	38	44	42	38
All	37	19	16	11	11	13	25	34	38	47	43	39
45												
C	35	17	14	10	10	12	24	32	38	45	42	36
D	37	18	14	9	9	13	25	34	38	49	44	39
BN	38	19	16	10	10	13	25	35	38	47	44	41
AN	36	19	15	11	11	13	25	35	38	57	44	45
W	39	19	18	12	14	13	25	35	38	44	42	38
All	37	19	16	11	11	13	25	34	38	47	43	39
55												
C	35	17	14	10	10	12	24	32	38	45	42	36
D	37	18	14	9	9	13	25	34	38	49	44	39
BN	38	19	16	10	10	13	25	35	38	47	44	41
AN	36	19	15	11	11	13	25	35	38	57	44	45
W	39	19	18	12	14	13	25	35	38	44	42	38
All	37	19	16	11	11	13	25	34	38	47	43	39
65												
C	35	17	14	10	10	12	24	32	38	46	42	36
D	37	18	14	9	9	13	25	34	38	49	44	39
BN	38	19	16	10	10	13	25	35	38	47	44	41
AN	36	19	15	11	11	13	25	35	38	57	44	45
W	39	20	18	12	14	13	25	35	38	44	42	38
All	37	19	16	11	11	13	25	34	38	47	43	39
75												
C	35	17	14	10	10	12	24	32	38	46	42	36
D	37	18	14	9	9	13	25	34	38	49	44	39
BN	38	19	16	10	10	13	25	35	38	47	44	41
AN	36	19	15	11	11	13	25	35	38	57	44	45
W	39	19	18	12	14	13	25	35	38	44	42	38
All	37	19	16	11	11	13	25	34	38	47	43	39

A12.1.5.5 Milton-Bowman Tunnel

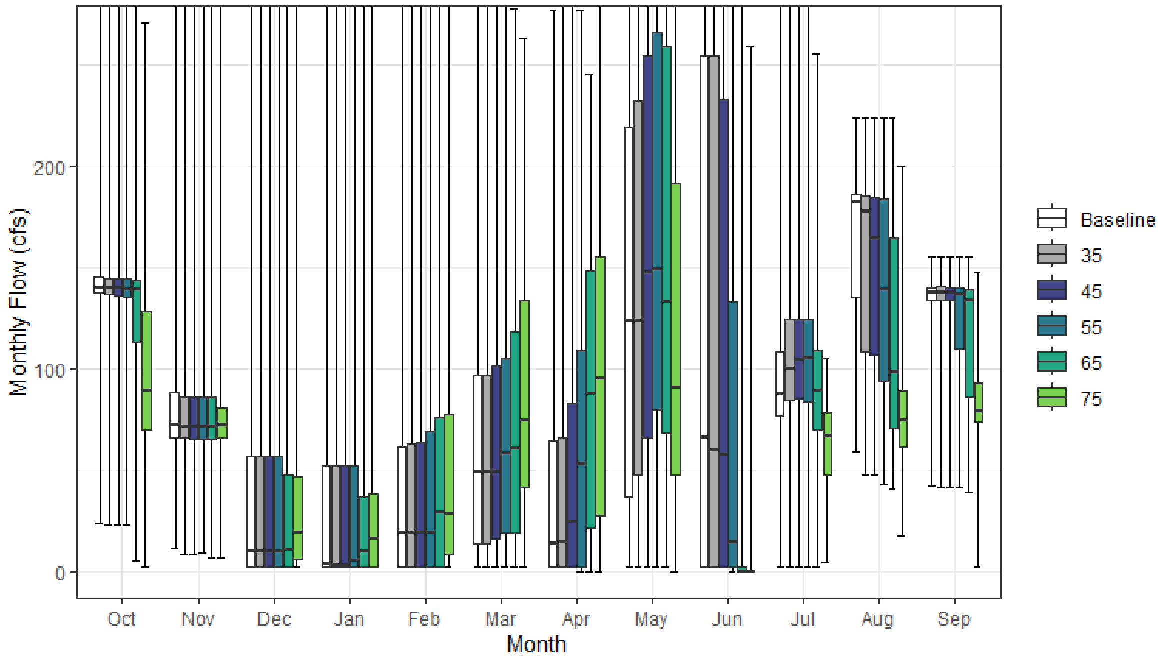

Figure A1-59. Milton-Bowman Tunnel Monthly Boxplot

Table A1-124. Cumulative Distribution of Monthly Flow (cfs)—Milton-Bowman Tunnel

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	23	11	2	2	2	2	2	2	2	2	59	42	23
10%	92	63	2	2	2	2	2	2	2	68	81	83	30
25%	137	66	2	2	2	14	2	37	2	77	136	134	42
50%	140	72	10	3	19	49	14	124	66	88	182	138	67
75%	145	88	57	52	61	97	65	219	255	109	186	140	95
90%	153	126	139	127	104	135	100	362	425	153	190	145	116
100%	372	425	425	425	425	303	277	425	425	325	224	156	135
Mean	138	91	48	42	47	62	40	148	142	103	160	128	70
35													
0%	23	8	2	2	2	2	2	2	2	2	48	42	23
10%	90	62	2	2	2	2	2	9	2	74	78	78	31
25%	137	66	2	2	2	14	2	48	2	84	108	134	42
50%	140	72	10	3	19	49	14	124	60	100	178	137	67
75%	144	86	57	52	63	97	66	233	255	124	186	140	95
90%	153	126	139	127	104	129	106	359	407	153	191	145	117
100%	372	425	425	425	425	303	296	425	425	325	224	156	135
Mean	137	90	48	42	47	62	42	156	139	111	150	126	70
45													
0%	23	9	2	2	2	2	2	2	2	2	48	42	22
10%	82	62	2	2	2	2	2	21	2	75	74	76	31
25%	136	65	2	2	2	16	2	66	2	85	107	134	42
50%	140	71	10	3	19	49	25	148	57	104	165	137	67
75%	144	86	57	52	64	102	83	255	233	125	185	140	95
90%	153	126	139	127	104	135	119	342	387	153	191	145	118
100%	372	425	425	425	425	303	290	425	425	325	224	156	135
Mean	135	90	48	42	47	63	50	167	126	112	146	125	70
55													
0%	23	9	2	2	2	2	0	2	0	2	43	42	22
10%	72	62	2	2	2	2	2	43	2	64	66	73	31
25%	135	65	2	2	2	19	2	80	2	84	94	110	41
50%	139	71	10	5	19	58	53	149	14	105	139	137	63
75%	144	86	57	52	69	105	109	266	133	124	184	140	93
90%	153	126	139	127	105	141	157	369	257	153	190	144	116
100%	372	425	425	425	425	303	277	425	425	310	224	156	135
Mean	133	90	48	43	48	68	67	179	85	111	135	122	68
65													
0%	5	7	2	2	2	2	0	2	0	2	41	39	21
10%	65	60	2	2	2	6	2	44	0	48	62	67	30
25%	113	65	2	2	2	19	21	68	0	70	70	86	38
50%	139	71	10	10	29	61	88	133	0	89	98	134	58
75%	143	86	47	37	76	118	148	260	2	109	164	139	82
90%	151	126	139	127	114	144	165	359	87	136	190	142	108
100%	372	425	425	425	425	278	246	425	413	256	224	156	133
Mean	127	89	48	43	52	73	86	173	29	94	112	114	63
75													
0%	2	7	2	2	2	2	0	0	0	4	18	2	15
10%	50	61	2	2	2	26	2	28	0	31	54	51	27
25%	69	66	6	2	8	41	27	47	0	48	62	74	34
50%	89	73	19	16	28	74	95	90	0	66	75	79	46
75%	128	81	47	38	78	133	155	192	0	79	89	93	70
90%	140	106	139	118	125	160	165	293	2	87	111	130	91
100%	271	425	425	425	425	263	400	425	259	105	200	148	119
Mean	97	88	47	44	57	85	95	133	5	62	80	83	53

Table A1-125. Water Year Average of Monthly Flows (cfs)—Milton-Bowman Tunnel

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	132	70	9	3	15	24	7	15	8	76	102	96
D	129	79	19	10	10	38	29	68	37	83	141	121
BN	136	70	11	7	24	37	31	154	119	90	174	137
AN	126	106	57	58	49	87	60	225	163	92	184	140
W	155	117	108	102	104	105	63	241	297	145	186	140
All	138	91	48	42	47	62	40	148	142	103	160	128
35												
C	127	69	11	5	15	22	7	30	8	84	87	90
D	128	78	18	9	11	38	35	77	35	98	125	117
BN	136	70	11	6	24	38	30	163	114	102	161	135
AN	126	104	57	59	49	88	61	232	155	99	177	140
W	154	117	108	102	105	104	66	247	295	146	184	140
All	137	90	48	42	47	62	42	156	139	111	150	126
45												
C	125	67	11	5	15	22	8	40	7	80	84	89
D	126	78	18	9	11	38	41	92	25	99	117	115
BN	136	70	11	6	24	40	37	174	96	102	158	135
AN	125	104	57	59	49	90	74	228	138	106	170	140
W	153	117	108	102	106	106	77	261	278	148	183	140
All	135	90	48	42	47	63	50	167	126	112	146	125
55												
C	122	66	11	5	15	27	14	54	3	68	76	82
D	123	78	19	10	11	38	56	106	9	95	101	112
BN	134	70	11	6	25	47	61	180	40	104	144	131
AN	124	104	57	59	52	95	96	224	85	111	155	140
W	151	117	108	102	107	113	95	281	212	148	180	139
All	133	90	48	43	48	68	67	179	85	111	135	122
65												
C	116	68	8	8	16	27	17	53	1	65	62	73
D	117	77	20	12	11	37	76	95	1	78	79	94
BN	128	68	11	7	28	56	88	159	2	82	104	125
AN	116	104	58	55	58	106	115	209	4	96	123	136
W	144	116	108	102	113	121	116	290	92	127	163	136
All	127	89	48	43	52	73	86	173	29	94	112	114
75												
C	91	69	14	18	13	38	12	35	1	61	54	56
D	86	74	22	16	14	54	61	60	0	69	66	71
BN	98	70	16	11	26	67	94	106	0	62	74	79
AN	85	102	58	51	60	122	126	147	0	59	81	88
W	111	112	98	97	131	130	153	249	15	60	108	106
All	97	88	47	44	57	85	95	133	5	62	80	83

A12.1.5.6 Toadtown Canal

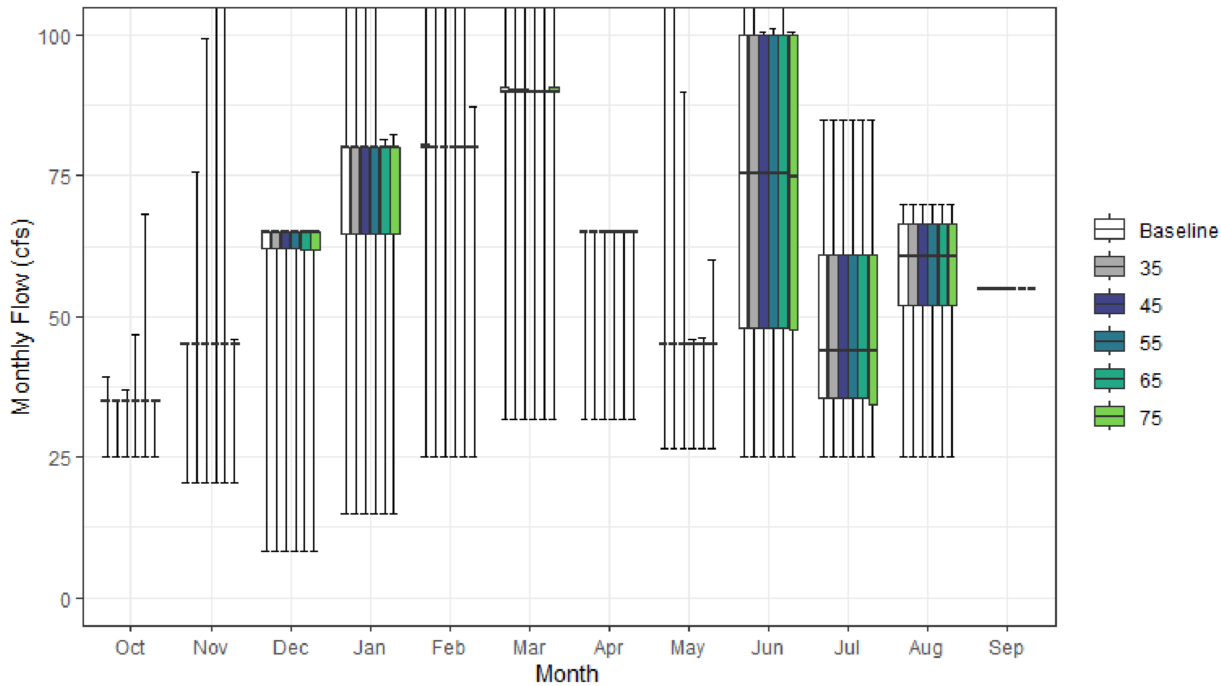

Figure A1-60. Toadtown Canal Monthly Boxplot

Table A1-126. Cumulative Distribution of Monthly Flow (cfs)—Toadtown Canal

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	25	21	8	15	25	32	32	26	25	25	25	55	26
10%	34	34	33	31	77	90	65	45	35	28	47	55	36
25%	35	45	62	65	80	90	65	45	48	35	52	55	41
50%	35	45	65	80	80	90	65	45	75	44	61	55	45
75%	35	45	65	80	81	91	65	45	100	61	67	55	48
90%	35	45	65	81	81	91	65	84	101	83	70	55	49
100%	39	45	65	117	120	127	65	115	113	85	70	55	54
Mean	35	43	58	71	79	90	64	51	73	50	58	55	44
35													
0%	25	21	8	15	25	32	32	26	25	25	25	55	26
10%	34	34	33	31	77	90	65	45	35	28	47	55	36
25%	35	45	62	65	80	90	65	45	48	35	52	55	41
50%	35	45	65	80	80	90	65	45	75	44	61	55	44
75%	35	45	65	80	80	90	65	45	100	61	67	55	48
90%	35	45	65	81	81	91	65	51	100	83	70	55	49
100%	35	76	65	117	120	127	65	114	111	85	70	55	51
Mean	35	43	58	70	78	90	64	48	73	50	58	55	43
45													
0%	25	21	8	15	25	32	32	26	25	25	25	55	26
10%	34	34	33	31	77	90	65	45	35	28	47	55	36
25%	35	45	62	65	80	90	65	45	48	35	52	55	41
50%	35	45	65	80	80	90	65	45	75	44	61	55	44
75%	35	45	65	80	80	90	65	45	100	61	67	55	47
90%	35	45	65	80	81	91	65	45	100	83	70	55	49
100%	37	99	65	117	120	127	65	90	101	85	70	55	54
Mean	35	44	58	70	78	90	64	45	72	50	58	55	43
55													
0%	25	21	8	15	25	32	32	26	25	25	25	55	26
10%	34	34	33	31	77	90	65	45	35	28	47	55	36
25%	35	45	62	65	80	90	65	45	48	35	52	55	41
50%	35	45	65	80	80	90	65	45	75	44	61	55	44
75%	35	45	65	80	80	90	65	45	100	61	67	55	47
90%	35	59	65	81	81	92	65	45	100	83	70	55	49
100%	47	109	65	117	120	127	65	46	101	85	70	55	54
Mean	35	47	58	70	77	90	64	44	72	50	58	55	43
65													
0%	25	21	8	15	25	32	32	26	25	25	25	55	26
10%	34	34	33	31	77	90	65	45	35	28	47	55	36
25%	35	45	62	65	80	90	65	45	48	35	52	55	41
50%	35	45	65	80	80	90	65	45	75	44	61	55	44
75%	35	45	65	80	80	90	65	45	100	61	67	55	47
90%	35	62	65	80	81	92	65	45	100	83	70	55	49
100%	68	109	65	81	120	127	65	46	118	85	70	55	54
Mean	35	48	57	69	78	90	64	44	73	50	58	55	43
75													
0%	25	21	8	15	25	32	32	26	25	25	25	55	26
10%	34	32	33	31	77	90	65	45	32	28	47	55	36
25%	35	45	62	65	80	90	65	45	48	34	52	55	41
50%	35	45	65	80	80	90	65	45	75	44	61	55	43
75%	35	45	65	80	80	91	65	45	100	61	67	55	47
90%	35	45	65	80	82	92	65	46	100	83	70	55	49
100%	35	46	65	82	87	127	65	60	101	85	70	55	49
Mean	35	42	57	69	77	89	64	45	72	49	58	55	43

Table A1-127. Water Year Average of Monthly Flows (cfs)—Toadtown Canal

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	34	40	45	51	68	81	59	44	43	32	45	55
D	34	43	58	61	76	90	65	56	56	37	54	55
BN	35	42	53	73	77	90	65	59	75	45	59	55
AN	34	43	63	76	80	90	65	45	82	50	61	55
W	35	45	65	87	87	93	65	49	98	72	67	55
All	35	43	58	71	79	90	64	51	73	50	58	55
35												
C	34	40	45	51	68	81	59	42	43	32	45	55
D	34	44	58	61	77	90	65	55	55	37	54	55
BN	35	42	53	73	78	90	65	54	75	45	59	55
AN	34	43	63	75	80	90	65	45	81	50	61	55
W	35	45	65	84	84	96	65	45	97	72	67	55
All	35	43	58	70	78	90	64	48	73	50	58	55
45												
C	34	40	45	51	68	81	59	41	43	32	45	55
D	34	46	58	61	76	90	65	47	55	37	54	55
BN	35	42	53	73	78	90	65	45	74	45	59	55
AN	34	43	63	76	80	90	65	45	81	50	61	55
W	35	46	65	83	84	96	65	45	96	72	67	55
All	35	44	58	70	78	90	64	45	72	50	58	55
55												
C	34	40	45	51	68	81	59	41	43	32	45	55
D	34	52	58	61	76	90	65	45	55	37	54	55
BN	35	43	53	73	77	90	65	45	74	45	59	55
AN	34	50	63	75	80	90	65	45	81	50	61	55
W	35	48	65	82	82	96	65	45	96	72	67	55
All	35	47	58	70	77	90	64	44	72	50	58	55
65												
C	34	41	45	51	68	81	59	41	43	32	45	55
D	34	52	57	61	76	90	65	45	55	37	54	55
BN	35	42	53	73	77	90	65	45	74	45	59	55
AN	34	50	62	75	80	91	65	45	81	50	61	55
W	36	51	65	79	83	93	65	45	98	72	67	55
All	35	48	57	69	78	90	64	44	73	50	58	55
75												
C	34	40	45	51	68	81	59	41	41	30	45	55
D	34	43	57	61	76	90	65	46	55	36	54	55
BN	35	42	52	73	78	91	65	45	74	45	59	55
AN	34	41	62	75	80	94	65	45	81	50	61	55
W	35	44	65	79	80	91	65	45	96	72	67	55
All	35	42	57	69	77	89	64	45	72	49	58	55

A12.1.5.7 Slate Creek Tunnel

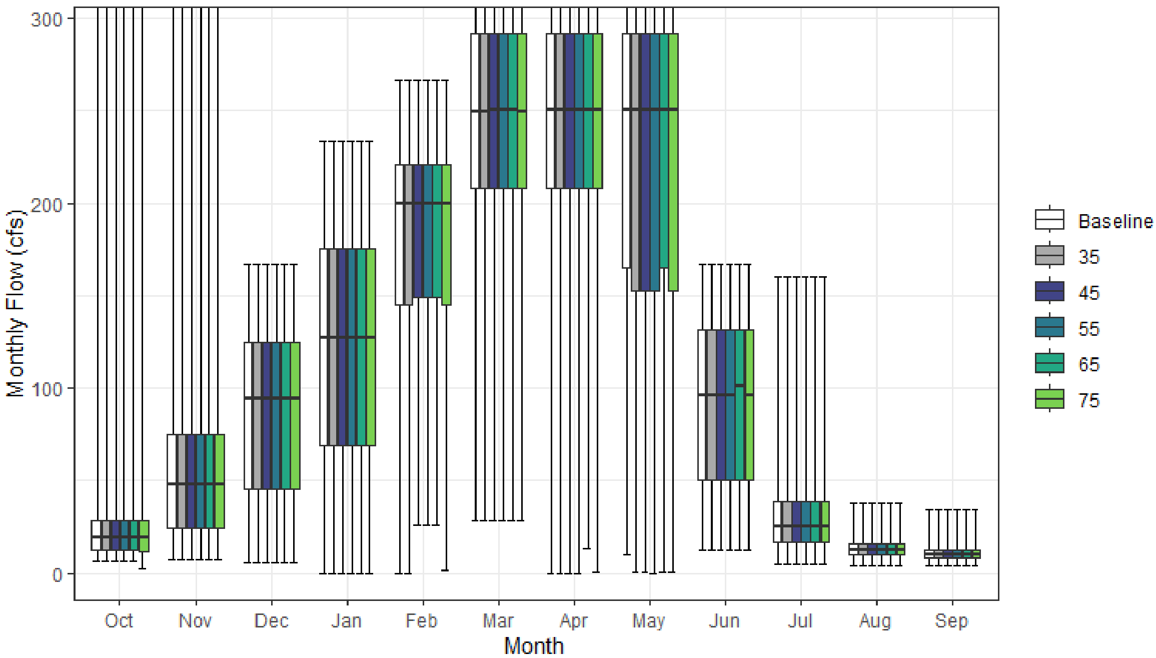

Figure A1-61. Slate Creek Tunnel Monthly Boxplot

Table A1-128. Cumulative Distribution of Monthly Flow (cfs)—Slate Creek Tunnel

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	6	8	6	0	0	29	0	10	12	5	4	4	13
10%	8	16	28	43	71	156	150	84	27	13	8	7	50
25%	12	24	46	69	145	208	208	166	50	17	10	8	65
50%	19	48	94	127	200	250	250	250	96	25	13	10	79
75%	28	75	125	175	221	292	292	292	131	38	16	13	97
90%	42	181	146	204	233	292	292	292	146	58	20	14	110
100%	437	470	167	233	267	333	333	333	167	160	38	34	134
Mean	27	79	88	124	172	237	237	217	92	33	13	11	80
35													
0%	6	8	6	0	0	29	0	0	12	5	4	4	13
10%	8	16	28	43	71	156	150	68	27	13	8	7	50
25%	13	24	46	69	145	208	208	153	50	17	10	8	65
50%	19	48	94	127	200	250	250	250	96	25	13	10	79
75%	28	75	125	175	221	292	292	292	131	38	16	13	97
90%	42	181	146	204	233	292	292	292	146	58	20	14	110
100%	437	470	167	233	267	333	333	333	167	160	38	34	134
Mean	27	79	88	124	172	237	237	212	92	33	13	11	80
45													
0%	6	8	6	0	26	29	0	0	12	5	4	4	13
10%	8	16	28	43	74	156	150	68	27	13	8	7	50
25%	13	24	46	69	149	208	208	153	50	17	10	8	65
50%	19	48	94	127	200	250	250	250	96	25	13	10	79
75%	28	75	125	175	221	292	292	292	131	38	16	13	97
90%	42	181	146	204	233	292	292	292	146	58	20	14	110
100%	437	470	167	233	267	333	333	333	167	160	38	34	134
Mean	27	79	88	124	174	236	237	212	92	33	13	11	80
55													
0%	6	8	6	0	26	29	0	0	12	5	4	4	13
10%	8	16	28	43	74	156	150	68	27	13	8	7	50
25%	13	24	46	69	149	208	208	153	50	17	10	8	65
50%	19	48	94	127	200	250	250	250	96	25	13	10	79
75%	28	75	125	175	221	292	292	292	131	38	16	13	97
90%	42	181	146	204	233	292	292	292	146	58	20	14	110
100%	437	470	167	233	267	333	333	333	167	160	38	34	134
Mean	27	79	88	124	174	237	237	212	92	33	13	11	80
65													
0%	6	8	6	0	26	29	13	0	12	5	4	4	13
10%	8	16	28	43	74	156	150	84	27	13	8	7	50
25%	13	24	46	69	149	208	208	165	50	17	10	8	65
50%	19	48	94	127	200	250	250	250	101	25	13	10	79
75%	28	75	125	175	221	292	292	292	132	38	16	13	97
90%	42	181	146	204	233	292	292	292	146	58	20	14	110
100%	437	470	167	233	267	333	333	333	167	160	38	34	134
Mean	27	79	88	124	174	237	238	219	93	33	13	11	80
75													
0%	3	8	6	0	1	29	1	0	12	5	4	4	13
10%	8	16	28	43	71	156	148	68	27	13	8	7	50
25%	12	24	46	69	145	208	208	153	50	17	10	8	65
50%	19	48	94	127	200	250	250	250	96	25	13	10	79
75%	28	75	125	175	221	292	292	292	131	38	16	13	97
90%	42	181	146	204	233	292	292	292	146	58	20	14	110
100%	437	470	167	233	267	333	333	333	167	160	38	34	127
Mean	27	79	88	124	172	236	234	212	92	33	13	11	79

Table A1-129. Water Year Average of Monthly Flows (cfs)—Slate Creek Tunnel

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	23	30	47	62	102	160	165	120	47	15	8	7
D	19	73	78	85	154	218	233	187	64	18	10	9
BN	20	44	66	128	171	231	257	240	100	28	13	10
AN	26	93	90	154	200	284	288	273	100	29	14	12
W	39	127	130	172	211	275	245	255	130	58	19	14
All	27	79	88	124	172	237	237	217	92	33	13	11
35												
C	23	30	47	62	102	160	165	120	47	15	8	7
D	19	73	78	85	154	218	233	187	64	18	10	9
BN	20	44	66	128	171	231	257	240	100	28	13	10
AN	26	93	90	154	200	284	288	273	100	29	14	12
W	39	127	130	172	211	275	245	236	130	58	19	14
All	27	79	88	124	172	237	237	212	92	33	13	11
45												
C	23	30	47	62	102	160	165	120	47	15	8	7
D	19	73	78	85	154	218	233	187	64	18	10	9
BN	20	44	66	128	171	231	257	240	100	28	13	10
AN	26	93	90	154	200	284	288	273	100	29	14	12
W	39	127	130	172	218	272	245	236	130	58	19	14
All	27	79	88	124	174	236	237	212	92	33	13	11
55												
C	23	30	47	62	102	160	165	120	47	15	8	7
D	19	73	78	85	154	218	233	187	64	18	10	9
BN	20	44	66	128	171	231	257	240	100	28	13	10
AN	26	93	90	154	200	284	288	273	100	29	14	12
W	39	127	130	172	218	275	245	236	130	58	19	14
All	27	79	88	124	174	237	237	212	92	33	13	11
65												
C	23	30	47	62	102	160	165	120	47	15	8	7
D	19	73	78	85	154	218	233	187	64	18	10	9
BN	20	44	66	128	171	231	257	240	100	28	13	10
AN	26	93	90	154	200	284	288	273	100	29	14	12
W	39	127	130	172	218	275	246	259	133	58	19	14
All	27	79	88	124	174	237	238	219	93	33	13	11
75												
C	23	30	47	62	102	160	165	120	47	15	8	7
D	19	72	78	85	154	218	233	187	64	18	10	9
BN	19	44	66	128	171	231	257	240	100	28	13	10
AN	26	93	90	154	200	284	288	273	100	29	14	12
W	39	127	130	172	211	272	233	236	130	58	19	14
All	27	79	88	124	172	236	234	212	92	33	13	11

A12.1.5.8 South Canal

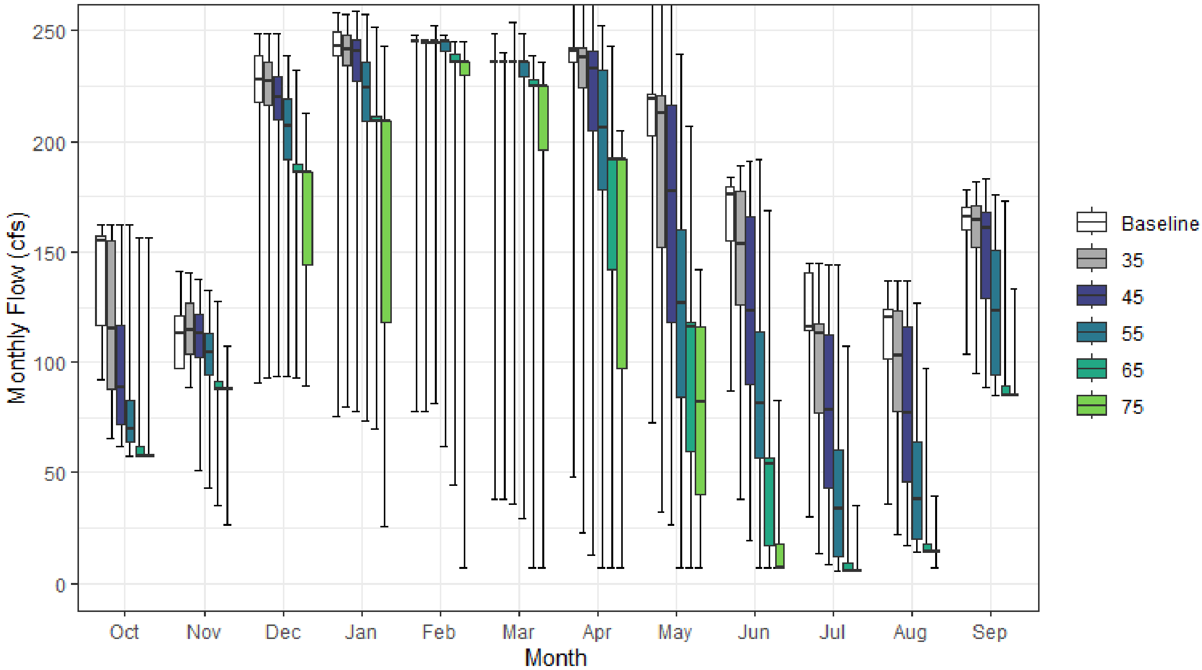

Figure A1-62. South Canal Monthly Boxplot

Table A1-130. Cumulative Distribution of Monthly Flow (cfs)—South Canal

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	92	97	91	76	78	38	48	73	87	30	36	104	53
10%	114	97	213	233	245	236	223	174	152	102	99	140	127
25%	117	97	218	239	245	236	236	203	155	114	102	160	132
50%	155	113	228	243	245	236	241	219	176	116	121	166	135
75%	157	121	239	250	245	236	243	222	179	141	124	170	136
90%	160	130	247	251	245	236	246	223	182	142	125	174	138
100%	162	141	249	258	248	249	269	277	184	145	137	178	140
Mean	142	112	226	237	238	231	230	210	167	122	113	161	132
35													
0%	65	88	93	80	78	38	23	32	38	13	22	95	43
10%	77	97	212	225	245	236	122	97	97	50	55	132	103
25%	88	104	217	235	245	236	224	152	126	77	78	152	121
50%	116	115	227	241	245	236	238	213	154	113	103	164	131
75%	155	127	236	248	245	236	242	220	177	117	123	171	134
90%	159	131	246	251	245	236	245	223	181	141	125	174	136
100%	162	141	249	258	245	240	269	277	189	145	137	182	139
Mean	118	115	224	235	238	230	218	185	147	101	98	159	125
45													
0%	62	51	93	78	81	36	13	27	19	9	17	89	39
10%	67	97	200	212	242	230	106	64	68	20	27	110	91
25%	72	102	210	227	245	236	205	118	90	43	46	129	105
50%	89	113	220	241	245	236	233	177	123	78	77	161	118
75%	117	122	229	246	245	236	241	216	166	113	116	168	130
90%	157	128	239	250	245	236	245	222	179	135	124	173	134
100%	162	138	249	259	253	254	269	275	191	144	137	183	139
Mean	101	112	217	231	237	228	205	161	124	77	79	149	116
55													
0%	58	43	94	74	62	30	7	7	7	6	14	85	36
10%	58	88	186	203	212	225	85	31	27	6	14	85	77
25%	64	94	192	209	241	230	178	84	57	12	20	94	90
50%	70	104	207	224	245	236	206	127	81	34	38	123	101
75%	83	113	219	236	245	236	233	160	114	60	64	151	116
90%	104	125	232	248	245	236	243	202	150	110	102	171	125
100%	162	133	239	257	248	249	252	240	192	144	127	176	135
Mean	79	104	204	219	234	223	190	125	85	43	48	124	101
65													
0%	58	35	93	70	44	7	7	7	7	6	14	85	33
10%	58	88	186	159	174	188	68	7	7	6	14	85	68
25%	58	88	186	209	236	225	142	60	17	6	14	85	79
50%	58	88	186	209	236	225	192	116	54	6	14	85	87
75%	62	92	189	211	240	228	193	118	57	9	18	89	90
90%	66	100	201	220	245	236	205	125	68	17	25	107	98
100%	157	128	232	252	245	239	243	207	168	108	97	173	120
Mean	63	91	186	200	225	214	166	93	43	12	20	93	84
75													
0%	58	27	90	26	7	7	7	7	7	6	7	85	26
10%	58	88	117	89	137	137	51	7	7	6	11	85	56
25%	58	88	144	118	230	196	97	40	7	6	14	85	69
50%	58	88	186	209	236	225	192	82	7	6	14	85	79
75%	58	88	186	209	236	225	192	116	18	6	14	85	85
90%	58	88	186	209	236	225	192	116	38	6	14	85	88
100%	157	107	213	243	245	236	205	142	83	35	40	133	100
Mean	59	87	169	172	212	200	150	75	16	6	14	86	75

Table A1-131. Water Year Average of Monthly Flows (cfs)—South Canal

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	145	118	218	215	208	208	173	165	150	101	95	153
D	140	111	230	241	241	236	241	204	169	125	112	162
BN	140	111	232	240	243	236	240	220	172	124	118	165
AN	135	112	227	241	245	236	241	217	168	132	111	157
W	145	110	223	241	245	236	241	229	172	124	120	164
All	142	112	226	237	238	231	230	210	167	122	113	161
35												
C	110	120	213	211	207	201	127	101	95	49	53	133
D	111	117	227	237	241	236	223	160	138	86	89	160
BN	122	116	227	240	242	236	237	204	154	111	109	170
AN	122	105	228	240	245	236	241	212	161	127	106	159
W	124	114	223	241	245	236	241	226	172	122	119	165
All	118	115	224	235	238	230	218	185	147	101	98	159
45												
C	84	112	202	203	207	187	105	71	67	26	33	111
D	97	113	219	227	240	236	202	124	104	54	57	143
BN	108	111	220	240	239	237	216	165	118	73	78	155
AN	96	108	223	237	245	236	238	190	138	94	88	161
W	111	112	219	239	245	236	241	222	169	118	116	166
All	101	112	217	231	237	228	205	161	124	77	79	149
55												
C	67	99	186	183	199	168	94	44	35	11	20	93
D	81	106	206	219	238	232	178	89	58	21	28	107
BN	82	106	207	228	233	234	193	121	75	28	34	115
AN	72	101	207	225	244	234	222	152	99	52	50	131
W	85	107	211	231	245	236	235	187	133	82	84	156
All	79	104	204	219	234	223	190	125	85	43	48	124
65												
C	60	90	173	161	179	149	81	29	20	6	15	86
D	61	92	187	198	231	222	157	73	22	7	16	87
BN	65	92	188	206	226	226	172	99	40	7	16	87
AN	60	86	185	211	239	228	199	121	54	17	24	97
W	65	92	192	214	240	230	201	126	67	19	26	102
All	63	91	186	200	225	214	166	93	43	12	20	93
75												
C	58	88	156	111	135	125	61	21	12	6	14	85
D	58	88	165	145	213	189	127	55	13	6	14	85
BN	63	88	155	177	221	218	165	72	10	6	13	85
AN	58	83	170	200	237	226	193	100	18	8	15	89
W	58	88	187	210	236	225	187	112	23	6	14	85
All	59	87	169	172	212	200	150	75	16	6	14	86

A12.1.5.9 Chalk Bluff Canal

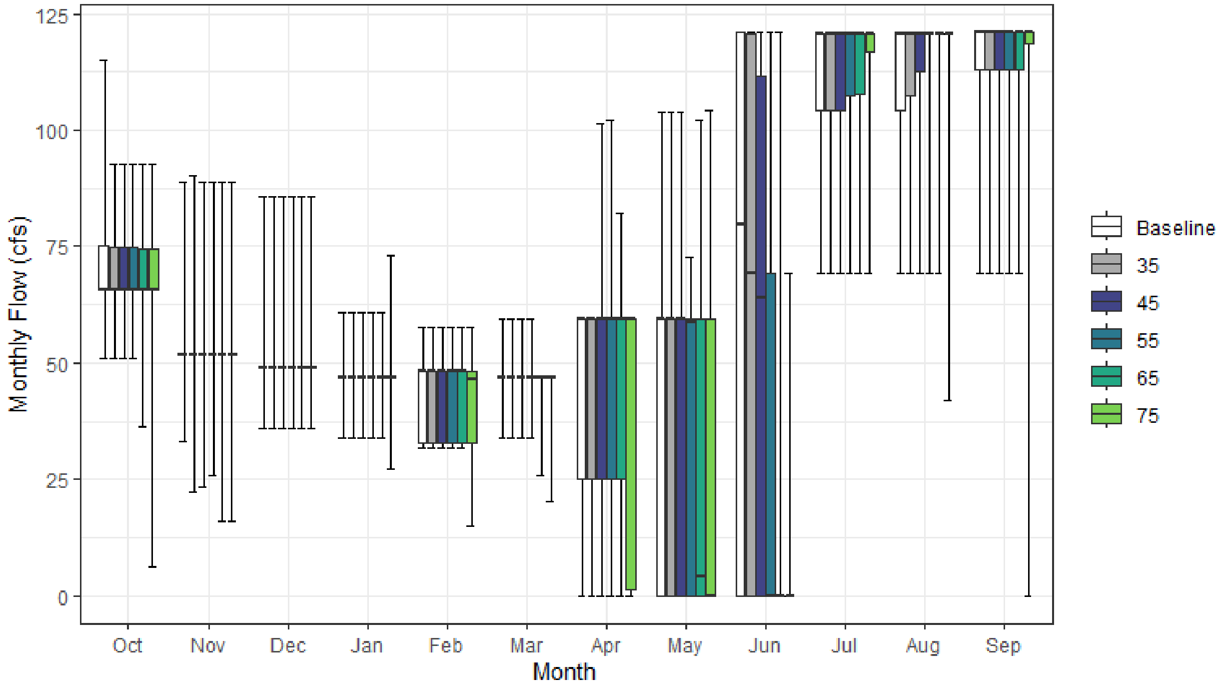

Figure A1-63. Chalk Bluff Canal Monthly Boxplot

Table A1-132. Cumulative Distribution of Monthly Flow (cfs)—Chalk Bluff Canal

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	51	33	36	34	32	34	0	0	0	69	69	69	35
10%	66	52	36	34	33	34	0	0	0	93	92	100	38
25%	66	52	49	47	33	47	25	0	0	104	104	113	43
50%	66	52	49	47	48	47	59	59	80	121	121	121	49
75%	75	52	49	47	48	47	59	59	121	121	121	121	55
90%	82	67	70	59	48	47	59	83	121	121	121	121	57
100%	115	89	85	61	58	59	59	104	121	121	121	121	60
Mean	70	54	51	46	43	44	44	43	69	113	113	113	49
35													
0%	51	22	36	34	32	34	0	0	0	69	69	69	35
10%	66	52	36	34	33	34	0	0	0	89	102	100	38
25%	66	52	49	47	33	47	25	0	0	104	107	113	42
50%	66	52	49	47	48	47	59	59	69	121	121	121	49
75%	75	52	49	47	48	47	59	59	121	121	121	121	54
90%	81	68	70	59	48	47	59	74	121	121	121	121	57
100%	93	90	85	61	58	59	59	104	121	121	121	121	60
Mean	70	55	51	46	43	44	44	41	62	113	113	114	48
45													
0%	51	23	36	34	32	34	0	0	0	69	69	69	35
10%	66	52	36	34	33	34	0	0	0	89	104	100	38
25%	66	52	49	47	33	47	25	0	0	104	113	113	42
50%	66	52	49	47	48	47	59	59	64	121	121	121	48
75%	75	52	49	47	48	47	59	59	112	121	121	121	53
90%	81	67	70	59	48	47	59	59	121	121	121	121	55
100%	93	89	85	61	58	59	101	104	121	121	121	121	59
Mean	70	54	51	46	43	44	45	37	54	112	114	114	47
55													
0%	51	26	36	34	32	34	0	0	0	69	69	69	35
10%	66	52	36	34	33	34	0	0	0	104	104	100	38
25%	66	52	49	47	33	47	25	0	0	108	121	113	42
50%	66	52	49	47	48	47	59	59	0	121	121	121	46
75%	75	52	49	47	48	47	59	59	69	121	121	121	52
90%	81	67	70	59	48	47	59	59	105	121	121	121	54
100%	93	89	85	61	58	59	102	73	121	121	121	121	56
Mean	70	54	51	46	43	44	44	33	35	114	115	114	46
65													
0%	36	16	36	34	32	26	0	0	0	69	69	69	35
10%	66	52	36	34	33	34	0	0	0	104	104	100	38
25%	66	52	49	47	33	47	25	0	0	108	121	113	42
50%	66	52	49	47	48	47	59	4	0	121	121	121	45
75%	75	52	49	47	48	47	59	59	0	121	121	121	48
90%	80	67	70	59	48	47	59	59	69	121	121	121	51
100%	93	89	85	61	58	47	82	102	121	121	121	121	53
Mean	69	54	51	46	43	44	44	27	14	114	115	115	45
75													
0%	6	16	36	27	15	20	0	0	0	69	42	0	27
10%	66	52	36	34	33	34	0	0	0	104	104	100	38
25%	66	52	49	47	33	47	1	0	0	117	121	119	41
50%	66	52	49	47	47	47	59	0	0	121	121	121	44
75%	75	52	49	47	48	47	59	59	0	121	121	121	46
90%	80	67	70	59	48	47	59	59	0	121	121	121	48
100%	93	89	85	73	58	47	59	104	69	121	121	121	50
Mean	69	54	51	46	43	44	40	19	2	116	116	114	43

Table A1-133. Water Year Average of Monthly Flows (cfs)—Chalk Bluff Canal

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	68	55	52	52	41	41	11	0	3	109	110	107
D	68	57	51	47	39	42	31	16	34	115	118	117
BN	74	58	56	41	43	45	54	58	90	117	118	121
AN	72	50	51	44	44	46	59	73	94	107	114	116
W	70	52	48	46	47	47	59	65	107	112	106	109
All	70	54	51	46	43	44	44	43	69	113	113	113
35												
C	68	55	52	52	41	41	11	0	1	109	110	107
D	68	57	51	47	39	42	31	14	26	115	118	117
BN	74	58	56	41	43	45	54	53	77	117	120	121
AN	68	52	51	44	44	46	59	67	86	110	114	116
W	70	52	48	46	47	47	59	64	104	112	107	109
All	70	55	51	46	43	44	44	41	62	113	113	114
45												
C	68	55	52	52	41	41	11	0	0	109	110	107
D	68	57	51	47	39	42	31	13	15	115	118	117
BN	74	58	56	41	43	45	54	43	58	118	121	121
AN	68	49	51	44	44	46	59	63	77	109	115	116
W	70	52	48	46	47	47	61	61	100	110	108	110
All	70	54	51	46	43	44	45	37	54	112	114	114
55												
C	68	55	52	52	41	41	9	0	0	109	110	107
D	68	57	51	47	39	42	31	9	3	118	118	117
BN	74	58	56	41	43	45	54	40	26	120	121	121
AN	68	49	51	44	44	46	59	51	48	112	116	116
W	70	52	48	46	47	47	61	57	76	111	110	111
All	70	54	51	46	43	44	44	33	35	114	115	114
65												
C	68	55	52	52	41	39	7	0	0	109	110	107
D	68	57	51	47	39	42	31	4	0	118	118	117
BN	74	58	56	41	43	45	54	26	0	121	121	121
AN	64	48	51	44	44	46	59	36	2	116	116	116
W	70	52	48	46	47	47	60	57	45	108	113	113
All	69	54	51	46	43	44	44	27	14	114	115	115
75												
C	68	55	52	51	38	38	1	0	0	109	106	100
D	68	57	51	48	39	42	22	0	0	118	118	117
BN	74	58	56	41	43	45	53	7	0	121	121	121
AN	61	48	51	44	44	46	59	29	0	116	116	116
W	70	52	48	46	47	47	59	47	5	114	116	116
All	69	54	51	46	43	44	40	19	2	116	116	114

A12.1.5.10 Clear Creek Tunnel

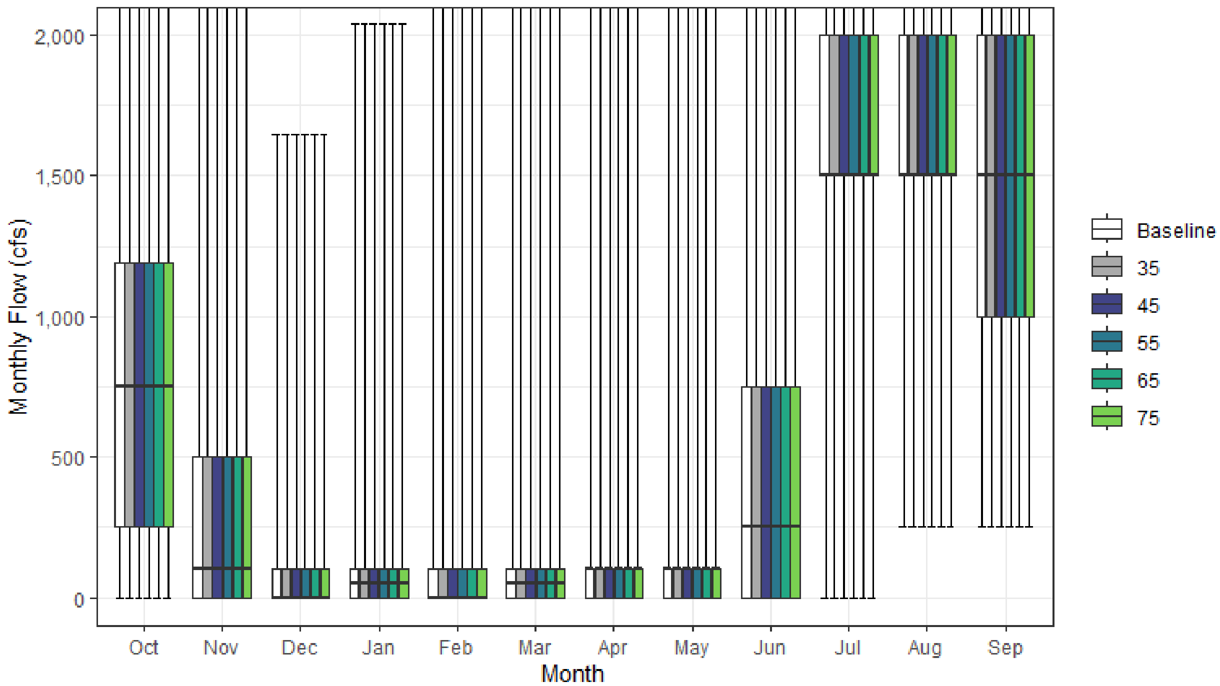

Figure A1-64. Clear Creek Tunnel Monthly Boxplot

Table A1-134. Cumulative Distribution of Monthly Flow (cfs)—Clear Creek Tunnel

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	0	0	0	0	0	0	0	0	0	250	250	137
10%	0	0	0	0	0	0	0	0	0	8	1,000	750	234
25%	250	0	0	0	0	0	0	0	0	1,500	1,500	1,000	326
50%	750	100	0	50	0	50	100	100	250	1,500	1,500	1,500	450
75%	1,188	500	100	100	100	100	100	100	750	2,000	2,000	2,000	550
90%	1,818	1,029	280	250	403	705	455	250	1,500	3,033	2,505	2,125	685
100%	2,155	3,200	1,647	2,038	3,200	2,405	2,345	3,200	3,200	3,200	3,200	3,200	1,077
Mean	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469	456
35													
0%	0	0	0	0	0	0	0	0	0	0	250	250	137
10%	0	0	0	0	0	0	0	0	0	8	1,000	750	234
25%	250	0	0	0	0	0	0	0	0	1,500	1,500	1,000	326
50%	750	100	0	50	0	50	100	100	250	1,500	1,500	1,500	450
75%	1,188	500	100	100	100	100	100	100	750	2,000	2,000	2,000	550
90%	1,818	1,029	280	250	403	705	455	250	1,500	3,033	2,505	2,125	685
100%	2,155	3,200	1,647	2,038	3,200	2,405	2,345	3,200	3,200	3,200	3,200	3,200	1,077
Mean	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469	456
45													
0%	0	0	0	0	0	0	0	0	0	0	250	250	137
10%	0	0	0	0	0	0	0	0	0	8	1,000	750	234
25%	250	0	0	0	0	0	0	0	0	1,500	1,500	1,000	326
50%	750	100	0	50	0	50	100	100	250	1,500	1,500	1,500	450
75%	1,188	500	100	100	100	100	100	100	750	2,000	2,000	2,000	550
90%	1,818	1,029	280	250	403	705	455	250	1,500	3,033	2,505	2,125	685
100%	2,155	3,200	1,647	2,038	3,200	2,405	2,345	3,200	3,200	3,200	3,200	3,200	1,077
Mean	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469	456
55													
0%	0	0	0	0	0	0	0	0	0	0	250	250	137
10%	0	0	0	0	0	0	0	0	0	8	1,000	750	234
25%	250	0	0	0	0	0	0	0	0	1,500	1,500	1,000	326
50%	750	100	0	50	0	50	100	100	250	1,500	1,500	1,500	450
75%	1,188	500	100	100	100	100	100	100	750	2,000	2,000	2,000	550
90%	1,818	1,029	280	250	403	705	455	250	1,500	3,033	2,505	2,125	685
100%	2,155	3,200	1,647	2,038	3,200	2,405	2,345	3,200	3,200	3,200	3,200	3,200	1,077
Mean	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469	456
65													
0%	0	0	0	0	0	0	0	0	0	0	250	250	137
10%	0	0	0	0	0	0	0	0	0	8	1,000	750	234
25%	250	0	0	0	0	0	0	0	0	1,500	1,500	1,000	326
50%	750	100	0	50	0	50	100	100	250	1,500	1,500	1,500	450
75%	1,188	500	100	100	100	100	100	100	750	2,000	2,000	2,000	550
90%	1,818	1,029	280	250	403	705	455	250	1,500	3,033	2,505	2,125	685
100%	2,155	3,200	1,647	2,038	3,200	2,405	2,345	3,200	3,200	3,200	3,200	3,200	1,077
Mean	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469	456
75													
0%	0	0	0	0	0	0	0	0	0	0	250	250	137
10%	0	0	0	0	0	0	0	0	0	8	1,000	750	234
25%	250	0	0	0	0	0	0	0	0	1,500	1,500	1,000	326
50%	750	100	0	50	0	50	100	100	250	1,500	1,500	1,500	450
75%	1,188	500	100	100	100	100	100	100	750	2,000	2,000	2,000	550
90%	1,818	1,029	280	250	403	705	455	250	1,500	3,033	2,505	2,125	685
100%	2,155	3,200	1,647	2,038	3,200	2,405	2,345	3,200	3,200	3,200	3,200	3,200	1,077
Mean	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469	456

Table A1-135. Water Year Average of Monthly Flows (cfs)—Clear Creek Tunnel

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	593	352	123	152	294	151	218	226	750	2,119	1,510	1,107
D	663	689	75	86	630	121	77	121	824	1,688	1,886	1,410
BN	894	271	82	149	223	340	242	76	485	1,294	1,688	1,412
AN	842	387	172	187	25	89	215	54	146	1,336	1,625	1,445
W	1,044	343	188	47	40	197	253	331	290	1,467	1,598	1,750
All	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469
35												
C	593	352	123	152	294	151	218	226	750	2,119	1,510	1,107
D	663	689	75	86	630	121	77	121	824	1,688	1,886	1,410
BN	894	271	82	149	223	340	242	76	485	1,294	1,688	1,412
AN	842	387	172	187	25	89	215	54	146	1,336	1,625	1,445
W	1,044	343	188	47	40	197	253	331	290	1,467	1,598	1,750
All	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469
45												
C	593	352	123	152	294	151	218	226	750	2,119	1,510	1,107
D	663	689	75	86	630	121	77	121	824	1,688	1,886	1,410
BN	894	271	82	149	223	340	242	76	485	1,294	1,688	1,412
AN	842	387	172	187	25	89	215	54	146	1,336	1,625	1,445
W	1,044	343	188	47	40	197	253	331	290	1,467	1,598	1,750
All	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469
55												
C	593	352	123	152	294	151	218	226	750	2,119	1,510	1,107
D	663	689	75	86	630	121	77	121	824	1,688	1,886	1,410
BN	894	271	82	149	223	340	242	76	485	1,294	1,688	1,412
AN	842	387	172	187	25	89	215	54	146	1,336	1,625	1,445
W	1,044	343	188	47	40	197	253	331	290	1,467	1,598	1,750
All	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469
65												
C	593	352	123	152	294	151	218	226	750	2,119	1,510	1,107
D	663	689	75	86	630	121	77	121	824	1,688	1,886	1,410
BN	894	271	82	149	223	340	242	76	485	1,294	1,688	1,412
AN	842	387	172	187	25	89	215	54	146	1,336	1,625	1,445
W	1,044	343	188	47	40	197	253	331	290	1,467	1,598	1,750
All	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469
75												
C	593	352	123	152	294	151	218	226	750	2,119	1,510	1,107
D	663	689	75	86	630	121	77	121	824	1,688	1,886	1,410
BN	894	271	82	149	223	340	242	76	485	1,294	1,688	1,412
AN	842	387	172	187	25	89	215	54	146	1,336	1,625	1,445
W	1,044	343	188	47	40	197	253	331	290	1,467	1,598	1,750
All	832	415	130	109	246	185	201	184	502	1,574	1,669	1,469

A12.1.5.11 Spring Creek Conduit

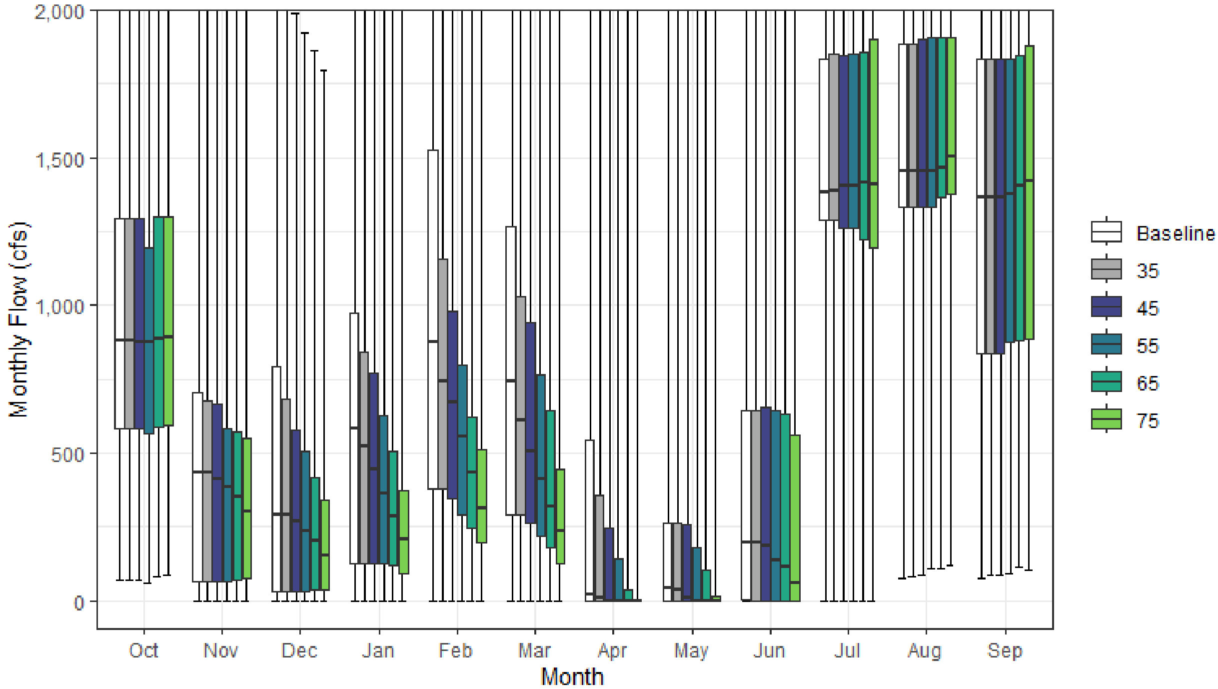

Figure A1-65. Spring Creek Conduit Monthly Boxplot

Table A1-136. Cumulative Distribution of Monthly Flow (cfs)—Spring Creek Conduit

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	70	0	0	0	0	0	0	0	0	0	76	77	166
10%	230	0	0	31	130	135	0	0	0	63	842	570	375
25%	585	67	32	123	381	293	0	0	5	1,291	1,331	837	460
50%	879	432	292	585	873	745	21	42	196	1,383	1,453	1,368	611
75%	1,297	702	795	973	1,524	1,266	545	262	642	1,834	1,887	1,835	727
90%	1,975	1,579	1,374	1,675	2,314	1,813	1,227	577	1,317	2,935	2,471	2,126	876
100%	2,365	3,564	2,071	3,659	4,200	4,200	2,755	3,507	3,507	3,396	3,191	3,200	1,651
Mean	988	577	504	716	1,106	892	364	243	474	1,471	1,567	1,359	620
35													
0%	72	0	0	0	0	0	0	0	0	0	81	85	172
10%	236	0	0	31	134	135	0	0	0	62	841	569	365
25%	584	67	32	123	381	293	0	0	0	1,291	1,331	837	442
50%	879	432	292	522	743	609	10	39	198	1,389	1,453	1,368	562
75%	1,297	674	683	841	1,156	1,031	355	262	642	1,849	1,887	1,837	676
90%	1,975	1,539	1,086	1,271	1,971	1,390	923	511	1,317	2,935	2,373	2,126	809
100%	2,365	3,564	2,052	2,798	3,748	3,581	2,582	3,507	3,466	3,350	3,192	3,234	1,499
Mean	990	563	434	594	937	747	273	230	467	1,480	1,568	1,365	583
45													
0%	72	0	0	0	0	0	0	0	0	0	86	86	168
10%	239	0	0	31	134	135	0	0	0	37	836	570	349
25%	585	67	32	123	346	263	0	0	0	1,263	1,332	838	428
50%	878	412	267	443	671	507	0	10	184	1,404	1,452	1,368	532
75%	1,297	666	579	770	982	942	246	255	655	1,849	1,900	1,836	647
90%	1,975	1,452	946	1,097	1,873	1,245	729	420	1,317	2,936	2,395	2,126	780
100%	2,365	3,564	1,988	2,366	3,325	3,021	2,474	3,476	3,411	3,307	3,191	3,234	1,402
Mean	990	551	389	522	834	656	223	213	460	1,480	1,570	1,365	559
55													
0%	61	0	0	0	0	0	0	0	0	0	110	90	160
10%	173	0	0	35	134	135	0	0	0	9	846	572	317
25%	569	67	32	123	291	220	0	0	0	1,262	1,332	877	400
50%	875	383	235	360	556	413	0	0	134	1,404	1,452	1,377	509
75%	1,195	584	505	628	798	765	144	181	646	1,854	1,905	1,835	618
90%	1,964	1,369	791	896	1,799	1,083	539	317	1,309	2,946	2,406	2,124	736
100%	2,365	3,522	1,924	2,020	3,325	2,833	2,367	3,407	3,357	3,265	3,237	3,234	1,304
Mean	970	538	341	447	727	561	177	186	448	1,481	1,574	1,372	534
65													
0%	83	0	0	0	0	0	0	0	0	0	110	114	151
10%	247	0	0	33	118	107	0	0	0	8	874	585	287
25%	589	69	39	120	247	179	0	0	0	1,221	1,367	879	385
50%	885	352	201	288	435	319	0	0	116	1,414	1,465	1,406	489
75%	1,301	570	417	505	622	644	35	101	631	1,856	1,906	1,846	599
90%	1,977	1,303	650	776	1,633	873	376	233	1,304	2,941	2,406	2,135	731
100%	2,365	3,483	1,861	2,021	3,308	2,723	2,261	3,346	3,309	3,240	3,217	3,231	1,208
Mean	994	524	292	371	620	466	137	157	434	1,483	1,583	1,386	511
75													
0%	88	0	0	0	0	0	0	0	0	0	121	105	161
10%	333	1	0	19	80	68	0	0	0	19	875	621	270
25%	596	75	39	94	197	127	0	0	0	1,197	1,375	886	358
50%	894	303	152	209	312	235	0	0	60	1,409	1,506	1,420	469
75%	1,297	550	339	375	512	445	0	13	559	1,900	1,905	1,882	570
90%	1,981	944	520	586	1,300	785	136	138	1,289	2,934	2,404	2,130	702
100%	2,360	3,436	1,797	2,020	3,273	2,613	2,153	3,289	3,276	3,181	3,221	3,231	1,107
Mean	1,006	497	241	291	509	367	108	122	410	1,487	1,602	1,406	487

Table A1-137. Water Year Average of Monthly Flows (cfs)—Spring Creek Conduit

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	738	345	210	238	595	296	48	121	604	1,984	1,387	983
D	799	812	249	223	1,113	630	36	49	694	1,542	1,738	1,284
BN	1,041	380	229	572	901	747	328	76	442	1,187	1,552	1,269
AN	1,018	558	498	1,162	1,387	1,124	386	254	217	1,250	1,542	1,366
W	1,220	652	1,022	1,240	1,377	1,398	792	549	368	1,410	1,557	1,669
All	988	577	504	716	1,106	892	364	243	474	1,471	1,567	1,359
35												
C	741	345	187	229	545	274	44	121	610	2,024	1,420	1,017
D	801	807	226	202	1,027	534	23	43	681	1,559	1,737	1,284
BN	1,042	371	205	501	766	689	263	73	436	1,185	1,552	1,269
AN	1,019	552	452	963	1,077	884	286	232	206	1,250	1,540	1,366
W	1,220	618	853	980	1,125	1,136	583	523	360	1,406	1,544	1,669
All	990	563	434	594	937	747	273	230	467	1,480	1,568	1,365
45												
C	740	345	172	219	512	257	40	115	612	2,026	1,428	1,017
D	802	801	206	188	972	463	14	36	677	1,574	1,751	1,286
BN	1,042	365	186	451	687	635	221	67	431	1,181	1,551	1,269
AN	1,020	541	414	842	914	753	233	187	192	1,249	1,537	1,365
W	1,220	592	753	839	958	985	475	498	347	1,398	1,535	1,669
All	990	551	389	522	834	656	223	213	460	1,480	1,570	1,365
55												
C	616	346	157	205	474	228	38	102	610	2,019	1,429	1,020
D	804	792	181	171	913	392	8	27	658	1,596	1,781	1,312
BN	1,042	359	168	401	603	575	179	56	428	1,182	1,557	1,274
AN	1,020	526	372	722	751	621	190	126	182	1,249	1,531	1,364
W	1,220	563	651	695	790	833	371	455	329	1,388	1,524	1,667
All	970	538	341	447	727	561	177	186	448	1,481	1,574	1,372
65												
C	750	347	143	188	436	201	35	95	606	2,020	1,429	1,021
D	808	782	157	150	851	321	3	22	627	1,596	1,793	1,331
BN	1,046	353	148	346	517	511	143	44	426	1,185	1,590	1,298
AN	1,020	512	326	602	589	489	157	68	176	1,256	1,538	1,386
W	1,224	535	548	551	622	679	280	399	314	1,387	1,524	1,676
All	994	524	292	371	620	466	137	157	434	1,483	1,583	1,386
75												
C	770	351	126	160	384	163	32	50	583	2,082	1,469	1,071
D	814	772	130	124	785	247	0	16	583	1,588	1,793	1,329
BN	1,079	275	124	290	429	446	126	17	411	1,153	1,604	1,317
AN	1,024	497	275	481	425	356	143	20	153	1,260	1,578	1,410
W	1,226	503	443	405	452	524	205	348	296	1,392	1,540	1,697
All	1,006	497	241	291	509	367	108	122	410	1,487	1,602	1,406

A12.1.5.12 Robbs Peak Tunnel

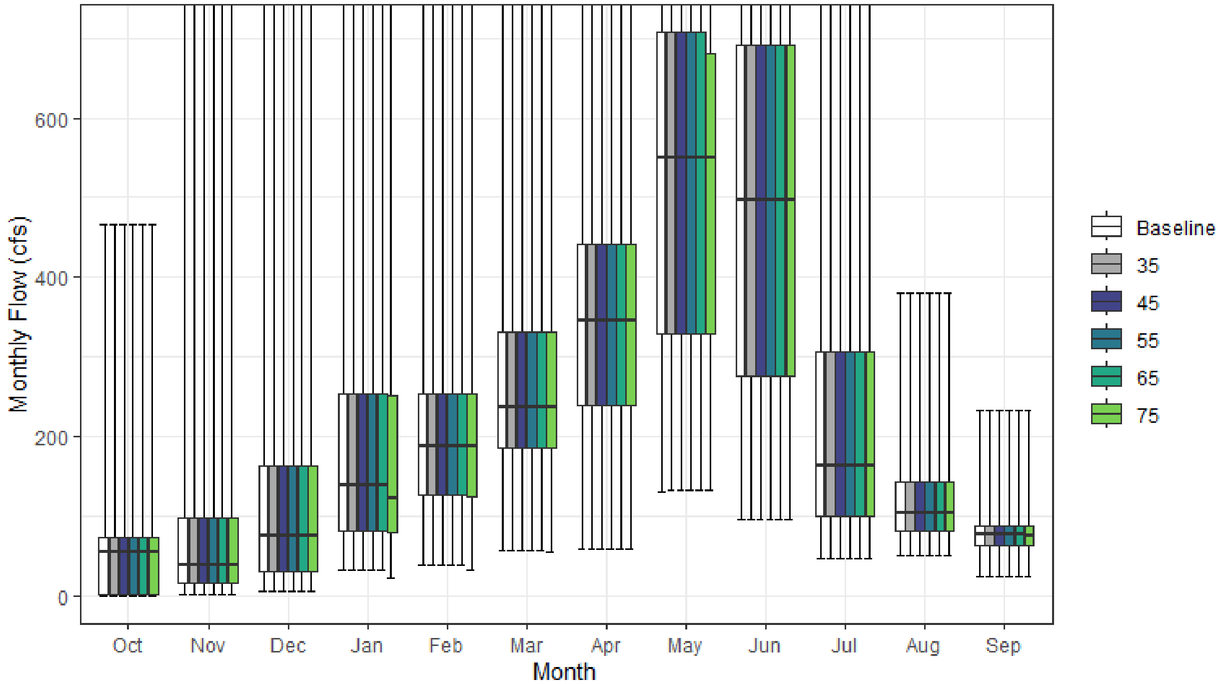

Figure A1-66. Robbs Peak Tunnel Monthly Boxplot

Table A1-138. Cumulative Distribution of Monthly Flow (cfs)—Robbs Peak Tunnel

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	0	2	6	32	39	56	59	131	96	47	51	24	47
10%	0	8	19	57	91	126	175	245	178	83	72	52	78
25%	2	16	29	81	126	185	239	329	276	100	81	63	110
50%	54	38	75	138	187	237	346	549	496	163	104	77	158
75%	72	98	163	254	252	331	441	707	690	306	142	87	220
90%	108	194	496	363	339	435	538	930	879	388	166	103	262
100%	466	841	1,020	890	965	909	799	1,020	1,020	783	381	233	371
Mean	59	87	158	188	211	268	349	550	513	219	118	79	169
35													
0%	0	2	6	33	39	56	60	131	96	47	51	24	47
10%	0	8	19	57	91	126	176	245	178	83	72	52	78
25%	2	16	29	81	126	185	240	329	276	100	81	63	110
50%	54	38	75	138	187	237	346	549	496	163	104	77	158
75%	72	98	163	254	252	331	441	707	690	306	142	87	220
90%	108	194	496	363	339	435	538	930	879	388	166	103	262
100%	466	841	1,020	890	965	909	799	1,020	1,020	783	381	233	371
Mean	59	87	158	188	211	268	350	550	513	219	118	79	169
45													
0%	0	2	6	33	39	56	60	131	96	47	51	24	47
10%	0	8	19	57	91	126	176	245	178	83	72	52	78
25%	2	16	29	81	126	185	240	329	276	100	81	63	110
50%	54	38	75	138	187	237	346	549	496	163	104	77	158
75%	72	98	163	254	252	331	441	707	690	306	142	87	220
90%	108	194	496	363	339	435	538	930	879	388	166	103	262
100%	466	841	1,020	890	965	909	799	1,020	1,020	783	381	233	371
Mean	59	87	158	188	211	268	350	550	513	219	118	79	169
55													
0%	0	2	6	33	39	56	60	131	96	47	51	24	47
10%	0	8	19	57	91	126	176	245	178	83	72	52	78
25%	2	16	29	81	126	185	240	329	276	100	81	63	110
50%	54	38	75	138	187	237	346	549	496	163	104	77	158
75%	72	98	163	254	252	331	441	707	690	306	142	87	220
90%	108	194	496	363	339	435	538	930	879	388	166	103	262
100%	466	841	1,020	890	965	909	799	1,020	1,020	783	381	233	371
Mean	59	87	158	188	211	268	350	550	513	219	118	79	169
65													
0%	0	2	6	33	39	56	60	131	96	47	51	24	47
10%	0	8	19	57	91	126	176	245	178	83	72	52	78
25%	2	16	29	81	126	185	240	329	276	100	81	63	110
50%	54	38	75	138	187	237	346	549	496	163	104	77	158
75%	72	98	163	254	252	331	441	707	690	306	142	87	220
90%	108	194	496	363	339	435	538	930	879	388	166	103	262
100%	466	841	1,020	890	965	909	799	1,020	1,020	783	381	233	371
Mean	59	87	158	188	211	268	350	550	513	219	118	79	169
75													
0%	0	2	6	21	32	55	60	131	96	47	51	24	47
10%	0	8	19	52	91	126	176	245	166	80	72	51	77
25%	2	16	29	80	124	185	240	329	276	100	81	63	109
50%	54	38	75	123	187	237	346	549	496	163	104	76	158
75%	72	98	163	250	252	331	441	680	690	306	142	87	220
90%	108	194	496	363	339	435	538	930	879	388	166	101	262
100%	466	841	1,020	890	965	909	799	1,020	1,020	783	381	233	371
Mean	59	87	158	186	211	268	349	549	511	219	118	79	169

Table A1-139. Water Year Average of Monthly Flows (cfs)—Robbs Peak Tunnel

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	45	29	44	64	102	143	169	252	240	90	76	70
D	43	73	85	97	152	230	304	417	361	132	88	82
BN	58	46	66	126	177	240	384	540	512	191	112	76
AN	57	130	176	276	247	341	389	661	533	216	115	67
W	79	134	323	323	319	348	442	768	765	372	168	89
All	59	87	158	188	211	268	349	550	513	219	118	79
35												
C	45	29	44	64	102	143	169	252	240	90	76	70
D	43	73	85	97	152	230	304	417	361	132	88	82
BN	57	46	66	126	177	240	384	540	512	191	112	76
AN	57	130	175	276	247	341	389	661	533	216	115	67
W	79	134	323	323	319	348	442	768	765	372	168	89
All	59	87	158	188	211	268	350	550	513	219	118	79
45												
C	45	29	44	64	102	143	169	252	240	90	76	70
D	43	73	85	97	152	230	304	417	361	132	88	82
BN	57	46	66	126	177	240	384	540	512	191	112	76
AN	57	130	175	276	247	341	389	661	533	216	115	67
W	79	134	323	323	319	348	442	768	765	372	168	89
All	59	87	158	188	211	268	350	550	513	219	118	79
55												
C	45	29	44	64	102	143	169	252	240	90	76	70
D	43	73	85	97	152	230	304	417	361	132	88	82
BN	57	46	66	126	177	240	384	540	512	191	112	76
AN	57	130	175	276	247	341	389	661	533	216	115	67
W	79	134	323	323	319	348	442	768	765	372	168	89
All	59	87	158	188	211	268	350	550	513	219	118	79
65												
C	45	29	44	64	102	143	169	252	240	90	76	70
D	43	73	85	97	152	230	304	417	361	132	88	82
BN	57	46	66	126	177	240	384	540	512	191	112	76
AN	57	130	175	276	247	341	389	661	533	216	115	67
W	79	134	323	323	319	348	442	768	765	372	168	89
All	59	87	158	188	211	268	350	550	513	219	118	79
75												
C	45	29	44	63	102	143	169	251	239	90	75	69
D	44	73	85	95	150	230	304	417	351	132	87	82
BN	57	46	66	122	177	240	384	536	512	191	112	75
AN	57	130	175	276	247	341	389	661	533	216	115	67
W	79	134	323	321	319	348	442	768	765	372	168	88
All	59	87	158	186	211	268	349	549	511	219	118	79

A12.1.5.13 Lake Valley Canal

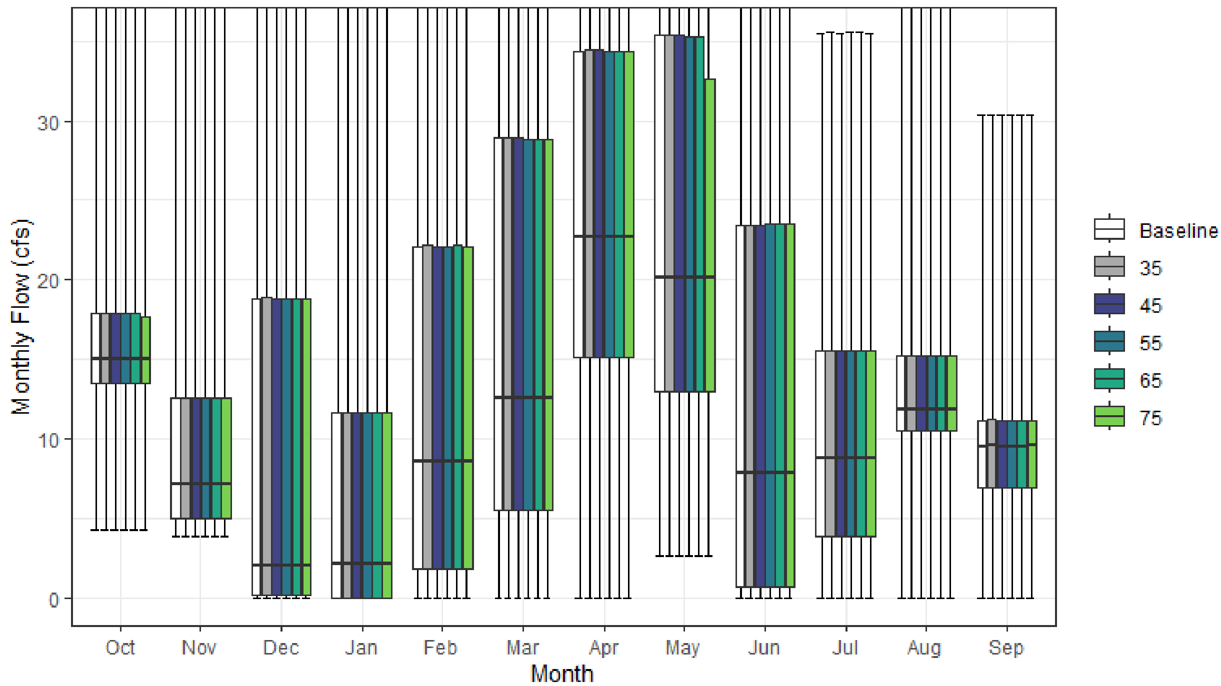

Table A1-140. Lake Valley Canal Monthly Boxplot

Table A1-141. Cumulative Distribution of Monthly Flow (cfs)—Lake Valley Canal

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Annual (TAF)
Baseline													
0%	4	4	0	0	0	0	0	3	0	0	0	0	2
10%	13	4	0	0	0	1	6	9	0	0	5	6	6
25%	13	5	0	0	2	6	15	13	1	4	11	7	8
50%	15	7	2	2	9	13	23	20	8	9	12	10	10
75%	18	13	19	12	22	29	34	35	23	16	15	11	12
90%	21	22	34	36	38	42	42	42	41	21	17	15	16
100%	42	42	42	42	42	42	42	42	42	36	42	30	22
Mean	17	11	10	9	13	17	24	23	14	10	12	10	10
35													
0%	4	4	0	0	0	0	0	3	0	0	0	0	2
10%	13	4	0	0	0	1	6	9	0	0	5	6	6
25%	13	5	0	0	2	6	15	13	1	4	11	7	8
50%	15	7	2	2	9	13	23	20	8	9	12	10	10
75%	18	13	19	12	22	29	34	35	23	16	15	11	12
90%	21	22	34	36	38	42	42	42	41	21	17	15	16
100%	42	42	42	42	42	42	42	42	42	36	42	30	22
Mean	17	11	10	9	13	17	24	23	14	10	12	10	10
45													
0%	4	4	0	0	0	0	0	3	0	0	0	0	2
10%	13	4	0	0	0	1	6	9	0	0	5	6	6
25%	13	5	0	0	2	6	15	13	1	4	11	7	8
50%	15	7	2	2	9	13	23	20	8	9	12	10	10
75%	18	13	19	12	22	29	34	35	23	16	15	11	12
90%	21	22	34	35	38	42	42	42	41	21	17	15	16
100%	42	42	42	42	42	42	42	42	42	36	42	30	22
Mean	17	11	10	9	13	17	24	23	14	10	12	10	10
55													
0%	4	4	0	0	0	0	0	3	0	0	0	0	2
10%	13	4	0	0	0	1	6	9	0	0	5	6	6
25%	13	5	0	0	2	6	15	13	1	4	11	7	8
50%	15	7	2	2	9	13	23	20	8	9	12	9	10
75%	18	13	19	12	22	29	34	35	24	16	15	11	12
90%	21	22	34	36	38	42	42	42	41	21	17	15	16
100%	42	42	42	42	42	42	42	42	42	36	42	30	22
Mean	17	11	10	9	13	17	24	23	14	10	12	10	10
65													
0%	4	4	0	0	0	0	0	3	0	0	0	0	2
10%	13	4	0	0	0	1	6	9	0	0	5	6	6
25%	13	5	0	0	2	6	15	13	1	4	11	7	8
50%	15	7	2	2	9	13	23	20	8	9	12	9	10
75%	18	13	19	12	22	29	34	35	24	16	15	11	12
90%	21	22	34	35	38	42	42	42	41	21	17	15	16
100%	42	42	42	42	42	42	42	42	42	36	42	30	22
Mean	17	11	10	9	13	17	24	23	14	10	12	10	10
75													
0%	4	4	0	0	0	0	0	3	0	0	0	0	2
10%	13	4	0	0	0	1	6	9	0	0	5	6	6
25%	13	5	0	0	2	6	15	13	1	4	11	7	8
50%	15	7	2	2	9	13	23	20	8	9	12	10	10
75%	18	13	19	12	22	29	34	33	24	16	15	11	12
90%	21	22	34	35	38	42	42	42	41	21	17	15	16
100%	42	42	42	42	42	42	42	42	42	36	42	30	21
Mean	17	11	10	9	13	17	24	23	14	10	12	10	10

Table A1-142. Water Year Average of Monthly Flows (cfs)—Lake Valley Canal

Water Year Type	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Baseline												
C	15	7	4	2	5	15	20	17	6	4	8	9
D	17	10	6	2	8	15	26	22	6	7	12	9
BN	16	8	2	4	13	17	28	29	17	12	13	10
AN	16	12	14	21	16	23	29	25	11	11	16	10
W	18	14	20	17	20	17	19	23	23	14	12	10
All	17	11	10	9	13	17	24	23	14	10	12	10
35												
C	15	7	4	2	5	15	20	17	6	4	8	9
D	17	10	6	2	8	15	26	22	6	7	12	9
BN	16	8	2	4	13	17	28	29	17	12	13	10
AN	16	12	14	21	16	23	29	25	11	11	16	10
W	18	14	20	17	20	17	19	23	23	14	12	10
All	17	11	10	9	13	17	24	23	14	10	12	10
45												
C	15	7	4	2	5	15	20	17	6	4	8	9
D	17	10	6	2	8	15	26	22	6	7	12	9
BN	16	8	2	4	13	17	28	29	17	12	13	10
AN	16	12	14	21	16	23	29	25	11	11	16	10
W	18	14	20	17	20	17	19	23	23	14	12	10
All	17	11	10	9	13	17	24	23	14	10	12	10
55												
C	15	7	4	2	5	15	20	17	6	4	8	9
D	17	10	6	2	8	15	26	22	6	7	12	9
BN	16	8	2	4	13	17	28	29	17	12	13	10
AN	16	12	14	21	16	23	29	25	11	11	16	10
W	18	14	20	17	20	17	19	23	23	14	12	10
All	17	11	10	9	13	17	24	23	14	10	12	10
65												
C	15	7	4	2	5	15	20	17	6	4	8	9
D	17	10	6	2	8	15	26	22	6	7	12	9
BN	16	8	2	4	13	17	28	29	17	12	13	10
AN	16	12	14	21	16	23	29	25	11	11	16	10
W	18	14	20	17	20	17	19	23	23	14	12	10
All	17	11	10	9	13	17	24	23	14	10	12	10
75												
C	15	7	4	2	5	15	20	17	6	4	8	9
D	17	10	6	2	8	15	26	22	6	7	12	9
BN	16	8	2	4	13	17	28	29	17	12	13	10
AN	16	10	14	21	16	23	29	25	11	11	16	10
W	18	14	20	17	20	17	19	22	23	14	12	10
All	17	11	10	9	13	17	24	23	14	10	12	10

A1.12.6 Reservoir Storage

SacWAM dynamically simulates storage regulation in most major reservoirs in the Sacramento Valley. Storage in smaller reservoirs, including regulating reservoirs that act as forebays and afterbays, are typically not simulated, although they may be represented in the model schematic. Storage in these smaller reservoirs is usually kept constant. For some mid-size reservoirs, storage is constrained to follow historical average monthly values. Reservoirs represented in the model, but having storage that does not change in any of the scenarios are considered non-reoperated reservoirs (Table A1-143). Results for these reservoirs are not presented. Results for other reservoirs that exhibit changes in operation in response to the new requirements (Table A1-144) are presented as end-of-April storage and elevation and end-of-September storage and elevation. SacWAM has storage-elevation relationships for most of the reoperated reservoirs, allowing average annual fluctuation in reservoir elevation to be calculated as the average of the annual maximum minus minimum water surface elevations (Table A1-145).

Table A1-143. List of Non-Reoperated Reservoirs ~~in Any of the Scenarios~~ and Their Watershed

Reservoir	Watershed	Reservoir	Watershed
Antelope Reservoir	Feather	Lake Davis	Feather
Belden Reservoir	Feather	Lake Natoma	American
Camino Reservoir	American	Lake Tableaud	Mokelumne
Caples Lake	American	Lake Valley	American
Chili Bar Reservoir	American	Lewiston Lake	Trinity
Clifton Court Forebay	–	Little Grass Valley Reservoir	Feather
Cresta Reservoir	Feather	Loon Lake	American
EBMUD Terminal Reservoirs	–	Lower Bucks Lake	Feather
Englebright Reservoir	Yuba	Merle Collins Reservoir	Yuba
Farmington Reservoir	Littlejohns	PGE Old Reservoirs	Mokelumne
Frenchman Lake	Feather	Poe Reservoir	Feather
French Lake	Yuba	Rock Creek Reservoir	Feather
Gerle Creek Reservoir	American	Schaads Reservoir	Mokelumne
Grizzly Reservoir	Feather	Silver Lake	American
Ice House	American	Slab Creek Reservoir	American
Jenkinson Lake	Cosumnes	Sly Creek Reservoir	Feather
Junction Reservoir	American	Thermalito Afterbay	Feather
Keswick Reservoir	Sacramento	Trinity Reservoir	Trinity
Lake Aloha	American	Union Valley Reservoir	American
Lake Amador	Mokelumne	Upper Bear	Mokelumne
Lake Combie	Bear		

Reservoirs represented in SacWAM with storage that does not change in any of the scenarios are considered non-reoperated reservoirs.

Table A1-144. List of Reoperated Reservoirs and Their Watershed

Reservoir	Watershed	Reservoir	Watershed
Black Butte Reservoir	Stony	Los Vaqueros Reservoir	Kellogg
Bowman Lake	Yuba	Lower Bear	Mokelumne
Buck Island	American	Mountain Meadows Reservoir	Feather
Bucks Lake	Feather	New Bullards Bar Reservoir	Yuba
Butt Valley	Feather	New Hogan Reservoir	Calaveras
Camanche Reservoir	Mokelumne	Oroville Reservoir	Feather
Camp Far West	Bear	Pardee Reservoir	Mokelumne
Clear Lake	Cache	Philbrook Round Valley	Feather
CVP San Luis Reservoir	SOD offstream	Rollins Reservoir	Bear
East Park Reservoir	Stony	Rubicon	American
Folsom Lake	American	Salt Springs	Mokelumne
French Meadows	American	San Luis Reservoir Total	SOD offstream
Hell Hole	American	Scotts Flat Reservoir	Yuba
Indian Valley Reservoir	Cache	Shasta Lake	Sacramento
Jackson Meadows Reservoir	Yuba	Stony Gorge Reservoir	Stony
Lake Almanor	Feather	Stumpy Meadows	American
Lake Berryessa	Putah	SWP San Luis Reservoir	SOD offstream
Lake Fordyce	Yuba	Whiskeytown Reservoir	Clear
Lake Spaulding	Yuba		

SOD = south of Delta
Reservoirs represented in SacWAM with storage that exhibits changes in operation in response to the proposed Plan amendments are considered reoperated reservoirs.

Table A1-145. Average Annual Change in Elevation for Reservoirs with Elevational Changes Calculated by SacWAM

			Flow Scenario Minus Baseline				
Reservoir	Watershed	Baseline	35	45	55	65	75
Black Butte Reservoir	Stony	32.5	-3.9	-5.6	-8.4	-12.7	-17.7
Bowman Lake	Yuba	54.5	-0.8	-0.6	-0.7	-1.5	-1.5
Bucks Lake	Feather	22.3	0.0	0.0	0.0	0.1	0.5
Butt Valley	Feather	3.2	0.0	0.0	0.0	0.0	0.1
Camanche Reservoir	Mokelumne	23.1	-5.9	-7.2	-8.5	-9.0	-8.2
Camp Far West	Bear	42.7	-0.7	-1.3	-0.7	-1.9	-8.0
Clear Lake	Cache	5.4	-0.2	-0.3	-0.4	-0.5	-0.7
East Park Reservoir	Stony	10.3	5.0	7.1	10.2	14.3	16.2
Folsom Lake	American	49.9	-2.8	-8.3	-15.4	-12.7	-5.2
French Meadows	American	66.0	0.0	0.0	-0.5	-2.9	-9.7
Hell Hole	American	103.7	-0.2	-0.2	-1.7	-3.7	15.2
Indian Valley Reservoir	Cache	49.4	1.5	1.5	0.5	-4.0	-6.2
Jackson Meadows Reservoir	Yuba	38.0	-0.3	-0.6	-1.6	-4.7	-10.9

			Flow Scenario Minus Baseline				
Reservoir	**Watershed**	**Baseline**	**35**	**45**	**55**	**65**	**75**
Lake Almanor	Feather	8.9	0.0	0.0	0.0	0.0	-0.2
Lake Berryessa	Putah	20.0	-5.5	-7.2	-9.5	-11.6	-14.0
Lake Fordyce	Yuba	67.1	-1.1	-2.5	-7.8	-16.5	-24.3
Lake Spaulding	Yuba	106.8	-0.2	-0.9	-1.7	-3.8	-13.3
Los Vaqueros Reservoir	Kellogg	13.9	0.3	-0.3	-1.9	-3.9	-5.0
Lower Bear	Mokelumne	86.4	0.1	0.5	0.2	-2.8	-10.1
New Bullards Bar Reservoir	Yuba	89.5	-12.0	-13.8	-15.4	-26.6	-32.9
New Hogan Reservoir	Calaveras	35.1	-9.4	-10.6	-14.3	-14.6	-15.2
Oroville Reservoir	Feather	148.9	-18.1	-26.9	-41.7	-67.8	-79.2
Pardee Reservoir	Mokelumne	18.4	0.0	0.0	-0.2	-0.4	-1.5
Rollins Reservoir	Bear	10.9	-0.2	0.0	1.3	4.1	14.8
Salt Springs	Mokelumne	183.0	-3.6	-9.7	-17.6	-28.8	-48.5
San Luis Reservoir Total	SOD Offstream	125.6	7.9	3.3	6.9	9.8	-14.5
Scotts Flat Reservoir	Yuba	28.9	0.0	0.0	0.0	0.1	0.0
Shasta Lake	Sacramento	70.3	-5.8	-4.2	-4.6	-11.2	-22.0
Stony Gorge Reservoir	Stony	11.3	6.7	9.3	13.3	18.0	19.5
Whiskeytown Reservoir	Clear	10.2	0.0	0.0	0.0	0.0	0.6

SOD = south of Delta

A12.1.6.1 Antelope Reservoir (Feather River Watershed)

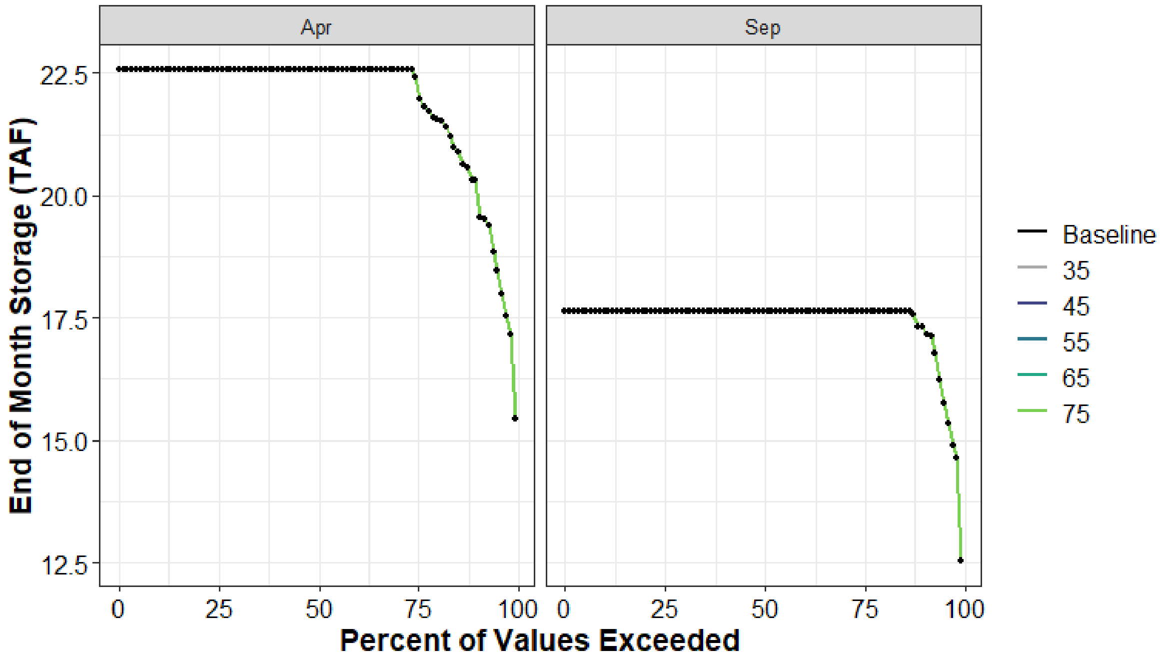

Figure A1-67. Antelope Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

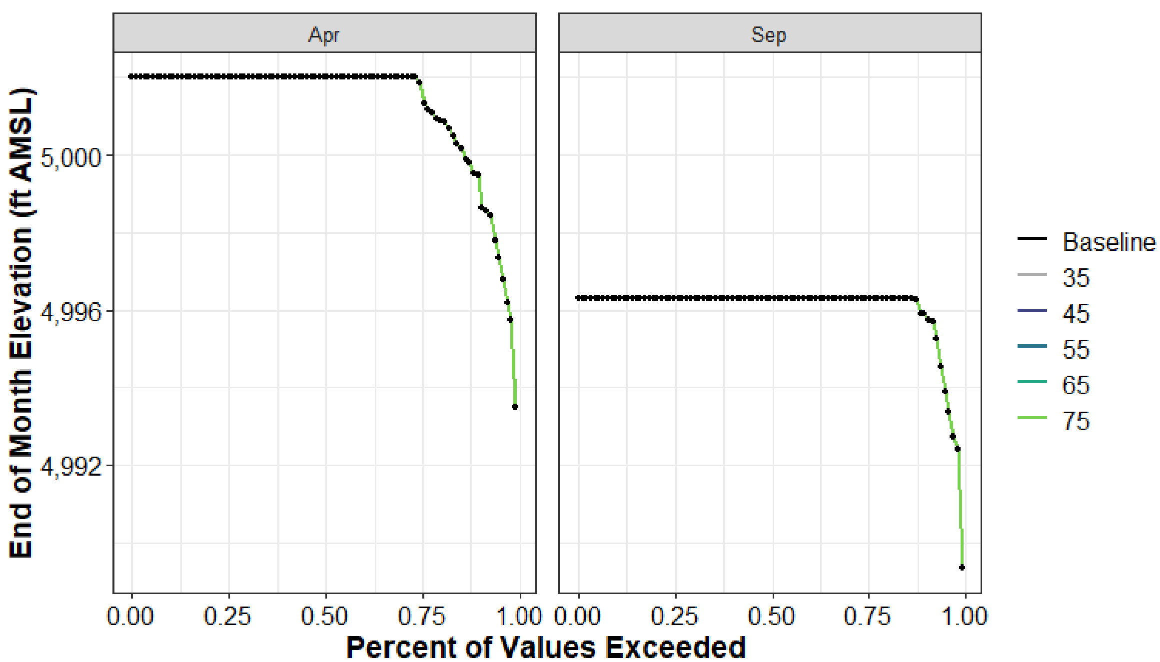

Figure A1-68. Antelope Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-146. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Antelope Reservoir

	Baseline	35	45	55	65	75
0%	13	0	0	0	0	0
10%	17	0	0	0	0	0
25%	18	0	0	0	0	0
50%	18	0	0	0	0	0
75%	18	0	0	0	0	0
90%	18	0	0	0	0	0
100%	18	0	0	0	0	0
Mean	17	0	0	0	0	0

Table A1-147. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Antelope Reservoir

	Baseline	35	45	55	65	75
0%	4,989	0	0	0	0	0
10%	4,996	0	0	0	0	0
25%	4,996	0	0	0	0	0
50%	4,996	0	0	0	0	0
75%	4,996	0	0	0	0	0
90%	4,996	0	0	0	0	0
100%	4,996	0	0	0	0	0
Mean	4,996	0	0	0	0	0

Table A1-148. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Antelope Reservoir

	Baseline	35	45	55	65	75
0%	15	0	0	0	0	0
10%	20	0	0	0	0	0
25%	22	0	0	0	0	0
50%	23	0	0	0	0	0
75%	23	0	0	0	0	0
90%	23	0	0	0	0	0
100%	23	0	0	0	0	0
Mean	22	0	0	0	0	0

Table A1-149. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Antelope Reservoir

	Baseline	35	45	55	65	75
0%	4,993	0	0	0	0	0
10%	4,999	0	0	0	0	0
25%	5,002	0	0	0	0	0
50%	5,002	0	0	0	0	0
75%	5,002	0	0	0	0	0
90%	5,002	0	0	0	0	0
100%	5,002	0	0	0	0	0
Mean	5,001	0	0	0	0	0

A12.1.6.2 Black Butte Reservoir (Stony Creek Watershed)

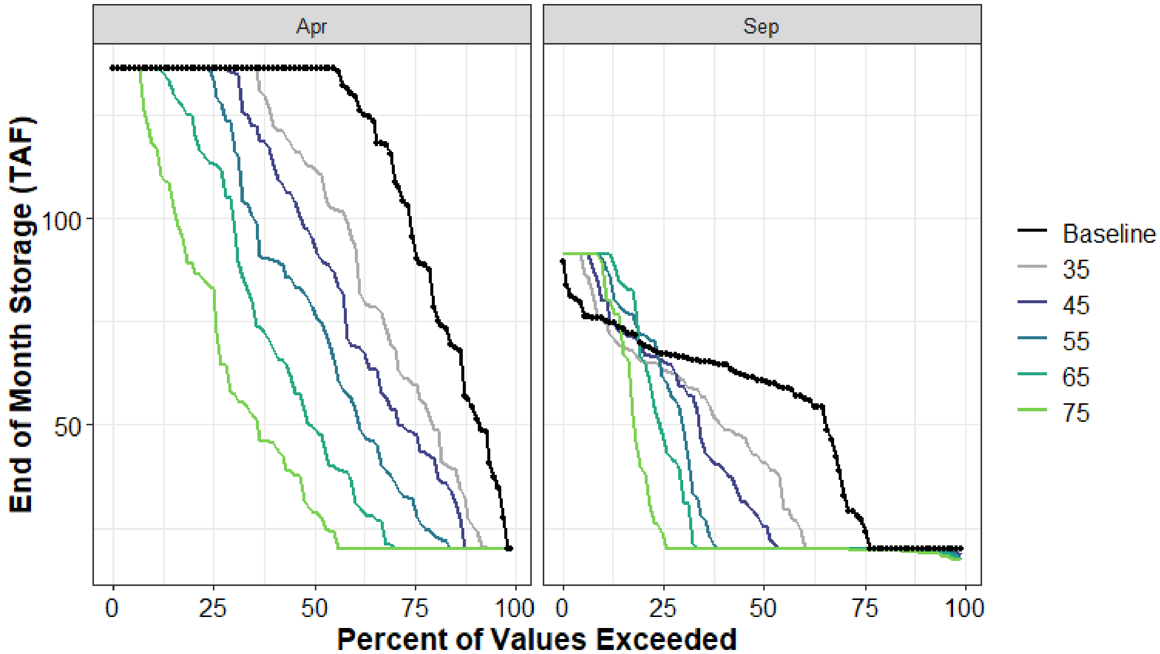

Figure A1-69. Black Butte Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

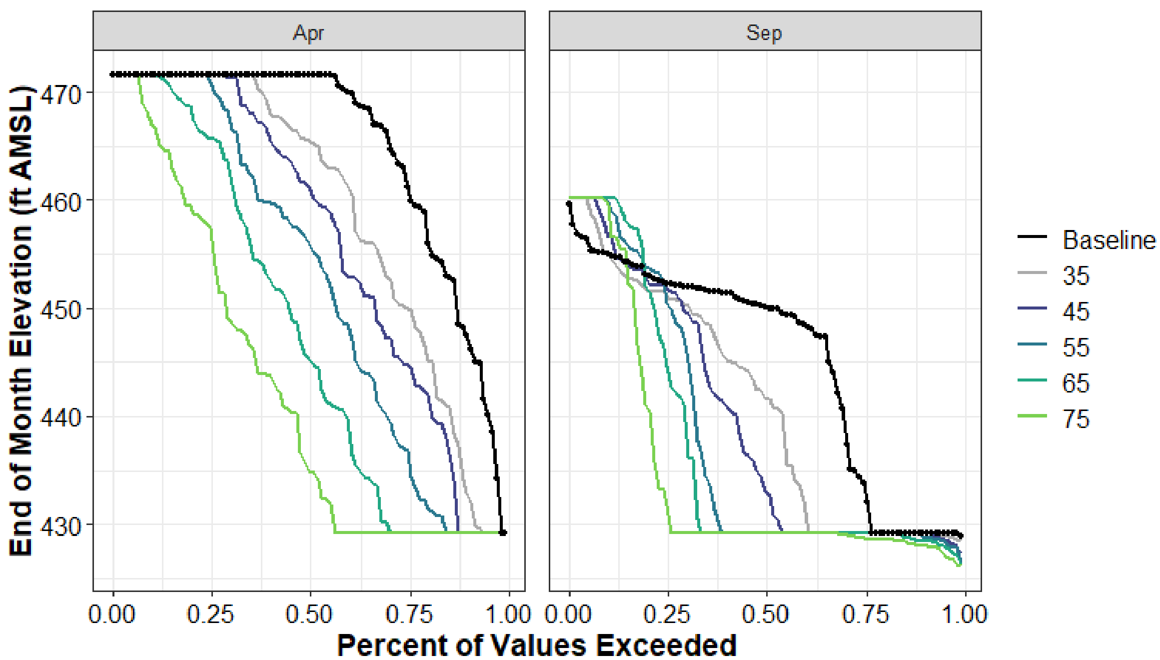

Figure A1-70. Black Butte Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-150. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Black Butte Reservoir

	Baseline	35	45	55	65	75
0%	20	0	-2	-2	-2	-3
10%	20	0	0	0	-1	-1
25%	27	-7	-7	-7	-7	-7
50%	61	-20	-35	-41	-41	-41
75%	67	-4	-2	-6	-19	-44
90%	76	0	5	14	16	12
100%	90	2	2	2	2	2
Mean	52	-9	-11	-14	-16	-20

Table A1-151. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Black Butte Reservoir

	Baseline	35	45	55	65	75
0%	429	0	-2	-2	-3	-3
10%	429	0	0	0	-1	-1
25%	434	-5	-5	-5	-5	-5
50%	450	-9	-17	-21	-21	-21
75%	452	-1	-1	-2	-8	-21
90%	455	0	1	5	5	4
100%	460	1	1	1	1	1
Mean	445	-4	-6	-7	-8	-11

Table A1-152. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Black Butte Reservoir

	Baseline	35	45	55	65	75
0%	20	0	0	0	0	0
10%	55	-29	-35	-35	-35	-35
25%	95	-35	-47	-63	-75	-75
50%	136	-24	-41	-58	-87	-107
75%	136	0	0	-2	-23	-53
90%	136	0	0	0	0	-18
100%	136	0	0	0	0	0
Mean	114	-18	-26	-37	-49	-63

Table A1-153. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Black Butte Reservoir

	Baseline	35	45	55	65	75
0%	429	0	0	0	0	0
10%	448	-15	-19	-19	-19	-19
25%	461	-11	-16	-24	-32	-32
50%	472	-6	-10	-16	-26	-37
75%	472	0	0	-1	-6	-14
90%	472	0	0	0	0	-5
100%	472	0	0	0	0	0
Mean	465	-6	-9	-13	-17	-23

A12.1.6.3 Bowman Lake (Yuba River Watershed)

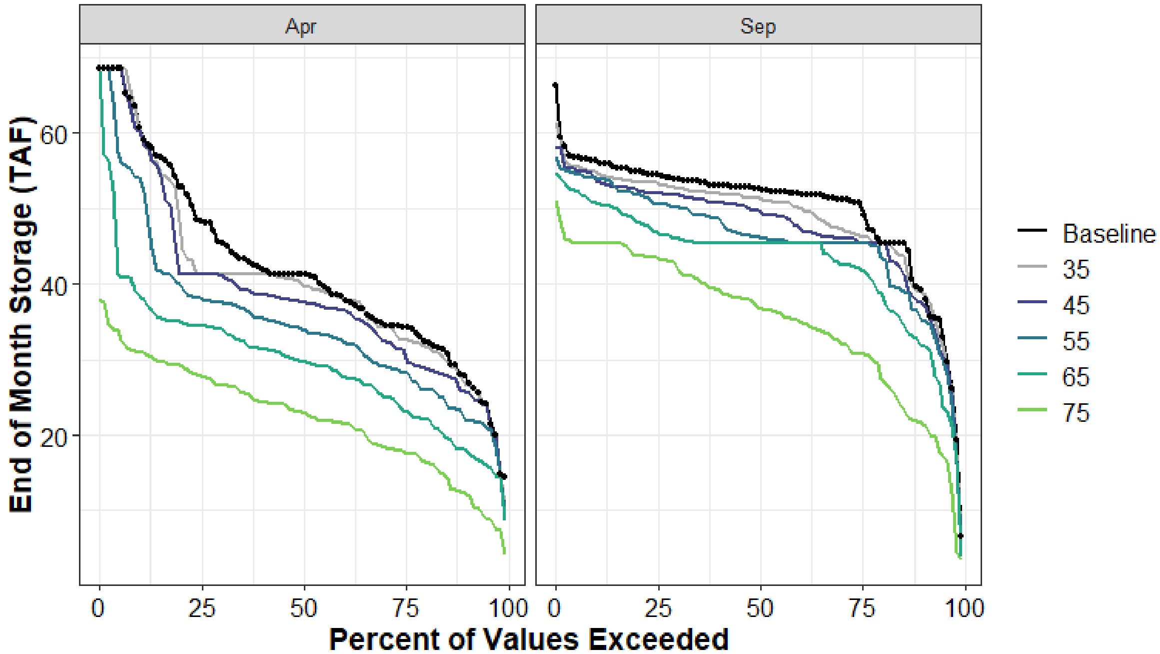

Figure A1-71. Bowman Lake End-of-April and End-of-September Storage Percent Exceedance Plot

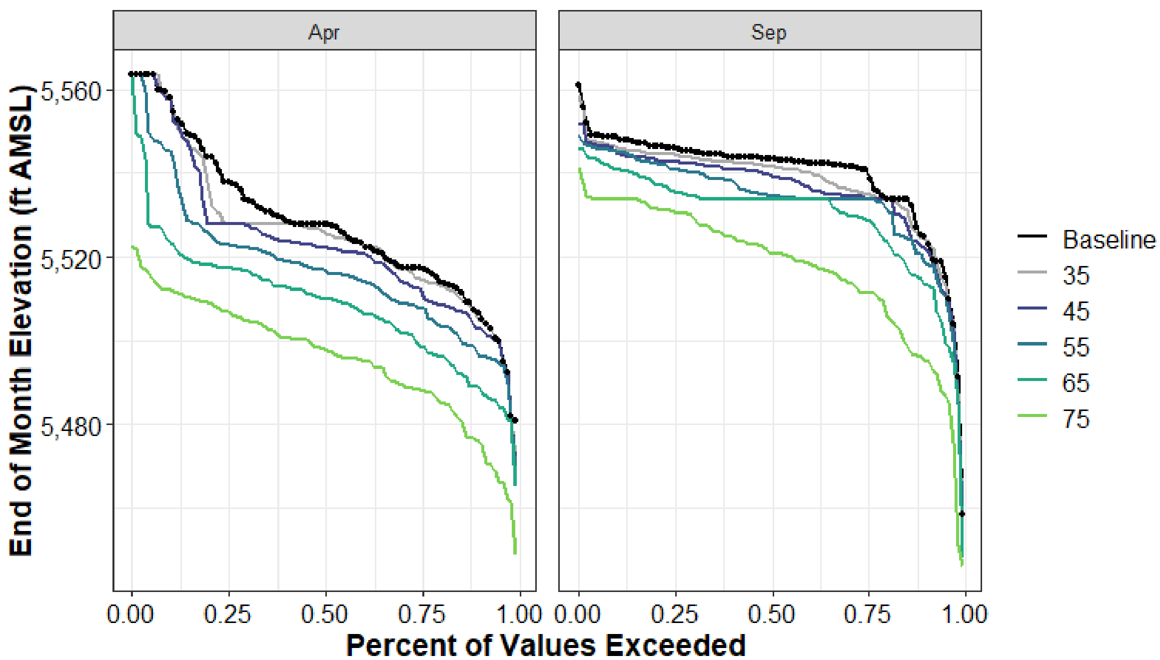

Figure A1-72. Bowman Lake End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-154. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Bowman Lake

	Baseline	35	45	55	65	75
0%	7	0	0	0	-3	-3
10%	39	0	-2	-4	-7	-18
25%	51	-4	-5	-5	-9	-20
50%	53	-1	-3	-7	-7	-16
75%	54	-1	-2	-4	-8	-11
90%	56	-2	-3	-2	-6	-11
100%	66	-5	-8	-9	-12	-15
Mean	50	-2	-3	-4	-7	-15

Table A1-155. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Bowman Lake

	Baseline	35	45	55	65	75
0%	5,459	-2	-2	-1	-10	-12
10%	5,525	-1	-3	-6	-11	-29
25%	5,541	-6	-7	-7	-12	-29
50%	5,544	-2	-4	-9	-10	-23
75%	5,546	-1	-3	-5	-10	-15
90%	5,548	-2	-4	-3	-8	-15
100%	5,561	-3	-9	-12	-15	-20
Mean	5,540	-2	-4	-6	-10	-22

Table A1-156. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Bowman Lake

	Baseline	35	45	55	65	75
0%	14	-4	-4	-5	-6	-10
10%	28	-1	-2	-6	-10	-15
25%	34	-2	-3	-6	-11	-17
50%	41	-1	-4	-7	-12	-18
75%	48	-7	-7	-10	-14	-20
90%	60	0	-1	-7	-22	-29
100%	69	0	0	0	0	-31
Mean	42	-1	-3	-7	-12	-20

Table A1-157. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Bowman Lake

	Baseline	35	45	55	65	75
0%	5,481	-9	-12	-13	-16	-32
10%	5,507	-1	-4	-10	-18	-31
25%	5,517	-3	-5	-10	-19	-29
50%	5,528	-2	-5	-11	-18	-30
75%	5,538	-10	-10	-15	-20	-31
90%	5,557	0	-1	-13	-34	-45
100%	5,564	0	0	0	0	-41
Mean	5,528	-2	-5	-11	-19	-32

A12.1.6.4 Buck Island (American River Watershed)

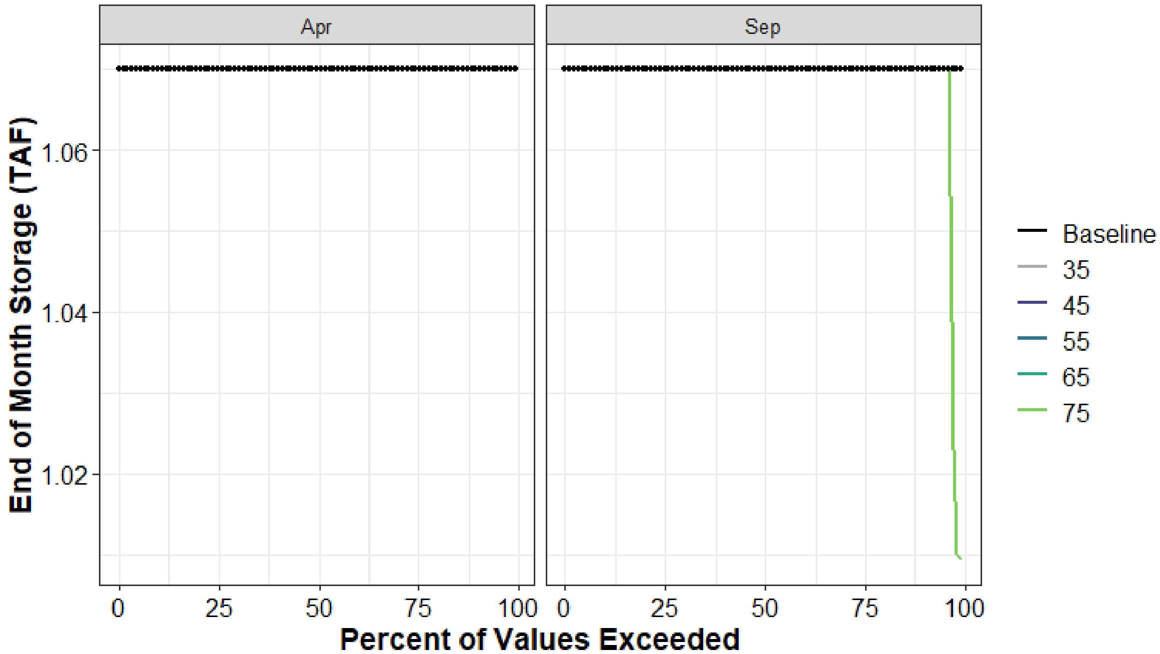

Figure A1-73. Buck Island End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-158. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Buck Island

	Baseline	35	45	55	65	75
0%	1	0	0	0	0	0
10%	1	0	0	0	0	0
25%	1	0	0	0	0	0
50%	1	0	0	0	0	0
75%	1	0	0	0	0	0
90%	1	0	0	0	0	0
100%	1	0	0	0	0	0
Mean	1	0	0	0	0	0

Table A1-159. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Buck Island

	Baseline	35	45	55	65	75
0%	1	0	0	0	0	0
10%	1	0	0	0	0	0
25%	1	0	0	0	0	0
50%	1	0	0	0	0	0
75%	1	0	0	0	0	0
90%	1	0	0	0	0	0
100%	1	0	0	0	0	0
Mean	1	0	0	0	0	0

A12.1.6.5 Bucks Lake (Feather River Watershed)

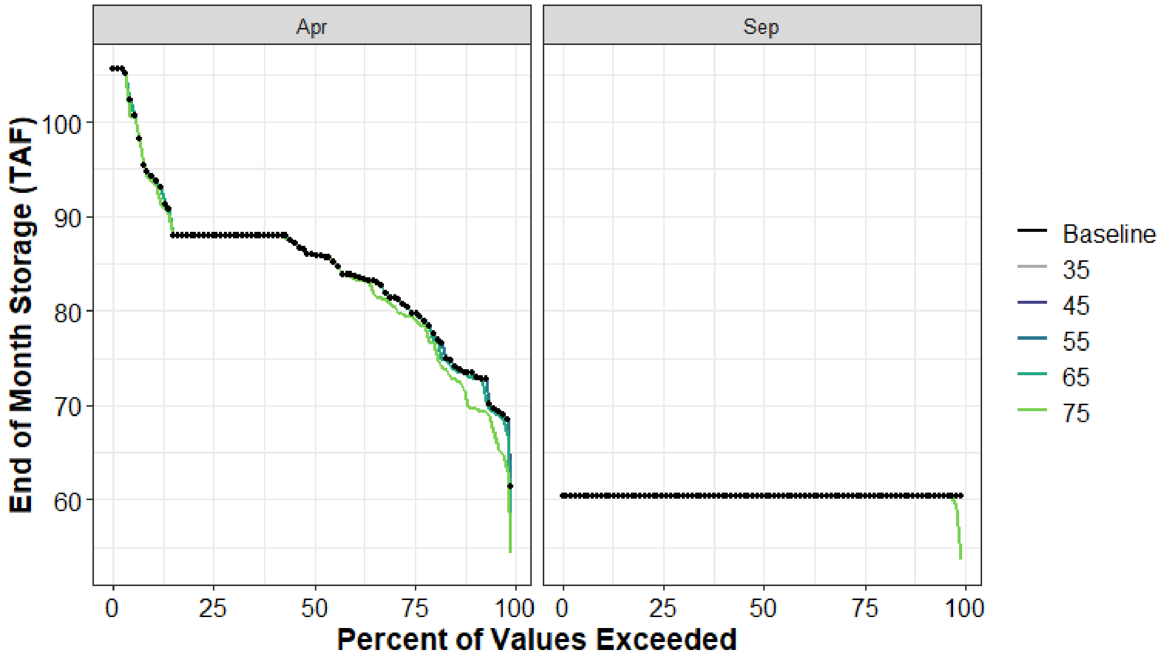

Figure A1-74. Bucks Lake End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

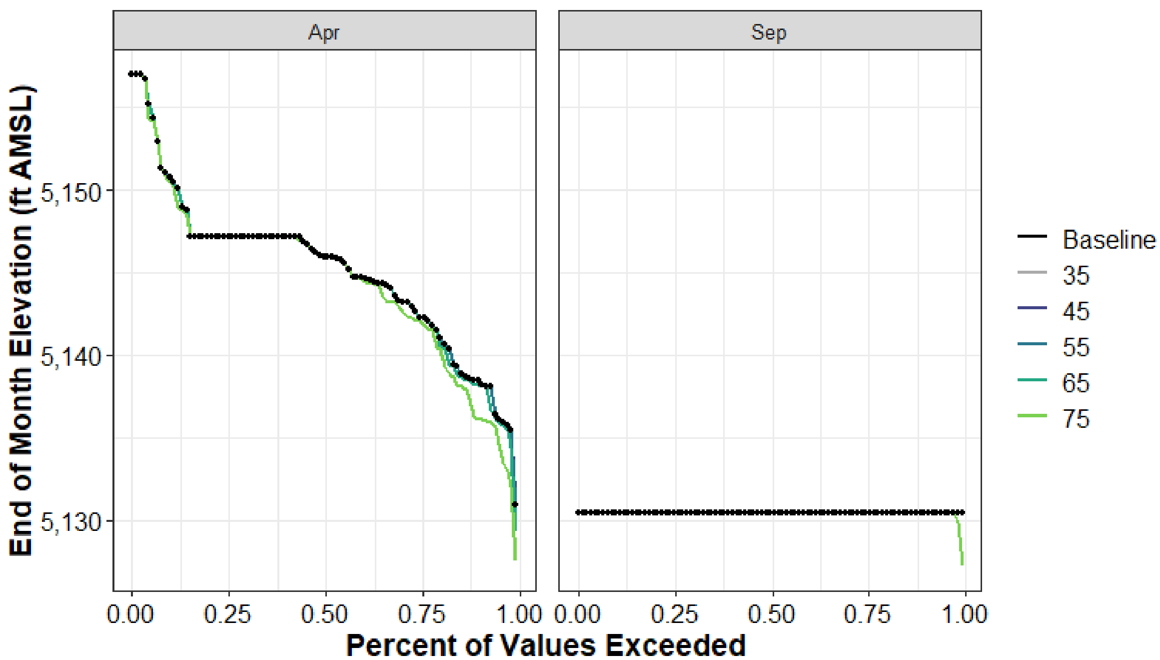

Figure A1-75. Bucks Lake Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-160. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Bucks Lake

	Baseline	35	45	55	65	75
0%	60	0	0	0	0	-7
10%	60	0	0	0	0	0
25%	60	0	0	0	0	0
50%	60	0	0	0	0	0
75%	60	0	0	0	0	0
90%	60	0	0	0	0	0
100%	60	0	0	0	0	0
Mean	60	0	0	0	0	0

Table A1-161. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Bucks Lake

	Baseline	35	45	55	65	75
0%	5,130	0	0	0	0	-3
10%	5,130	0	0	0	0	0
25%	5,130	0	0	0	0	0
50%	5,130	0	0	0	0	0
75%	5,130	0	0	0	0	0
90%	5,130	0	0	0	0	0
100%	5,130	0	0	0	0	0
Mean	5,130	0	0	0	0	0

Table A1-162. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Bucks Lake

	Baseline	35	45	55	65	75
0%	61	0	0	-1	-3	-7
10%	73	0	0	0	0	-4
25%	80	0	0	0	0	0
50%	86	0	0	0	0	0
75%	88	0	0	0	0	0
90%	94	0	0	0	0	-1
100%	106	0	0	0	0	0
Mean	85	0	0	0	0	-1

Table A1-163. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Bucks Lake

	Baseline	35	45	55	65	75
0%	5,131	0	0	-1	-2	-3
10%	5,138	0	0	0	0	-2
25%	5,142	0	0	0	0	0
50%	5,146	0	0	0	0	0
75%	5,147	0	0	0	0	0
90%	5,151	0	0	0	0	0
100%	5,157	0	0	0	0	0
Mean	5,145	0	0	0	0	-1

A12.1.6.6 Butt Valley (Feather River Watershed)

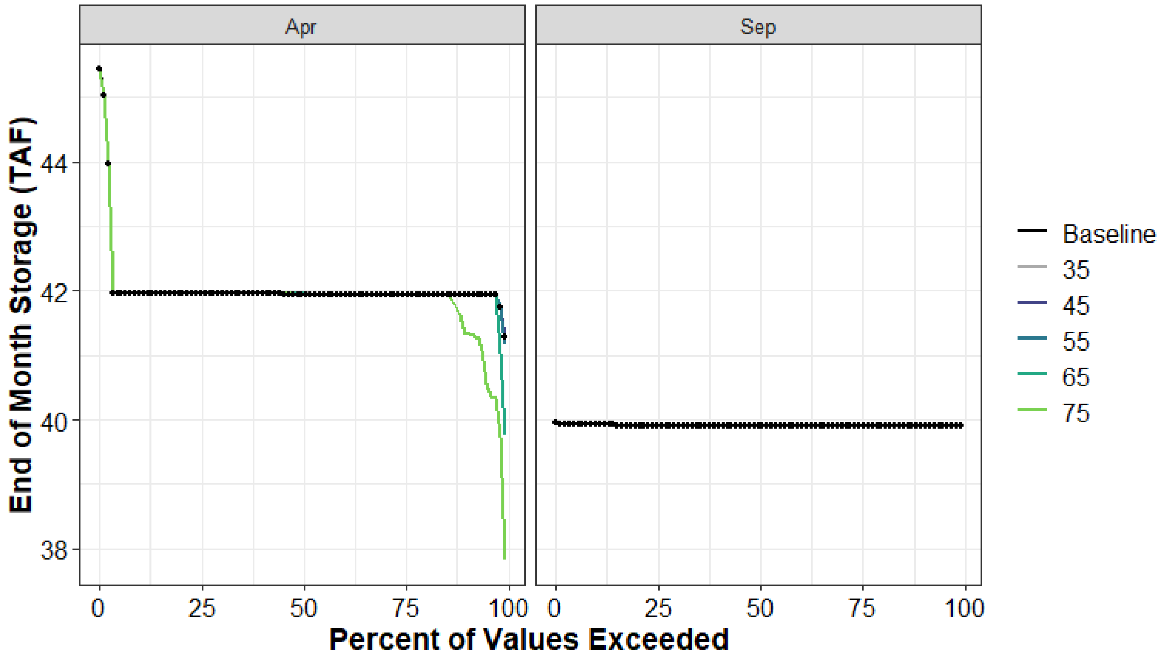

Figure A1-76. Butt Valley End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

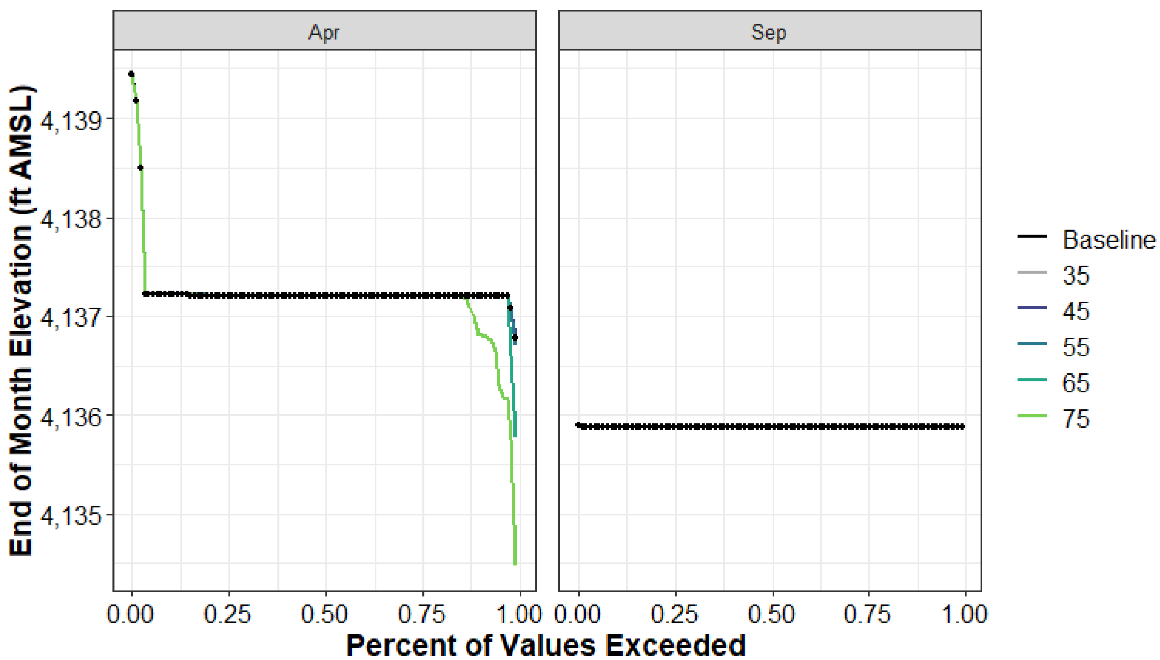

Figure A1-77. Butt Valley Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-164. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Butt Valley

	Baseline	35	45	55	65	75
0%	40	0	0	0	0	0
10%	40	0	0	0	0	0
25%	40	0	0	0	0	0
50%	40	0	0	0	0	0
75%	40	0	0	0	0	0
90%	40	0	0	0	0	0
100%	40	0	0	0	0	0
Mean	40	0	0	0	0	0

Table A1-165. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Butt Valley

	Baseline	35	45	55	65	75
0%	4,136	0	0	0	0	0
10%	4,136	0	0	0	0	0
25%	4,136	0	0	0	0	0
50%	4,136	0	0	0	0	0
75%	4,136	0	0	0	0	0
90%	4,136	0	0	0	0	0
100%	4,136	0	0	0	0	0
Mean	4,136	0	0	0	0	0

Table A1-166. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Butt Valley

	Baseline	35	45	55	65	75
0%	41	0	0	0	-2	-3
10%	42	0	0	0	0	-1
25%	42	0	0	0	0	0
50%	42	0	0	0	0	0
75%	42	0	0	0	0	0
90%	42	0	0	0	0	0
100%	45	0	0	0	0	0
Mean	42	0	0	0	0	0

Table A1-167. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Butt Valley

	Baseline	35	45	55	65	75
0%	4,137	0	0	0	-1	-2
10%	4,137	0	0	0	0	0
25%	4,137	0	0	0	0	0
50%	4,137	0	0	0	0	0
75%	4,137	0	0	0	0	0
90%	4,137	0	0	0	0	0
100%	4,139	0	0	0	0	0
Mean	4,137	0	0	0	0	0

A12.1.6.7 Camanche Reservoir (Mokelumne River Watershed)

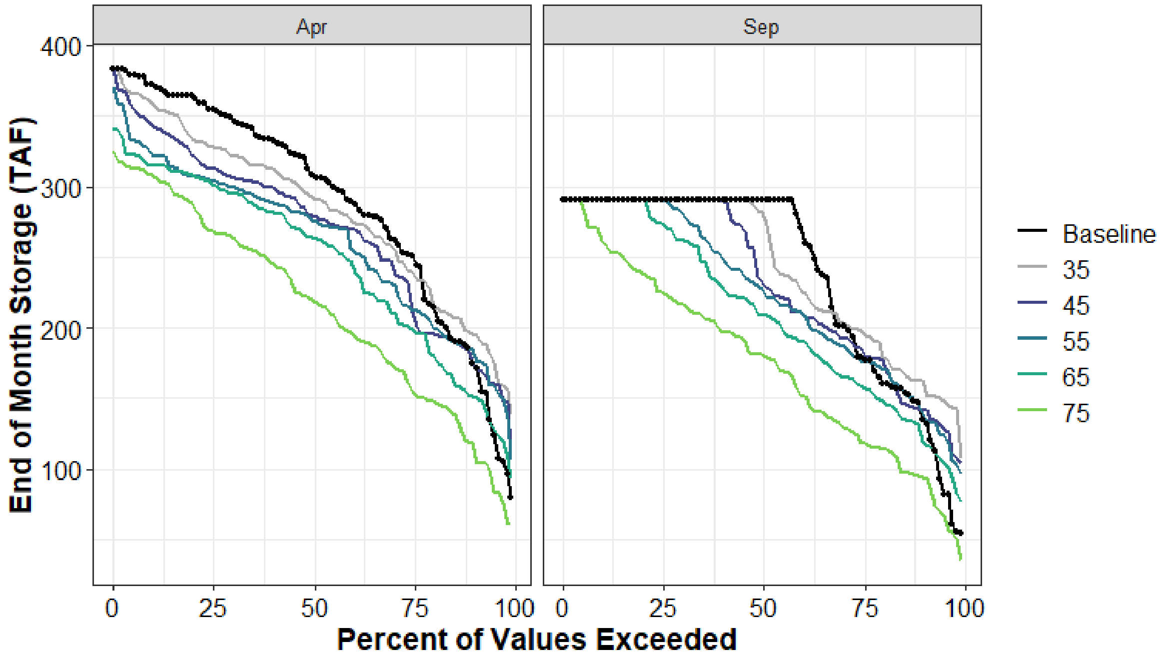

Figure A1-78. Camanche Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

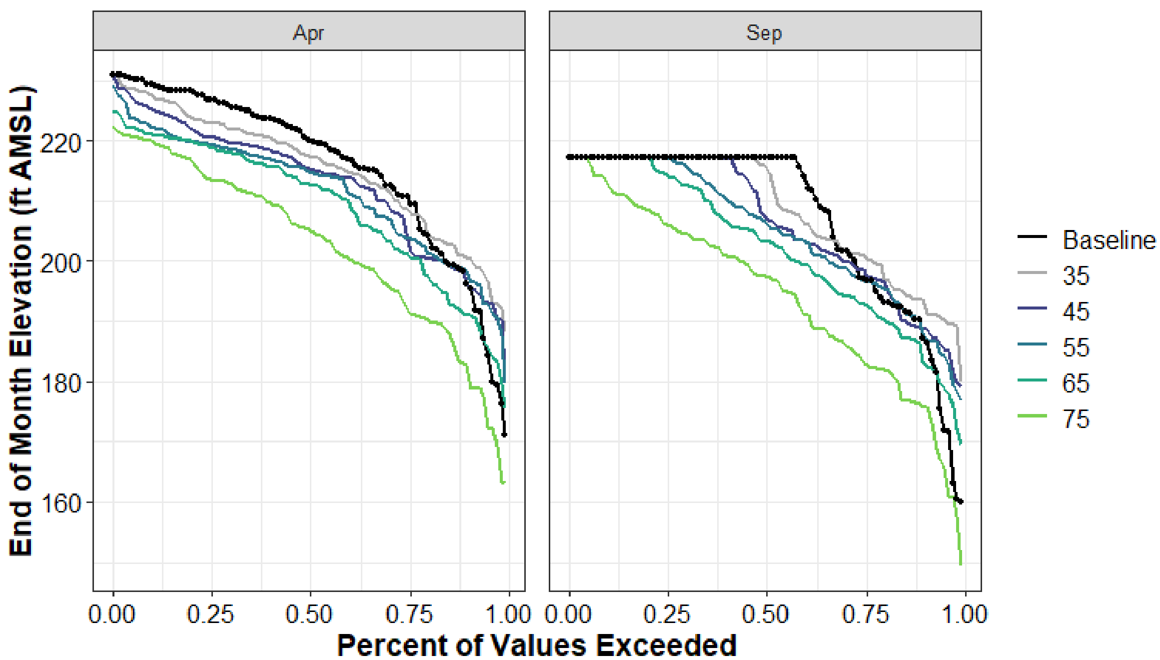

Figure A1-79. Camanche Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-168. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Camanche Reservoir

	Baseline	35	45	55	65	75
0%	54	53	50	42	22	-19
10%	137	25	4	3	-15	-43
25%	179	19	6	-2	-20	-60
50%	290	-8	-58	-63	-81	-109
75%	290	0	0	0	-17	-65
90%	291	0	0	0	0	-29
100%	291	0	0	0	0	0
Mean	240	2	-9	-16	-30	-64

Table A1-169. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Camanche Reservoir

	Baseline	35	45	55	65	75
0%	160	20	19	17	10	-11
10%	188	6	1	1	-4	-12
25%	197	4	1	0	-4	-14
50%	217	-1	-10	-11	-14	-20
75%	217	0	0	0	-3	-11
90%	217	0	0	0	0	-5
100%	217	0	0	0	0	0
Mean	207	1	-1	-2	-5	-13

Table A1-170. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Camanche Reservoir

	Baseline	35	45	55	65	75
0%	80	59	30	26	13	-20
10%	177	20	1	9	-25	-59
25%	251	-11	-40	-39	-52	-96
50%	308	-16	-29	-32	-45	-88
75%	355	-27	-42	-51	-54	-86
90%	372	-14	-29	-50	-57	-64
100%	383	0	0	-13	-42	-59
Mean	291	-7	-21	-29	-43	-76

Table A1-171. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Camanche Reservoir

	Baseline	35	45	55	65	75
0%	171	17	10	8	4	-8
10%	197	4	0	2	-5	-14
25%	211	-2	-7	-7	-10	-19
50%	220	-2	-5	-5	-7	-15
75%	227	-4	-6	-8	-8	-13
90%	229	-2	-4	-7	-8	-9
100%	231	0	0	-2	-6	-8
Mean	216	-1	-3	-4	-7	-13

A12.1.6.8 Camp Far West (Bear River Watershed)

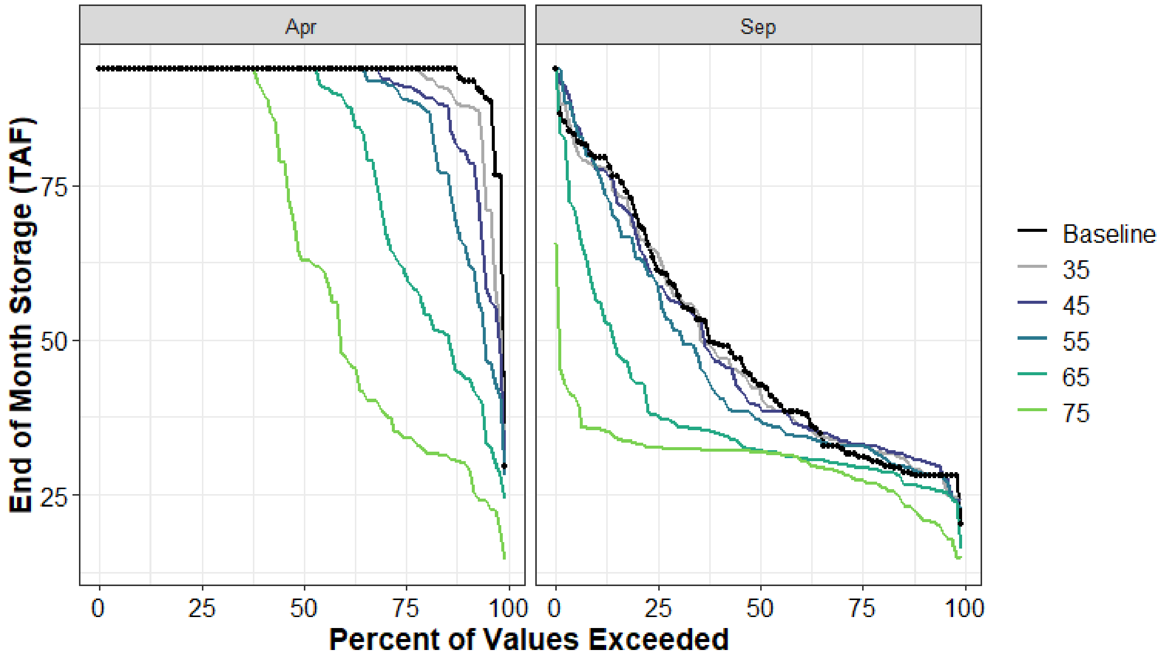

Figure A1-80. Camp Far West End-of-April and End-of-September Storage Percent Exceedance Plot

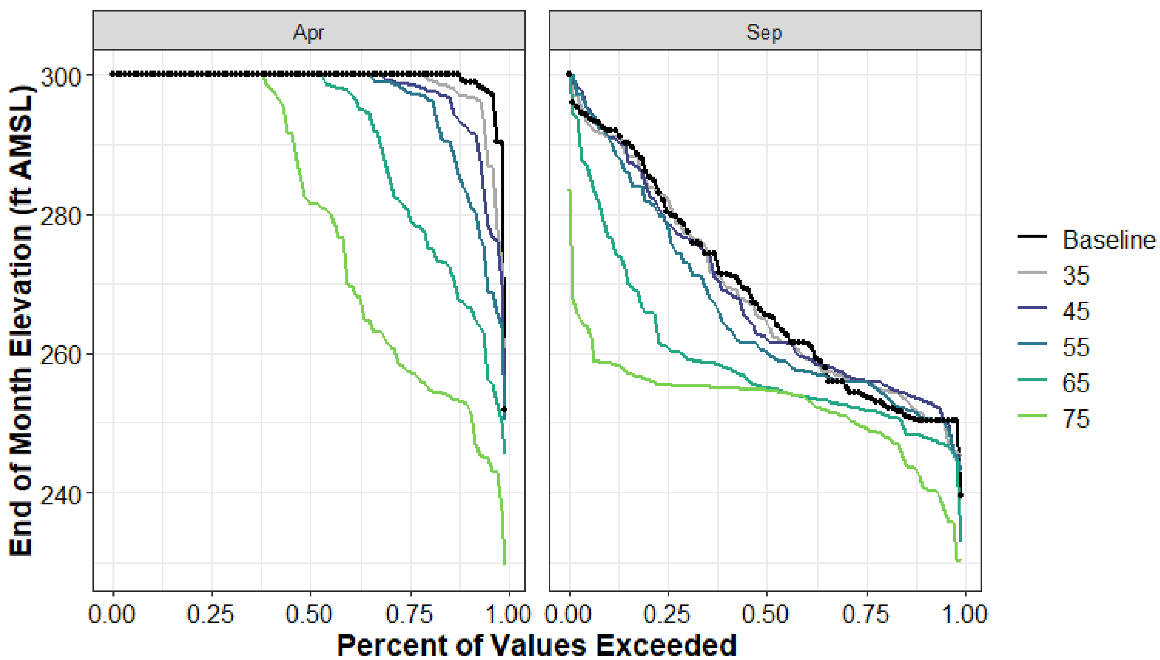

Figure A1-81. Camp Far West End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-172. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Camp Far West

	Baseline	35	45	55	65	75
0%	20	4	4	2	-4	-5
10%	28	1	2	0	-2	-7
25%	31	2	2	2	-2	-4
50%	43	-1	-3	-5	-10	-11
75%	61	3	-3	-2	-23	-29
90%	79	-1	-2	-2	-23	-44
100%	94	0	0	0	0	-28
Mean	49	0	-1	-3	-11	-18

Table A1-173. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Camp Far West

	Baseline	35	45	55	65	75
0%	240	6	6	4	-7	-9
10%	250	1	3	0	-2	-9
25%	254	2	2	2	-2	-4
50%	265	0	-3	-5	-10	-11
75%	280	2	-2	-2	-19	-25
90%	292	-1	-1	-1	-15	-33
100%	300	0	0	0	0	-17
Mean	269	0	0	-2	-9	-16

Table A1-174. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Camp Far West

	Baseline	35	45	55	65	75
0%	29	-1	0	-1	-5	-15
10%	92	-4	-11	-27	-48	-62
25%	94	0	-3	-5	-32	-59
50%	94	0	0	0	0	-31
75%	94	0	0	0	0	0
90%	94	0	0	0	0	0
100%	94	0	0	0	0	0
Mean	92	-1	-3	-5	-14	-28

Table A1-175. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Camp Far West

	Baseline	35	45	55	65	75
0%	252	-1	0	-2	-7	-23
10%	299	-2	-6	-16	-32	-46
25%	300	0	-1	-3	-19	-43
50%	300	0	0	0	0	-18
75%	300	0	0	0	0	0
90%	300	0	0	0	0	0
100%	300	0	0	0	0	0
Mean	299	-1	-2	-3	-9	-20

A12.1.6.9 Caples Lake (American River Watershed)

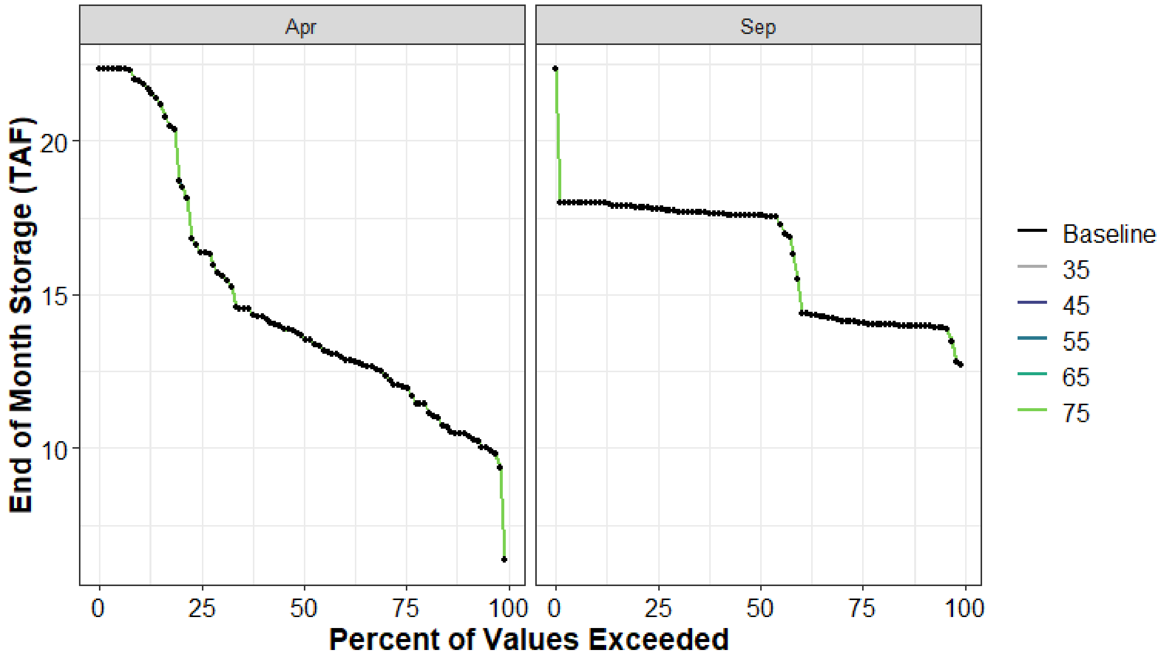

Figure A1-82. Caples Lake End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

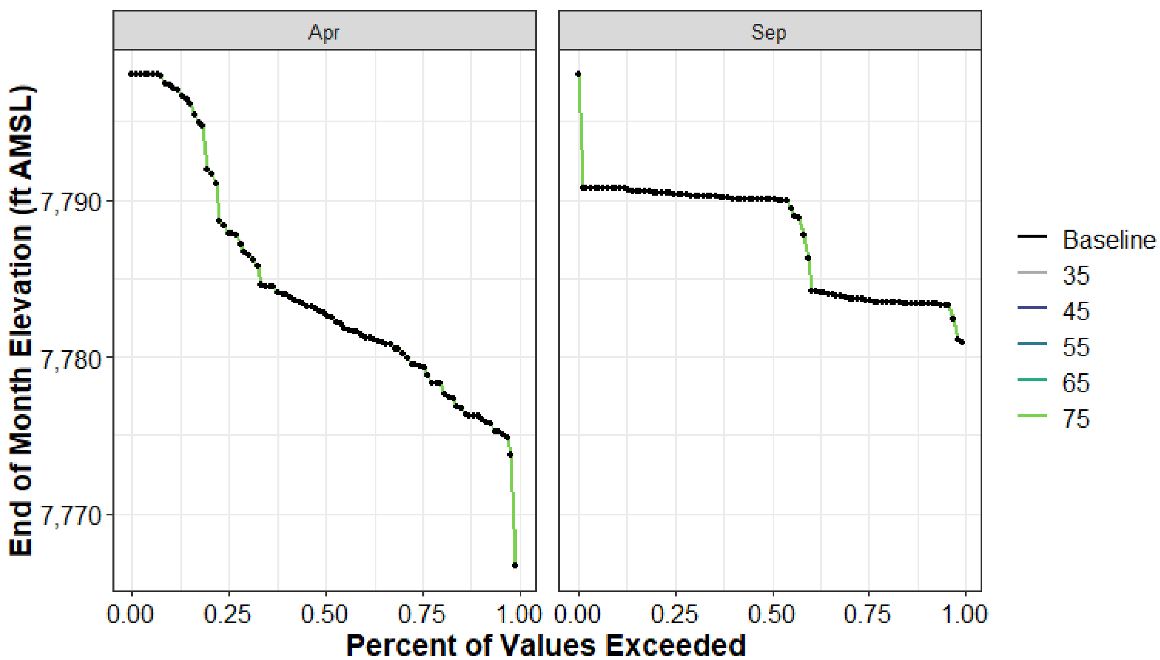

Figure A1-83. Caples Lake End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-176. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Caples Lake

	Baseline	35	45	55	65	75
0%	13	0	0	0	0	0
10%	14	0	0	0	0	0
25%	14	0	0	0	0	0
50%	18	0	0	0	0	0
75%	18	0	0	0	0	0
90%	18	0	0	0	0	0
100%	22	0	0	0	0	0
Mean	16	0	0	0	0	0

Table A1-177. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Caples Lake

	Baseline	35	45	55	65	75
0%	7,781	0	0	0	0	0
10%	7,783	0	0	0	0	0
25%	7,784	0	0	0	0	0
50%	7,790	0	0	0	0	0
75%	7,790	0	0	0	0	0
90%	7,791	0	0	0	0	0
100%	7,798	0	0	0	0	0
Mean	7,788	0	0	0	0	0

Table A1-178. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Caples Lake

	Baseline	35	45	55	65	75
0%	6	0	0	0	0	0
10%	10	0	0	0	0	0
25%	12	0	0	0	0	0
50%	14	0	0	0	0	0
75%	16	0	0	0	0	0
90%	22	0	0	0	0	0
100%	22	0	0	0	0	0
Mean	15	0	0	0	0	0

Table A1-179. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Caples Lake

	Baseline	35	45	55	65	75
0%	7,767	0	0	0	0	0
10%	7,776	0	0	0	0	0
25%	7,779	0	0	0	0	0
50%	7,783	0	0	0	0	0
75%	7,788	0	0	0	0	0
90%	7,797	0	0	0	0	0
100%	7,798	0	0	0	0	0
Mean	7,784	0	0	0	0	0

A12.1.6.10 Clear Lake (Cache Creek Watershed)

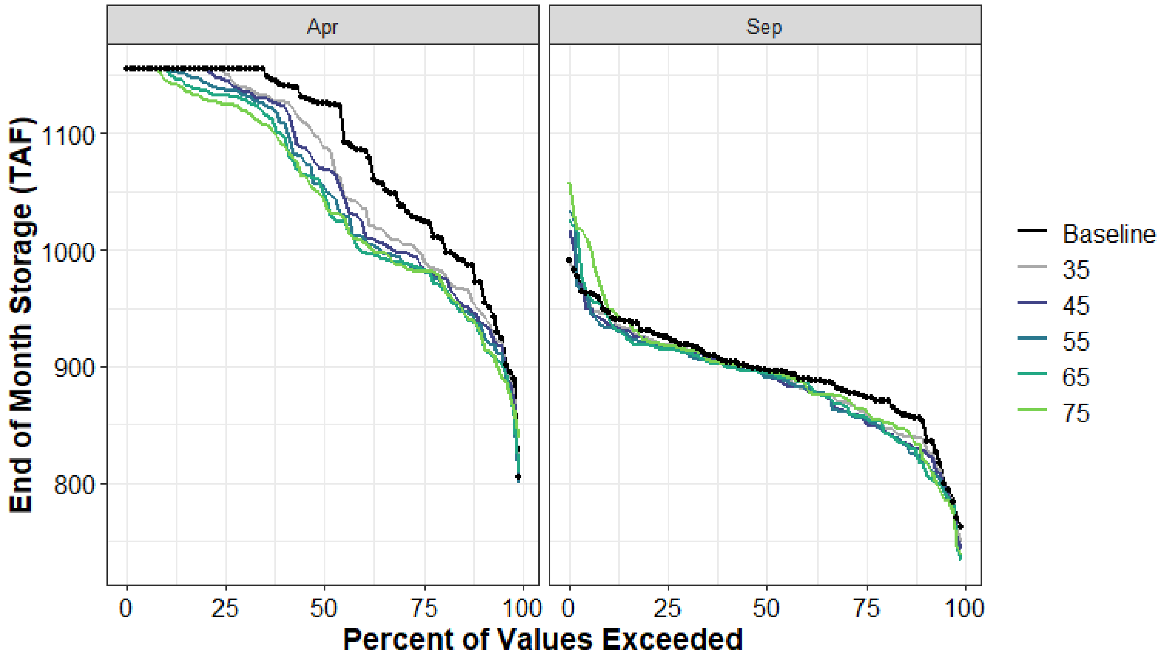

Figure A1-84. Clear Lake End-of-April and End-of-September Storage Percent Exceedance Plot

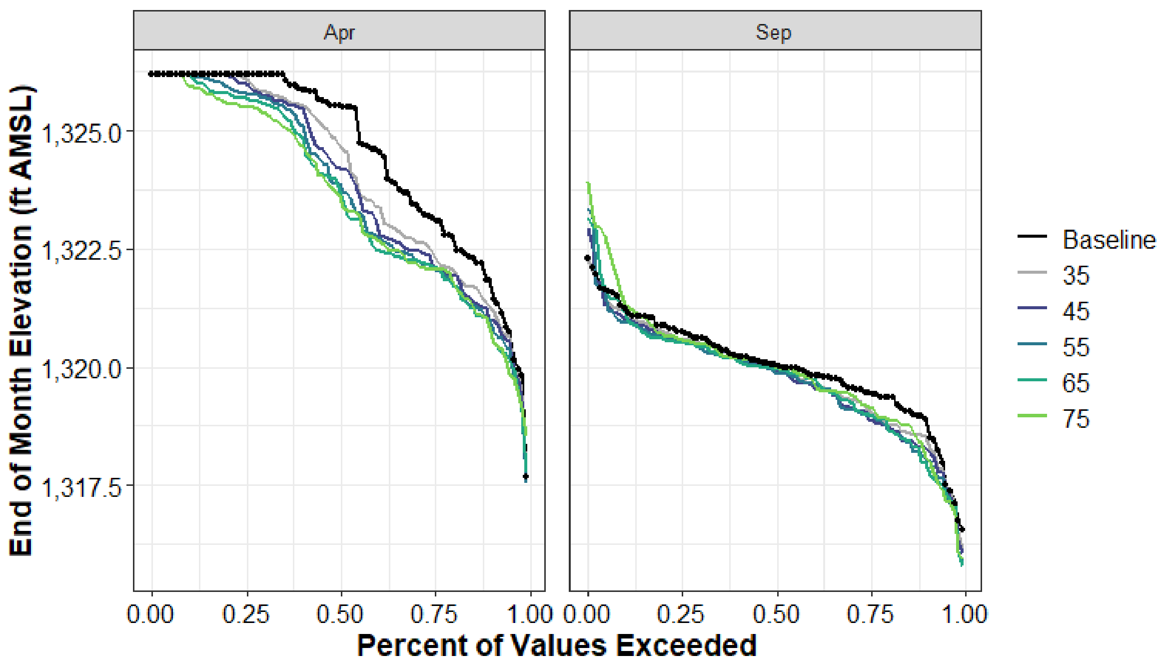

Figure A1-85. Clear Lake End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-180. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Clear Lake

	Baseline	35	45	55	65	75
0%	763	-14	-19	-27	-29	-24
10%	853	-15	-24	-33	-36	-30
25%	875	-15	-22	-20	-19	-12
50%	897	-3	-3	-6	-3	0
75%	925	-7	-9	-9	-10	-8
90%	946	-2	-10	-13	-6	3
100%	990	-1	26	44	36	67
Mean	896	-8	-10	-11	-10	-4

Table A1-181. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Clear Lake

	Baseline	35	45	55	65	75
0%	1,317	0	0	-1	-1	-1
10%	1,319	0	-1	-1	-1	-1
25%	1,319	0	-1	0	0	0
50%	1,320	0	0	0	0	0
75%	1,321	0	0	0	0	0
90%	1,321	0	0	0	0	0
100%	1,322	0	1	1	1	2
Mean	1,320	0	0	0	0	0

Table A1-182. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Clear Lake

	Baseline	35	45	55	65	75
0%	805	-1	-2	-6	4	33
10%	972	-23	-34	-36	-42	-41
25%	1026	-30	-41	-42	-41	-44
50%	1126	-37	-56	-70	-77	-82
75%	1155	-4	-9	-17	-22	-30
90%	1155	0	0	0	-1	-11
100%	1155	0	0	0	0	0
Mean	1084	-20	-27	-34	-39	-41

Table A1-183. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Clear Lake

	Baseline	35	45	55	65	75
0%	1,318	0	0	0	0	1
10%	1,322	-1	-1	-1	-1	-1
25%	1,323	-1	-1	-1	-1	-1
50%	1,326	-1	-1	-2	-2	-2
75%	1,326	0	0	0	0	-1
90%	1,326	0	0	0	0	0
100%	1,326	0	0	0	0	0
Mean	1,325	0	-1	-1	-1	-1

A12.1.6.11 CVP San Luis Reservoir (SOD Offstream)

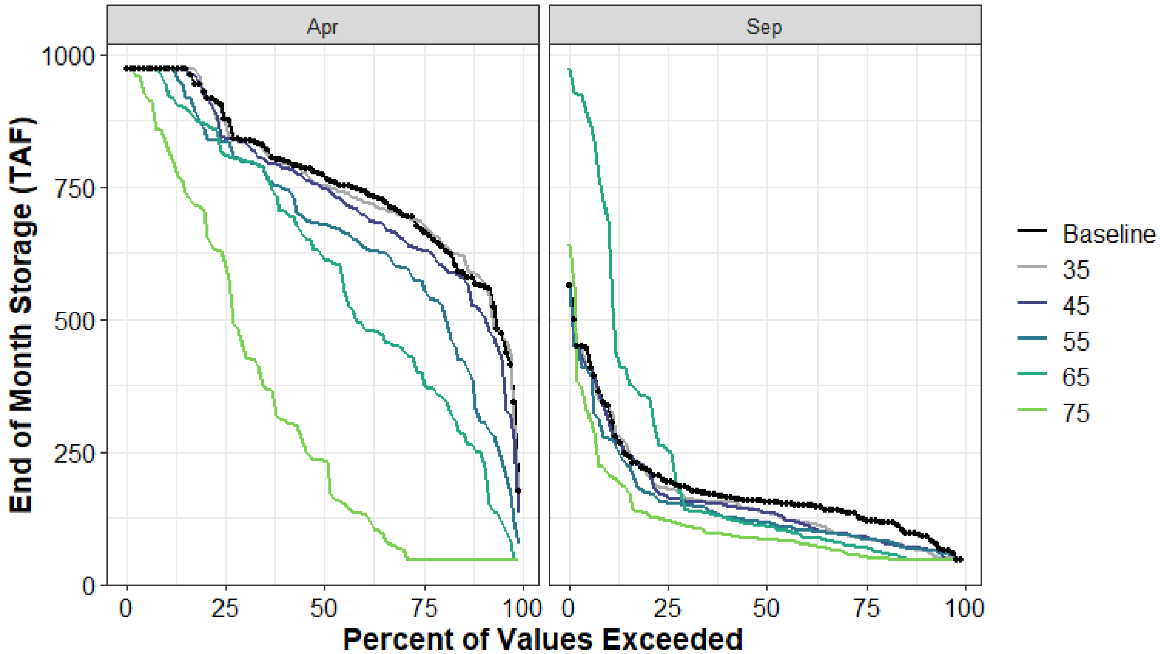

Figure A1-86. CVP San Luis Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

Table A1-184. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for CVP San Luis Reservoir

	Baseline	35	45	55	65	75
0%	45	3	1	0	0	0
10%	90	-26	-23	-25	-45	-45
25%	121	-33	-31	-36	-51	-69
50%	155	-22	-20	-39	-46	-70
75%	194	-12	-27	-39	61	-75
90%	332	3	-27	-57	323	-124
100%	562	0	0	0	410	78
Mean	180	-20	-22	-34	33	-67

Table A1-185. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for CVP San Luis Reservoir

	Baseline	35	45	55	65	75
0%	174	-7	-39	-101	-129	-129
10%	565	15	-47	-252	-315	-520
25%	670	14	-39	-99	-271	-625
50%	773	-21	-26	-94	-157	-540
75%	879	-3	-35	-45	-69	-269
90%	972	0	0	0	-32	-142
100%	972	0	0	0	0	0
Mean	761	-3	-26	-92	-165	-431

A12.1.6.12 East Park Reservoir (Stony Creek Watershed)

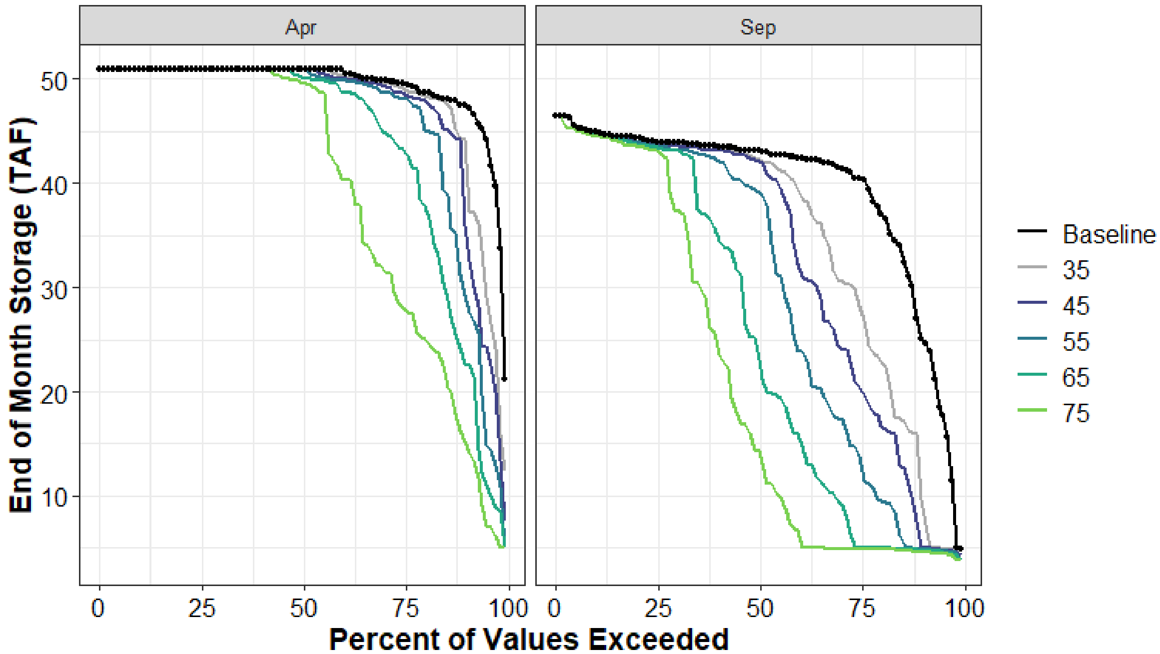

Figure A1-87. East Park Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

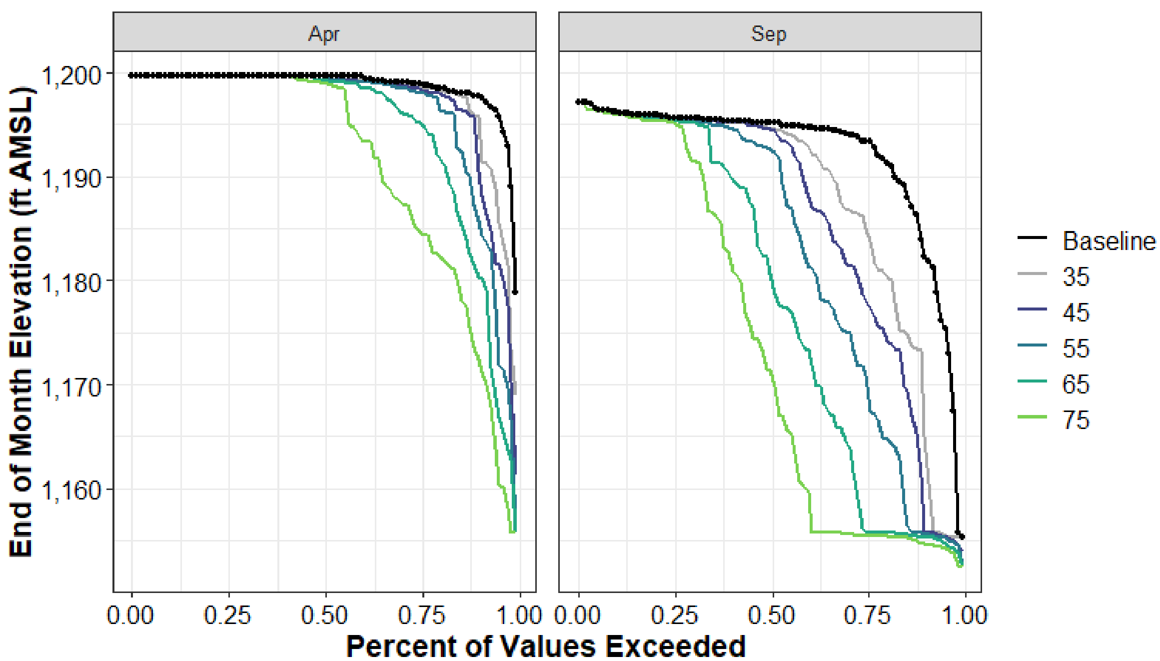

Figure A1-88. East Park Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-186. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for East Park Reservoir

	Baseline	35	45	55	65	75
0%	5	0	0	-1	-1	-1
10%	25	-14	-20	-21	-21	-21
25%	40	-12	-20	-27	-35	-36
50%	43	-1	-1	-4	-20	-29
75%	44	0	0	0	-1	-1
90%	45	0	0	0	0	0
100%	46	0	0	0	0	0
Mean	39	-5	-7	-10	-15	-18

Table A1-187. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for East Park Reservoir

	Baseline	35	45	55	65	75
0%	1,155	0	-1	-3	-3	-3
10%	1,183	-16	-26	-27	-27	-28
25%	1,193	-9	-15	-23	-38	-38
50%	1,195	-1	-1	-3	-15	-24
75%	1,196	0	0	0	0	0
90%	1,196	0	0	0	0	0
100%	1,197	0	0	0	0	0
Mean	1,192	-4	-6	-10	-14	-19

Table A1-188. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for East Park Reservoir

	Baseline	35	45	55	65	75
0%	21	-9	-14	-16	-16	-16
10%	48	-3	-10	-18	-24	-32
25%	50	0	-1	-1	-6	-22
50%	51	0	0	0	-1	-1
75%	51	0	0	0	0	0
90%	51	0	0	0	0	0
100%	51	0	0	0	0	0
Mean	49	-1	-2	-3	-6	-10

Table A1-189. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for East Park Reservoir

	Baseline	35	45	55	65	75
0%	1,179	-10	-18	-23	-23	-23
10%	1,198	-2	-6	-12	-17	-25
25%	1,199	0	0	-1	-4	-14
50%	1,200	0	0	0	0	-1
75%	1,200	0	0	0	0	0
90%	1,200	0	0	0	0	0
100%	1,200	0	0	0	0	0
Mean	1,199	-1	-2	-3	-4	-8

A12.1.6.13 EBMUD Terminal Reservoirs (N/A)

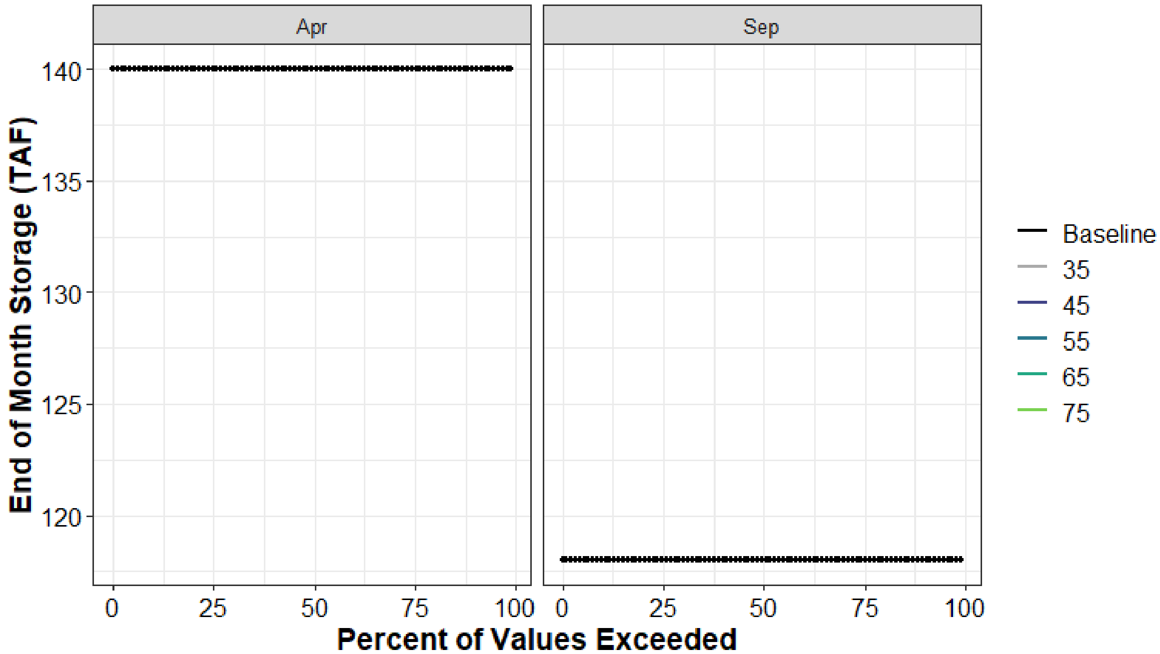

Figure A1-89. EBMUD Terminal Reservoirs End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-190. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for EBMUD Terminal Reservoirs

	Baseline	35	45	55	65	75
0%	118	0	0	0	0	0
10%	118	0	0	0	0	0
25%	118	0	0	0	0	0
50%	118	0	0	0	0	0
75%	118	0	0	0	0	0
90%	118	0	0	0	0	0
100%	118	0	0	0	0	0
Mean	118	0	0	0	0	0

Table A1-191. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for EBMUD Terminal Reservoirs

	Baseline	35	45	55	65	75
0%	140	0	0	0	0	0
10%	140	0	0	0	0	0
25%	140	0	0	0	0	0
50%	140	0	0	0	0	0
75%	140	0	0	0	0	0
90%	140	0	0	0	0	0
100%	140	0	0	0	0	0
Mean	140	0	0	0	0	0

A12.1.6.14 Englebright Reservoir (Yuba River Watershed)

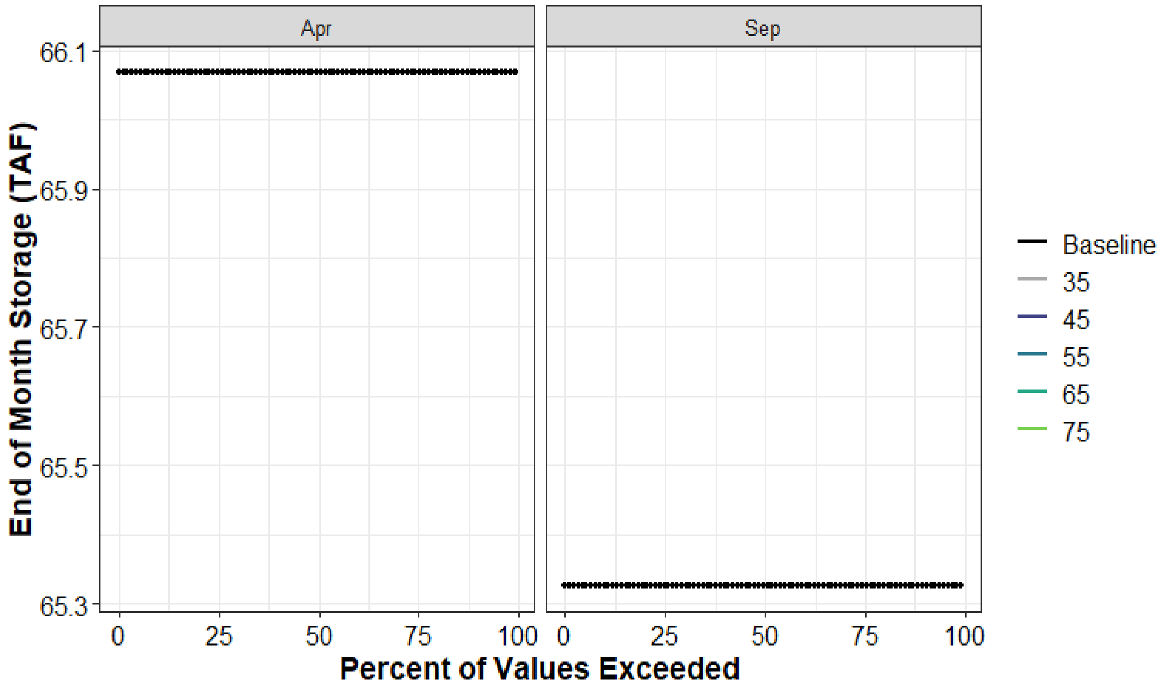

Figure A1-90. Englebright Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

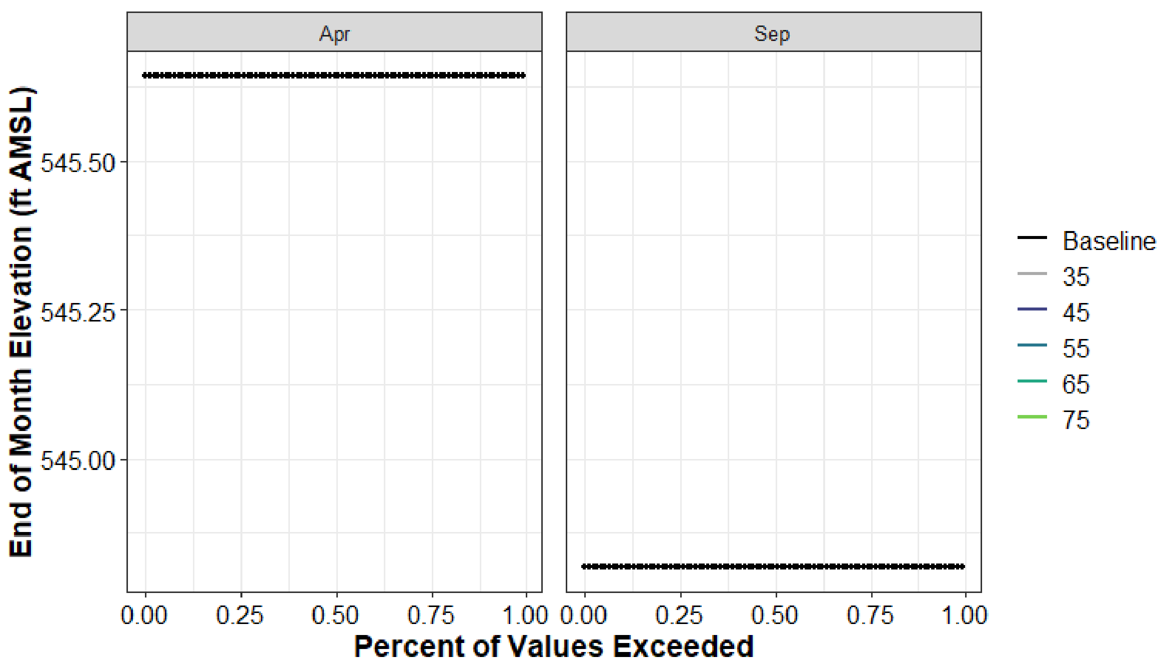

Figure A1-91. Englebright Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-192. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Englebright Reservoir

	Baseline	35	45	55	65	75
0%	65	0	0	0	0	0
10%	65	0	0	0	0	0
25%	65	0	0	0	0	0
50%	65	0	0	0	0	0
75%	65	0	0	0	0	0
90%	65	0	0	0	0	0
100%	65	0	0	0	0	0
Mean	65	0	0	0	0	0

Table A1-193. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Englebright Reservoir

	Baseline	35	45	55	65	75
0%	545	0	0	0	0	0
10%	545	0	0	0	0	0
25%	545	0	0	0	0	0
50%	545	0	0	0	0	0
75%	545	0	0	0	0	0
90%	545	0	0	0	0	0
100%	545	0	0	0	0	0
Mean	545	0	0	0	0	0

Table A1-194. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Englebright Reservoir

	Baseline	35	45	55	65	75
0%	66	0	0	0	0	0
10%	66	0	0	0	0	0
25%	66	0	0	0	0	0
50%	66	0	0	0	0	0
75%	66	0	0	0	0	0
90%	66	0	0	0	0	0
100%	66	0	0	0	0	0
Mean	66	0	0	0	0	0

Table A1-195. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Englebright Reservoir

	Baseline	35	45	55	65	75
0%	546	0	0	0	0	0
10%	546	0	0	0	0	0
25%	546	0	0	0	0	0
50%	546	0	0	0	0	0
75%	546	0	0	0	0	0
90%	546	0	0	0	0	0
100%	546	0	0	0	0	0
Mean	546	0	0	0	0	0

A12.1.6.15 Folsom Reservoir (American River Watershed)

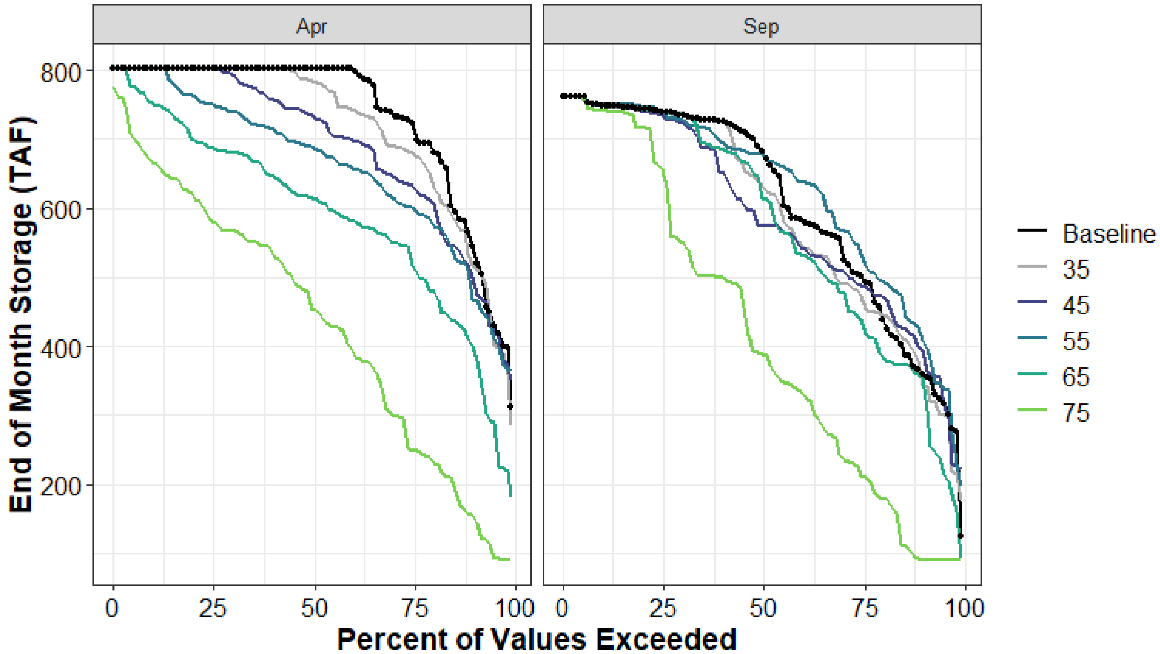

Figure A1-92. Folsom Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

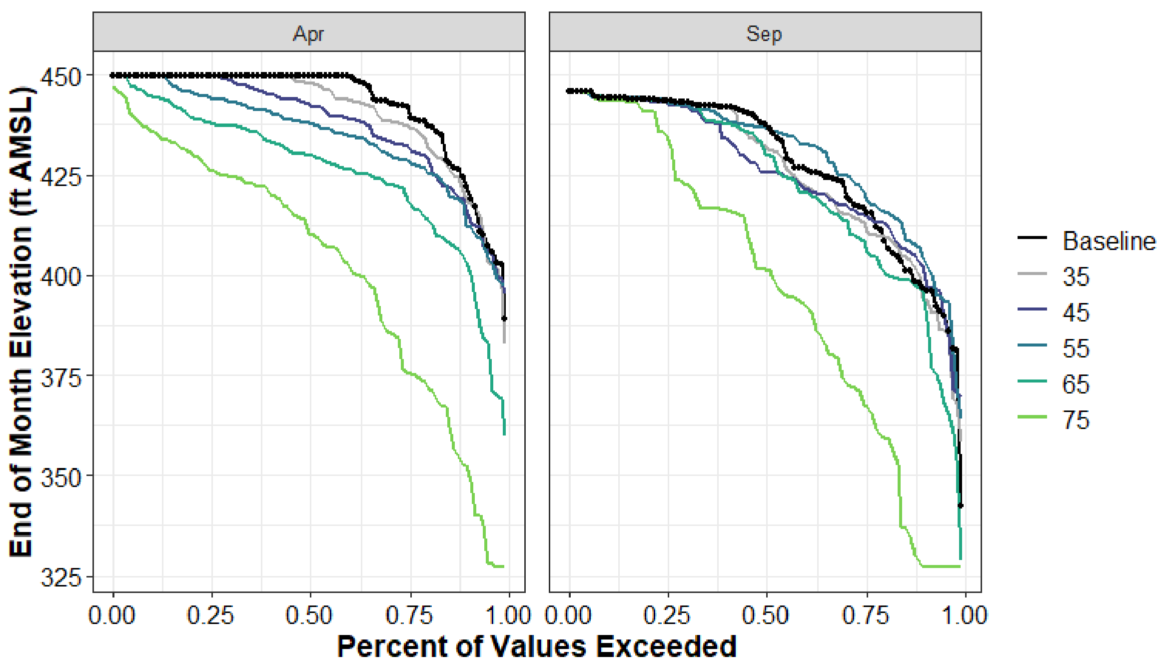

Figure A1-93. Folsom Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-196. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Folsom Reservoir

	Baseline	35	45	55	65	75
0%	125	50	96	72	-32	-35
10%	361	-10	34	53	-5	-271
25%	501	-29	-13	31	-63	-289
50%	684	-51	-109	-6	-68	-295
75%	740	-1	-5	2	1	-84
90%	748	-1	-1	2	2	-7
100%	762	0	0	0	0	0
Mean	606	-15	-21	16	-35	-190

Table A1-197. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Folsom Reservoir

	Baseline	35	45	55	65	75
0%	342	16	28	22	-14	-15
10%	397	-2	5	8	-1	-70
25%	417	-4	-2	4	-8	-49
50%	438	-6	-12	-1	-7	-36
75%	443	0	0	0	0	-9
90%	444	0	0	0	0	-1
100%	446	0	0	0	0	0
Mean	427	-2	-2	2	-5	-31

Table A1-198. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Folsom Reservoir

	Baseline	35	45	55	65	75
0%	312	-27	38	52	-131	-222
10%	549	-28	-46	-72	-146	-393
25%	724	-45	-91	-123	-208	-476
50%	802	-18	-68	-113	-188	-350
75%	802	0	0	-52	-115	-222
90%	802	0	0	0	-49	-136
100%	802	0	0	0	0	-27
Mean	734	-17	-44	-72	-144	-299

Table A1-199. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Folsom Reservoir

	Baseline	35	45	55	65	75
0%	389	-7	6	8	-29	-62
10%	423	-3	-6	-9	-19	-70
25%	442	-5	-10	-13	-23	-66
50%	450	-2	-7	-12	-20	-39
75%	450	0	0	-5	-12	-24
90%	450	0	0	0	-5	-14
100%	450	0	0	0	0	-3
Mean	442	-2	-5	-8	-17	-40

A12.1.6.16 French Lake (Yuba River Watershed)

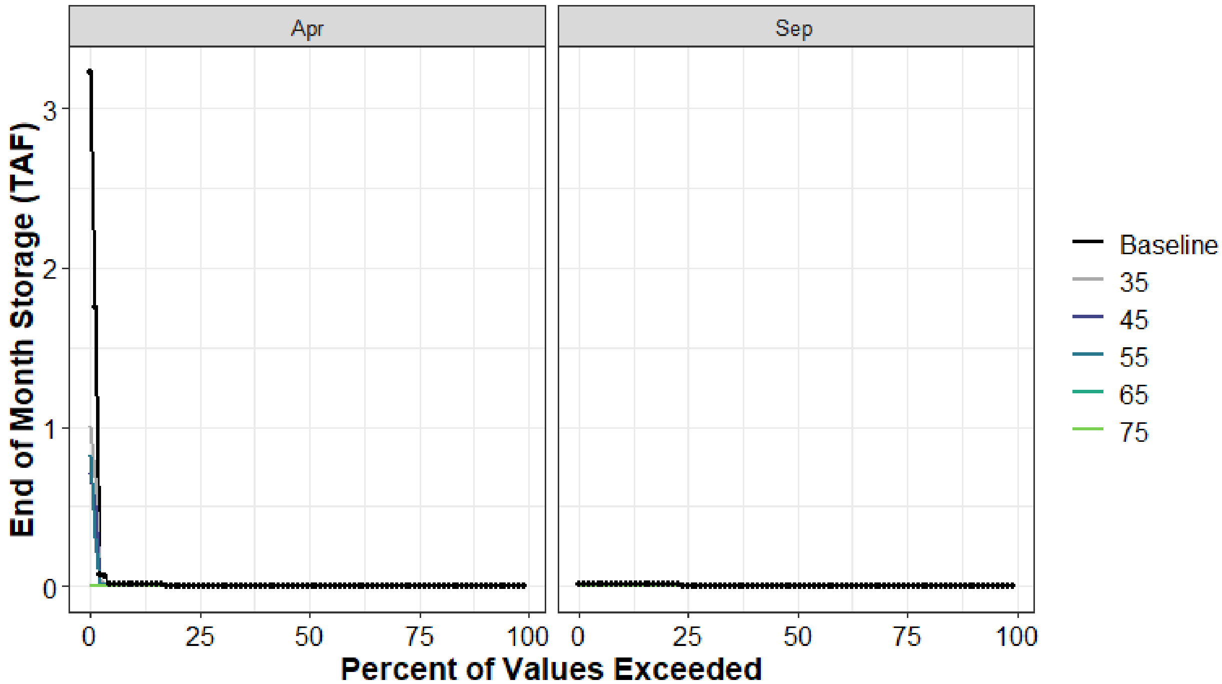

Figure A1-94. French Lake End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-200. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for French Lake

	Baseline	35	45	55	65	75
0%	0	0	0	0	0	0
10%	0	0	0	0	0	0
25%	0	0	0	0	0	0
50%	0	0	0	0	0	0
75%	0	0	0	0	0	0
90%	0	0	0	0	0	0
100%	0	0	0	0	0	0
Mean	0	0	0	0	0	0

Table A1-201. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for French Lake

	Baseline	35	45	55	65	75
0%	0	0	0	0	0	0
10%	0	0	0	0	0	0
25%	0	0	0	0	0	0
50%	0	0	0	0	0	0
75%	0	0	0	0	0	0
90%	0	0	0	0	0	0
100%	3	-2	-3	-2	-3	-3
Mean	0	0	0	0	0	0

A12.1.6.17 French Meadows (American River Watershed)

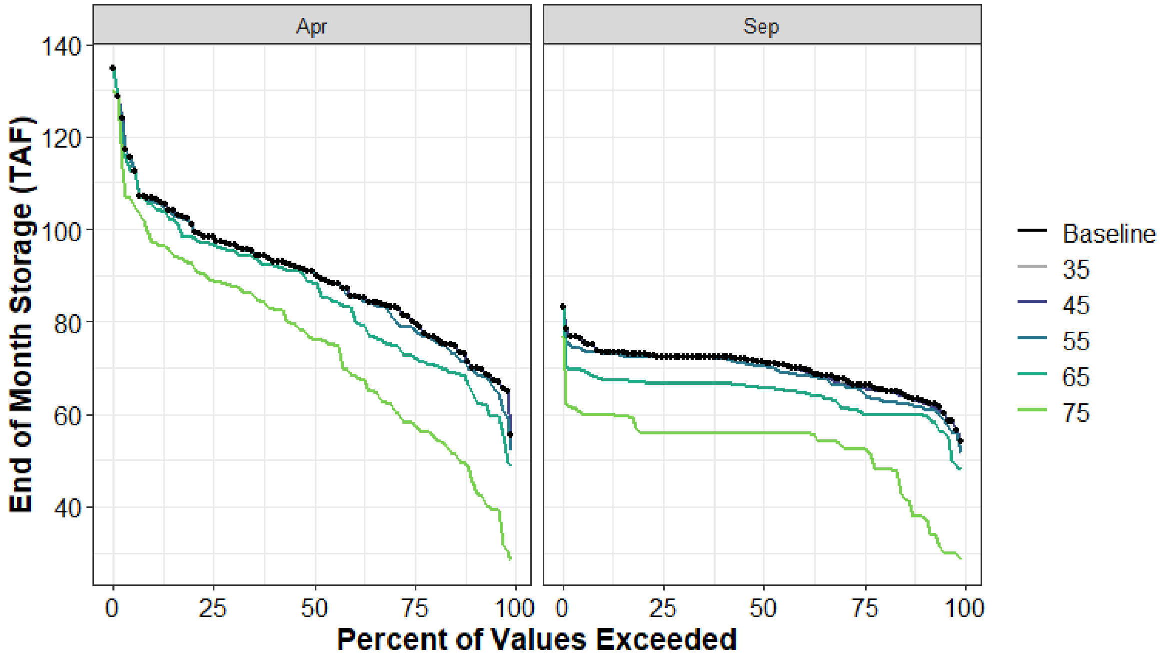

Figure A1-95. French Meadows End-of-April and End-of-September Storage Percent Exceedance Plot

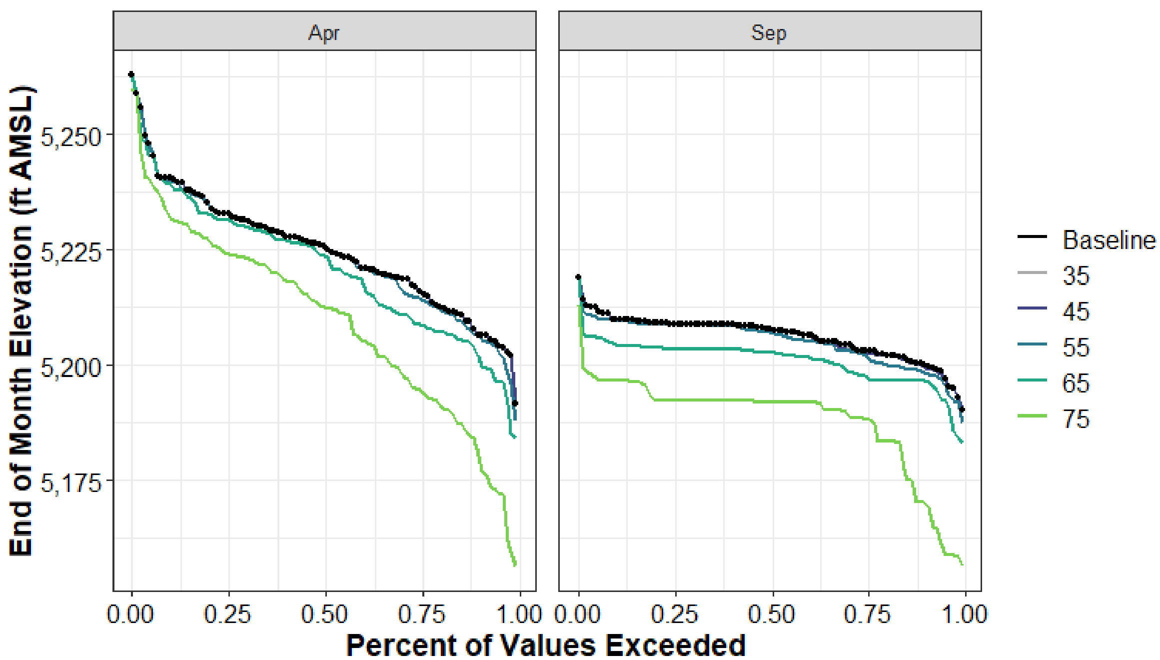

Figure A1-96. French Meadows End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-202. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for French Meadows

	Baseline	35	45	55	65	75
0%	54	0	0	-2	-6	-26
10%	63	0	0	-1	-3	-25
25%	66	0	-1	-1	-6	-14
50%	71	0	0	-1	-5	-15
75%	72	0	0	0	-6	-16
90%	74	0	0	0	-6	-14
100%	83	0	0	0	0	-7
Mean	70	0	0	-1	-5	-17

Table A1-203. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for French Meadows

	Baseline	35	45	55	65	75
0%	5,190	0	0	-3	-7	-34
10%	5,200	0	0	-2	-3	-30
25%	5,203	0	-1	-1	-6	-15
50%	5,208	0	0	-1	-5	-16
75%	5,209	0	0	0	-5	-17
90%	5,210	0	0	0	-6	-13
100%	5,219	0	0	0	0	-6
Mean	5,206	0	0	-1	-5	-18

Table A1-204. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for French Meadows

	Baseline	35	45	55	65	75
0%	55	0	0	-3	-7	-27
10%	70	0	0	0	-5	-24
25%	80	0	0	-1	-8	-22
50%	91	0	0	0	-2	-14
75%	98	0	0	0	-2	-9
90%	107	0	0	-1	-2	-10
100%	135	0	0	0	0	-4
Mean	90	0	0	-1	-4	-15

Table A1-205. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for French Meadows

	Baseline	35	45	55	65	75
0%	5,192	0	0	-4	-7	-35
10%	5,207	0	0	0	-5	-26
25%	5,216	0	0	-1	-7	-21
50%	5,226	0	0	0	-2	-13
75%	5,233	0	0	0	-1	-9
90%	5,241	0	0	-1	-1	-9
100%	5,263	0	0	0	0	-3
Mean	5,225	0	0	-1	-4	-15

A12.1.6.18 Frenchman Lake (Feather River Watershed)

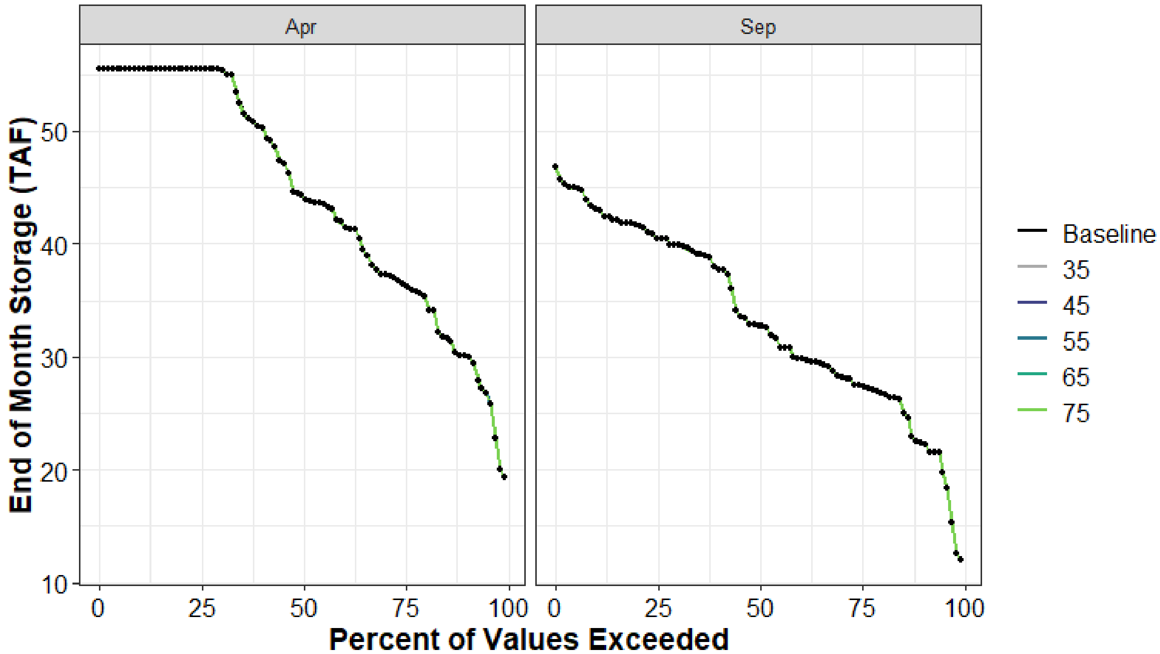

Figure A1-97. Frenchman Lake End-of-April and End-of-September Storage Percent Exceedance Plot

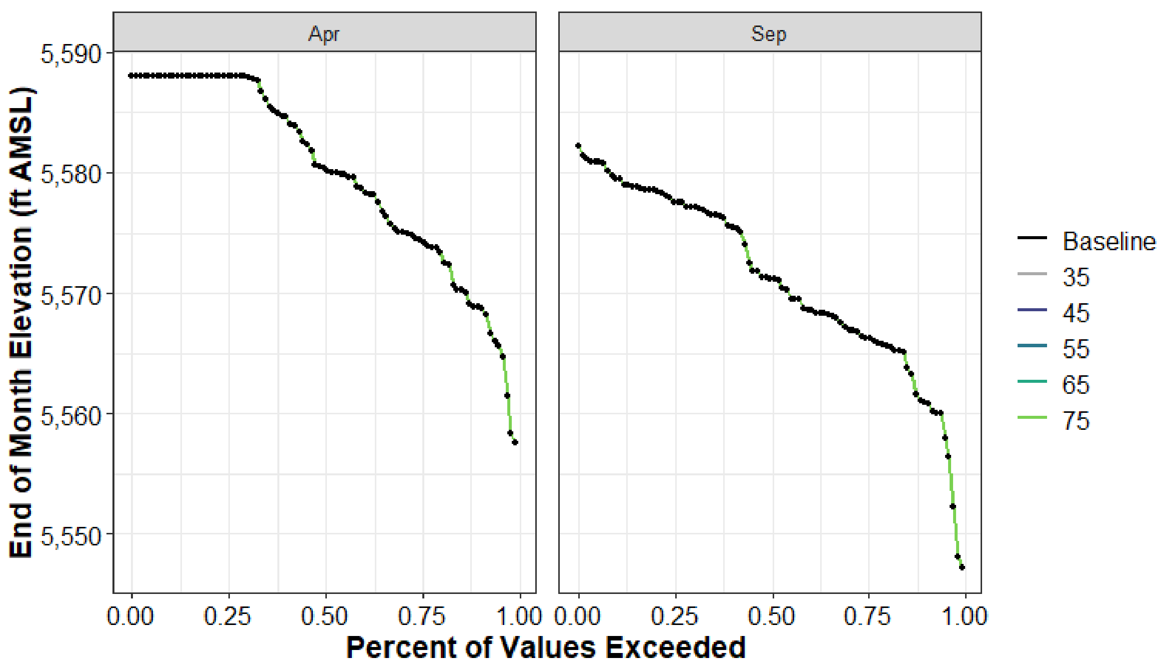

Figure A1-98. Frenchman Lake End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-206. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Frenchman Lake

	Baseline	35	45	55	65	75
0%	12	0	0	0	0	0
10%	22	0	0	0	0	0
25%	27	0	0	0	0	0
50%	33	0	0	0	0	0
75%	40	0	0	0	0	0
90%	43	0	0	0	0	0
100%	47	0	0	0	0	0
Mean	33	0	0	0	0	0

Table A1-207. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Frenchman Lake

	Baseline	35	45	55	65	75
0%	5,547	0	0	0	0	0
10%	5,561	0	0	0	0	0
25%	5,566	0	0	0	0	0
50%	5,571	0	0	0	0	0
75%	5,578	0	0	0	0	0
90%	5,580	0	0	0	0	0
100%	5,582	0	0	0	0	0
Mean	5,571	0	0	0	0	0

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Table A1-208. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Frenchman Lake

	Baseline	35	45	55	65	75
0%	19	0	0	0	0	0
10%	30	0	0	0	0	0
25%	36	0	0	0	0	0
50%	44	0	0	0	0	0
75%	55	0	0	0	0	0
90%	55	0	0	0	0	0
100%	55	0	0	0	0	0
Mean	44	0	0	0	0	0

Table A1-209. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Frenchman Lake

	Baseline	35	45	55	65	75
0%	5,558	0	0	0	0	0
10%	5,569	0	0	0	0	0
25%	5,574	0	0	0	0	0
50%	5,580	0	0	0	0	0
75%	5,588	0	0	0	0	0
90%	5,588	0	0	0	0	0
100%	5,588	0	0	0	0	0
Mean	5,580	0	0	0	0	0

A12.1.6.19 Hell Hole (American River Watershed)

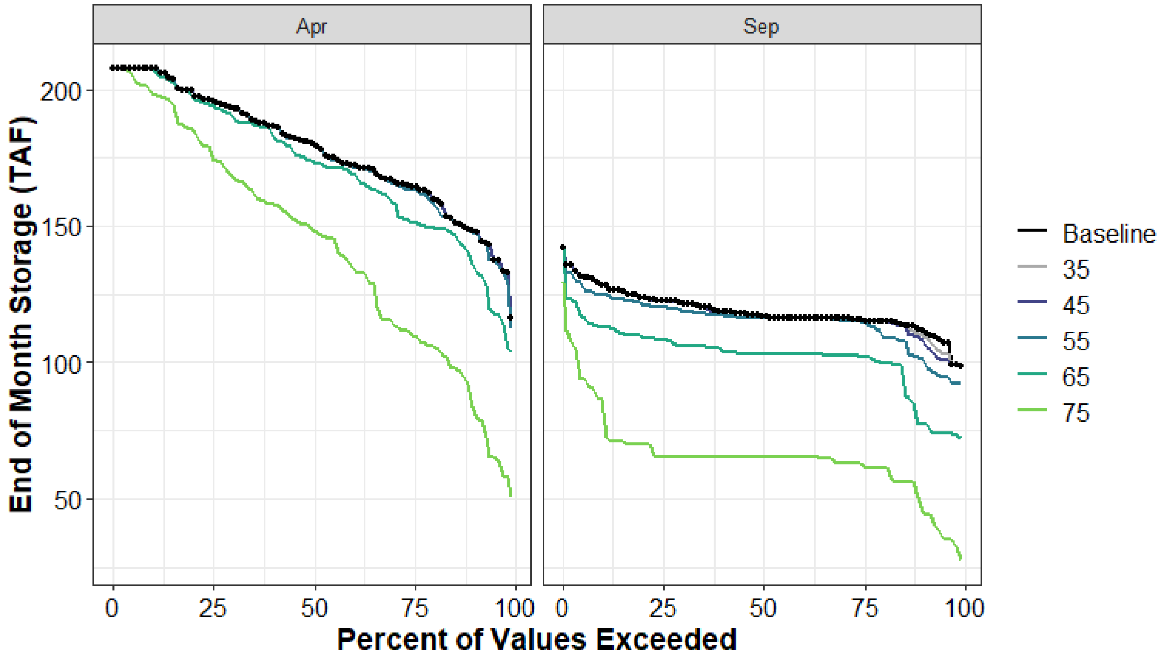

Figure A1-99. Hell Hole End-of-April and End-of-September Storage Percent Exceedance Plot

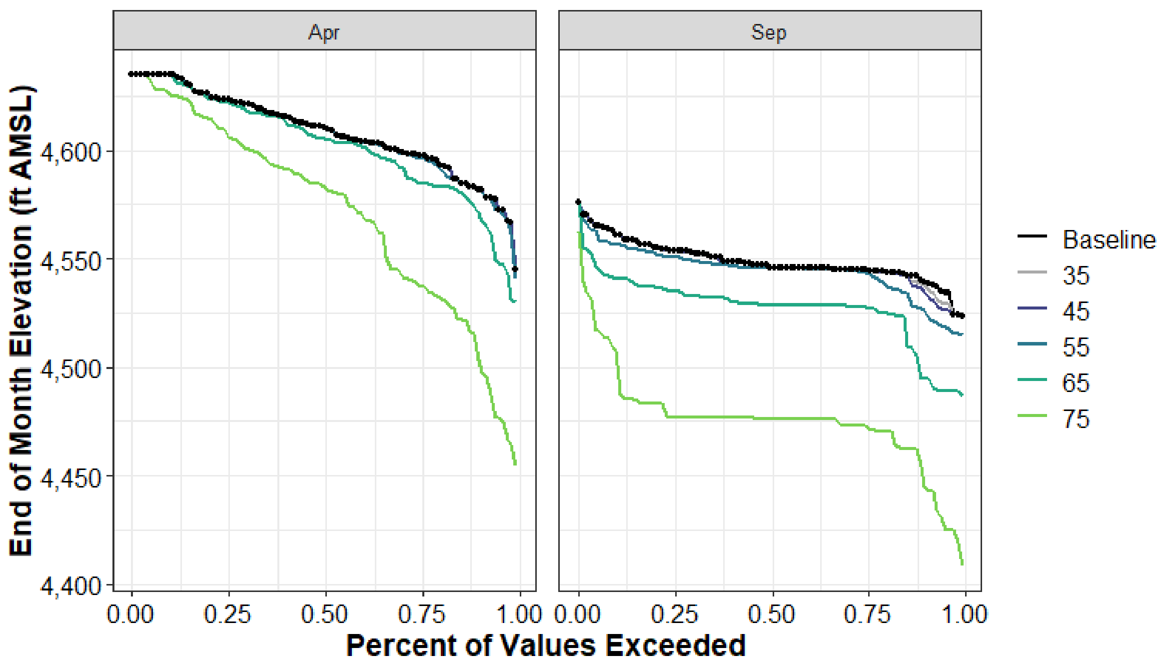

Figure A1-100. Hell Hole End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-210. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Hell Hole

	Baseline	35	45	55	65	75
0%	99	0	0	-7	-27	-71
10%	112	-1	-3	-10	-34	-65
25%	116	0	0	-1	-13	-53
50%	117	0	0	0	-14	-51
75%	123	0	0	-3	-15	-57
90%	128	0	0	-3	-15	-44
100%	142	0	0	0	0	-12
Mean	119	0	-1	-3	-17	-53

Table A1-211. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Hell Hole

	Baseline	35	45	55	65	75
0%	4,523	0	0	-8	-37	-115
10%	4,539	-2	-4	-13	-45	-92
25%	4,545	0	0	-1	-17	-72
50%	4,546	0	0	0	-17	-70
75%	4,554	0	0	-3	-19	-77
90%	4,561	0	0	-4	-20	-57
100%	4,576	0	0	0	0	-13
Mean	4,549	0	-1	-4	-22	-73

Table A1-212. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Hell Hole

	Baseline	35	45	55	65	75
0%	116	0	0	-4	-12	-65
10%	148	0	0	0	-11	-63
25%	164	0	0	-1	-14	-55
50%	180	0	0	0	-7	-31
75%	196	0	0	0	-2	-22
90%	208	0	0	0	0	-9
100%	208	0	0	0	0	0
Mean	178	0	0	0	-6	-35

Table A1-213. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Hell Hole

	Baseline	35	45	55	65	75
0%	4,545	0	0	-5	-15	-91
10%	4,582	0	0	0	-11	-77
25%	4,598	0	0	-1	-13	-60
50%	4,611	0	0	0	-5	-28
75%	4,623	0	0	0	-1	-18
90%	4,635	0	0	0	0	-9
100%	4,635	0	0	0	0	0
Mean	4,608	0	0	0	-6	-37

A12.1.6.20 Ice House Reservoir (American River Watershed)

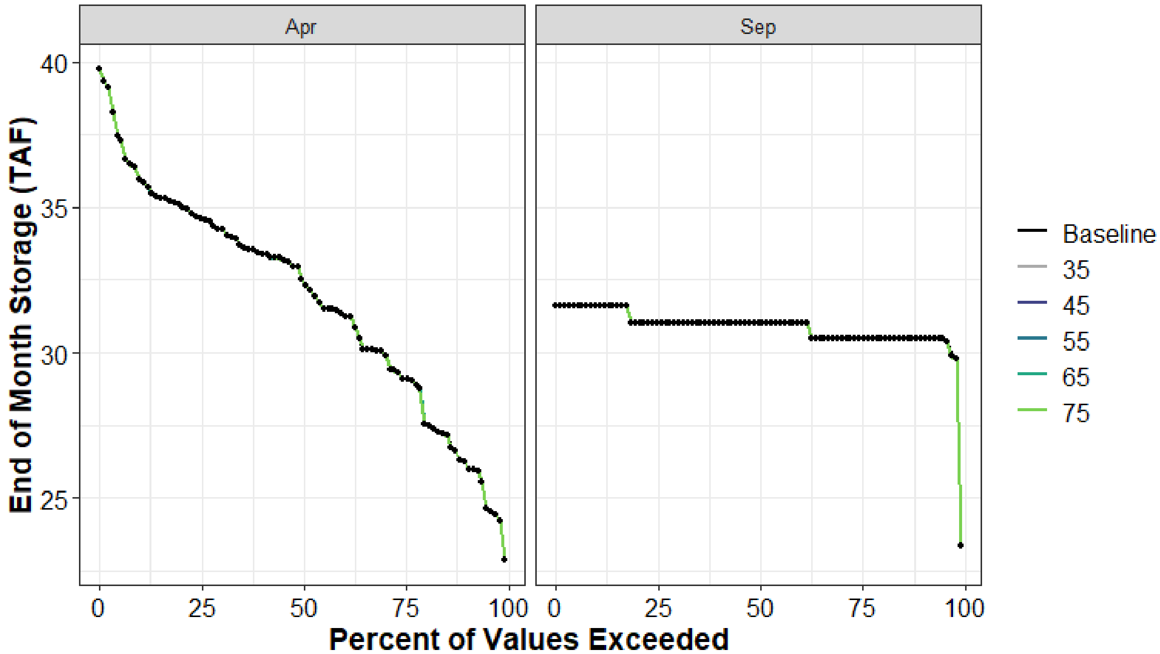

Figure A1-101. Ice House Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

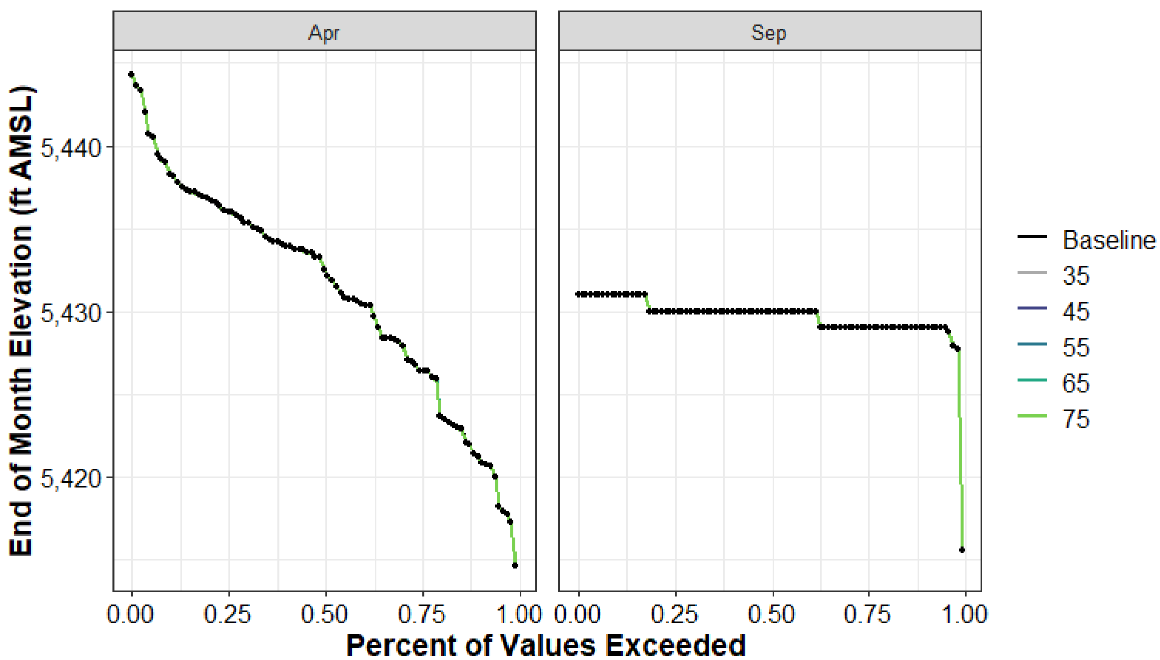

Figure A1-102. Ice House Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-214. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Ice House Reservoir

	Baseline	35	45	55	65	75
0%	23	0	0	0	0	0
10%	30	0	0	0	0	0
25%	30	0	0	0	0	0
50%	31	0	0	0	0	0
75%	31	0	0	0	0	0
90%	32	0	0	0	0	0
100%	32	0	0	0	0	0
Mean	31	0	0	0	0	0

Table A1-215. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Ice House Reservoir

	Baseline	35	45	55	65	75
0%	5416	0	0	0	0	0
10%	5429	0	0	0	0	0
25%	5429	0	0	0	0	0
50%	5430	0	0	0	0	0
75%	5430	0	0	0	0	0
90%	5431	0	0	0	0	0
100%	5431	0	0	0	0	0
Mean	5430	0	0	0	0	0

Table A1-216. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Ice House Reservoir

	Baseline	35	45	55	65	75
0%	23	0	0	0	0	0
10%	26	0	0	0	0	0
25%	29	0	0	0	0	0
50%	33	0	0	0	0	0
75%	35	0	0	0	0	0
90%	36	0	0	0	0	0
100%	40	0	0	0	0	0
Mean	32	0	0	0	0	0

Table A1-217. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Ice House Reservoir

	Baseline	35	45	55	65	75
0%	5415	0	0	0	0	0
10%	5421	0	0	0	0	0
25%	5426	0	0	0	0	0
50%	5433	0	0	0	0	0
75%	5436	0	0	0	0	0
90%	5438	0	0	0	0	0
100%	5444	0	0	0	0	0
Mean	5431	0	0	0	0	0

A12.1.6.21 Indian Valley Reservoir (Cache Creek Watershed)

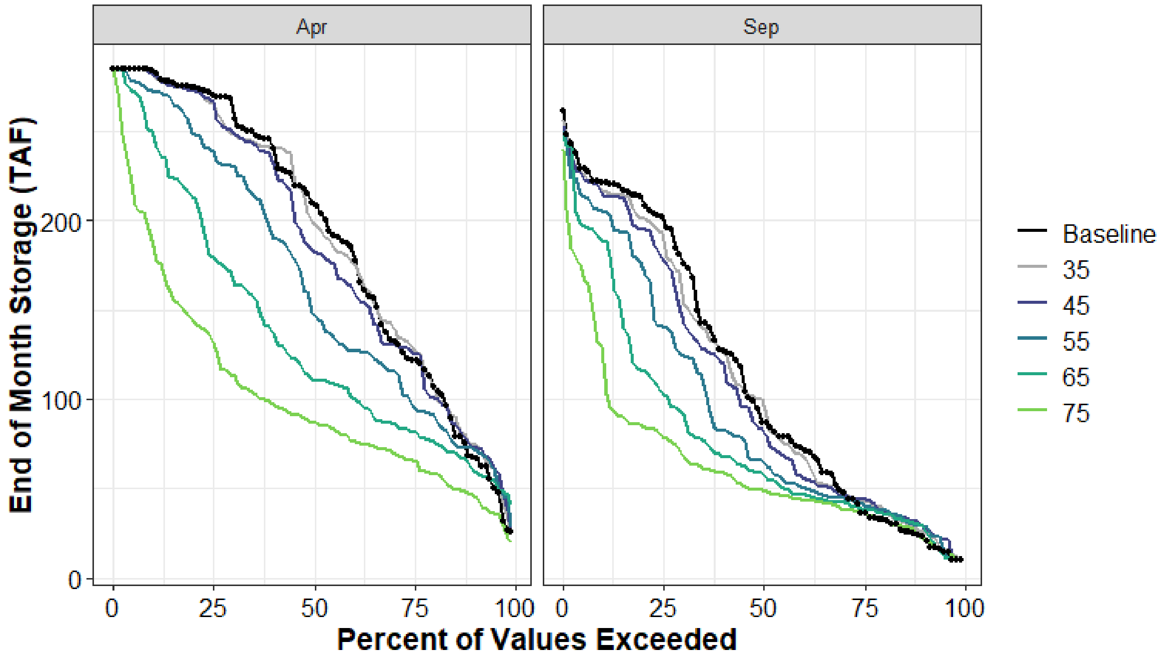

Figure A1-103. Indian Valley Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

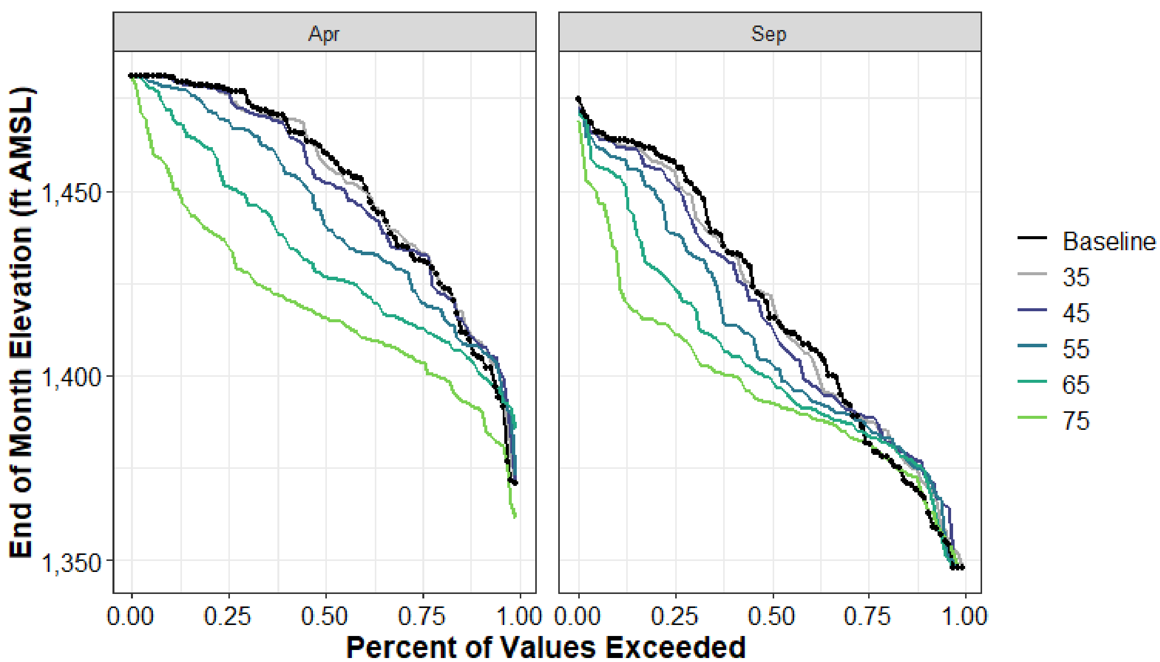

Figure A1-104. Indian Valley Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-218. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Indian Valley Reservoir

	Baseline	35	45	55	65	75
0%	10	0	0	0	0	0
10%	23	3	6	6	6	-1
25%	37	7	7	6	3	0
50%	87	13	-3	-21	-28	-37
75%	202	-8	-23	-60	-98	-122
90%	221	-4	-6	-16	-32	-96
100%	261	-5	-8	-11	-13	-22
Mean	113	-3	-7	-20	-34	-50

Table A1-219. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Indian Valley Reservoir

	Baseline	35	45	55	65	75
0%	1,348	0	0	0	0	0
10%	1,367	4	7	7	7	-1
25%	1,382	6	7	5	3	0
50%	1,416	6	-2	-12	-16	-23
75%	1,458	-2	-7	-20	-34	-46
90%	1,464	-1	-2	-5	-10	-32
100%	1,475	-1	-2	-3	-4	-6
Mean	1,418	0	-2	-7	-14	-21

Table A1-220. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Indian Valley Reservoir

	Baseline	35	45	55	65	75
0%	26	-1	0	2	15	-6
10%	68	7	6	5	-6	-21
25%	122	7	5	-25	-40	-56
50%	210	-11	-26	-61	-99	-123
75%	270	-4	-3	-31	-90	-138
90%	283	-2	-1	-11	-35	-97
100%	284	0	0	0	0	0
Mean	191	0	-5	-24	-54	-89

Table A1-221. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Indian Valley Reservoir

	Baseline	35	45	55	65	75
0%	1371	-1	0	2	15	-9
10%	1,405	4	3	3	-4	-14
25%	1,431	2	2	-11	-18	-27
50%	1,460	-3	-8	-19	-34	-45
75%	1,477	-1	-1	-8	-26	-42
90%	1,481	0	0	-3	-9	-27
100%	1,481	0	0	0	0	0
Mean	1,451	0	-1	-8	-18	-32

A12.1.6.22 Jackson Meadows Reservoir (Yuba River Watershed)

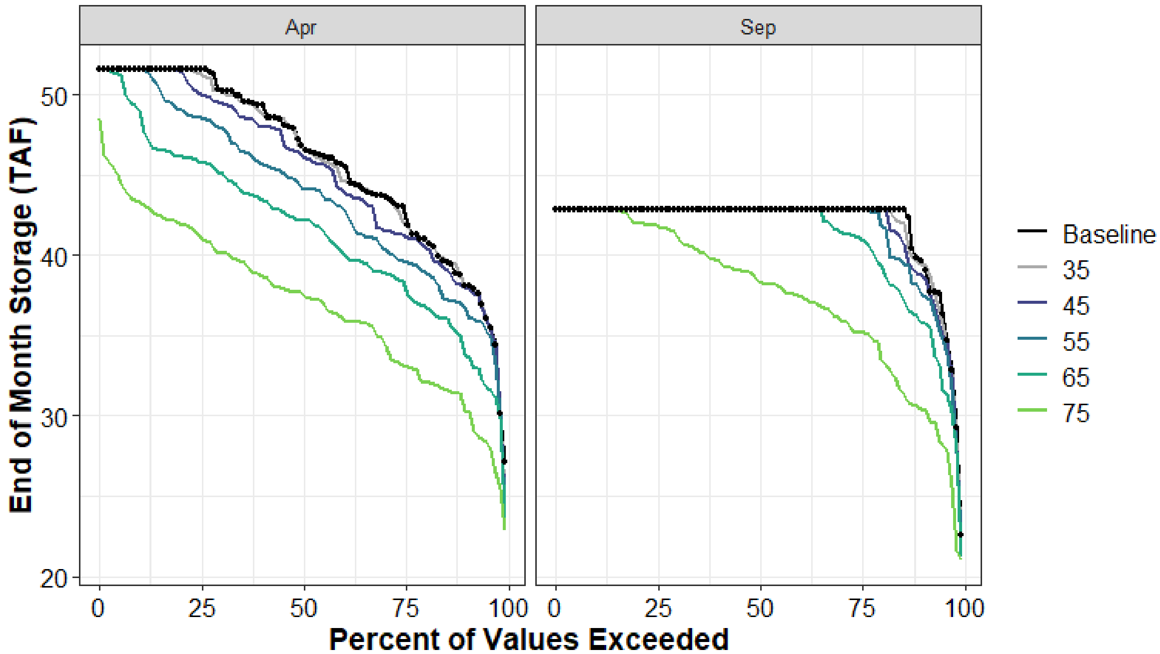

Figure A1-105. Jackson Meadows Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

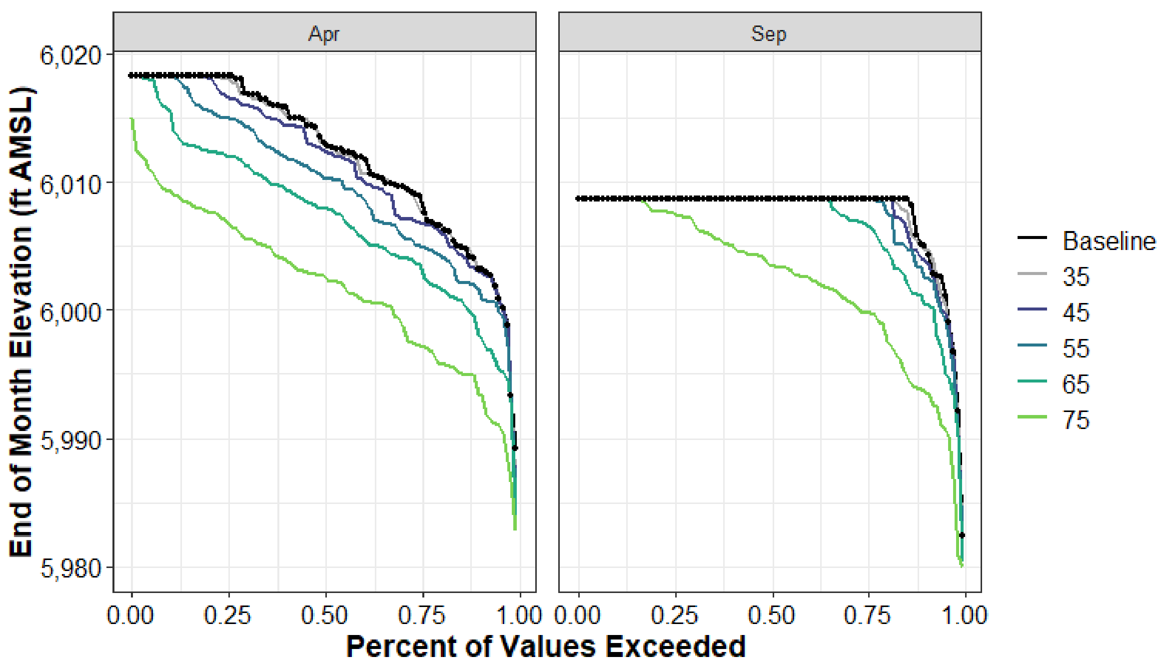

Figure A1-106. Jackson Meadows Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-222. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Jackson Meadows Reservoir

	Baseline	35	45	55	65	75
0%	23	0	0	0	-1	-2
10%	40	0	-1	-2	-4	-9
25%	43	0	0	0	-2	-8
50%	43	0	0	0	0	-5
75%	43	0	0	0	0	-1
90%	43	0	0	0	0	0
100%	43	0	0	0	0	0
Mean	42	0	0	0	-1	-4

Table A1-223. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Jackson Meadows Reservoir

	Baseline	35	45	55	65	75
0%	5,982	0	0	0	-2	-2
10%	6,005	0	-1	-2	-4	-11
25%	6,009	0	0	0	-2	-9
50%	6,009	0	0	0	0	-5
75%	6,009	0	0	0	0	-1
90%	6,009	0	0	0	0	0
100%	6,009	0	0	0	0	0
Mean	6,008	0	0	0	-1	-5

Table A1-224. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Jackson Meadows Reservoir

	Baseline	35	45	55	65	75
0%	27	-2	-3	-3	-3	-4
10%	38	0	0	-1	-4	-8
25%	43	-1	-2	-3	-5	-10
50%	47	0	-1	-3	-5	-9
75%	52	0	-2	-3	-6	-10
90%	52	0	0	0	-3	-8
100%	52	0	0	0	0	-3
Mean	46	0	-1	-2	-4	-9

Table A1-225. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Jackson Meadows Reservoir

	Baseline	35	45	55	65	75
0%	5,989	-3	-4	-4	-5	-6
10%	6,003	0	0	-2	-5	-10
25%	6,009	-1	-2	-4	-5	-12
50%	6,013	0	-1	-3	-5	-10
75%	6,018	0	-2	-3	-6	-12
90%	6,018	0	0	0	-3	-9
100%	6,018	0	0	0	0	-3
Mean	6,012	0	-1	-2	-5	-10

A12.1.6.23 Jenkinson Lake (Cosumnes River Watershed)

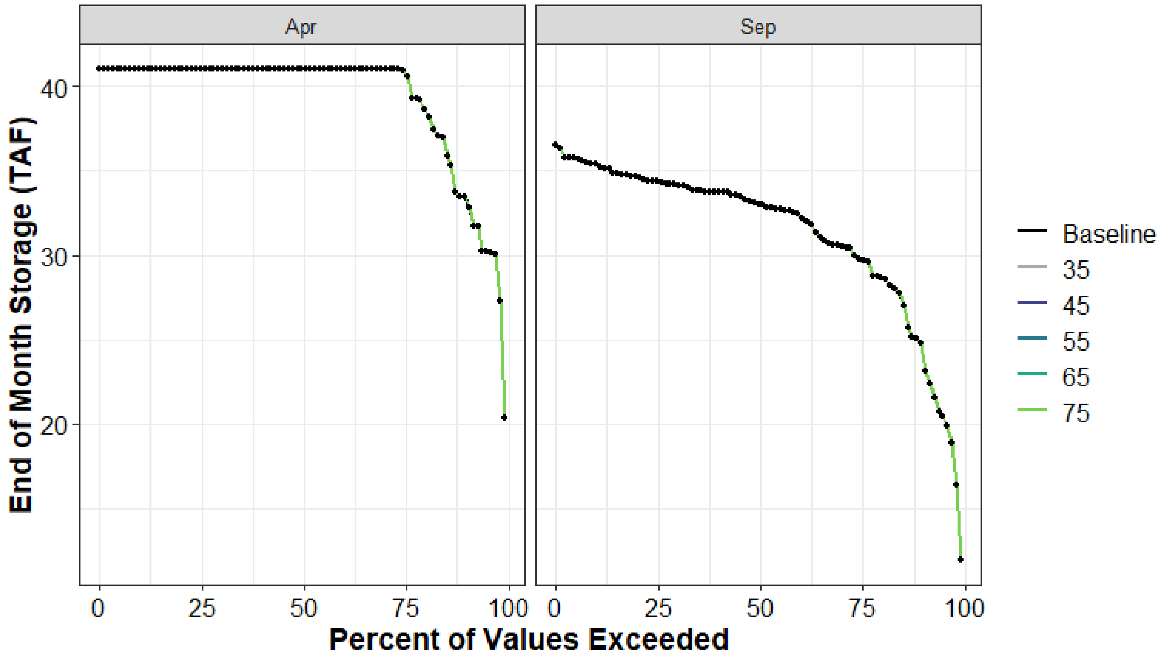

Figure A1-107. Jenkinson Lake End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-226. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Jenkinson Lake

	Baseline	35	45	55	65	75
0%	12	0	0	0	0	0
10%	25	0	0	0	0	0
25%	30	0	0	0	0	0
50%	33	0	0	0	0	0
75%	34	0	0	0	0	0
90%	35	0	0	0	0	0
100%	37	0	0	0	0	0
Mean	31	0	0	0	0	0

Table A1-227. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Jenkinson Lake

	Baseline	35	45	55	65	75
0%	20	0	0	0	0	0
10%	33	0	0	0	0	0
25%	41	0	0	0	0	0
50%	41	0	0	0	0	0
75%	41	0	0	0	0	0
90%	41	0	0	0	0	0
100%	41	0	0	0	0	0
Mean	39	0	0	0	0	0

A12.1.6.24 Lake Almanor (Feather River Watershed)

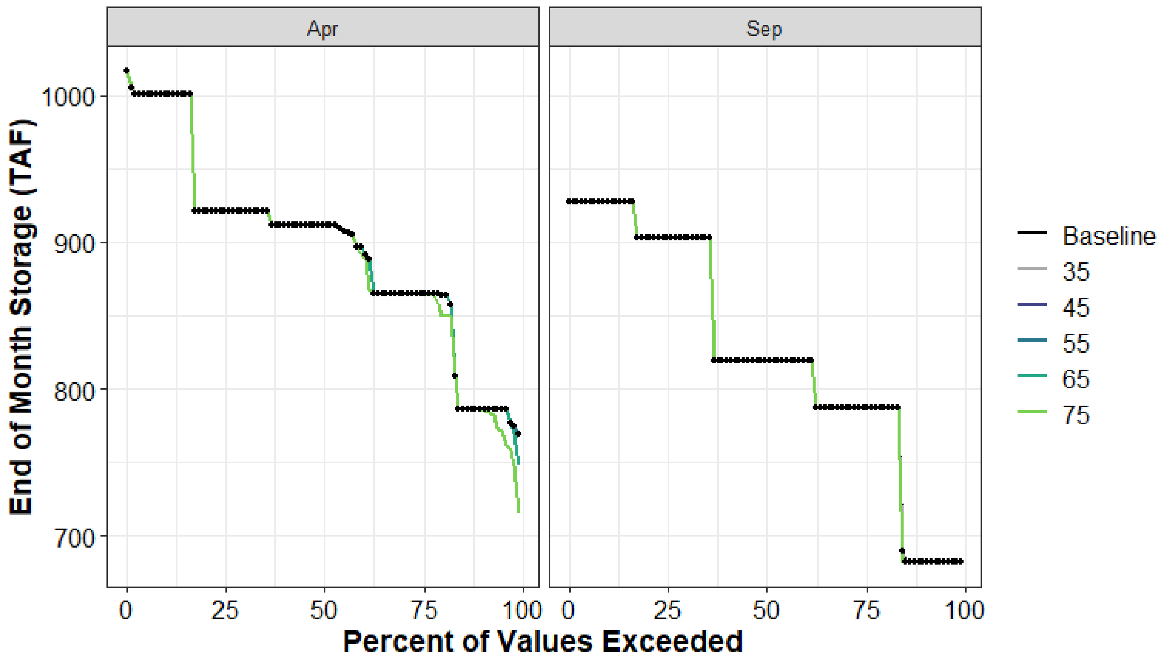

Figure A1-108. Lake Almanor End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

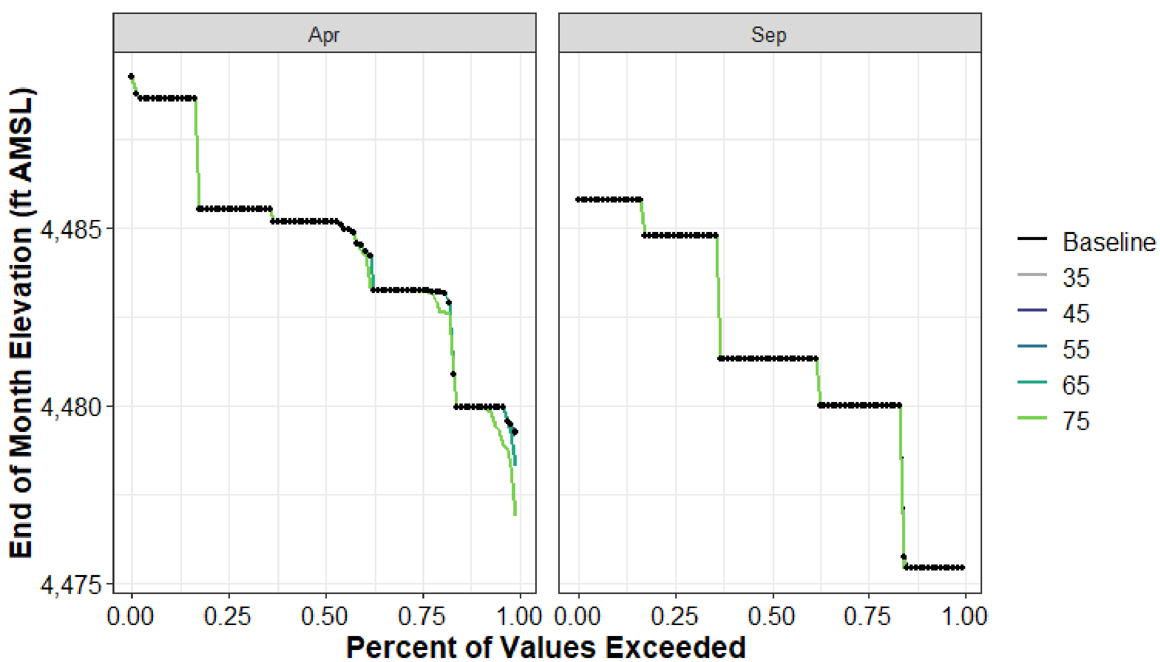

Figure A1-109. Lake Almanor Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-228. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Almanor

	Baseline	35	45	55	65	75
0%	682	0	0	0	0	0
10%	682	0	0	0	0	0
25%	787	0	0	0	0	0
50%	819	0	0	0	0	0
75%	903	0	0	0	0	0
90%	928	0	0	0	0	0
100%	928	0	0	0	0	0
Mean	825	0	0	0	0	0

Table A1-229. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Lake Almanor

	Baseline	35	45	55	65	75
0%	4475	0	0	0	0	0
10%	4475	0	0	0	0	0
25%	4480	0	0	0	0	0
50%	4481	0	0	0	0	0
75%	4485	0	0	0	0	0
90%	4486	0	0	0	0	0
100%	4486	0	0	0	0	0
Mean	4482	0	0	0	0	0

Table A1-230. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Almanor

	Baseline	35	45	55	65	75
0%	770	0	0	-2	-22	-55
10%	786	0	0	0	0	0
25%	865	0	0	0	0	0
50%	912	0	0	0	0	0
75%	921	0	0	0	0	0
90%	1001	0	0	0	0	0
100%	1017	0	0	0	0	0
Mean	897	0	0	0	0	-2

Table A1-231. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Lake Almanor

	Baseline	35	45	55	65	75
0%	4479	0	0	0	-1	-2
10%	4480	0	0	0	0	0
25%	4483	0	0	0	0	0
50%	4485	0	0	0	0	0
75%	4485	0	0	0	0	0
90%	4489	0	0	0	0	0
100%	4489	0	0	0	0	0
Mean	4484	0	0	0	0	0

A12.1.6.25 Lake Aloha (American River Watershed)

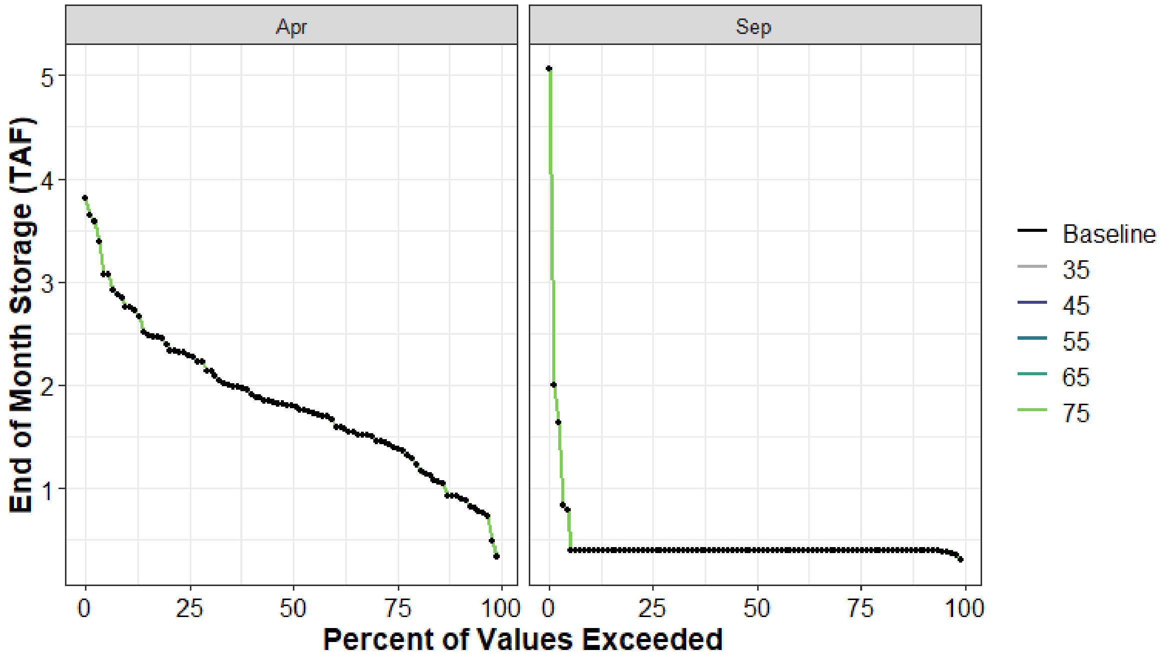

Figure A1-110. Lake Aloha End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-232. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Aloha

	Baseline	35	45	55	65	75
0%	0	0	0	0	0	0
10%	0	0	0	0	0	0
25%	0	0	0	0	0	0
50%	0	0	0	0	0	0
75%	0	0	0	0	0	0
90%	0	0	0	0	0	0
100%	5	0	0	0	0	0
Mean	0	0	0	0	0	0

Table A1-233. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Aloha

	Baseline	35	45	55	65	75
0%	0	0	0	0	0	0
10%	1	0	0	0	0	0
25%	1	0	0	0	0	0
50%	2	0	0	0	0	0
75%	2	0	0	0	0	0
90%	3	0	0	0	0	0
100%	4	0	0	0	0	0
Mean	2	0	0	0	0	0

A12.1.6.26 Lake Amador (Mokelumne River Watershed)

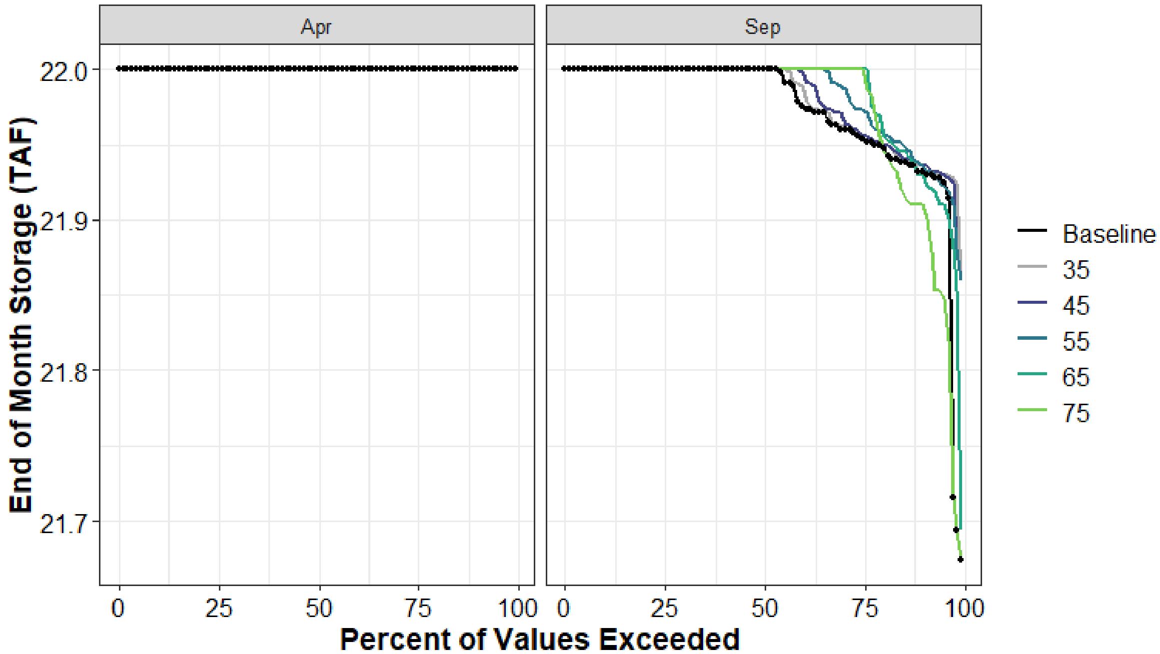

Figure A1-111. Lake Amador End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-234. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Amador

	Baseline	35	45	55	65	75
0%	22	0	0	0	0	0
10%	22	0	0	0	0	0
25%	22	0	0	0	0	0
50%	22	0	0	0	0	0
75%	22	0	0	0	0	0
90%	22	0	0	0	0	0
100%	22	0	0	0	0	0
Mean	22	0	0	0	0	0

Table A1-235. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Amador

	Baseline	35	45	55	65	75
0%	22	0	0	0	0	0
10%	22	0	0	0	0	0
25%	22	0	0	0	0	0
50%	22	0	0	0	0	0
75%	22	0	0	0	0	0
90%	22	0	0	0	0	0
100%	22	0	0	0	0	0
Mean	22	0	0	0	0	0

A12.1.6.27 Lake Berryessa (Putah Creek Watershed)

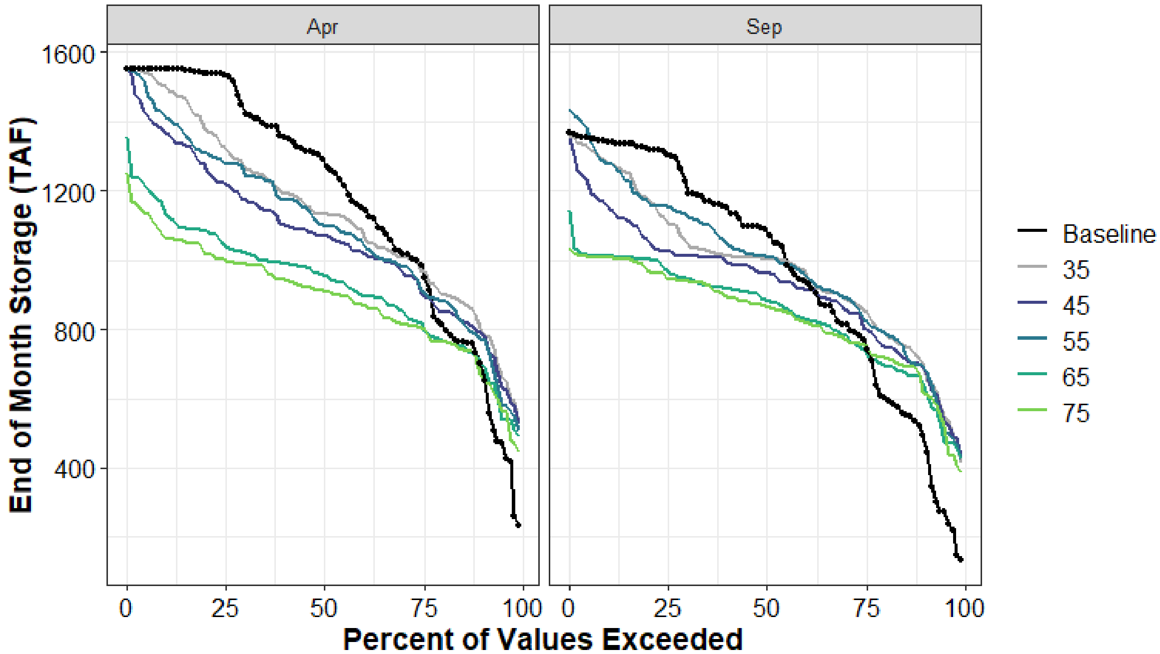

Figure A1-112. Lake Berryessa End-of-April and End-of-September Storage Percent Exceedance Plot

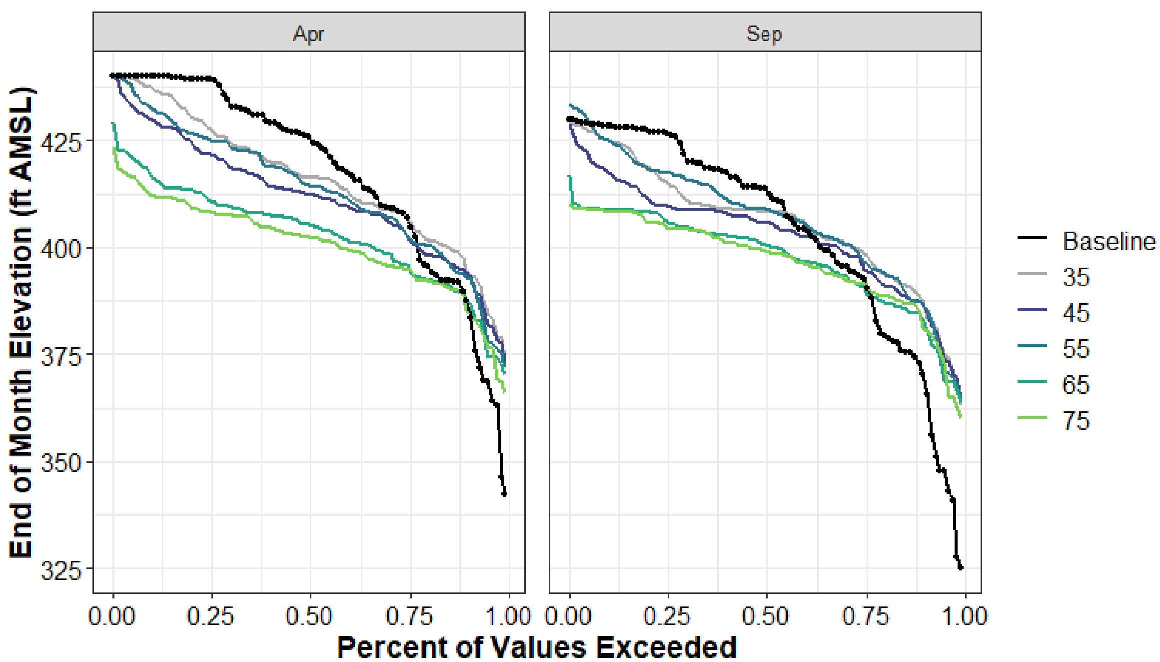

Figure A1-113. Lake Berryessa End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-236. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Berryessa

	Baseline	35	45	55	65	75
0%	133	282	297	294	292	252
10%	499	205	195	199	149	133
25%	770	86	32	56	-26	-13
50%	1,090	-85	-127	-78	-204	-221
75%	1,304	-191	-280	-150	-334	-358
90%	1,341	-63	-192	-63	-331	-335
100%	1,370	-9	-22	63	-228	-335
Mean	971	7	-44	18	-126	-135

Table A1-237. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Lake Berryessa

	Baseline	35	45	55	65	75
0%	325	38	39	39	39	35
10%	371	17	16	16	12	11
25%	393	6	2	4	-2	-1
50%	414	-5	-8	-5	-13	-14
75%	426	-11	-17	-9	-20	-22
90%	428	-4	-11	-4	-20	-20
100%	430	-1	-1	3	-13	-20
Mean	404	2	-1	3	-6	-7

Table A1-238. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Berryessa

	Baseline	35	45	55	65	75
0%	233	295	293	274	258	213
10%	708	105	86	70	5	-27
25%	983	-15	-77	-68	-164	-178
50%	1,293	-159	-221	-190	-333	-381
75%	1,536	-208	-314	-257	-491	-533
90%	1,551	-52	-185	-138	-421	-491
100%	1,551	0	0	0	-198	-302
Mean	1,180	-41	-113	-81	-250	-287

Table A1-239. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Lake Berryessa

	Baseline	35	45	55	65	75
0%	342	31	31	29	28	24
10%	388	7	6	5	0	-2
25%	407	-1	-5	-4	-11	-12
50%	426	-9	-13	-11	-20	-23
75%	439	-11	-18	-14	-28	-31
90%	440	-3	-10	-8	-24	-28
100%	440	0	0	0	-11	-17
Mean	417	-1	-6	-4	-14	-17

A12.1.6.28 Lake Combie (Bear River Watershed)

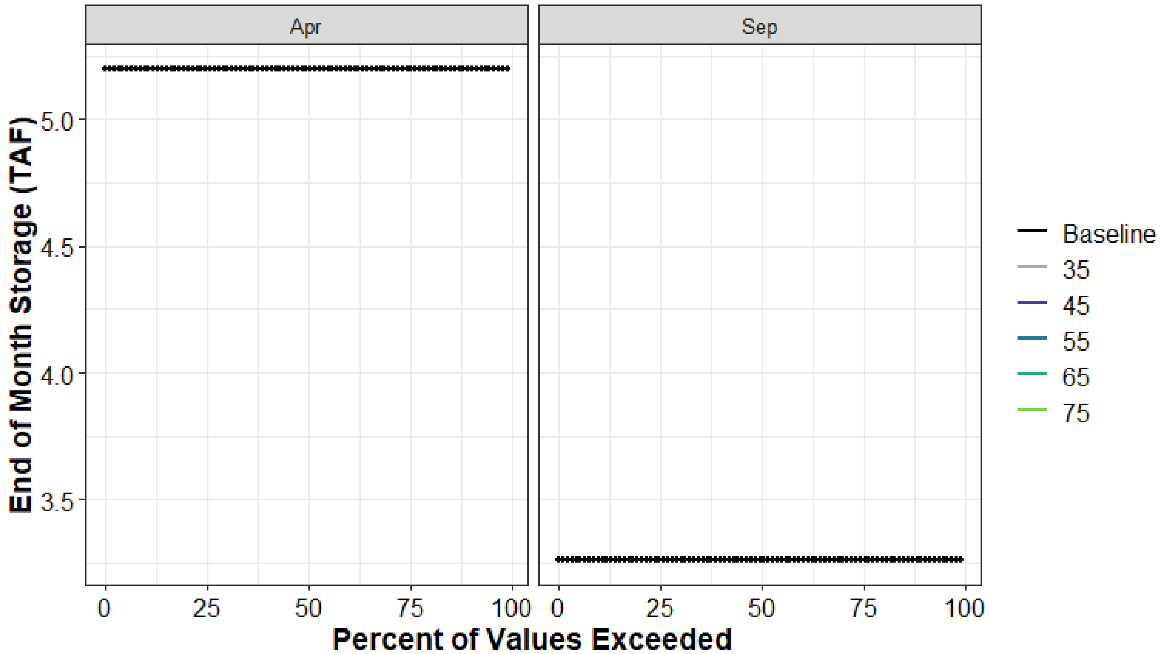

Figure A1-114. Lake Combie End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

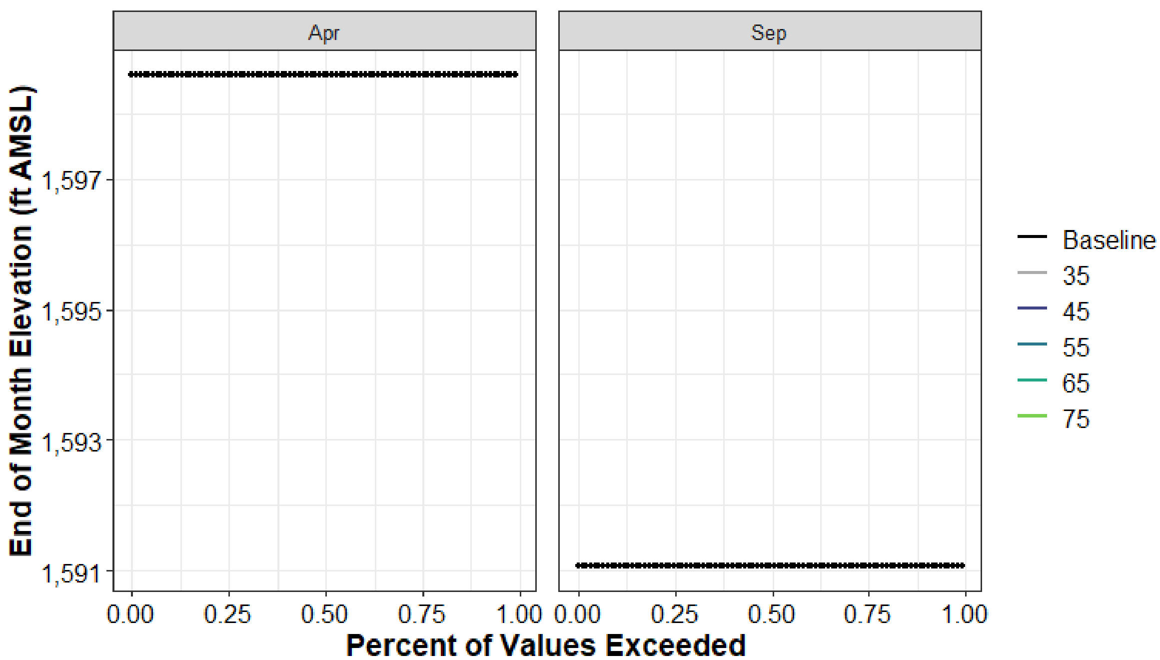

Figure A1-115. Lake Combie Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-240. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Combie

	Baseline	35	45	55	65	75
0%	3	0	0	0	0	0
10%	3	0	0	0	0	0
25%	3	0	0	0	0	0
50%	3	0	0	0	0	0
75%	3	0	0	0	0	0
90%	3	0	0	0	0	0
100%	3	0	0	0	0	0
Mean	3	0	0	0	0	0

Table A1-241. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Lake Combie

	Baseline	35	45	55	65	75
0%	1591	0	0	0	0	0
10%	1591	0	0	0	0	0
25%	1591	0	0	0	0	0
50%	1591	0	0	0	0	0
75%	1591	0	0	0	0	0
90%	1591	0	0	0	0	0
100%	1591	0	0	0	0	0
Mean	1591	0	0	0	0	0

Table A1-242. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Combie

	Baseline	35	45	55	65	75
0%	5	0	0	0	0	0
10%	5	0	0	0	0	0
25%	5	0	0	0	0	0
50%	5	0	0	0	0	0
75%	5	0	0	0	0	0
90%	5	0	0	0	0	0
100%	5	0	0	0	0	0
Mean	5	0	0	0	0	0

Table A1-243. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Lake Combie

	Baseline	35	45	55	65	75
0%	1599	0	0	0	0	0
10%	1599	0	0	0	0	0
25%	1599	0	0	0	0	0
50%	1599	0	0	0	0	0
75%	1599	0	0	0	0	0
90%	1599	0	0	0	0	0
100%	1599	0	0	0	0	0
Mean	1599	0	0	0	0	0

A12.1.6.29 Lake Davis (Feather River Watershed)

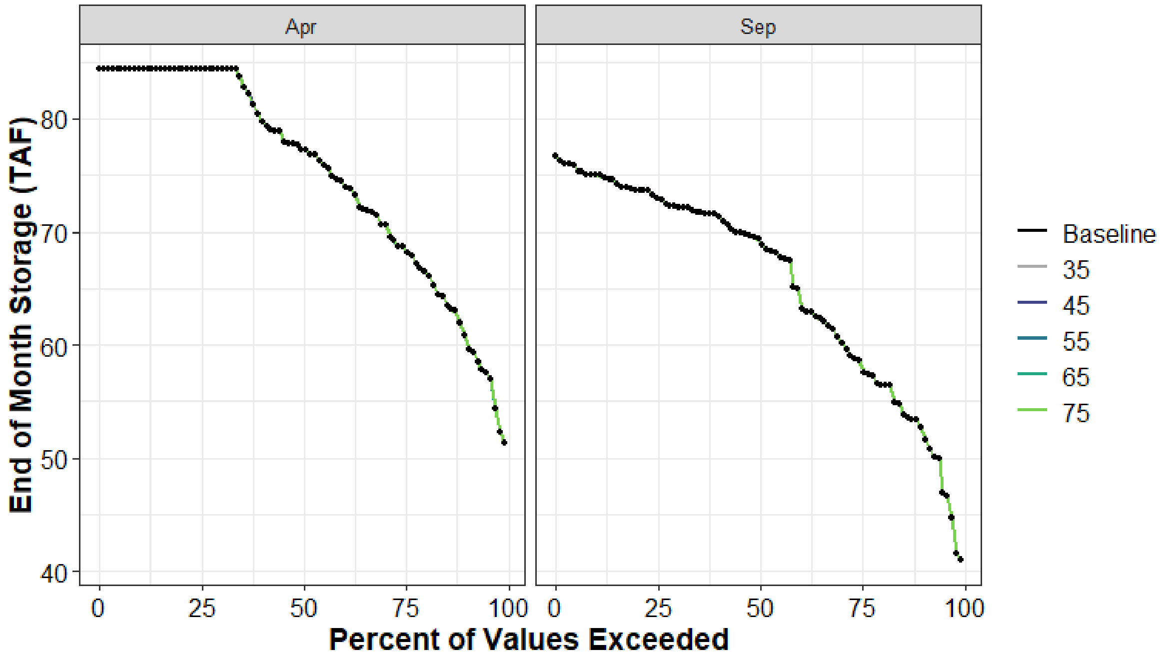

Figure A1-116. Lake Davis End-of-April and End-of-September Storage Percent Exceedance Plot

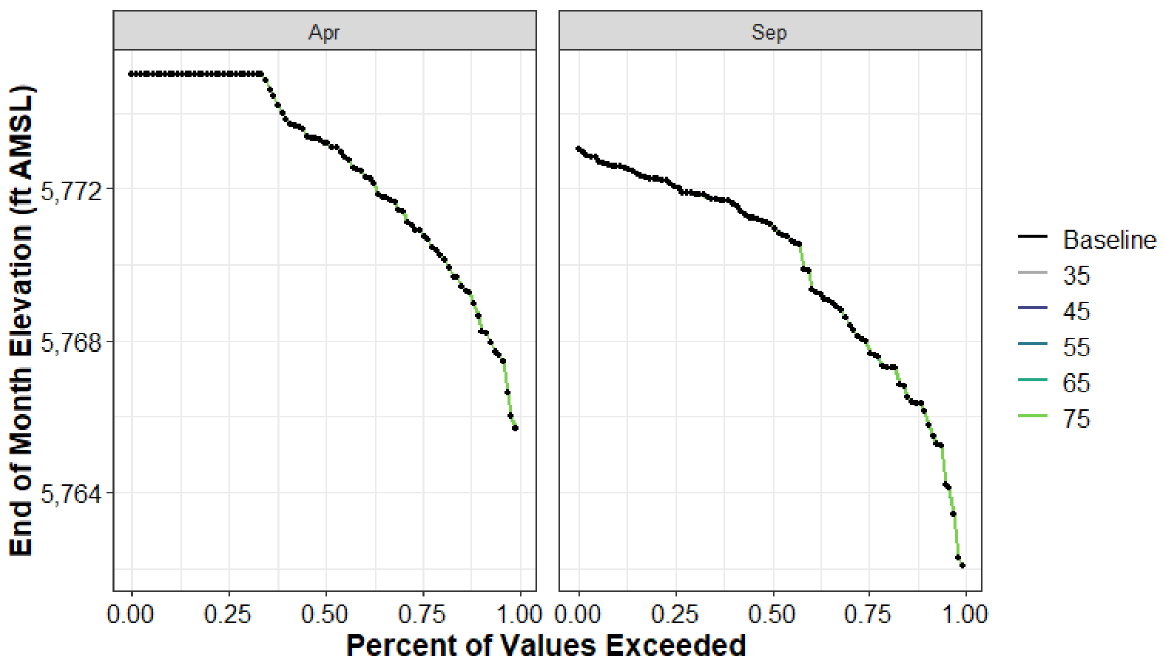

Figure A1-117. Lake Davis End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-244. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Davis

	Baseline	35	45	55	65	75
0%	41	0	0	0	0	0
10%	53	0	0	0	0	0
25%	59	0	0	0	0	0
50%	69	0	0	0	0	0
75%	73	0	0	0	0	0
90%	75	0	0	0	0	0
100%	77	0	0	0	0	0
Mean	65	0	0	0	0	0

Table A1-245. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Lake Davis

	Baseline	35	45	55	65	75
0%	5,762	0	0	0	0	0
10%	5,766	0	0	0	0	0
25%	5,768	0	0	0	0	0
50%	5,771	0	0	0	0	0
75%	5,772	0	0	0	0	0
90%	5,773	0	0	0	0	0
100%	5,773	0	0	0	0	0
Mean	5,770	0	0	0	0	0

Table A1-246. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Davis

	Baseline	35	45	55	65	75
0%	51	0	0	0	0	0
10%	61	0	0	0	0	0
25%	69	0	0	0	0	0
50%	77	0	0	0	0	0
75%	84	0	0	0	0	0
90%	84	0	0	0	0	0
100%	84	0	0	0	0	0
Mean	75	0	0	0	0	0

Table A1-247. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Lake Davis

	Baseline	35	45	55	65	75
0%	5,766	0	0	0	0	0
10%	5,769	0	0	0	0	0
25%	5,771	0	0	0	0	0
50%	5,773	0	0	0	0	0
75%	5,775	0	0	0	0	0
90%	5,775	0	0	0	0	0
100%	5,775	0	0	0	0	0
Mean	5,773	0	0	0	0	0

A12.1.6.30 Lake Fordyce (Yuba River Watershed)

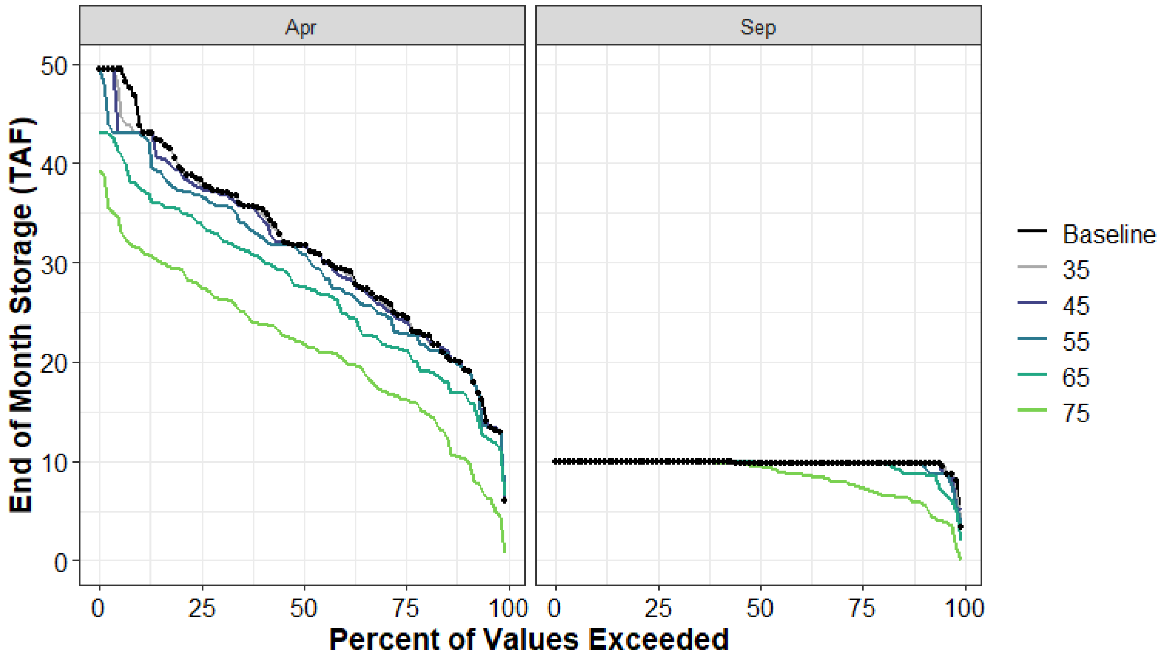

Figure A1-118. Lake Fordyce End-of-April and End-of-September Storage Percent Exceedance Plot

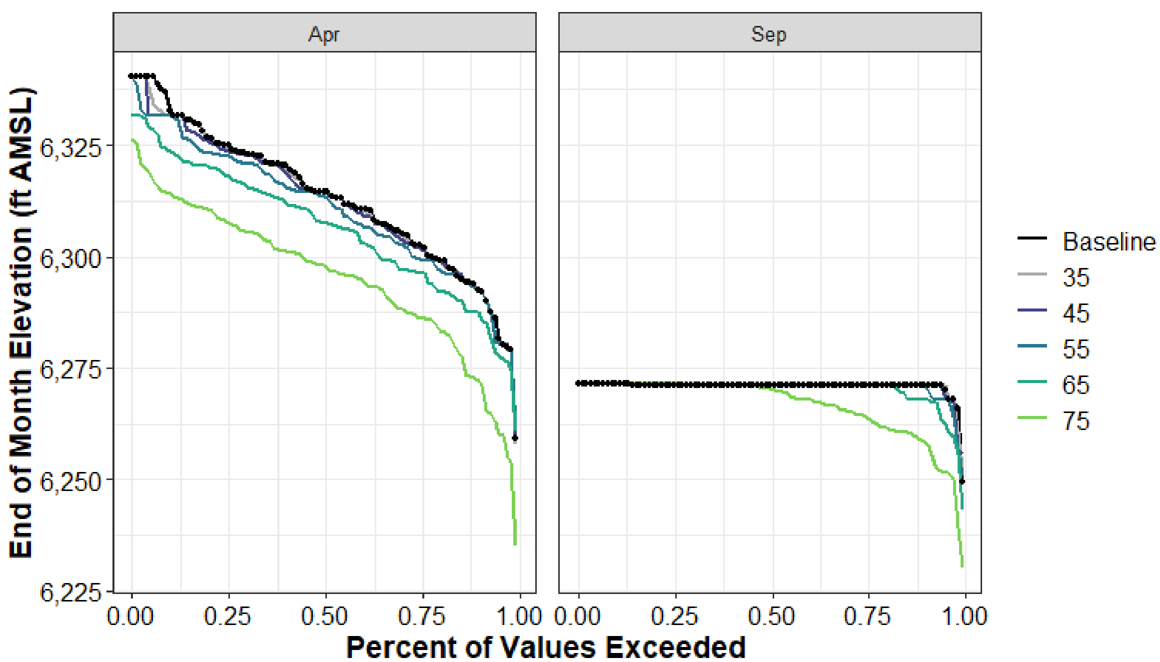

Figure A1-119. Lake Fordyce End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-248. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Fordyce

	Baseline	35	45	55	65	75
0%	3	1	2	0	-1	-3
10%	10	0	0	0	-1	-4
25%	10	0	0	0	0	-2
50%	10	0	0	0	0	0
75%	10	0	0	0	0	0
90%	10	0	0	0	0	0
100%	10	0	0	0	0	0
Mean	10	0	0	0	0	-1

Table A1-249. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Lake Fordyce

	Baseline	35	45	55	65	75
0%	6,249	3	6	1	-6	-19
10%	6,271	0	0	0	-3	-12
25%	6,271	0	0	0	0	-7
50%	6,271	0	0	0	0	-1
75%	6,271	0	0	0	0	0
90%	6,271	0	0	0	0	0
100%	6,271	0	0	0	0	0
Mean	6,271	0	0	0	-1	-4

Table A1-250. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Fordyce

	Baseline	35	45	55	65	75
0%	6	0	0	0	0	-5
10%	19	0	0	0	-3	-9
25%	25	0	0	-2	-3	-8
50%	32	0	0	-1	-4	-10
75%	38	-1	-1	-2	-4	-11
90%	44	-1	-1	-1	-6	-12
100%	49	0	0	0	-6	-10
Mean	32	0	-1	-2	-4	-10

Table A1-251. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Lake Fordyce

	Baseline	35	45	55	65	75
0%	6,259	-1	0	1	2	-24
10%	6,293	0	0	0	-5	-21
25%	6,303	0	-1	-3	-6	-16
50%	6,315	0	0	-1	-7	-17
75%	6,325	-1	-1	-2	-7	-17
90%	6,333	-1	-1	-1	-9	-19
100%	6,340	0	0	0	-9	-14
Mean	6,313	0	-1	-3	-7	-18

A12.1.6.31 Lake Spaulding (Yuba River Watershed)

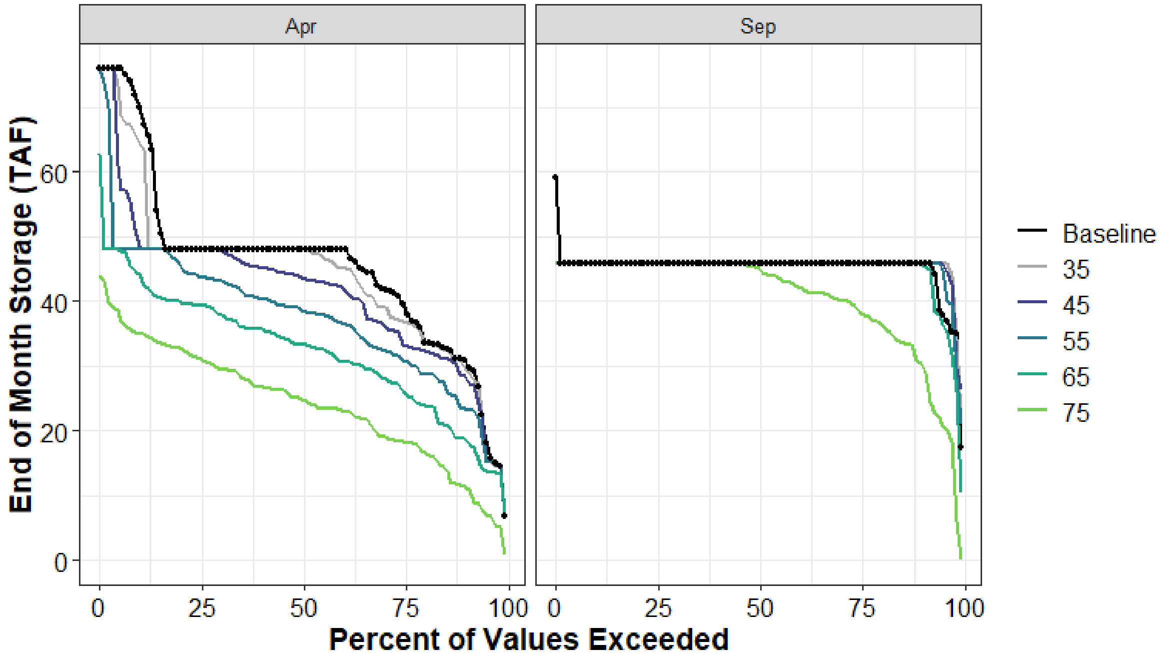

Figure A1-120. Lake Spaulding End-of-April and End-of-September Storage Percent Exceedance Plot

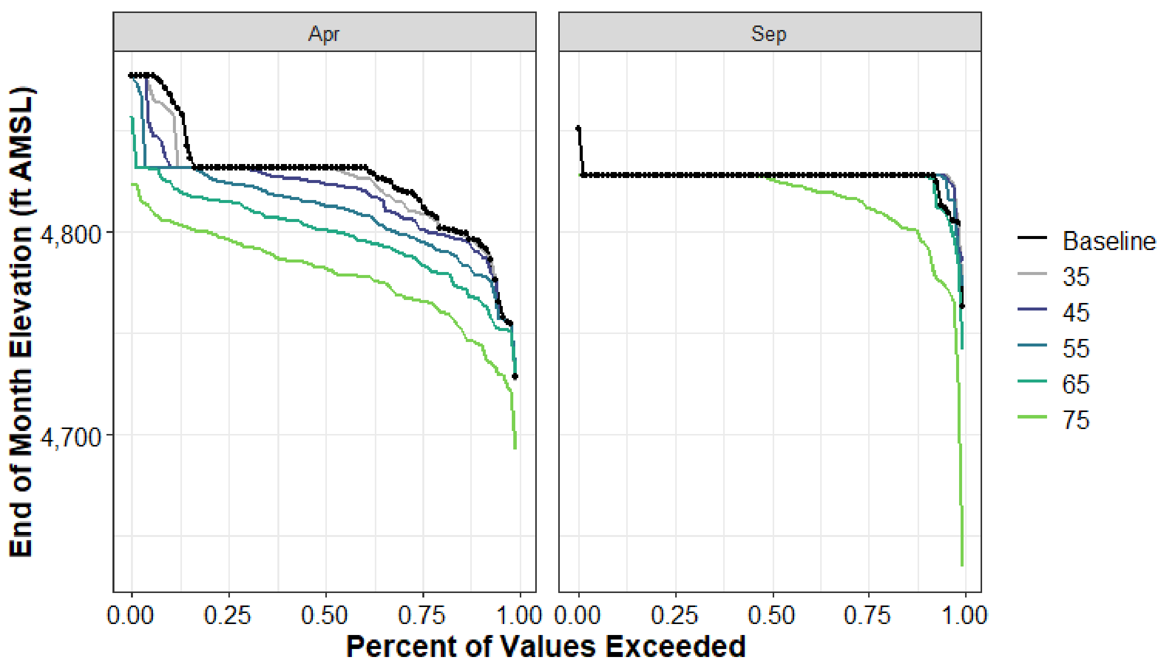

Figure A1-121. Lake Spaulding End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-252. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Spaulding

	Baseline	35	45	55	65	75
0%	17	4	9	4	-7	-17
10%	46	0	0	0	0	-15
25%	46	0	0	0	0	-8
50%	46	0	0	0	0	-1
75%	46	0	0	0	0	0
90%	46	0	0	0	0	0
100%	59	-13	-13	-13	-13	-13
Mean	45	0	0	0	0	-5

Table A1-253. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Lake Spaulding

	Baseline	35	45	55	65	75
0%	4,763	11	22	10	-21	-129
10%	4,828	0	0	0	0	-33
25%	4,828	0	0	0	0	-15
50%	4,828	0	0	0	0	-1
75%	4,828	0	0	0	0	0
90%	4,828	0	0	0	0	0
100%	4,851	-23	-23	-23	-23	-23
Mean	4,827	1	1	0	-1	-11

Table A1-254. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Spaulding

	Baseline	35	45	55	65	75
0%	7	0	0	0	1	-6
10%	31	-1	-2	-7	-12	-19
25%	40	-3	-6	-9	-14	-21
50%	48	0	-4	-9	-15	-23
75%	48	0	0	-4	-9	-17
90%	69	-5	-21	-21	-26	-34
100%	76	0	0	0	-13	-32
Mean	46	-2	-4	-8	-14	-22

Table A1-255. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Lake Spaulding

	Baseline	35	45	55	65	75
0%	4,728	-2	0	2	2	-36
10%	4,796	-2	-6	-17	-28	-50
25%	4,815	-6	-14	-20	-31	-49
50%	4,832	0	-8	-19	-31	-50
75%	4,832	0	0	-8	-17	-36
90%	4,867	-8	-34	-35	-43	-62
100%	4,877	0	0	0	-20	-53
Mean	4,826	-3	-8	-16	-27	-47

A12.1.6.32 Lake Valley (American River Watershed)

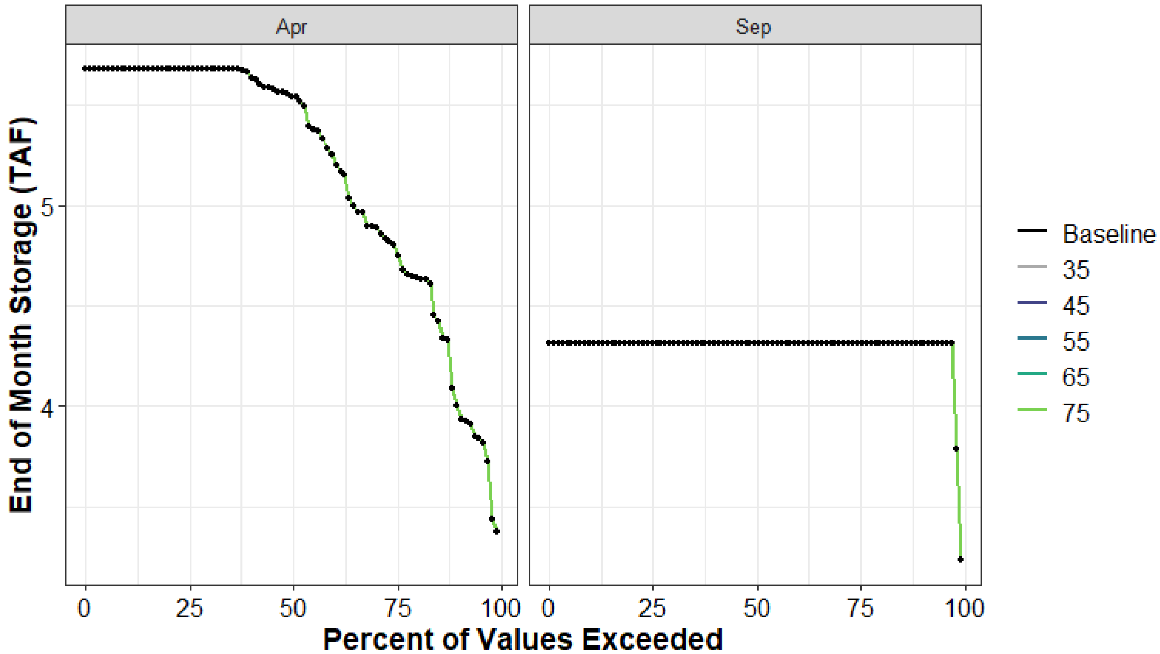

Figure A1-122. Lake Valley End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-256. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Valley

	Baseline	35	45	55	65	75
0%	3	0	0	0	0	0
10%	4	0	0	0	0	0
25%	4	0	0	0	0	0
50%	4	0	0	0	0	0
75%	4	0	0	0	0	0
90%	4	0	0	0	0	0
100%	4	0	0	0	0	0
Mean	4	0	0	0	0	0

Table A1-257. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lake Valley

	Baseline	35	45	55	65	75
0%	3	0	0	0	0	0
10%	4	0	0	0	0	0
25%	5	0	0	0	0	0
50%	6	0	0	0	0	0
75%	6	0	0	0	0	0
90%	6	0	0	0	0	0
100%	6	0	0	0	0	0
Mean	5	0	0	0	0	0

A12.1.6.33 Little Grass Valley Reservoir (Feather River Watershed)

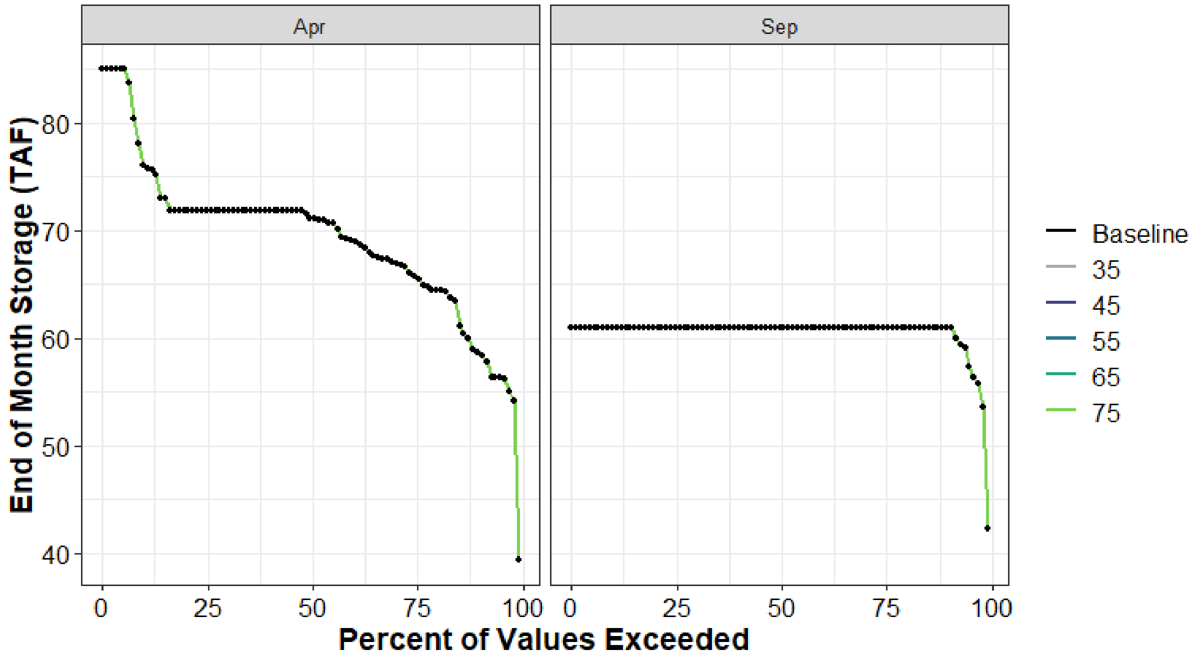

Figure A1-123. Little Grass Valley Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

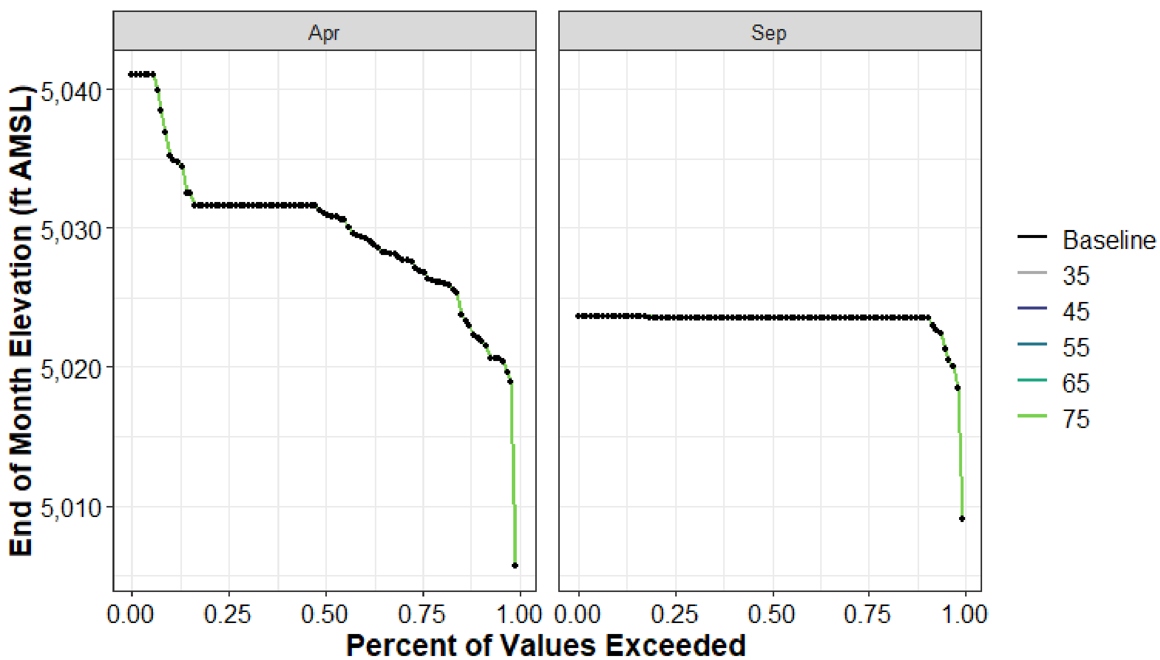

Figure A1-124. Little Grass Valley Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-258. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Little Grass Valley Reservoir

	Baseline	35	45	55	65	75
0%	42	0	0	0	0	0
10%	61	0	0	0	0	0
25%	61	0	0	0	0	0
50%	61	0	0	0	0	0
75%	61	0	0	0	0	0
90%	61	0	0	0	0	0
100%	61	0	0	0	0	0
Mean	60	0	0	0	0	0

Table A1-259. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Little Grass Valley Reservoir

	Baseline	35	45	55	65	75
0%	5009	0	0	0	0	0
10%	5024	0	0	0	0	0
25%	5024	0	0	0	0	0
50%	5024	0	0	0	0	0
75%	5024	0	0	0	0	0
90%	5024	0	0	0	0	0
100%	5024	0	0	0	0	0
Mean	5023	0	0	0	0	0

Table A1-260. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Little Grass Valley Reservoir

	Baseline	35	45	55	65	75
0%	39	0	0	0	0	0
10%	59	0	0	0	0	0
25%	66	0	0	0	0	0
50%	71	0	0	0	0	0
75%	72	0	0	0	0	0
90%	76	0	0	0	0	0
100%	85	0	0	0	0	0
Mean	69	0	0	0	0	0

Table A1-261. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Little Grass Valley Reservoir

	Baseline	35	45	55	65	75
0%	5006	0	0	0	0	0
10%	5022	0	0	0	0	0
25%	5027	0	0	0	0	0
50%	5031	0	0	0	0	0
75%	5032	0	0	0	0	0
90%	5035	0	0	0	0	0
100%	5041	0	0	0	0	0
Mean	5030	0	0	0	0	0

A12.1.6.34 Loon Lake (American River Watershed)

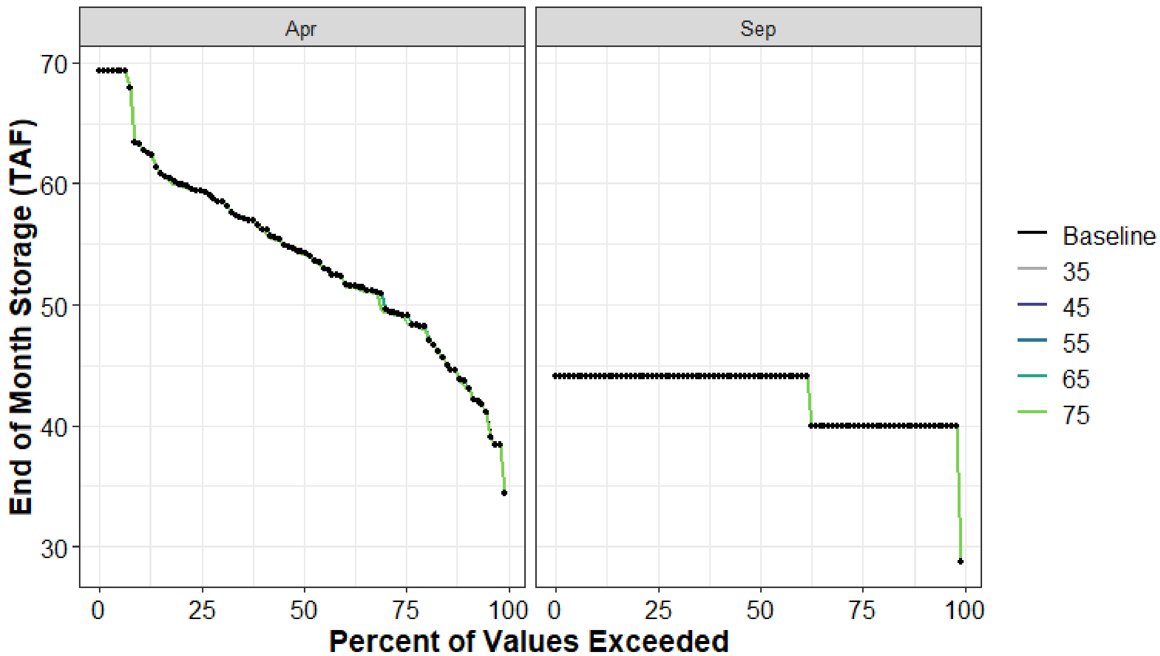

Figure A1-125. Loon Lake End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

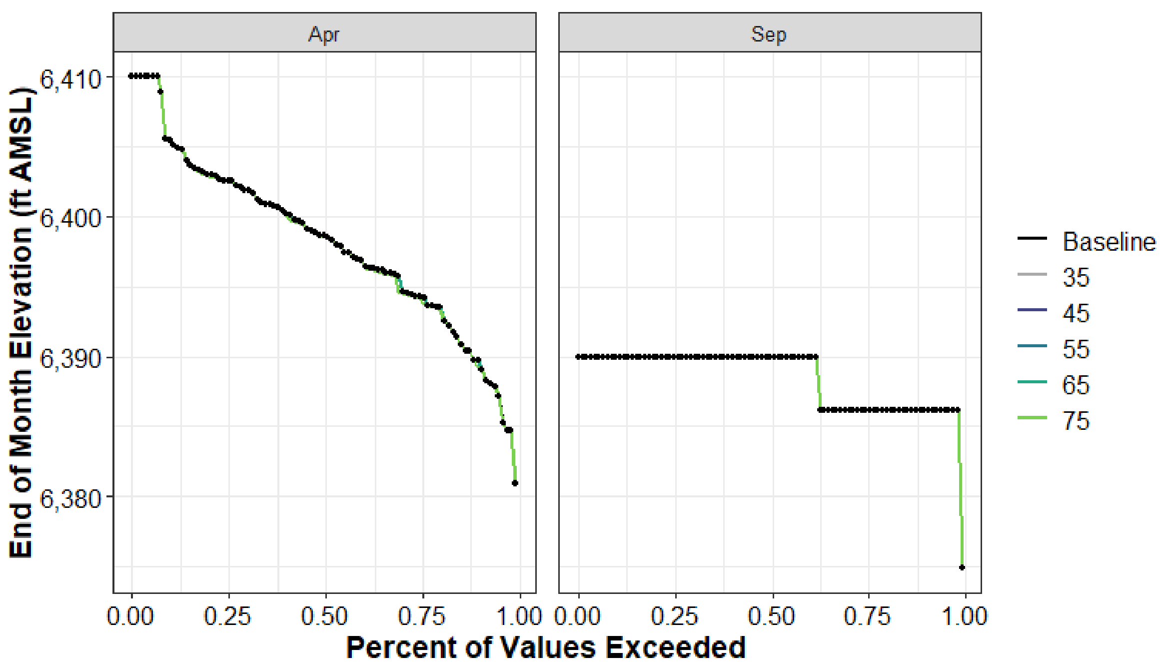

Figure A1-126. Loon Lake Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-262. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Loon Lake Reservoir

	Baseline	35	45	55	65	75
0%	29	0	0	0	0	0
10%	40	0	0	0	0	0
25%	40	0	0	0	0	0
50%	44	0	0	0	0	0
75%	44	0	0	0	0	0
90%	44	0	0	0	0	0
100%	44	0	0	0	0	0
Mean	42	0	0	0	0	0

Table A1-263. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Loon Lake Reservoir

	Baseline	35	45	55	65	75
0%	6375	0	0	0	0	0
10%	6386	0	0	0	0	0
25%	6386	0	0	0	0	0
50%	6390	0	0	0	0	0
75%	6390	0	0	0	0	0
90%	6390	0	0	0	0	0
100%	6390	0	0	0	0	0
Mean	6388	0	0	0	0	0

Table A1-264. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Loon Lake Reservoir

	Baseline	35	45	55	65	75
0%	34	0	0	0	0	0
10%	44	0	0	0	0	0
25%	49	0	0	0	0	0
50%	54	0	0	0	0	0
75%	59	0	0	0	0	0
90%	63	0	0	0	0	0
100%	69	0	0	0	0	0
Mean	54	0	0	0	0	0

A12.1.6.35 Los Vaqueros Reservoir (Kellogg Creek Watershed)

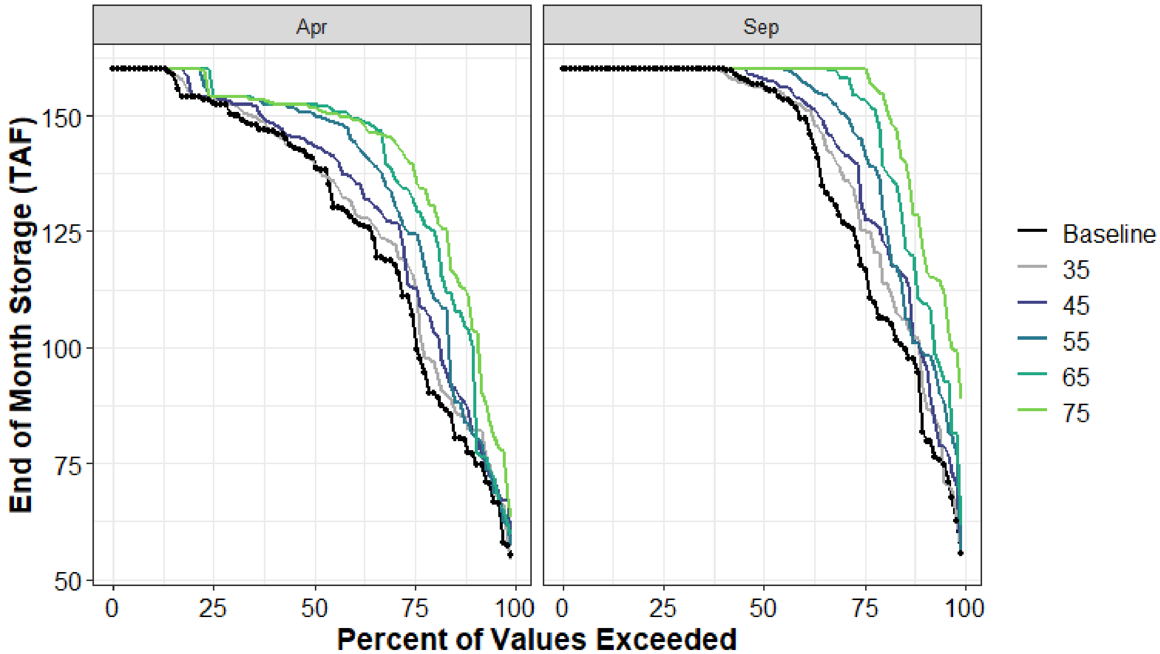

Figure A1-127. Los Vaqueros Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

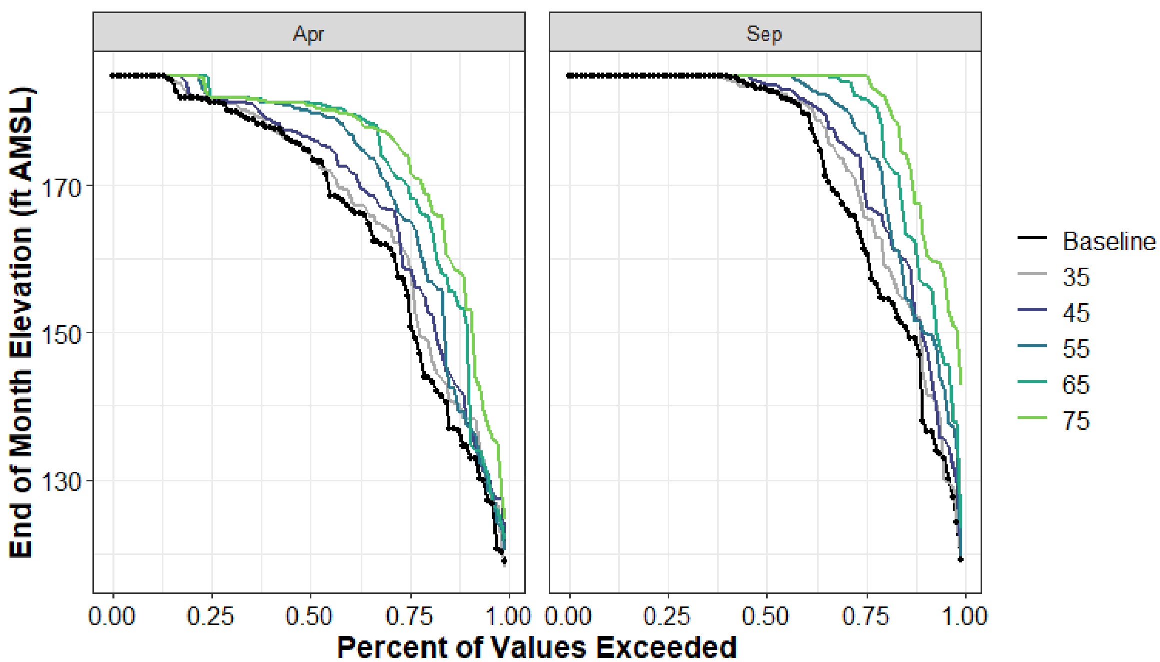

Figure A1-128. Los Vaqueros Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-265. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Los Vaqueros Reservoir

	Baseline	35	45	55	65	75
0%	56	0	0	0	6	33
10%	84	9	14	15	26	39
25%	118	8	13	27	35	42
50%	157	-1	1	3	3	3
75%	160	0	0	0	0	0
90%	160	0	0	0	0	0
100%	160	0	0	0	0	0
Mean	138	3	5	8	11	15

Table A1-266. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Los Vaqueros Reservoir

	Baseline	35	45	55	65	75
0%	119	0	0	0	4	24
10%	140	6	10	11	17	25
25%	161	4	8	16	20	23
50%	183	0	1	2	2	2
75%	185	0	0	0	0	0
90%	185	0	0	0	0	0
100%	185	0	0	0	0	0
Mean	172	2	3	4	7	9

Table A1-267. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Los Vaqueros Reservoir

	Baseline	35	45	55	65	75
0%	55	-1	3	2	4	8
10%	77	5	6	5	24	28
25%	107	9	6	18	25	33
50%	141	0	3	10	12	11
75%	153	1	2	2	2	2
90%	160	0	0	0	0	0
100%	160	0	0	0	0	0
Mean	127	2	5	8	12	14

Table A1-268. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Los Vaqueros Reservoir

	Baseline	35	45	55	65	75
0%	119	-1	2	1	3	6
10%	135	4	4	3	17	20
25%	155	5	4	10	15	19
50%	175	0	2	6	6	6
75%	181	1	1	1	1	1
90%	185	0	0	0	0	0
100%	185	0	0	0	0	0
Mean	166	1	3	5	7	9

A12.1.6.36 Lower Bear (Mokelumne River Watershed)

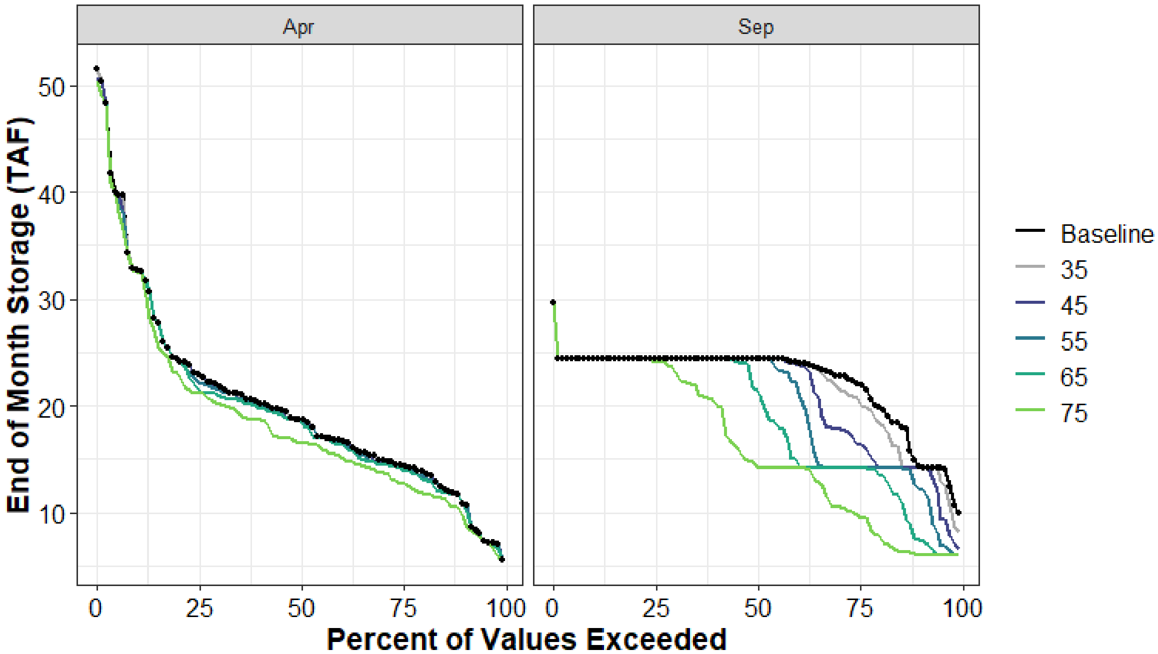

Figure A1-129. Lower Bear End-of-April and End-of-September Storage Percent Exceedance Plot

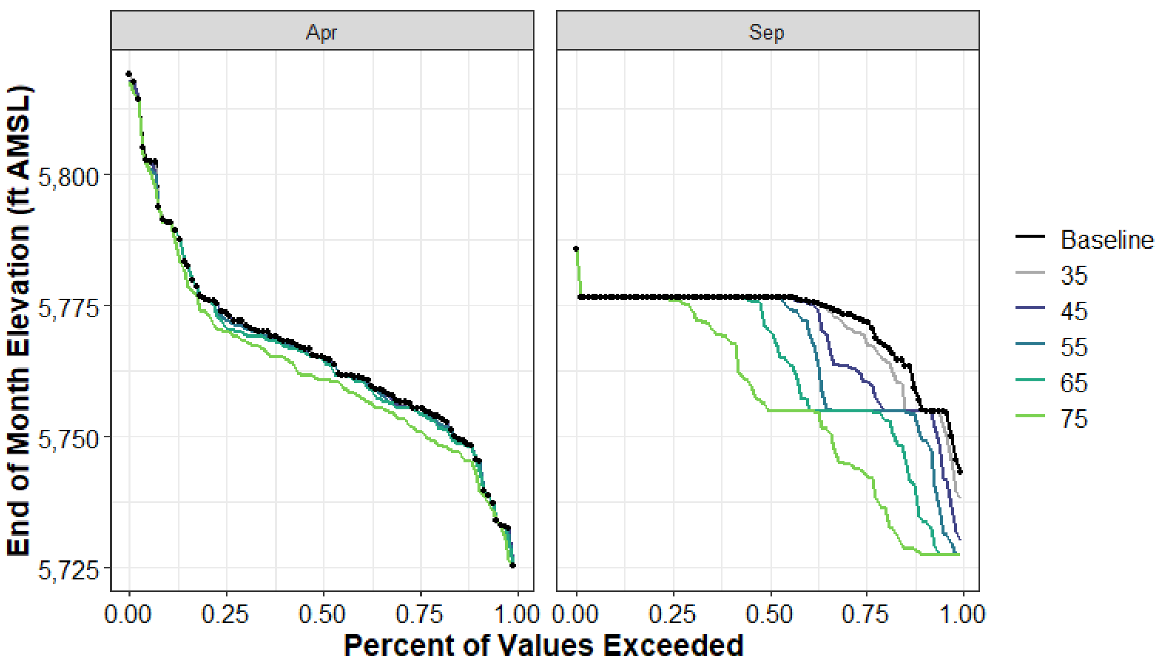

Figure A1-130. Lower Bear End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-269. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Lower Bear

	Baseline	35	45	55	65	75
0%	10	-2	-3	-4	-4	-4
10%	14	0	0	-2	-7	-8
25%	22	-1	-6	-8	-8	-12
50%	24	0	0	0	-3	-10
75%	24	0	0	0	0	0
90%	24	0	0	0	0	0
100%	30	0	0	0	0	0
Mean	22	0	-1	-2	-4	-6

Table A1-270. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Lower Bear

	Baseline	35	45	55	65	75
0%	5,743	-5	-13	-16	-16	-16
10%	5,755	-1	-1	-6	-21	-28
25%	5,772	-3	-11	-17	-17	-29
50%	5,776	0	0	0	-6	-21
75%	5,776	0	0	0	0	0
90%	5,776	0	0	0	0	0
100%	5,786	0	0	0	0	0
Mean	5,772	-1	-3	-6	-9	-15

Table A1-271. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Lower Bear

	Baseline	35	45	55	65	75
0%	6	0	0	0	0	0
10%	11	0	0	0	0	-1
25%	14	0	0	0	0	-2
50%	19	0	0	0	0	-2
75%	23	0	0	-1	-2	-2
90%	33	0	0	0	0	0
100%	51	0	-1	-1	-1	-1
Mean	20	0	0	0	0	-1

Table A1-272. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Lower Bear

	Baseline	35	45	55	65	75
0%	5,725	0	0	0	0	0
10%	5,746	0	0	0	0	-3
25%	5,755	0	0	0	0	-5
50%	5,765	0	0	0	0	-4
75%	5,774	0	0	-2	-3	-4
90%	5,791	0	0	0	0	0
100%	5,819	0	-1	-2	-2	-2
Mean	5,766	0	0	-1	-1	-3

A12.1.6.37 Merle Collins Reservoir (Yuba River Watershed)

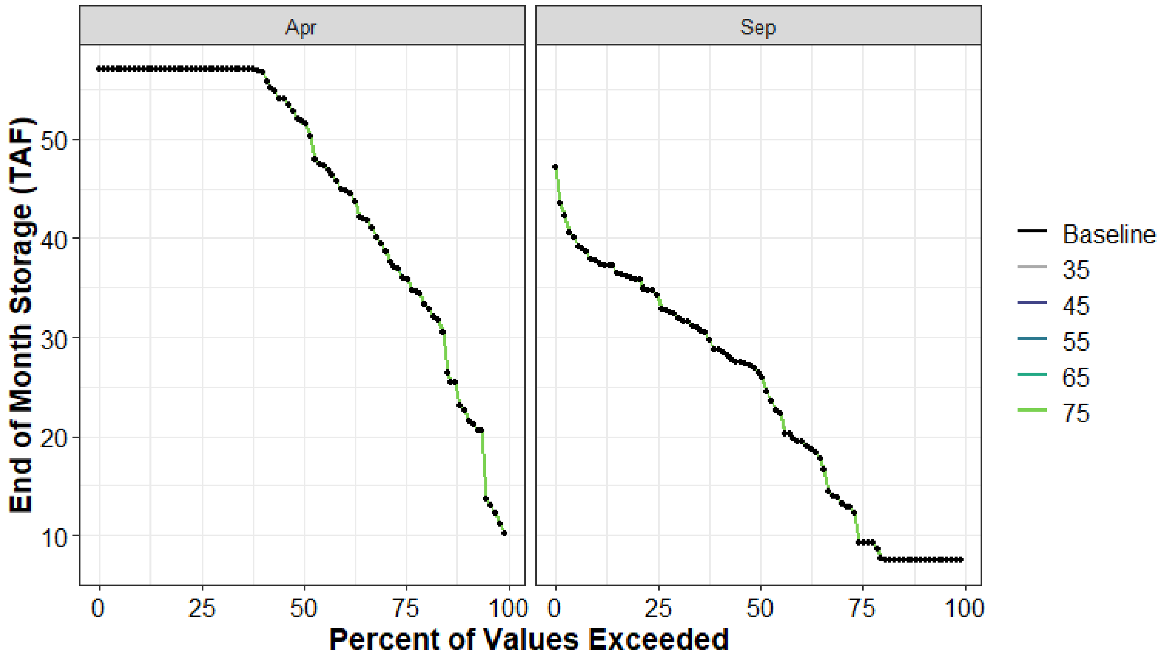

Figure A1-131. Merle Collins Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

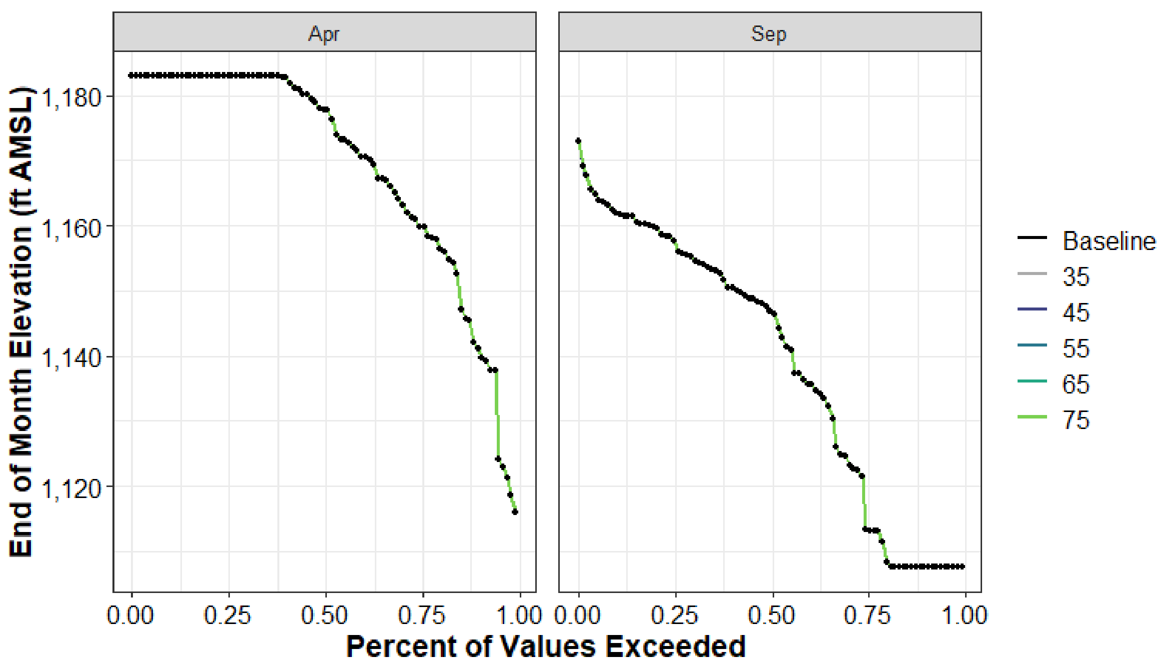

Figure A1-132. Merle Collins Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-273. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Merle Collins Reservoir

	Baseline	35	45	55	65	75
0%	8	0	0	0	0	0
10%	8	0	0	0	0	0
25%	9	0	0	0	0	0
50%	26	0	0	0	0	0
75%	34	0	0	0	0	0
90%	38	0	0	0	0	0
100%	47	0	0	0	0	0
Mean	23	0	0	0	0	0

Table A1-274. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Merle Collins Reservoir

	Baseline	35	45	55	65	75
0%	1,108	0	0	0	0	0
10%	1,108	0	0	0	0	0
25%	1,113	0	0	0	0	0
50%	1,147	0	0	0	0	0
75%	1,158	0	0	0	0	0
90%	1,162	0	0	0	0	0
100%	1,173	0	0	0	0	0
Mean	1,139	0	0	0	0	0

Table A1-275. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Merle Collins Reservoir

	Baseline	35	45	55	65	75
0%	10	0	0	0	0	0
10%	23	0	0	0	0	0
25%	36	0	0	0	0	0
50%	52	0	0	0	0	0
75%	57	0	0	0	0	0
90%	57	0	0	0	0	0
100%	57	0	0	0	0	0
Mean	45	0	0	0	0	0

Table A1-276. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Merle Collins Reservoir

	Baseline	35	45	55	65	75
0%	1,116	0	0	0	0	0
10%	1,141	0	0	0	0	0
25%	1,160	0	0	0	0	0
50%	1,178	0	0	0	0	0
75%	1,183	0	0	0	0	0
90%	1,183	0	0	0	0	0
100%	1,183	0	0	0	0	0
Mean	1,169	0	0	0	0	0

A12.1.6.38 Mountain Meadows Reservoir (Feather River Watershed)

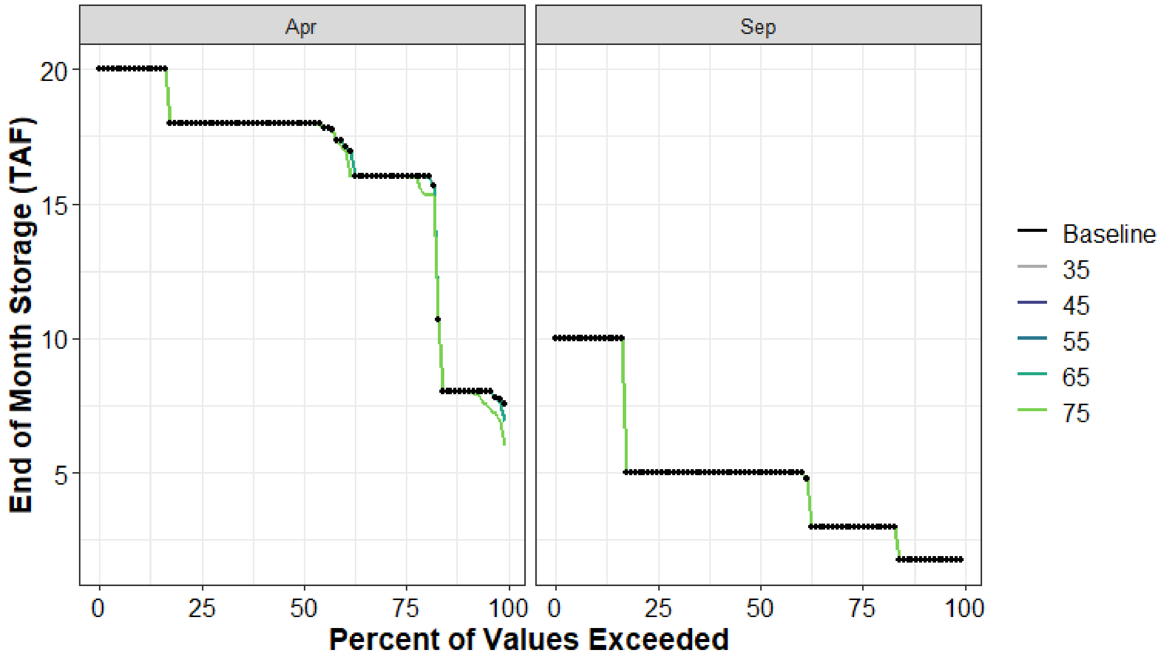

Figure A1-133. Mountain Meadows Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-277. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Mountain Meadows Reservoir

	Baseline	35	45	55	65	75
0%	2	0	0	0	0	0
10%	2	0	0	0	0	0
25%	3	0	0	0	0	0
50%	5	0	0	0	0	0
75%	5	0	0	0	0	0
90%	10	0	0	0	0	0
100%	10	0	0	0	0	0
Mean	5	0	0	0	0	0

Table A1-278. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Mountain Meadows Reservoir

	Baseline	35	45	55	65	75
0%	8	0	0	0	-1	-2
10%	8	0	0	0	0	0
25%	16	0	0	0	0	0
50%	18	0	0	0	0	0
75%	18	0	0	0	0	0
90%	20	0	0	0	0	0
100%	20	0	0	0	0	0
Mean	16	0	0	0	0	0

A12.1.6.39 New Bullards Bar Reservoir (Yuba River Watershed)

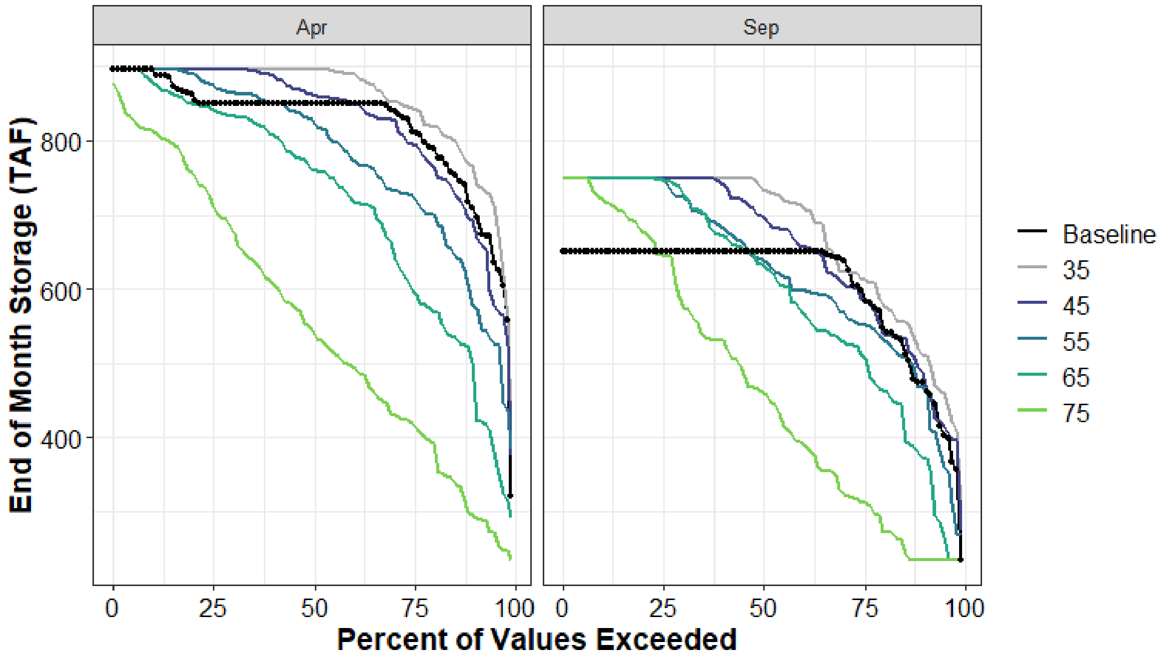

Figure A1-134. New Bullards Bar Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

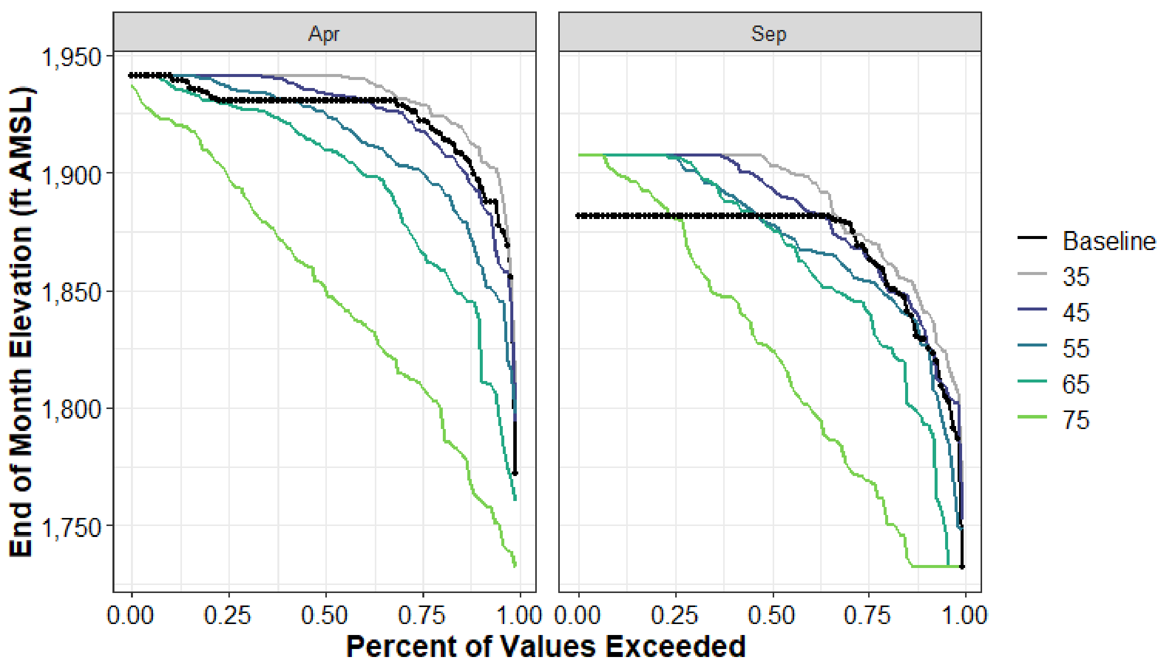

Figure A1-135. New Bullards Bar Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-279. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for New Bullards Bar Reservoir

	Baseline	35	45	55	65	75
0%	234	66	41	34	0	0
10%	474	38	14	-7	-101	-240
25%	598	15	-10	-46	-85	-285
50%	650	85	49	-10	-17	-188
75%	650	100	100	100	97	-3
90%	650	100	100	100	100	70
100%	650	100	100	100	100	100
Mean	605	70	50	18	-10	-134

Table A1-280. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for New Bullards Bar Reservoir

	Baseline	35	45	55	65	75
0%	1,732	31	20	16	0	0
10%	1,829	12	5	-2	-35	-97
25%	1,867	4	-3	-13	-25	-98
50%	1,881	22	13	-3	-5	-56
75%	1,881	26	26	26	25	-1
90%	1,881	26	26	26	26	18
100%	1,881	26	26	26	26	26
Mean	1,868	19	13	4	-6	-47

Table A1-281. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for New Bullards Bar Reservoir

	Baseline	35	45	55	65	75
0%	320	80	54	63	-29	-86
10%	711	56	-17	-126	-204	-414
25%	813	30	-17	-86	-216	-394
50%	850	46	13	-21	-90	-303
75%	850	46	46	26	-7	-138
90%	895	1	1	1	-16	-81
100%	896	0	0	0	0	-19
Mean	820	34	5	-41	-103	-264

Table A1-282. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for New Bullards Bar Reservoir

	Baseline	35	45	55	65	75
0%	1,772	31	22	25	-12	-40
10%	1,897	14	-5	-34	-58	-135
25%	1,922	7	-4	-21	-56	-112
50%	1,931	10	3	-5	-21	-79
75%	1,931	10	10	6	-2	-33
90%	1,941	0	0	0	-3	-18
100%	1,941	0	0	0	0	-4
Mean	1,923	8	1	-10	-28	-74

A12.1.6.40 New Hogan Reservoir (Calaveras River Watershed)

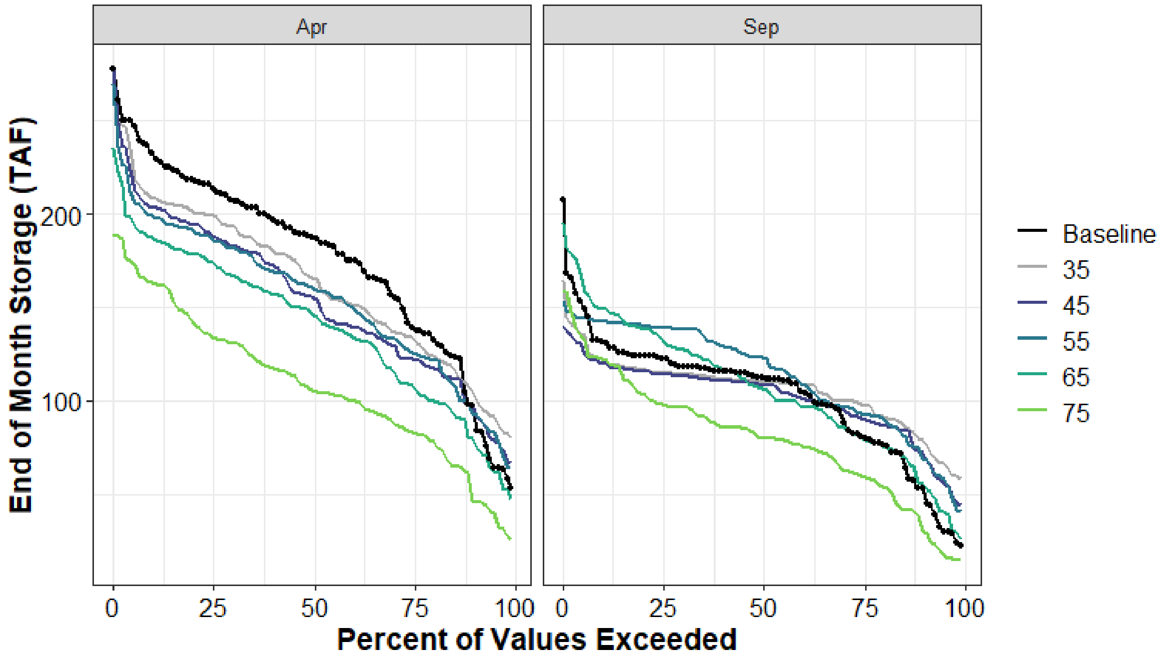

Figure A1-136. New Hogan Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

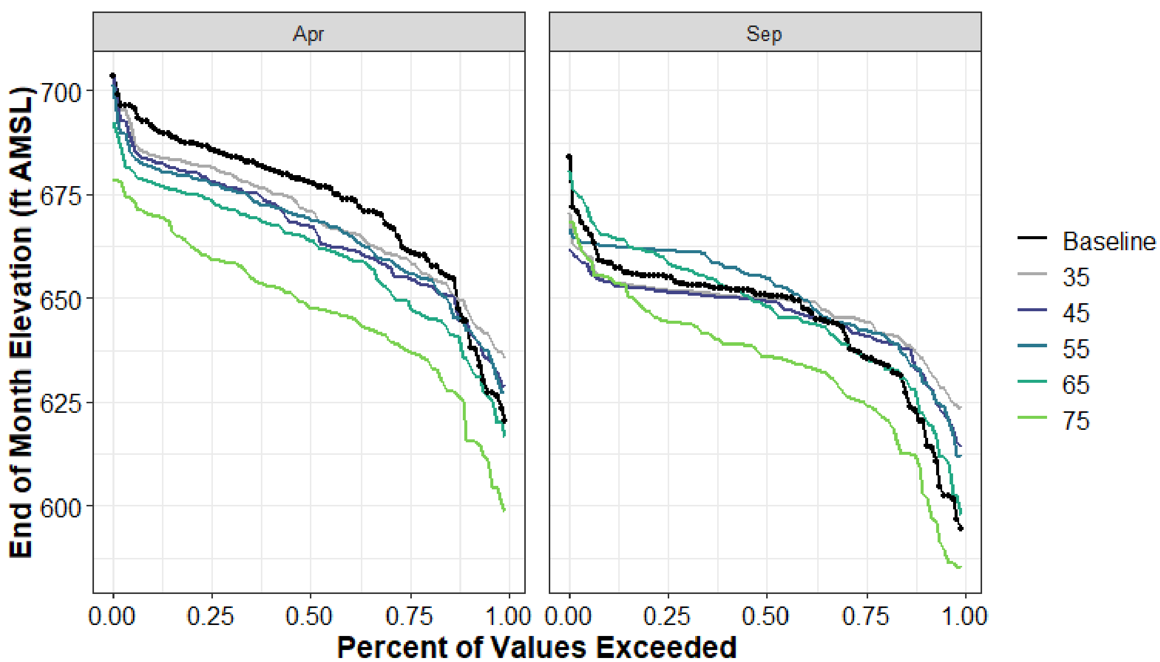

Figure A1-137. New Hogan Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-283. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for New Hogan Reservoir

	Baseline	35	45	55	65	75
0%	22	36	22	19	3	-7
10%	53	27	20	17	3	-21
25%	80	18	10	13	0	-20
50%	113	-2	-4	10	-6	-32
75%	123	-8	-9	16	9	-25
90%	131	-9	-11	11	18	-9
100%	208	-44	-67	-54	-12	-49
Mean	103	3	-1	11	4	-23

Table A1-284. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for New Hogan Reservoir

	Baseline	35	45	55	65	75
0%	594	29	20	17	4	-9
10%	620	15	11	10	2	-16
25%	636	8	5	6	0	-11
50%	651	-1	-2	4	-3	-15
75%	655	-3	-4	6	4	-11
90%	658	-3	-4	4	7	-4
100%	684	-14	-22	-18	-4	-16
Mean	645	3	1	6	2	-11

Table A1-285. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for New Hogan Reservoir

	Baseline	35	45	55	65	75
0%	53	27	14	11	-5	-27
10%	98	8	0	-4	-18	-48
25%	139	-5	-17	-13	-31	-56
50%	188	-22	-32	-27	-41	-82
75%	214	-14	-26	-28	-39	-80
90%	232	-24	-28	-34	-45	-69
100%	278	0	0	-8	-43	-89
Mean	176	-12	-21	-21	-36	-67

Table A1-286. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for New Hogan Reservoir

	Baseline	35	45	55	65	75
0%	620	15	8	7	-4	-22
10%	644	3	0	-2	-9	-26
25%	661	-2	-7	-5	-12	-24
50%	678	-7	-11	-9	-14	-30
75%	686	-4	-8	-8	-12	-26
90%	691	-7	-8	-10	-13	-21
100%	703	0	0	-2	-11	-25
Mean	673	-4	-7	-7	-12	-25

A12.1.6.41 Oroville Reservoir (Feather River Watershed)

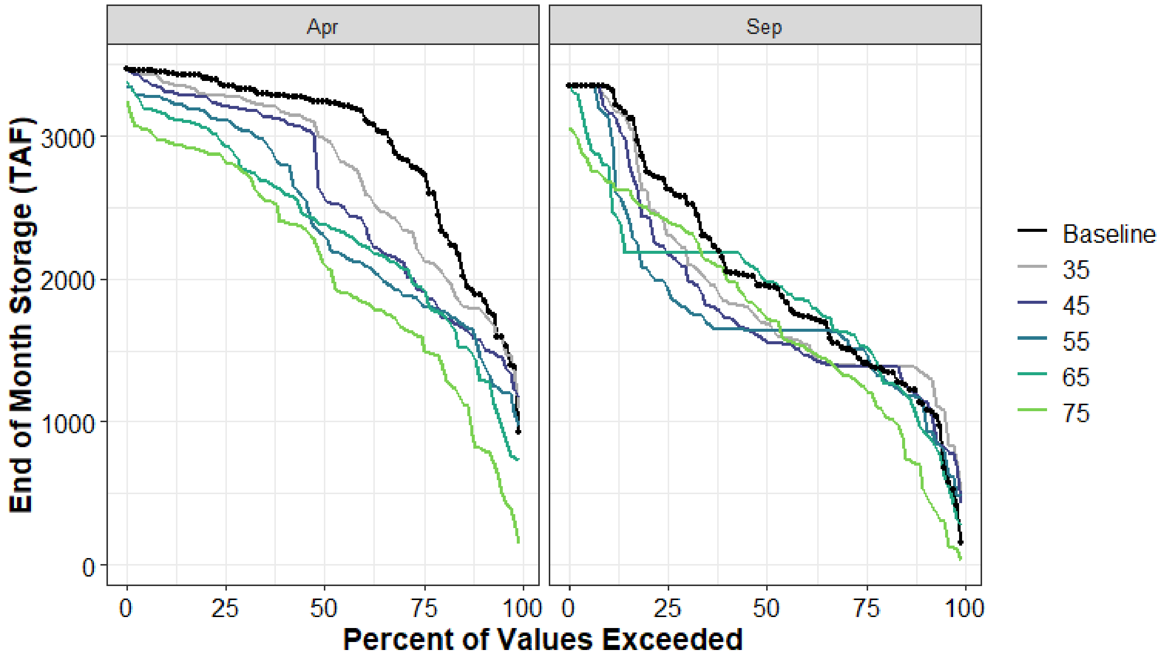

Figure A1-138. Oroville Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

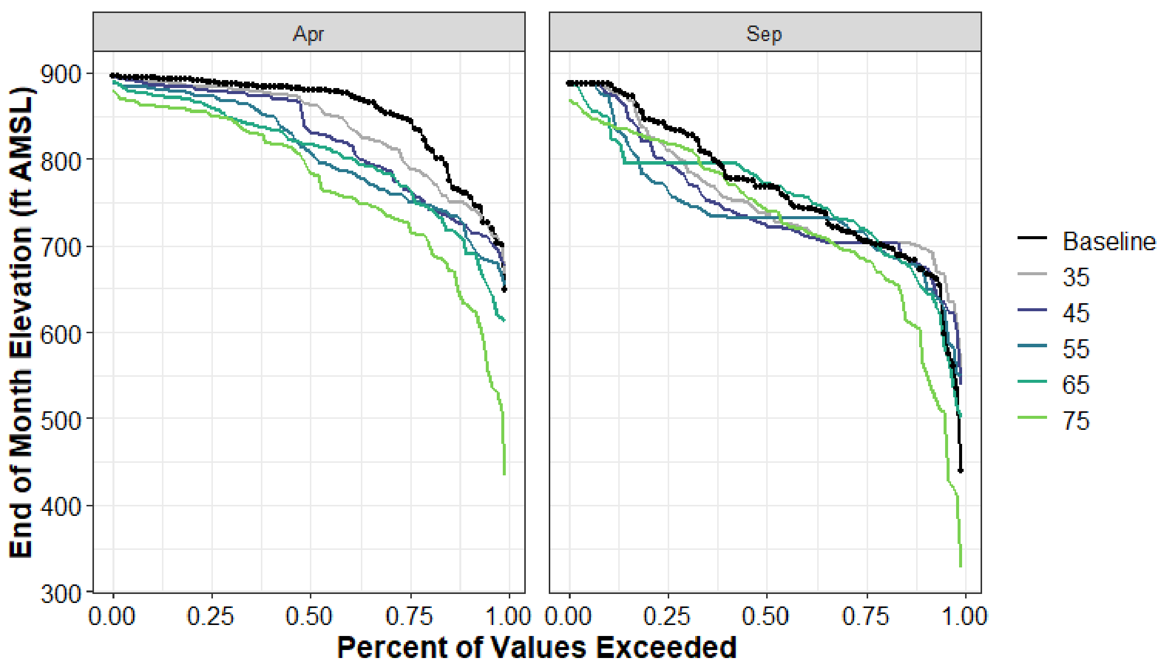

Figure A1-139. Oroville Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-287. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Oroville Reservoir

	Baseline	35	45	55	65	75
0%	157	359	273	320	116	-126
10%	1,130	212	25	2	-185	-560
25%	1,411	-20	-22	92	122	-170
50%	1,950	-260	-375	-312	37	-211
75%	2,633	-315	-452	-692	-445	-217
90%	3,335	-95	-174	-241	-604	-661
100%	3,351	0	0	0	0	-292
Mean	2,037	-107	-200	-264	-156	-309

Table A1-288. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Oroville Reservoir

	Baseline	35	45	55	65	75
0%	440	119	98	110	61	-113
10%	672	25	3	0	-21	-100
25%	705	-2	-3	11	14	-20
50%	767	-30	-43	-36	4	-24
75%	836	-27	-42	-70	-42	-17
90%	887	-6	-12	-16	-43	-47
100%	888	0	0	0	0	-20
Mean	766	-9	-19	-26	-13	-38

Table A1-289. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Oroville Reservoir

	Baseline	35	45	55	65	75
0%	930	160	236	43	-193	-785
10%	1,891	-99	-319	-412	-577	-1071
25%	2,755	-598	-832	-934	-807	-1162
50%	3,239	-242	-647	-920	-856	-1122
75%	3,354	-70	-146	-239	-414	-521
90%	3,449	-75	-136	-192	-300	-481
100%	3,470	0	0	-116	-87	-230
Mean	2,937	-205	-364	-535	-596	-873

Table A1-290. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Oroville Reservoir

	Baseline	35	45	55	65	75
0%	649	19	27	5	-37	-216
10%	760	-12	-37	-48	-67	-128
25%	846	-55	-82	-94	-79	-120
50%	880	-17	-47	-70	-64	-94
75%	888	-5	-10	-16	-28	-36
90%	894	-5	-9	-13	-20	-33
100%	896	0	0	-8	-6	-15
Mean	853	-17	-32	-47	-52	-85

A12.1.6.42 Pardee Reservoir (Mokelumne River Watershed)

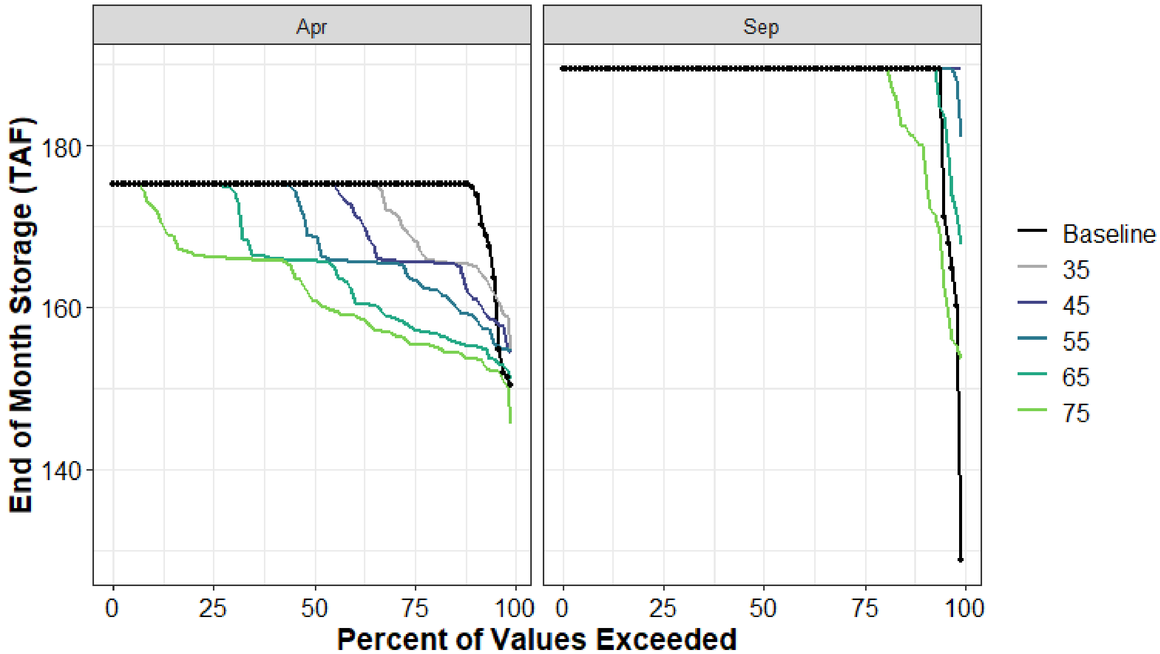

Figure A1-140. Pardee Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

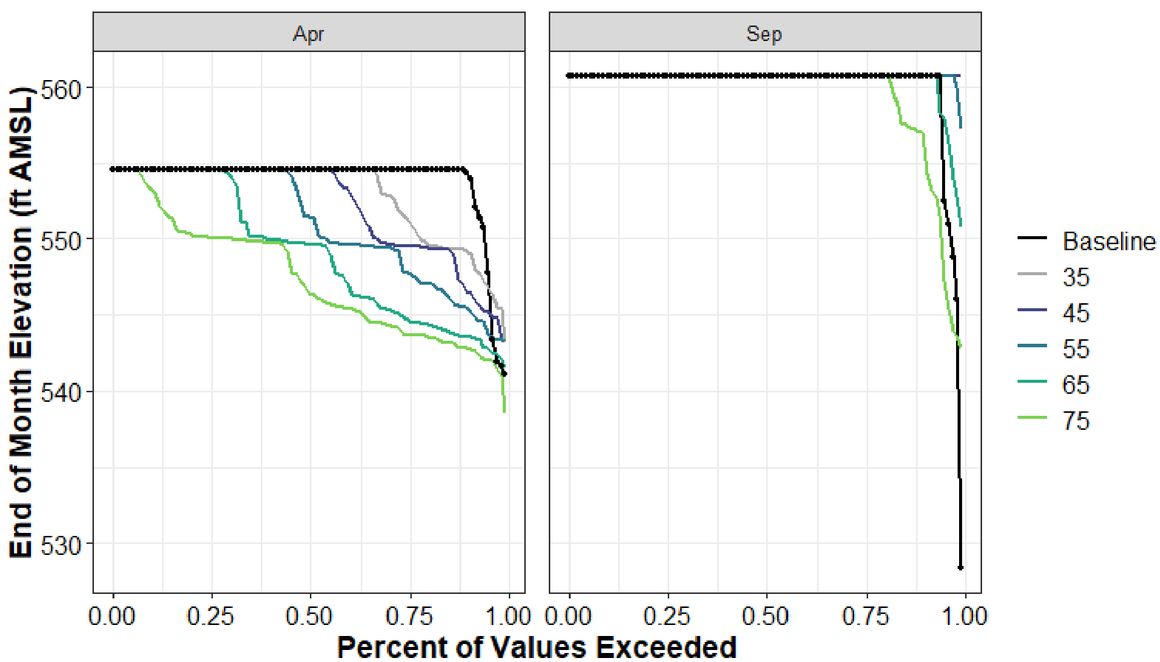

Figure A1-141. Pardee Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-291. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Pardee Reservoir

	Baseline	35	45	55	65	75
0%	129	61	61	52	39	25
10%	189	0	0	0	0	-9
25%	189	0	0	0	0	0
50%	189	0	0	0	0	0
75%	189	0	0	0	0	0
90%	189	0	0	0	0	0
100%	189	0	0	0	0	0
Mean	188	2	2	2	1	-1

Table A1-292. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Pardee Reservoir

	Baseline	35	45	55	65	75
0%	528	32	32	29	22	14
10%	561	0	0	0	0	-4
25%	561	0	0	0	0	0
50%	561	0	0	0	0	0
75%	561	0	0	0	0	0
90%	561	0	0	0	0	0
100%	561	0	0	0	0	0
Mean	560	1	1	1	0	-1

Table A1-293. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Pardee Reservoir

	Baseline	35	45	55	65	75
0%	150	4	4	4	1	-5
10%	175	-10	-14	-16	-20	-21
25%	175	-7	-10	-12	-18	-20
50%	175	0	0	-6	-9	-14
75%	175	0	0	0	0	-9
90%	175	0	0	0	0	-3
100%	175	0	0	0	0	0
Mean	174	-2	-3	-5	-9	-12

Table A1-294. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Pardee Reservoir

	Baseline	35	45	55	65	75
0%	541	2	2	2	0	-3
10%	554	-5	-8	-9	-11	-12
25%	555	-3	-5	-7	-10	-11
50%	555	0	0	-3	-5	-8
75%	555	0	0	0	0	-4
90%	555	0	0	0	0	-1
100%	555	0	0	0	0	0
Mean	554	-1	-2	-3	-5	-6

A12.1.6.43 PGE Old Reservoirs (Mokelumne River Watershed)

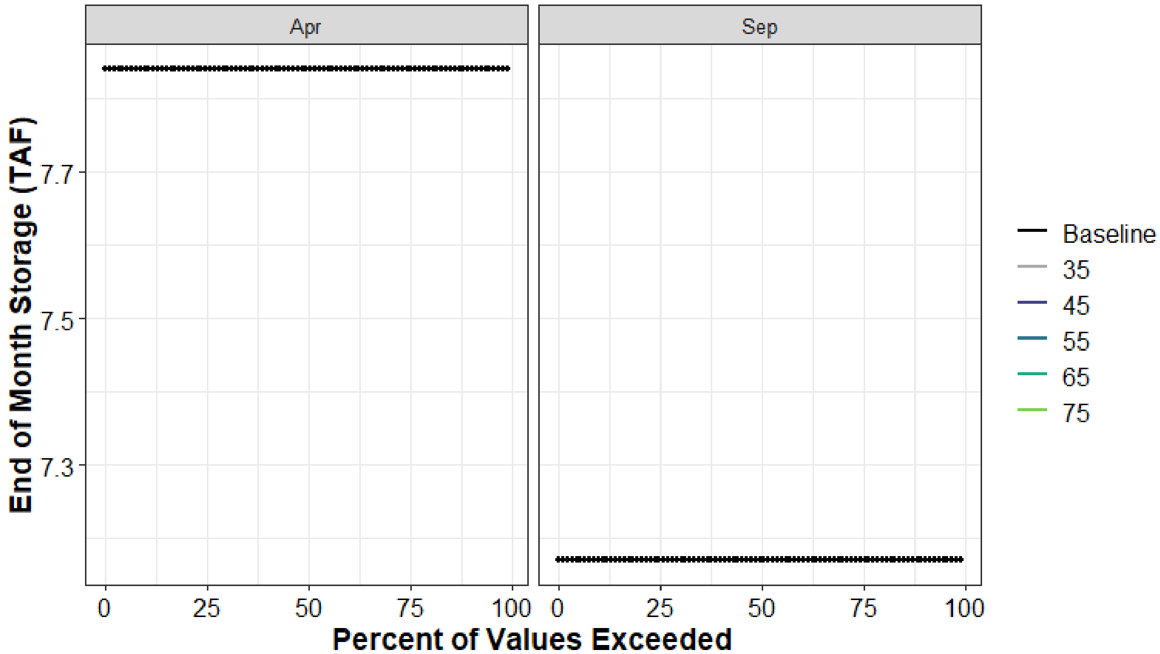

Figure A1-142. PGE Old Reservoirs End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-295. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for PGE Old Reservoirs

	Baseline	35	45	55	65	75
0%	7	0	0	0	0	0
10%	7	0	0	0	0	0
25%	7	0	0	0	0	0
50%	7	0	0	0	0	0
75%	7	0	0	0	0	0
90%	7	0	0	0	0	0
100%	7	0	0	0	0	0
Mean	7	0	0	0	0	0

Table A1-296. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for PGE Old Reservoirs

	Baseline	35	45	55	65	75
0%	8	0	0	0	0	0
10%	8	0	0	0	0	0
25%	8	0	0	0	0	0
50%	8	0	0	0	0	0
75%	8	0	0	0	0	0
90%	8	0	0	0	0	0
100%	8	0	0	0	0	0
Mean	8	0	0	0	0	0

A12.1.6.44 Philbrook Round Valley (Feather River Watershed)

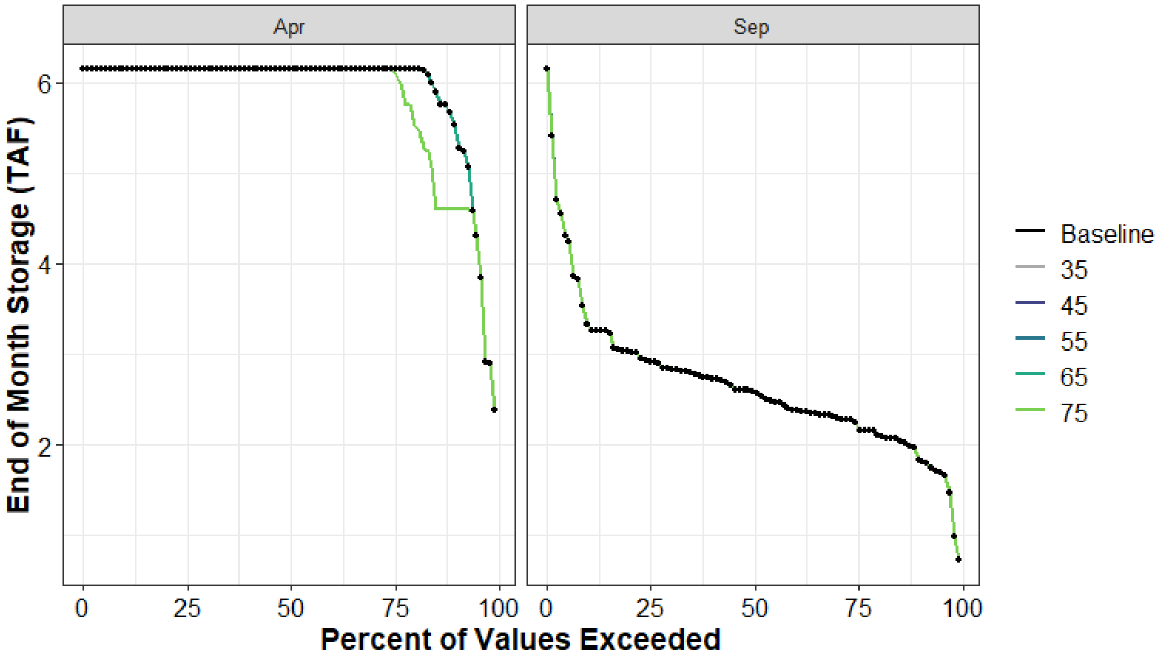

Figure A1-143. Philbrook Round Valley End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-297. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Philbrook Round Valley

	Baseline	35	45	55	65	75
0%	1	0	0	0	0	0
10%	2	0	0	0	0	0
25%	2	0	0	0	0	0
50%	3	0	0	0	0	0
75%	3	0	0	0	0	0
90%	3	0	0	0	0	0
100%	6	0	0	0	0	0
Mean	3	0	0	0	0	0

Table A1-298. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Philbrook Round Valley

	Baseline	35	45	55	65	75
0%	2	0	0	0	0	0
10%	6	0	0	0	0	-1
25%	6	0	0	0	0	0
50%	6	0	0	0	0	0
75%	6	0	0	0	0	0
90%	6	0	0	0	0	0
100%	6	0	0	0	0	0
Mean	6	0	0	0	0	0

A12.1.6.45 Rollins Reservoir (Bear River Watershed)

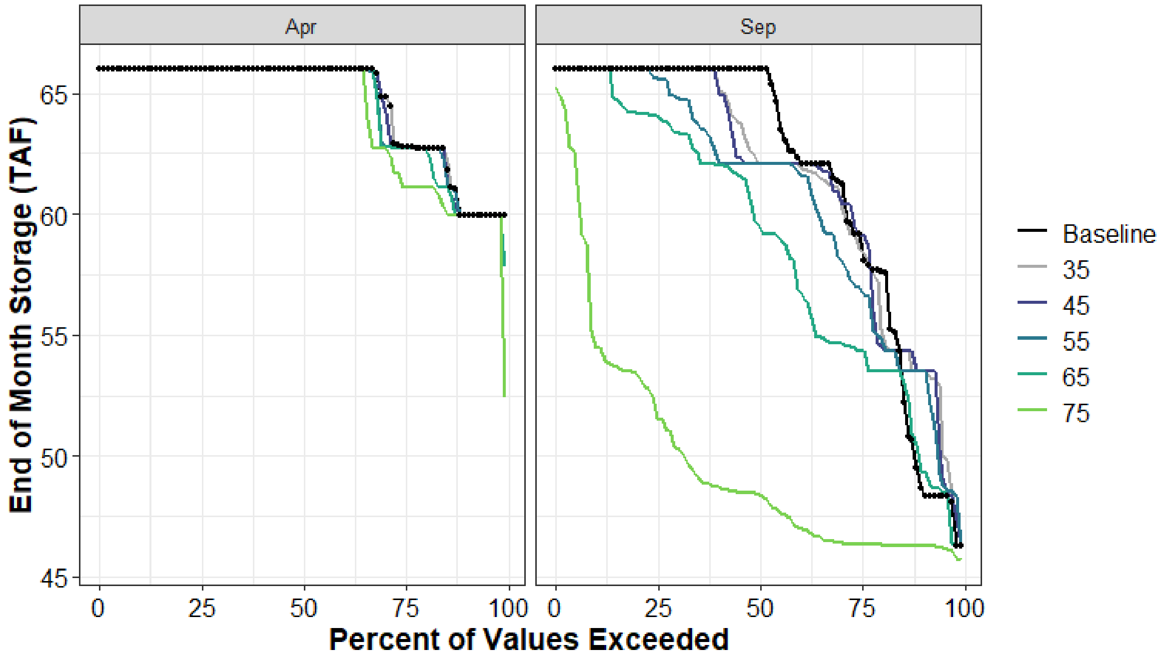

Figure A1-144. Rollins Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

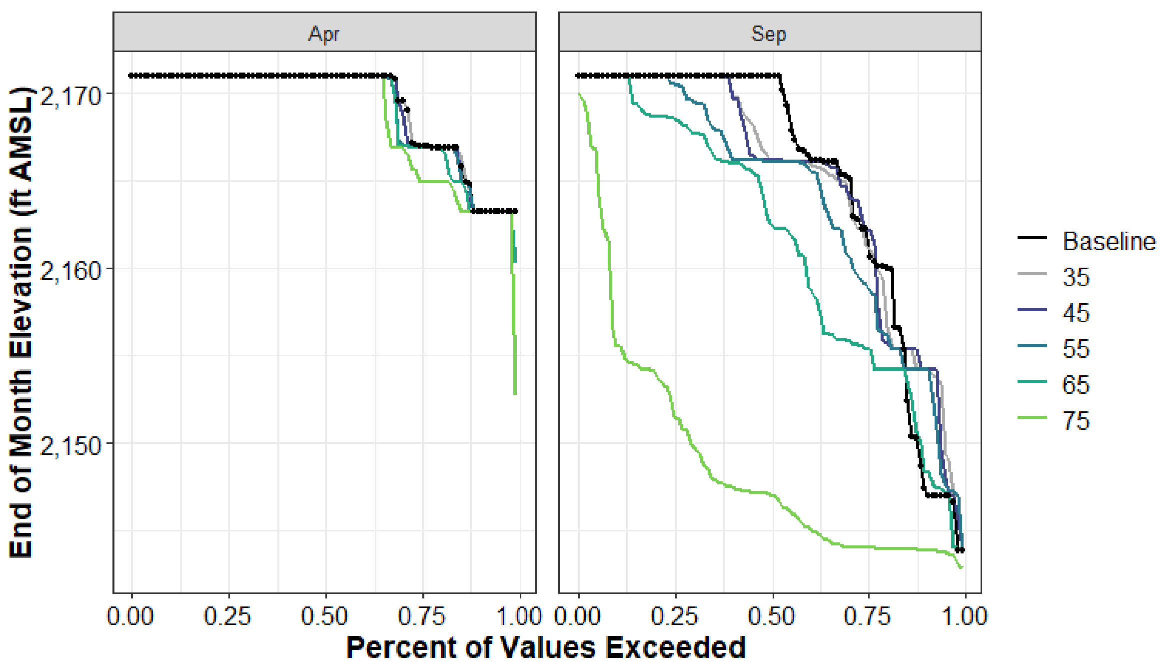

Figure A1-145. Rollins Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-299. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Rollins Reservoir

	Baseline	35	45	55	65	75
0%	46	0	0	0	0	-1
10%	49	5	5	5	1	-3
25%	59	-1	0	-2	-5	-13
50%	66	-4	-4	-4	-6	-18
75%	66	0	0	0	-2	-14
90%	66	0	0	0	0	-12
100%	66	0	0	0	0	-1
Mean	62	0	0	-1	-3	-12

Table A1-300. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Rollins Reservoir

	Baseline	35	45	55	65	75
0%	2,144	0	0	0	0	-1
10%	2,148	7	7	7	1	-4
25%	2,162	-1	0	-3	-7	-18
50%	2,171	-5	-5	-5	-8	-24
75%	2,171	0	0	0	-2	-19
90%	2,171	0	0	0	0	-15
100%	2,171	0	0	0	0	-1
Mean	2,165	0	0	-1	-4	-16

Table A1-301. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Rollins Reservoir

	Baseline	35	45	55	65	75
0%	60	0	0	0	-2	-7
10%	60	0	0	0	0	0
25%	63	0	0	0	0	-2
50%	66	0	0	0	0	0
75%	66	0	0	0	0	0
90%	66	0	0	0	0	0
100%	66	0	0	0	0	0
Mean	65	0	0	0	0	0

Table A1-302. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Rollins Reservoir

	Baseline	35	45	55	65	75
0%	2,163	0	0	0	-3	-11
10%	2,163	0	0	0	0	0
25%	2,167	0	0	0	0	-2
50%	2,171	0	0	0	0	0
75%	2,171	0	0	0	0	0
90%	2,171	0	0	0	0	0
100%	2,171	0	0	0	0	0
Mean	2,169	0	0	0	0	-1

A12.1.6.46 Rubicon (American River Watershed)

Figure A1-146. Rubicon End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-303. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Rubicon

	Baseline	35	45	55	65	75
0%	1	0	0	0	0	0
10%	1	0	0	0	0	0
25%	1	0	0	0	0	0
50%	1	0	0	0	0	0
75%	1	0	0	0	0	0
90%	1	0	0	0	0	0
100%	1	0	0	0	0	0
Mean	1	0	0	0	0	0

Table A1-304. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Rubicon

	Baseline	35	45	55	65	75
0%	1	0	0	0	0	0
10%	1	0	0	0	0	0
25%	1	0	0	0	0	0
50%	1	0	0	0	0	0
75%	1	0	0	0	0	0
90%	1	0	0	0	0	0
100%	1	0	0	0	0	0
Mean	1	0	0	0	0	0

A12.1.6.47 Salt Springs (Mokelumne River Watershed)

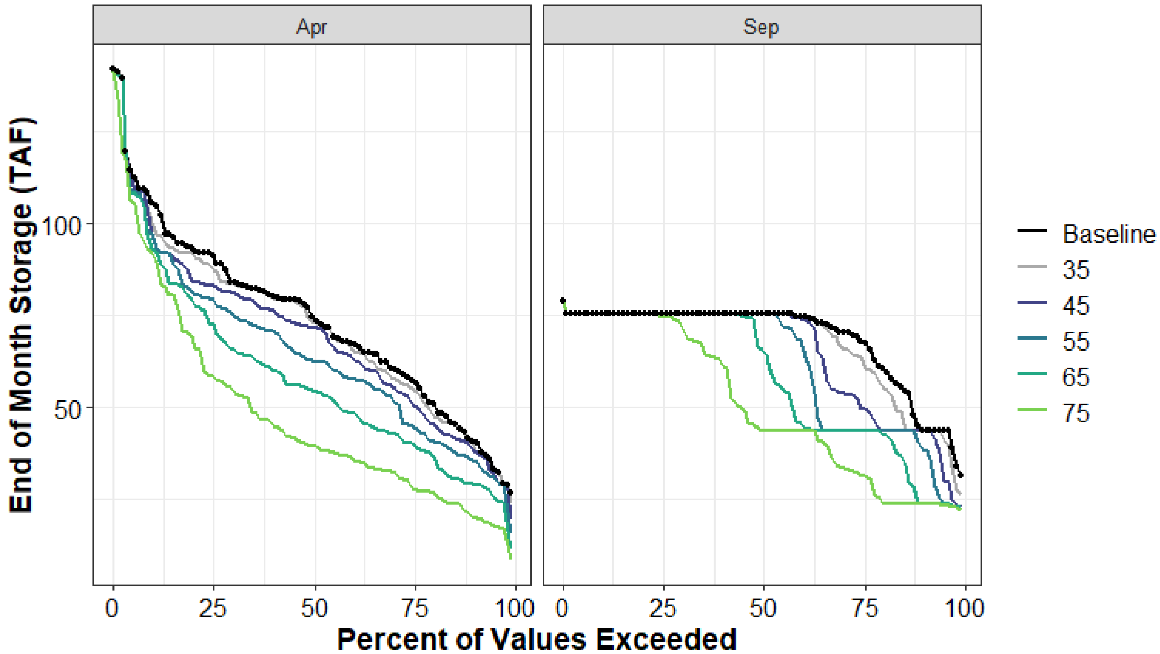

Figure A1-147. Salt Springs End-of-April and End-of-September Storage Percent Exceedance Plot

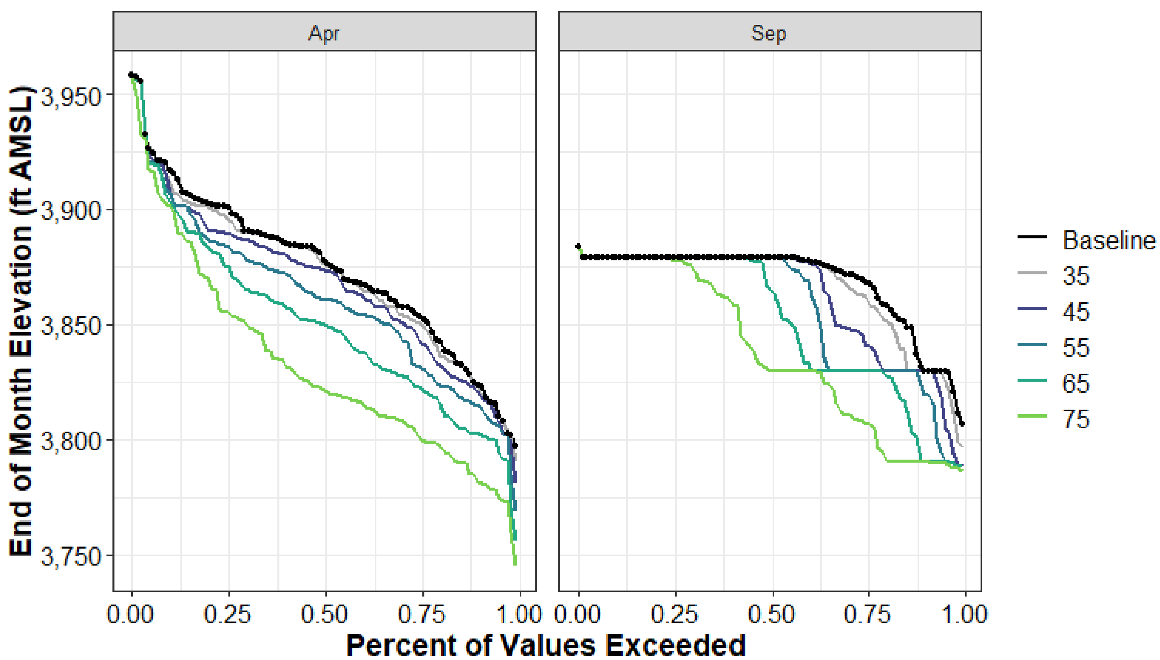

Figure A1-148. Salt Springs End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-305. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Salt Springs

	Baseline	35	45	55	65	75
0%	32	-5	-9	-8	-9	-9
10%	44	0	0	-5	-20	-20
25%	68	-5	-18	-24	-24	-36
50%	76	0	0	0	-10	-32
75%	76	0	0	0	0	-1
90%	76	0	0	0	0	0
100%	79	0	0	0	0	0
Mean	69	-1	-4	-7	-11	-18

Table A1-306. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Salt Springs

	Baseline	35	45	55	65	75
0%	3,807	-10	-18	-18	-19	-21
10%	3,830	-1	-1	-10	-39	-40
25%	3,868	-6	-28	-39	-39	-62
50%	3,879	0	0	0	-14	-49
75%	3,879	0	0	0	0	-1
90%	3,879	0	0	0	0	0
100%	3,884	0	0	0	0	0
Mean	3,869	-2	-7	-12	-18	-31

Table A1-307. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Salt Springs

	Baseline	35	45	55	65	75
0%	27	-3	-7	-11	-15	-18
10%	41	-1	-2	-5	-12	-20
25%	57	-2	-6	-12	-17	-29
50%	75	-1	-3	-12	-20	-35
75%	91	-4	-8	-12	-18	-33
90%	105	-6	-9	-9	-12	-14
100%	142	-1	-1	-1	-1	-1
Mean	74	-2	-4	-9	-15	-26

Table A1-308. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Salt Springs

	Baseline	35	45	55	65	75
0%	3,797	-6	-16	-28	-41	-52
10%	3,824	-1	-3	-9	-22	-42
25%	3,853	-3	-11	-21	-31	-53
50%	3,877	-1	-4	-16	-27	-56
75%	3,900	-5	-11	-17	-25	-45
90%	3,917	-7	-10	-10	-14	-16
100%	3,958	-1	-1	-1	-1	-1
Mean	3,874	-2	-6	-13	-24	-42

A12.1.6.48 Scotts Flat Reservoir (Yuba River Watershed)

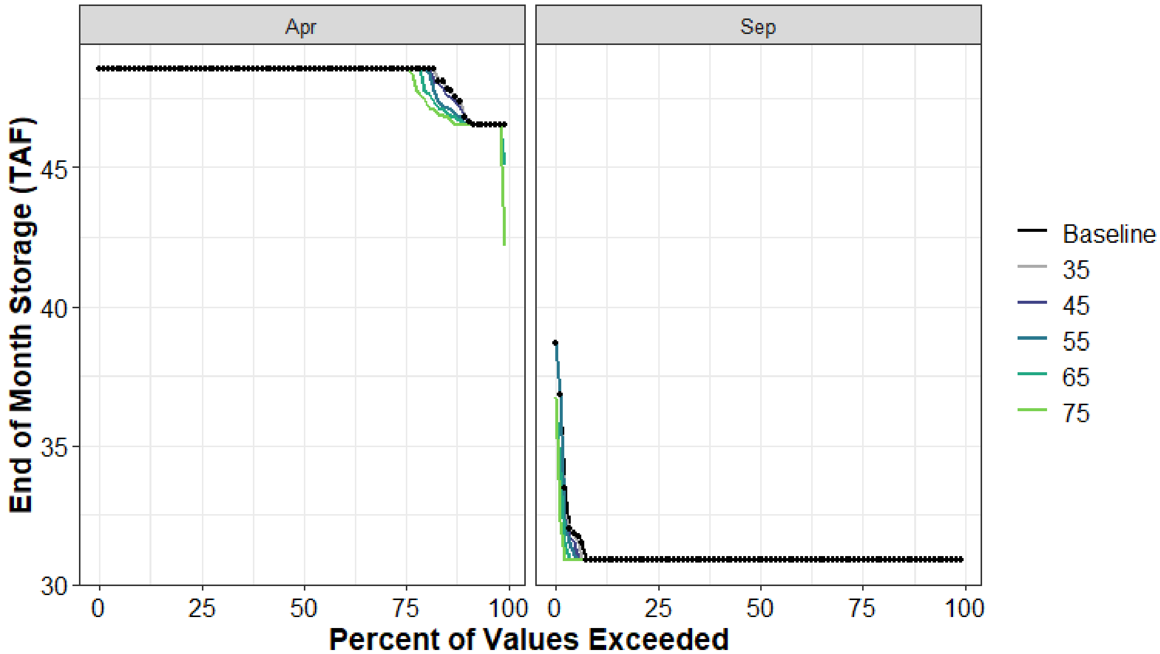

Figure A1-149. Scotts Flat Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

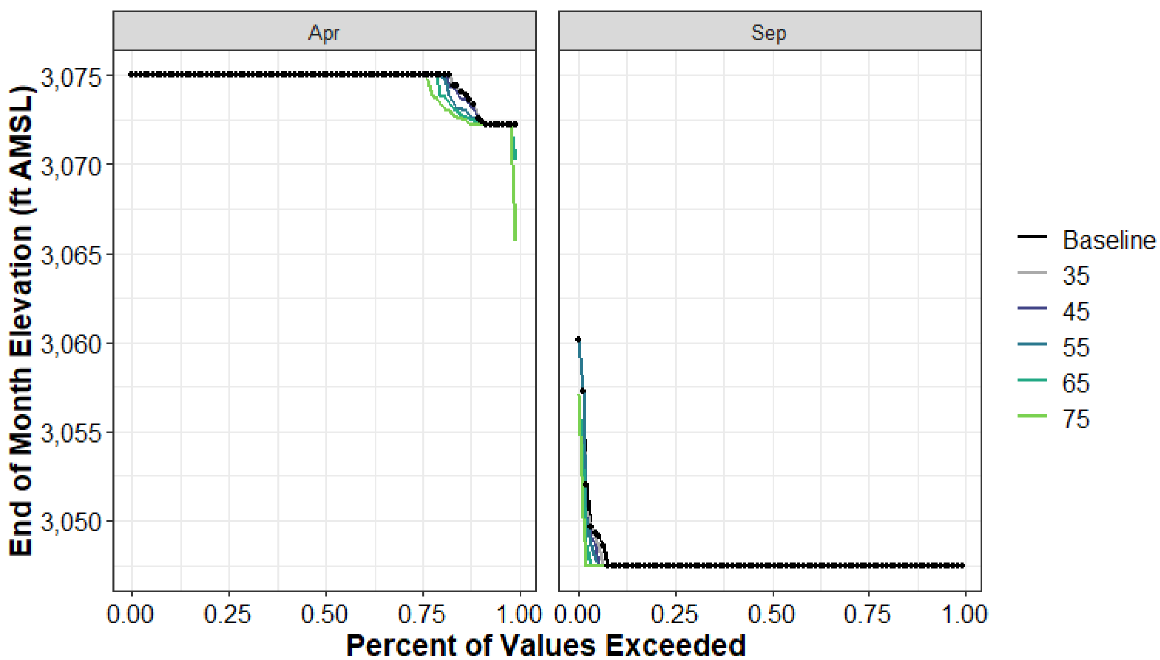

Figure A1-150. Scotts Flat Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-309. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Scotts Flat Reservoir

	Baseline	35	45	55	65	75
0%	31	0	0	0	0	0
10%	31	0	0	0	0	0
25%	31	0	0	0	0	0
50%	31	0	0	0	0	0
75%	31	0	0	0	0	0
90%	31	0	0	0	0	0
100%	39	0	0	0	-2	-2
Mean	31	0	0	0	0	0

Table A1-310. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Scotts Flat Reservoir

	Baseline	35	45	55	65	75
0%	3047	0	0	0	0	0
10%	3047	0	0	0	0	0
25%	3047	0	0	0	0	0
50%	3047	0	0	0	0	0
75%	3047	0	0	0	0	0
90%	3047	0	0	0	0	0
100%	3060	0	0	0	-3	-3
Mean	3048	0	0	0	0	0

Table A1-311. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Scotts Flat Reservoir

	Baseline	35	45	55	65	75
0%	47	0	0	0	-1	-4
10%	47	0	0	0	0	0
25%	49	0	0	0	0	0
50%	49	0	0	0	0	0
75%	49	0	0	0	0	0
90%	49	0	0	0	0	0
100%	49	0	0	0	0	0
Mean	48	0	0	0	0	0

Table A1-312. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Scotts Flat Reservoir

	Baseline	35	45	55	65	75
0%	3072	0	0	0	-2	-7
10%	3073	0	0	0	0	-1
25%	3075	0	0	0	0	0
50%	3075	0	0	0	0	0
75%	3075	0	0	0	0	0
90%	3075	0	0	0	0	0
100%	3075	0	0	0	0	0
Mean	3075	0	0	0	0	0

A12.1.6.49 Shasta Reservoir (Sacramento River Watershed)

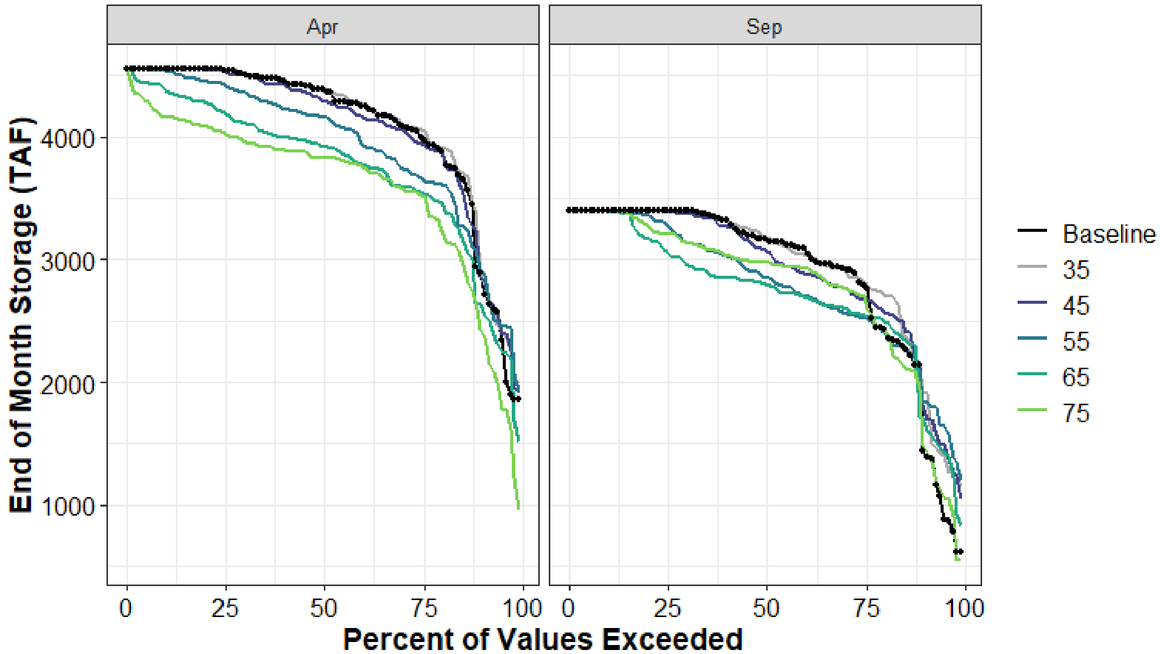

Figure A1-151. Shasta Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

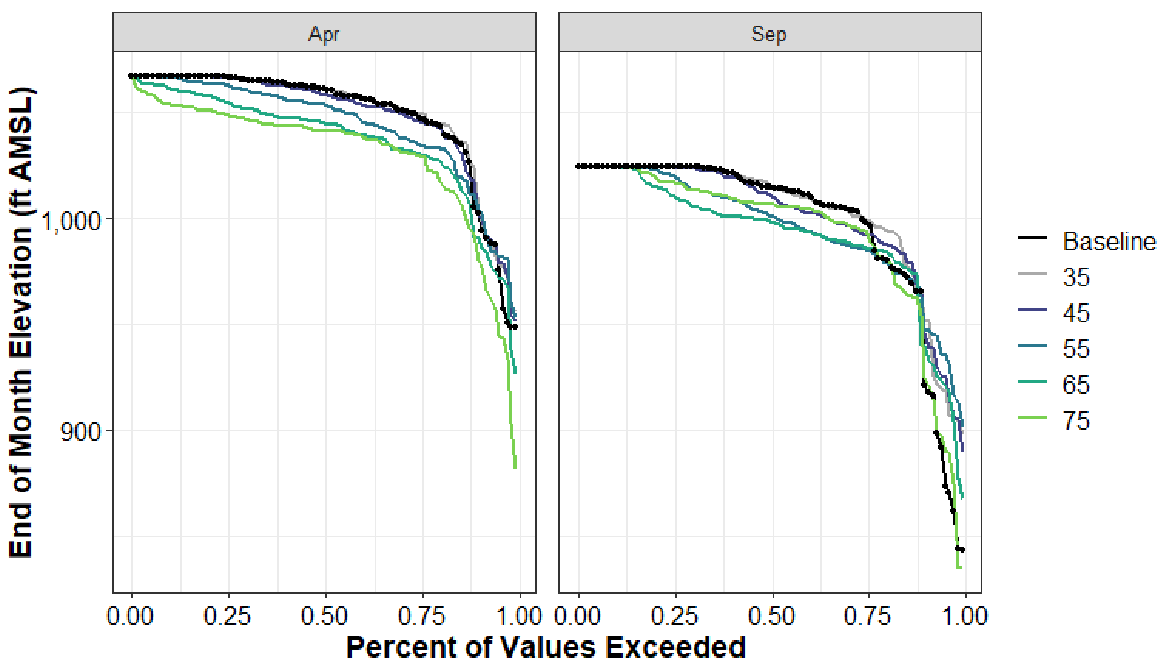

Figure A1-152. Shasta Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-313. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Shasta Reservoir

	Baseline	35	45	55	65	75
0%	614	537	436	582	223	-64
10%	1,578	387	297	320	138	9
25%	2,790	29	-117	-263	-244	-84
50%	3,165	18	-80	-312	-359	-190
75%	3,400	0	-10	-112	-326	-188
90%	3,400	0	0	0	-2	0
100%	3,400	0	0	0	0	0
Mean	2,879	74	18	-94	-173	-115

Table A1-314. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Shasta Reservoir

	Baseline	35	45	55	65	75
0%	843	55	46	58	25	-8
10%	930	25	20	21	10	1
25%	998	1	-6	-13	-12	-4
50%	1,015	1	-4	-14	-16	-8
75%	1,024	0	0	-4	-14	-8
90%	1,024	0	0	0	0	0
100%	1,024	0	0	0	0	0
Mean	998	5	3	-2	-6	-5

Table A1-315. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Shasta Reservoir

	Baseline	35	45	55	65	75
0%	1,856	127	51	74	-335	-891
10%	2,898	99	43	66	-260	-419
25%	3,994	64	-44	-331	-441	-474
50%	4,389	-14	-99	-224	-465	-560
75%	4,546	0	-8	-112	-346	-515
90%	4,552	0	0	-13	-177	-388
100%	4,552	0	0	0	0	0
Mean	4,086	29	-18	-154	-343	-492

Table A1-316. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Shasta Reservoir

	Baseline	35	45	55	65	75
0%	949	7	3	4	-22	-67
10%	1,003	4	2	3	-13	-20
25%	1,047	2	-2	-12	-17	-18
50%	1,061	0	-3	-8	-17	-20
75%	1,067	0	0	-4	-12	-18
90%	1,067	0	0	0	-6	-13
100%	1,067	0	0	0	0	0
Mean	1,049	1	0	-5	-13	-19

A12.1.6.50 Silver Lake (American River Watershed)

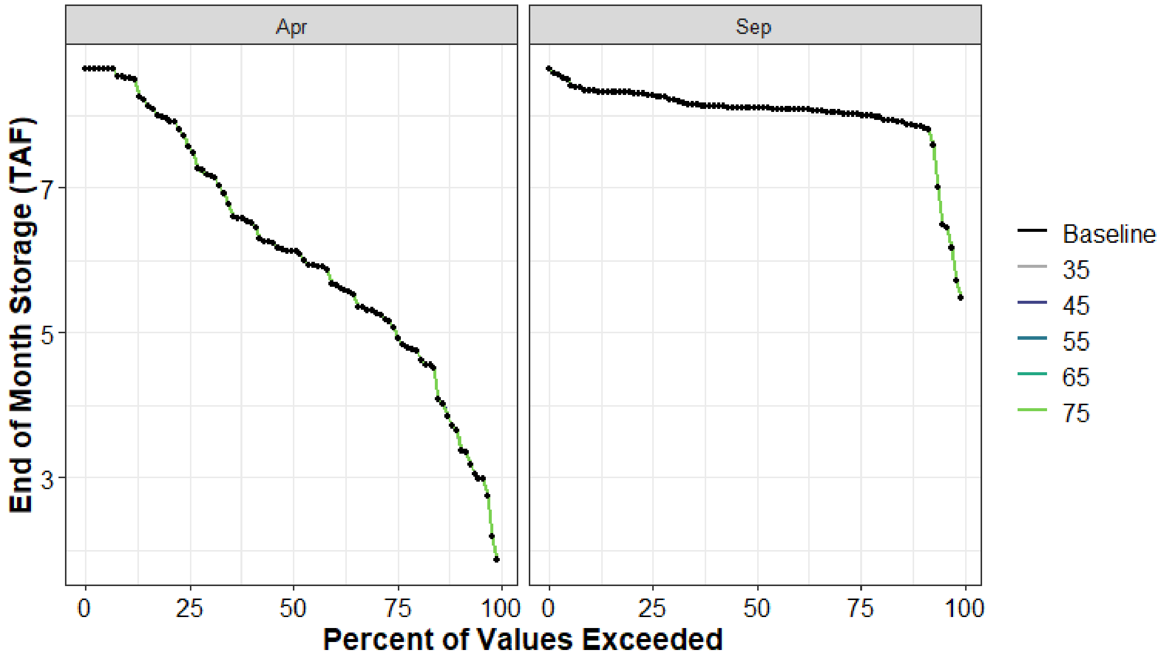

Figure A1-153. Silver Lake End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

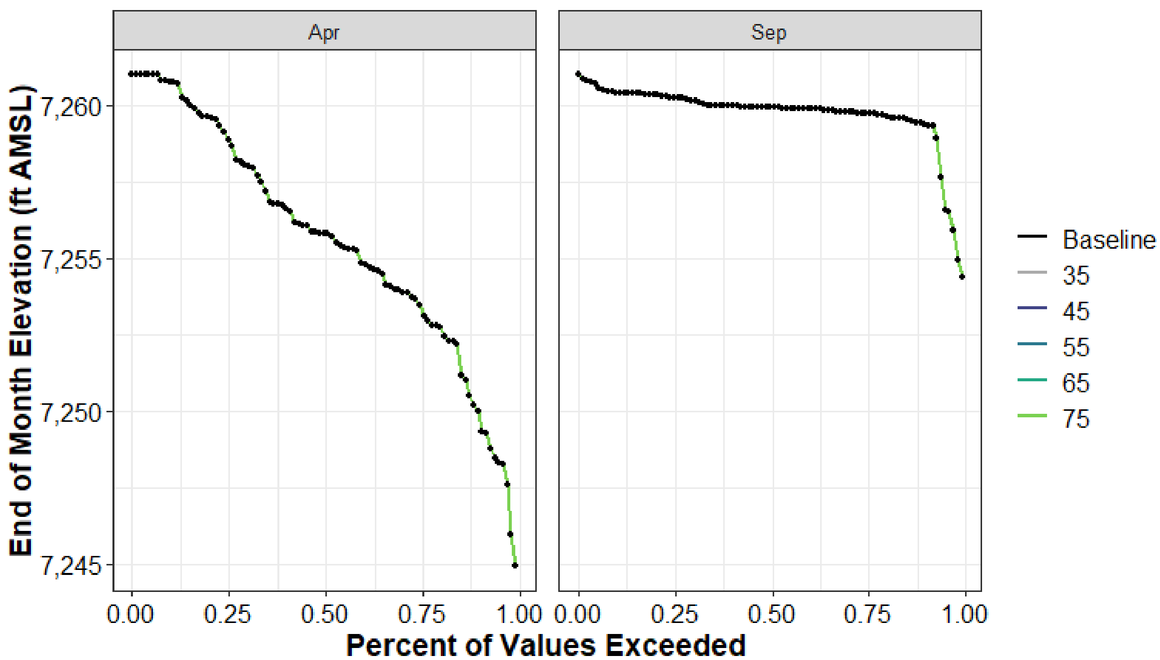

Figure A1-154. Silver Lake Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-317. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Silver Lake Reservoir

	Baseline	35	45	55	65	75
0%	5	0	0	0	0	0
10%	8	0	0	0	0	0
25%	8	0	0	0	0	0
50%	8	0	0	0	0	0
75%	8	0	0	0	0	0
90%	8	0	0	0	0	0
100%	9	0	0	0	0	0
Mean	8	0	0	0	0	0

Table A1-318. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Silver Lake Reservoir

	Baseline	35	45	55	65	75
0%	7254	0	0	0	0	0
10%	7259	0	0	0	0	0
25%	7260	0	0	0	0	0
50%	7260	0	0	0	0	0
75%	7260	0	0	0	0	0
90%	7260	0	0	0	0	0
100%	7261	0	0	0	0	0
Mean	7260	0	0	0	0	0

Table A1-319. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Silver Lake Reservoir

	Baseline	35	45	55	65	75
0%	2	0	0	0	0	0
10%	4	0	0	0	0	0
25%	5	0	0	0	0	0
50%	6	0	0	0	0	0
75%	8	0	0	0	0	0
90%	9	0	0	0	0	0
100%	9	0	0	0	0	0
Mean	6	0	0	0	0	0

Table A1-320. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Silver Lake Reservoir

	Baseline	35	45	55	65	75
0%	7245	0	0	0	0	0
10%	7250	0	0	0	0	0
25%	7253	0	0	0	0	0
50%	7256	0	0	0	0	0
75%	7259	0	0	0	0	0
90%	7261	0	0	0	0	0
100%	7261	0	0	0	0	0
Mean	7256	0	0	0	0	0

A12.1.6.51 Sly Creek Reservoir (Feather River Watershed)

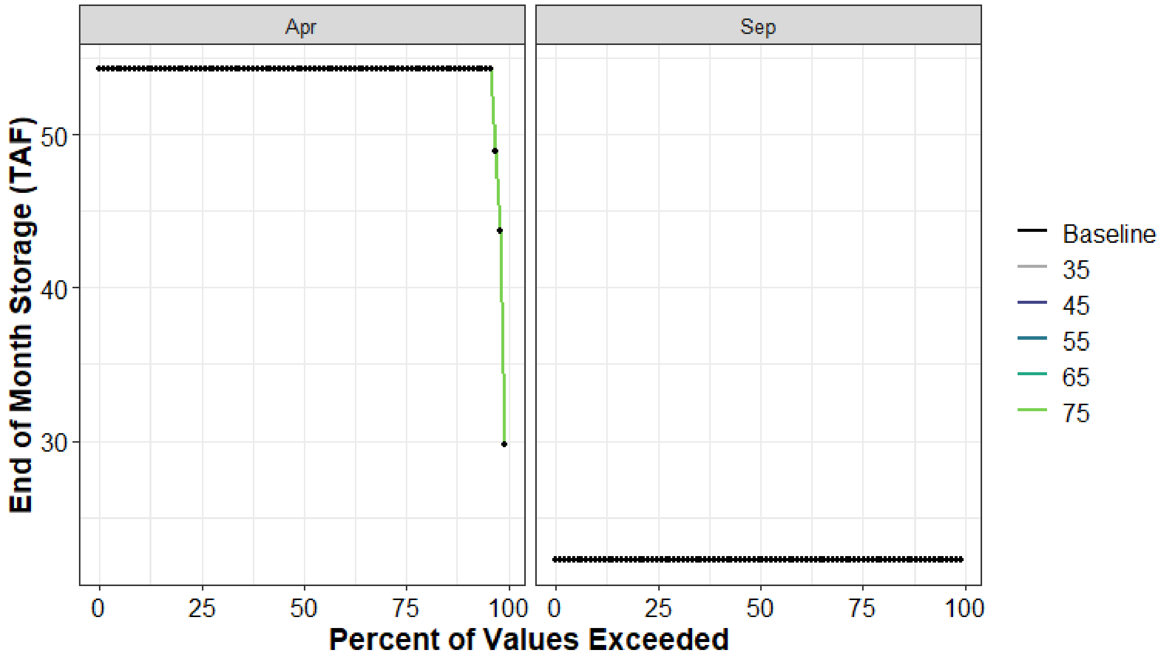

Figure A1-155. Sly Creek Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

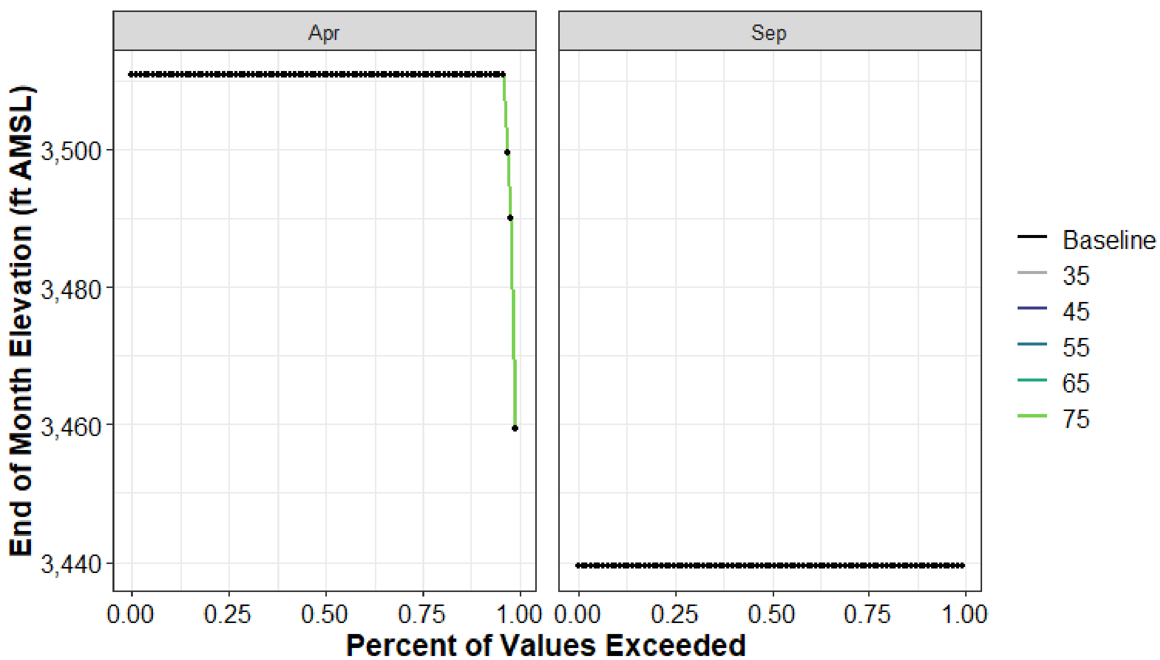

Figure A1-156. Sly Creek Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-321. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Sly Creek Reservoir

	Baseline	35	45	55	65	75
0%	22	0	0	0	0	0
10%	22	0	0	0	0	0
25%	22	0	0	0	0	0
50%	22	0	0	0	0	0
75%	22	0	0	0	0	0
90%	22	0	0	0	0	0
100%	22	0	0	0	0	0
Mean	22	0	0	0	0	0

Table A1-322. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Sly Creek Reservoir

	Baseline	35	45	55	65	75
0%	3439	0	0	0	0	0
10%	3439	0	0	0	0	0
25%	3439	0	0	0	0	0
50%	3439	0	0	0	0	0
75%	3439	0	0	0	0	0
90%	3439	0	0	0	0	0
100%	3439	0	0	0	0	0
Mean	3439	0	0	0	0	0

Table A1-323. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Sly Creek Reservoir

	Baseline	35	45	55	65	75
0%	30	0	0	0	0	0
10%	54	0	0	0	0	0
25%	54	0	0	0	0	0
50%	54	0	0	0	0	0
75%	54	0	0	0	0	0
90%	54	0	0	0	0	0
100%	54	0	0	0	0	0
Mean	54	0	0	0	0	0

Table A1-324. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Sly Creek Reservoir

	Baseline	35	45	55	65	75
0%	3459	0	0	0	0	0
10%	3511	0	0	0	0	0
25%	3511	0	0	0	0	0
50%	3511	0	0	0	0	0
75%	3511	0	0	0	0	0
90%	3511	0	0	0	0	0
100%	3511	0	0	0	0	0
Mean	3510	0	0	0	0	0

A12.1.6.52 Stony Gorge Reservoir (Stony Creek Watershed)

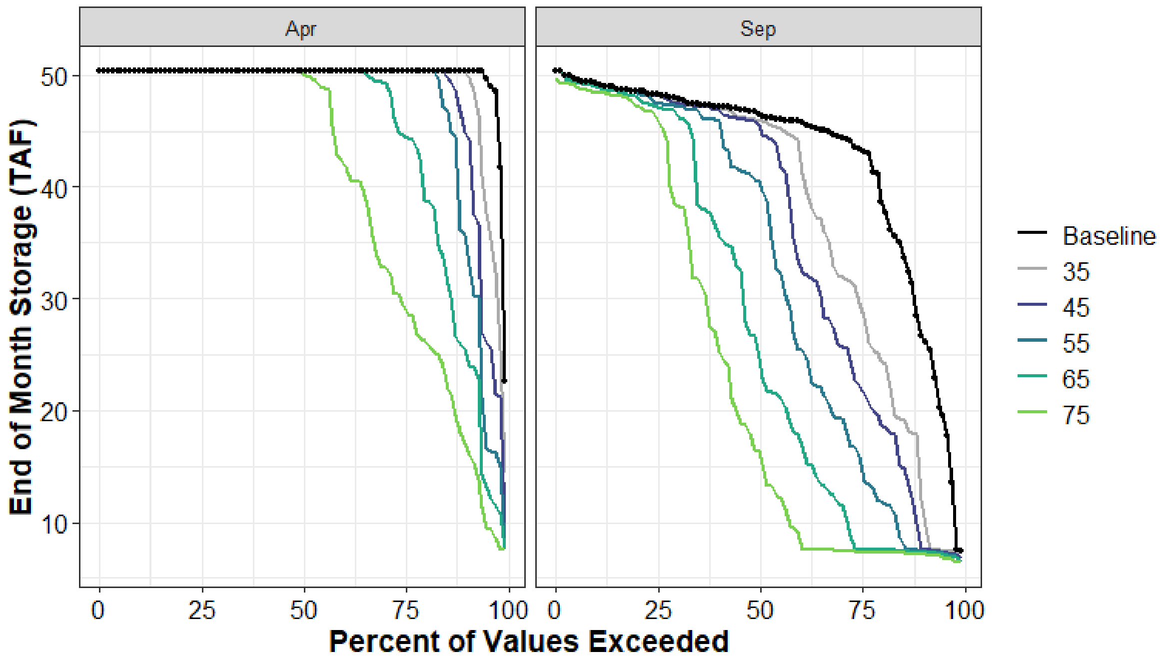

Figure A1-157. Stony Gorge Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

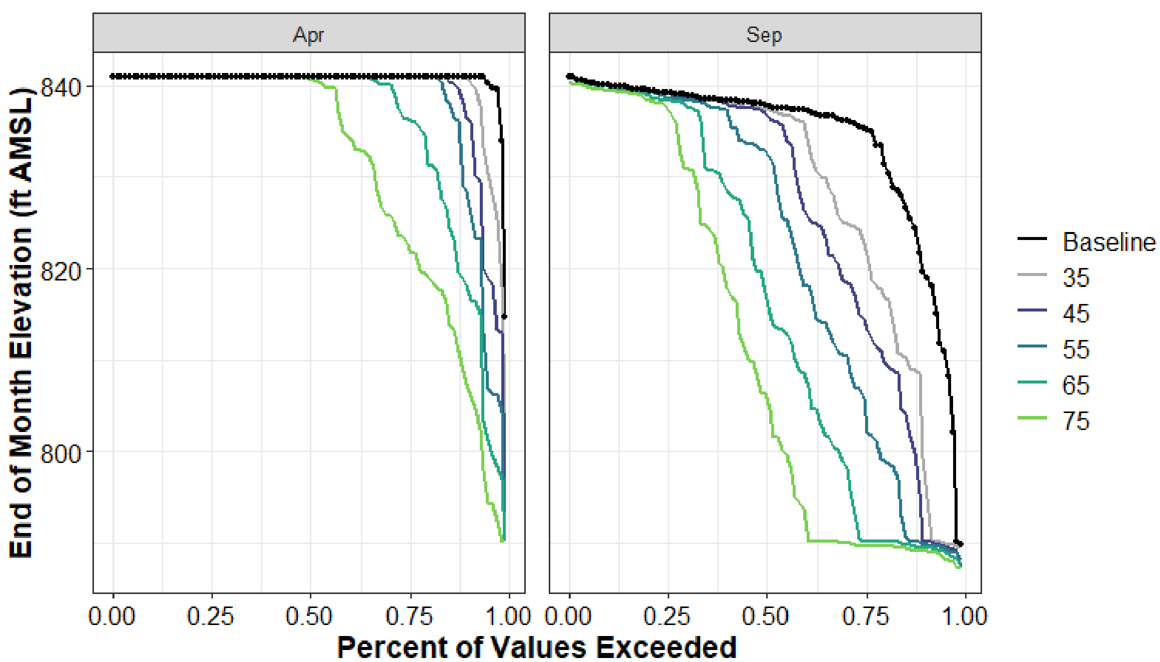

Figure A1-158. Stony Gorge Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-325. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Stony Gorge Reservoir

	Baseline	35	45	55	65	75
0%	7	0	-1	-1	-1	-1
10%	27	-14	-19	-20	-20	-20
25%	43	-14	-21	-27	-36	-36
50%	47	-1	-1	-6	-22	-30
75%	48	0	0	-1	-1	-2
90%	49	0	0	0	0	-1
100%	50	0	0	0	0	-1
Mean	43	-5	-7	-11	-15	-19

Table A1-326. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Stony Gorge Reservoir

	Baseline	35	45	55	65	75
0%	790	0	-2	-2	-3	-3
10%	820	-19	-29	-30	-31	-31
25%	835	-13	-21	-30	-45	-46
50%	838	-1	-1	-5	-21	-32
75%	839	0	0	-1	-1	-2
90%	840	0	0	0	0	-1
100%	841	0	0	0	0	-1
Mean	834	-5	-8	-12	-18	-23

Table A1-327. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Stony Gorge Reservoir

	Baseline	35	45	55	65	75
0%	23	-8	-13	-15	-15	-15
10%	50	0	-5	-15	-25	-33
25%	50	0	0	0	-6	-21
50%	50	0	0	0	0	0
75%	50	0	0	0	0	0
90%	50	0	0	0	0	0
100%	50	0	0	0	0	0
Mean	50	-1	-2	-3	-5	-10

Table A1-328. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Stony Gorge Reservoir

	Baseline	35	45	55	65	75
0%	815	-11	-19	-25	-25	-25
10%	841	0	-4	-12	-23	-33
25%	841	0	0	0	-5	-18
50%	841	0	0	0	0	0
75%	841	0	0	0	0	0
90%	841	0	0	0	0	0
100%	841	0	0	0	0	0
Mean	841	-1	-2	-3	-5	-10

A12.1.6.53 Stumpy Meadows (American River Watershed)

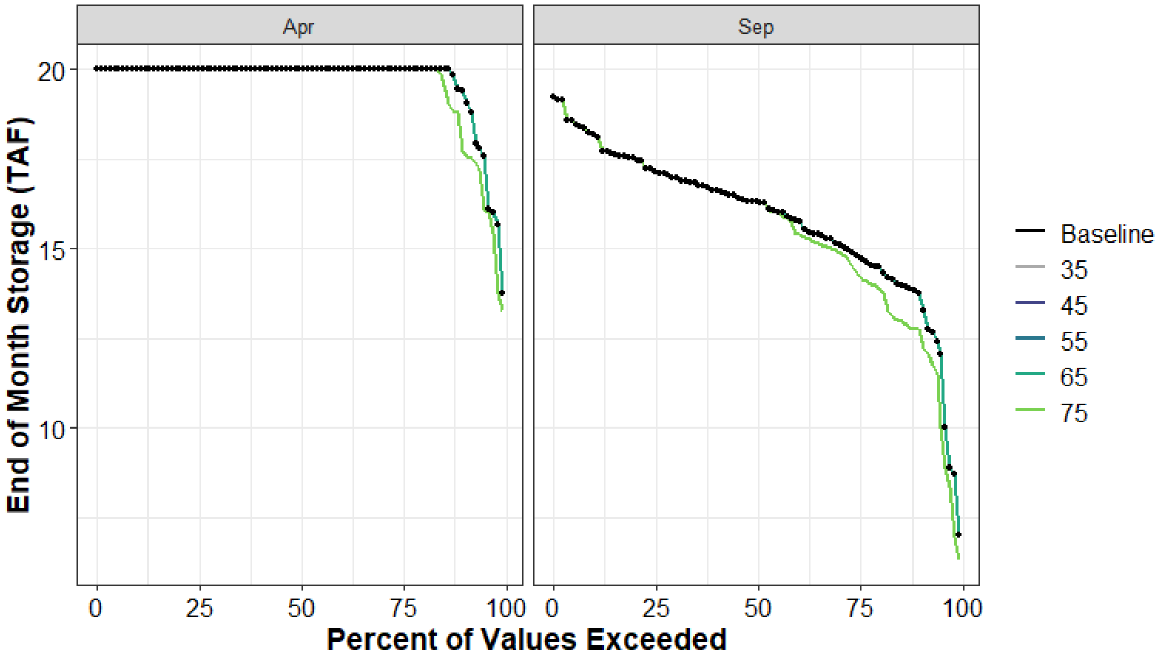

Figure A1-159. Stumpy Meadows End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

Table A1-329. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Stumpy Meadows

	Baseline	35	45	55	65	75
0%	7	0	0	0	0	-1
10%	14	0	0	0	0	-1
25%	15	0	0	0	0	-1
50%	16	0	0	0	0	0
75%	17	0	0	0	0	0
90%	18	0	0	0	0	0
100%	19	0	0	0	0	0
Mean	16	0	0	0	0	0

Table A1-330. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Stumpy Meadows

	Baseline	35	45	55	65	75
0%	14	0	0	0	0	0
10%	19	0	0	0	0	-2
25%	20	0	0	0	0	0
50%	20	0	0	0	0	0
75%	20	0	0	0	0	0
90%	20	0	0	0	0	0
100%	20	0	0	0	0	0
Mean	20	0	0	0	0	0

A12.1.6.54 SWP San Luis Reservoir (SOD Offstream)

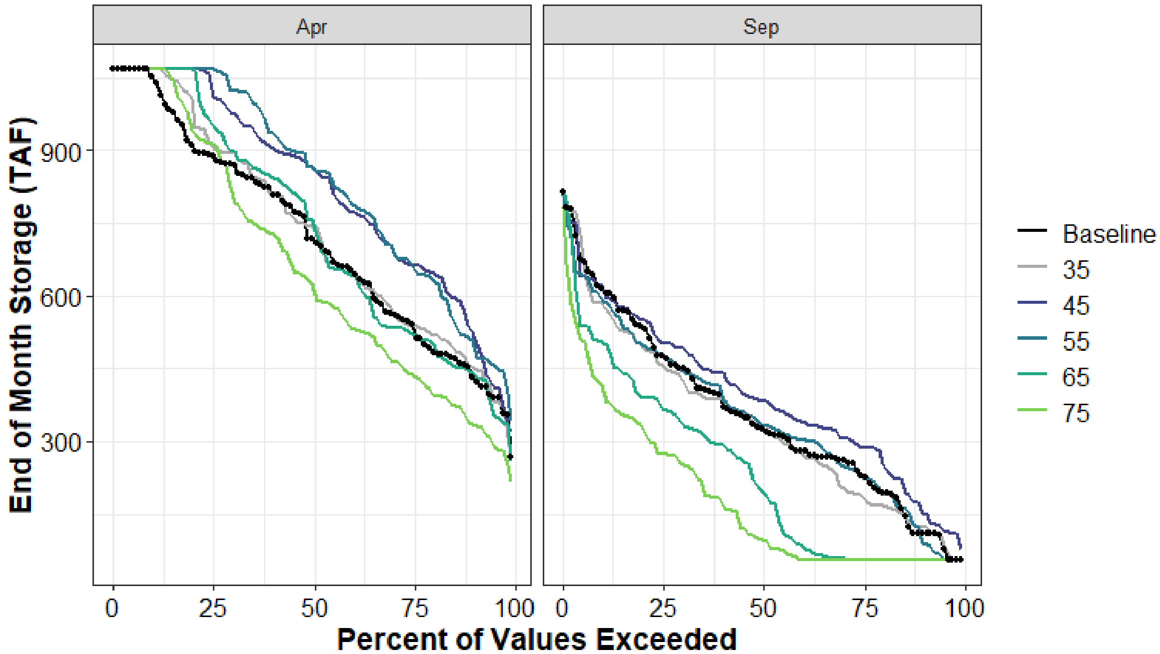

Figure A1-160. SWP San Luis Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

Table A1-331. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for SWP San Luis Reservoir

	Baseline	35	45	55	65	75
0%	55	0	25	0	0	0
10%	111	12	47	-12	-55	-56
25%	231	-40	58	0	-175	-175
50%	325	8	59	8	-129	-229
75%	475	-17	28	-1	-108	-200
90%	613	-31	4	-22	-109	-205
100%	813	-8	-2	-7	5	-30
Mean	357	-15	39	-3	-119	-174

Table A1-332. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for SWP San Luis Reservoir

	Baseline	35	45	55	65	75
0%	266	3	52	75	-9	-49
10%	437	18	92	74	5	-99
25%	542	-3	122	122	-20	-104
50%	716	27	151	149	40	-93
75%	888	15	122	179	61	27
90%	1,051	16	16	16	16	16
100%	1,067	0	0	0	0	0
Mean	721	16	102	113	17	-60

A12.1.6.55 Total San Luis Reservoir (N/A)

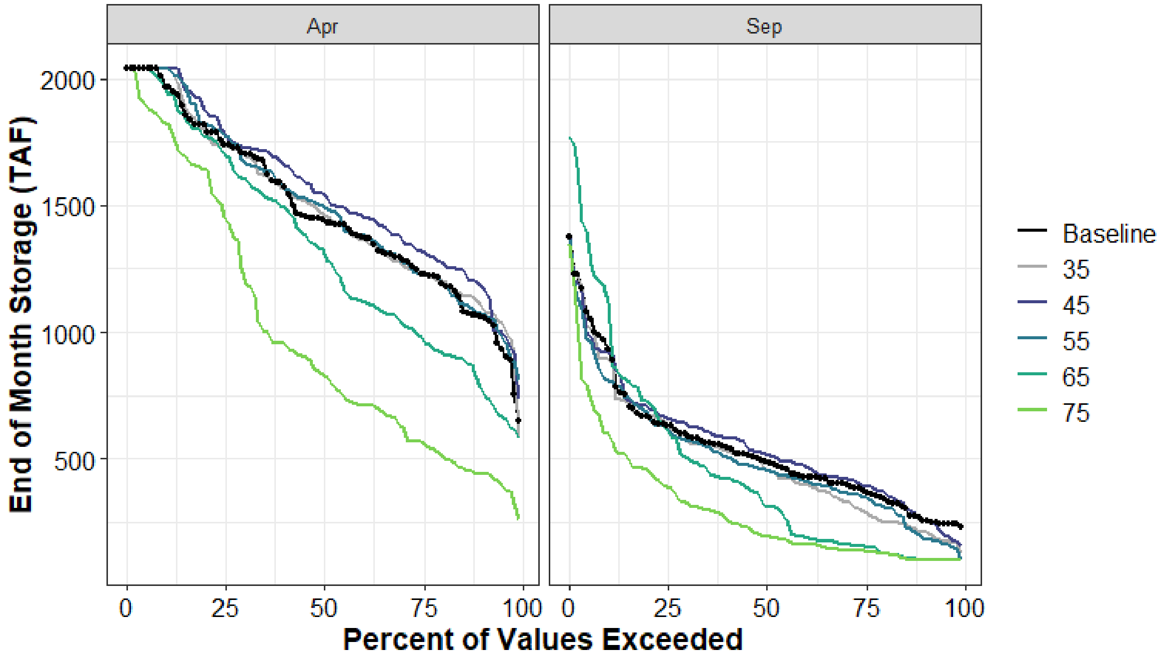

Figure A1-161. Total San Luis Reservoir End-of-April and End-of-September Storage Percent Exceedance Plot

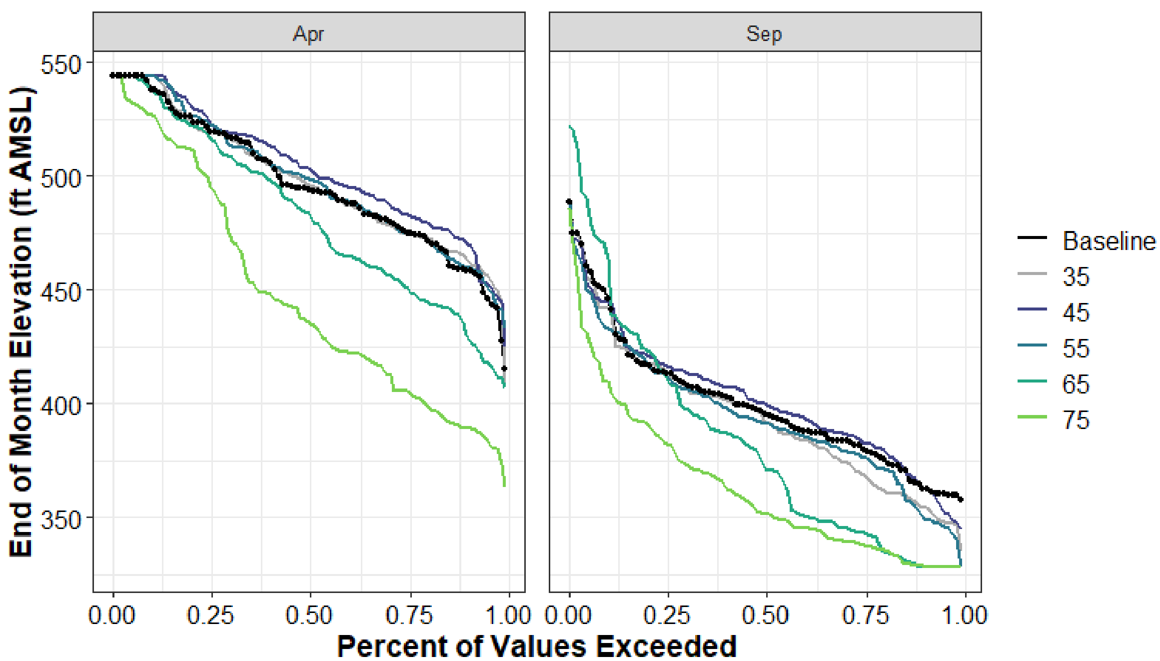

Figure A1-162. Total San Luis Reservoir End-of-April and End-of-September Elevation Percent Exceedance Plot

Table A1-333. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Total San Luis Reservoir

	Baseline	35	45	55	65	75
0%	228	-103	-69	-127	-128	-128
10%	260	-48	2	-71	-159	-157
25%	371	-76	21	-26	-217	-235
50%	489	-33	32	-32	-177	-294
75%	629	9	30	-3	-13	-239
90%	925	-36	-6	-114	140	-331
100%	1,375	-8	-2	-7	396	-31
Mean	537	-35	17	-37	-86	-240

Table A1-334. Distribution of Baseline September Storage Elevation (ft) and Absolute Difference by Scenario for Total San Luis Reservoir

	Baseline	35	45	55	65	75
0%	357	-22	-13	-29	-29	-29
10%	363	-8	0	-12	-35	-34
25%	380	-11	3	-4	-37	-42
50%	396	-4	4	-4	-24	-44
75%	413	1	4	0	-2	-30
90%	445	-4	-1	-12	14	-37
100%	488	-1	0	-1	34	-3
Mean	399	-5	2	-5	-17	-36

Table A1-335. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Total San Luis Reservoir

	Baseline	35	45	55	65	75
0%	648	-63	86	160	-68	-386
10%	1,060	56	127	14	-268	-620
25%	1,229	2	89	0	-249	-662
50%	1,441	26	106	56	-116	-609
75%	1,739	-3	48	34	-36	-286
90%	1,966	73	73	73	-6	-140
100%	2,039	0	0	0	0	0
Mean	1,482	13	76	21	-148	-490

Table A1-336. Distribution of Baseline April Storage Elevation (ft) and Absolute Difference by Scenario for Total San Luis Reservoir

	Baseline	35	45	55	65	75
0%	415	-7	10	18	-8	-52
10%	459	5	12	1	-28	-70
25%	475	0	8	0	-24	-69
50%	494	2	9	5	-10	-59
75%	520	0	4	3	-3	-25
90%	538	6	6	6	0	-11
100%	544	0	0	0	0	0
Mean	497	1	7	2	-14	-49

A12.1.6.56 Trinity Reservoir (Trinity River Watershed)

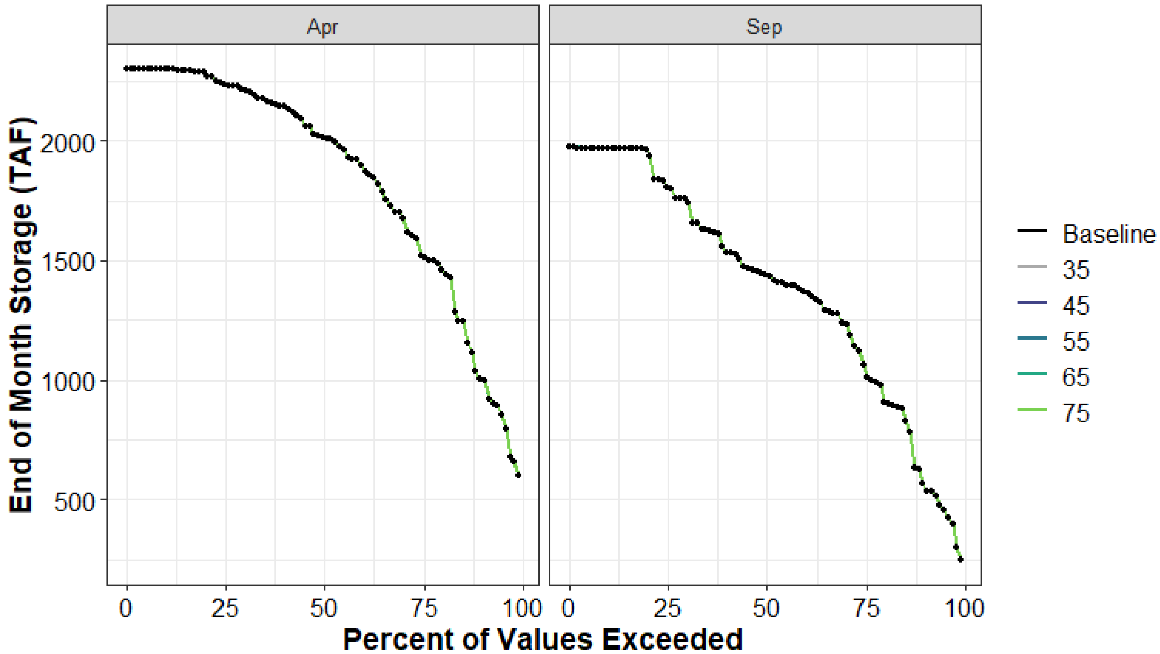

Figure A1-163. Trinity Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

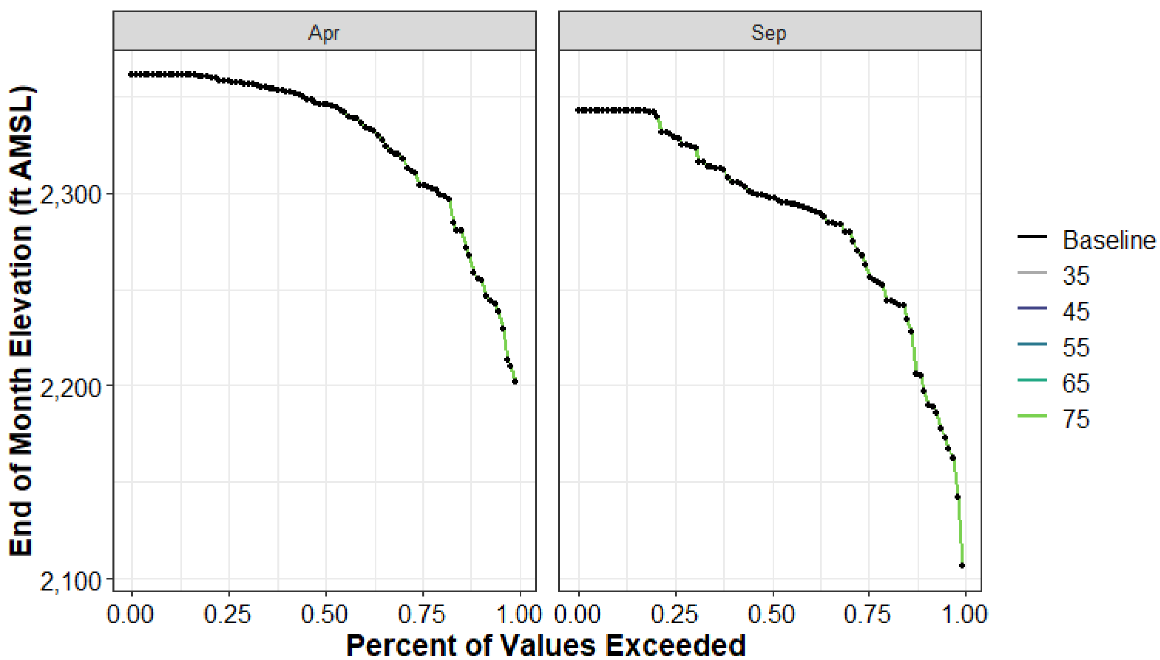

Figure A1-164. Trinity Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-337. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Trinity Reservoir

	Baseline	35	45	55	65	75
0%	246	0	0	0	0	0
10%	580	0	0	0	0	0
25%	1065	0	0	0	0	0
50%	1439	0	0	0	0	0
75%	1807	0	0	0	0	0
90%	1972	0	0	0	0	0
100%	1973	0	0	0	0	1
Mean	1389	0	0	0	0	0

Table A1-338. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Trinity Reservoir

	Baseline	35	45	55	65	75
0%	2106	0	0	0	0	0
10%	2199	0	0	0	0	0
25%	2262	0	0	0	0	0
50%	2297	0	0	0	0	0
75%	2329	0	0	0	0	0
90%	2343	0	0	0	0	0
100%	2343	0	0	0	0	0
Mean	2287	0	0	0	0	0

Table A1-339. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Trinity Reservoir

	Baseline	35	45	55	65	75
0%	601	0	0	0	0	0
10%	1011	0	0	0	0	1
25%	1517	0	0	0	0	0
50%	2014	0	0	0	1	0
75%	2239	0	0	0	0	0
90%	2299	0	0	0	0	0
100%	2300	0	0	0	0	0
Mean	1845	0	0	0	0	0

Table A1-340. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Trinity Reservoir

	Baseline	35	45	55	65	75
0%	2202	0	0	0	0	0
10%	2256	0	0	0	0	0
25%	2304	0	0	0	0	0
50%	2346	0	0	0	0	0
75%	2358	0	0	0	0	0
90%	2361	0	0	0	0	0
100%	2361	0	0	0	0	0
Mean	2327	0	0	0	0	0

A12.1.6.57 Union Valley Reservoir (American River Watershed)

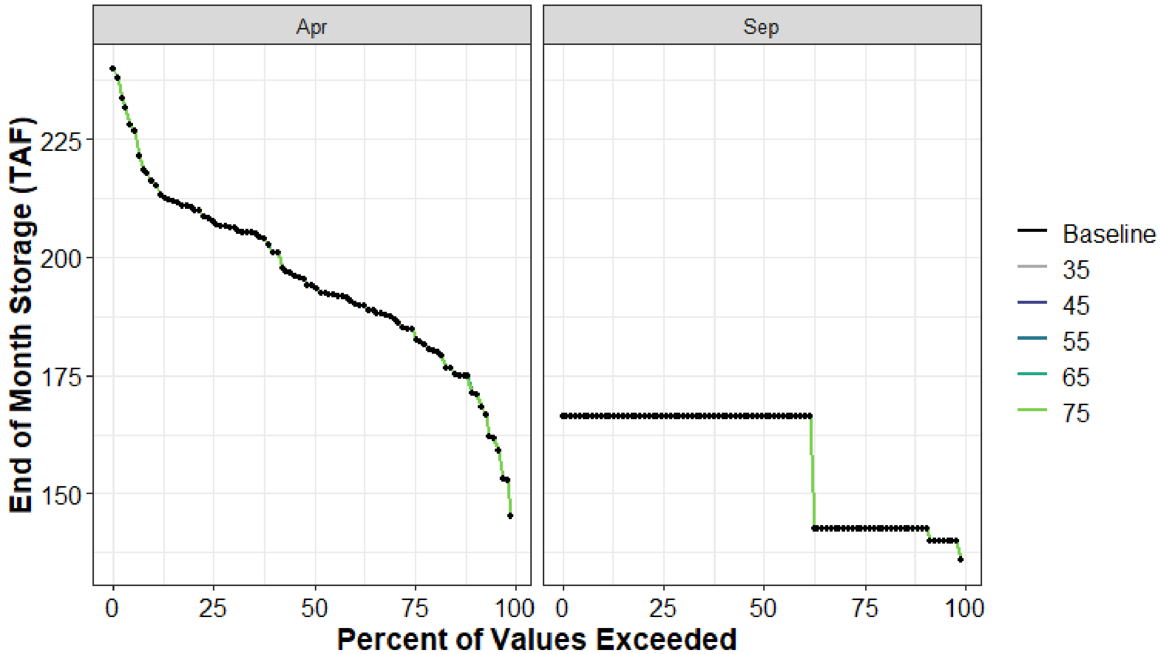

Figure A1-165. Union Valley Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

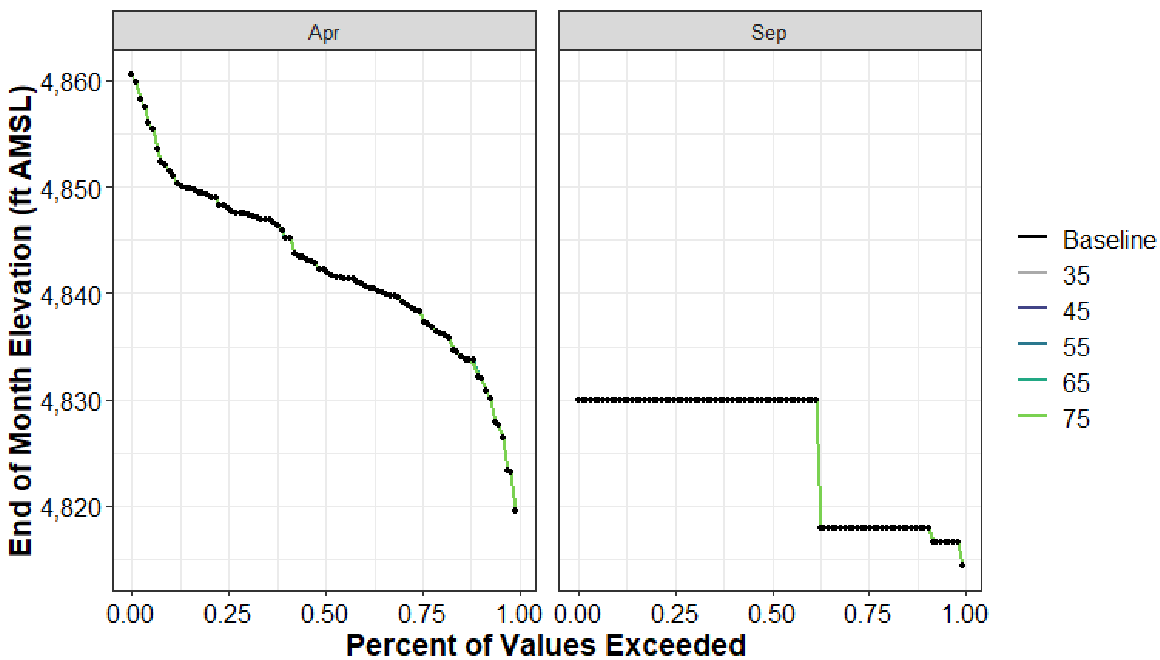

Figure A1-166. Union Valley Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-341. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Union Valley Reservoir

	Baseline	35	45	55	65	75
0%	136	0	0	0	0	0
10%	143	0	0	0	0	0
25%	143	0	0	0	0	0
50%	166	0	0	0	0	0
75%	166	0	0	0	0	0
90%	166	0	0	0	0	0
100%	166	0	0	0	0	0
Mean	157	0	0	0	0	0

Table A1-342. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Union Valley Reservoir

	Baseline	35	45	55	65	75
0%	4814	0	0	0	0	0
10%	4818	0	0	0	0	0
25%	4818	0	0	0	0	0
50%	4830	0	0	0	0	0
75%	4830	0	0	0	0	0
90%	4830	0	0	0	0	0
100%	4830	0	0	0	0	0
Mean	4825	0	0	0	0	0

Table A1-343. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Union Valley Reservoir

	Baseline	35	45	55	65	75
0%	145	0	0	0	0	0
10%	172	0	0	0	0	0
25%	185	0	0	0	0	0
50%	194	0	0	0	0	0
75%	208	0	0	0	0	0
90%	216	0	0	0	0	0
100%	240	0	0	0	0	0
Mean	195	0	0	0	0	0

Table A1-344. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Union Valley Reservoir

	Baseline	35	45	55	65	75
0%	4820	0	0	0	0	0
10%	4833	0	0	0	0	0
25%	4838	0	0	0	0	0
50%	4842	0	0	0	0	0
75%	4848	0	0	0	0	0
90%	4851	0	0	0	0	0
100%	4861	0	0	0	0	0
Mean	4843	0	0	0	0	0

A12.1.6.58 Upper Bear (Mokelumne River Watershed)

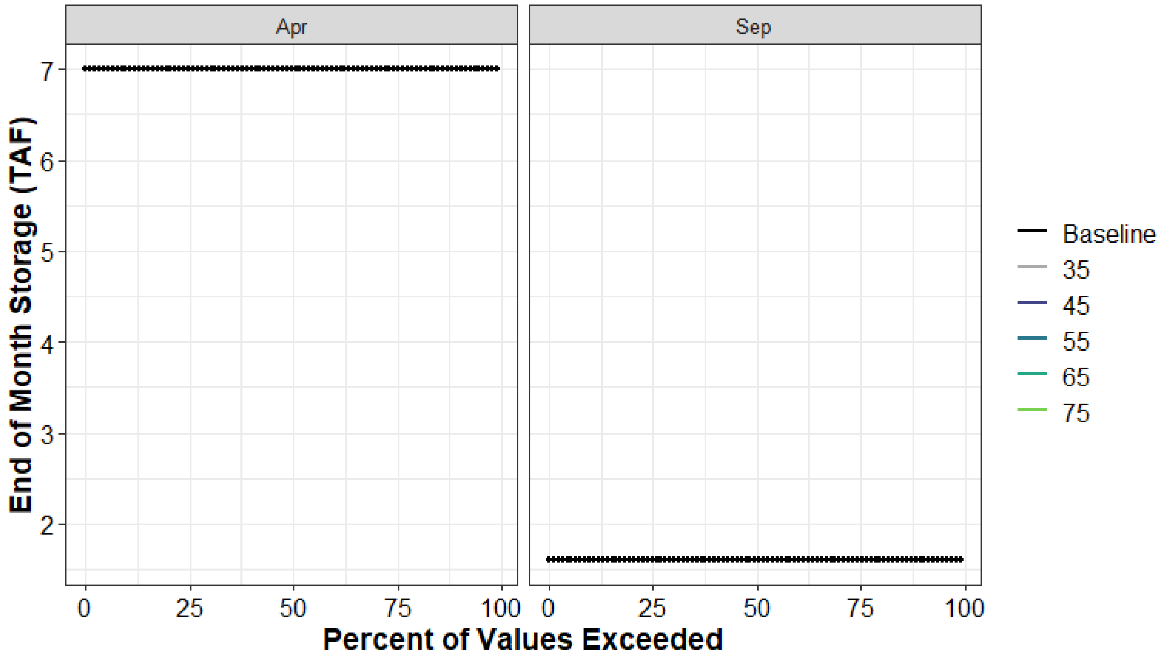

Figure A1-167. Upper Bear End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

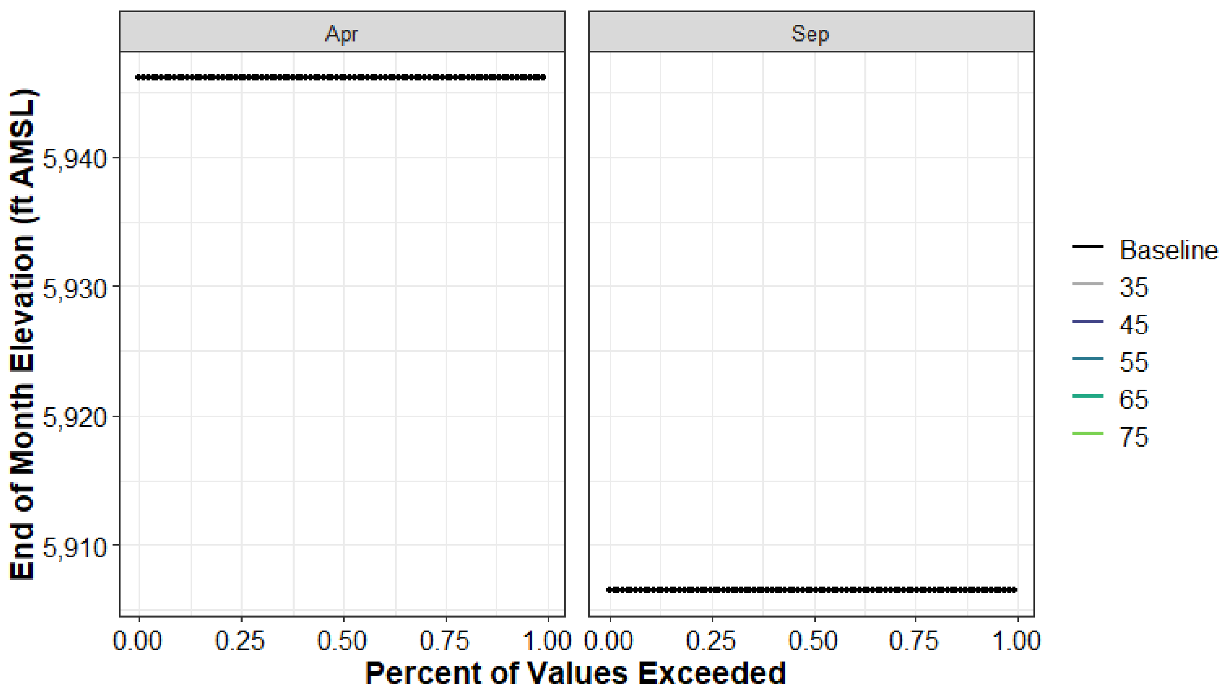

Figure A1-168. Upper Bear Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-345. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Upper Bear Reservoir

	Baseline	35	45	55	65	75
0%	2	0	0	0	0	0
10%	2	0	0	0	0	0
25%	2	0	0	0	0	0
50%	2	0	0	0	0	0
75%	2	0	0	0	0	0
90%	2	0	0	0	0	0
100%	2	0	0	0	0	0
Mean	2	0	0	0	0	0

Table A1-346. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Upper Bear Reservoir

	Baseline	35	45	55	65	75
0%	5906	0	0	0	0	0
10%	5906	0	0	0	0	0
25%	5906	0	0	0	0	0
50%	5906	0	0	0	0	0
75%	5906	0	0	0	0	0
90%	5906	0	0	0	0	0
100%	5906	0	0	0	0	0
Mean	5906	0	0	0	0	0

Table A1-347. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Upper Bear Reservoir

	Baseline	35	45	55	65	75
0%	7	0	0	0	0	0
10%	7	0	0	0	0	0
25%	7	0	0	0	0	0
50%	7	0	0	0	0	0
75%	7	0	0	0	0	0
90%	7	0	0	0	0	0
100%	7	0	0	0	0	0
Mean	7	0	0	0	0	0

Table A1-348. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Upper Bear Reservoir

	Baseline	35	45	55	65	75
0%	5946	0	0	0	0	0
10%	5946	0	0	0	0	0
25%	5946	0	0	0	0	0
50%	5946	0	0	0	0	0
75%	5946	0	0	0	0	0
90%	5946	0	0	0	0	0
100%	5946	0	0	0	0	0
Mean	5946	0	0	0	0	0

A12.1.6.59 Whiskeytown Reservoir (Clear Creek Watershed)

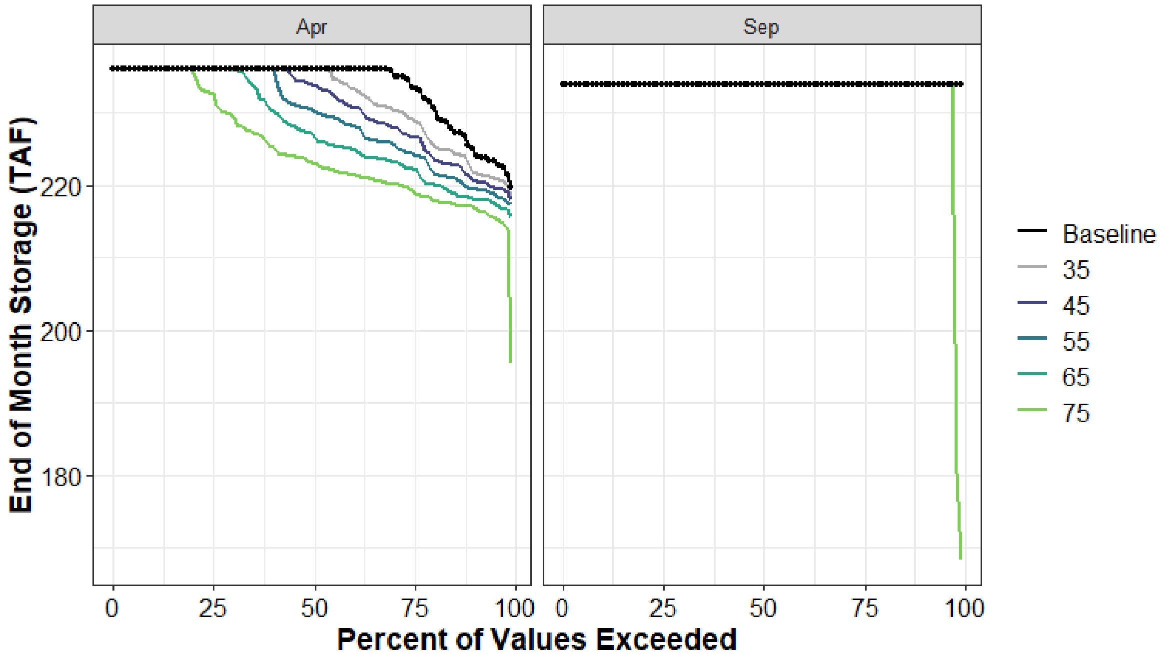

Figure A1-169. Whiskeytown Reservoir End-of-April and End-of-September Storage (TAF) Percent Exceedance Plot

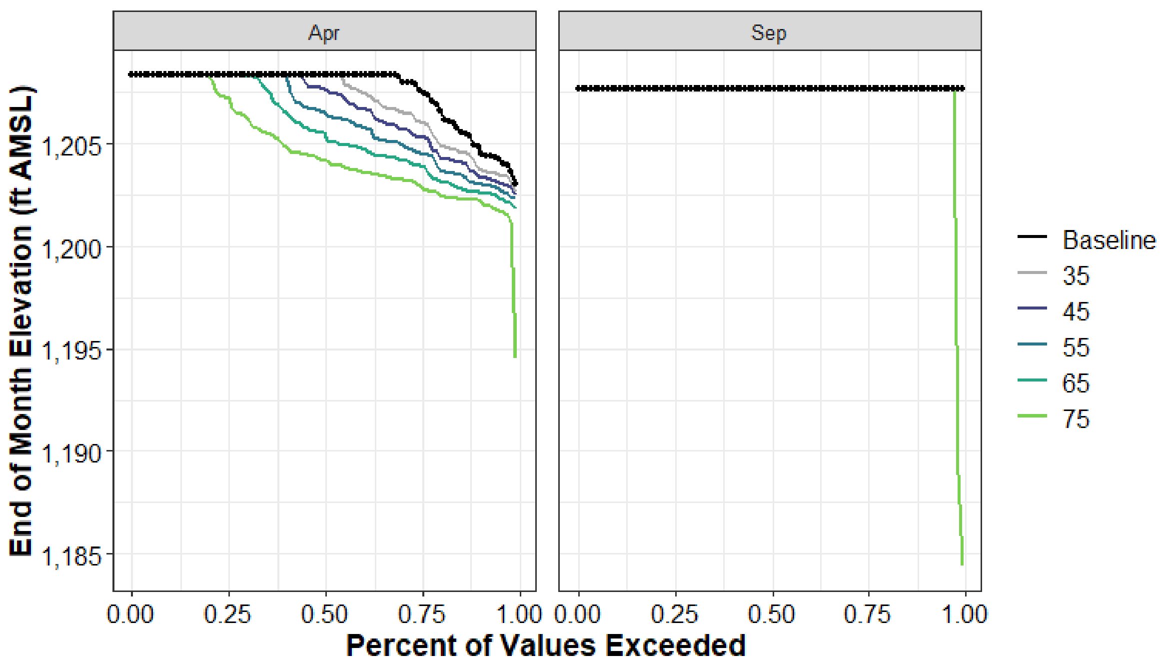

Figure A1-170. Whiskeytown Reservoir End-of-April and End-of-September Elevation (ft AMSL) Percent Exceedance Plot

Table A1-349. Distribution of Baseline September Carryover Storage (TAF) and Absolute Difference by Scenario for Whiskeytown Reservoir

	Baseline	35	45	55	65	75
0%	234	0	0	0	0	-66
10%	234	0	0	0	0	0
25%	234	0	0	0	0	0
50%	234	0	0	0	0	0
75%	234	0	0	0	0	0
90%	234	0	0	0	0	0
100%	234	0	0	0	0	0
Mean	234	0	0	0	0	-1

Table A1-350. Distribution of Baseline September Storage Elevation (TAF) and Absolute Difference by Scenario for Whiskeytown Reservoir

	Baseline	35	45	55	65	75
0%	1,208	0	0	0	0	-23
10%	1,208	0	0	0	0	0
25%	1,208	0	0	0	0	0
50%	1,208	0	0	0	0	0
75%	1,208	0	0	0	0	0
90%	1,208	0	0	0	0	0
100%	1,208	0	0	0	0	0
Mean	1,208	0	0	0	0	0

Table A1-351. Distribution of Baseline April Carryover Storage (TAF) and Absolute Difference by Scenario for Whiskeytown Reservoir

	Baseline	35	45	55	65	75
0%	220	-1	-2	-2	-4	-24
10%	225	-3	-4	-6	-7	-8
25%	234	-4	-7	-9	-11	-14
50%	236	0	-2	-6	-9	-13
75%	236	0	0	0	0	-3
90%	236	0	0	0	0	0
100%	236	0	0	0	0	0
Mean	234	-2	-3	-4	-6	-9

Table A1-352. Distribution of Baseline April Storage Elevation (TAF) and Absolute Difference by Scenario for Whiskeytown Reservoir

	Baseline	35	45	55	65	75
0%	1,203	0	-1	-1	-1	-9
10%	1,205	-1	-1	-2	-2	-3
25%	1,208	-1	-2	-3	-4	-5
50%	1,208	0	-1	-2	-3	-4
75%	1,208	0	0	0	0	-1
90%	1,208	0	0	0	0	0
100%	1,208	0	0	0	0	0
Mean	1,208	-1	-1	-1	-2	-3

A1.12.7 Flood Risk Indicators

Table A1-353 through Table A1-407 present flood risk indicators (flow and upstream reservoir storage) for all scenarios for all months October–May. All flows are at the downstream ends of rivers except the Sacramento River flows are at Knights Landing.

Table A1-353. Flow and Storage Changes on the American River during October through May from the 35 Scenario

	American River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	3,828	4,038	210	5%	Wet	609	594	-15	-2%
	Top 10% average	2,213	2,337	124	6%	Above normal	541	539	-2	0%
November	Max flow	19,216	19,132	-85	0%	Wet	537	530	-7	-1%
	Top 10% average	9,099	8,568	-531	-6%	Above normal	471	471	0	0%
December	Max flow	23,246	22,243	-1,003	-4%	Wet	534	535	1	0%
	Top 10% average	15,651	15,478	-173	-1%	Above normal	488	488	1	0%
January	Max flow	28,322	28,322	0	0%	Wet	543	543	0	0%
	Top 10% average	15,824	15,834	11	0%	Above normal	548	547	-1	0%
February	Max flow	30,920	30,920	0	0%	Wet	523	523	0	0%
	Top 10% average	15,051	15,051	-1	0%	Above normal	548	548	0	0%
March	Max flow	16,944	16,944	0	0%	Wet	634	634	0	0%
	Top 10% average	12,739	12,739	0	0%	Above normal	643	643	0	0%
April	Max flow	14,755	14,755	0	0%	Wet	795	790	-5	-1%
	Top 10% average	9,048	9,022	-26	0%	Above normal	797	786	-11	-1%
May	Max flow	11,440	11,440	0	0%	Wet	970	958	-12	-1%
	Top 10% average	9,346	9,346	0	0%	Above normal	972	946	-26	-3%

cfs = cubic feet per second
TAF = thousand acre-feet
Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-354. Flow and Storage Changes on the Bear River during October through May from the 35 Scenario

	Bear River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	2,242	2,349	106	5%	Wet	50	49	-1	-3%
	Top 10% average	377	382	5	1%	Above normal	44	42	-1	-3%
November	Max flow	2,439	2,474	35	1%	Wet	79	71	-8	-10%
	Top 10% average	1,283	1,413	129	10%	Above normal	65	60	-5	-8%
December	Max flow	4,566	4,509	-57	-1%	Wet	94	91	-2	-2%
	Top 10% average	3,752	3,563	-189	-5%	Above normal	81	76	-6	-7%
January	Max flow	6,016	6,016	0	0%	Wet	94	94	0	0%
	Top 10% average	4,538	4,495	-43	-1%	Above normal	94	93	-1	-1%
February	Max flow	7,649	7,649	0	0%	Wet	94	94	0	0%
	Top 10% average	4,796	4,782	-14	0%	Above normal	94	94	0	0%
March	Max flow	5,445	5,445	0	0%	Wet	94	94	0	0%
	Top 10% average	3,966	3,973	7	0%	Above normal	94	94	0	0%
April	Max flow	4,271	4,271	0	0%	Wet	94	94	0	0%
	Top 10% average	2,720	2,717	-3	0%	Above normal	94	94	0	0%
May	Max flow	1,571	1,571	0	0%	Wet	94	94	0	0%
	Top 10% average	1,059	1,060	1	0%	Above normal	94	93	-1	-1%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-355. Flow and Storage Changes on Cache Creek during October through May from the 35 Scenario

	Cache Creek flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Clear Lake Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	656	663	7	1%	Wet	906	901	-5	-1%
	Top 10% average	155	161	6	4%	Above normal	872	866	-6	-1%
November	Max flow	556	813	257	46%	Wet	930	923	-7	-1%
	Top 10% average	231	259	28	12%	Above normal	889	883	-6	-1%
December	Max flow	4,922	4,598	-324	-7%	Wet	1,038	1,019	-19	-2%
	Top 10% average	1,664	1,884	220	13%	Above normal	940	930	-10	-1%
January	Max flow	6,895	6,551	-343	-5%	Wet	1,126	1,111	-15	-1%
	Top 10% average	4,347	4,014	-333	-8%	Above normal	1,051	1,028	-22	-2%
February	Max flow	11,608	11,425	-183	-2%	Wet	1,152	1,146	-6	-1%
	Top 10% average	6,315	5,780	-535	-8%	Above normal	1,121	1,102	-18	-2%
March	Max flow	8,516	8,516	0	0%	Wet	1,155	1,154	-1	0%
	Top 10% average	4,515	4,337	-177	-4%	Above normal	1,146	1,131	-15	-1%
April	Max flow	3,761	3,761	0	0%	Wet	1,151	1,150	-2	0%
	Top 10% average	2,412	2,335	-77	-3%	Above normal	1,139	1,120	-18	-2%
May	Max flow	363	367	4	1%	Wet	1,113	1,109	-4	0%
	Top 10% average	167	261	94	57%	Above normal	1,103	1,083	-20	-2%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-356. Flow and Storage Changes on the Calaveras River during October through May from the 35 Scenario

	Calaveras River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	New Hogan Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	31	31	0	0%	Wet	118	112	-6	-5%
	Top 10% average	7	18	11	162%	Above normal	103	107	4	4%
November	Max flow	1,039	1,039	0	0%	Wet	119	114	-5	-4%
	Top 10% average	405	328	-77	-19%	Above normal	102	104	3	2%
December	Max flow	1,509	1,329	-180	-12%	Wet	135	128	-7	-5%
	Top 10% average	973	913	-60	-6%	Above normal	107	108	1	1%
January	Max flow	2,967	2,966	-1	0%	Wet	156	150	-6	-4%
	Top 10% average	1,559	1,474	-85	-5%	Above normal	139	133	-6	-4%
February	Max flow	3,313	3,207	-106	-3%	Wet	172	168	-4	-2%
	Top 10% average	2,137	2,071	-66	-3%	Above normal	160	151	-9	-5%
March	Max flow	2,608	2,608	0	0%	Wet	187	183	-5	-2%
	Top 10% average	1,766	1,736	-30	-2%	Above normal	187	175	-12	-6%
April	Max flow	845	844	-1	0%	Wet	220	206	-14	-6%
	Top 10% average	283	374	92	32%	Above normal	203	185	-18	-9%
May	Max flow	0	129	129	30727%	Wet	215	197	-18	-8%
	Top 10% average	0	74	73	19444%	Above normal	191	174	-17	-9%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-357. Flow Changes on Clear Creek during October through May from the 35 Scenario

	Clear Creek flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	209	209	0	0%
	Top 10% average	204	204	0	0%
November	Max flow	293	723	430	147%
	Top 10% average	216	355	139	64%
December	Max flow	354	833	479	135%
	Top 10% average	292	683	390	134%
January	Max flow	651	1,511	861	132%
	Top 10% average	418	993	574	137%
February	Max flow	1,572	2,023	451	29%
	Top 10% average	658	1,190	533	81%
March	Max flow	1,342	1,960	619	46%
	Top 10% average	471	996	525	111%
April	Max flow	406	1,000	594	147%
	Top 10% average	291	721	430	148%
May	Max flow	284	501	217	76%
	Top 10% average	280	361	81	29%

cfs = cubic feet per second

Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5%.

Table A1-358. Flow and Storage Changes on the Feather River during October through May from the 35 Scenario

	Feather River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Oroville Reservoir Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	9,481	11,516	2,036	21%	Wet	2,241	2,105	-136	-6%
	Top 10% average	6,913	7,014	101	1%	Above normal	1,836	1,765	-71	-4%
November	Max flow	21,639	22,347	707	3%	Wet	2,311	2,165	-146	-6%
	Top 10% average	8,801	9,968	1,167	13%	Above normal	1,887	1,801	-86	-5%
December	Max flow	40,167	41,014	847	2%	Wet	2,561	2,409	-152	-6%
	Top 10% average	28,174	27,469	-705	-3%	Above normal	1,984	1,912	-72	-4%
January	Max flow	66,475	66,488	13	0%	Wet	2,769	2,608	-161	-6%
	Top 10% average	37,501	36,311	-1,190	-3%	Above normal	2,340	2,225	-116	-5%
February	Max flow	54,456	52,521	-1,936	-4%	Wet	2,885	2,826	-58	-2%
	Top 10% average	35,270	33,711	-1,559	-4%	Above normal	2,586	2,488	-98	-4%
March	Max flow	54,566	50,410	-4,156	-8%	Wet	2,947	2,944	-3	0%
	Top 10% average	37,927	36,816	-1,111	-3%	Above normal	2,891	2,762	-129	-4%
April	Max flow	36,622	36,669	47	0%	Wet	3,322	3,292	-30	-1%
	Top 10% average	25,641	25,649	8	0%	Above normal	3,344	3,112	-232	-7%
May	Max flow	29,766	29,722	-44	0%	Wet	3,524	3,483	-41	-1%
	Top 10% average	23,254	23,354	101	0%	Above normal	3,511	3,268	-243	-7%

cfs = cubic feet per second
TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-359. Flow and Storage Changes on the Mokelumne River during October through May from the 35 Scenario

	Mokelumne River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Camanche Reservoir Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	961	1,000	39	4%	Wet	284	286	2	1%
	Top 10% average	365	371	6	2%	Above normal	249	260	10	4%
November	Max flow	3,984	3,959	-25	-1%	Wet	281	283	2	1%
	Top 10% average	1,281	1,329	48	4%	Above normal	239	251	12	5%
December	Max flow	3,767	3,766	-1	0%	Wet	291	294	2	1%
	Top 10% average	2,471	2,402	-69	-3%	Above normal	239	253	14	6%
January	Max flow	6,335	6,335	0	0%	Wet	303	303	0	0%
	Top 10% average	2,992	3,044	51	2%	Above normal	260	272	11	4%
February	Max flow	5,565	5,445	-120	-2%	Wet	304	305	0	0%
	Top 10% average	2,748	2,602	-146	-5%	Above normal	282	290	8	3%
March	Max flow	3,474	3,475	1	0%	Wet	322	319	-3	-1%
	Top 10% average	2,186	2,187	1	0%	Above normal	313	310	-3	-1%
April	Max flow	4,364	4,365	1	0%	Wet	346	335	-11	-3%
	Top 10% average	2,341	2,335	-6	0%	Above normal	347	325	-22	-6%
May	Max flow	3,721	3,741	21	1%	Wet	356	334	-22	-6%
	Top 10% average	3,135	3,161	26	1%	Above normal	372	320	-52	-14%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-360. Flow and Storage Changes on Putah Creek during October through May from the 35 Scenario

	Putah Creek flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Lake Berryessa Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	941	967	25	3%	Wet	1,073	1,054	-19	-2%
	Top 10% average	130	135	5	4%	Above normal	920	934	14	2%
November	Max flow	24	519	495	2067%	Wet	1,088	1,063	-25	-2%
	Top 10% average	22	286	264	1178%	Above normal	923	935	12	1%
December	Max flow	1,495	1,415	-79	-5%	Wet	1,184	1,127	-57	-5%
	Top 10% average	254	945	690	271%	Above normal	971	966	-5	0%
January	Max flow	4,813	2,536	-2,277	-47%	Wet	1,305	1,228	-77	-6%
	Top 10% average	1,713	1,705	-8	0%	Above normal	1,082	1,038	-44	-4%
February	Max flow	6,187	960	-5,227	-84%	Wet	1,397	1,312	-84	-6%
	Top 10% average	2,981	529	-2,452	-82%	Above normal	1,203	1,119	-84	-7%
March	Max flow	5,725	5,725	0	0%	Wet	1,442	1,369	-73	-5%
	Top 10% average	2,278	1,648	-630	-28%	Above normal	1,252	1,159	-93	-7%
April	Max flow	3,390	1,239	-2,150	-63%	Wet	1,450	1,392	-58	-4%
	Top 10% average	1,818	943	-875	-48%	Above normal	1,256	1,160	-96	-8%
May	Max flow	306	235	-71	-23%	Wet	1,426	1,368	-58	-4%
	Top 10% average	86	180	94	109%	Above normal	1,233	1,142	-91	-7%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-361. Flow and Storage Changes on the Sacramento River at Knights Landing during October through May from the 35 Scenario

	Sacramento River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Lake Shasta Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	14,007	13,888	-119	-1%	Wet	3,044	3,005	-39	-1%
	Top 10% average	11,650	11,626	-24	0%	Above normal	2,726	2,764	39	1%
November	Max flow	21,263	21,245	-18	0%	Wet	3,125	3,098	-27	-1%
	Top 10% average	17,163	16,849	-313	-2%	Above normal	2,745	2,797	52	2%
December	Max flow	22,301	22,349	47	0%	Wet	3,252	3,243	-9	0%
	Top 10% average	21,495	21,480	-15	0%	Above normal	2,897	2,954	56	2%
January	Max flow	23,406	23,357	-49	0%	Wet	3,470	3,464	-7	0%
	Top 10% average	22,617	22,616	-1	0%	Above normal	3,357	3,405	49	1%
February	Max flow	24,394	21,098	-3,296	-14%	Wet	3,623	3,626	2	0%
	Top 10% average	23,061	15,908	-7,153	-31%	Above normal	3,589	3,615	26	1%
March	Max flow	23,579	23,579	0	0%	Wet	3,897	3,897	0	0%
	Top 10% average	22,263	22,283	20	0%	Above normal	4,050	4,050	-1	0%
April	Max flow	22,033	22,033	0	0%	Wet	4,358	4,356	-1	0%
	Top 10% average	20,770	20,771	1	0%	Above normal	4,506	4,505	-1	0%
May	Max flow	19,495	19,381	-114	-1%	Wet	4,518	4,500	-18	0%
	Top 10% average	16,870	16,770	-101	-1%	Above normal	4,510	4,508	-2	0%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-362. Flow and Storage Changes on Stony Creek during October through May from the 35 Scenario

	Stony Creek flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	Black Butte Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October	Max flow	933	933	0	0%	Wet	40	37	-3	-8%
	Top 10% average	584	627	42	7%	Above normal	39	31	-8	-19%
November	Max flow	1,739	1,708	-31	-2%	Wet	29	28	-1	-3%
	Top 10% average	1,003	824	-179	-18%	Above normal	28	26	-1	-4%
December	Max flow	4,539	4,509	-30	-1%	Wet	30	29	0	-2%
	Top 10% average	3,056	2,909	-147	-5%	Above normal	29	28	-1	-5%
January	Max flow	8,078	7,617	-461	-6%	Wet	31	31	0	0%
	Top 10% average	4,740	4,649	-91	-2%	Above normal	31	31	0	0%
February	Max flow	8,585	8,555	-30	0%	Wet	80	75	-5	-6%
	Top 10% average	4,879	4,847	-31	-1%	Above normal	81	80	-1	-1%
March	Max flow	6,390	6,388	-1	0%	Wet	124	117	-7	-6%
	Top 10% average	3,212	3,187	-25	-1%	Above normal	126	122	-4	-3%
April	Max flow	3,343	3,339	-4	0%	Wet	134	129	-6	-4%
	Top 10% average	1,997	1,968	-29	-1%	Above normal	136	131	-5	-4%
May	Max flow	1,324	1,414	90	7%	Wet	133	128	-6	-4%
	Top 10% average	846	930	83	10%	Above normal	136	132	-4	-3%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-363. Flow and Storage Changes on the Yuba River during October through May from the 35 Scenario

	Yuba River flow (cfs)	Existing Condition	35 Scenario	Difference	Percent Change	New Bullards Bar Storage (TAF)	Existing Condition	35 Scenario	Difference	Percent Change
October [a]	Max flow	4,278	4,508	230	5%	Wet	603	670	66	11%
	Top 10% average	941	972	31	3%	Above normal	553	615	63	11%
November [a]	Max flow	5,063	6,636	1,573	31%	Wet	630	686	56	9%
	Top 10% average	2,796	3,455	659	24%	Above normal	566	620	55	10%
December	Max flow	15,368	16,728	1,360	9%	Wet	686	733	47	7%
	Top 10% average	9,906	10,685	779	8%	Above normal	578	634	56	10%
January	Max flow	22,279	22,293	14	0%	Wet	716	760	44	6%
	Top 10% average	11,715	12,093	378	3%	Above normal	645	685	40	6%
February	Max flow	19,091	20,581	1,489	8%	Wet	759	780	21	3%
	Top 10% average	9,885	10,857	972	10%	Above normal	705	746	41	6%
March	Max flow	15,119	15,119	0	0%	Wet	776	796	20	3%
	Top 10% average	10,720	11,282	562	5%	Above normal	774	793	18	2%
April	Max flow	11,621	11,628	7	0%	Wet	870	892	22	3%
	Top 10% average	7,447	7,539	92	1%	Above normal	855	891	36	4%
May	Max flow	10,564	10,564	0	0%	Wet	946	955	10	1%
	Top 10% average	8,199	8,354	155	2%	Above normal	939	960	21	2%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

[a] Flows in October and November are inflated due to an operation nuance in SacWAM. The October and November flows are not higher than the max flows in the wettest months and do not affect the analysis.

Table A1-364. Flow and Storage Changes on the American River during October through May from the 45 Scenario

	American River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	3,828	5,547	1,719	45%	Wet	609	599	-10	-2%
	Top 10% average	2,213	2,480	267	12%	Above normal	541	534	-7	-1%
November	Max flow	19,216	18,618	-598	-3%	Wet	537	533	-3	-1%
	Top 10% average	9,099	8,546	-554	-6%	Above normal	471	474	3	1%
December	Max flow	23,246	22,991	-256	-1%	Wet	534	537	3	1%
	Top 10% average	15,651	15,394	-257	-2%	Above normal	488	489	1	0%
January	Max flow	28,322	28,322	0	0%	Wet	543	543	0	0%
	Top 10% average	15,824	15,684	-140	-1%	Above normal	548	546	-2	0%
February	Max flow	30,920	30,920	0	0%	Wet	523	523	0	0%
	Top 10% average	15,051	15,051	0	0%	Above normal	548	548	0	0%
March	Max flow	16,944	16,944	0	0%	Wet	634	633	-2	0%
	Top 10% average	12,739	12,805	66	1%	Above normal	643	643	0	0%
April	Max flow	14,755	14,755	0	0%	Wet	795	778	-17	-2%
	Top 10% average	9,048	9,022	-26	0%	Above normal	797	766	-32	-4%
May	Max flow	11,440	11,440	0	0%	Wet	970	926	-44	-5%
	Top 10% average	9,346	9,346	0	0%	Above normal	972	884	-88	-9%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-365. Flow and Storage Changes on the Bear River during October through May from the 45 Scenario

	Bear River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	2,242	2,160	-82	-4%	Wet	50	48	-2	-4%
	Top 10% average	377	368	-9	-2%	Above normal	44	44	1	2%
November	Max flow	2,439	2,568	129	5%	Wet	79	66	-13	-16%
	Top 10% average	1,283	1,552	269	21%	Above normal	65	60	-5	-8%
December	Max flow	4,566	4,454	-111	-2%	Wet	94	90	-3	-4%
	Top 10% average	3,752	3,482	-270	-7%	Above normal	81	75	-6	-8%
January	Max flow	6,016	6,016	-1	0%	Wet	94	93	0	0%
	Top 10% average	4,538	4,457	-82	-2%	Above normal	94	91	-3	-3%
February	Max flow	7,649	7,643	-6	0%	Wet	94	94	0	0%
	Top 10% average	4,796	4,774	-22	0%	Above normal	94	94	0	0%
March	Max flow	5,445	5,431	-14	0%	Wet	94	94	0	0%
	Top 10% average	3,966	3,967	2	0%	Above normal	94	94	0	0%
April	Max flow	4,271	4,279	8	0%	Wet	94	94	0	0%
	Top 10% average	2,720	2,712	-8	0%	Above normal	94	94	0	0%
May	Max flow	1,571	1,571	0	0%	Wet	94	93	-1	-1%
	Top 10% average	1,059	1,041	-19	-2%	Above normal	94	90	-3	-4%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-366. Flow and Storage Changes on Cache Creek during October through May from the 45 Scenario

	Cache Creek flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Clear Lake Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	656	661	5	1%	Wet	906	899	-7	-1%
	Top 10% average	155	162	7	4%	Above normal	872	862	-10	-1%
November	Max flow	556	869	313	56%	Wet	930	921	-9	-1%
	Top 10% average	231	267	37	16%	Above normal	889	879	-10	-1%
December	Max flow	4,922	4,421	-500	-10%	Wet	1038	1,016	-22	-2%
	Top 10% average	1,664	1,947	283	17%	Above normal	940	927	-14	-1%
January	Max flow	6,895	6,440	-455	-7%	Wet	1,126	1,107	-19	-2%
	Top 10% average	4,347	3,915	-433	-10%	Above normal	1,051	1,023	-28	-3%
February	Max flow	11,608	10,981	-627	-5%	Wet	1,152	1,144	-8	-1%
	Top 10% average	6,315	5,627	-688	-11%	Above normal	1,121	1,094	-26	-2%
March	Max flow	8,516	8,516	0	0%	Wet	1,155	1,153	-2	0%
	Top 10% average	4,515	4,228	-286	-6%	Above normal	1,146	1,122	-24	-2%
April	Max flow	3,761	3,761	0	0%	Wet	1,151	1,149	-3	0%
	Top 10% average	2,412	2,305	-107	-4%	Above normal	1,139	1,110	-29	-3%
May	Max flow	363	472	109	30%	Wet	1,113	1,106	-7	-1%
	Top 10% average	167	334	167	101%	Above normal	1,103	1,072	-32	-3%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-367. Flow and Storage Changes on the Calaveras River during October through May from the 45 Scenario

	Calaveras River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	New Hogan Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	31	37	6	20%	Wet	118	108	-10	-8%
	Top 10% average	7	23	16	222%	Above normal	103	104	1	1%
November	Max flow	1,039	1,039	0	0%	Wet	119	111	-8	-6%
	Top 10% average	405	317	-88	-22%	Above normal	102	101	-1	-1%
December	Max flow	1,509	1,300	-208	-14%	Wet	135	124	-10	-8%
	Top 10% average	973	900	-73	-8%	Above normal	107	105	-3	-2%
January	Max flow	2,967	2,965	-2	0%	Wet	156	145	-11	-7%
	Top 10% average	1,559	1,462	-98	-6%	Above normal	139	126	-13	-9%
February	Max flow	3,313	3,085	-229	-7%	Wet	172	163	-9	-5%
	Top 10% average	2,137	2,011	-126	-6%	Above normal	160	144	-16	-10%
March	Max flow	2,608	2,608	0	0%	Wet	187	180	-8	-4%
	Top 10% average	1,766	1,671	-95	-5%	Above normal	187	166	-20	-11%
April	Max flow	845	843	-1	0%	Wet	220	200	-20	-9%
	Top 10% average	283	419	137	48%	Above normal	203	175	-28	-14%
May	Max flow	0	167	166	39556%	Wet	215	190	-24	-11%
	Top 10% average	0	95	94	25005%	Above normal	191	165	-26	-13%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-368. Flow Changes on Clear Creek during October through May from the 45 Scenario

	Clear Creek flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	209	210	1	0%
	Top 10% average	204	204	0	0%
November	Max flow	293	930	637	217%
	Top 10% average	216	456	240	111%
December	Max flow	354	1,071	717	202%
	Top 10% average	292	878	585	200%
January	Max flow	651	1,943	1,292	199%
	Top 10% average	418	1,276	858	205%
February	Max flow	1,572	2,601	1,029	65%
	Top 10% average	658	1,530	873	133%
March	Max flow	1,342	2,520	1,179	88%
	Top 10% average	471	1,281	809	172%
April	Max flow	406	1,285	879	217%
	Top 10% average	291	926	635	218%
May	Max flow	284	644	360	127%
	Top 10% average	280	458	178	64%

cfs = cubic feet per second

Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5%.

Table A1-369. Flow and Storage Changes on the Feather River during October through May from the 45 Scenario

	Feather River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Oroville Reservoir Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	9,481	11,135	1,655	17%	Wet	2,241	2,047	-194	-9%
	Top 10% average	6,913	6,990	78	1%	Above normal	1,836	1,692	-144	-8%
November	Max flow	21,639	22,621	981	5%	Wet	2,311	2,101	-210	-9%
	Top 10% average	8,801	10,868	2,067	23%	Above normal	1,887	1,736	-151	-8%
December	Max flow	40,167	40,722	555	1%	Wet	2,561	2,325	-235	-9%
	Top 10% average	28,174	27,395	-780	-3%	Above normal	1,984	1,826	-158	-8%
January	Max flow	66,475	66,454	-20	0%	Wet	2,769	2,506	-263	-9%
	Top 10% average	37,501	35,909	-1,592	-4%	Above normal	2,340	2,091	-250	-11%
February	Max flow	54,456	50,829	-3,627	-7%	Wet	2,885	2,747	-138	-5%
	Top 10% average	35,270	33,110	-2,160	-6%	Above normal	2,586	2,359	-227	-9%
March	Max flow	54,566	49,996	-4,570	-8%	Wet	2,947	2,913	-34	-1%
	Top 10% average	37,927	34,568	-3,360	-9%	Above normal	2,891	2,668	-224	-8%
April	Max flow	36,622	36,627	5	0%	Wet	3,322	3,257	-65	-2%
	Top 10% average	25,641	25,038	-604	-2%	Above normal	3,344	2,962	-382	-11%
May	Max flow	29,766	29,721	-45	0%	Wet	3,524	3,438	-86	-2%
	Top 10% average	23,254	23,507	253	1%	Above normal	3,511	3,056	-455	-13%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-370. Flow and Storage Changes on the Mokelumne River during October through May from the 45 Scenario

	Mokelumne River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Camanche Reservoir Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	961	1,030	69	7%	Wet	284	281	-3	-1%
	Top 10% average	365	359	-6	-2%	Above normal	249	247	-3	-1%
November	Max flow	3,984	2,965	-1,020	-26%	Wet	281	278	-3	-1%
	Top 10% average	1,281	1,239	-43	-3%	Above normal	239	244	5	2%
December	Max flow	3,767	3,766	-1	0%	Wet	291	289	-2	-1%
	Top 10% average	2,471	2,360	-111	-4%	Above normal	239	247	8	4%
January	Max flow	6,335	6,335	0	0%	Wet	303	298	-6	-2%
	Top 10% average	2,992	3,044	52	2%	Above normal	260	262	2	1%
February	Max flow	5,565	5,117	-448	-8%	Wet	304	302	-2	-1%
	Top 10% average	2,748	2,549	-198	-7%	Above normal	282	280	-2	-1%
March	Max flow	3,474	3,474	0	0%	Wet	322	314	-7	-2%
	Top 10% average	2,186	2,192	6	0%	Above normal	313	298	-15	-5%
April	Max flow	4,364	4,365	0	0%	Wet	346	323	-23	-7%
	Top 10% average	2,341	2,334	-7	0%	Above normal	347	304	-43	-12%
May	Max flow	3,721	3,774	53	1%	Wet	356	312	-44	-12%
	Top 10% average	3,135	3,177	43	1%	Above normal	372	289	-83	-22%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-371. Flow and Storage Changes on Putah Creek during October through May from the 45 Scenario

	Putah Creek flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Lake Berryessa Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	941	974	32	3%	Wet	1,073	988	-85	-8%
	Top 10% average	130	142	12	9%	Above normal	920	886	-34	-4%
November	Max flow	24	666	642	2679%	Wet	1,088	995	-93	-9%
	Top 10% average	22	367	345	1542%	Above normal	923	887	-36	-4%
December	Max flow	1,495	1,780	286	19%	Wet	1,184	1,049	-135	-11%
	Top 10% average	254	1,196	941	370%	Above normal	971	913	-58	-6%
January	Max flow	4,813	3,213	-1,600	-33%	Wet	1,305	1,134	-171	-13%
	Top 10% average	1,713	2,163	450	26%	Above normal	1,082	973	-109	-10%
February	Max flow	6,187	1,107	-5,081	-82%	Wet	1,397	1,215	-182	-13%
	Top 10% average	2,981	609	-2,372	-80%	Above normal	1,203	1,043	-160	-13%
March	Max flow	5,725	4,757	-968	-17%	Wet	1,442	1,268	-174	-12%
	Top 10% average	2,278	1,785	-493	-22%	Above normal	1,252	1,076	-176	-14%
April	Max flow	3,390	1,592	-1,798	-53%	Wet	1,450	1,289	-161	-11%
	Top 10% average	1,818	1,043	-775	-43%	Above normal	1,256	1,077	-179	-14%
May	Max flow	306	301	-5	-2%	Wet	1,426	1,265	-161	-11%
	Top 10% average	86	231	145	167%	Above normal	1,233	1,063	-170	-14%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-372. Flow and Storage Changes on the Sacramento River at Knights Landing during October through May from the 45 Scenario

	Sacramento River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Lake Shasta Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	14,007	13,888	-119	-1%	Wet	3,044	2,981	-63	-2%
	Top 10% average	11,650	11,626	-24	0%	Above normal	2,726	2,709	-16	-1%
November	Max flow	21,263	21,245	-18	0%	Wet	3,125	3,064	-61	-2%
	Top 10% average	17,163	16,849	-313	-2%	Above normal	2,745	2,747	2	0%
December	Max flow	22,301	22,349	47	0%	Wet	3,252	3,239	-13	0%
	Top 10% average	21,495	21,480	-15	0%	Above normal	2,897	2,890	-7	0%
January	Max flow	23,406	23,357	-49	0%	Wet	3,470	3,455	-15	0%
	Top 10% average	22,617	22,616	-1	0%	Above normal	3,357	3,349	-7	0%
February	Max flow	24,394	22,301	-2,093	-9%	Wet	3,623	3,625	2	0%
	Top 10% average	23,061	21,495	-1,566	-7%	Above normal	3,589	3,584	-5	0%
March	Max flow	23,579	23,579	0	0%	Wet	3,897	3,895	-2	0%
	Top 10% average	22,263	22,283	20	0%	Above normal	4,050	4,048	-2	0%
April	Max flow	22,033	22,033	0	0%	Wet	4,358	4,345	-12	0%
	Top 10% average	20,770	20,771	1	0%	Above normal	4,506	4,501	-5	0%
May	Max flow	19,495	19,381	-114	-1%	Wet	4,518	4,481	-37	-1%
	Top 10% average	16,870	16,770	-101	-1%	Above normal	4,510	4,492	-19	0%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-373. Flow and Storage Changes on Stony Creek during October through May from the 45 Scenario

	Stony Creek flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	Black Butte Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October	Max flow	933	933	0	0%	Wet	40	35	-5	-13%
	Top 10% average	584	674	90	15%	Above normal	39	29	-10	-27%
November	Max flow	1,739	1,708	-30	-2%	Wet	29	27	-2	-6%
	Top 10% average	1,003	766	-237	-24%	Above normal	28	24	-3	-12%
December	Max flow	4,539	4,509	-30	-1%	Wet	30	29	-1	-3%
	Top 10% average	3,056	2,817	-239	-8%	Above normal	29	27	-2	-7%
January	Max flow	8,078	7,512	-566	-7%	Wet	31	31	0	-1%
	Top 10% average	4,740	4,628	-112	-2%	Above normal	31	31	0	-1%
February	Max flow	8,585	8,555	-30	0%	Wet	80	73	-7	-8%
	Top 10% average	4,879	4,825	-53	-1%	Above normal	81	78	-2	-3%
March	Max flow	6,390	6,388	-1	0%	Wet	124	113	-11	-9%
	Top 10% average	3,212	3,181	-31	-1%	Above normal	126	119	-7	-5%
April	Max flow	3,343	3,339	-4	0%	Wet	134	124	-10	-7%
	Top 10% average	1,997	1,950	-47	-2%	Above normal	136	128	-8	-6%
May	Max flow	1,324	1,422	98	7%	Wet	133	124	-10	-7%
	Top 10% average	846	953	107	13%	Above normal	136	128	-8	-6%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-374. Flow and Storage Changes on the Yuba River during October through May from the 45 Scenario

	Yuba River flow (cfs)	Existing Condition	45 Scenario	Difference	Percent Change	New Bullards Bar Storage (TAF)	Existing Condition	45 Scenario	Difference	Percent Change
October [a]	Max flow	4,278	4,279	1	0%	Wet	603	665	61	10%
	Top 10% average	941	995	54	6%	Above normal	553	600	48	9%
November [a]	Max flow	5,063	9,451	4,388	87%	Wet	630	669	39	6%
	Top 10% average	2,796	4,129	1,333	48%	Above normal	566	605	39	7%
December	Max flow	15,368	15,794	426	3%	Wet	686	729	43	6%
	Top 10% average	9,906	10,026	120	1%	Above normal	578	621	43	7%
January	Max flow	22,279	22,259	-21	0%	Wet	716	758	42	6%
	Top 10% average	11,715	11,933	218	2%	Above normal	645	666	21	3%
February	Max flow	19,091	20,674	1,583	8%	Wet	759	780	22	3%
	Top 10% average	9,885	10,827	942	10%	Above normal	705	728	23	3%
March	Max flow	15,119	15,216	97	1%	Wet	776	796	20	3%
	Top 10% average	10,720	11,256	535	5%	Above normal	774	787	12	2%
April	Max flow	11,621	11,639	18	0%	Wet	870	889	19	2%
	Top 10% average	7,447	7,545	98	1%	Above normal	855	878	23	3%
May	Max flow	10,564	10,564	0	0%	Wet	946	947	1	0%
	Top 10% average	8,199	8,349	150	2%	Above normal	939	940	1	0%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

[a] Flows in October and November are inflated due to an operation nuance in SacWAM. The October and November flows are not higher than the max flows in the wettest months and do not affect the analysis.

Table A1-375. Flow and Storage Changes on the American River during October through May from the 55 Scenario

	American River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Camp Far West storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	3,828	5,022	1,195	31%	Wet	609	631	22	4%
	Top 10% average	2,213	2,383	170	8%	Above normal	541	559	18	3%
November	Max flow	19,216	18,940	-276	-1%	Wet	537	552	16	3%
	Top 10% average	9,099	8,908	-192	-2%	Above normal	471	490	19	4%
December	Max flow	23,246	24,527	1,281	6%	Wet	534	540	7	1%
	Top 10% average	15,651	15,756	105	1%	Above normal	488	494	6	1%
January	Max flow	28,322	28,394	72	0%	Wet	543	543	0	0%
	Top 10% average	15,824	15,918	94	1%	Above normal	548	540	-8	-1%
February	Max flow	30,920	30,924	4	0%	Wet	523	524	0	0%
	Top 10% average	15,051	15,037	-14	0%	Above normal	548	548	0	0%
March	Max flow	16,944	16,944	0	0%	Wet	634	628	-7	-1%
	Top 10% average	12,739	12,852	113	1%	Above normal	643	641	-2	0%
April	Max flow	14,755	14,755	0	0%	Wet	795	754	-41	-5%
	Top 10% average	9,048	9,094	46	1%	Above normal	797	729	-69	-9%
May	Max flow	11,440	11,451	11	0%	Wet	970	867	-103	-11%
	Top 10% average	9,346	9,457	111	1%	Above normal	972	803	-169	-17%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-376. Flow and Storage Changes on the Bear River during October through May from the 55 Scenario

	Bear River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	2,242	2,899	656	29%	Wet	50	46	-4	-8%
	Top 10% average	377	448	71	19%	Above normal	44	40	-4	-8%
November	Max flow	2,439	3,013	574	24%	Wet	79	61	-17	-22%
	Top 10% average	1,283	1,661	378	29%	Above normal	65	52	-13	-20%
December	Max flow	4,566	4,279	-287	-6%	Wet	94	87	-7	-7%
	Top 10% average	3,752	3,304	-448	-12%	Above normal	81	68	-13	-16%
January	Max flow	6,016	6,021	5	0%	Wet	94	93	-1	-1%
	Top 10% average	4,538	4,422	-116	-3%	Above normal	94	87	-7	-7%
February	Max flow	7,649	7,632	-17	0%	Wet	94	94	0	0%
	Top 10% average	4,796	4,720	-76	-2%	Above normal	94	92	-1	-2%
March	Max flow	5,445	5,431	-14	0%	Wet	94	94	0	0%
	Top 10% average	3,966	3,904	-62	-2%	Above normal	94	94	0	0%
April	Max flow	4,271	4,297	26	1%	Wet	94	94	0	0%
	Top 10% average	2,720	2,710	-11	0%	Above normal	94	94	0	0%
May	Max flow	1,571	1,571	0	0%	Wet	94	92	-2	-2%
	Top 10% average	1,059	1,041	-18	-2%	Above normal	94	88	-5	-6%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-377. Flow and Storage Changes on Cache Creek during October through May from the 55 Scenario

	Cache Creek flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Clear Lake Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	656	655	-1	0%	Wet	906	899	-8	-1%
	Top 10% average	155	163	8	5%	Above normal	872	861	-11	-1%
November	Max flow	556	924	367	66%	Wet	930	920	-10	-1%
	Top 10% average	231	295	65	28%	Above normal	889	878	-11	-1%
December	Max flow	4,922	4,244	-678	-14%	Wet	1,038	1,015	-24	-2%
	Top 10% average	1,664	2,123	459	28%	Above normal	940	925	-15	-2%
January	Max flow	6,895	6,398	-496	-7%	Wet	1,126	1,102	-23	-2%
	Top 10% average	4,347	4,052	-295	-7%	Above normal	1,051	1,019	-31	-3%
February	Max flow	11,608	10,453	-1,155	-10%	Wet	1,152	1,142	-10	-1%
	Top 10% average	6,315	5,552	-763	-12%	Above normal	1,121	1,088	-33	-3%
March	Max flow	8,516	8,516	0	0%	Wet	1,155	1,152	-3	0%
	Top 10% average	4,515	4,040	-474	-11%	Above normal	1,146	1,113	-34	-3%
April	Max flow	3,761	3,761	0	0%	Wet	1,151	1,144	-7	-1%
	Top 10% average	2,412	2,276	-136	-6%	Above normal	1,139	1,098	-41	-4%
May	Max flow	363	576	213	59%	Wet	1,113	1,101	-12	-1%
	Top 10% average	167	408	241	145%	Above normal	1,103	1,059	-44	-4%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-378. Flow and Storage Changes on the Calaveras River during October through May from the 55 Scenario

	Calaveras River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	New Hogan Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	31	45	14	46%	Wet	118	124	6	5%
	Top 10% average	7	27	20	283%	Above normal	103	117	14	14%
November	Max flow	1,039	1,039	0	0%	Wet	119	126	7	6%
	Top 10% average	405	379	-25	-6%	Above normal	102	113	11	11%
December	Max flow	1,509	1,530	21	1%	Wet	135	135	0	0%
	Top 10% average	973	986	13	1%	Above normal	107	117	10	9%
January	Max flow	2,967	2,962	-5	0%	Wet	156	150	-6	-4%
	Top 10% average	1,559	1,561	1	0%	Above normal	139	134	-6	-4%
February	Max flow	3,313	3,227	-87	-3%	Wet	172	164	-8	-5%
	Top 10% average	2,137	2,094	-43	-2%	Above normal	160	147	-13	-8%
March	Max flow	2,608	2,608	0	0%	Wet	187	178	-9	-5%
	Top 10% average	1,766	1,642	-124	-7%	Above normal	187	166	-21	-11%
April	Max flow	845	907	62	7%	Wet	220	195	-25	-12%
	Top 10% average	283	484	201	71%	Above normal	203	173	-30	-15%
May	Max flow	0	204	203	48365%	Wet	215	188	-27	-12%
	Top 10% average	0	116	115	30573%	Above normal	191	167	-24	-13%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-379. Flow Changes on Clear Creek during October through May from the 55 Scenario

	Clear Creek flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	209	2,151	1,941	927%
	Top 10% average	204	421	217	106%
November	Max flow	293	1,137	843	288%
	Top 10% average	216	557	341	158%
December	Max flow	354	1,310	955	269%
	Top 10% average	292	1,072	780	267%
January	Max flow	651	2,375	1,724	265%
	Top 10% average	418	1,560	1,141	273%
February	Max flow	1,572	3,179	1,607	102%
	Top 10% average	658	1,870	1,213	184%
March	Max flow	1,342	3,080	1,738	130%
	Top 10% average	471	1,565	1,094	232%
April	Max flow	406	1,571	1,165	287%
	Top 10% average	291	1,132	841	289%
May	Max flow	284	787	504	177%
	Top 10% average	280	559	279	100%

cfs = cubic feet per second

Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5%.

Table A1-380. Flow and Storage Changes on the Feather River during October through May from the 55 Scenario

	Feather River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Oroville Reservoir Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	9,481	13,608	4,127	44%	Wet	2,241	2,027	-214	-10%
	Top 10% average	6,913	7,145	233	3%	Above normal	1,836	1,579	-257	-14%
November	Max flow	21,639	22,777	1,138	5%	Wet	2,311	2,075	-236	-10%
	Top 10% average	8,801	11,982	3,181	36%	Above normal	1,887	1,615	-272	-14%
December	Max flow	40,167	40,592	425	1%	Wet	2,561	2,272	-289	-11%
	Top 10% average	28,174	28,038	-137	0%	Above normal	1,984	1,660	-324	-16%
January	Max flow	66,475	62,210	-4,265	-6%	Wet	2,769	2,449	-320	-12%
	Top 10% average	37,501	35,528	-1,973	-5%	Above normal	2,340	1,870	-470	-20%
February	Max flow	54,456	53,840	-617	-1%	Wet	2,885	2,657	-227	-8%
	Top 10% average	35,270	33,405	-1,865	-5%	Above normal	2,586	2,122	-464	-18%
March	Max flow	54,566	49,980	-4,585	-8%	Wet	2,947	2,831	-116	-4%
	Top 10% average	37,927	34,116	-3,812	-10%	Above normal	2,891	2,416	-475	-16%
April	Max flow	36,622	36,436	-186	-1%	Wet	3,322	3,136	-186	-6%
	Top 10% average	25,641	25,212	-430	-2%	Above normal	3,344	2,651	-693	-21%
May	Max flow	29,766	29,714	-52	0%	Wet	3,524	3,276	-248	-7%
	Top 10% average	23,254	23,221	-33	0%	Above normal	3,511	2,688	-823	-23%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-381. Flow and Storage Changes on the Mokelumne River during October through May from the 55 Scenario

	Mokelumne River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Camanche Reservoir Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	961	1,080	119	12%	Wet	284	274	-10	-4%
	Top 10% average	365	385	20	5%	Above normal	249	239	-11	-4%
November	Max flow	3,984	3,010	-974	-24%	Wet	281	272	-9	-3%
	Top 10% average	1,281	1,249	-33	-3%	Above normal	239	238	-1	0%
December	Max flow	3,767	3,634	-133	-4%	Wet	291	285	-6	-2%
	Top 10% average	2,471	2,259	-211	-9%	Above normal	239	242	4	1%
January	Max flow	6,335	6,336	0	0%	Wet	303	294	-9	-3%
	Top 10% average	2,992	2,945	-47	-2%	Above normal	260	257	-3	-1%
February	Max flow	5,565	4,841	-724	-13%	Wet	304	299	-6	-2%
	Top 10% average	2,748	2,511	-237	-9%	Above normal	282	273	-9	-3%
March	Max flow	3,474	3,474	0	0%	Wet	322	309	-12	-4%
	Top 10% average	2,186	2,134	-51	-2%	Above normal	313	284	-29	-9%
April	Max flow	4,364	4,364	0	0%	Wet	346	311	-35	-10%
	Top 10% average	2,341	2,390	48	2%	Above normal	347	283	-63	-18%
May	Max flow	3,721	3,821	100	3%	Wet	356	294	-62	-17%
	Top 10% average	3,135	3,255	120	4%	Above normal	372	265	-107	-29%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-382. Flow and Storage Changes on Putah Creek during October through May from the 55 Scenario

	Putah Creek flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Lake Berryessa Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	941	978	37	4%	Wet	1,073	1,041	-32	-3%
	Top 10% average	130	148	18	14%	Above normal	920	965	45	5%
November	Max flow	24	813	789	3294%	Wet	1,088	1,047	-41	-4%
	Top 10% average	22	448	426	1904%	Above normal	923	965	42	5%
December	Max flow	1,495	2,145	650	43%	Wet	1,184	1,090	-94	-8%
	Top 10% average	254	1,467	1,213	477%	Above normal	971	986	16	2%
January	Max flow	4,813	3,891	-922	-19%	Wet	1,305	1,159	-146	-11%
	Top 10% average	1,713	2,622	909	53%	Above normal	1,082	1,035	-47	-4%
February	Max flow	6,187	4,471	-1,716	-28%	Wet	1,397	1,224	-173	-12%
	Top 10% average	2,981	286	-2,695	-90%	Above normal	1,203	1,093	-110	-9%
March	Max flow	5,725	4,780	-945	-17%	Wet	1,442	1,266	-176	-12%
	Top 10% average	2,278	2,114	-163	-7%	Above normal	1,252	1,120	-132	-11%
April	Max flow	3,390	1,944	-1,446	-43%	Wet	1,450	1,285	-165	-11%
	Top 10% average	1,818	1,252	-567	-31%	Above normal	1,256	1,121	-135	-11%
May	Max flow	306	368	62	20%	Wet	1,426	1,271	-155	-11%
	Top 10% average	86	281	195	225%	Above normal	1,233	1,109	-124	-10%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-383. Flow and Storage Changes on the Sacramento River at Knights Landing during October through May from the 55 Scenario

	Sacramento River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Lake Shasta Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	14,007	13,888	-119	-1%	Wet	3,044	2,887	-157	-5%
	Top 10% average	11,650	11,626	-24	0%	Above normal	2,726	2,708	-17	-1%
November	Max flow	21,263	21,245	-18	0%	Wet	3,125	2,959	-166	-5%
	Top 10% average	17,163	16,849	-313	-2%	Above normal	2,745	2,756	11	0%
December	Max flow	22,301	22,349	47	0%	Wet	3,252	3,199	-53	-2%
	Top 10% average	21,495	21,480	-15	0%	Above normal	2,897	2,885	-13	0%
January	Max flow	23,406	23,357	-49	0%	Wet	3,470	3,445	-25	-1%
	Top 10% average	22,617	22,616	-1	0%	Above normal	3,357	3,346	-11	0%
February	Max flow	24,394	22,301	-2,093	-9%	Wet	3,623	3,613	-10	0%
	Top 10% average	23,061	21,495	-1,566	-7%	Above normal	3,589	3,580	-9	0%
March	Max flow	23,579	23,579	0	0%	Wet	3,897	3,869	-28	-1%
	Top 10% average	22,263	22,283	20	0%	Above normal	4,050	4,031	-19	0%
April	Max flow	22,033	22,033	0	0%	Wet	4,358	4,295	-62	-1%
	Top 10% average	20,770	20,771	1	0%	Above normal	4,506	4,449	-57	-1%
May	Max flow	19,495	19,381	-114	-1%	Wet	4,518	4,412	-107	-2%
	Top 10% average	16,870	16,770	-101	-1%	Above normal	4,510	4,396	-115	-3%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-384. Flow and Storage Changes on Stony Creek during October through May from the 55 Scenario

	Stony Creek flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	Black Butte Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October	Max flow	933	933	0	0%	Wet	40	32	-9	-21%
	Top 10% average	584	713	129	22%	Above normal	39	27	-12	-31%
November	Max flow	1,739	1,708	-30	-2%	Wet	29	25	-3	-12%
	Top 10% average	1,003	725	-278	-28%	Above normal	28	23	-4	-16%
December	Max flow	4,539	4,509	-30	-1%	Wet	30	29	-1	-4%
	Top 10% average	3,056	2,707	-350	-11%	Above normal	29	24	-5	-16%
January	Max flow	8,078	7,419	-659	-8%	Wet	31	31	0	-1%
	Top 10% average	4,740	4,603	-137	-3%	Above normal	31	30	-1	-3%
February	Max flow	8,585	8,555	-30	0%	Wet	80	70	-9	-12%
	Top 10% average	4,879	4,760	-119	-2%	Above normal	81	75	-5	-6%
March	Max flow	6,390	6,388	-1	0%	Wet	124	108	-16	-13%
	Top 10% average	3,212	3,173	-39	-1%	Above normal	126	114	-12	-9%
April	Max flow	3,343	3,339	-4	0%	Wet	134	119	-15	-11%
	Top 10% average	1,997	1,922	-75	-4%	Above normal	136	123	-13	-10%
May	Max flow	1,324	1,422	98	7%	Wet	133	118	-15	-11%
	Top 10% average	846	974	127	15%	Above normal	136	121	-14	-10%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-385. Flow and Storage Changes on the Yuba River during October through May from the 55 Scenario

	Yuba River flow (cfs)	Existing Condition	55 Scenario	Difference	Percent Change	New Bullards Bar Storage (TAF)	Existing Condition	55 Scenario	Difference	Percent Change
October [a]	Max flow	4,278	6,140	1,862	44%	Wet	603	635	32	5%
	Top 10% average	941	1,297	356	38%	Above normal	553	575	22	4%
November [a]	Max flow	5,063	12,506	7,443	147%	Wet	630	624	-7	-1%
	Top 10% average	2,796	5,142	2,346	84%	Above normal	566	575	9	2%
December	Max flow	15,368	14,946	-422	-3%	Wet	686	688	2	0%
	Top 10% average	9,906	9,657	-249	-3%	Above normal	578	594	15	3%
January	Max flow	22,279	21,864	-415	-2%	Wet	716	735	19	3%
	Top 10% average	11,715	11,640	-75	-1%	Above normal	645	642	-3	0%
February	Max flow	19,091	19,119	27	0%	Wet	759	778	19	3%
	Top 10% average	9,885	10,215	330	3%	Above normal	705	694	-11	-2%
March	Max flow	15,119	14,891	-228	-2%	Wet	776	796	20	3%
	Top 10% average	10,720	11,126	406	4%	Above normal	774	756	-19	-2%
April	Max flow	11,621	11,118	-503	-4%	Wet	870	880	10	1%
	Top 10% average	7,447	7,634	186	3%	Above normal	855	829	-26	-3%
May	Max flow	10,564	10,564	0	0%	Wet	946	930	-16	-2%
	Top 10% average	8,199	8,470	270	3%	Above normal	939	872	-67	-7%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

[a] Flows in October and November are inflated due to an operation nuance in SacWAM. The October and November flows are not higher than the max flows in the wettest months and do not affect the analysis.

Table A1-386. Flow and Storage Changes on the American River during October through May from the 65 Scenario

	American River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	3,828	3,638	-190	-5%	Wet	609	599	-10	-2%
	Top 10% average	2,213	2,304	91	4%	Above normal	541	532	-9	-2%
November	Max flow	19,216	18,815	-401	-2%	Wet	537	531	-6	-1%
	Top 10% average	9,099	8,346	-754	-8%	Above normal	471	462	-9	-2%
December	Max flow	23,246	23,161	-86	0%	Wet	534	526	-8	-1%
	Top 10% average	15,651	15,354	-297	-2%	Above normal	488	467	-21	-4%
January	Max flow	28,322	28,519	196	1%	Wet	543	540	-3	-1%
	Top 10% average	15,824	15,578	-245	-2%	Above normal	548	516	-32	-6%
February	Max flow	30,920	30,868	-52	0%	Wet	523	524	1	0%
	Top 10% average	15,051	14,610	-441	-3%	Above normal	548	538	-9	-2%
March	Max flow	16,944	16,944	0	0%	Wet	634	620	-14	-2%
	Top 10% average	12,739	12,728	-11	0%	Above normal	643	634	-9	-1%
April	Max flow	14,755	14,755	0	0%	Wet	795	710	-84	-11%
	Top 10% average	9,048	9,675	627	7%	Above normal	797	680	-117	-15%
May	Max flow	11,440	11,812	373	3%	Wet	970	771	-199	-21%
	Top 10% average	9,346	10,381	1,035	11%	Above Normal	972	705	-267	-27%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-387. Flow and Storage Changes on the Bear River during October through May from the 65 Scenario

	Bear River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	2,242	2,792	550	25%	Wet	50	39	-11	-22%
	Top 10% average	377	457	81	21%	Above normal	44	31	-12	-28%
November	Max flow	2,439	2,553	114	5%	Wet	79	52	-27	-34%
	Top 10% average	1,283	1,497	213	17%	Above normal	65	41	-24	-37%
December	Max flow	4,566	4,018	-547	-12%	Wet	94	79	-14	-15%
	Top 10% average	3,752	3,228	-524	-14%	Above normal	81	55	-26	-33%
January	Max flow	6,016	5,906	-111	-2%	Wet	94	90	-4	-4%
	Top 10% average	4,538	4,222	-316	-7%	Above normal	94	73	-21	-22%
February	Max flow	7,649	7,069	-580	-8%	Wet	94	94	0	0%
	Top 10% average	4,796	4,493	-303	-6%	Above normal	94	88	-6	-6%
March	Max flow	5,445	5,463	18	0%	Wet	94	94	0	0%
	Top 10% average	3,966	3,811	-155	-4%	Above normal	94	92	-1	-1%
April	Max flow	4,271	4,264	-7	0%	Wet	94	94	0	0%
	Top 10% average	2,720	2,705	-15	-1%	Above normal	94	93	-1	-1%
May	Max flow	1,571	1,571	0	0%	Wet	94	90	-4	-4%
	Top 10% average	1,059	1,042	-17	-2%	Above normal	94	84	-10	-10%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-388. Flow and Storage Changes on Cache Creek during October through May from the 65 Scenario

	Cache Creek flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Clear Lake Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	656	653	-4	-1%	Wet	906	901	-5	-1%
	Top 10% average	155	166	10	7%	Above normal	872	862	-10	-1%
November	Max flow	556	945	389	70%	Wet	930	922	-8	-1%
	Top 10% average	231	325	94	41%	Above normal	889	879	-10	-1%
December	Max flow	4,922	4,101	-821	-17%	Wet	1,038	1,015	-23	-2%
	Top 10% average	1,664	2,345	681	41%	Above normal	940	926	-15	-2%
January	Max flow	6,895	5,951	-944	-14%	Wet	1,126	1,100	-26	-2%
	Top 10% average	4,347	4,342	-5	0%	Above normal	1,051	1,019	-31	-3%
February	Max flow	11,608	9,900	-1,708	-15%	Wet	1,152	1,140	-12	-1%
	Top 10% average	6,315	5,537	-778	-12%	Above normal	1,121	1,084	-36	-3%
March	Max flow	8,516	8,516	0	0%	Wet	1,155	1,151	-4	0%
	Top 10% average	4,515	4,038	-476	-11%	Above normal	1,146	1,104	-42	-4%
April	Max flow	3,761	3,500	-261	-7%	Wet	1,151	1,140	-11	-1%
	Top 10% average	2,412	2,253	-159	-7%	Above normal	1,139	1,089	-50	-4%
May	Max flow	363	681	318	88%	Wet	1,113	1,097	-16	-1%
	Top 10% average	167	482	316	189%	Above normal	1,103	1,053	-50	-5%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-389. Flow and Storage Changes on the Calaveras River during October through May from the 65 Scenario

	Calaveras River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	New Hogan Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	31	53	22	73%	Wet	118	121	3	2%
	Top 10% average	7	31	24	343%	Above normal	103	109	6	6%
November	Max flow	1,039	1,039	0	0%	Wet	119	119	1	1%
	Top 10% average	405	560	155	38%	Above normal	102	104	2	2%
December	Max flow	1,509	1,595	86	6%	Wet	135	127	-7	-6%
	Top 10% average	973	1,010	37	4%	Above normal	107	108	0	0%
January	Max flow	2,967	2,961	-7	0%	Wet	156	141	-15	-10%
	Top 10% average	1,559	1,581	22	1%	Above normal	139	123	-16	-12%
February	Max flow	3,313	3,036	-277	-8%	Wet	172	155	-17	-10%
	Top 10% average	2,137	2,052	-85	-4%	Above normal	160	134	-26	-16%
March	Max flow	2,608	2,608	0	0%	Wet	187	170	-18	-9%
	Top 10% average	1,766	1,612	-154	-9%	Above normal	187	149	-38	-20%
April	Max flow	845	1,031	186	22%	Wet	220	182	-38	-17%
	Top 10% average	283	555	273	97%	Above normal	203	155	-49	-24%
May	Max flow	0	240	240	57140%	Wet	215	178	-37	-17%
	Top 10% average	0	137	136	36141%	Above normal	191	148	-43	-22%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-390. Flow Changes on Clear Creek during October through May from the 65 Scenario

	Clear Creek flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	209	245	35	17%
	Top 10% average	204	211	6	3%
November	Max flow	293	1,343	1,050	358%
	Top 10% average	216	658	442	205%
December	Max flow	354	1,547	1,193	337%
	Top 10% average	292	1,267	975	334%
January	Max flow	651	2,806	2,156	331%
	Top 10% average	418	1,843	1,425	341%
February	Max flow	1,572	3,757	2,185	139%
	Top 10% average	658	2,210	1,553	236%
March	Max flow	1,342	3,640	2,298	171%
	Top 10% average	471	1,849	1,378	292%
April	Max flow	406	1,856	1,451	358%
	Top 10% average	291	1,338	1,047	360%
May	Max flow	284	930	647	228%
	Top 10% average	280	661	381	136%

cfs = cubic feet per second

Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5%.

Table A1-391. Flow and Storage Changes on the Feather River during October through May from the 65 Scenario

	Feather River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Oroville Reservoir Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	9,481	16,086	6,605	70%	Wet	2,241	2,158	-84	-4%
	Top 10% average	6,913	6,466	-446	-6%	Above normal	1,836	1,707	-129	-7%
November	Max flow	21,639	22,802	1,162	5%	Wet	2,311	2,190	-121	-5%
	Top 10% average	8,801	12,618	3,817	43%	Above normal	1,887	1,747	-139	-7%
December	Max flow	40,167	40,628	461	1%	Wet	2,561	2,329	-232	-9%
	Top 10% average	28,174	29,183	1,009	4%	Above normal	1,984	1,791	-193	-10%
January	Max flow	66,475	63,296	-3,179	-5%	Wet	2,769	2,489	-280	-10%
	Top 10% average	37,501	36,966	-536	-1%	Above normal	2,340	1,950	-390	-17%
February	Max flow	54,456	58,349	3,893	7%	Wet	2,885	2,659	-226	-8%
	Top 10% average	35,270	34,002	-1,268	-4%	Above normal	2,586	2,145	-441	-17%
March	Max flow	54,566	49,992	-4,574	-8%	Wet	2,947	2,789	-159	-5%
	Top 10% average	37,927	34,089	-3,839	-10%	Above normal	2,891	2,358	-533	-18%
April	Max flow	36,622	36,609	-13	0%	Wet	3,322	3,019	-303	-9%
	Top 10% average	25,641	26,908	1,267	5%	Above normal	3,344	2,527	-817	-24%
May	Max flow	29,766	29,725	-41	0%	Wet	3,524	3,075	-449	-13%
	Top 10% average	23,254	24,947	1,694	7%	Above normal	3,511	2,522	-989	-28%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-392. Flow and Storage Changes on the Mokelumne River during October through May from the 65 Scenario

	Mokelumne River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Camanche Reservoir Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	961	1,130	169	18%	Wet	284	263	-21	-8%
	Top 10% average	365	422	57	16%	Above normal	249	224	-25	-10%
November	Max flow	3,984	3,061	-923	-23%	Wet	281	263	-18	-6%
	Top 10% average	1,281	1,275	-6	0%	Above normal	239	223	-16	-7%
December	Max flow	3,767	3,184	-583	-15%	Wet	291	275	-16	-6%
	Top 10% average	2,471	2,253	-218	-9%	Above normal	239	231	-7	-3%
January	Max flow	6,335	6,313	-23	0%	Wet	303	285	-18	-6%
	Top 10% average	2,992	2,795	-197	-7%	Above normal	260	246	-14	-5%
February	Max flow	5,565	4,944	-621	-11%	Wet	304	290	-15	-5%
	Top 10% average	2,748	2,524	-224	-8%	Above normal	282	259	-22	-8%
March	Max flow	3,474	3,474	0	0%	Wet	322	297	-25	-8%
	Top 10% average	2,186	2,250	64	3%	Above normal	313	265	-48	-15%
April	Max flow	4,364	4,364	0	0%	Wet	346	296	-50	-14%
	Top 10% average	2,341	2,530	189	8%	Above normal	347	263	-84	-24%
May	Max flow	3,721	4,028	308	8%	Wet	356	279	-77	-22%
	Top 10% average	3,135	3,645	510	16%	Above normal	372	246	-126	-34%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-393. Flow and Storage Changes on Putah Creek during October through May from the 65 Scenario

	Putah Creek flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Lake Berryessa Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	941	983	42	4%	Wet	1,073	884	-189	-18%
	Top 10% average	130	153	23	18%	Above normal	920	831	-89	-10%
November	Max flow	24	960	936	3908%	Wet	1,088	888	-200	-18%
	Top 10% average	22	529	507	2266%	Above normal	923	831	-93	-10%
December	Max flow	1,495	2,509	1,014	68%	Wet	1,184	921	-263	-22%
	Top 10% average	254	1,700	1,445	568%	Above normal	971	847	-124	-13%
January	Max flow	4,813	4,569	-244	-5%	Wet	1,305	974	-331	-25%
	Top 10% average	1,713	3,079	1,367	80%	Above normal	1,082	884	-198	-18%
February	Max flow	6,187	0	-6,187	-100%	Wet	1,397	1,024	-373	-27%
	Top 10% average	2,981	0	-2,981	-100%	Above normal	1,203	931	-272	-23%
March	Max flow	5,725	3,781	-1,944	-34%	Wet	1,442	1,060	-382	-26%
	Top 10% average	2,278	2,230	-48	-2%	Above normal	1,252	952	-300	-24%
April	Max flow	3,390	2,298	-1,092	-32%	Wet	1,450	1,074	-376	-26%
	Top 10% average	1,818	1,427	-391	-22%	Above normal	1,256	954	-302	-24%
May	Max flow	306	431	125	41%	Wet	1,426	1,060	-366	-26%
	Top 10% average	86	331	244	283%	Above normal	1,233	945	-288	-23%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-394. Flow and Storage Changes on the Sacramento River at Knights Landing during October through May from the 65 Scenario

	Sacramento River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Lake Shasta Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	14,007	13,888	-119	-1%	Wet	3,044	2,892	-152	-5%
	Top 10% average	11,650	11,626	-24	0%	Above normal	2,726	2,581	-144	-5%
November	Max flow	21,263	21,245	-18	0%	Wet	3,125	2,963	-162	-5%
	Top 10% average	17,163	16,849	-313	-2%	Above normal	2,745	2,661	-84	-3%
December	Max flow	22,301	22,349	47	0%	Wet	3,252	3,200	-52	-2%
	Top 10% average	21,495	21,480	-15	0%	Above normal	2,897	2,855	-42	-1%
January	Max flow	23,406	23,357	-49	0%	Wet	3,470	3,414	-57	-2%
	Top 10% average	22,617	22,616	-1	0%	Above normal	3,357	3,266	-91	-3%
February	Max flow	24,394	22,301	-2,093	-9%	Wet	3,623	3,588	-35	-1%
	Top 10% average	23,061	21,495	-1,566	-7%	Above normal	3,589	3,486	-103	-3%
March	Max flow	23,579	23,579	0	0%	Wet	3,897	3,830	-67	-2%
	Top 10% average	22,263	22,283	20	0%	Above normal	4,050	3,928	-122	-3%
April	Max flow	22,033	22,033	0	0%	Wet	4,358	4,191	-167	-4%
	Top 10% average	20,770	20,771	1	0%	Above normal	4,506	4,267	-240	-5%
May	Max flow	19,495	19,381	-114	-1%	Wet	4,518	4,274	-244	-5%
	Top 10% average	16,870	16,770	-101	-1%	Above normal	4,510	4,185	-326	-7%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-395. Flow and Storage Changes on Stony Creek during October through May from the 65 Scenario

	Stony Creek flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	Black Butte Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October	Max flow	933	933	0	0%	Wet	40	31	-9	-22%
	Top 10% average	584	722	137	24%	Above normal	39	25	-14	-36%
November	Max flow	1,739	1,709	-30	-2%	Wet	29	25	-4	-15%
	Top 10% average	1,003	761	-242	-24%	Above normal	28	22	-5	-19%
December	Max flow	4,539	4,509	-30	-1%	Wet	30	27	-3	-10%
	Top 10% average	3,056	2,623	-433	-14%	Above normal	29	24	-5	-18%
January	Max flow	8,078	7,224	-854	-11%	Wet	31	30	-1	-3%
	Top 10% average	4,740	4,542	-198	-4%	Above normal	31	29	-2	-5%
February	Max flow	8,585	8,555	-30	0%	Wet	80	65	-15	-19%
	Top 10% average	4,879	4,702	-177	-4%	Above normal	81	69	-12	-15%
March	Max flow	6,390	6,388	-1	0%	Wet	124	98	-26	-21%
	Top 10% average	3,212	3,162	-50	-2%	Above normal	126	102	-24	-19%
April	Max flow	3,343	3,074	-269	-8%	Wet	134	111	-24	-18%
	Top 10% average	1,997	1,835	-163	-8%	Above normal	136	109	-27	-20%
May	Max flow	1,324	1,422	98	7%	Wet	133	109	-24	-18%
	Top 10% average	846	966	120	14%	Above normal	136	107	-29	-21%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-396. Flow and Storage Changes on the Yuba River during October through May from the 65 Scenario -

	Yuba River flow (cfs)	Existing Condition	65 Scenario	Difference	Percent Change	New Bullards Bar Storage (TAF)	Existing Condition	65 Scenario	Difference	Percent Change
October [a]	Max flow	4,278	8,878	4,600	108%	Wet	603	623	20	3%
	Top 10% average	941	1,713	772	82%	Above normal	553	578	25	5%
November [a]	Max flow	5,063	11,126	6,063	120%	Wet	630	616	-14	-2%
	Top 10% average	2,796	5,115	2,319	83%	Above normal	566	560	-6	-1%
December	Max flow	15,368	14,027	-1,342	-9%	Wet	686	669	-17	-3%
	Top 10% average	9,906	10,052	146	1%	Above normal	578	578	0	0%
January	Max flow	22,279	21,603	-677	-3%	Wet	716	707	-9	-1%
	Top 10% average	11,715	11,948	233	2%	Above normal	645	626	-19	-3%
February	Max flow	19,091	19,872	781	4%	Wet	759	742	-17	-2%
	Top 10% average	9,885	10,577	692	7%	Above normal	705	677	-28	-4%
March	Max flow	15,119	14,363	-756	-5%	Wet	776	777	0	0%
	Top 10% average	10,720	10,679	-41	0%	Above normal	774	733	-42	-5%
April	Max flow	11,621	11,443	-178	-2%	Wet	870	849	-21	-2%
	Top 10% average	7,447	7,953	505	7%	Above normal	855	784	-71	-8%
May	Max flow	10,564	10,564	0	0%	Wet	946	899	-47	-5%
	Top 10% average	8,199	8,938	739	9%	Above normal	939	821	-118	-13%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

[a] Flows in October and November are inflated due to an operation nuance in SacWAM. The October and November flows are not higher than the max flows in the wettest months and do not affect the analysis.

Table A1-397. Flow and Storage Changes on the American River during October through May from the 75 Scenario

	American River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	3,828	4,197	369	10%	Wet	609	470	-139	-23%
	Top 10% average	2,213	2,154	-59	-3%	Above normal	541	361	-180	-33%
November	Max flow	19,216	14,466	-4,751	-25%	Wet	537	420	-117	-22%
	Top 10% average	9,099	6,993	-2,106	-23%	Above normal	471	337	-134	-28%
December	Max flow	23,246	19,784	-3,462	-15%	Wet	534	460	-74	-14%
	Top 10% average	15,651	13,181	-2,470	-16%	Above normal	488	340	-148	-30%
January	Max flow	28,322	28,862	540	2%	Wet	543	478	-65	-12%
	Top 10% average	15,824	14,957	-867	-5%	Above normal	548	392	-156	-28%
February	Max flow	30,920	28,000	-2,920	-9%	Wet	523	501	-22	-4%
	Top 10% average	15,051	13,156	-1,895	-13%	Above normal	548	448	-100	-18%
March	Max flow	16,944	16,185	-759	-4%	Wet	634	589	-46	-7%
	Top 10% average	12,739	12,179	-560	-4%	Above normal	643	522	-121	-19%
April	Max flow	14,755	15,551	796	5%	Wet	795	623	-172	-22%
	Top 10% average	9,048	10,746	1,698	19%	Above normal	797	529	-268	-34%
May	Max flow	11,440	13,630	2,190	19%	Wet	970	621	-349	-36%
	Top 10% average	9,346	11,929	2,584	28%	Above normal	972	520	-452	-46%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-398. Flow and Storage Changes on the Bear River during October through May from the 75 Scenario

	Bear River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Camp Far West Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	2,242	3,080	838	37%	Wet	50	27	-22	-45%
	Top 10% average	377	512	135	36%	Above normal	44	29	-14	-33%
November	Max flow	2,439	2,569	129	5%	Wet	79	33	-46	-58%
	Top 10% average	1,283	1,401	117	9%	Above normal	65	34	-31	-48%
December	Max flow	4,566	3,644	-922	-20%	Wet	94	57	-37	-39%
	Top 10% average	3,752	2,763	-989	-26%	Above normal	81	42	-40	-49%
January	Max flow	6,016	5,787	-229	-4%	Wet	94	77	-17	-18%
	Top 10% average	4,538	3,770	-768	-17%	Above normal	94	55	-39	-42%
February	Max flow	7,649	6,291	-1,358	-18%	Wet	94	92	-2	-2%
	Top 10% average	4,796	4,069	-727	-15%	Above normal	94	71	-23	-25%
March	Max flow	5,445	5,382	-63	-1%	Wet	94	93	0	0%
	Top 10% average	3,966	3,709	-257	-6%	Above normal	94	85	-9	-9%
April	Max flow	4,271	4,209	-62	-1%	Wet	94	93	0	0%
	Top 10% average	2,720	2,588	-132	-5%	Above normal	94	87	-6	-7%
May	Max flow	1,571	1,571	0	0%	Wet	94	85	-9	-9%
	Top 10% average	1,059	957	-102	-10%	Above normal	94	72	-21	-23%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-399. Flow and Storage Changes on Cache Creek during October through May from the 75 Scenario

	Cache Creek flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Clear Lake Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	656	648	-8	-1%	Wet	906	907	0	0%
	Top 10% average	155	169	14	9%	Above normal	872	866	-6	-1%
November	Max flow	556	1,090	534	96%	Wet	930	927	-3	0%
	Top 10% average	231	370	139	60%	Above normal	889	883	-7	-1%
December	Max flow	4,922	4,280	-642	-13%	Wet	1,038	1,018	-21	-2%
	Top 10% average	1,664	2,616	952	57%	Above normal	940	928	-12	-1%
January	Max flow	6,895	6,866	-29	0%	Wet	1,126	1,100	-26	-2%
	Top 10% average	4,347	4,640	293	7%	Above normal	1,051	1,021	-29	-3%
February	Max flow	11,608	9,190	-2,419	-21%	Wet	1,152	1,137	-15	-1%
	Top 10% average	6,315	5,757	-558	-9%	Above normal	1,121	1,083	-37	-3%
March	Max flow	8,516	8,516	0	0%	Wet	1,155	1,146	-9	-1%
	Top 10% average	4,515	4,127	-387	-9%	Above normal	1,146	1,097	-50	-4%
April	Max flow	3,761	3,340	-421	-11%	Wet	1,151	1,136	-16	-1%
	Top 10% average	2,412	2,247	-165	-7%	Above normal	1,139	1,083	-55	-5%
May	Max flow	363	786	423	116%	Wet	1,113	1,095	-18	-2%
	Top 10% average	167	556	390	234%	Above normal	1,103	1,053	-50	-5%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-400. Flow and Storage Changes on the Calaveras River during October through May from the 75 Scenario

	Calaveras River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	New Hogan Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	31	61	30	99%	Wet	118	92	-26	-22%
	Top 10% average	7	36	28	403%	Above normal	103	88	-15	-15%
November	Max flow	1,039	1,039	0	0%	Wet	119	92	-26	-22%
	Top 10% average	405	421	16	4%	Above normal	102	83	-19	-19%
December	Max flow	1,509	1,475	-34	-2%	Wet	135	99	-35	-26%
	Top 10% average	973	1,031	58	6%	Above normal	107	86	-22	-20%
January	Max flow	2,967	2,519	-448	-15%	Wet	156	113	-43	-28%
	Top 10% average	1,559	1,527	-33	-2%	Above normal	139	97	-43	-31%
February	Max flow	3,313	2,854	-460	-14%	Wet	172	126	-47	-27%
	Top 10% average	2,137	2,054	-83	-4%	Above normal	160	105	-54	-34%
March	Max flow	2,608	2,608	0	0%	Wet	187	140	-47	-25%
	Top 10% average	1,766	1,556	-209	-12%	Above normal	187	116	-70	-38%
April	Max flow	845	1,164	320	38%	Wet	220	148	-72	-33%
	Top 10% average	283	631	348	123%	Above normal	203	120	-83	-41%
May	Max flow	0	277	277	65878%	Wet	215	143	-72	-33%
	Top 10% average	0	158	157	41682%	Above normal	191	114	-77	-40%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-401. Flow Changes on Clear Creek during October through May from the 75 Scenario

	Clear Creek flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	209	282	72	35%
	Top 10% average	204	221	17	8%
November	Max flow	293	1,550	1,257	428%
	Top 10% average	216	759	543	252%
December	Max flow	354	1,785	1,431	404%
	Top 10% average	292	1,462	1,170	400%
January	Max flow	651	3,238	2,587	398%
	Top 10% average	418	2,127	1,708	408%
February	Max flow	1,572	4,335	2,763	176%
	Top 10% average	658	2,550	1,893	288%
March	Max flow	1,342	4,200	2,858	213%
	Top 10% average	471	2,134	1,662	353%
April	Max flow	406	2,142	1,736	428%
	Top 10% average	291	1,543	1,253	431%
May	Max flow	284	1,073	789	278%
	Top 10% average	280	762	483	172%

cfs = cubic feet per second

Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5%.

Table A1-402. Flow and Storage Changes on the Feather River during October through May from the 75 Scenario

	Feather River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Oroville Reservoir Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	9,481	14,498	5,017	53%	Wet	2,241	2,036	-205	-9%
	Top 10% average	6,913	5,001	-1,912	-28%	Above normal	1,836	1,686	-150	-8%
November	Max flow	21,639	22,019	380	2%	Wet	2,311	2,113	-199	-9%
	Top 10% average	8,801	12,368	3,568	41%	Above normal	1,887	1,741	-146	-8%
December	Max flow	40,167	42,339	2,172	5%	Wet	2,561	2,200	-361	-14%
	Top 10% average	28,174	31,372	3,198	11%	Above normal	1,984	1,759	-225	-11%
January	Max flow	66,475	60,522	-5,952	-9%	Wet	2,769	2,315	-454	-16%
	Top 10% average	37,501	36,879	-623	-2%	Above normal	2,340	1,865	-475	-20%
February	Max flow	54,456	61,966	7,509	14%	Wet	2,885	2,444	-441	-15%
	Top 10% average	35,270	34,203	-1,067	-3%	Above normal	2,586	2,004	-582	-23%
March	Max flow	54,566	50,006	-4,560	-8%	Wet	2,947	2,528	-419	-14%
	Top 10% average	37,927	35,585	-2,342	-6%	Above normal	2,891	2,134	-757	-26%
April	Max flow	36,622	36,854	232	1%	Wet	3,322	2,673	-650	-20%
	Top 10% average	25,641	29,153	3,512	14%	Above normal	3,344	2,238	-1106	-33%
May	Max flow	29,766	31,454	1,688	6%	Wet	3,524	2,671	-853	-24%
	Top 10% average	23,254	27,483	4,230	18%	Above normal	3,511	2,200	-1311	-37%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-403. Flow and Storage Changes on the Mokelumne River during October through May from the 75 Scenario

	Mokelumne River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Camanche Reservoir Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	961	1,180	219	23%	Wet	284	230	-54	-19%
	Top 10% average	365	433	68	19%	Above normal	249	185	-65	-26%
November	Max flow	3,984	3,454	-531	-13%	Wet	281	231	-50	-18%
	Top 10% average	1,281	1,309	28	2%	Above normal	239	186	-53	-22%
December	Max flow	3,767	3,678	-89	-2%	Wet	291	240	-51	-18%
	Top 10% average	2,471	2,444	-27	-1%	Above normal	239	192	-47	-20%
January	Max flow	6,335	6,326	-9	0%	Wet	303	253	-51	-17%
	Top 10% average	2,992	2,847	-145	-5%	Above normal	260	205	-55	-21%
February	Max flow	5,565	4,832	-734	-13%	Wet	304	259	-46	-15%
	Top 10% average	2,748	2,506	-241	-9%	Above normal	282	217	-64	-23%
March	Max flow	3,474	3,474	0	0%	Wet	322	262	-60	-19%
	Top 10% average	2,186	2,523	337	15%	Above normal	313	220	-94	-30%
April	Max flow	4,364	4,085	-279	-6%	Wet	346	259	-87	-25%
	Top 10% average	2,341	2,813	472	20%	Above normal	347	218	-129	-37%
May	Max flow	3,721	4,648	927	25%	Wet	356	241	-115	-32%
	Top 10% average	3,135	4,135	1,000	32%	Above normal	372	203	-169	-45%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-404. Flow and Storage Changes on Putah Creek during October through May from the 75 Scenario

	Putah Creek flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Lake Berryessa Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	941	991	50	5%	Wet	1,073	863	-210	-20%
	Top 10% average	130	160	30	23%	Above normal	920	832	-88	-10%
November	Max flow	24	1,107	1,083	4518%	Wet	1,088	866	-222	-20%
	Top 10% average	22	609	587	2623%	Above normal	923	832	-91	-10%
December	Max flow	1,495	2,876	1,381	92%	Wet	1,184	889	-295	-25%
	Top 10% average	254	1,952	1,698	668%	Above normal	971	844	-127	-13%
January	Max flow	4,813	5,248	435	9%	Wet	1,305	926	-379	-29%
	Top 10% average	1,713	3,538	1,826	107%	Above normal	1,082	870	-213	-20%
February	Max flow	6,187	6,025	-162	-3%	Wet	1,397	961	-436	-31%
	Top 10% average	2,981	3,954	973	33%	Above normal	1,203	905	-299	-25%
March	Max flow	5,725	4,365	-1,361	-24%	Wet	1,442	985	-456	-32%
	Top 10% average	2,278	2,574	297	13%	Above normal	1,252	919	-333	-27%
April	Max flow	3,390	2,646	-744	-22%	Wet	1,450	995	-455	-31%
	Top 10% average	1,818	1,648	-170	-9%	Above normal	1,256	920	-336	-27%
May	Max flow	306	496	190	62%	Wet	1,426	988	-439	-31%
	Top 10% average	86	381	294	341%	Above normal	1,233	914	-319	-26%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-405. Flow and Storage Changes on the Sacramento River at Knights Landing during October through May from the 75 Scenario

	Sacramento River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Lake Shasta Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	14,007	13,888	-119	-1%	Wet	3,044	2,965	-79	-3%
	Top 10% average	11,650	11,626	-24	0%	Above normal	2,726	2,743	17	1%
November	Max flow	21,263	21,245	-18	0%	Wet	3,125	3,018	-107	-3%
	Top 10% average	17,163	16,849	-313	-2%	Above normal	2,745	2,782	38	1%
December	Max flow	22,301	22,349	47	0%	Wet	3,252	3,169	-83	-3%
	Top 10% average	21,495	21,480	-15	0%	Above normal	2,897	2,939	42	1%
January	Max flow	23,406	23,357	-49	0%	Wet	3,470	3,343	-128	-4%
	Top 10% average	22,617	22,616	-1	0%	Above normal	3,357	3,230	-127	-4%
February	Max flow	24,394	22,301	-2,093	-9%	Wet	3,623	3,502	-121	-3%
	Top 10% average	23,061	21,495	-1,566	-7%	Above normal	3,589	3,373	-216	-6%
March	Max flow	23,579	23,579	0	0%	Wet	3,897	3,755	-142	-4%
	Top 10% average	22,263	22,283	20	0%	Above normal	4,050	3,715	-335	-8%
April	Max flow	22,033	22,033	0	0%	Wet	4,358	4,049	-308	-7%
	Top 10% average	20,770	20,771	1	0%	Above normal	4,506	3,978	-529	-12%
May	Max flow	19,495	19,381	-114	-1%	Wet	4,518	4,138	-380	-8%
	Top 10% average	16,870	16,770	-101	-1%	Above normal	4,510	3,945	-566	-13%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-406. Flow and Storage Changes on Stony Creek during October through May from the 75 Scenario

	Stony Creek flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	Black Butte Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October	Max flow	933	933	0	0%	Wet	40	30	-10	-26%
	Top 10% average	584	725	141	24%	Above normal	39	23	-16	-42%
November	Max flow	1,739	1,708	-30	-2%	Wet	29	24	-5	-16%
	Top 10% average	1,003	787	-216	-21%	Above normal	28	21	-6	-22%
December	Max flow	4,539	4,509	-30	-1%	Wet	30	25	-5	-17%
	Top 10% average	3,056	2,717	-340	-11%	Above normal	29	21	-8	-27%
January	Max flow	8,078	7,168	-910	-11%	Wet	31	27	-4	-12%
	Top 10% average	4,740	4,482	-258	-5%	Above normal	31	24	-7	-24%
February	Max flow	8,585	8,301	-285	-3%	Wet	80	56	-24	-30%
	Top 10% average	4,879	4,623	-255	-5%	Above normal	81	48	-32	-40%
March	Max flow	6,390	6,388	-1	0%	Wet	124	83	-41	-33%
	Top 10% average	3,212	3,132	-80	-2%	Above normal	126	72	-53	-43%
April	Max flow	3,343	2,742	-601	-18%	Wet	134	92	-42	-31%
	Top 10% average	1,997	1,843	-155	-8%	Above normal	136	76	-60	-44%
May	Max flow	1,324	1,422	98	7%	Wet	133	91	-43	-32%
	Top 10% average	846	969	123	15%	Above normal	136	73	-62	-46%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

Table A1-407. Flow and Storage Changes on the Yuba River during October through May from the 75 Scenario

	Yuba River flow (cfs)	Existing Condition	75 Scenario	Difference	Percent Change	New Bullards Bar Storage (TAF)	Existing Condition	75 Scenario	Difference	Percent Change
October [a]	Max flow	4,278	6,918	2,640	62%	Wet	603	502	-102	-17%
	Top 10% average	941	1,607	666	71%	Above normal	553	459	-94	-17%
November [a]	Max flow	5,063	9,920	4,857	96%	Wet	630	483	-147	-23%
	Top 10% average	2,796	5,939	3,143	112%	Above normal	566	447	-119	-21%
December	Max flow	15,368	16,183	815	5%	Wet	686	515	-171	-25%
	Top 10% average	9,906	10,911	1,005	10%	Above normal	578	454	-125	-22%
January	Max flow	22,279	22,098	-182	-1%	Wet	716	566	-150	-21%
	Top 10% average	11,715	11,846	131	1%	Above normal	645	485	-160	-25%
February	Max flow	19,091	19,800	709	4%	Wet	759	614	-144	-19%
	Top 10% average	9,885	10,367	482	5%	Above normal	705	528	-178	-25%
March	Max flow	15,119	14,334	-785	-5%	Wet	776	656	-121	-16%
	Top 10% average	10,720	11,000	280	3%	Above normal	774	582	-192	-25%
April	Max flow	11,621	11,691	70	1%	Wet	870	705	-165	-19%
	Top 10% average	7,447	8,626	1,178	16%	Above normal	855	613	-242	-28%
May	Max flow	10,564	10,908	344	3%	Wet	946	737	-209	-22%
	Top 10% average	8,199	9,856	1,656	20%	Above normal	939	635	-304	-32%

cfs = cubic feet per second

TAF = thousand acre-feet

Storage changes are shown for wet and above-normal water years. Gray shaded area shows months with highest flood risk and red cells are months with a flow increase of > 100 cfs or > 5% and with a storage increased of > 10 TAF or > 5%.

[a] Flows in October and November are inflated due to an operation nuance in SacWAM. The October and November flows are not higher than the max flows in the wettest months and do not affect the analysis.

A1.12.8 Water Supply

In this section, SacWAM results for water supply are presented by water budget area (WBA), other logical groupings of demand sites within the model domain but outside of the valley floor (upper watershed and foothill, San Francisco Bay Area), CVP contract type, and SWP contract type. The values presented by WBA include total water supplied, including surface water and groundwater to the demand locations by water year. Results presented for CVP and SWP deliveries include only surface supplies and also are summarized by water year. All water supply results are presented as simple aggregations of transmission link flows to the set of demand sites identified for each summary. WBAs in the Sacramento Valley include water delivered to SWP and CVP contractors in those WBAs.

WBAs with no changes are presented first, followed by annual exceedance distribution and water year type averaged results for each WBA separated by use (agriculture, urban, and refuge). CVP and SWP delivery results are presented last.

Supply to some WBAs is unchanged or nearly so in all scenarios because the WBA has a surface supply that is not reduced as a result of assumptions made for each of the scenarios described in Section A1.2, *Implementation of Proposed Plan Amendments*, or all sources originate from groundwater supply, which was assumed not to change. Table A1-408 lists the WBAs with the same supply in the unimpaired flow scenarios as the baseline scenario.

Table A1-408. Water Budget Areas with Constant Supply in All of the Scenarios

Water Budget Area	Demand Type	Reason for Constant Supply
Water Budget Areas 4 and 6	Urban	Groundwater only
Water Budget Area 5	Urban	Groundwater only
Water Budget Area 7	Urban	Groundwater only
Water Budget Area 8	Urban	Groundwater only
Water Budget Area 9	Urban	Groundwater only
Water Budget Area 10	Urban	Groundwater only
Water Budget Areas 14 and 15N	Urban	Demands fully met in all scenarios
Water Budget Area 15S	Urban	Groundwater only
Water Budget Area 17	Urban	Groundwater only
Water Budget Areas 18 and 19	Urban	Groundwater only
Water Budget Area 22	Urban	Groundwater only
Water Budget Area 23	Urban	Groundwater only
Water Budget Area 26	Agriculture	Groundwater only
Water Budget Area 61N	Agriculture and Urban	Groundwater and San Joaquin sources only

A1.12.8.1 Water Budget Area 2 (Ag)

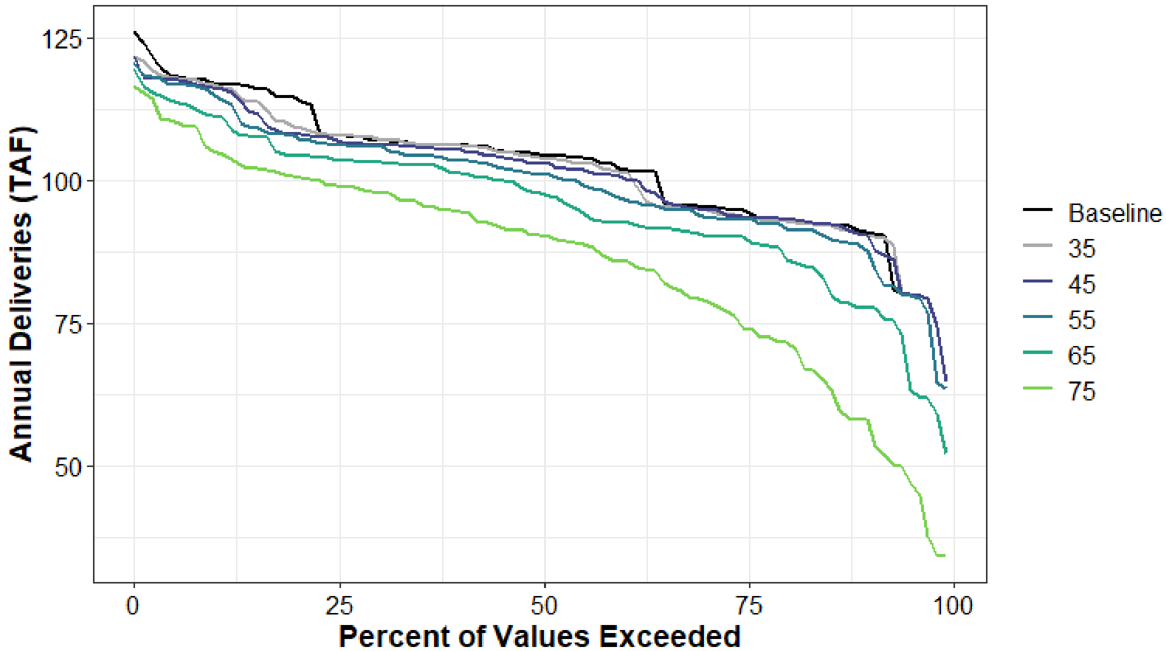

Figure A1-171. Total Water Supplied to Water Budget Area 2 (Ag) Annual Percent Exceedance Plot

Table A1-409. Total Water Supplied to Water Budget Area 2 (Ag) Annual Exceedance Probability Distribution Scenario (TAF)

	Baseline	35	45	55	65	75
0%	126	122	122	121	119	117
10%	117	117	116	115	111	105
20%	114	109	108	107	104	101
30%	107	107	106	106	103	98
40%	106	106	105	104	101	94
50%	104	104	103	101	98	90
60%	102	102	101	97	93	86
70%	95	95	95	94	90	79
80%	93	93	93	92	87	72
90%	91	90	90	88	78	58
100%	65	65	65	64	52	34
Mean	103	102	101	100	95	86

Table A1-410. Total Water Supplied to Water Budget Area 2 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	111	104	102	94	85	67
D	105	105	105	106	101	83
BN	104	104	103	100	95	83
AN	100	101	100	100	96	93
W	97	97	97	98	96	96
All	103	102	101	100	95	86

A1.12.8.2 Water Budget Area 2 (Urban)

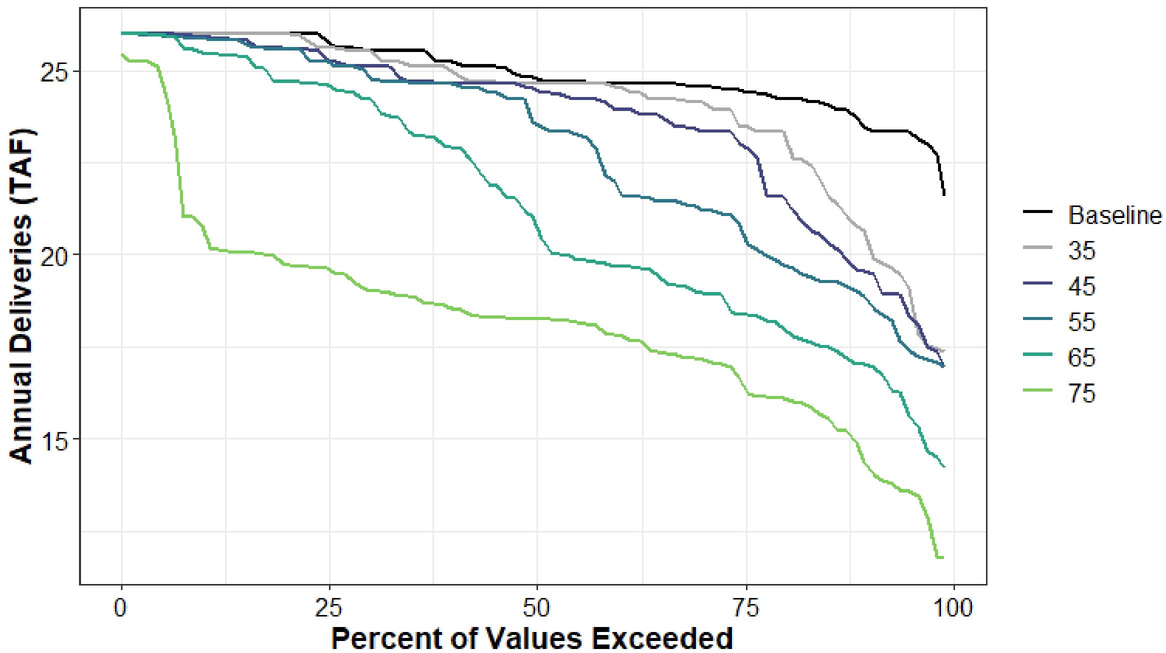

Figure A1-172. Total Water Supplied to Water Budget Area 2 (Urban) Annual Percent Exceedance Plot

Table A1-411. Total Water Supplied to Water Budget Area 2 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	26	26	26	26	26	25.4
10%	26	26	26	26	25.5	20.6
20%	26	26	25.6	25.6	24.7	19.7
30%	25.6	25.5	25.1	24.9	24.2	19
40%	25.2	25	24.7	24.6	22.9	18.6
50%	24.8	24.7	24.5	23.6	21	18.3
60%	24.7	24.6	23.9	21.9	19.7	17.8
70%	24.6	24.1	23.4	21.3	19	17.2
80%	24.2	23.3	21.6	19.8	18.1	16.1
90%	23.5	20.7	19.6	18.9	17	14.5
100%	21.6	17.4	16.9	17	14.2	11.8
Mean	24.9	24.1	23.6	22.8	21.2	18.2

Table A1-412. Total Water Supplied to Water Budget Area 2 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	24.5	20.1	19.9	19.7	17.5	15.7
D	24.8	24.2	22.9	20.3	18.5	17.3
BN	24.4	24.3	24.1	23.1	20.3	17.1
AN	25.5	25.4	25.1	25	23.6	18.2
W	25.3	25.3	25.2	25.2	24.8	20.8
All	24.9	24.1	23.6	22.8	21.2	18.2

A1.12.8.3 Water Budget Area 3 (Ag)

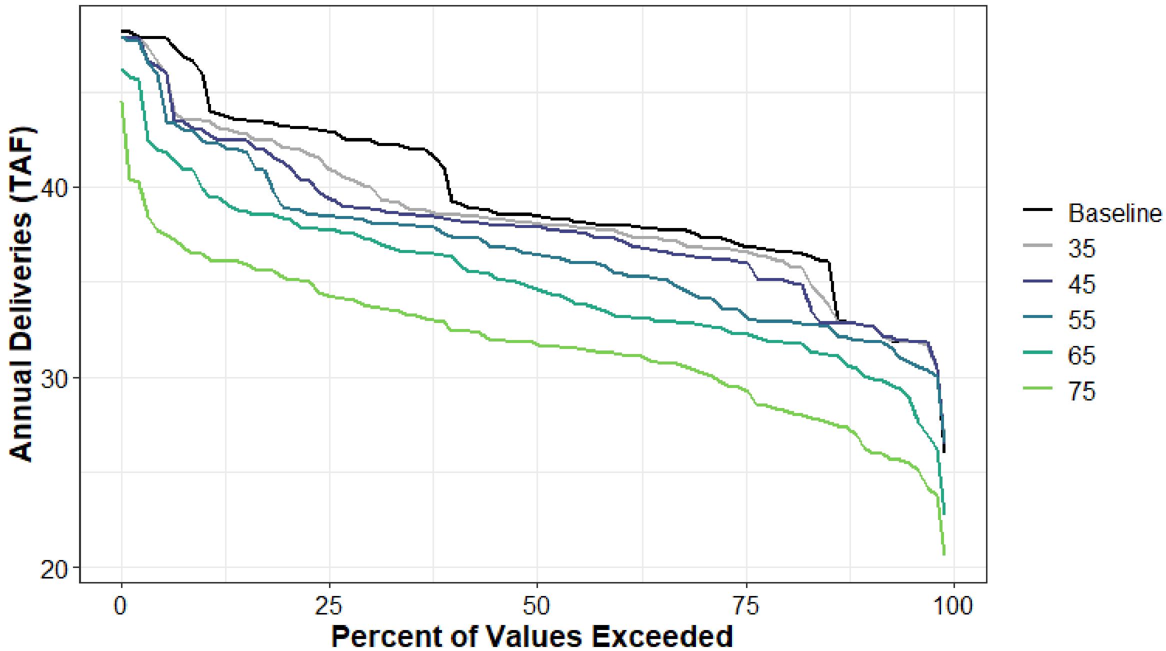

Figure A1-173. Total Water Supplied to Water Budget Area 3 (Ag) Annual Percent Exceedance Plot

Table A1-413. Total Water Supplied to Water Budget Area 3 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	48	48	48	48	46	44
10%	46	43	43	42	40	36
20%	43	42	41	39	38	35
30%	42	40	39	38	37	34
40%	40	39	38	37	36	33
50%	39	38	38	37	35	32
60%	38	38	37	35	33	31
70%	37	37	36	34	33	30
80%	37	36	35	33	32	28
90%	33	33	33	32	30	26
100%	26	27	26	27	23	21
Mean	39	38	38	37	35	32

Table A1-414. Total Water Supplied to Water Budget Area 3 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	43	38	37	36	34	32
D	41	40	39	36	34	31
BN	39	39	38	37	33	30
AN	37	37	37	38	36	31
W	38	38	37	37	37	34
All	39	38	38	37	35	32

A1.12.8.4 Water Budget Area 3 (Urban)

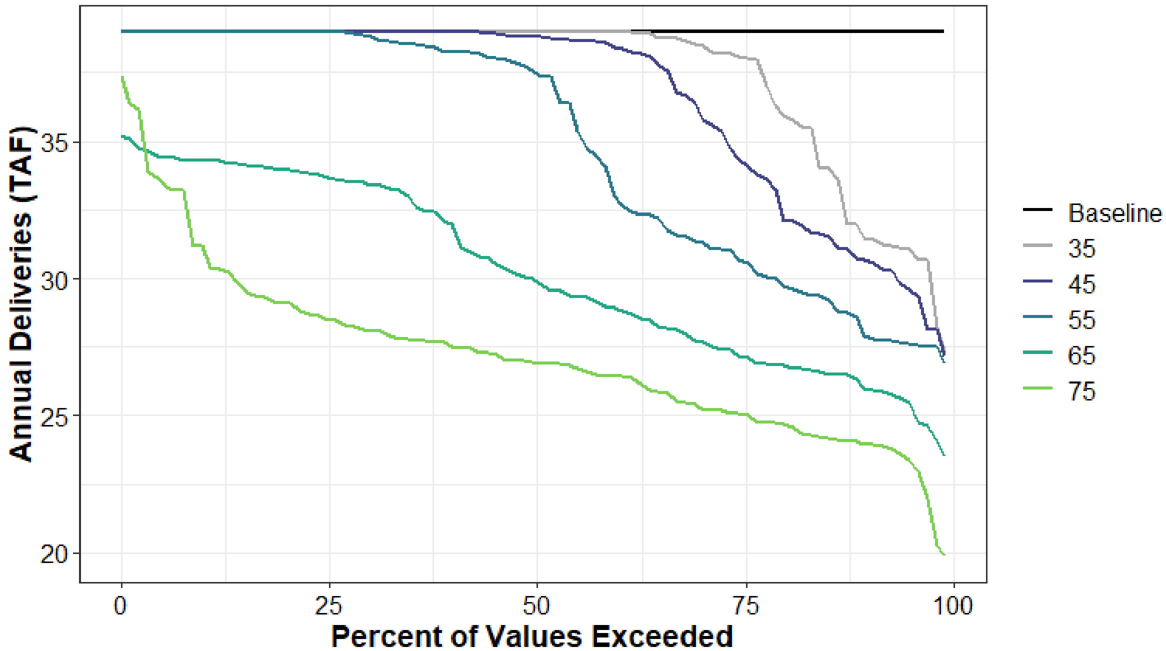

Figure A1-174. Total Water Supplied to Water Budget Area 3 (Urban) Annual Percent Exceedance Plot

Table A1-415. Total Water Supplied to Water Budget Area 3 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	39	39	39	39	35	37
10%	39	39	39	39	34	31
20%	39	39	39	39	34	29
30%	39	39	39	39	33	28
40%	39	39	39	38	32	28
50%	39	39	39	38	30	27
60%	39	39	38	33	29	26
70%	39	39	36	31	28	25
80%	39	36	33	30	27	25
90%	39	32	31	28	26	24
100%	39	27	27	27	23	20
Mean	39	37	37	35	30	27

Table A1-416. Total Water Supplied to Water Budget Area 3 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	39	32	31	30	27	26
D	39	37	35	30	27	26
BN	39	39	38	36	29	26
AN	39	39	39	38	32	26
W	39	39	39	39	34	30
All	39	37	37	35	30	27

A1.12.8.5 Water Budget Areas 4 & 6 (Ag)

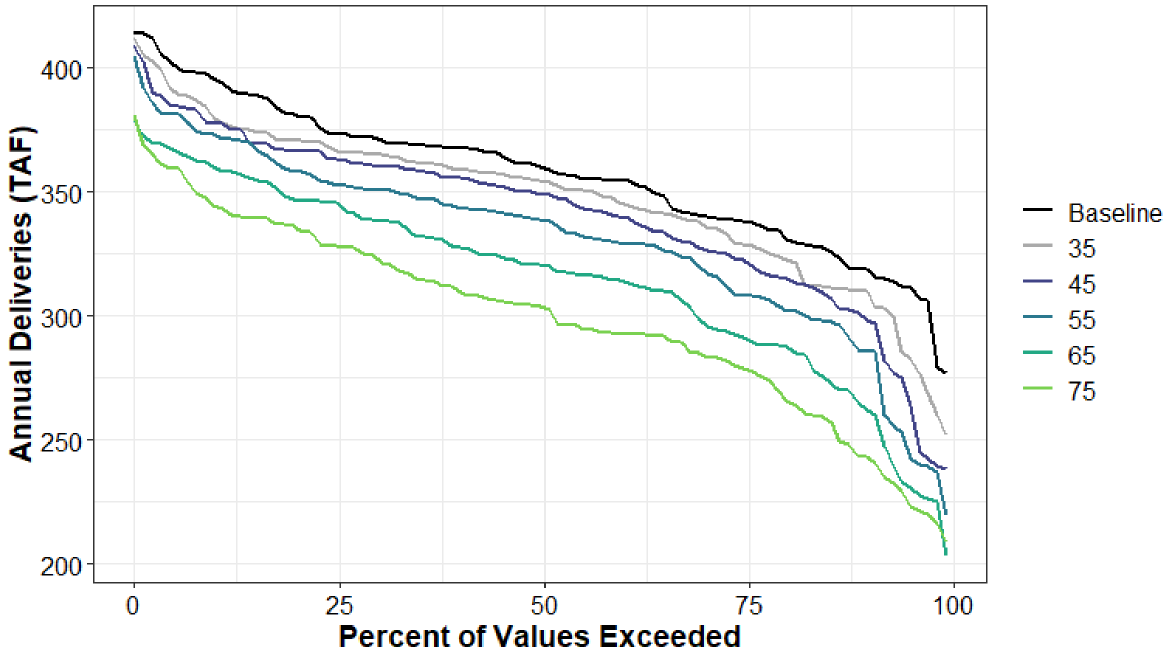

Figure A1-175. Total Water Supplied to Water Budget Areas 4 & 6 (Ag) Annual Percent Exceedance Plot

Table A1-417. Total Water Supplied to Water Budget Areas 4 & 6 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	415	412	409	405	379	381
10%	395	380	378	373	360	344
20%	381	371	367	358	347	335
30%	371	365	361	351	339	323
40%	368	359	356	344	328	310
50%	360	355	349	339	321	304
60%	355	346	340	330	314	293
70%	341	337	327	319	298	284
80%	332	323	316	303	288	267
90%	319	310	299	286	263	243
100%	277	252	238	220	203	209
Mean	357	347	341	331	315	300

Table A1-418. Total Water Supplied to Water Budget Areas 4 & 6 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	384	363	355	344	335	324
D	367	362	356	347	333	317
BN	361	359	356	347	326	312
AN	343	339	332	327	310	287
W	340	325	315	304	286	272
All	357	347	341	331	315	300

A1.12.8.6 Water Budget Area 5 (Ag)

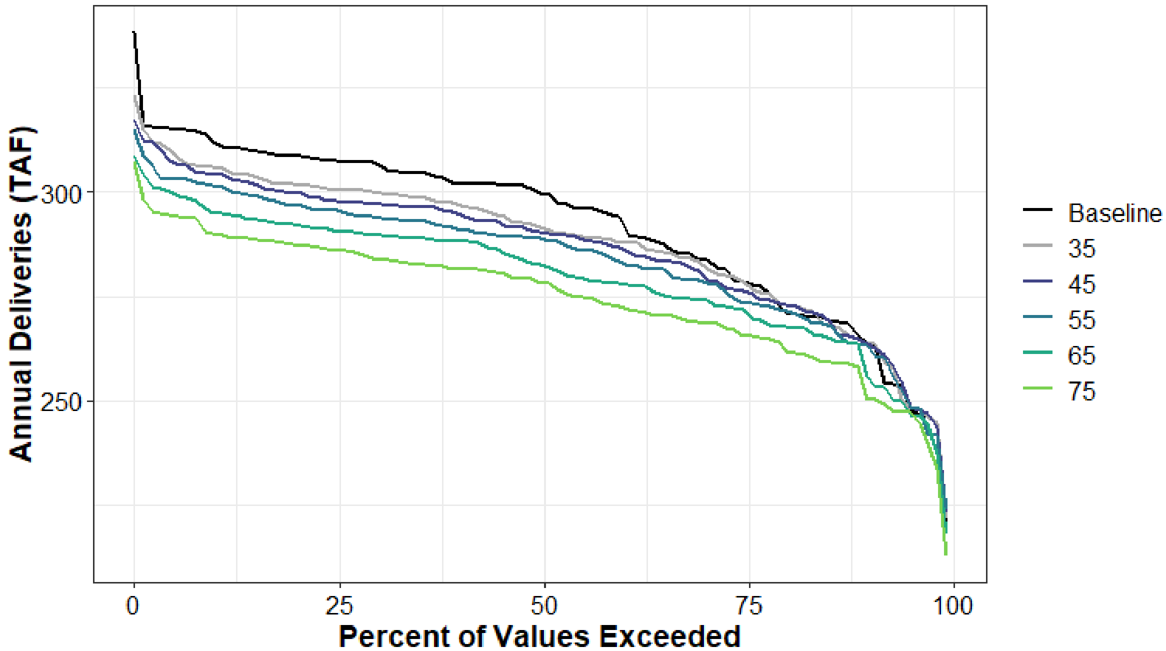

Figure A1-176. Total Water Supplied to Water Budget Area 5 (Ag) Annual Percent Exceedance Plot

Table A1-419. Total Water Supplied to Water Budget Area 5 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	339	323	317	315	309	307
10%	312	306	304	302	295	290
20%	309	302	300	297	292	287
30%	306	300	297	294	290	284
40%	302	297	295	291	288	282
50%	300	292	290	289	283	278
60%	293	288	287	283	278	273
70%	284	283	280	279	274	269
80%	272	273	273	272	268	263
90%	264	264	264	263	257	252
100%	220	222	223	224	218	213
Mean	292	288	286	284	280	275

Table A1-420. Total Water Supplied to Water Budget Area 5 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	307	297	295	293	287	283
D	301	293	290	286	280	277
BN	292	289	286	283	277	270
AN	284	284	282	281	277	270
W	281	281	281	280	278	272
All	292	288	286	284	280	275

A1.12.8.7 Water Budget Area 7 (Ag)

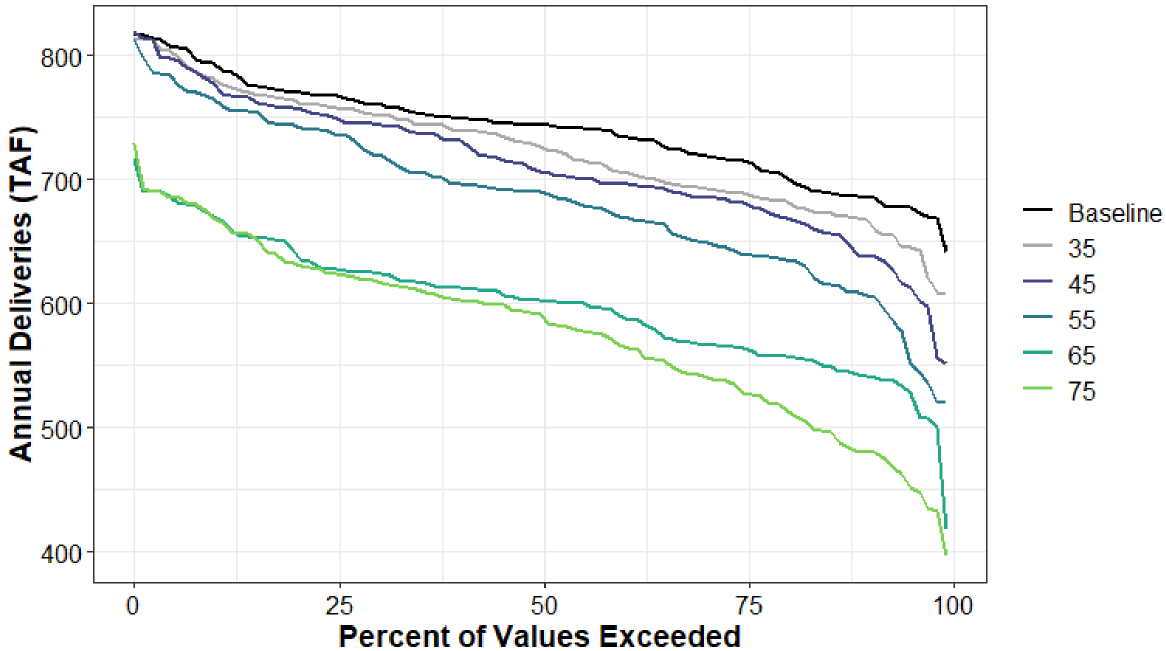

Figure A1-177. Total Water Supplied to Water Budget Area 7 (Ag) Annual Percent Exceedance Plot

Table A1-421. Total Water Supplied to Water Budget Area 7 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	818	814	819	813	716	729
10%	792	781	776	764	669	668
20%	770	762	757	743	640	631
30%	760	751	744	719	624	617
40%	749	739	731	697	612	603
50%	744	726	706	690	602	591
60%	734	706	696	670	589	566
70%	720	693	685	649	567	541
80%	703	682	669	636	557	516
90%	686	668	638	607	542	480
100%	642	607	551	521	417	396
Mean	739	722	710	683	599	578

Table A1-422. Total Water Supplied to Water Budget Area 7 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	745	676	665	655	645	648
D	758	730	693	629	594	591
BN	753	755	743	688	575	553
AN	735	733	732	728	601	496
W	716	716	717	717	594	580
All	739	722	710	683	599	578

A1.12.8.8 Water Budget Area 8 (Ag)

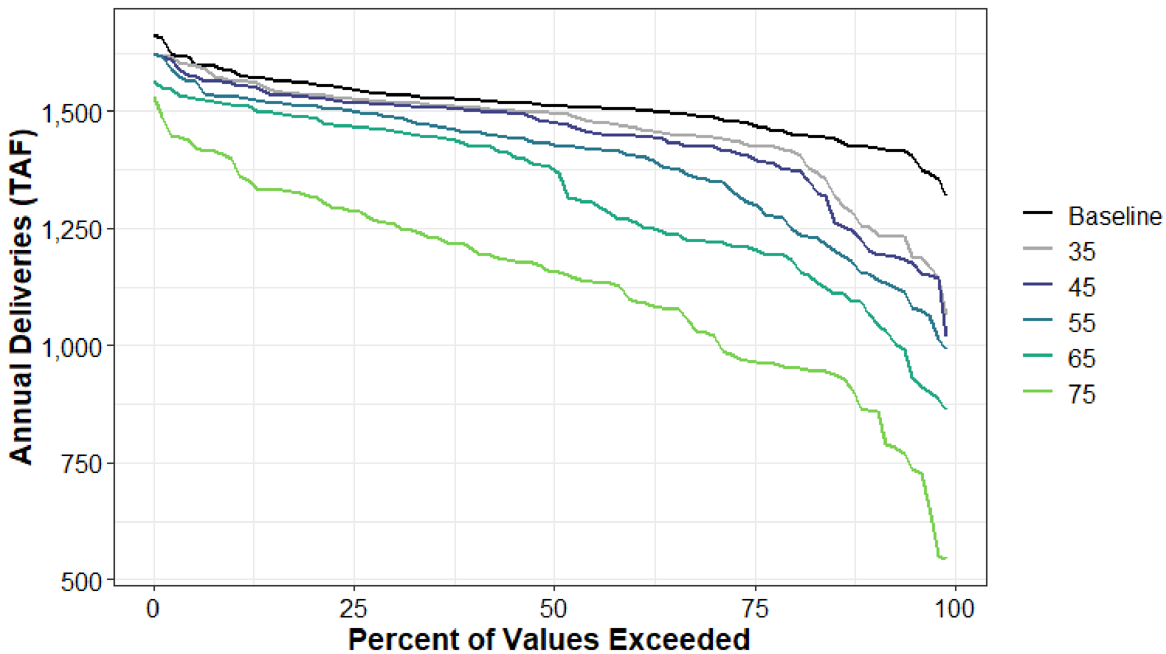

Figure A1-178. Total Water Supplied to Water Budget Area 8 (Ag) Annual Percent Exceedance Plot

Table A1-423. Total Water Supplied to Water Budget Area 8 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	1,664	1,623	1,622	1,623	1,566	1,531
10%	1,585	1,564	1,560	1,531	1,514	1,391
20%	1,559	1,535	1,529	1,511	1,488	1,319
30%	1,536	1,519	1,515	1,488	1,460	1,259
40%	1,524	1,509	1,503	1,454	1,426	1,207
50%	1,512	1,496	1,478	1,431	1,381	1,156
60%	1,503	1,466	1,447	1,405	1,268	1,099
70%	1,487	1,446	1,425	1,353	1,221	1,026
80%	1,455	1,417	1,376	1,258	1,187	953
90%	1,425	1,253	1,208	1,153	1,073	862
100%	1,318	1,063	1,016	990	863	544
Mean	1,509	1,458	1,440	1,390	1,318	1,131

Table A1-424. Total Water Supplied to Water Budget Area 8 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	1,562	1,256	1,210	1,128	1,051	892
D	1,536	1,527	1,484	1,353	1,208	1,035
BN	1,517	1,519	1,511	1,470	1,337	1,058
AN	1,484	1,488	1,488	1,490	1,473	1,195
W	1,464	1,464	1,465	1,466	1,466	1,349
All	1,509	1,458	1,440	1,390	1,318	1,131

A1.12.8.9 Water Budget Area 8 (Refuge)

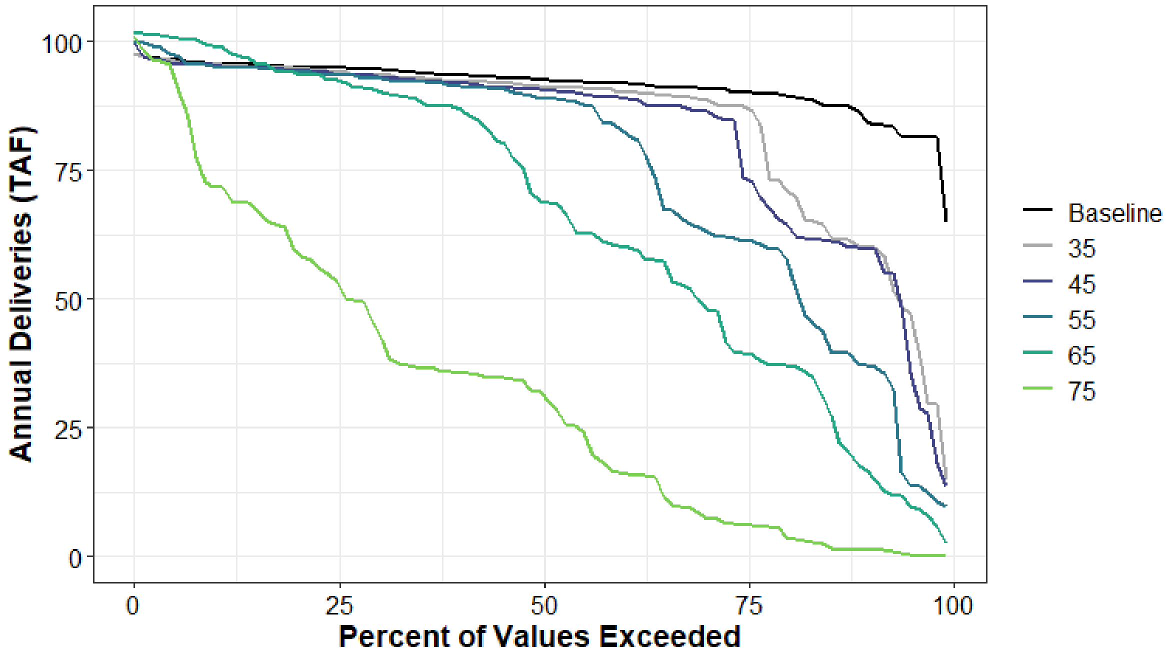

Figure A1-179. Total Water Supplied to Water Budget Area 8 (Refuge) Annual Percent Exceedance Plot

Table A1-425. Total Water Supplied to Water Budget Area 8 (Refuge) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	98	98	100	100	102	101
10%	96	95	95	95	99	72
20%	95	95	95	94	94	59
30%	95	93	93	93	90	43
40%	93	92	92	91	87	36
50%	93	91	91	89	69	32
60%	92	90	89	83	60	16
70%	91	89	87	64	49	8
80%	90	72	65	58	37	4
90%	85	60	60	37	17	1
100%	65	15	14	10	2	0
Mean	92	84	82	75	66	33

Table A1-426. Total Water Supplied to Water Budget Area 8 (Refuge) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	90	54	53	39	30	9
D	93	87	83	66	49	18
BN	92	92	90	86	66	25
AN	91	88	87	85	79	23
W	91	91	91	91	91	65
All	92	84	82	75	66	33

A1.12.8.10 Water Budget Area 9 (Ag)

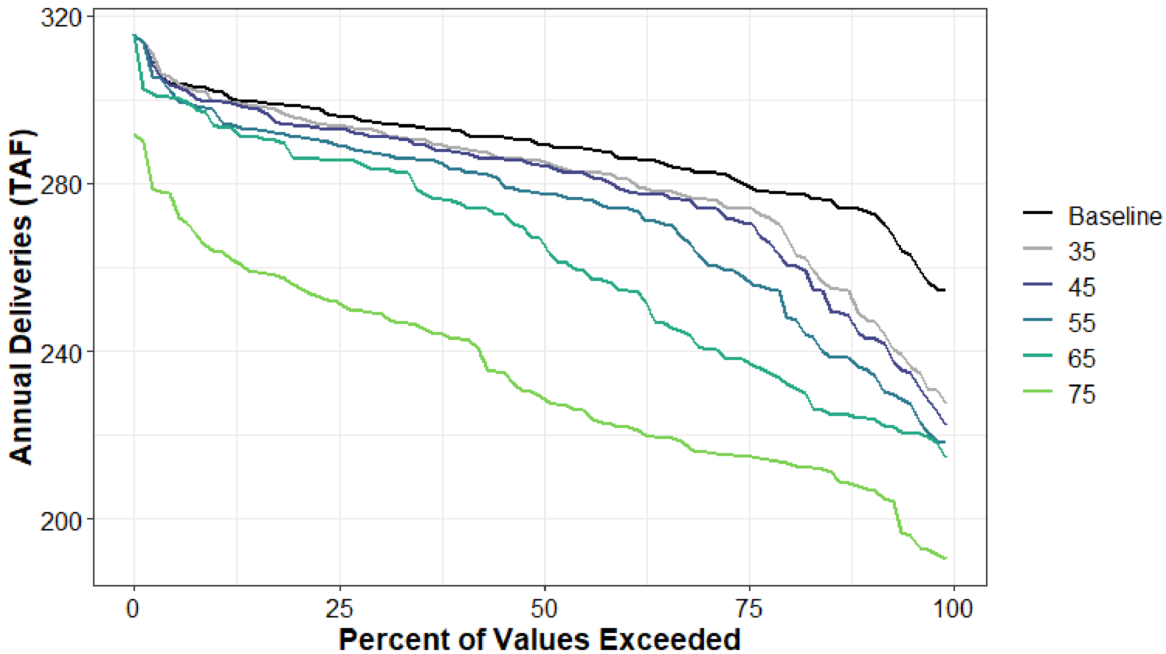

Figure A1-180. Total Water Supplied to Water Budget Area 9 (Ag) Annual Percent Exceedance Plot

Table A1-427. Total Water Supplied to Water Budget Area 9 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	316	316	316	316	316	292
10%	302	300	300	297	294	264
20%	299	296	294	291	286	256
30%	295	293	291	287	283	249
40%	293	288	287	283	275	243
50%	289	285	284	278	267	229
60%	286	281	279	274	255	222
70%	283	276	274	262	241	216
80%	278	269	262	251	233	214
90%	273	248	243	236	224	207
100%	254	227	222	218	215	190
Mean	288	280	279	272	262	234

Table A1-428. Total Water Supplied to Water Budget Area 9 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	296	248	242	232	230	219
D	294	294	290	271	240	214
BN	292	292	291	288	273	220
AN	284	285	285	286	286	246
W	278	278	279	279	279	259
All	288	280	279	272	262	234

A1.12.8.11 Water Budget Area 9 (Refuge)

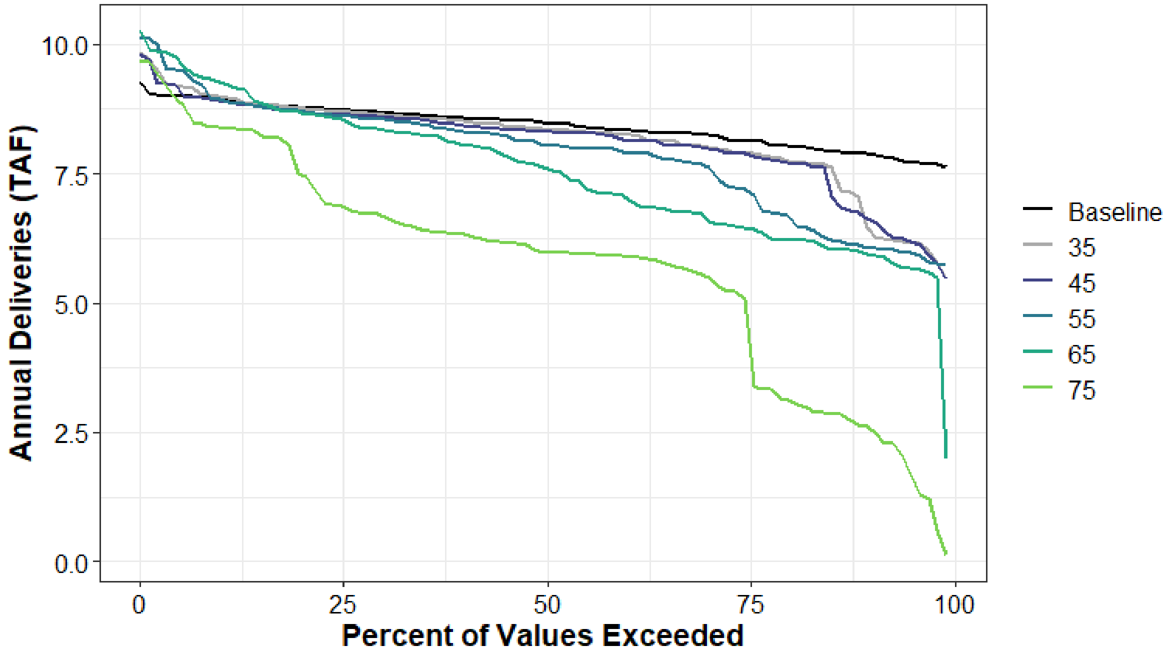

Figure A1-181. Total Water Supplied to Water Budget Area 9 (Refuge) Annual Percent Exceedance Plot

Table A1-429. Total Water Supplied to Water Budget Area 9 (Refuge) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	9.3	9.8	9.8	10.1	10.3	9.7
10%	8.9	9	8.9	8.9	9.3	8.4
20%	8.8	8.8	8.7	8.7	8.7	7.5
30%	8.7	8.6	8.6	8.5	8.4	6.7
40%	8.6	8.5	8.4	8.3	8.1	6.3
50%	8.5	8.4	8.3	8.1	7.6	6
60%	8.3	8.3	8.2	7.9	7.1	5.9
70%	8.3	8	8	7.7	6.7	5.5
80%	8	7.8	7.7	6.7	6.2	3.1
90%	7.9	6.6	6.7	6.1	6	2.6
100%	7.6	5.5	5.5	5.7	2	0.1
Mean	8.4	8.2	8.1	7.9	7.5	5.7

Table A1-430. Total Water Supplied to Water Budget Area 9 (Refuge) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	8.8	6.6	6.6	6.4	6.1	3.7
D	8.6	8.8	8.6	7.4	6.4	5.3
BN	8.5	8.6	8.6	8.7	7.8	4.6
AN	8.3	8.5	8.4	8.4	8.3	6.2
W	8.1	8.1	8.2	8.3	8.6	7.6
All	8.4	8.2	8.1	7.9	7.5	5.7

A1.12.8.12 Water Budget Area 10 (Ag)

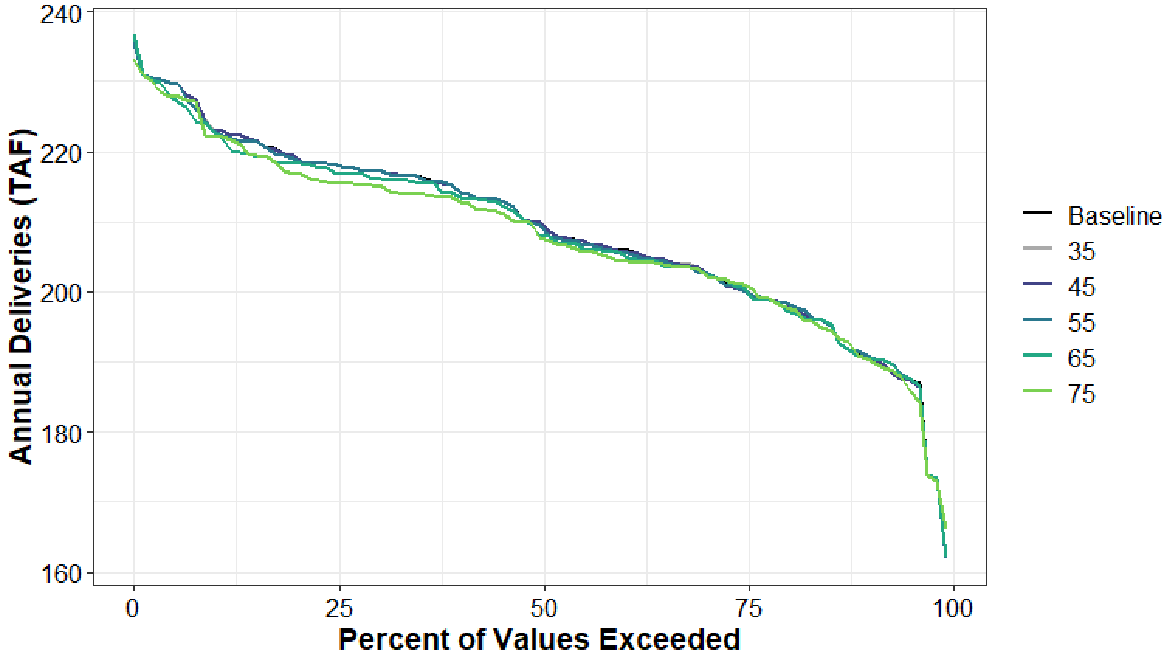

Figure A1-182. Total Water Supplied to Water Budget Area 10 (Ag) Annual Percent Exceedance Plot

Table A1-431. Total Water Supplied to Water Budget Area 10 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	237	237	237	236	237	233
10%	223	223	223	223	223	222
20%	219	219	219	219	218	217
30%	217	217	217	217	216	215
40%	214	214	214	214	214	213
50%	210	210	210	210	208	208
60%	206	206	206	206	205	204
70%	203	203	203	203	203	203
80%	198	198	198	198	198	198
90%	191	191	191	191	191	191
100%	162	162	162	162	162	166
Mean	209	209	209	209	208	208

Table A1-432. Total Water Supplied to Water Budget Area 10 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	218	218	218	218	216	216
D	214	214	214	214	213	212
BN	211	211	211	211	211	210
AN	203	203	203	203	202	201
W	201	201	201	201	201	201
All	209	209	209	209	208	208

A1.12.8.13 Water Budget Area 11 (Ag)

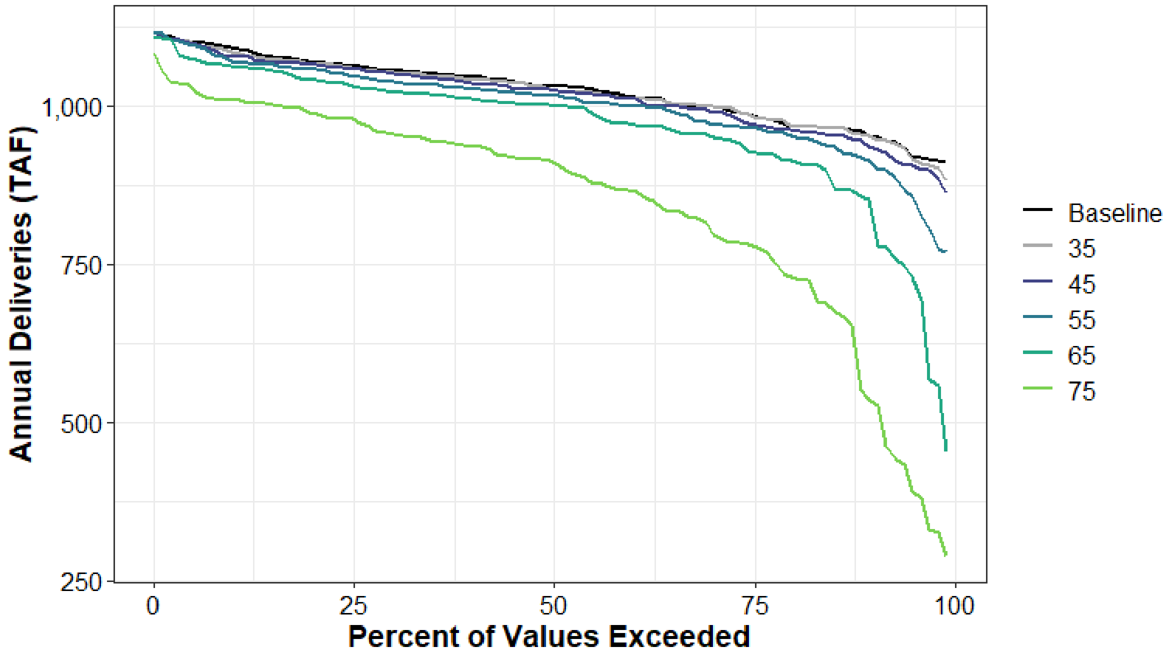

Figure A1-183. Total Water Supplied to Water Budget Area 11 (Ag) Annual Percent Exceedance Plot

Table A1-433. Total Water Supplied to Water Budget Area 11 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	1,118	1,118	1,118	1,118	1,109	1,084
10%	1,092	1,085	1,079	1,070	1,063	1,010
20%	1,071	1,067	1,065	1,058	1,041	989
30%	1,056	1,053	1,052	1,038	1,023	956
40%	1,047	1,041	1,037	1,028	1,011	937
50%	1,031	1,026	1,026	1,018	1,002	913
60%	1,015	1,013	1,012	1,001	972	866
70%	999	1,001	992	973	953	808
80%	970	972	964	955	914	732
90%	954	953	938	915	854	539
100%	912	882	862	769	454	288
Mean	1,025	1,022	1,016	1,001	964	844

Table A1-434. Total Water Supplied to Water Budget Area 11 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	1,041	1,021	1,005	957	859	685
D	1,051	1,053	1,049	1,029	996	850
BN	1,046	1,046	1,040	1,032	980	810
AN	1,009	1,012	1,005	1,003	983	874
W	991	989	987	983	980	932
All	1,025	1,022	1,016	1,001	964	844

A1.12.8.14 Water Budget Area 11 (Refuge)

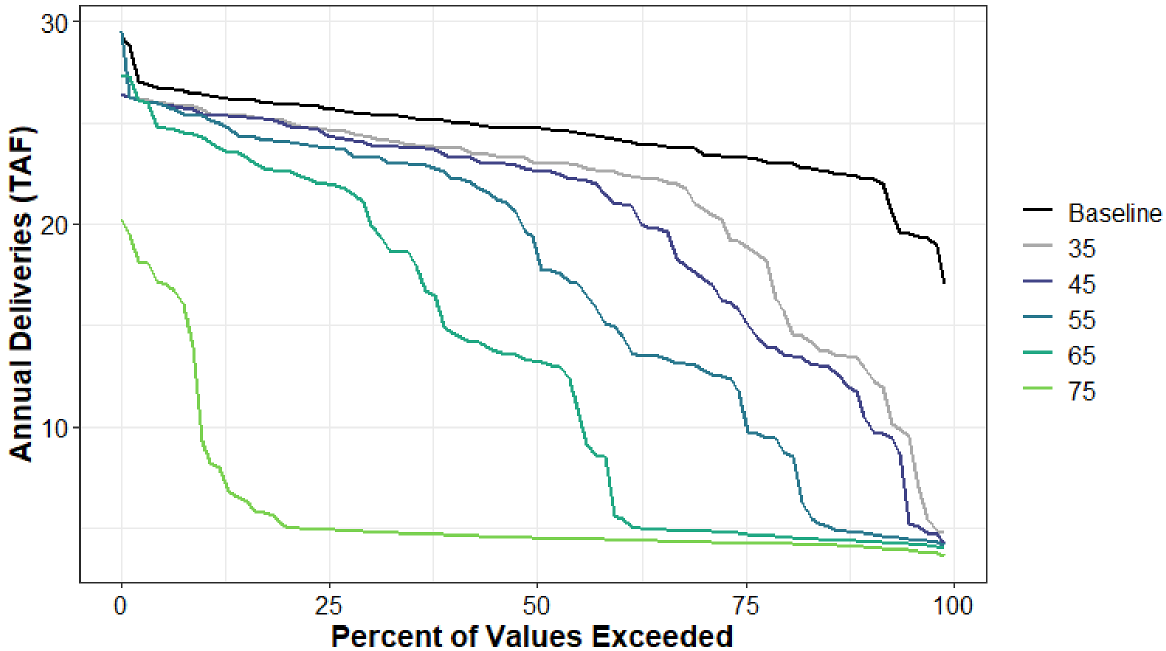

Figure A1-184. Total Water Supplied to Water Budget Area 11 (Refuge) Annual Percent Exceedance Plot

Table A1-435. Total Water Supplied to Water Budget Area 11 (Refuge) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	29.2	26.4	26.4	29.5	27.3	20.2
10%	26.4	25.6	25.4	25.3	24.2	9.1
20%	25.9	25.1	24.9	24	22.6	5.1
30%	25.4	24.3	24	23.3	20.4	4.8
40%	25	23.7	23.3	22.3	14.7	4.7
50%	24.7	23	22.6	19.4	13.3	4.5
60%	24.2	22.5	21	14.9	5.6	4.4
70%	23.6	20.9	17.5	12.9	4.8	4.3
80%	23	15.9	13.7	9	4.6	4.2
90%	22.3	13.1	10.7	4.7	4.3	4.1
100%	17	4.7	4.2	4.2	4	3.6
Mean	24.3	21	19.9	17	13.2	5.9

Table A1-436. Total Water Supplied to Water Budget Area 11 (Refuge) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	22.6	13.9	13.3	9.7	5.9	4.7
D	25.6	21.4	18.3	13.7	10.1	4.5
BN	25.2	21.9	20.9	16.5	11.1	4.6
AN	24.6	22.2	21.9	19.3	12	4.5
W	23.6	23.4	23.2	22.8	21.1	9
All	24.3	21	19.9	17	13.2	5.9

A1.12.8.15 Water Budget Area 11 (Urban)

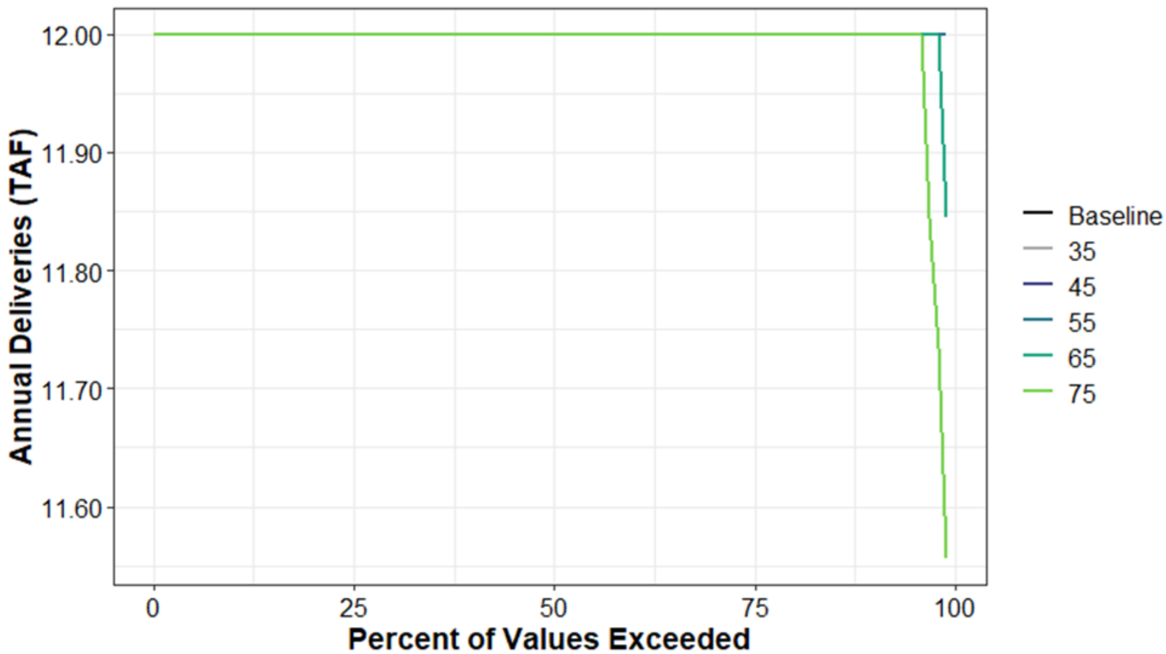

Figure A1-185. Total Water Supplied to Water Budget Area 11 (Urban) Annual Percent Exceedance Plot

Table A1-437. Total Water Supplied to Water Budget Area 11 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	12	12	12	12	12	12
10%	12	12	12	12	12	12
20%	12	12	12	12	12	12
30%	12	12	12	12	12	12
40%	12	12	12	12	12	12
50%	12	12	12	12	12	12
60%	12	12	12	12	12	12
70%	12	12	12	12	12	12
80%	12	12	12	12	12	12
90%	12	12	12	12	12	12
100%	12	12	12	12	11.8	11.6
Mean	12	12	12	12	12	12

Table A1-438. Total Water Supplied to Water Budget Area 11 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	12	12	12	12	12	12
D	12	12	12	12	12	12
BN	12	12	12	12	12	12
AN	12	12	12	12	12	12
W	12	12	12	12	12	12
All	12	12	12	12	12	12

A1.12.8.16 Water Budget Areas 12 & 13 (Ag)

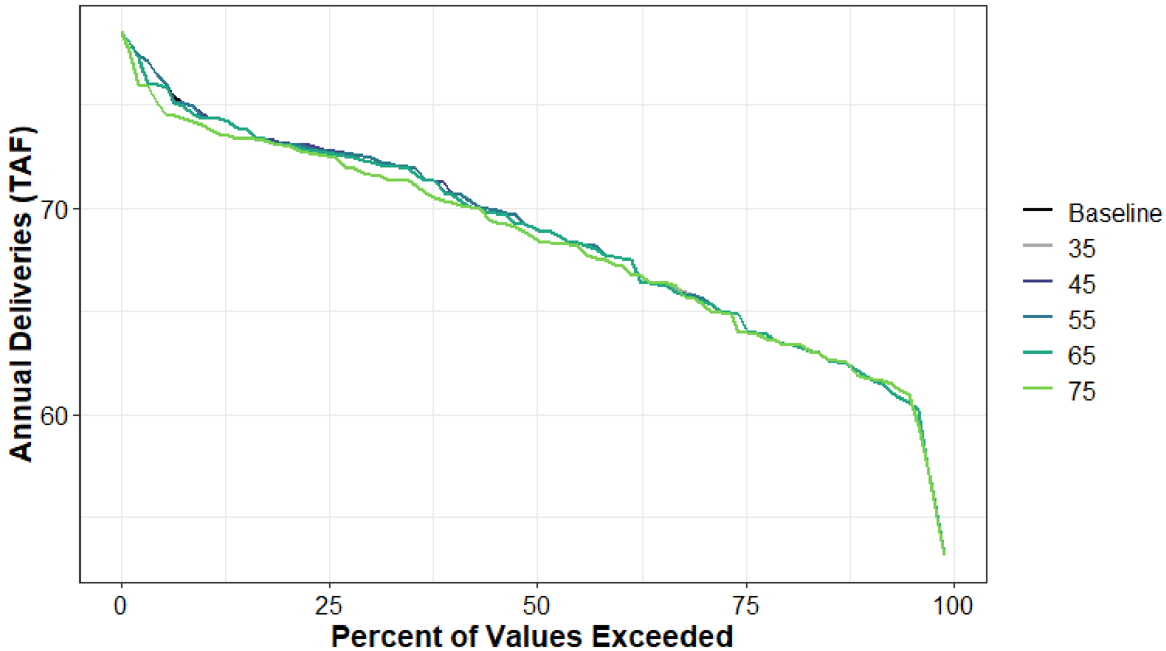

Figure A1-186. Total Water Supplied to Water Budget Areas 12 & 13 (Ag) Annual Percent Exceedance Plot

Table A1-439. Total Water Supplied to Water Budget Areas 12 & 13 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	79	79	79	79	79	79
10%	75	74	75	74	74	74
20%	73	73	73	73	73	73
30%	72	72	72	72	72	72
40%	71	71	71	71	71	70
50%	69	69	69	69	69	69
60%	68	68	68	68	68	67
70%	66	66	66	66	66	66
80%	63	63	63	63	63	63
90%	62	62	62	62	62	62
100%	53	53	53	53	53	53
Mean	69	69	69	69	69	68

Table A1-440. Total Water Supplied to Water Budget Areas 12 & 13 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	74	74	74	74	74	73
D	70	70	70	70	70	70
BN	70	70	70	70	70	69
AN	67	67	67	67	67	67
W	65	65	65	65	65	65
All	69	69	69	69	69	68

A1.12.8.17 Water Budget Areas 12 & 13 (Urban)

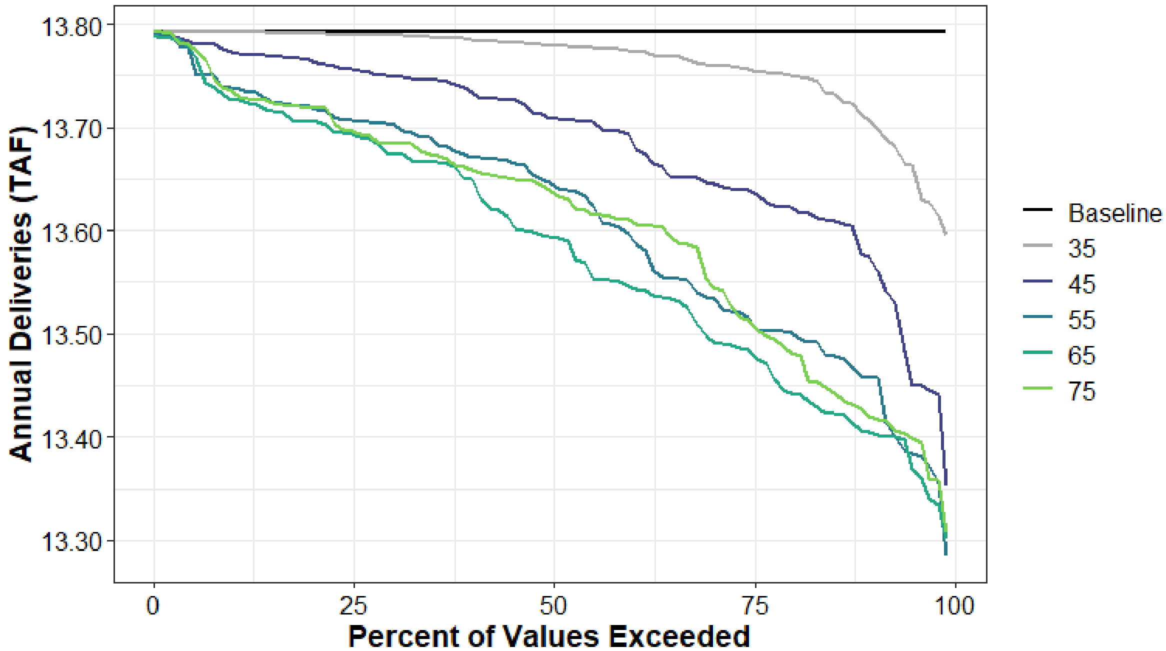

Figure A1-187. Total Water Supplied to Water Budget Areas 12 & 13 (Urban) Annual Percent Exceedance Plot

Table A1-441. Total Water Supplied to Water Budget Areas 12 & 13 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	13.8	13.8	13.8	13.8	13.8	13.8
10%	13.8	13.8	13.8	13.7	13.7	13.7
20%	13.8	13.8	13.8	13.7	13.7	13.7
30%	13.8	13.8	13.7	13.7	13.7	13.7
40%	13.8	13.8	13.7	13.7	13.6	13.7
50%	13.8	13.8	13.7	13.6	13.6	13.6
60%	13.8	13.8	13.7	13.6	13.5	13.6
70%	13.8	13.8	13.6	13.5	13.5	13.5
80%	13.8	13.8	13.6	13.5	13.4	13.5
90%	13.8	13.7	13.6	13.5	13.4	13.4
100%	13.8	13.6	13.4	13.3	13.3	13.3
Mean	13.8	13.8	13.7	13.6	13.6	13.6

Table A1-442. Total Water Supplied to Water Budget Areas 12 & 13 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	13.8	13.8	13.7	13.7	13.7	13.7
D	13.8	13.7	13.6	13.5	13.5	13.5
BN	13.8	13.7	13.7	13.6	13.5	13.5
AN	13.8	13.8	13.7	13.6	13.5	13.6
W	13.8	13.8	13.7	13.7	13.7	13.7
All	13.8	13.8	13.7	13.6	13.6	13.6

A1.12.8.18 Water Budget Areas 14 & 15 (Ag)

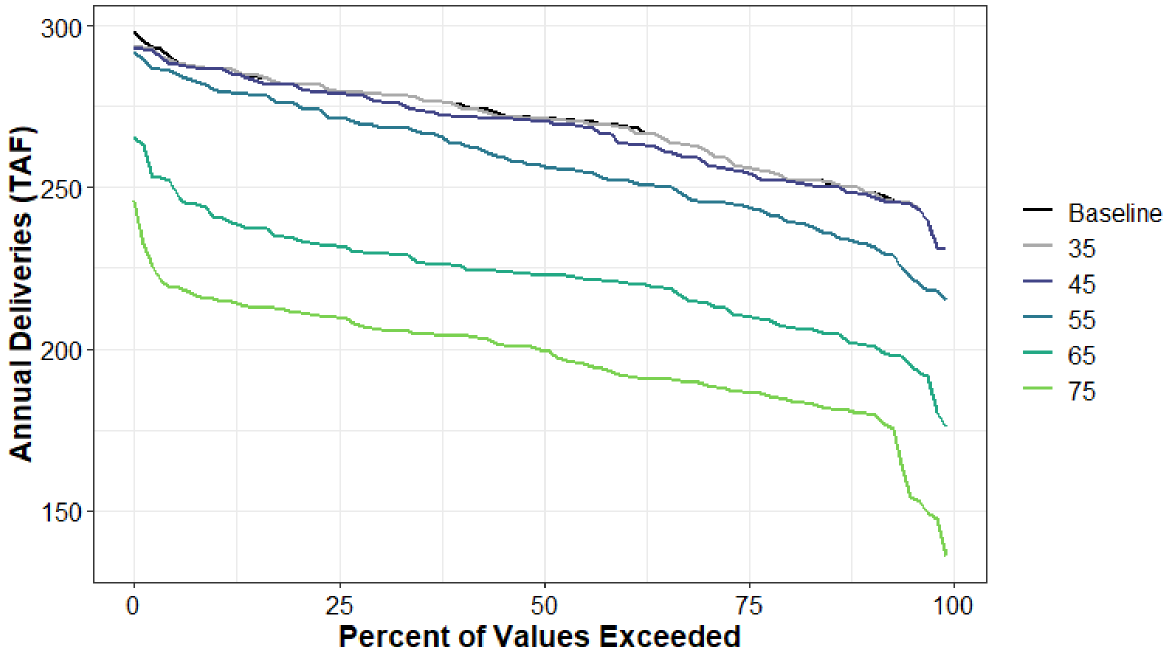

Figure A1-188. Total Water Supplied to Water Budget Areas 14 & 15 (Ag) Annual Percent Exceedance Plot

Table A1-443. Total Water Supplied to Water Budget Areas 14 & 15 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	298	294	293	292	265	246
10%	287	287	287	280	241	215
20%	282	282	281	276	234	211
30%	279	279	277	269	230	206
40%	276	275	272	264	226	204
50%	271	271	270	257	223	200
60%	269	269	264	252	221	192
70%	262	262	258	246	214	189
80%	253	253	252	240	207	185
90%	249	249	248	233	201	180
100%	231	231	231	215	176	136
Mean	269	269	267	257	222	197

Table A1-444. Total Water Supplied to Water Budget Areas 14 & 15 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	280	279	269	250	229	187
D	277	277	276	256	227	207
BN	273	273	273	265	223	204
AN	265	265	264	258	223	198
W	258	258	258	256	214	190
All	269	269	267	257	222	197

A1.12.8.19 Water Budget Area 15 (Ag)

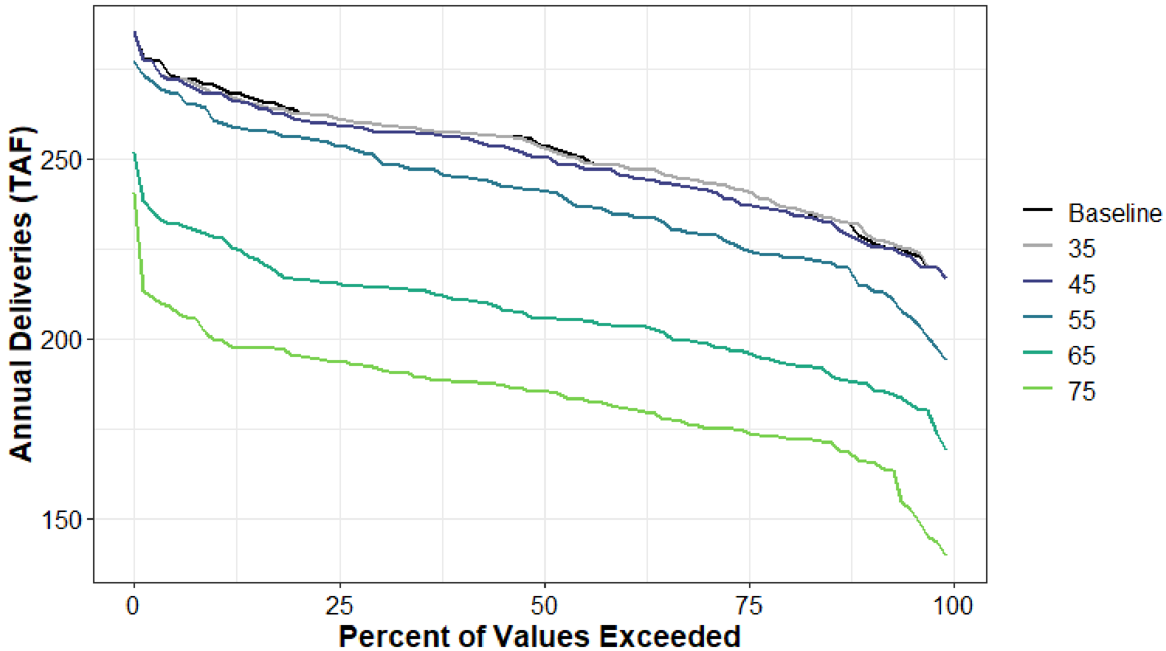

Figure A1-189. Total Water Supplied to Water Budget Area 15 (Ag) Annual Percent Exceedance Plot

Table A1-445. Total Water Supplied to Water Budget Area 15 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	285	285	285	277	252	240
10%	270	268	268	260	228	200
20%	263	262	261	256	217	195
30%	260	260	258	250	214	192
40%	257	257	256	245	211	188
50%	254	253	250	241	206	185
60%	248	248	246	234	204	181
70%	244	244	242	229	199	175
80%	237	237	235	223	193	172
90%	228	229	227	215	188	166
100%	217	217	217	194	169	140
Mean	251	251	249	239	207	184

Table A1-446. Total Water Supplied to Water Budget Area 15 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	263	261	250	231	215	178
D	258	259	259	237	211	192
BN	253	253	253	245	206	188
AN	247	247	247	241	208	185
W	240	240	240	240	199	178
All	251	251	249	239	207	184

A1.12.8.20 Water Budget Area 16 (Ag)

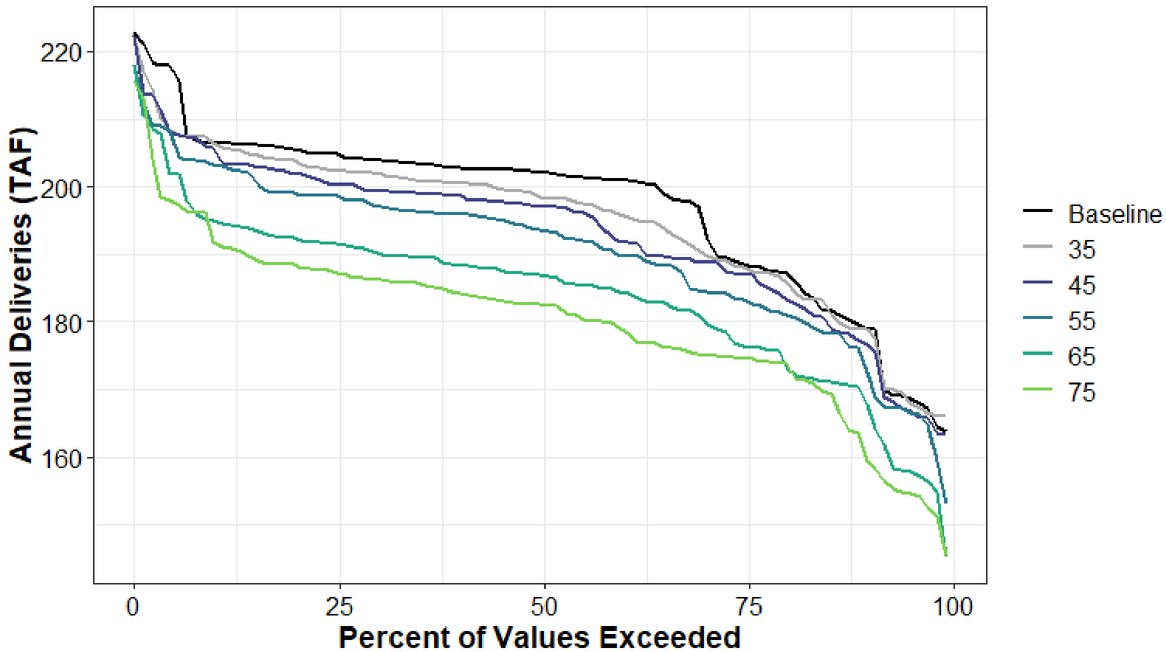

Figure A1-190. Total Water Supplied to Water Budget Area 16 (Ag) Annual Percent Exceedance Plot

Table A1-447. Total Water Supplied to Water Budget Area 16 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	223	222	222	218	218	216
10%	206	206	205	203	195	192
20%	205	204	202	199	192	188
30%	204	202	199	197	190	186
40%	203	201	199	196	188	184
50%	202	198	197	194	187	183
60%	201	196	192	190	184	179
70%	195	190	189	184	180	175
80%	187	186	184	181	174	174
90%	179	179	177	173	168	160
100%	164	166	163	153	145	145
Mean	197	195	193	190	184	180

Table A1-448. Total Water Supplied to Water Budget Area 16 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	207	200	199	197	195	190
D	202	199	196	190	187	184
BN	198	197	195	191	182	177
AN	194	193	191	191	182	175
W	190	189	188	187	178	176
All	197	195	193	190	184	180

A1.12.8.21 Water Budget Area 16 (Urban)

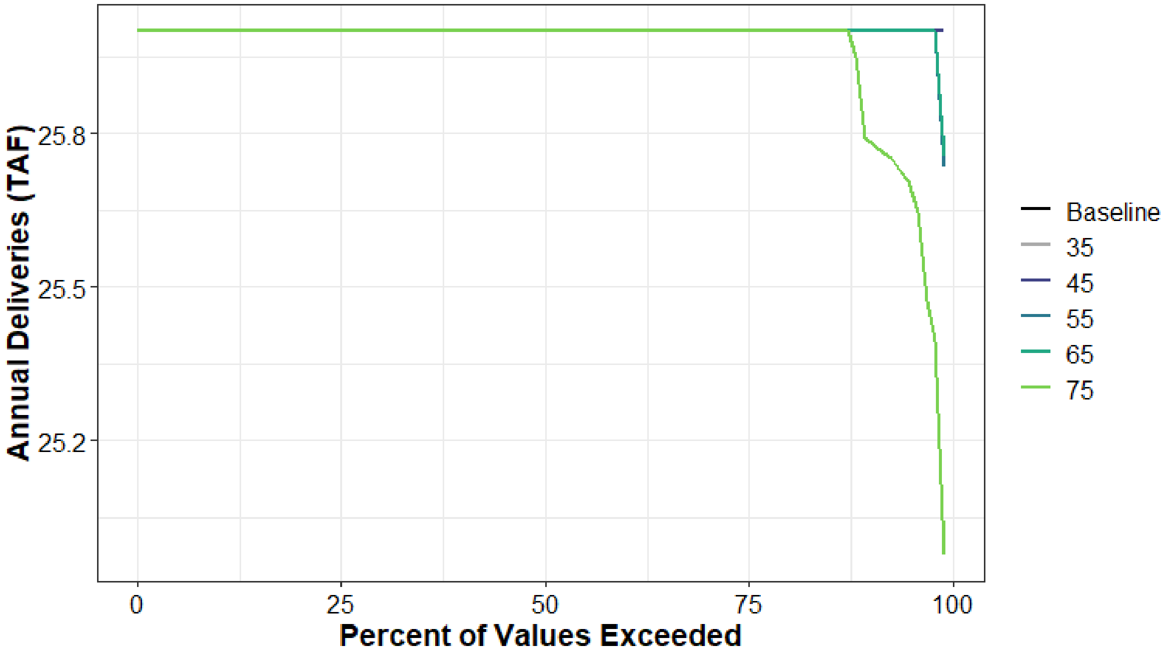

Figure A1-191. Total Water Supplied to Water Budget Area 16 (Urban) Annual Percent Exceedance Plot

Table A1-449. Total Water Supplied to Water Budget Area 16 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	26	26	26	26	26	26
10%	26	26	26	26	26	26
20%	26	26	26	26	26	26
30%	26	26	26	26	26	26
40%	26	26	26	26	26	26
50%	26	26	26	26	26	26
60%	26	26	26	26	26	26
70%	26	26	26	26	26	26
80%	26	26	26	26	26	26
90%	26	26	26	26	26	25.8
100%	26	26	26	25.7	25.8	25
Mean	26	26	26	26	26	26

Table A1-450. Total Water Supplied to Water Budget Area 16 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	26	26	26	26	26	26
D	26	26	26	26	26	26
BN	26	26	26	26	26	25.9
AN	26	26	26	26	26	25.9
W	26	26	26	26	26	26
All	26	26	26	26	26	26

A1.12.8.22 Water Budget Area 17 (Ag)

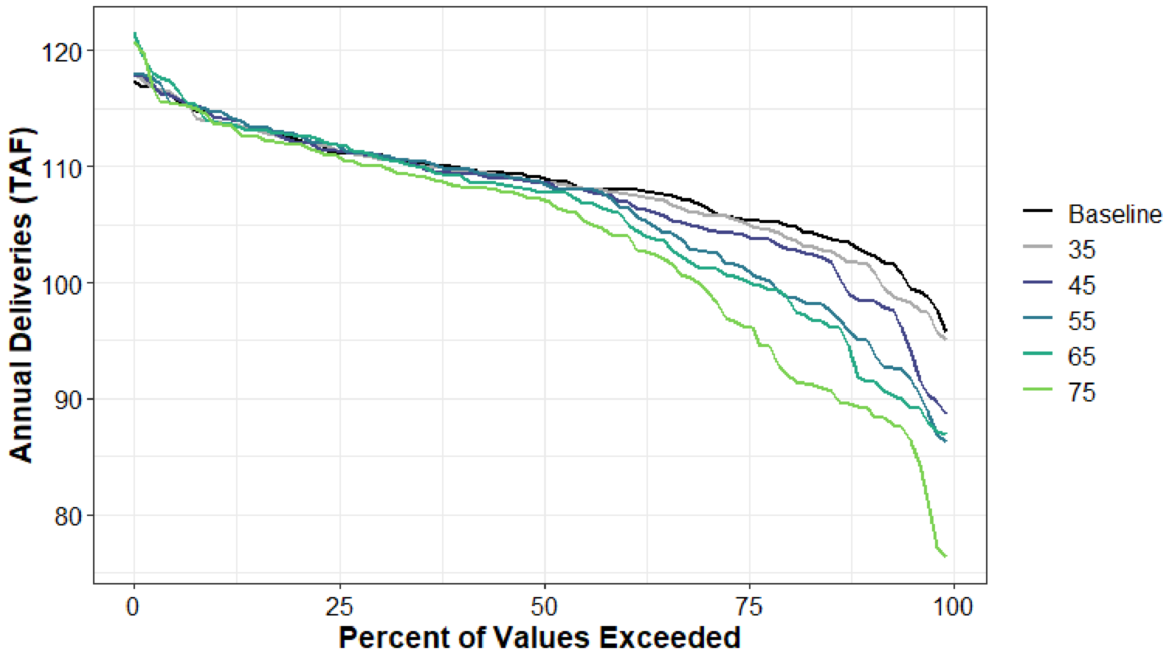

Figure A1-192. Total Water Supplied to Water Budget Area 17 (Ag) Annual Percent Exceedance Plot

Table A1-451. Total Water Supplied to Water Budget Area 17 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	117	118	118	118	122	121
10%	114	114	114	115	114	114
20%	112	112	112	113	113	112
30%	111	111	111	111	111	110
40%	110	110	109	110	109	108
50%	109	109	109	109	108	107
60%	108	108	107	106	106	104
70%	107	106	105	103	101	100
80%	105	104	103	99	99	92
90%	103	102	98	95	92	89
100%	96	95	89	86	87	76
Mean	109	108	107	106	106	104

Table A1-452. Total Water Supplied to Water Budget Area 17 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	111	112	112	112	111	110
D	110	110	110	110	110	109
BN	109	109	109	108	108	107
AN	107	107	105	105	104	102
W	106	105	103	100	99	94
All	109	108	107	106	106	104

A1.12.8.23 Water Budget Area 17 (Refuge)

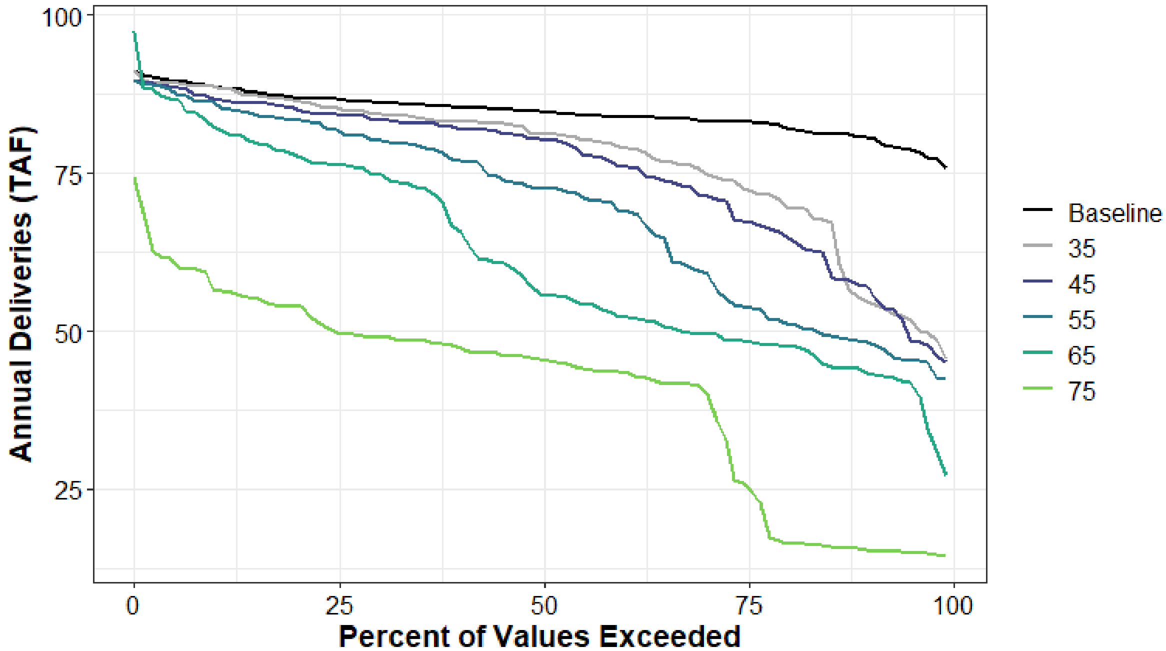

Figure A1-193. Total Water Supplied to Water Budget Area 17 (Refuge) Annual Percent Exceedance Plot

Table A1-453. Total Water Supplied to Water Budget Area 17 (Refuge) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	91	91	90	90	97	74
10%	89	89	87	86	82	56
20%	87	87	85	83	78	54
30%	86	84	84	80	75	49
40%	85	83	82	77	66	47
50%	85	81	80	73	56	46
60%	84	79	76	69	52	44
70%	83	75	72	59	50	41
80%	82	70	65	51	48	16
90%	81	55	57	48	44	15
100%	76	46	45	42	27	14
Mean	85	77	75	69	61	41

Table A1-454. Total Water Supplied to Water Budget Area 17 (Refuge) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	84	57	56	49	45	27
D	85	80	76	62	51	36
BN	85	80	78	73	60	34
AN	84	82	79	75	64	47
W	85	83	83	81	78	53
All	85	77	75	69	61	41

A1.12.8.24 Water Budget Areas 18 & 19 (Ag)

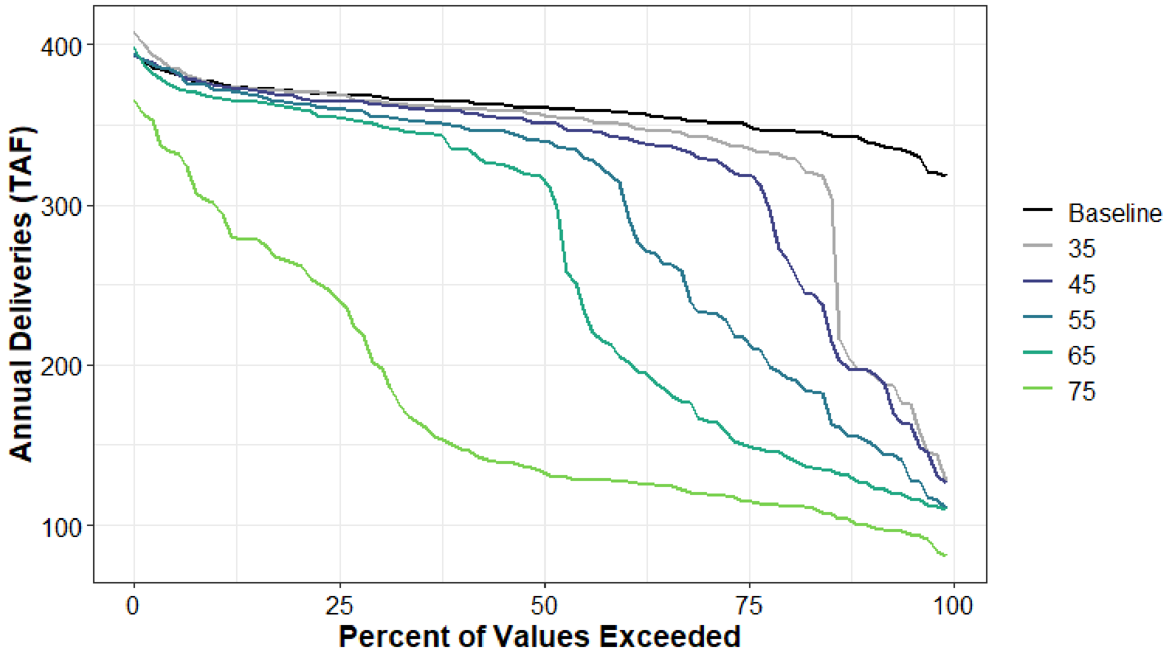

Figure A1-194. Total Water Supplied to Water Budget Areas 18 & 19 (Ag) Annual Percent Exceedance Plot

Table A1-455. Total Water Supplied to Water Budget Areas 18 & 19 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	393	408	394	394	398	365
10%	376	375	375	372	367	300
20%	371	370	367	363	360	263
30%	367	365	362	355	350	199
40%	365	360	358	349	334	148
50%	360	356	351	340	318	134
60%	358	351	342	309	205	127
70%	352	342	329	233	166	120
80%	346	330	269	194	144	112
90%	340	197	197	153	126	100
100%	318	127	127	110	110	81
Mean	359	332	321	292	261	173

Table A1-456. Total Water Supplied to Water Budget Areas 18 & 19 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	364	202	188	166	161	134
D	365	362	327	230	146	117
BN	365	366	360	337	269	113
AN	355	358	358	357	359	159
W	349	349	349	351	352	277
All	359	332	321	292	261	173

A1.12.8.25 Water Budget Areas 20 & 25 (Ag)

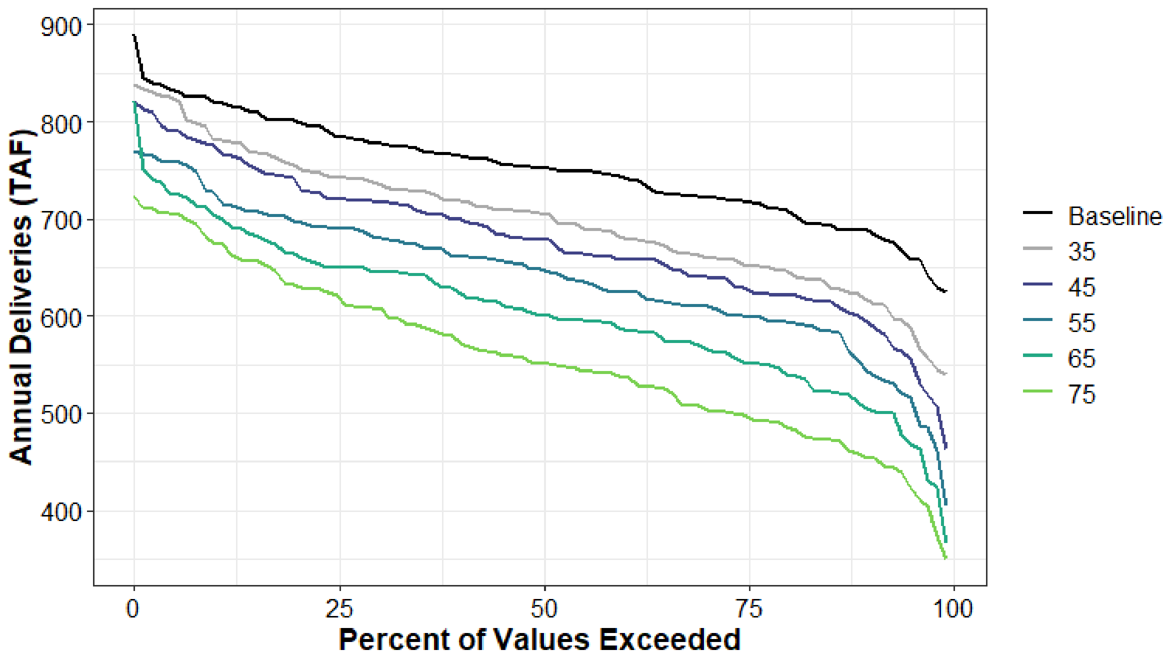

Figure A1-195. Total Water Supplied to Water Budget Areas 20 & 25 (Ag) Annual Percent Exceedance Plot

Table A1-457. Total Water Supplied to Water Budget Areas 20 & 25 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	890	838	821	769	821	723
10%	820	781	774	725	703	676
20%	800	754	737	697	662	631
30%	777	736	717	681	646	608
40%	765	718	699	661	624	573
50%	753	707	679	648	600	551
60%	744	681	659	625	587	538
70%	722	662	640	610	568	506
80%	710	647	621	594	543	488
90%	688	618	596	545	506	455
100%	625	539	463	405	366	350
Mean	752	700	677	641	604	558

Table A1-458. Total Water Supplied to Water Budget Areas 20 & 25 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	787	711	691	673	644	619
D	774	702	672	639	593	544
BN	763	685	653	627	574	539
AN	738	701	673	643	578	513
W	715	702	690	634	619	567
All	752	700	677	641	604	558

A1.12.8.26 Water Budget Areas 20 & 25 (Urban)

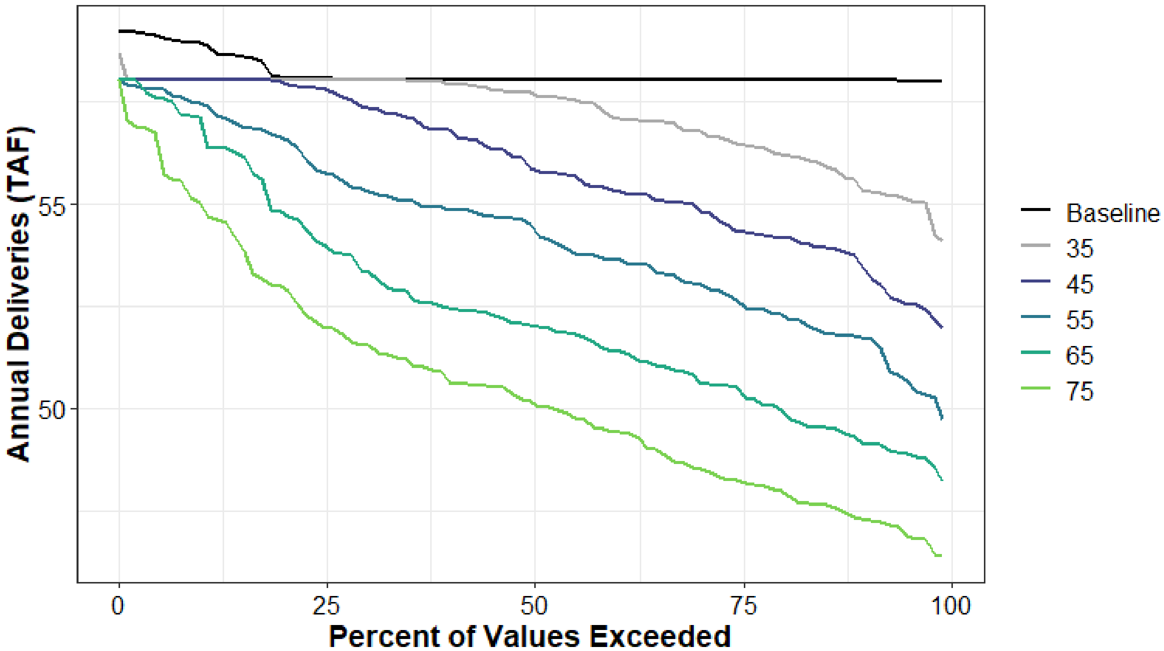

Figure A1-196. Total Water Supplied to Water Budget Areas 20 & 25 (Urban) Annual Percent Exceedance Plot

Table A1-459. Total Water Supplied to Water Budget Areas 20 & 25 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	59	59	58	58	58	58
10%	59	58	58	57	57	55
20%	58	58	58	57	55	53
30%	58	58	57	55	53	52
40%	58	58	57	55	52	51
50%	58	58	56	55	52	50
60%	58	57	55	54	51	49
70%	58	57	55	53	51	49
80%	58	56	54	52	50	48
90%	58	55	54	52	49	47
100%	58	54	52	50	48	46
Mean	58	57	56	54	52	51

Table A1-460. Total Water Supplied to Water Budget Areas 20 & 25 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	59	57	55	55	52	50
D	58	56	54	52	50	48
BN	58	57	56	53	51	49
AN	58	58	56	54	52	51
W	58	58	58	57	56	54
All	58	57	56	54	52	51

A1.12.8.27 Water Budget Area 21 (Ag)

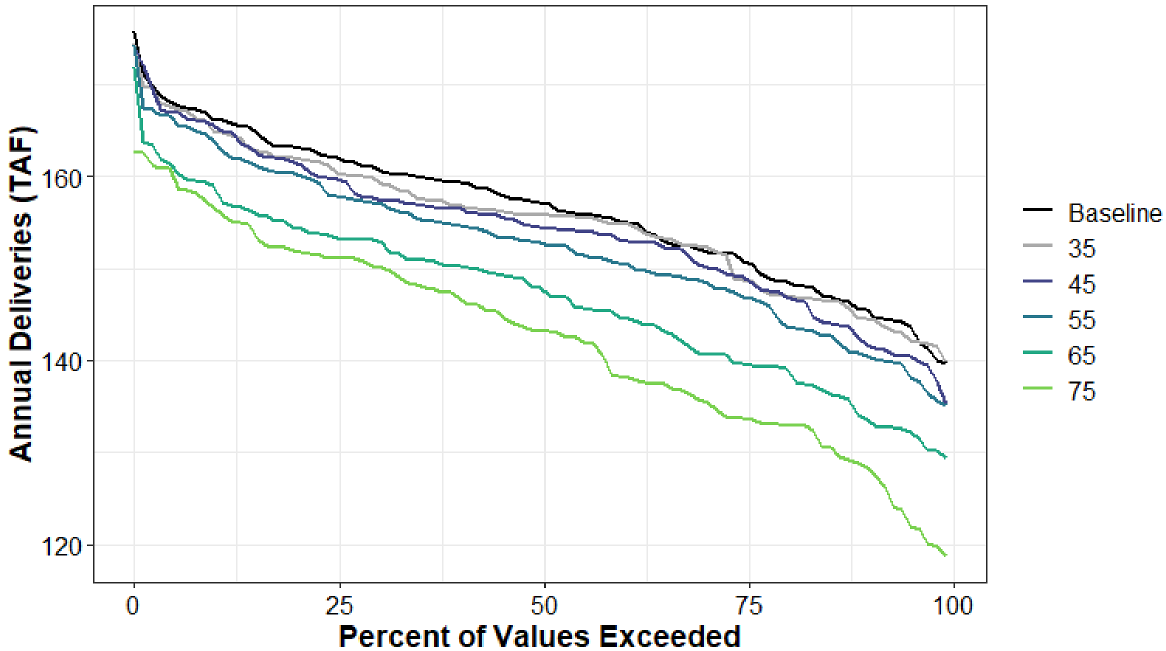

Figure A1-197. Total Water Supplied to Water Budget Area 21 (Ag) Annual Percent Exceedance Plot

Table A1-461. Total Water Supplied to Water Budget Area 21 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	176	174	174	174	172	163
10%	166	165	166	164	159	156
20%	163	162	161	160	154	152
30%	161	159	157	157	153	150
40%	159	157	156	155	150	147
50%	157	156	154	153	148	143
60%	155	155	153	151	145	138
70%	152	152	150	149	141	136
80%	149	147	147	144	139	133
90%	145	144	142	141	134	128
100%	140	140	135	135	129	119
Mean	156	155	154	152	147	142

Table A1-462. Total Water Supplied to Water Budget Area 21 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	163	161	160	159	154	144
D	160	158	156	153	151	147
BN	157	157	156	154	147	143
AN	155	155	153	153	146	141
W	151	150	149	148	140	139
All	156	155	154	152	147	142

A1.12.8.28 Water Budget Area 21 (Urban)

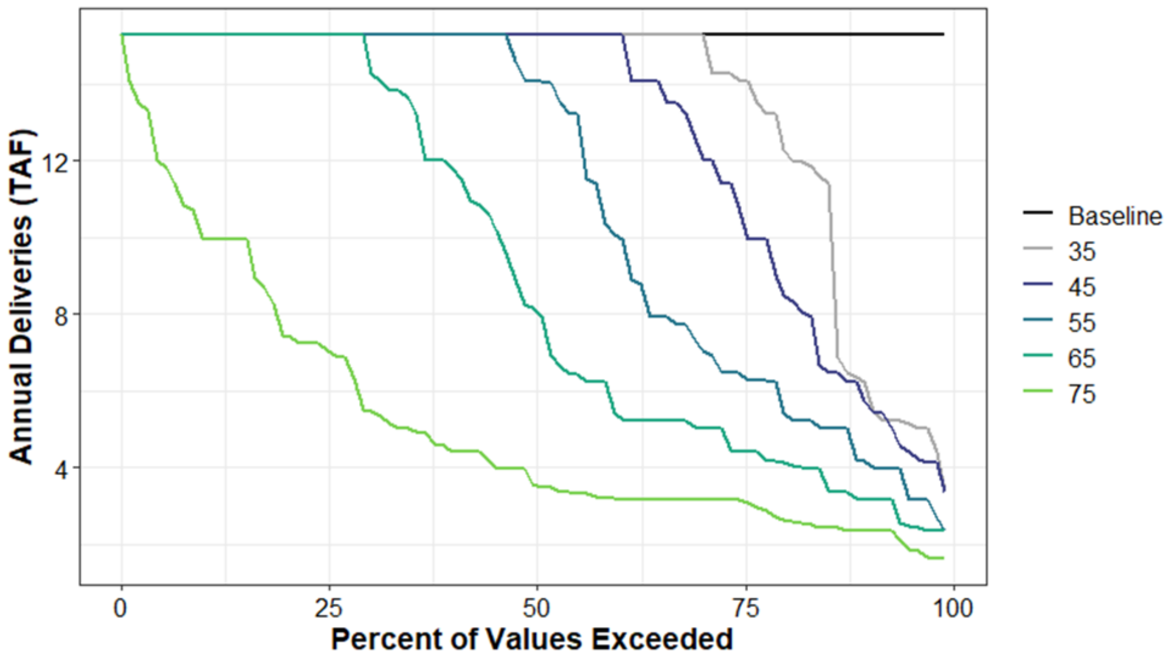

Figure A1-198. Total Water Supplied to Water Budget Area 21 (Urban) Annual Percent Exceedance Plot

Table A1-463. Total Water Supplied to Water Budget Area 21 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	15.3	15.3	15.3	15.3	15.3	15.3
10%	15.3	15.3	15.3	15.3	15.3	10
20%	15.3	15.3	15.3	15.3	15.3	7.4
30%	15.3	15.3	15.3	15.3	14.7	5.5
40%	15.3	15.3	15.3	15.3	11.8	4.4
50%	15.3	15.3	15.3	14.1	8.2	3.6
60%	15.3	15.3	15.3	10	5.4	3.2
70%	15.3	15.3	12.4	7.2	5	3.2
80%	15.3	12.7	8.7	5.8	4.2	2.7
90%	15.3	6.3	5.8	4.2	3.2	2.3
100%	15.3	3.4	3.4	2.3	2.4	1.6
Mean	15.3	13.6	12.8	11.2	9.2	5.2

Table A1-464. Total Water Supplied to Water Budget Area 21 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	15.3	6.7	5.9	4.4	3.5	3
D	15.3	14	11.8	7.5	4.7	3.1
BN	15.3	15.2	14.5	12.5	7.6	3.9
AN	15.3	15	15	14.8	13.3	4.1
W	15.3	15.3	15.2	15.2	14.8	9.2
All	15.3	13.6	12.8	11.2	9.2	5.2

A1.12.8.29 Water Budget Area 22 (Ag)

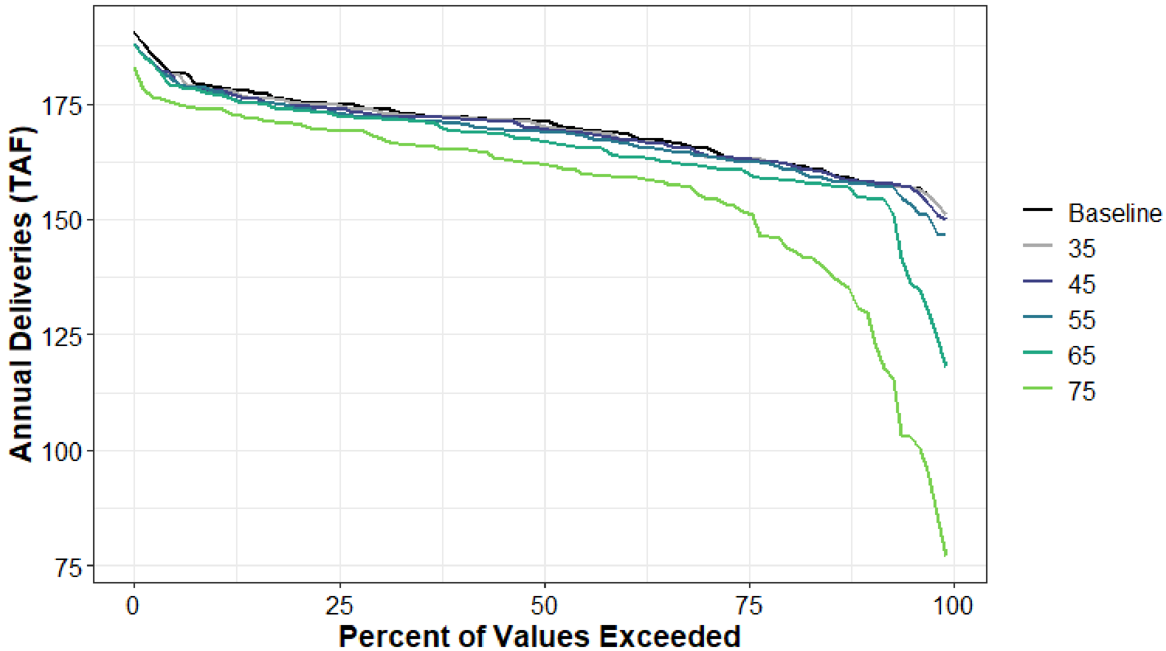

Figure A1-199. Total Water Supplied to Water Budget Area 22 (Ag) Annual Percent Exceedance Plot

Table A1-465. Total Water Supplied to Water Budget Area 22 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	191	188	188	188	188	183
10%	179	178	178	178	177	174
20%	176	175	175	174	174	171
30%	174	173	173	172	172	168
40%	172	172	172	171	169	165
50%	171	171	170	169	167	162
60%	169	167	167	167	164	159
70%	165	164	164	164	162	155
80%	162	162	162	161	158	145
90%	158	158	158	158	155	130
100%	151	151	150	147	118	77
Mean	170	169	169	168	165	156

Table A1-466. Total Water Supplied to Water Budget Area 22 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	177	174	171	166	154	131
D	173	173	173	173	171	156
BN	171	171	171	171	168	155
AN	167	167	167	167	167	165
W	164	164	164	164	164	165
All	170	169	169	168	165	156

A1.12.8.30 Water Budget Area 23 (Ag)

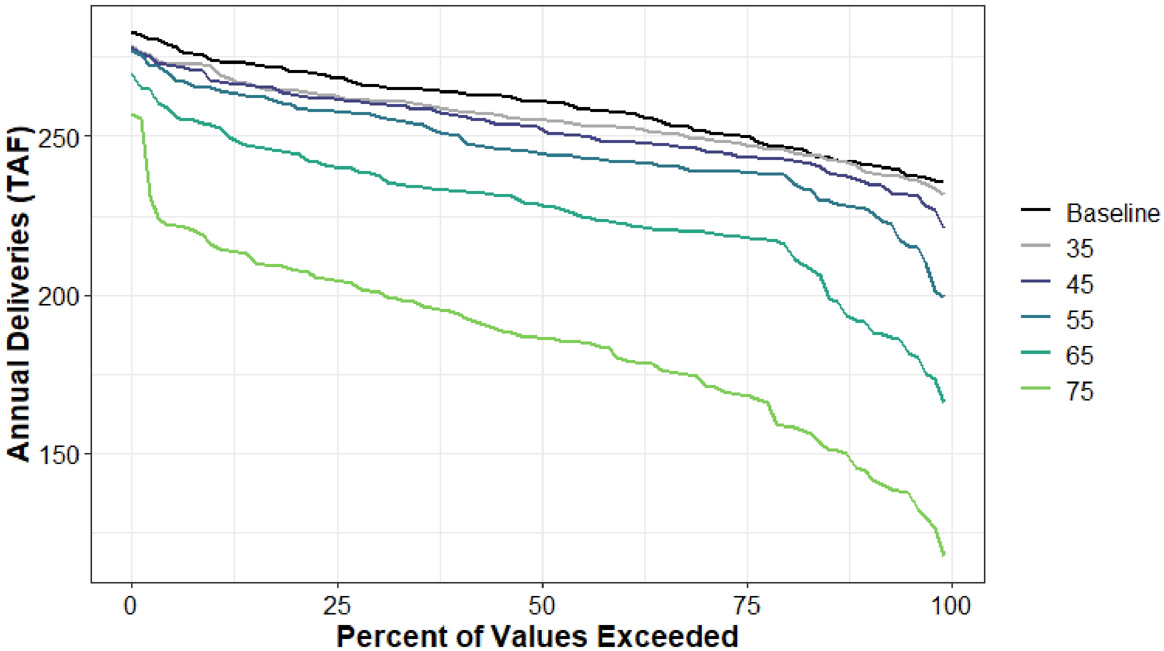

Figure A1-200. Total Water Supplied to Water Budget Area 23 (Ag) Annual Percent Exceedance Plot

Table A1-467. Total Water Supplied to Water Budget Area 23 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	283	279	278	277	270	257
10%	274	272	267	265	254	216
20%	270	264	263	259	244	208
30%	266	261	260	257	238	201
40%	264	258	257	251	233	194
50%	261	255	253	245	229	187
60%	258	253	248	242	223	180
70%	252	249	246	239	220	173
80%	247	246	243	238	216	159
90%	241	240	236	227	192	145
100%	236	232	221	199	166	118
Mean	259	255	253	246	226	185

Table A1-468. Total Water Supplied to Water Budget Area 23 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	268	261	256	244	216	190
D	265	259	256	246	216	172
BN	262	256	255	250	227	167
AN	256	252	251	248	235	189
W	250	250	248	243	235	201
All	259	255	253	246	226	185

A1.12.8.31 Water Budget Area 24 (Ag)

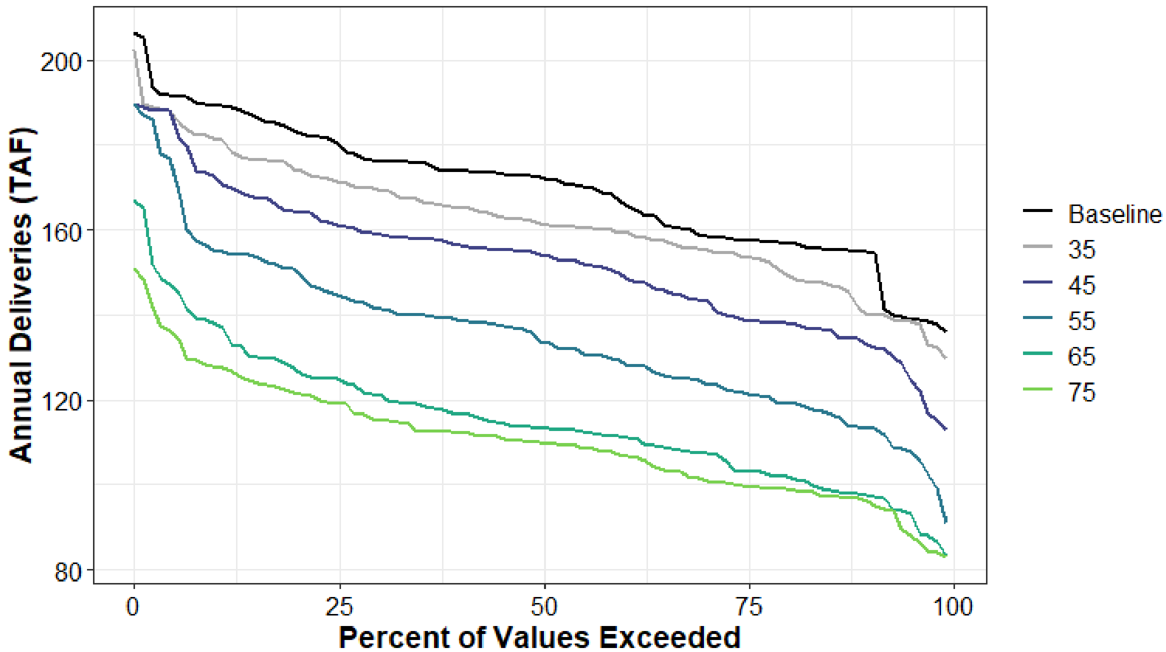

Figure A1-201. Total Water Supplied to Water Budget Area 24 (Ag) Annual Percent Exceedance Plot

Table A1-469. Total Water Supplied to Water Budget Area 24 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	207	202	190	189	167	151
10%	189	181	172	155	138	128
20%	183	174	164	150	127	121
30%	176	170	159	142	121	115
40%	174	165	156	139	117	112
50%	172	162	154	134	113	110
60%	167	159	149	129	111	107
70%	159	155	143	124	107	101
80%	157	150	138	119	102	99
90%	155	140	133	113	98	96
100%	136	130	113	91	83	83
Mean	170	162	152	135	115	110

Table A1-470. Total Water Supplied to Water Budget Area 24 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	179	158	146	132	125	123
D	176	164	149	131	117	114
BN	172	167	150	130	113	111
AN	165	162	154	135	114	107
W	160	161	159	143	111	102
All	170	162	152	135	115	110

A1.12.8.32 Water Budget Area 24 (Urban)

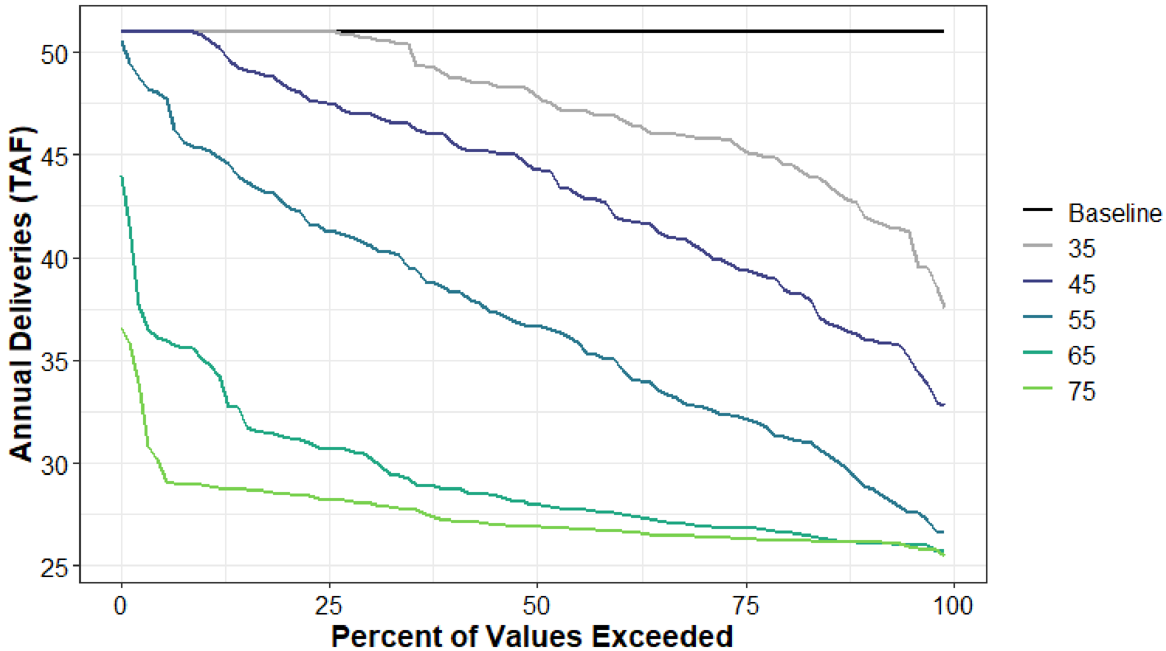

Figure A1-202. Total Water Supplied to Water Budget Area 24 (Urban) Annual Percent Exceedance Plot

Table A1-471. Total Water Supplied to Water Budget Area 24 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	51	51	51	51	44	37
10%	51	51	51	45	35	29
20%	51	51	48	43	31	28
30%	51	51	47	41	30	28
40%	51	49	46	38	29	27
50%	51	48	44	37	28	27
60%	51	47	42	35	28	27
70%	51	46	40	33	27	26
80%	51	45	39	31	27	26
90%	51	42	36	29	26	26
100%	51	38	33	27	26	25
Mean	51	47	44	37	29	27

Table A1-472. Total Water Supplied to Water Budget Area 24 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	51	42	36	31	29	28
D	51	46	41	34	28	27
BN	51	49	44	36	28	28
AN	51	49	45	38	30	28
W	51	50	48	43	31	27
All	51	47	44	37	29	27

A1.12.8.33 Water Budget Area 26 (Urban)

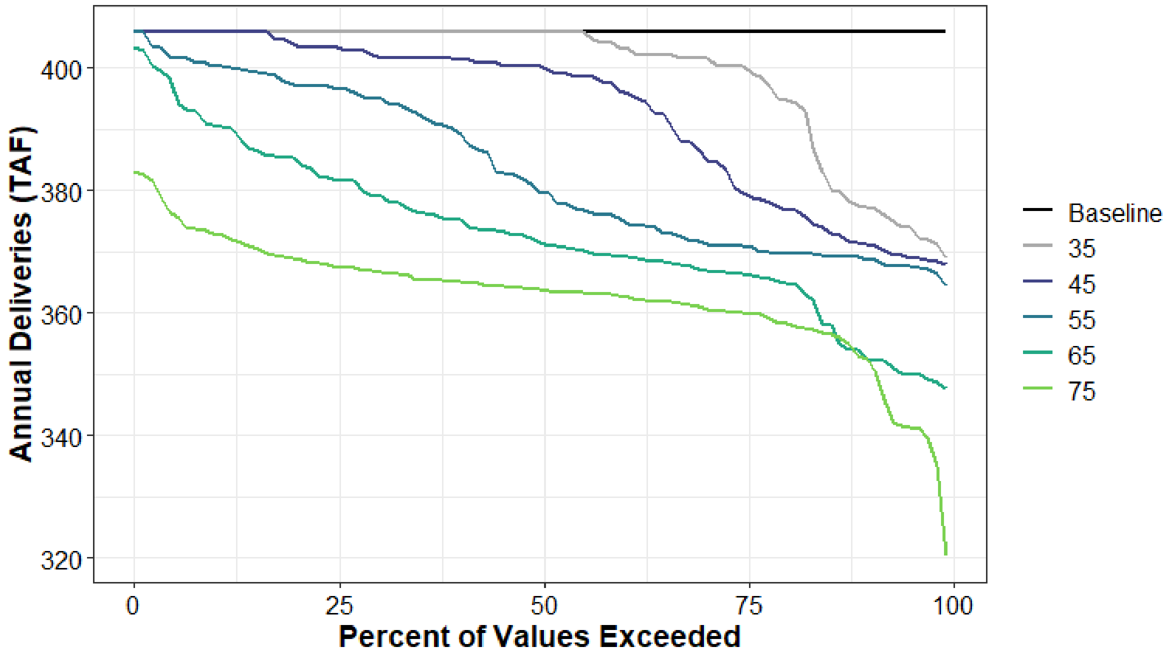

Figure A1-203. Total Water Supplied to Water Budget Area 26 (Urban) Annual Percent Exceedance Plot

Table A1-473. Total Water Supplied to Water Budget Area 26 (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	406	406	406	406	403	383
10%	406	406	406	400	391	373
20%	406	406	404	397	385	369
30%	406	406	402	395	379	367
40%	406	406	401	389	375	365
50%	406	406	400	380	371	364
60%	406	403	396	375	369	363
70%	406	402	386	371	367	361
80%	406	395	377	370	365	358
90%	406	377	371	369	353	353
100%	406	369	368	364	348	320
Mean	406	399	393	383	373	363

Table A1-474. Total Water Supplied to Water Budget Area 26 (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	406	379	372	370	356	353
D	406	398	385	371	366	362
BN	406	405	398	380	369	361
AN	406	405	402	391	378	362
W	406	405	404	398	388	370
All	406	399	393	383	373	363

A1.12.8.34 Water Budget Area 50 (Ag)

The values in the figure and tables that follow summarize agricultural diversions to Delta islands as represented by the Delta Channel Depletions model.

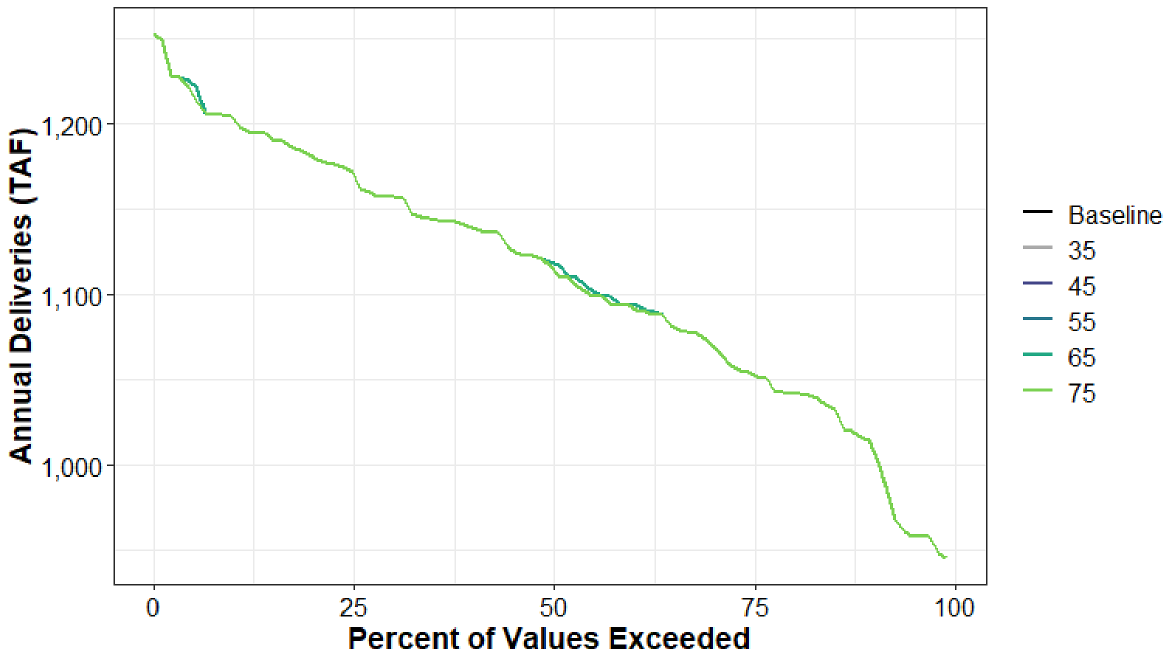

Figure A1-204. Total Water Supplied to Water Budget Area 50 (Ag) Annual Percent Exceedance Plot

Table A1-475. Total Water Supplied to Water Budget Area 50 (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	1,253	1,253	1,253	1,253	1,253	1,253
10%	1,204	1,204	1,204	1,204	1,204	1,204
20%	1,181	1,181	1,181	1,181	1,181	1,181
30%	1,157	1,157	1,157	1,157	1,157	1,157
40%	1,140	1,140	1,140	1,140	1,140	1,140
50%	1,119	1,119	1,119	1,119	1,119	1,118
60%	1,094	1,094	1,094	1,094	1,094	1,093
70%	1,072	1,072	1,072	1,072	1,072	1,072
80%	1,043	1,043	1,043	1,043	1,043	1,043
90%	1,016	1,016	1,016	1,016	1,016	1,016
100%	946	946	946	946	946	946
Mean	1,110	1,110	1,110	1,110	1,110	1,110

Table A1-476. Total Water Supplied to Water Budget Area 50 (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	1,179	1,179	1,179	1,179	1,179	1,178
D	1,145	1,145	1,145	1,145	1,145	1,145
BN	1,130	1,130	1,130	1,130	1,130	1,128
AN	1,081	1,081	1,081	1,081	1,081	1,081
W	1,048	1,048	1,048	1,048	1,048	1,048
All	1,110	1,110	1,110	1,110	1,110	1,110

A1.12.8.35 Delta (Urban)

The values in the figure and tables that follow summarize diversions to the City of Antioch (demand site U_ANTOC_NU).

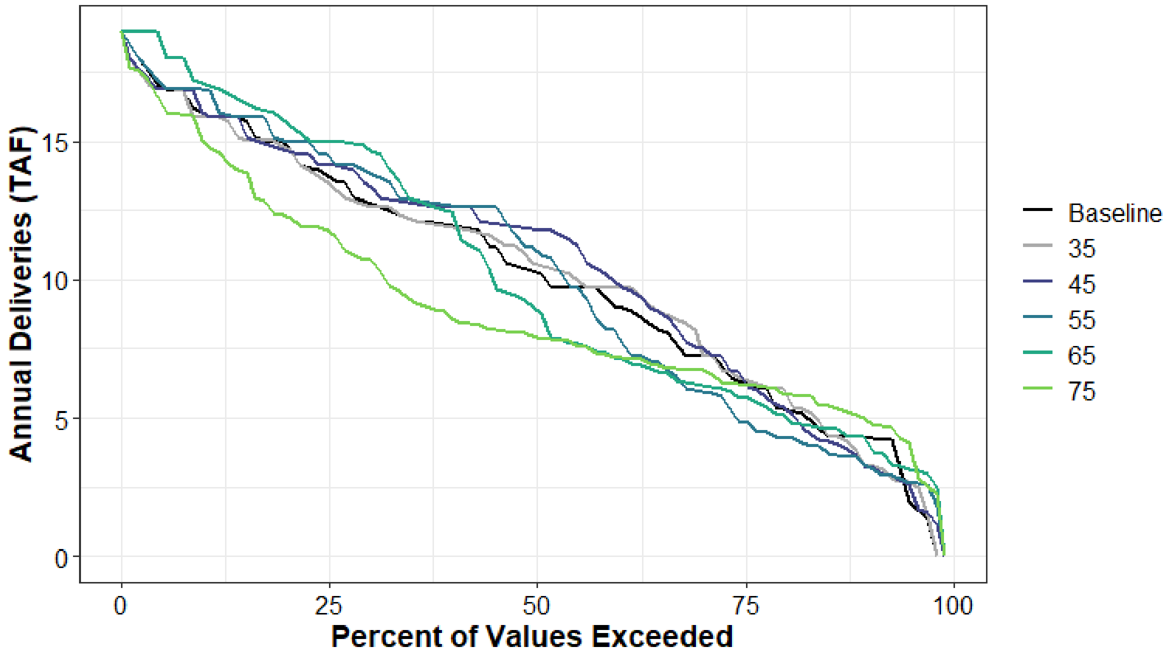

Figure A1-205. Total Water Supplied to Delta (Urban) Annual Percent Exceedance Plot

Table A1-477. Total Water Supplied to Water Budget Delta (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	19	19	19	19	19	19
10%	16	15.9	16	16.9	17.2	15
20%	14.9	14.8	14.7	15.1	16.1	12.3
30%	13	12.8	13.4	14	14.7	10.7
40%	12.1	12.1	12.6	13	12.5	8.7
50%	10.6	10.6	12.1	11.2	9	8
60%	9.1	9.7	10.1	8.1	7.2	7.2
70%	7.2	7.8	7.6	6	6.2	6.7
80%	5.4	6.1	5.4	4.3	5.1	5.9
90%	4.3	3.4	3.4	3.4	4.3	5
100%	0	0	0	0	0	0
Mean	10.2	10.3	10.5	10.2	10.2	9

Table A1-478. Total Water Supplied to Water Budget Delta (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	3.3	2.9	3.4	3.4	4.4	5.1
D	7.3	7.9	7.5	6.1	6.3	7.3
BN	10.1	10.4	10.9	9.9	7.6	7.7
AN	12	11.7	12.5	12.8	13.3	8.2
W	15.5	15.3	15.5	15.9	16.6	13.5
All	10.2	10.3	10.5	10.2	10.2	9

A1.12.8.36 Water Budget Area 60N (Ag)

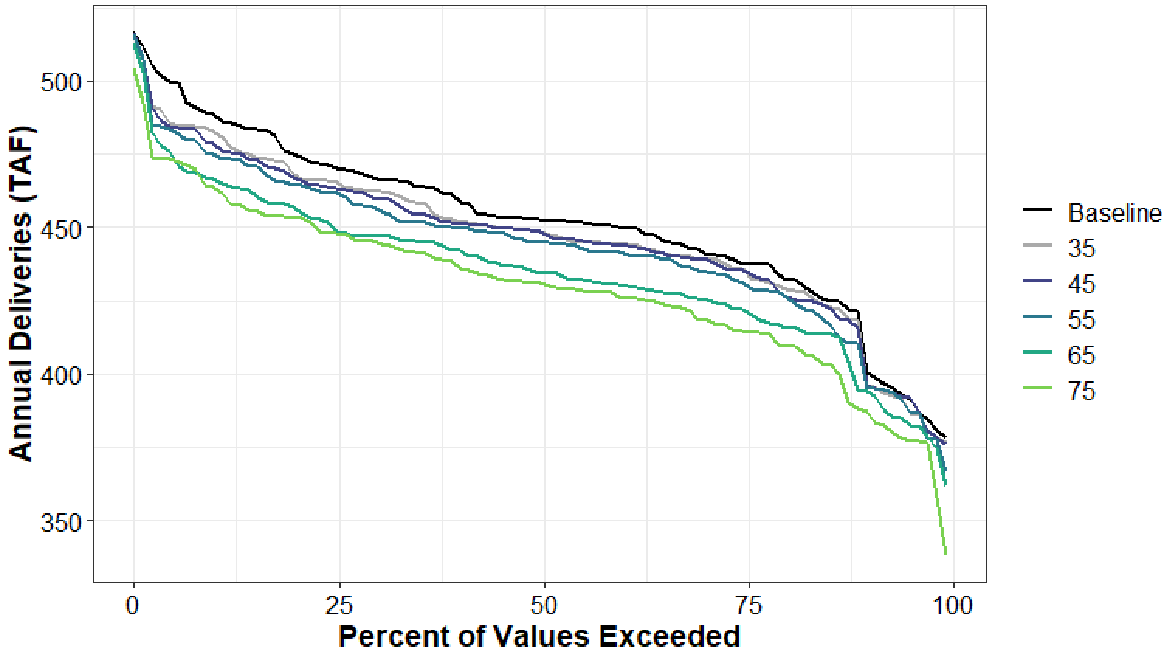

Figure A1-206. Total Water Supplied to Water Budget Area 60N (Ag) Annual Percent Exceedance Plot

Table A1-479. Total Water Supplied to Water Budget Area 60N (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	517	512	516	516	513	504
10%	488	482	478	475	466	464
20%	475	468	467	465	456	453
30%	467	462	460	456	447	445
40%	459	452	451	450	443	436
50%	453	449	449	445	434	431
60%	450	444	444	441	430	426
70%	442	439	439	435	426	418
80%	433	430	427	427	416	410
90%	405	400	400	398	394	387
100%	378	377	376	366	362	338
Mean	452	447	446	443	435	430

Table A1-480. Total Water Supplied to Water Budget Area 60N (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	473	462	460	452	435	435
D	462	455	454	451	442	432
BN	450	445	444	442	437	430
AN	442	439	437	436	429	423
W	439	438	438	437	431	427
All	452	447	446	443	435	430

A1.12.8.37 Water Budget Area 60N (Urban)

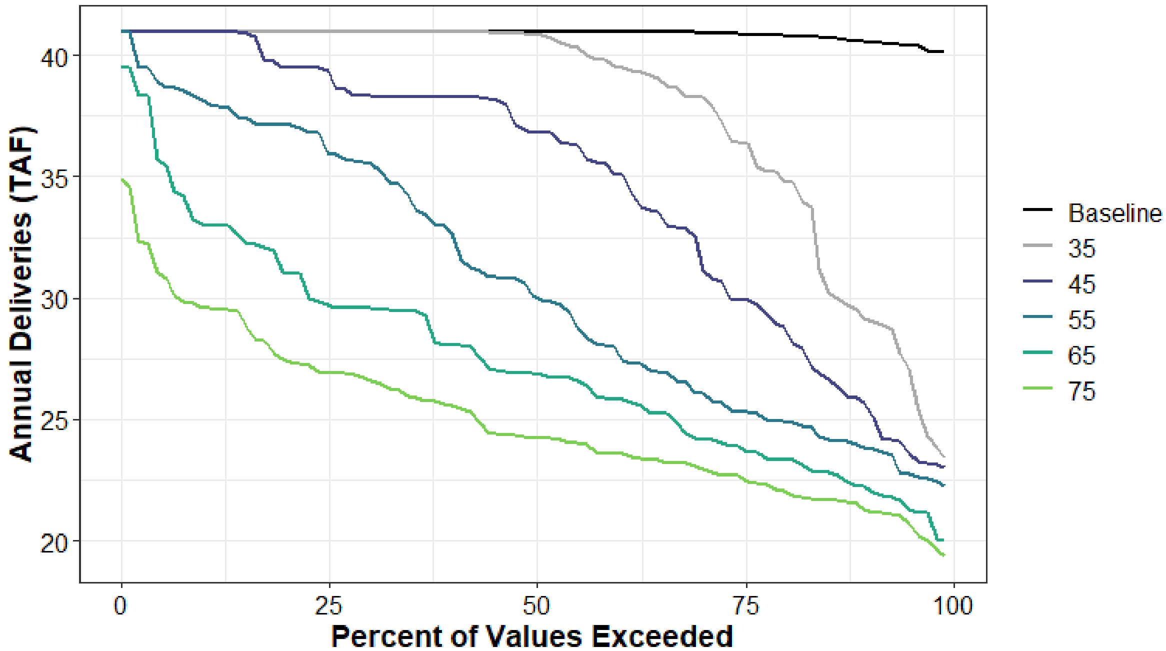

Figure A1-207. Total Water Supplied to Water Budget Area 60N (Urban) Annual Percent Exceedance Plot

Table A1-481. Total Water Supplied to Water Budget Area 60N (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	41	41	41	41	40	35
10%	41	41	41	38	33	30
20%	41	41	40	37	31	27
30%	41	41	38	36	30	27
40%	41	41	38	33	28	26
50%	41	41	37	30	27	24
60%	41	40	35	28	26	24
70%	41	38	32	26	24	23
80%	41	35	29	25	23	22
90%	41	29	26	24	22	21
100%	40	23	23	22	20	19
Mean	41	38	35	31	27	25

Table A1-482. Total Water Supplied to Water Budget Area 60N (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	41	29	26	24	22	22
D	41	37	31	26	24	23
BN	41	40	36	30	26	25
AN	41	40	38	34	28	25
W	41	41	40	37	33	29
All	41	38	35	31	27	25

A1.12.8.38 Water Budget Area 60S (Ag)

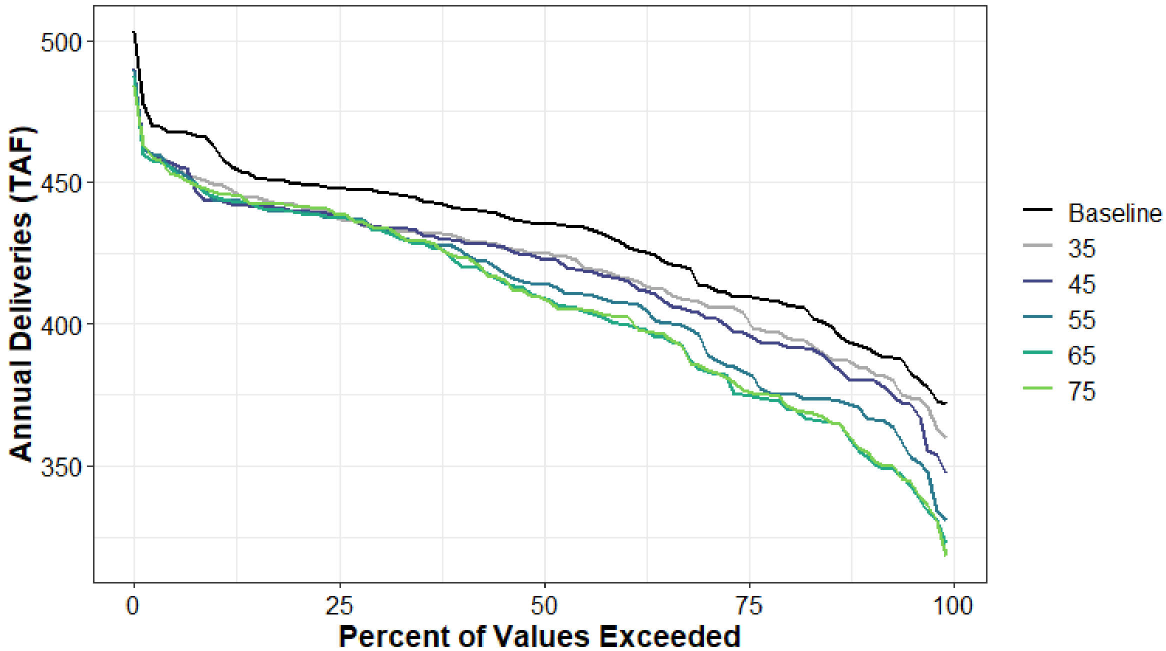

Figure A1-208. Total Water Supplied to Water Budget Area 60S (Ag) Annual Percent Exceedance Plot

Table A1-483. Total Water Supplied to Water Budget Area 60S (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	503	490	490	490	487	484
10%	462	450	443	444	445	446
20%	450	442	440	439	439	442
30%	447	434	434	433	433	434
40%	441	431	429	426	421	423
50%	435	425	423	414	409	410
60%	429	417	416	407	400	403
70%	414	407	403	394	384	385
80%	407	396	392	375	371	373
90%	392	384	380	368	354	355
100%	372	360	347	331	323	318
Mean	430	420	418	411	406	407

Table A1-484. Total Water Supplied to Water Budget Area 60S (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	442	438	438	439	439	440
D	444	431	429	428	427	429
BN	436	421	418	412	410	410
AN	427	411	407	396	392	392
W	412	406	402	387	376	377
All	430	420	418	411	406	407

A1.12.8.39 Water Budget Area 60S (Urban)

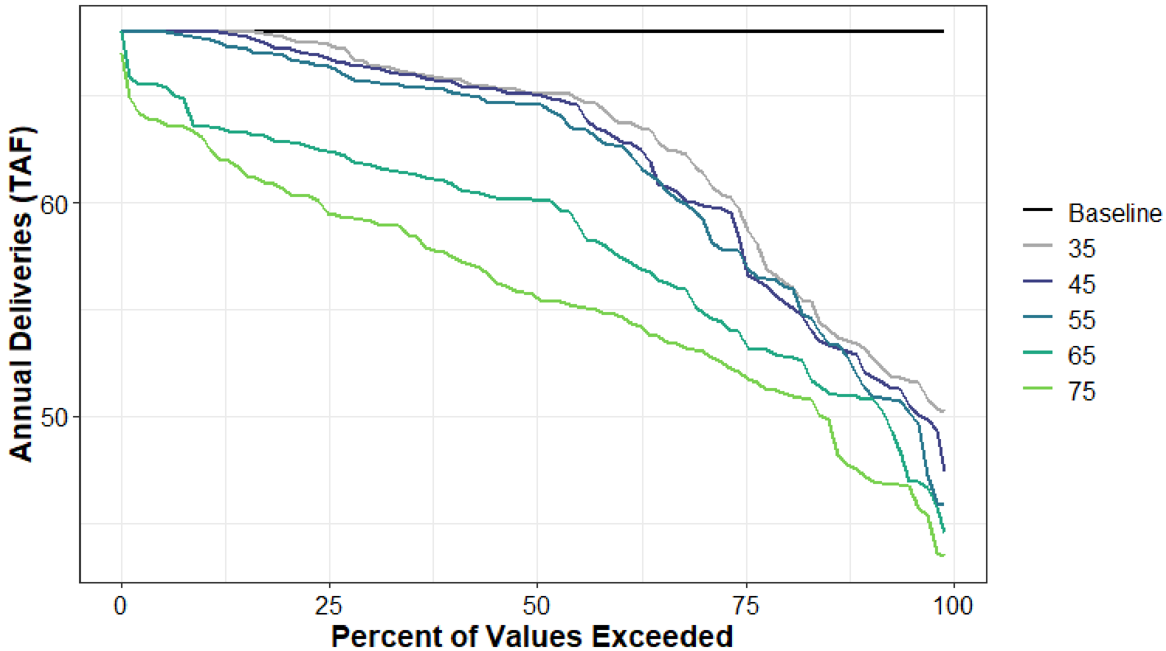

Figure A1-209. Total Water Supplied to Water Budget Area 60S (Urban) Annual Percent Exceedance Plot

Table A1-485. Total Water Supplied to Water Budget Area 60S (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	68	68	68	68	68	67
10%	68	68	68	68	64	63
20%	68	68	67	67	63	61
30%	68	66	66	66	62	59
40%	68	66	66	65	61	58
50%	68	65	65	65	60	56
60%	68	64	63	63	58	55
70%	68	62	60	59	55	53
80%	68	56	55	56	53	51
90%	68	53	52	51	51	47
100%	68	50	47	46	45	43
Mean	68	63	62	62	58	56

Table A1-486. Total Water Supplied to Water Budget Area 60S (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	68	54	53	53	52	51
D	68	61	60	60	56	53
BN	68	64	63	62	58	55
AN	68	67	66	65	61	57
W	68	66	66	66	62	61
All	68	63	62	62	58	56

A1.12.8.40 Upper Watershed and Foothill (Ag)

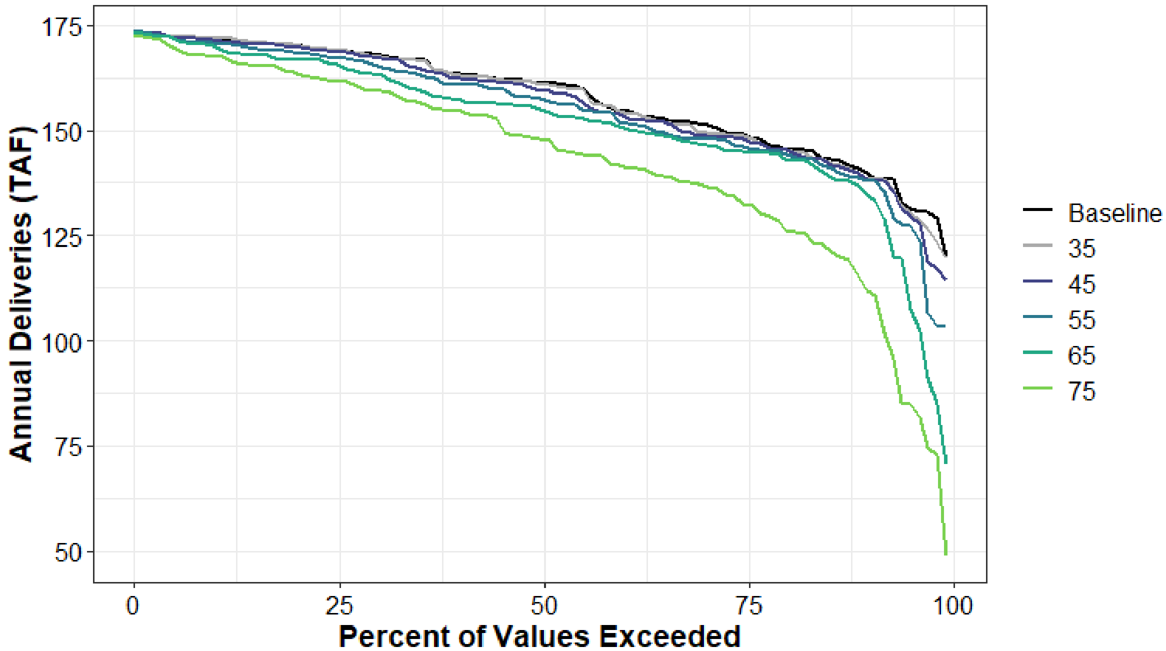

Figure A1-210. Total Surface Water Supplied to Upper Watershed and Foothill (Ag) Annual Percent Exceedance Plot

Table A1-487. Total Surface Water Supplied to Upper Watershed and Foothill (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	173	174	174	174	173	173
10%	172	172	171	171	170	168
20%	170	170	170	169	167	163
30%	168	168	167	165	163	159
40%	163	163	162	161	157	155
50%	161	161	159	157	155	148
60%	155	155	154	152	151	142
70%	151	150	149	148	147	137
80%	146	145	145	145	143	127
90%	140	139	139	138	135	112
100%	120	120	115	103	71	49
Mean	158	157	156	155	151	143

Table A1-488. Total Surface Water Supplied to Upper Watershed and Foothill (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	139	137	136	132	125	107
D	149	149	148	147	144	133
BN	159	158	157	155	153	148
AN	164	164	163	162	158	152
W	170	171	170	169	167	163
All	158	157	156	155	151	143

A1.12.8.41 Upper Watershed and Foothill (Urban)

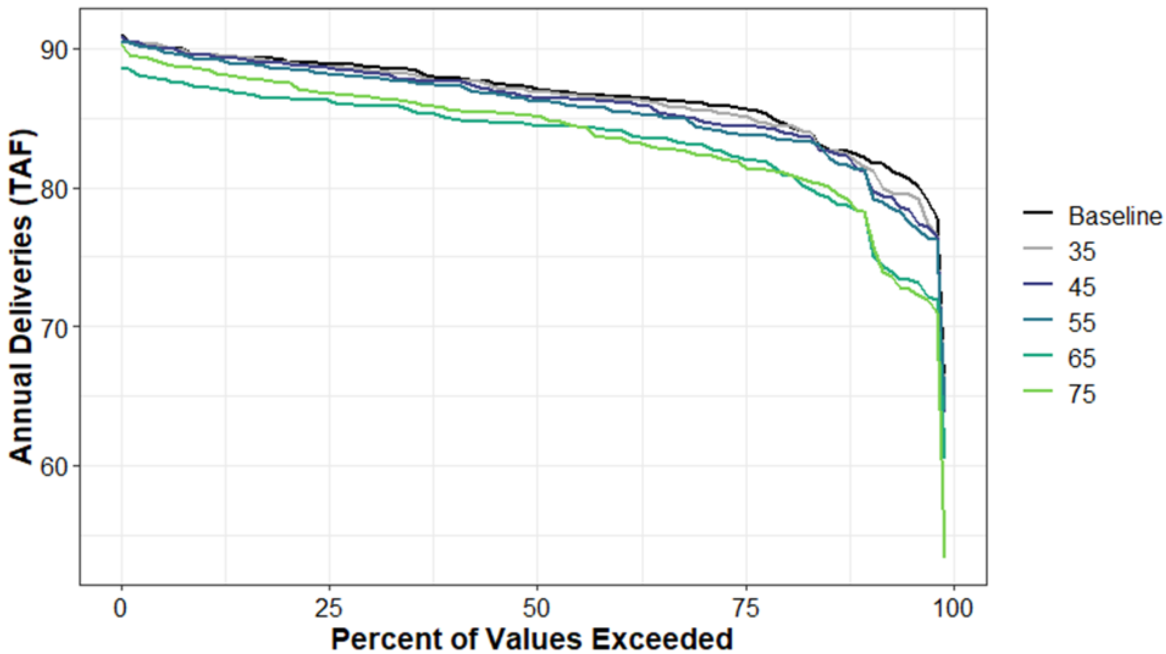

Figure A1-211. Total Surface Water Supplied to Upper Watershed and Foothill (Urban) Annual Percent Exceedance Plot

Table A1-489. Total Surface Water Supplied to Upper Watershed and Foothill (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	91	91	91	90	89	90
10%	89	90	89	89	87	88
20%	89	89	89	89	86	88
30%	89	88	88	88	86	87
40%	88	88	88	87	85	86
50%	87	87	86	86	85	85
60%	86	86	86	85	84	84
70%	86	86	85	84	83	82
80%	85	84	84	83	81	81
90%	82	82	81	81	78	78
100%	65	64	64	64	60	53
Mean	87	86	86	86	83	84

Table A1-490. Total Surface Water Supplied to Upper Watershed and Foothill (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	81	80	79	79	75	75
D	86	85	85	84	82	83
BN	87	87	87	86	84	84
AN	88	88	87	87	85	86
W	89	89	89	89	87	88
All	87	86	86	86	83	84

A1.12.8.42 San Francisco Bay Area (Ag)

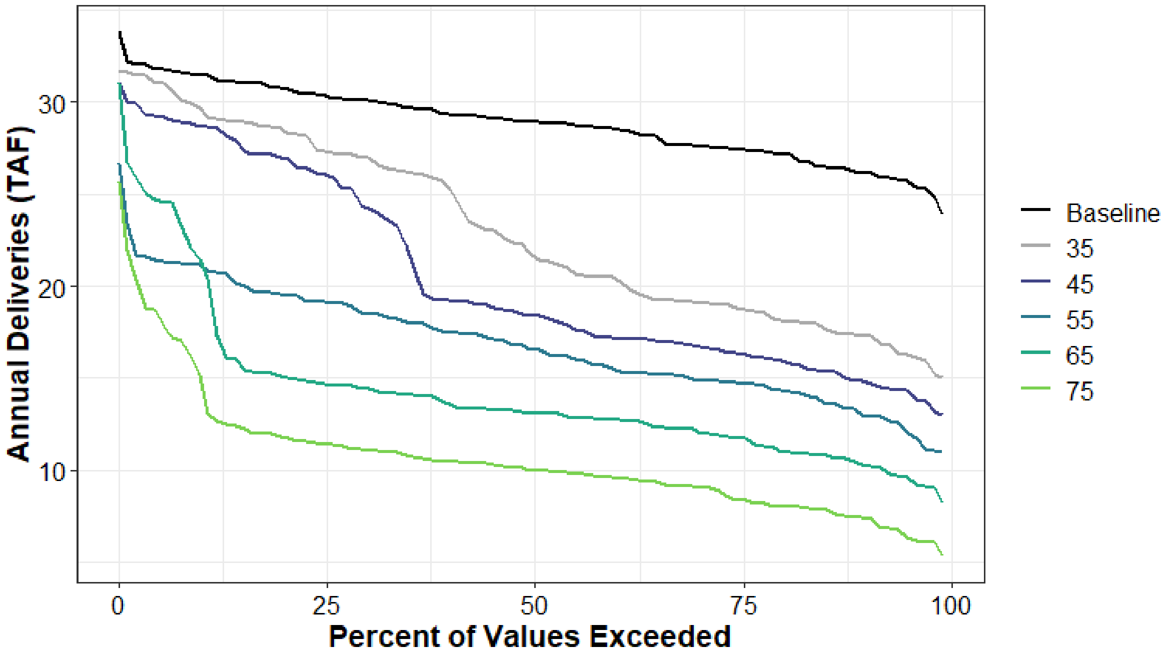

Figure A1-212. Total Surface Water Supplied to San Francisco Bay Area (Ag) Annual Percent Exceedance Plot

Table A1-491. Total Surface Water Supplied to San Francisco Bay Area (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	34	32	31	27	31	26
10%	31	30	29	21	21	15
20%	31	28	27	20	15	12
30%	30	27	24	19	14	11
40%	29	25	19	18	14	10
50%	29	22	18	17	13	10
60%	29	20	17	15	13	10
70%	28	19	17	15	12	9
80%	27	18	16	14	11	8
90%	26	17	15	13	10	7
100%	24	15	13	11	8	5
Mean	29	23	20	17	14	11

Table A1-492. Total Surface Water Supplied to San Francisco Bay Area (Ag) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	31	22	19	18	15	12
D	30	22	19	17	13	10
BN	29	21	18	16	13	10
AN	28	23	19	16	12	9
W	27	26	25	17	16	11
All	29	23	20	17	14	11

A1.12.8.43 San Francisco Bay Area (Urban)

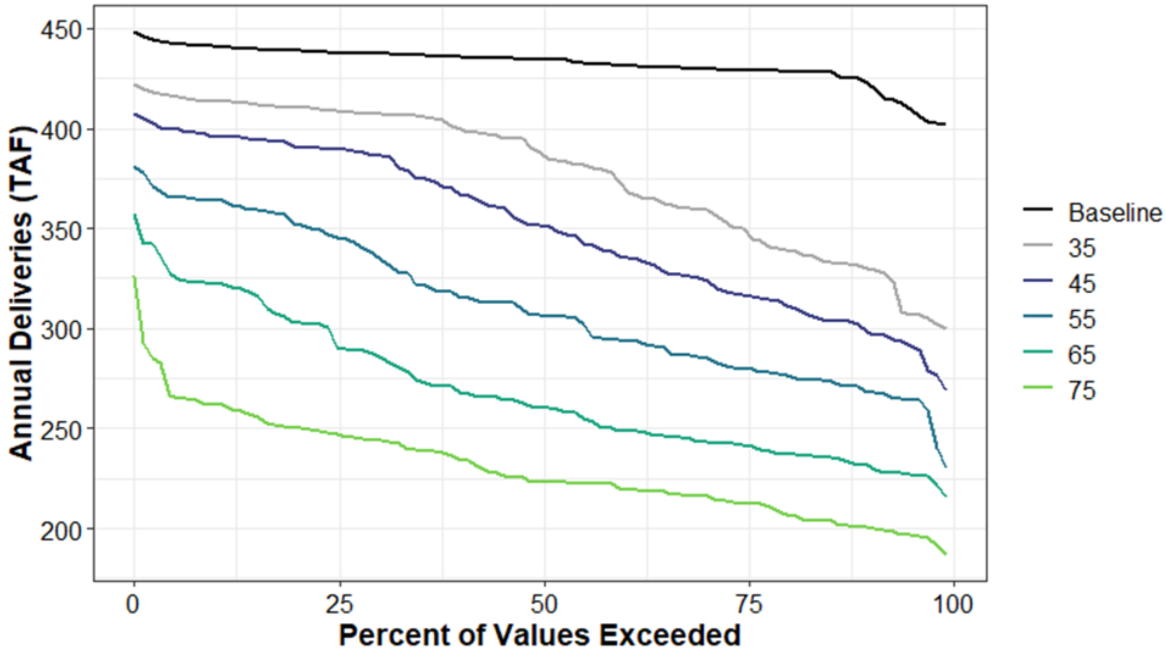

Figure A1-213. Total Surface Water Supplied to San Francisco Bay Area (Urban) Annual Percent Exceedance Plot

Table A1-493. Total Surface Water Supplied to San Francisco Bay Area (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	449	422	407	381	357	326
10%	441	414	396	364	322	262
20%	439	410	391	352	303	251
30%	437	407	386	336	286	244
40%	436	400	367	316	268	235
50%	434	388	351	307	260	223
60%	431	372	336	294	249	220
70%	430	359	325	286	243	216
80%	429	339	312	277	237	208
90%	424	330	299	269	232	201
100%	402	300	269	230	216	187
Mean	432	378	350	311	269	230

Table A1-494. Total Surface Water Supplied to San Francisco Bay Area (Urban) Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	420	324	300	275	246	232
D	435	356	321	282	244	217
BN	437	383	350	302	251	212
AN	434	400	369	321	270	225
W	434	410	392	354	310	252
All	432	378	350	311	269	230

A1.12.8.44 Total CVP Deliveries

Summaries of total CVP deliveries do not include supplies delivered to Contra Costa Water District (demand site U_CCWD_NU) or East Bay Municipal Utility District (demand site U_EBMUD_NU).

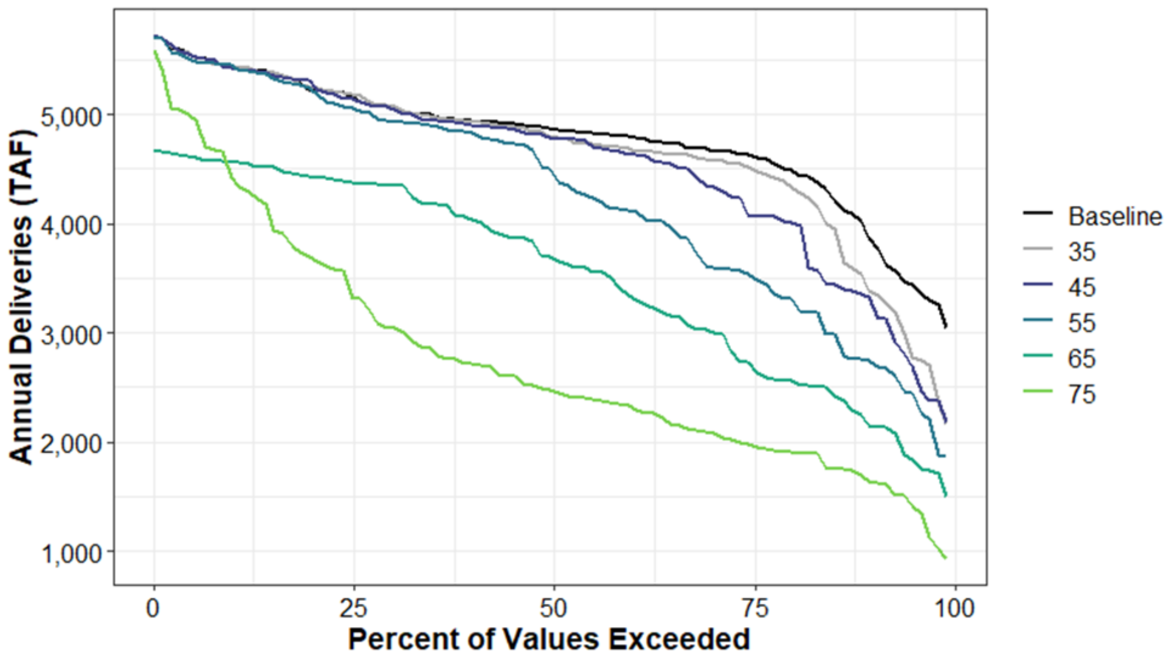

Figure A1-214. Total CVP Deliveries Annual Percent Exceedance Plot Deliveries

Table A1-495. Total CVP Deliveries Exceedance Probability Distribution by Scenario (TAF)

	Baseline	35	45	55	65	75
0%	5,710	5,729	5,729	5,715	4,661	5,581
10%	5,422	5,423	5,418	5,441	4,562	4,401
20%	5,226	5,248	5,281	5,221	4,431	3,679
30%	5,053	5,077	5,055	4,939	4,354	3,038
40%	4,940	4,935	4,909	4,835	4,046	2,718
50%	4,874	4,794	4,784	4,511	3,702	2,482
60%	4,797	4,686	4,636	4,122	3,331	2,329
70%	4,679	4,586	4,347	3,604	3,016	2,090
80%	4,501	4,359	4,018	3,312	2,563	1,906
90%	3,895	3,413	3,328	2,749	2,169	1,646
100%	3,038	2,165	2,183	1,869	1,501	929
Mean	4,783	4,662	4,554	4,255	3,531	2,760

Table A1-496. Total CVP Deliveries Average by Water Year Type (TAF)

WYT	Baseline	35	45	55	65	75
C	3,869	3,266	3,056	2,648	2,200	1,670
D	4,664	4,568	4,326	3,687	2,939	2,100
BN	4,792	4,796	4,717	4,340	3,548	2,347
AN	4,893	4,897	4,882	4,791	4,024	2,847
W	5,310	5,297	5,286	5,262	4,465	4,054
All	4,783	4,662	4,554	4,255	3,531	2,760

A1.12.8.45 Total CVP North of Delta

Summaries of total CVP North of Delta deliveries do not include supplies delivered to Contra Costa Water District (demand site U_CCWD_NU) or East Bay Municipal Utility District (demand site U_EBMUD_NU).

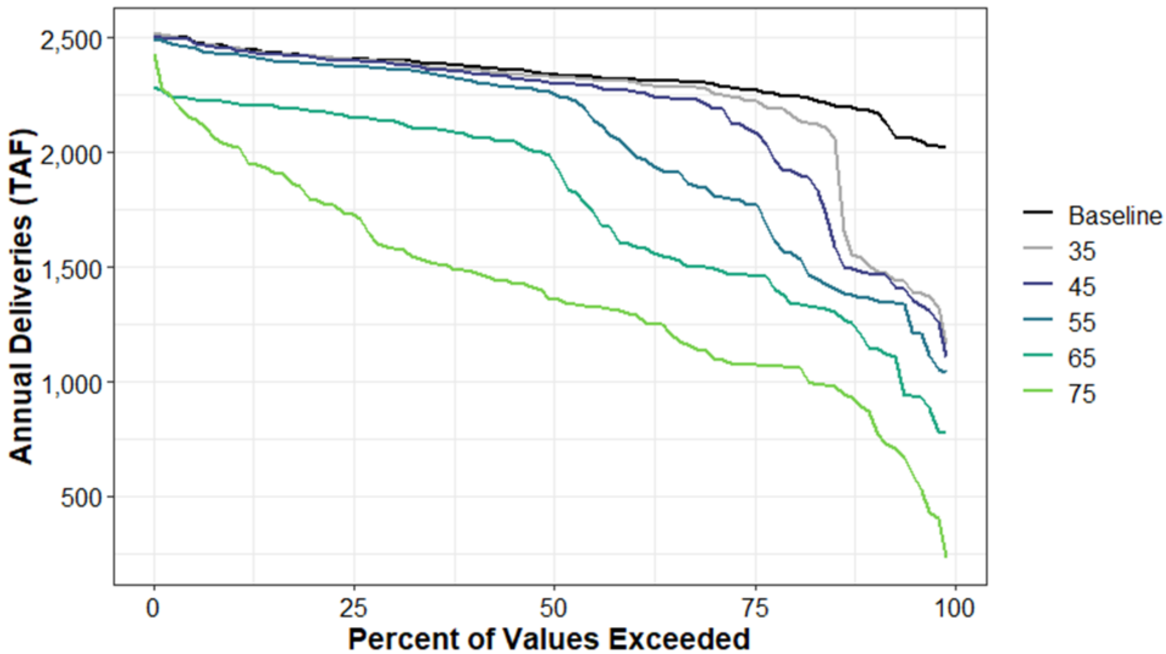

Figure A1-215. Total Water Supplied to Total CVP North of Delta Annual Percent Exceedance Plot Deliveries

Table A1-497. Total Water Supplied to Total CVP North of Delta Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	2,515	2,517	2,508	2,490	2,282	2,424
10%	2,456	2,452	2,451	2,427	2,213	2,029
20%	2,416	2,419	2,416	2,388	2,182	1,798
30%	2,401	2,394	2,388	2,364	2,138	1,585
40%	2,376	2,361	2,348	2,312	2,069	1,482
50%	2,339	2,333	2,304	2,266	1,987	1,362
60%	2,316	2,309	2,268	2,010	1,598	1,298
70%	2,301	2,271	2,204	1,833	1,497	1,124
80%	2,247	2,172	1,921	1,563	1,357	1,063
90%	2,181	1,513	1,475	1,367	1,158	879
100%	2,021	1,162	1,109	1,044	774	229
Mean	2,328	2,216	2,163	2,032	1,774	1,394

Table A1-498. Total Water Supplied to Total CVP North of Delta Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	2,166	1,555	1,464	1,303	1,133	863
D	2,332	2,276	2,144	1,811	1,478	1,164
BN	2,366	2,366	2,329	2,183	1,802	1,212
AN	2,380	2,381	2,374	2,355	2,134	1,473
W	2,367	2,365	2,362	2,358	2,167	1,927
All	2,328	2,216	2,163	2,032	1,774	1,394

A1.12.8.46 CVP North of Delta Water Service (Ag)

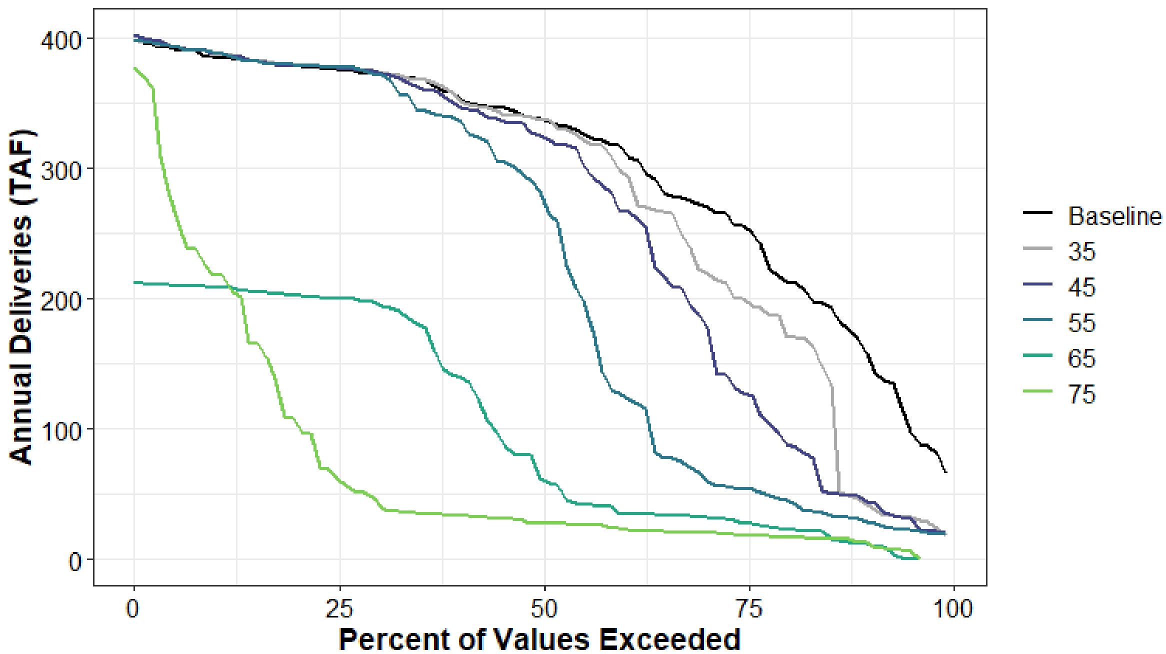

Figure A1-216. Total Water Supplied to CVP North of Delta Water Service (Ag) Annual Percent Exceedance Plot Deliveries

Table A1-499. Total Water Supplied to CVP North of Delta Water Service (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	399	399	403	399	213	378
10%	386	388	388	389	209	218
20%	379	379	379	380	202	104
30%	373	374	374	372	196	43
40%	354	353	348	337	140	34
50%	338	338	325	282	62	27
60%	316	297	268	127	35	23
70%	272	221	184	64	32	20
80%	215	177	92	46	23	17
90%	160	43	45	29	12	13
100%	66	19	21	19	0	0
Mean	303	279	260	222	102	68

Table A1-500. Total Water Supplied to CVP North of Delta Water Service (Ag) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	163	66	47	32	14	15
D	270	232	176	81	29	24
BN	314	318	301	223	58	25
AN	363	363	362	358	177	26
W	369	370	369	370	199	174
All	303	279	260	222	102	68

A1.12.8.47 CVP North of Delta Water Service (M&I)

Summaries of CVP North of Delta Water Service (M&I) deliveries do not include supplies delivered to Contra Costa Water District (demand site U_CCWD_NU) or East Bay Municipal Utility District (demand site U_EBMUD_NU).

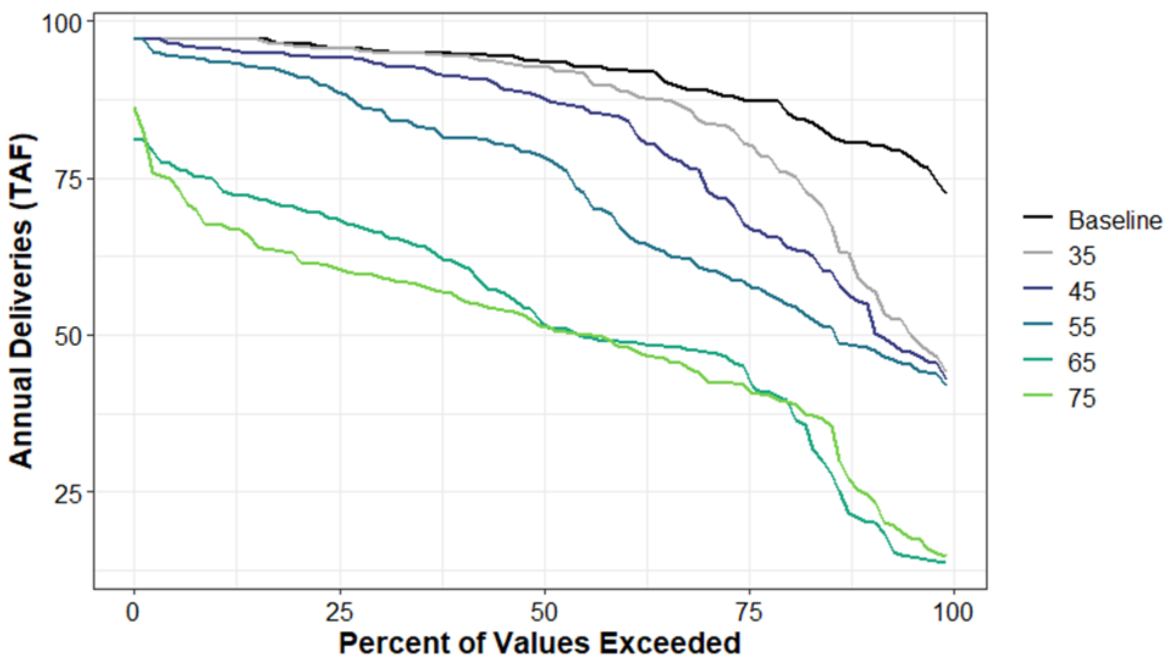

Figure A1-217. Total Water Supplied to CVP North of Delta Water Service (M&I) Percent Exceedance Plot Deliveries

Table A1-501. Total Water Supplied to CVP North of Delta Water Service (M&I) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	97	97	97	97	81	86
10%	97	97	96	93	74	67
20%	96	96	94	91	70	62
30%	95	95	93	86	66	59
40%	95	94	91	81	61	56
50%	94	93	88	79	52	51
60%	92	89	85	67	49	48
70%	89	84	75	61	47	43
80%	86	76	65	55	40	39
90%	81	58	55	48	20	25
100%	72	44	43	42	14	15
Mean	91	85	81	73	53	50

Table A1-502. Total Water Supplied to CVP North of Delta Water Service (M&I) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	84	59	54	51	26	31
D	90	84	74	59	42	46
BN	90	90	85	72	50	47
AN	93	93	91	84	63	51
W	95	95	94	91	71	65
All	91	85	81	73	53	50

A1.12.8.48 CVP Settlement (Ag)

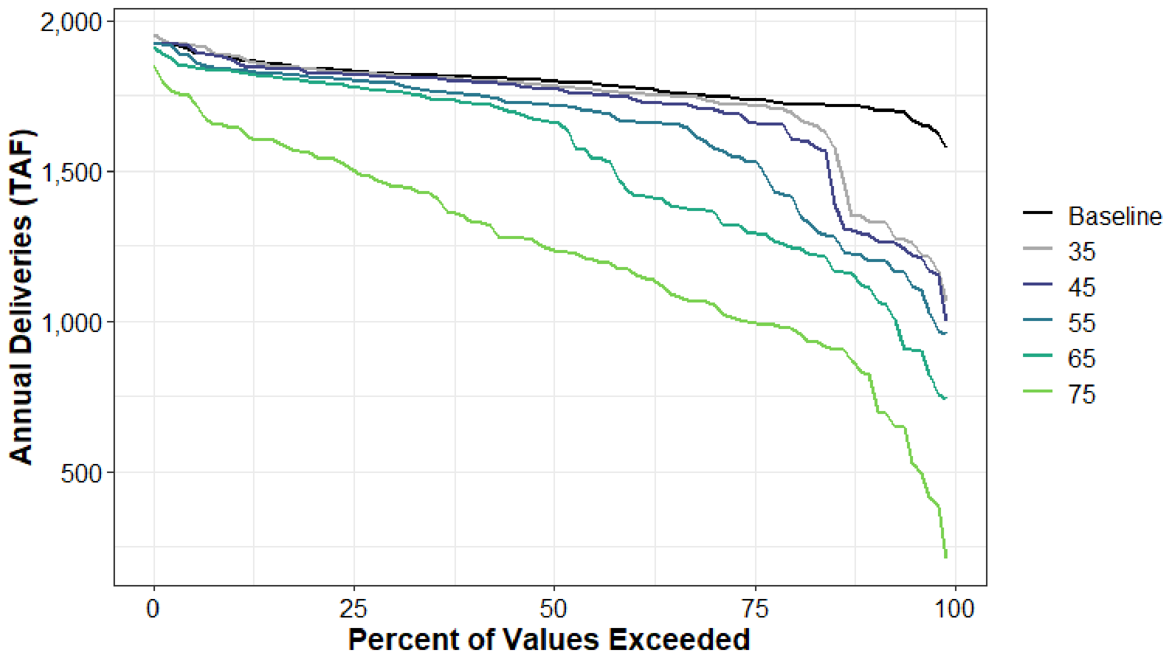

Figure A1-218. Total Water Supplied to CVP Settlement (Ag) Percent Exceedance Plot Deliveries

Table A1-503. Total Water Supplied to CVP Settlement (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	1,922	1,953	1,923	1,923	1,913	1,850
10%	1,876	1,883	1,864	1,838	1,830	1,641
20%	1,839	1,838	1,824	1,810	1,795	1,551
30%	1,821	1,818	1,810	1,792	1,763	1,452
40%	1,811	1,798	1,795	1,753	1,725	1,333
50%	1,799	1,781	1,771	1,718	1,661	1,238
60%	1,776	1,757	1,743	1,663	1,429	1,169
70%	1,749	1,732	1,706	1,588	1,366	1,059
80%	1,724	1,698	1,625	1,419	1,249	978
90%	1,711	1,337	1,286	1,203	1,114	823
100%	1,576	1,063	997	955	740	209
Mean	1,788	1,720	1,695	1,624	1,523	1,228

Table A1-504. Total Water Supplied to CVP Settlement (Ag) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	1,778	1,346	1,282	1,160	1,050	799
D	1,824	1,826	1,769	1,572	1,333	1,063
BN	1,814	1,817	1,807	1,765	1,601	1,101
AN	1,777	1,787	1,785	1,786	1,785	1,356
W	1,755	1,754	1,754	1,756	1,761	1,603
All	1,788	1,720	1,695	1,624	1,523	1,228

A1.12.8.49 CVP Settlement (M&I)

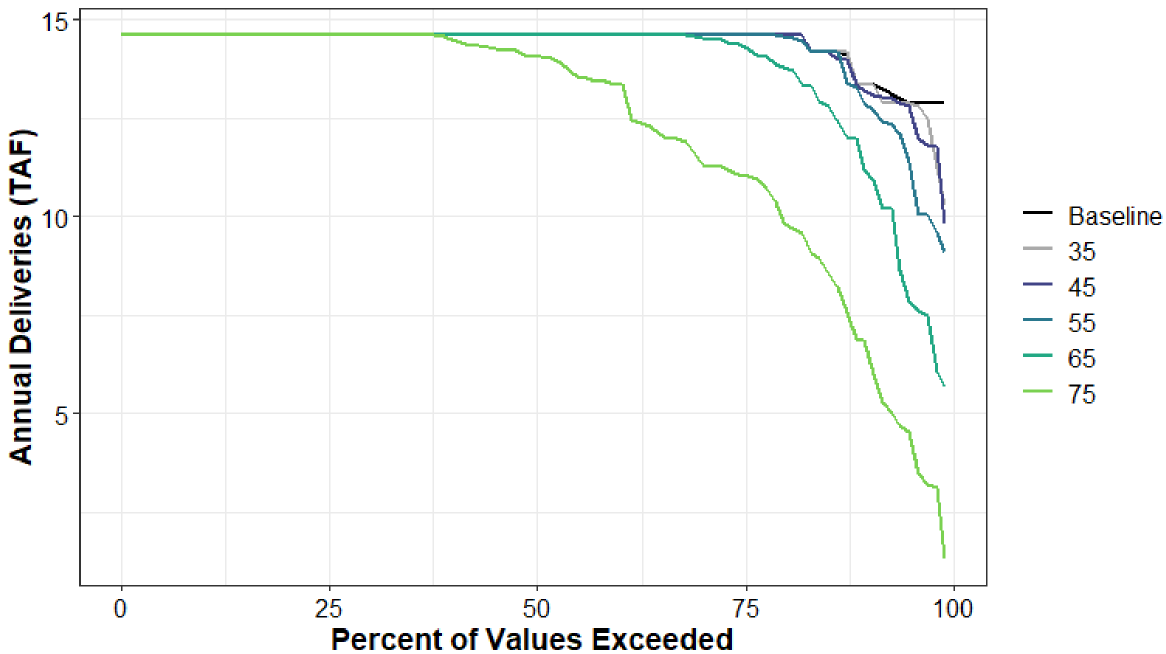

Figure A1-219. Total Water Supplied to CVP Settlement (M&I) Percent Exceedance Plot Deliveries

Table A1-505. Total Water Supplied to CVP Settlement (M&I) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	14.6	14.6	14.6	14.6	14.6	14.6
10%	14.6	14.6	14.6	14.6	14.6	14.6
20%	14.6	14.6	14.6	14.6	14.6	14.6
30%	14.6	14.6	14.6	14.6	14.6	14.6
40%	14.6	14.6	14.6	14.6	14.6	14.5
50%	14.6	14.6	14.6	14.6	14.6	14.1
60%	14.6	14.6	14.6	14.6	14.6	13.4
70%	14.6	14.6	14.6	14.6	14.6	11.5
80%	14.6	14.6	14.6	14.6	13.8	10.1
90%	13.4	13.4	13.2	13	11.4	6.9
100%	12.9	10.3	9.8	9.1	5.7	1.3
Mean	14.4	14.4	14.3	14.2	13.8	12.2

Table A1-506. Total Water Supplied to CVP Settlement (M&I) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	13.7	13.2	13.1	12.4	10.7	7.7
D	14.5	14.5	14.5	14.5	14.2	11.8
BN	14.6	14.6	14.6	14.6	14.1	11.9
AN	14.6	14.6	14.5	14.6	14.5	13.8
W	14.6	14.6	14.6	14.6	14.6	14.5
All	14.4	14.4	14.3	14.2	13.8	12.2

A1.12.8.50 CVP North of Delta (Refuge)

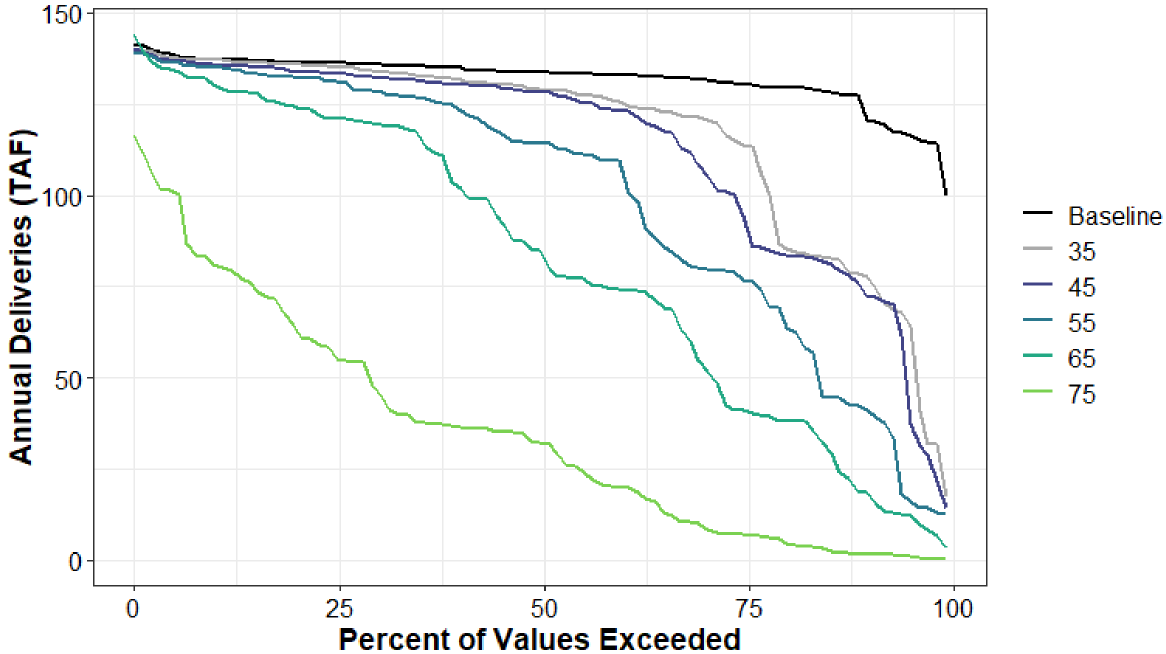

Figure A1-220. Total Water Supplied to CVP North of Delta (Refuge) Percent Exceedance Plot Deliveries

Table A1-507. Total Water Supplied to CVP North of Delta (Refuge) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	141	140	140	139	144	116
10%	137	137	136	135	130	81
20%	136	136	134	132	124	63
30%	136	134	132	129	120	46
40%	135	132	131	123	102	37
50%	134	129	128	114	85	32
60%	133	126	123	108	74	20
70%	132	121	107	80	54	9
80%	130	86	84	66	38	5
90%	122	78	73	41	19	2
100%	100	17	14	13	3	0
Mean	132	117	113	99	82	35

Table A1-508. Total Water Supplied to CVP North of Delta (Refuge) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	128	71	69	47	34	10
D	133	119	110	84	59	19
BN	133	125	121	109	79	27
AN	132	124	121	113	94	25
W	134	131	130	127	121	71
All	132	117	113	99	82	35

A1.12.8.51 CVP South of Delta

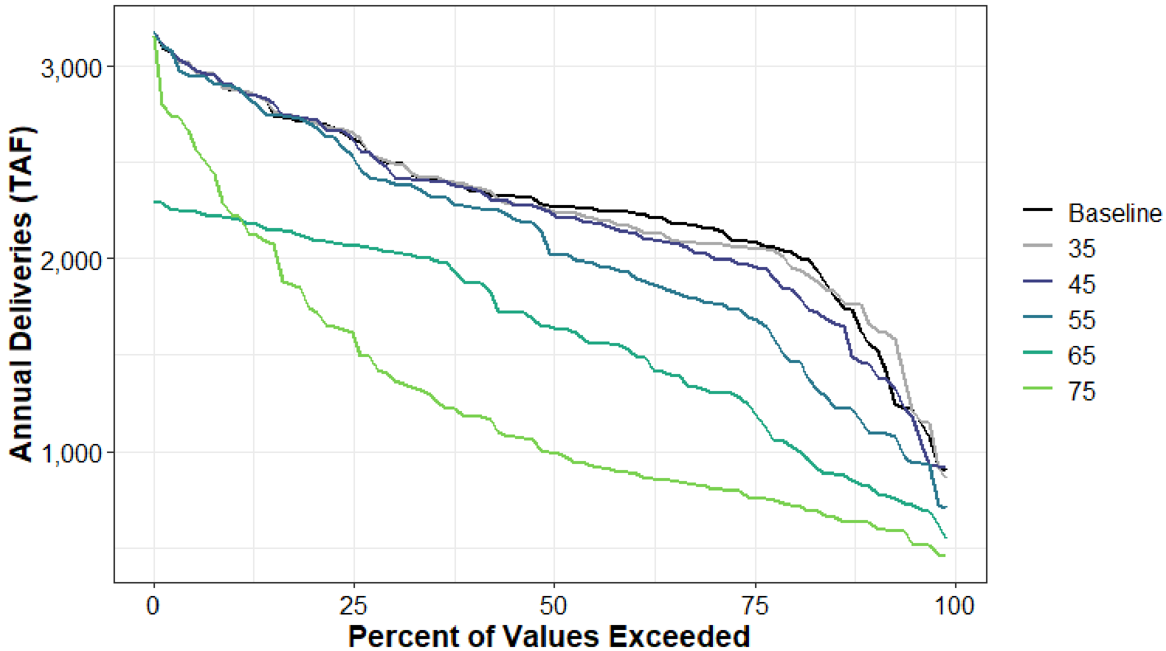

Figure A1-221. Total Water Supplied to CVP South of Delta Percent Exceedance Plot Deliveries

Table A1-509. Total Water Supplied to CVP South of Delta Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	3,179	3,178	3,179	3,179	2,293	3,154
10%	2,874	2,881	2,896	2,894	2,207	2,226
20%	2,707	2,707	2,724	2,693	2,101	1,739
30%	2,500	2,500	2,443	2,394	2,034	1,382
40%	2,352	2,378	2,367	2,268	1,875	1,185
50%	2,277	2,252	2,241	2,024	1,647	993
60%	2,241	2,167	2,137	1,925	1,521	888
70%	2,156	2,079	2,014	1,770	1,312	813
80%	2,040	1,977	1,839	1,479	1,039	728
90%	1,571	1,684	1,456	1,109	820	635
100%	900	858	913	708	543	457
Mean	2,274	2,266	2,215	2,056	1,600	1,238

Table A1-510. Total Water Supplied to CVP South of Delta Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	1,532	1,544	1,431	1,201	911	680
D	2,149	2,118	2,015	1,722	1,324	830
BN	2,243	2,247	2,209	1,989	1,599	1,012
AN	2,329	2,332	2,324	2,255	1,733	1,244
W	2,760	2,748	2,741	2,721	2,118	1,979
All	2,274	2,266	2,215	2,056	1,600	1,238

A1.12.8.52 CVP South of Delta Water Service (Ag)

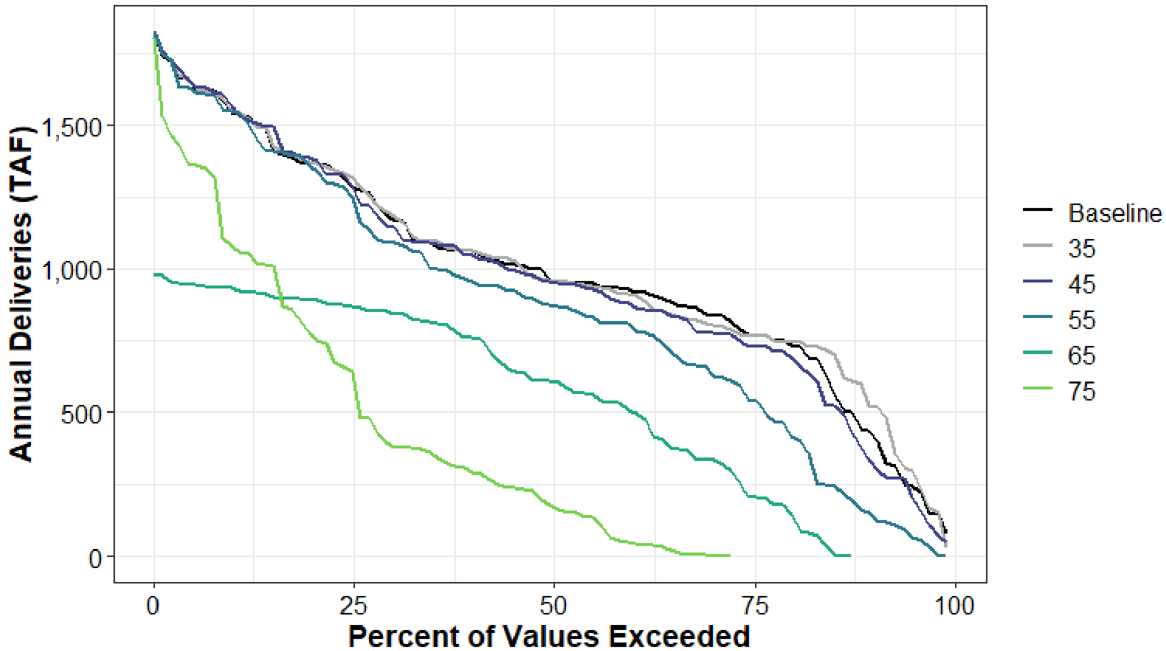

Figure A1-222. Total Water Supplied to CVP South of Delta Water Service (Ag) Percent Exceedance Plot Deliveries

Table A1-511. Total Water Supplied to CVP South of Delta Water Service (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	1,828	1,827	1,828	1,828	984	1,803
10%	1,543	1,547	1,560	1,551	931	1,075
20%	1,368	1,371	1,385	1,354	892	769
30%	1,176	1,190	1,148	1,091	847	387
40%	1,064	1,063	1,050	957	762	296
50%	960	964	955	877	611	178
60%	928	911	877	804	506	46
70%	840	808	779	645	334	3
80%	741	745	699	437	161	0
90%	441	540	342	155	0	0
100%	75	29	50	0	0	0
Mean	999	1,009	974	870	545	369

Table A1-512. Total Water Supplied to CVP South of Delta Water Service (Ag) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	1,532	1,544	1,431	1,201	911	680
D	2,149	2,118	2,015	1,722	1,324	830
BN	2,243	2,247	2,209	1,989	1,599	1,012
AN	2,329	2,332	2,324	2,255	1,733	1,244
W	2,760	2,748	2,741	2,721	2,118	1,979
All	2,274	2,266	2,215	2,056	1,600	1,238

A1.12.8.53 CVP South of Delta Water Service (M&I)

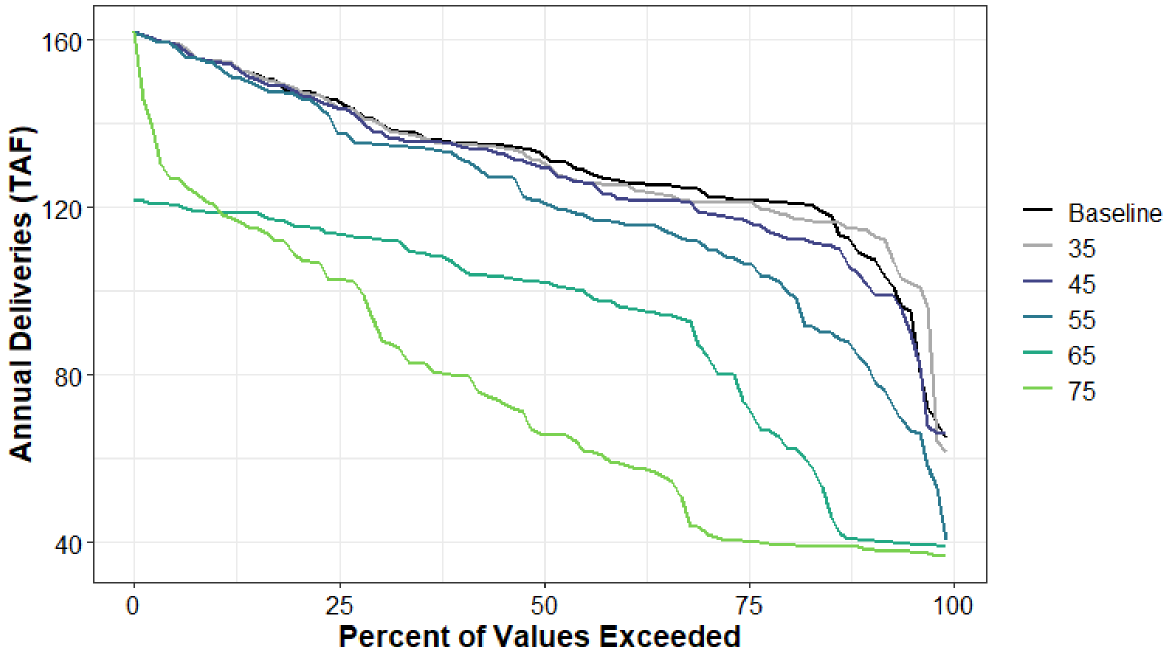

Figure A1-223. Total Water Supplied to CVP South of Delta Water Service (M&I) Percent Exceedance Plot Deliveries

Table A1-513. Total Water Supplied to CVP South of Delta Water Service (M&I) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	162	162	162	162	122	162
10%	155	155	155	154	119	120
20%	148	148	147	147	116	108
30%	140	140	138	136	112	90
40%	136	136	135	132	106	80
50%	133	131	130	122	102	66
60%	126	125	122	116	96	59
70%	124	122	119	111	86	43
80%	122	118	113	101	64	39
90%	108	114	102	83	41	38
100%	65	62	66	40	39	37
Mean	131	131	128	120	92	74

Table A1-514. Total Water Supplied to CVP South of Delta Water Service (M&I) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	104	108	101	86	58	45
D	126	124	120	106	78	53
BN	129	129	125	119	94	65
AN	133	132	132	128	103	79
W	150	149	148	147	116	110
All	131	131	128	120	92	74

A1.12.8.54 CVP South of Delta Exchange

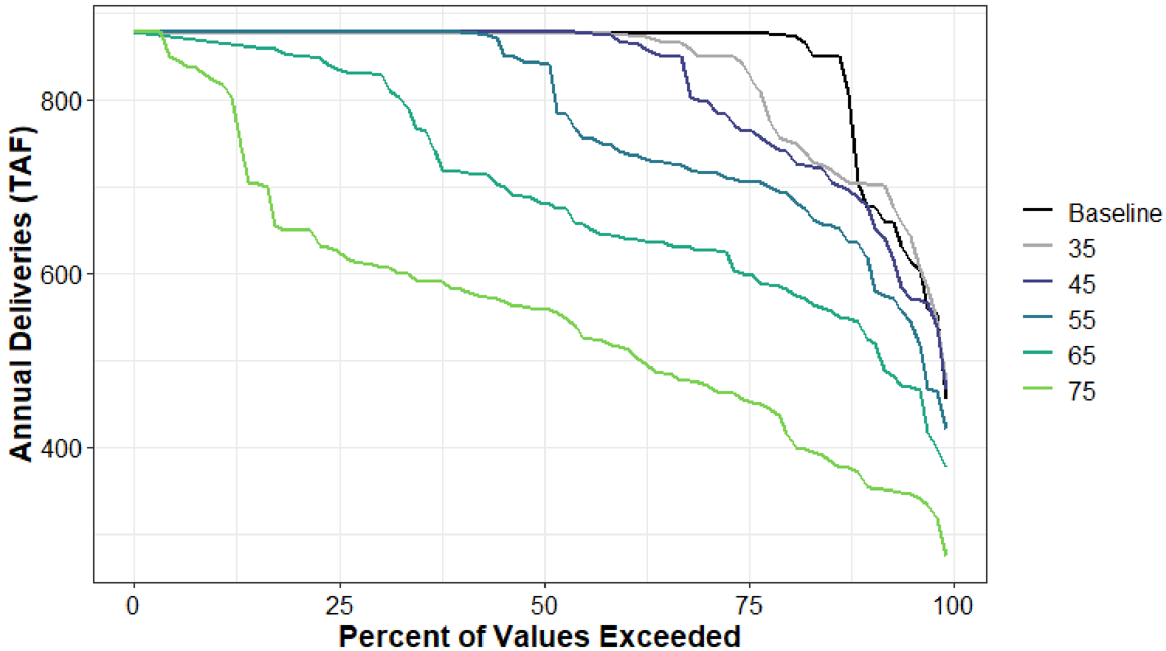

Figure A1-224. Total Water Supplied to CVP SOD Exchange Percent Exceedance Plot Deliveries

Table A1-515. Total Water Supplied to CVP SOD Exchange Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	879	879	879	879	879	879
10%	879	879	879	879	879	822
20%	879	879	879	879	851	649
30%	879	879	879	879	828	608
40%	879	879	879	878	717	581
50%	879	879	879	842	682	559
60%	879	874	867	739	641	515
70%	879	850	799	717	626	472
80%	874	755	741	693	583	424
90%	682	705	680	620	528	358
100%	455	474	465	421	376	274
Mean	845	830	817	776	697	557

Table A1-516. Total Water Supplied to CVP SOD Exchange Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	701	680	663	591	522	416
D	868	815	788	714	627	471
BN	874	876	852	796	666	541
AN	874	874	874	857	717	590
W	876	876	876	876	853	693
All	845	830	817	776	697	557

A1.12.8.55 CVP South of Delta (Refuge)

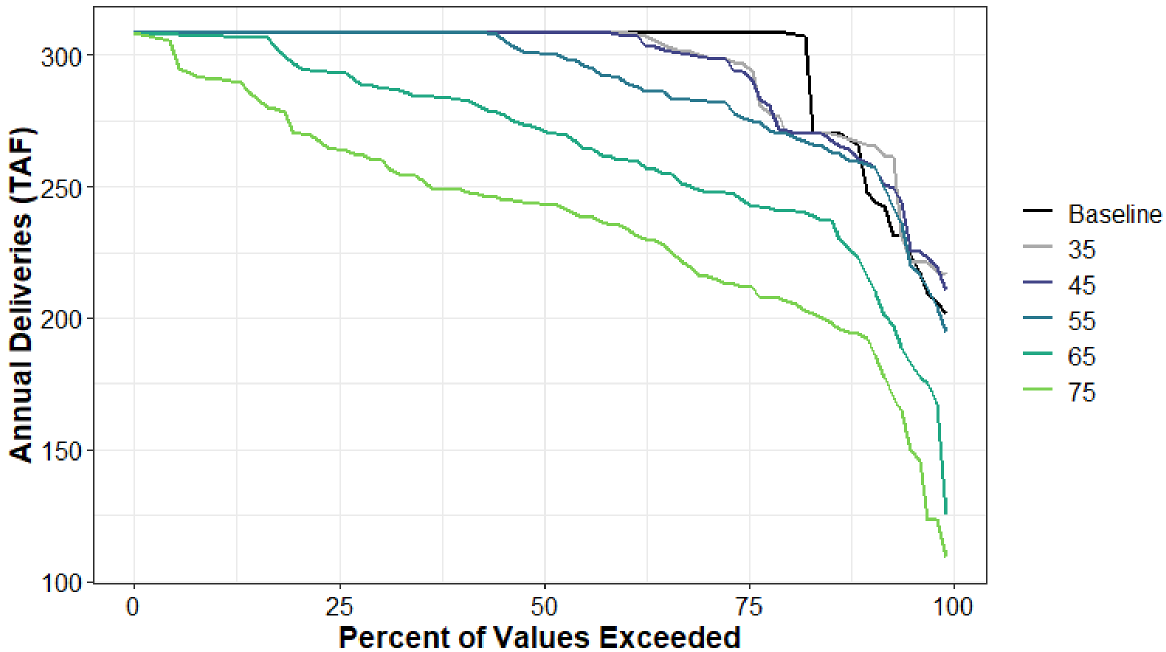

Figure A1-225. Total Water Supplied to CVP SOD (Refuge) Percent Exceedance Plot Deliveries

Table A1-517. Total Water Supplied to CVP SOD (Refuge) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	309	309	309	309	309	309
10%	309	309	309	309	309	291
20%	309	309	309	309	296	270
30%	309	309	309	309	288	260
40%	309	309	309	309	283	249
50%	309	309	309	301	272	243
60%	309	308	308	291	260	235
70%	309	300	300	283	248	216
80%	308	273	272	270	241	207
90%	252	267	259	258	217	193
100%	202	216	211	194	125	109
Mean	297	295	294	289	265	238

Table A1-518. Total Water Supplied to CVP SOD (Refuge) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	260	255	261	250	223	202
D	303	295	294	281	263	223
BN	303	305	300	297	272	240
AN	302	302	302	299	260	248
W	307	307	306	305	287	261
All	297	295	294	289	265	238

A1.12.8.56 Total SWP Deliveries

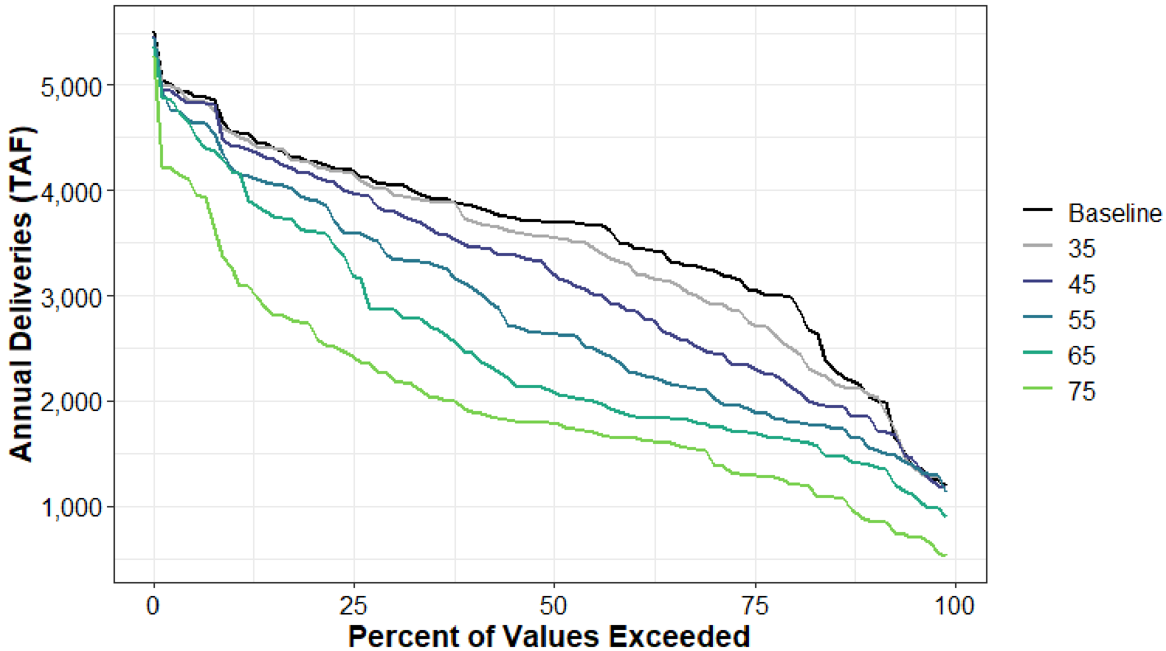

Figure A1-226. Total Water Supplied to Total SWP Deliveries Percent Exceedance Plot Deliveries

Table A1-519. Total Water Supplied to Total SWP Deliveries Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	5,512	5,466	5,463	5,452	5,359	5,270
10%	4,549	4,537	4,420	4,194	4,178	3,232
20%	4,272	4,251	4,148	3,912	3,607	2,678
30%	4,052	3,975	3,797	3,362	2,869	2,217
40%	3,862	3,718	3,469	3,086	2,465	1,902
50%	3,697	3,559	3,237	2,633	2,095	1,788
60%	3,474	3,274	2,859	2,273	1,866	1,644
70%	3,246	2,934	2,463	2,073	1,768	1,472
80%	2,990	2,516	2,149	1,809	1,632	1,223
90%	2,061	2,073	1,845	1,577	1,401	864
100%	1,190	1,133	1,176	1,125	892	523
Mean	5,512	5,466	5,463	5,452	5,359	5,270

Table A1-520. Total Water Supplied to Total SWP Deliveries Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	1,964	1,905	1,765	1,587	1,304	931
D	3,255	2,970	2,553	2,154	1,879	1,451
BN	3,646	3,437	3,061	2,616	2,160	1,695
AN	3,760	3,730	3,491	2,941	2,346	2,024
W	4,406	4,360	4,280	4,052	3,810	3,049
All	3,530	3,400	3,160	2,820	2,479	1,967

A1.12.8.57 Total SWP Table A

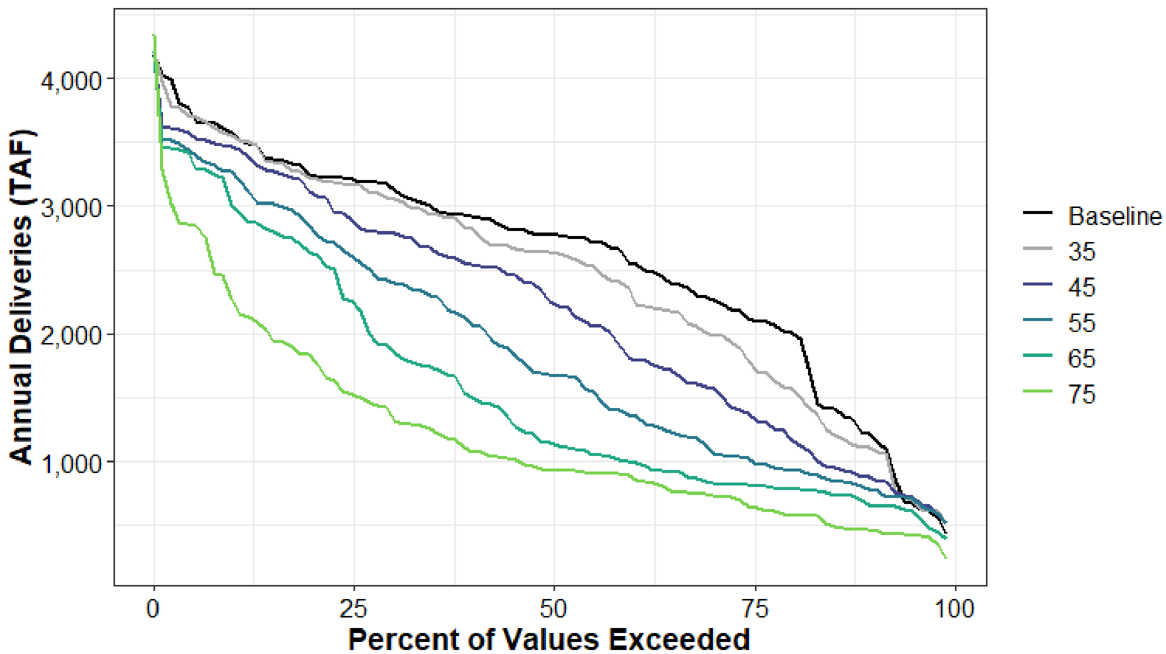

Figure A1-227. Total Water Supplied to Total SWP Table A Percent Exceedance Plot Deliveries

Table A1-521. Total Water Supplied to Total SWP Table A Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	4,180	4,196	4,185	4,171	4,210	4,345
10%	3,564	3,541	3,457	3,257	2,997	2,254
20%	3,242	3,221	3,101	2,824	2,630	1,809
30%	3,143	3,055	2,787	2,407	1,873	1,361
40%	2,920	2,829	2,544	2,086	1,505	1,084
50%	2,776	2,636	2,255	1,688	1,142	935
60%	2,553	2,331	1,813	1,363	996	885
70%	2,275	2,002	1,584	1,097	837	739
80%	2,015	1,576	1,201	934	782	586
90%	1,221	1,107	878	787	673	465
100%	429	518	522	522	390	237
Mean	2,579	2,444	2,178	1,861	1,568	1,208

Table A1-522. Total Water Supplied to Total SWP Table A Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	1,124	1,084	944	833	664	482
D	2,305	2,006	1,586	1,221	987	723
BN	2,694	2,477	2,106	1,672	1,255	973
AN	2,813	2,757	2,506	1,974	1,419	1,217
W	3,394	3,347	3,186	2,957	2,743	2,101
All	2,579	2,444	2,178	1,861	1,568	1,208

A1.12.8.58 SWP Table A North of Delta

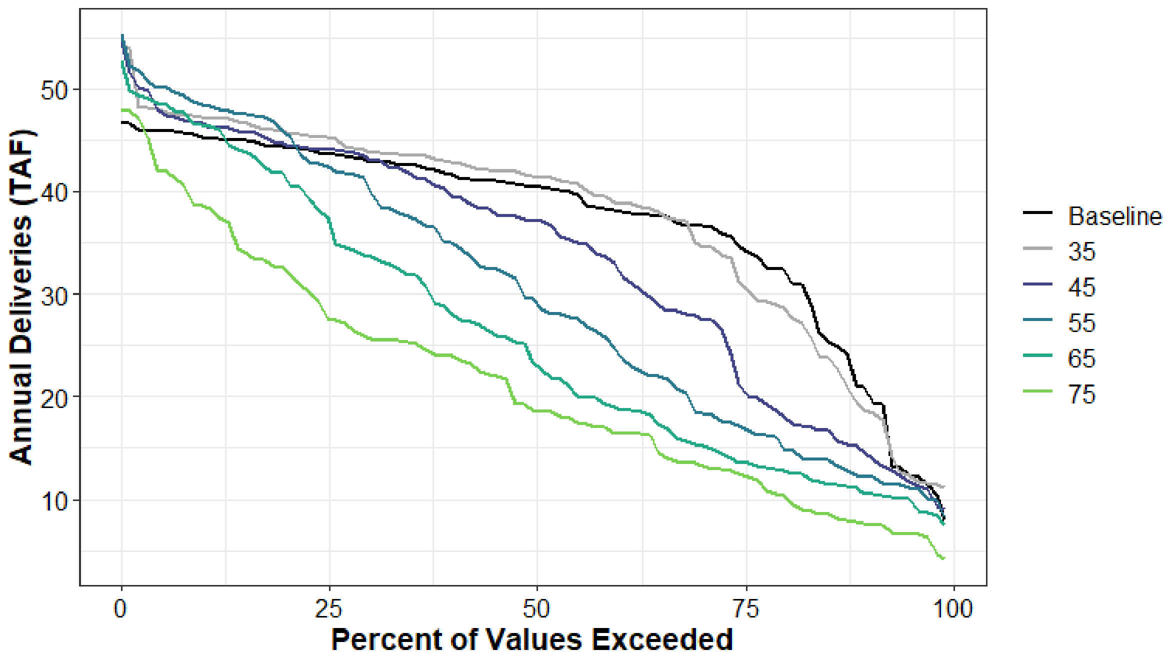

Figure A1-228. Total Water Supplied to SWP Table A North of Delta Percent Exceedance Plot Deliveries

Table A1-523. Total Water Supplied to SWP Table A North of Delta Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	47	54	55	55	53	48
10%	45	47	47	48	46	39
20%	44	46	45	46	41	32
30%	43	44	43	40	34	26
40%	42	43	40	35	28	24
50%	41	41	37	30	23	19
60%	38	39	33	25	19	16
70%	37	35	28	18	15	13
80%	32	29	18	15	13	10
90%	21	19	15	12	11	8
100%	8	11	9	8	7	4
Mean	37	37	33	30	26	21

Table A1-524. Total Water Supplied to SWP Table A North of Delta Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	20	20	15	13	11	8
D	35	33	26	20	16	14
BN	40	40	35	28	23	18
AN	41	43	41	35	29	24
W	44	46	44	46	42	35
All	37	37	33	30	26	21

A1.12.8.59 SWP Table A South of Delta

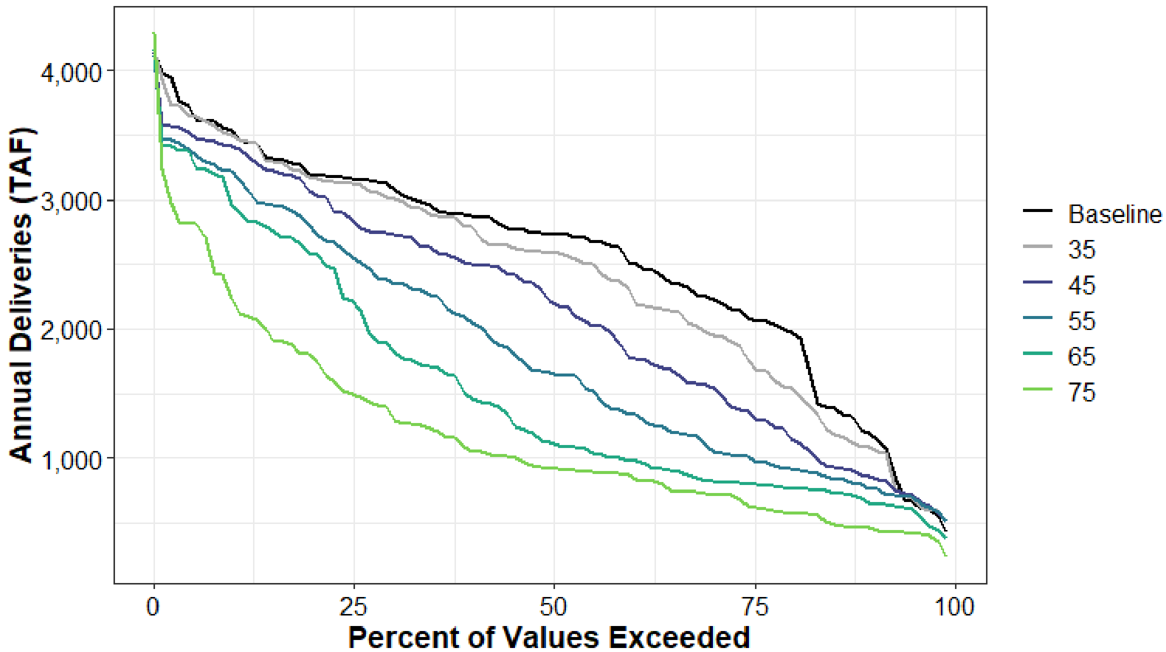

Figure A1-229. Total Water Supplied to SWP Table A South of Delta Percent Exceedance Plot Deliveries

Table A1-525. Total Water Supplied to SWP Table A South of Delta Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	4,134	4,148	4,138	4,116	4,163	4,297
10%	3,518	3,489	3,411	3,207	2,949	2,220
20%	3,199	3,175	3,053	2,778	2,586	1,778
30%	3,099	3,013	2,741	2,366	1,843	1,336
40%	2,883	2,789	2,502	2,053	1,472	1,059
50%	2,734	2,593	2,218	1,660	1,123	922
60%	2,513	2,290	1,780	1,340	980	860
70%	2,237	1,965	1,556	1,080	823	726
80%	1,983	1,546	1,183	920	769	577
90%	1,202	1,087	862	773	662	457
100%	421	506	513	513	383	233
Mean	2,542	2,407	2,145	1,831	1,542	1,187

Table A1-526. Total Water Supplied to SWP Table A South of Delta Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	1,104	1,065	929	820	653	474
D	2,270	1,973	1,560	1,201	971	708
BN	2,654	2,437	2,071	1,644	1,232	955
AN	2,772	2,713	2,465	1,939	1,389	1,193
W	3,350	3,301	3,142	2,912	2,701	2,066
All	2,542	2,407	2,145	1,831	1,542	1,187

A1.12.8.60 Total SWP Article 21

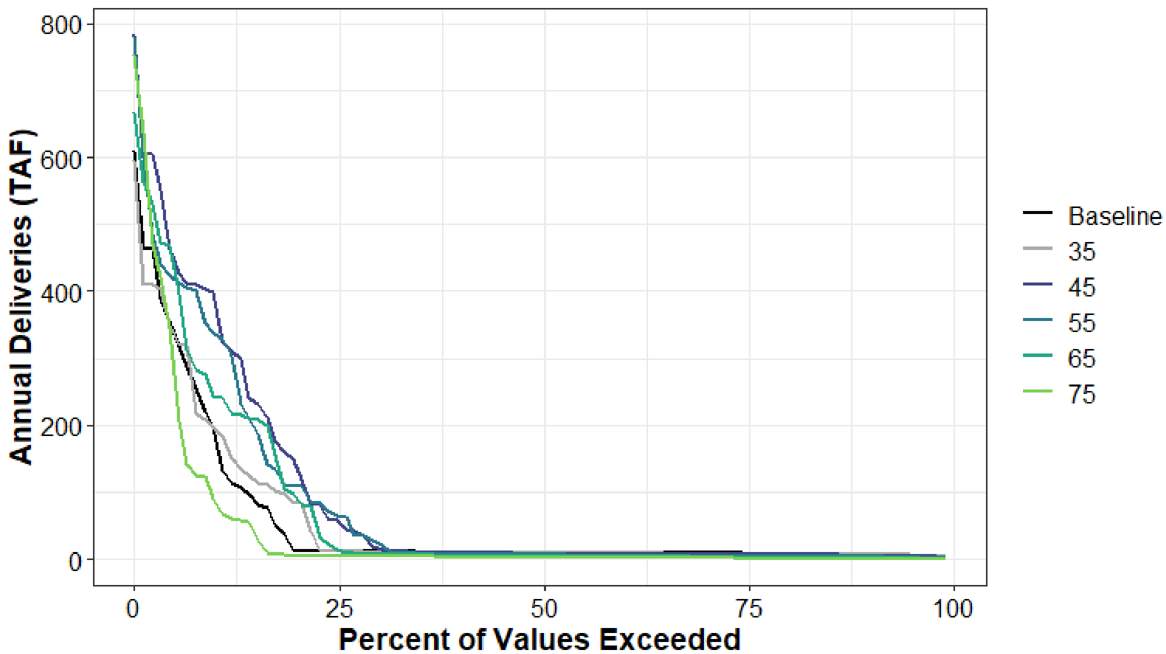

Figure A1-230. Total Water Supplied to Total SWP Article 21 Percent Exceedance Plot Deliveries

Table A1-527. Total Water Supplied to Total SWP Article 21 Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	610	596	784	780	667	753
10%	183	194	385	336	242	86
20%	12	83	136	109	91	6
30%	11	11	17	24	7	5
40%	11	10	9	8	6	4
50%	10	9	8	6	5	3
60%	9	9	8	6	4	2
70%	9	8	7	5	4	2
80%	8	8	7	5	3	1
90%	7	7	6	4	2	1
100%	4	5	4	2	1	0
Mean	53	57	88	79	69	41

Table A1-528. Total Water Supplied to Total SWP Article 21 Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	19	14	31	12	2	2
D	17	23	30	18	12	1
BN	16	19	20	16	32	26
AN	54	70	91	74	51	39
W	121	121	202	201	177	101
All	53	57	88	79	69	41

A1.12.8.61 SWP Article 21 Central Coast and Tulare

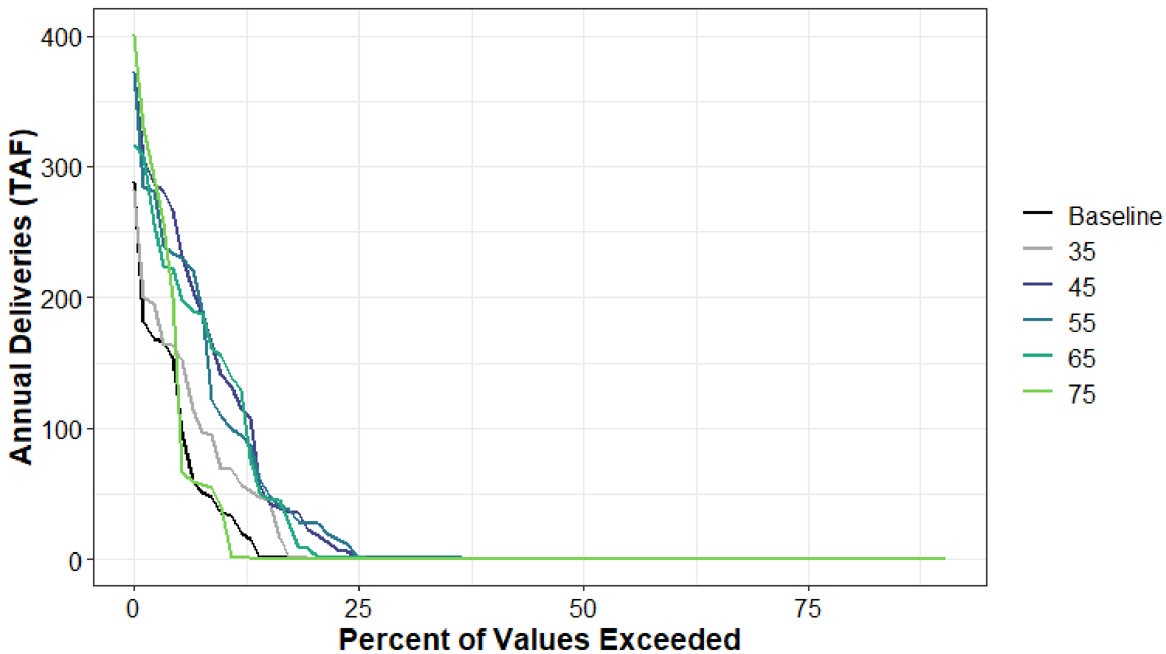

Figure A1-231. Total Water Supplied to SWP Article 21 Central Coast and Tulare Percent Exceedance Plot Deliveries

Table A1-529. Total Water Supplied to SWP Article 21 Central Coast and Tulare Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	288	282	373	372	317	401
10%	35	69	139	108	152	32
20%	1	1	21	27	6	1
30%	1	1	1	1	1	0
40%	1	1	1	1	1	0
50%	0	0	1	1	0	0
60%	0	0	0	0	0	0
70%	0	0	0	0	0	0
80%	0	0	0	0	0	0
90%	0	0	0	0	0	0
100%	0	0	0	0	0	0
Mean	15	20	33	31	30	19

Table A1-530. Total Water Supplied to SWP Article 21 Central Coast and Tulare Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	7	4	14	5	0	0
D	4	8	13	8	6	0
BN	3	10	10	8	20	18
AN	6	18	15	16	15	10
W	37	44	81	84	76	48
All	15	20	33	31	30	19

A1.12.8.62 SWP Article 21 South Bay Aqueduct

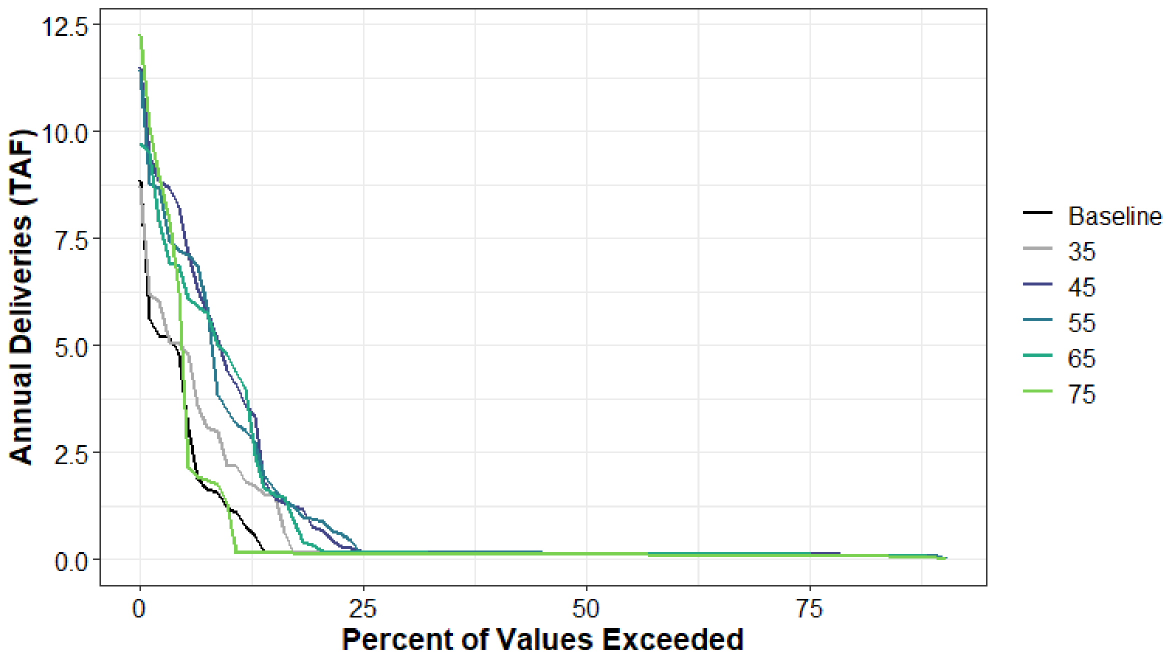

Figure A1-232. Total Water Supplied to SWP Article 21 South Bay Aqueduct Coast and Tulare Percent Exceedance Plot Deliveries

Table A1-531. Total Water Supplied to SWP Article 21 South Bay Aqueduct and Tulare Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	8.8	8.7	11.5	11.4	9.7	12.3
10%	1.2	2.2	4.4	3.4	4.7	1.1
20%	0.1	0.2	0.7	0.9	0.3	0.1
30%	0.1	0.1	0.2	0.2	0.1	0.1
40%	0.1	0.1	0.1	0.1	0.1	0.1
50%	0.1	0.1	0.1	0.1	0.1	0.1
60%	0.1	0.1	0.1	0.1	0.1	0.1
70%	0.1	0.1	0.1	0.1	0.1	0.1
80%	0.1	0.1	0.1	0.1	0.1	0.1
90%	0.1	0.1	0.1	0.1	0.1	0
100%	0	0	0	0	0	0
Mean	0.5	0.7	1.1	1	1	0.7

Table A1-532. Total Water Supplied to SWP Article 21 South Bay Aqueduct and Tulare Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	0.3	0.2	0.5	0.3	0.1	0.1
D	0.2	0.3	0.5	0.3	0.3	0.1
BN	0.2	0.4	0.4	0.3	0.7	0.6
AN	0.3	0.6	0.6	0.6	0.5	0.4
W	1.2	1.4	2.5	2.6	2.4	1.5
All	0.5	0.7	1.1	1	1	0.7

A1.12.8.63 SWP Article 21 South Coast

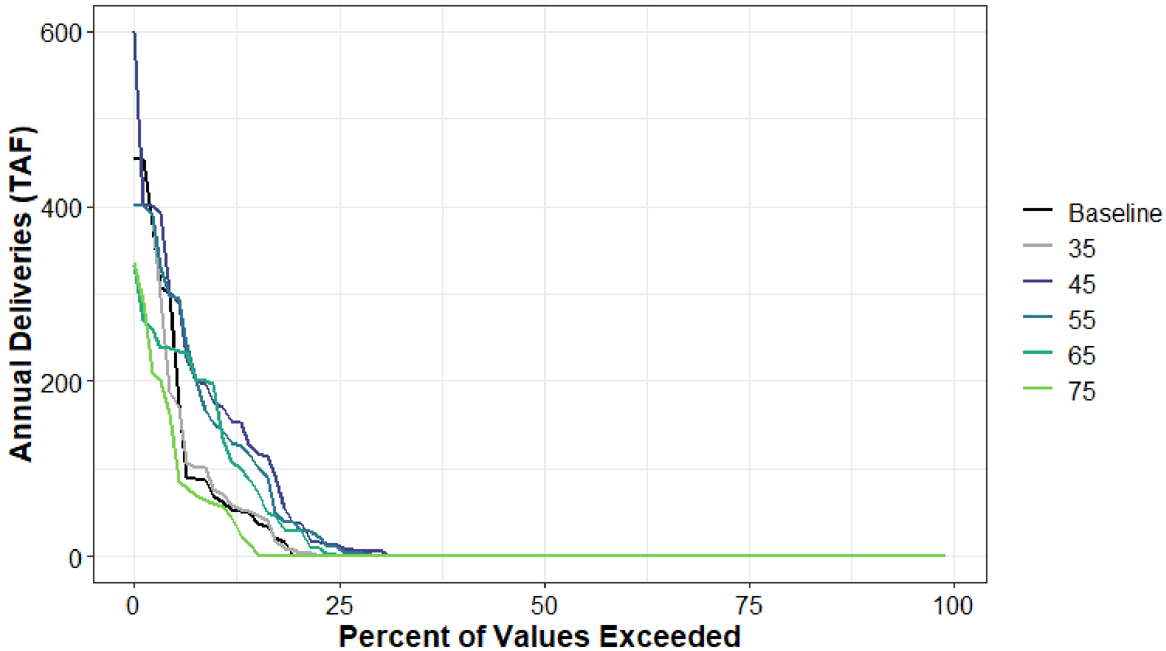

Figure A1-233. Total Water Supplied to SWP Article 21 South Coast Percent Exceedance Plot Deliveries

Table A1-533. Total Water Supplied to SWP Article 21 South Coast Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	454	400	600	400	332	336
10%	68	76	176	151	185	59
20%	0	6	37	35	28	0
30%	0	0	5	2	0	0
40%	0	0	0	0	0	0
50%	0	0	0	0	0	0
60%	0	0	0	0	0	0
70%	0	0	0	0	0	0
80%	0	0	0	0	0	0
90%	0	0	0	0	0	0
100%	0	0	0	0	0	0
Mean	30	28	47	41	34	18

Table A1-534. Total Water Supplied to SWP Article 21 South Coast Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	6	4	11	3	0	0
D	4	8	11	6	3	0
BN	3	1	3	3	8	6
AN	38	44	68	51	31	25
W	73	66	110	107	91	47
All	30	28	47	41	34	18

A1.12.8.64 SWP Article 21 Napa

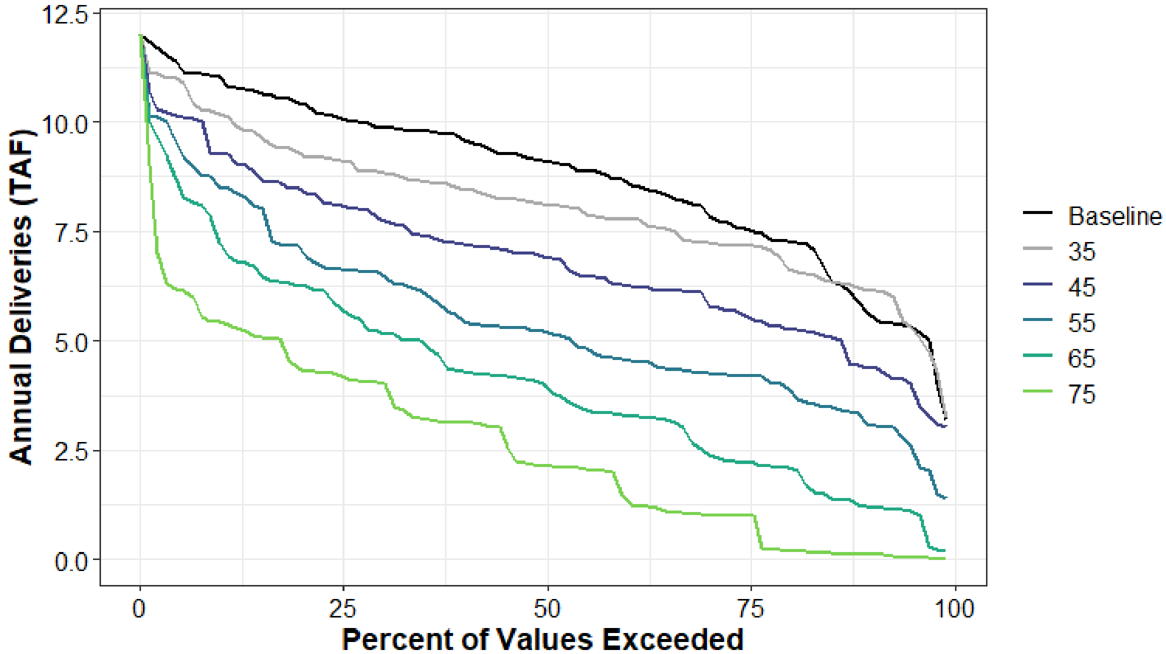

Figure A1-234. Total Water Supplied to SWP Article 21 Napa Percent Exceedance Plot Deliveries

Table A1-535. Total Water Supplied to SWP Article 21 Napa Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	12	12	12	12	12	12
10%	11	10.2	9.3	8.5	7.2	5.4
20%	10.4	9.3	8.4	7.1	6.3	4.4
30%	9.9	8.8	7.8	6.5	5.2	4
40%	9.6	8.5	7.2	5.5	4.3	3.1
50%	9.1	8.1	6.9	5.2	4	2.1
60%	8.7	7.8	6.3	4.6	3.3	1.4
70%	8	7.2	6	4.3	2.5	1
80%	7.3	6.7	5.3	4	2.1	0.2
90%	5.7	6.2	4.4	3.1	1.2	0.1
100%	3.2	3.2	3	1.4	0.2	0
Mean	8.8	8.1	6.9	5.5	4.2	2.6

Table A1-536. Total Water Supplied to SWP Article 21 Napa Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	5.9	6.3	5.2	3.5	1.6	0.9
D	7.8	7.2	5.6	4	2.3	0.5
BN	9.4	8.1	6.6	5	3.8	2.1
AN	9.4	8.5	7.1	5.7	4.8	4
W	10.4	9.5	8.8	7.9	6.9	4.9
All	8.8	8.1	6.9	5.5	4.2	2.6

A1.12.8.65 SWP Feather River Service Area (Ag)

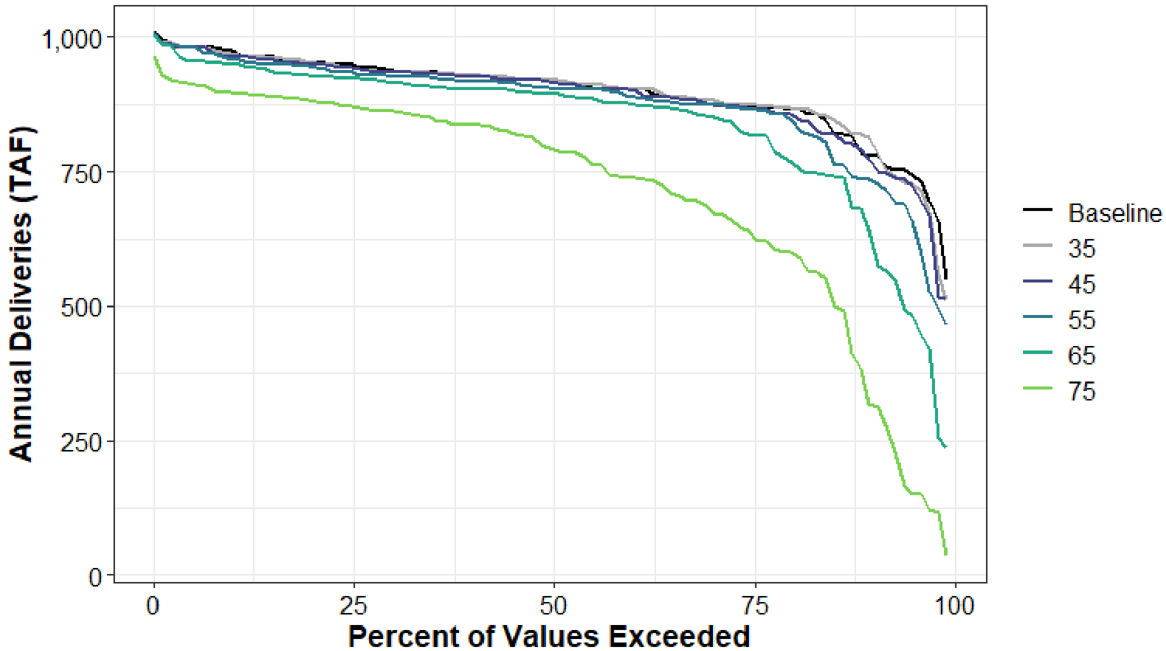

Figure A1-235. Total Water Supplied to SWP Feather River Service Area (Ag) Percent Exceedance Plot Deliveries

Table A1-537. Total Water Supplied to SWP Feather River Service Area (Ag) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	1,011	1,011	1,011	1,011	1,003	963
10%	974	970	965	959	949	896
20%	952	952	950	946	927	883
30%	939	935	934	928	916	862
40%	927	929	926	918	904	838
50%	918	920	919	905	894	794
60%	902	904	902	888	876	738
70%	884	884	876	873	853	682
80%	867	869	857	849	770	600
90%	781	815	778	735	649	330
100%	549	511	514	466	237	35
Mean	897	896	890	875	838	715

Table A1-538. Total Water Supplied to SWP Feather River Service Area (Ag) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	819	801	783	735	633	444
D	933	937	933	911	878	726
BN	936	937	930	923	869	694
AN	893	901	890	889	871	763
W	890	891	890	889	886	842
All	897	896	890	875	838	715

A1.12.8.66 SWP Settlement (Urban)

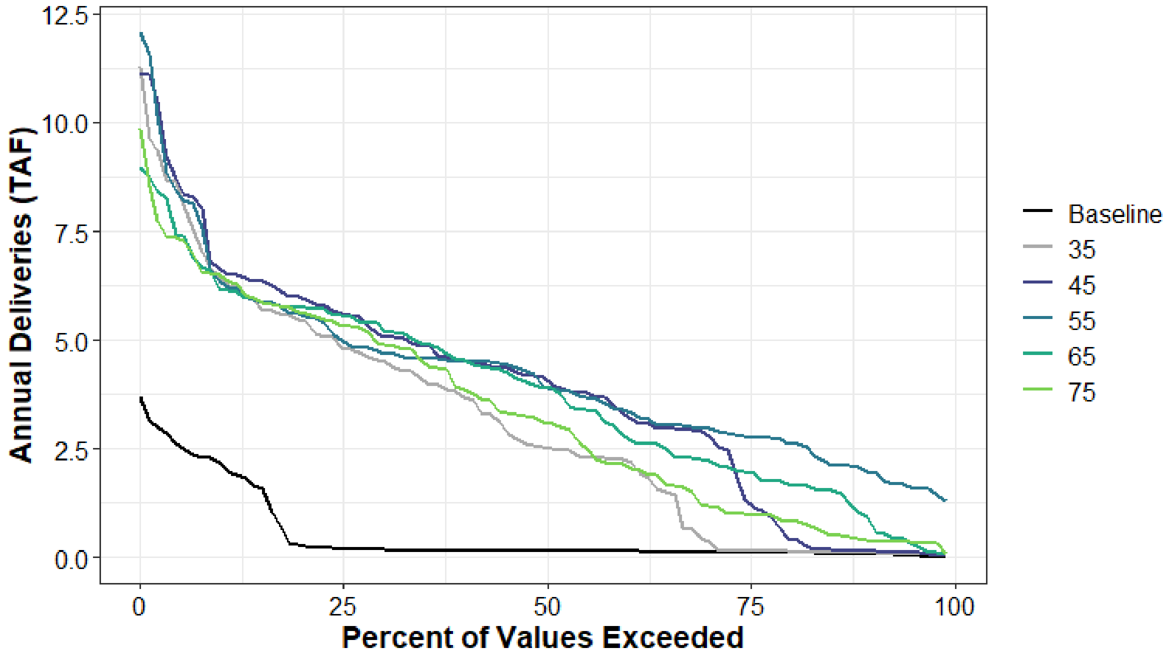

Figure A1-236. Total Water Supplied to SWP Settlement (Urban) Percent Exceedance Plot Deliveries

Table A1-539. Total Water Supplied to SWP Settlement (Urban) Exceedance Probability Distribution of Deliveries by Scenario (TAF) Deliveries

	Baseline	35	45	55	65	75
0%	3.7	11.3	11.1	12.1	9	9.8
10%	2.1	6.4	6.6	6.3	6.2	6.5
20%	0.3	5.4	6	5.6	5.8	5.6
30%	0.2	4.5	5.1	4.7	5.3	4.9
40%	0.2	3.7	4.6	4.5	4.6	3.9
50%	0.2	2.5	4.2	3.9	3.9	3.1
60%	0.1	2.2	3.3	3.4	2.8	2.1
70%	0.1	0.4	2.9	3	2.3	1.2
80%	0.1	0.1	0.5	2.7	1.7	0.8
90%	0.1	0.1	0.2	2	1	0.4
100%	0	0.1	0.1	1.3	0.1	0.1
Mean	0.5	3.1	3.9	4.3	3.8	3.3

Table A1-540. Total Water Supplied to SWP Settlement (Urban) Average by Water Year Type (TAF) Deliveries

WYT	Baseline	35	45	55	65	75
C	2	6.2	6.9	7.1	4.6	3.2
D	0.4	3.6	4.2	3.6	2.3	1.1
BN	0.3	3.3	4.5	4	3.6	2.6
AN	0.2	2.2	3.3	3.7	4.7	4.7
W	0.1	1.2	1.9	3.7	4.2	4.8
All	0.5	3.1	3.9	4.3	3.8	3.3

A1.12.9 Groundwater Storage and Flows

SacWAM groundwater results include groundwater pumping, groundwater storage, stream-groundwater interactions and vertical recharge (deep percolation). As discussed in Section A1.2, *Implementation of Proposed Plan Amendments*, the flow scenarios assumed that groundwater pumping does not increase above existing levels; the results below reflect this assumption. Groundwater storage results are presented as annual time series and average annual change for each basin. Results for stream-groundwater interaction and groundwater recharge from deep percolation are presented as average annual net flux from stream to groundwater for each basin. The results below include groundwater inflows, outflows, and storage for the American, Butte, Colusa, Cosumnes, Red Bluff-Corning, Redding, Sutter-Yuba, and Yolo-Solano groundwater basins and the portion of the Eastern San Joaquin basin modeled by SacWAM.

A1.12.9.1 Total Groundwater Pumping

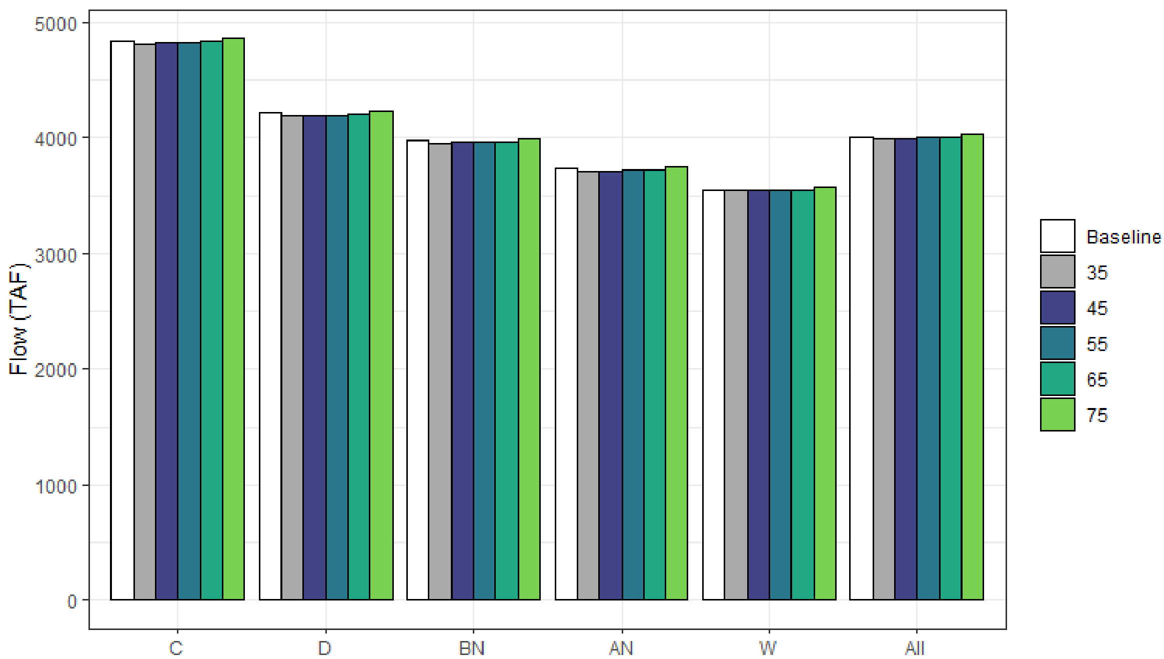

Figure A1-237. Average Annual Groundwater Pumping across All Basins by Water Year Type and Scenario (TAF/yr)

Table A1-541. Average Annual Groundwater Pumping across All Basins by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	4,840	4,812	4,817	4,825	4,832	4,863
D	4,212	4,191	4,193	4,197	4,200	4,232
BN	3,973	3,956	3,958	3,963	3,967	3,993
AN	3,730	3,708	3,714	3,719	3,725	3,746
W	3,552	3,543	3,543	3,544	3,547	3,570
All	4,009	3,991	3,993	3,997	4,002	4,028

A1.12.9.2 Total Groundwater Pumping – Delta Eastside Tributaries

The groundwater basins underlying the Delta eastside tributaries region include the Cosumnes and a portion of the Eastern San Joaquin basins. Groundwater pumping for this region is considered to be the sum of groundwater pumping for all demands in water budget areas 60N and 60S; pumping for demands in water budget area 61N is excluded.

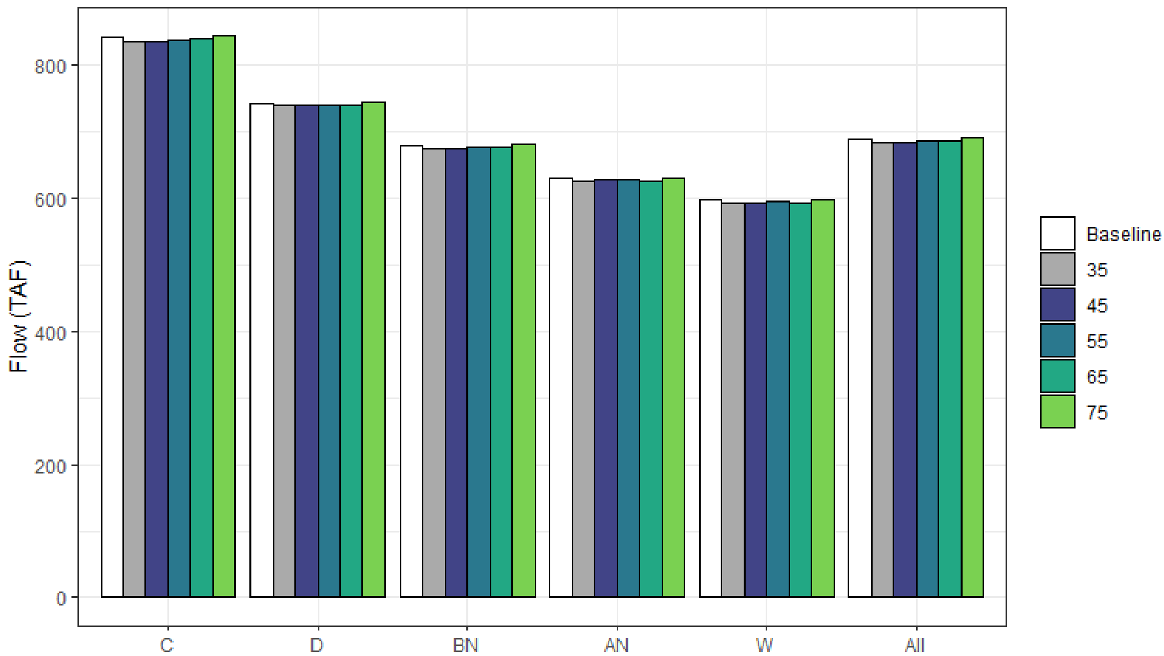

Figure A1-238. Average Total Annual Groundwater Pumping for the Delta Eastside Tributaries Region by Water Year Type and Scenario (TAF/yr)

Table A1-542. Average Annual Groundwater Pumping Delta Eastside Tributaries Region by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	842	836	835	837	838	844
D	742	740	739	739	739	744
BN	679	674	675	676	676	681
AN	629	625	627	627	626	630
W	596	592	592	595	593	597
All	688	684	684	686	685	690

A1.12.9.3 Total Groundwater Pumping – Sacramento River Watershed

The groundwater basins underlying the Sacramento River watershed include the American, Butte, Red Bluff-Corning, Redding, Sutter-Yuba, Yolo-Solano, and Colusa basins.

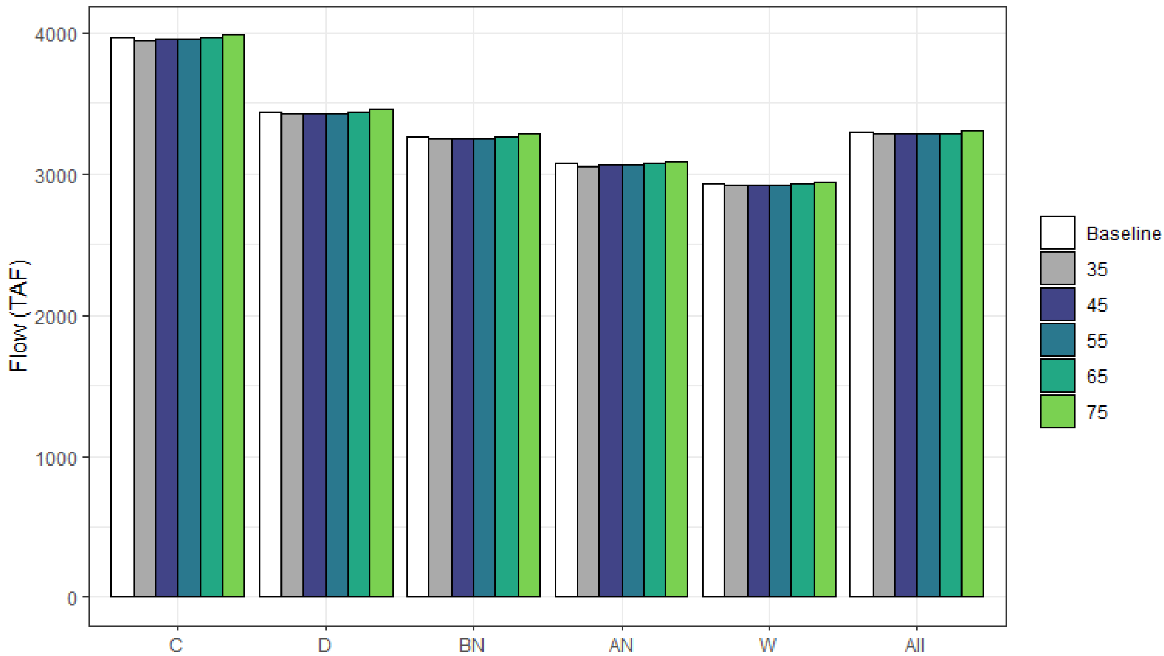

Figure A1-239. Average Total Annual Groundwater Pumping for the Sacramento River Watershed by Water Year Type and Scenario (TAF/yr)

Table A1-543. Average Annual Groundwater Pumping Sacramento River Watershed by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	3,968	3,945	3,950	3,956	3,962	3,987
D	3,440	3,421	3,424	3,428	3,432	3,457
BN	3,262	3,250	3,251	3,255	3,260	3,280
AN	3,074	3,057	3,060	3,065	3,072	3,089
W	2,929	2,924	2,924	2,922	2,927	2,945
All	3,291	3,278	3,280	3,282	3,288	3,309

A1.12.9.4 Groundwater Pumping by Basin

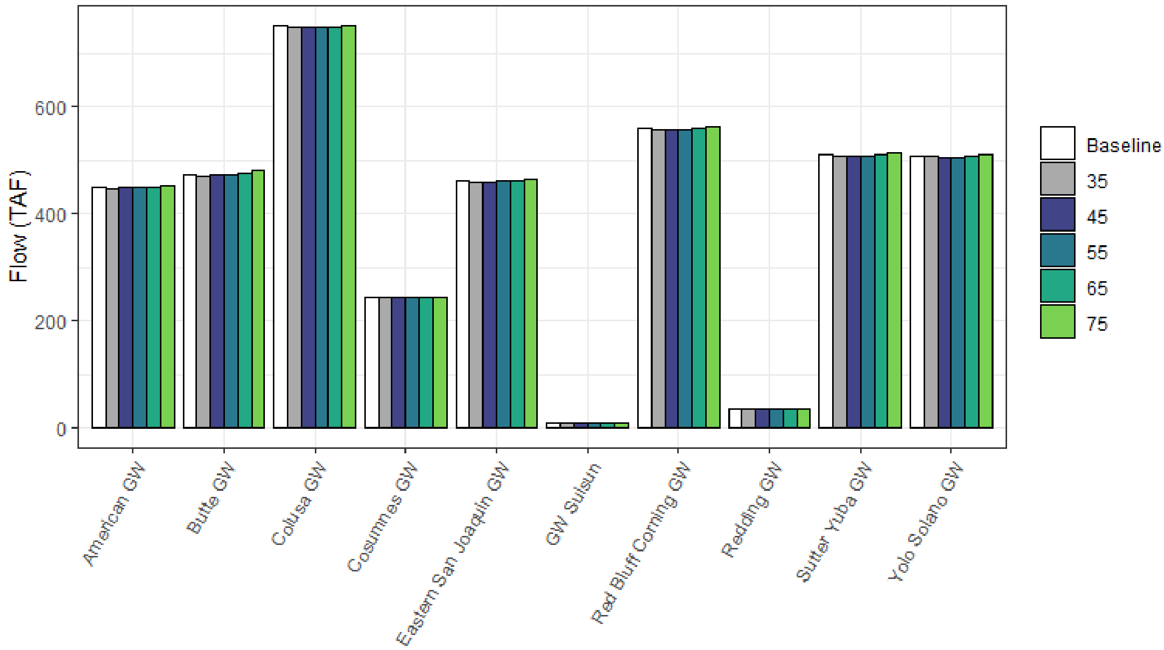

Figure A1-240. Annual Average Groundwater Pumping by Basin (TAF/yr)

Table A1-544. Annual Average Groundwater Pumping by Basin Change from Baseline

Basin	Baseline	35	45	55	65	75
American	451	-2	-2	-1	0	2
Butte	472	-1	0	2	3	10
Colusa	750	-2	-2	-2	-1	2
Cosumnes	245	-1	-1	-1	-2	0
Eastern San Joaquin	463	-3	-3	-1	-1	2
Red Bluff-Corning	10	0	0	0	0	0
Redding	561	-4	-3	-3	-2	1
Sutter-Yuba	36	0	0	0	0	0
Yolo-Solano	511	-2	-3	-2	-1	1

A1.12.9.5 Total Groundwater Recharge

Total groundwater recharge includes stream gain/loss, infiltration from applied water and precipitation, and transmission losses to all of the groundwater basins.

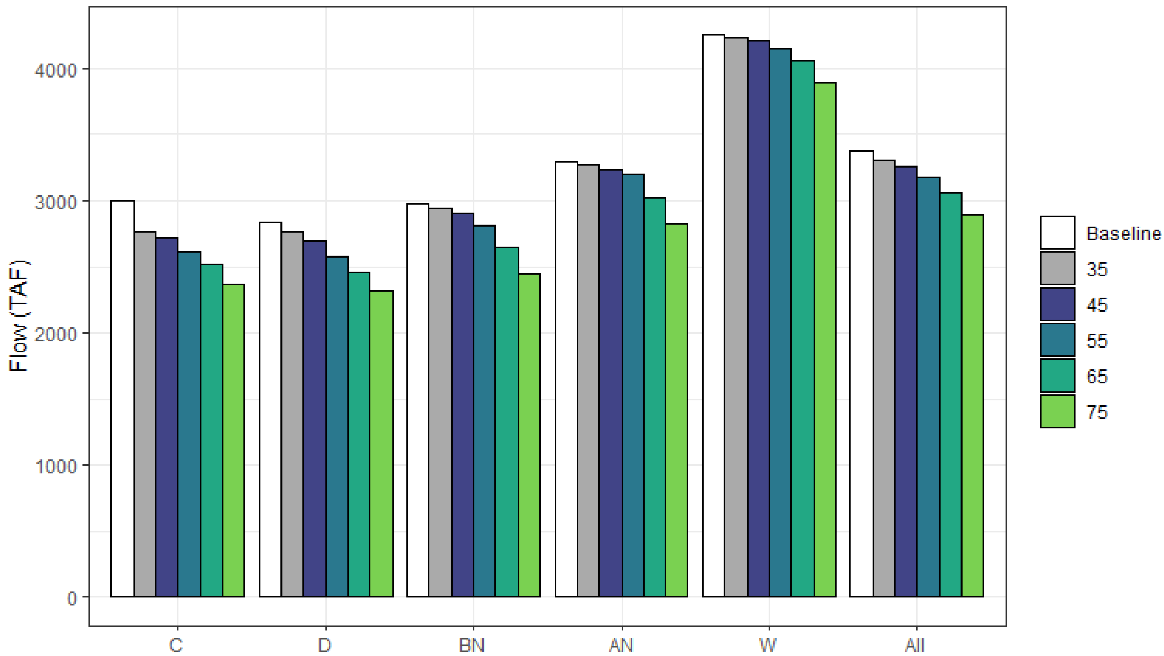

Figure A1-241. Total Average Annual Groundwater Recharge by Water Year Type and Scenario (TAF/yr)

Table A1-545. Total Average Annual Groundwater Recharge by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	3,001	2,764	2,721	2,611	2,522	2,365
D	2,841	2,763	2,698	2,574	2,461	2,316
BN	2,982	2,943	2,901	2,815	2,645	2,446
AN	3,292	3,266	3,241	3,198	3,027	2,823
W	4,258	4,229	4,209	4,155	4,056	3,898
All	3,378	3,302	3,264	3,181	3,058	2,889

A1.12.9.6 Total Groundwater Recharge – Delta Eastside Tributaries

Total groundwater recharge includes stream gain/loss, infiltration from applied water and precipitation, and transmission losses to all of the groundwater basins. The groundwater basins underlying the Delta eastside tributaries region include the Cosumnes and a portion of the Eastern San Joaquin basins. All sources of recharge within water budget areas 60S and 60N are included in the summary of recharge for the Delta eastside tributaries region.

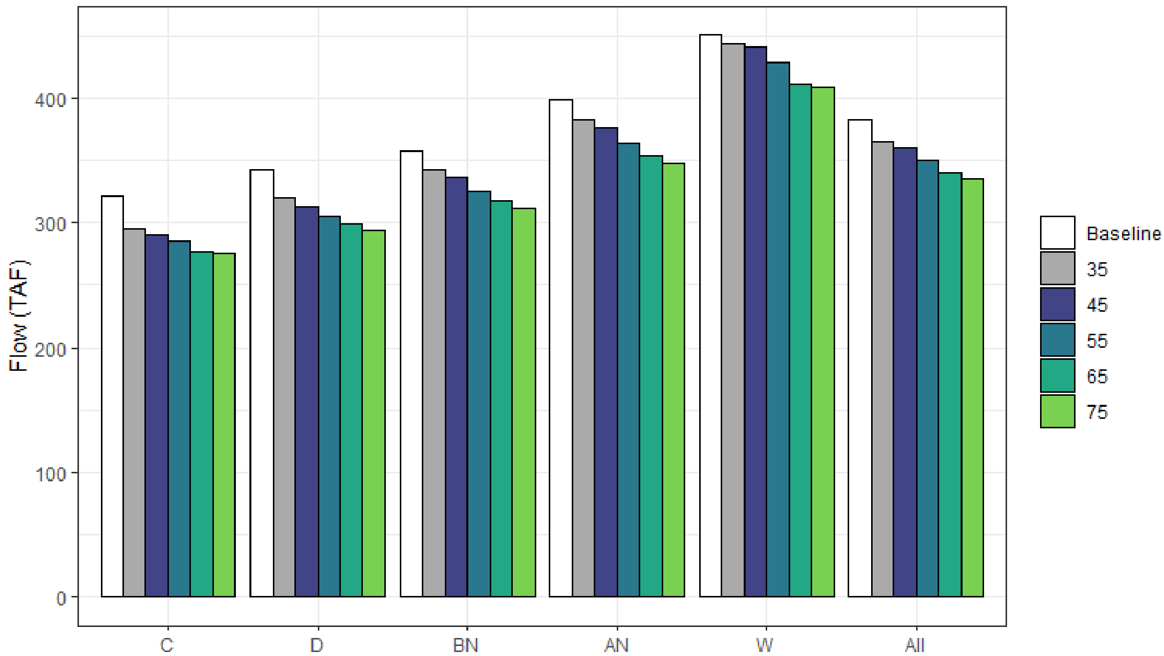

Figure A1-242. Total Average Annual Groundwater Recharge for the Delta Eastside Tributaries Region by Water Year Type and Scenario (TAF/yr)

Table A1-546. Average Annual Groundwater Recharge for the Delta Eastside Tributaries Region by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	322	295	290	286	277	276
D	343	321	313	306	300	294
BN	357	342	336	325	317	311
AN	398	382	377	364	353	347
W	451	444	441	428	411	408
All	382	365	360	350	340	335

A1.12.9.7 Total Groundwater Recharge – Sacramento River Watershed

Total groundwater recharge includes stream gain/loss, infiltration from applied water and precipitation, and transmission losses to all of the groundwater basins. The groundwater basins underlying the Sacramento River watershed include the American, Butte, Red Bluff-Corning, Redding, Sutter-Yuba, Yolo-Solano, and Colusa basins.

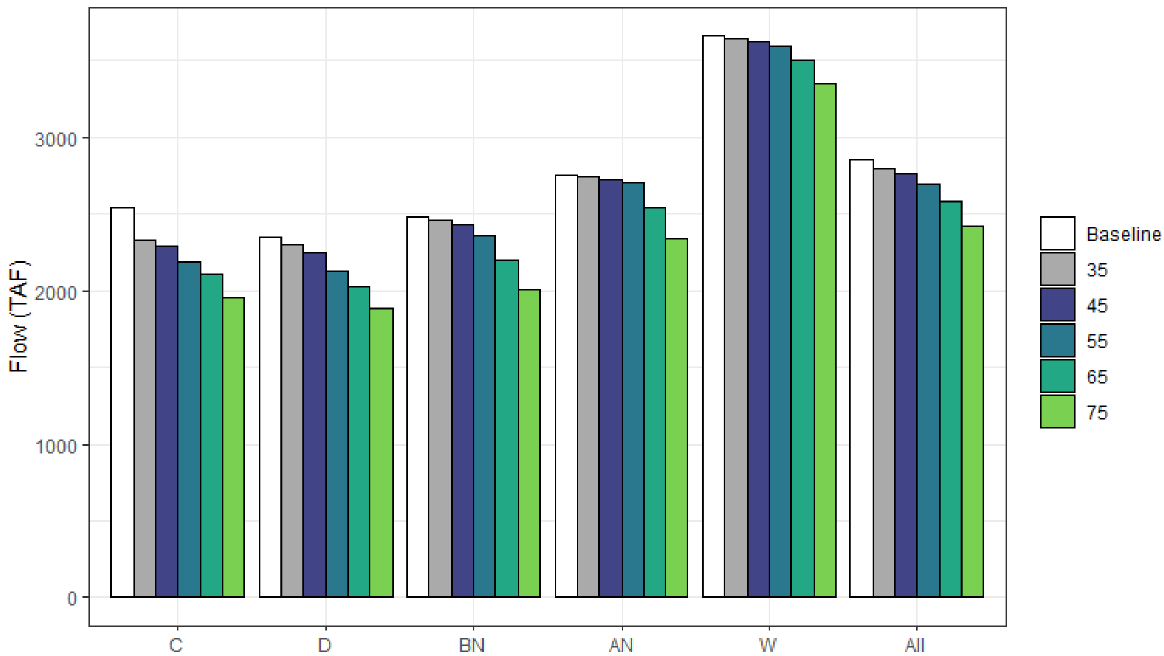

Figure A1-243. Total Average Annual Groundwater Recharge for the Sacramento River Watershed by Water Year Type and Scenario (TAF/yr)

Table A1-547. Average Annual Groundwater Recharge for the Sacramento River Watershed by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	2,537	2,330	2,292	2,187	2,108	1,952
D	2,353	2,300	2,245	2,128	2,022	1,884
BN	2,485	2,464	2,429	2,355	2,193	2,002
AN	2,753	2,745	2,728	2,698	2,539	2,342
W	3,664	3,643	3,626	3,589	3,506	3,352
All	2,853	2,797	2,764	2,692	2,581	2,418

A1.12.9.8 Total Groundwater Recharge by Basin

Total groundwater recharge includes stream gain/loss, infiltration from applied water and precipitation, and transmission losses.

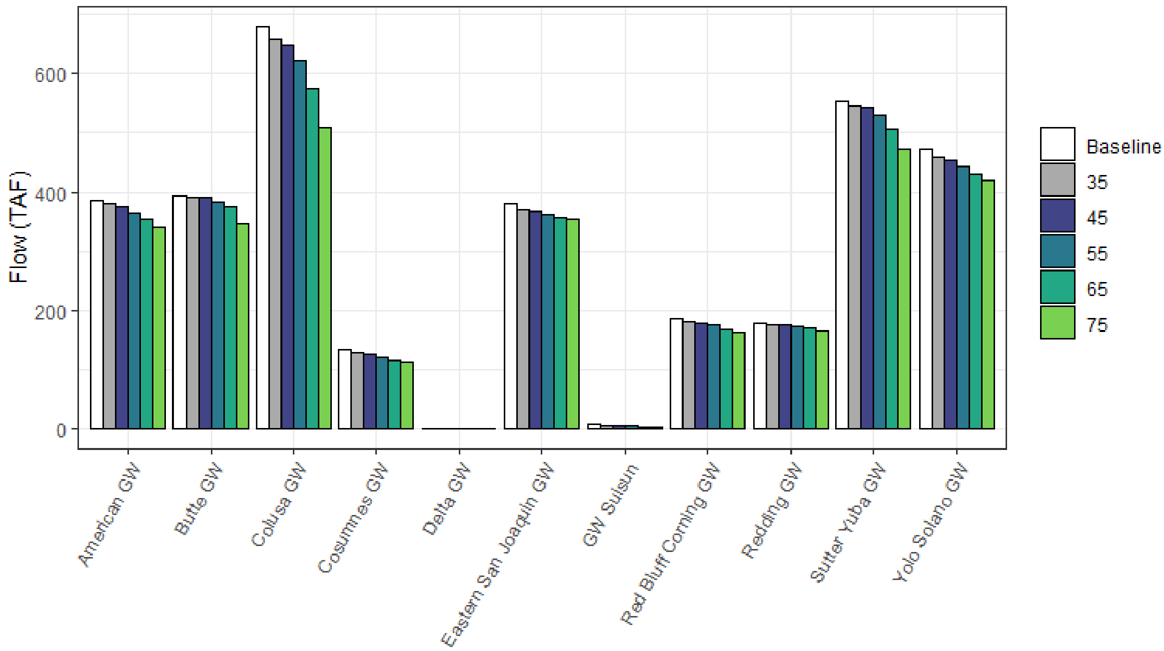

Figure A1-244. Annual Average Groundwater Recharge by Basin (TAF/yr)

Table A1-548. Annual Average Groundwater Recharge by Basin (TAF/yr)

Basin	Baseline	35	45	55	65	75
American GW	387	-5	-11	-22	-33	-46
Butte GW	395	-2	-5	-11	-20	-49
Colusa GW	680	-22	-32	-58	-105	-171
Cosumnes GW	134	-5	-8	-13	-18	-20
Eastern San Joaquin GW	0	0	0	0	0	0
Red Bluff-Corning GW	381	-11	-13	-19	-24	-26
Redding GW	9	-2	-3	-5	-5	-6
Sutter-Yuba GW	188	-6	-8	-12	-19	-24
Yolo-Solano GW	177	-2	-2	-4	-7	-12

A1.12.9.9 Total Stream-Groundwater Flux

Total stream-groundwater flux represents the net flow from streams to underlying groundwater basins.

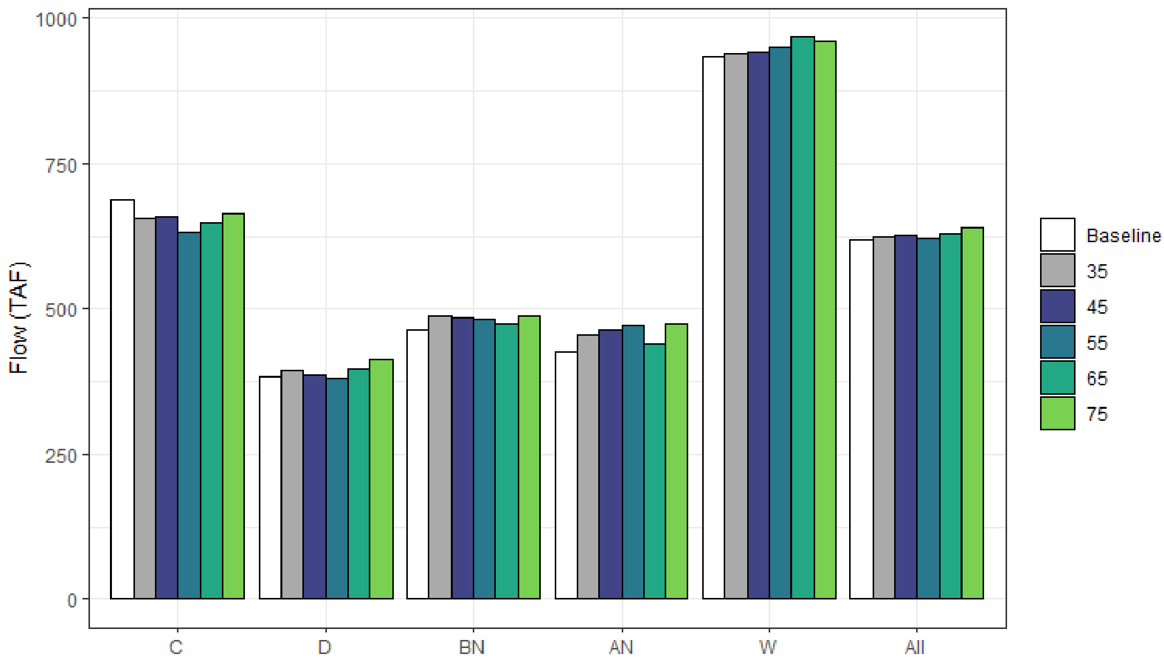

Figure A1-245. Total Average Annual Stream-Groundwater Flux (Net Groundwater Gain) by Water Year Type and Scenario (TAF/yr)

Table A1-549. Total Average Annual Stream-Groundwater Flux (Net Groundwater Gain) by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	688	657	660	633	649	664
D	384	393	388	380	398	414
BN	463	487	486	482	475	488
AN	426	455	464	473	439	475
W	935	939	942	950	969	960
All	619	625	626	623	630	640

A1.12.9.10 Total Stream-Groundwater Flux – Delta Eastside Tributaries

For the Delta eastside tributaries region, this summary includes stream-groundwater flows associated with the Cosumnes, Mokelumne, and Calaveras River watersheds.

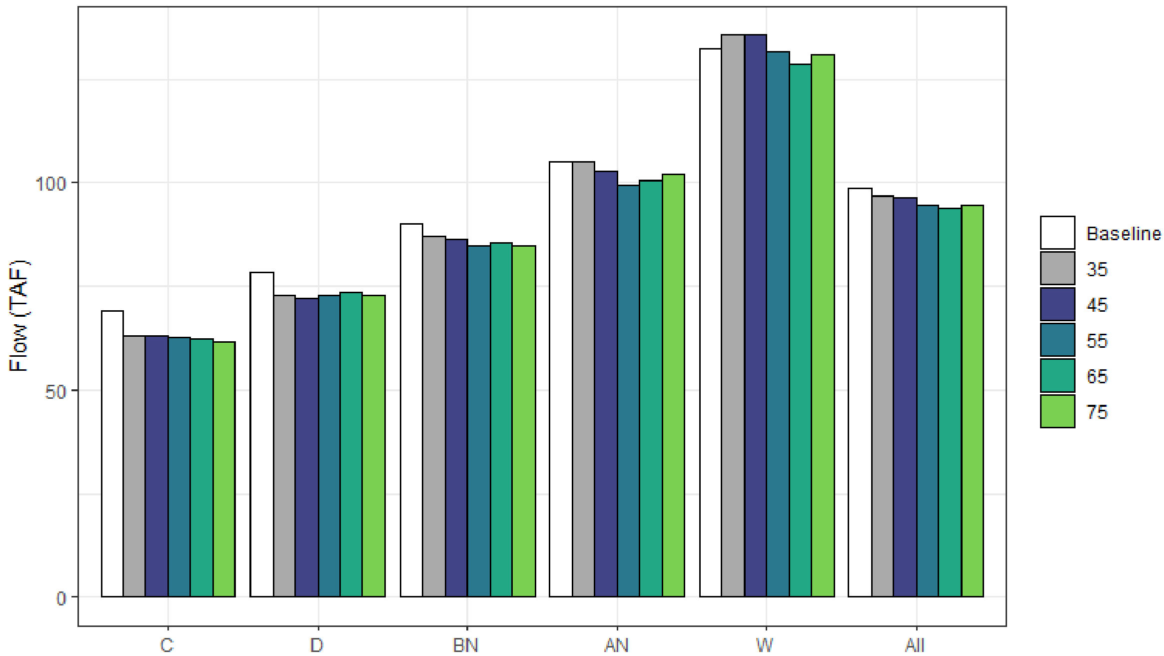

Figure A1-246. Total Average Annual Stream-Groundwater Flux (Net Groundwater Gain) for Delta Eastside Tributaries Region by Water Year Type and Scenario (TAF/yr)

Table A1-550. Total Average Annual Stream-Groundwater Flux (Net Groundwater Gain) for Delta Eastside Tributaries Region by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	69	63	63	63	62	62
D	78	73	72	73	73	73
BN	90	87	86	85	86	85
AN	105	105	103	99	100	102
W	132	136	136	132	128	131
All	99	97	96	95	94	94

A1.12.9.11 Total Stream-Groundwater Flux – Sacramento River Watershed

For the Sacramento River watershed, this summary includes all stream-groundwater flows in the American, Butte, Red Bluff-Corning, Redding, Sutter-Yuba, Yolo-Solano, and Colusa basins.

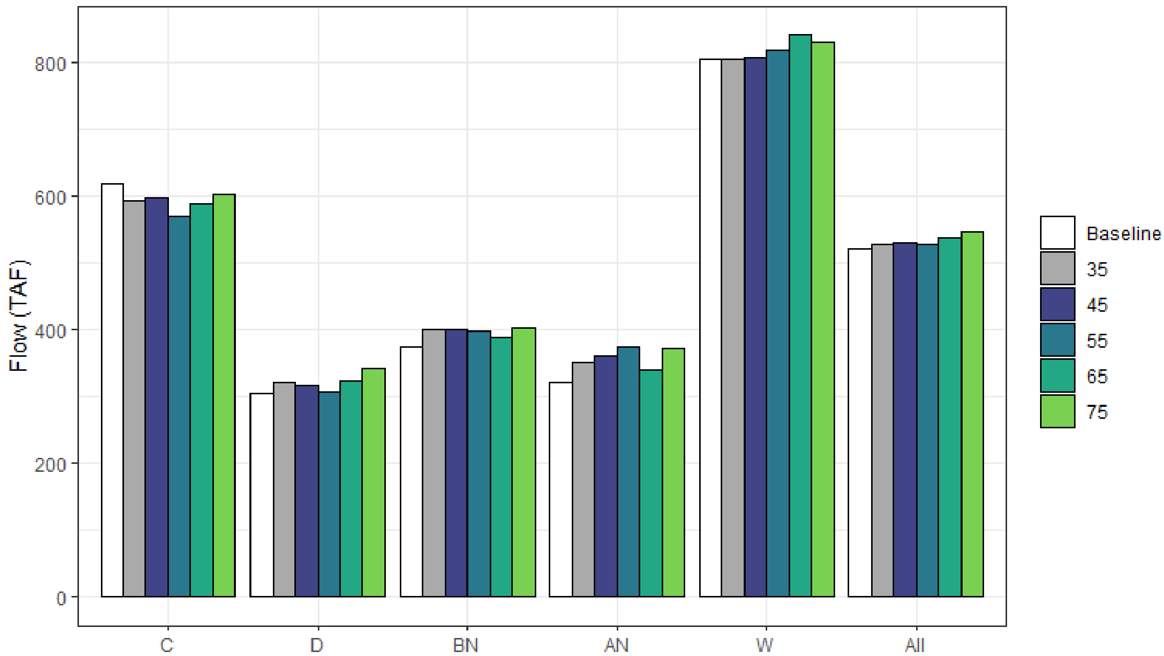

Figure A1-247. Total Average Annual Stream-Groundwater Flux (Net Groundwater Gain) for Sacramento River Watershed by Water Year Type and Scenario (TAF/yr)

Table A1-551. Total Average Annual Stream-Groundwater Flux (Net Groundwater Gain) for Sacramento River Watershed by Water Year Type and Scenario (TAF/yr)

WYT	Baseline	35	45	55	65	75
C	619	594	597	570	587	602
D	305	320	316	307	325	341
BN	373	400	399	397	389	403
AN	321	350	361	373	339	373
W	803	804	806	818	841	829
All	520	528	530	528	536	546

A1.12.9.12 Stream-Groundwater Flux by Basin

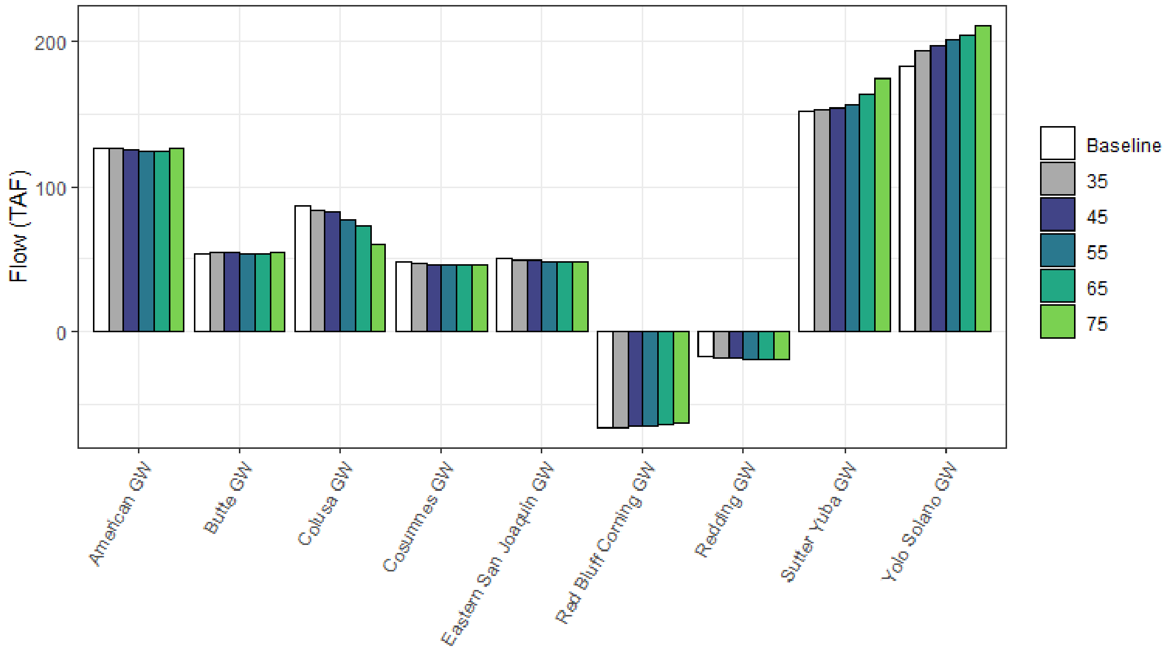

Figure A1-248. Stream-Groundwater Flux (Net Groundwater Gain) by Basin (TAF/yr)

Table A1-552. Stream-Groundwater Flux (Net Groundwater Gain) by Basin Change from Baseline (TAF/yr)

Basin	Baseline	35	45	55	65	75
American	127	0	-1	-2	-2	-1
Butte	54	1	1	0	0	2
Colusa	87	-3	-5	-10	-15	-27
Cosumnes	48	-1	-2	-2	-2	-2
Eastern San Joaquin	51	-1	-1	-2	-3	-2
Red Bluff-Corning	-66	1	1	1	2	3
Redding	-17	-1	-1	-2	-2	-2
Sutter-Yuba	152	1	2	4	11	23
Yolo-Solano	184	10	13	18	21	28

A1.12.9.13 Groundwater Storage by Basin

Table A1-553. Annual Average Rate of Change in Storage by Basin (TAF/yr)

Basin	Baseline	35	45	55	65	75
American	-64	-67	-73	-84	-97	-112
Butte	-78	-79	-82	-90	-101	-136
Colusa	-70	-90	-101	-127	-175	-243
Cosumnes	-111	-115	-118	-122	-127	-131
Eastern San Joaquin	-81	-90	-92	-99	-104	-110
Red Bluff-Corning	-1	-3	-4	-5	-6	-7
Redding	-374	-376	-379	-383	-390	-399
Sutter-Yuba	142	140	139	138	135	130
Yolo-Solano	43	38	34	21	-3	-39

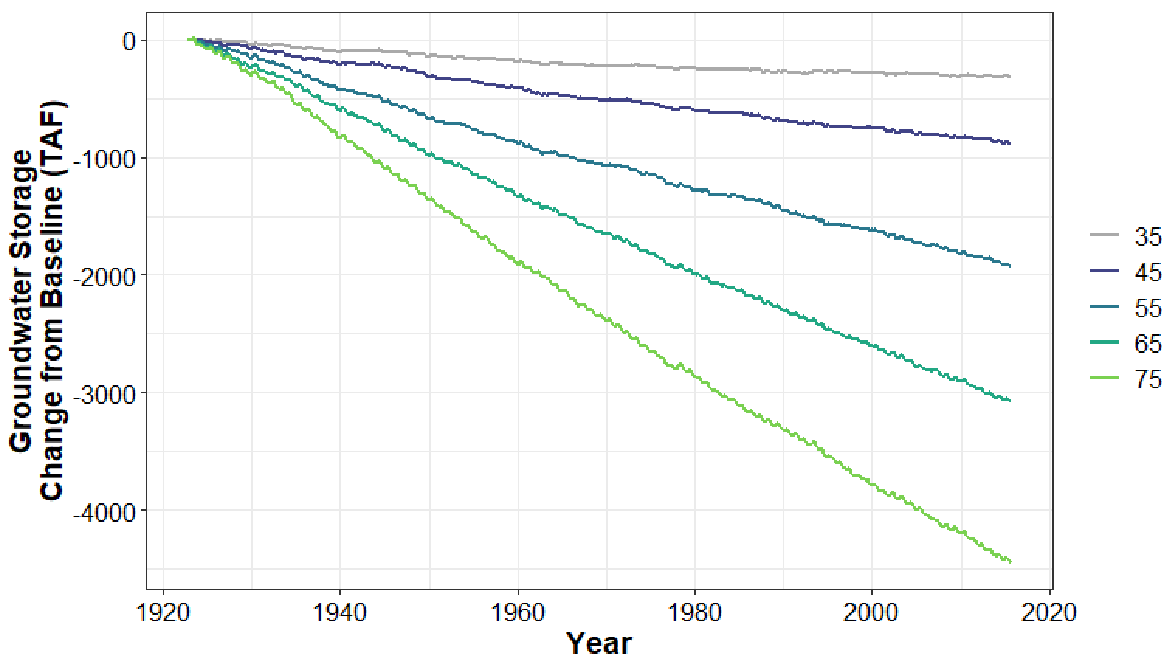

Figure A1-249. American River Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

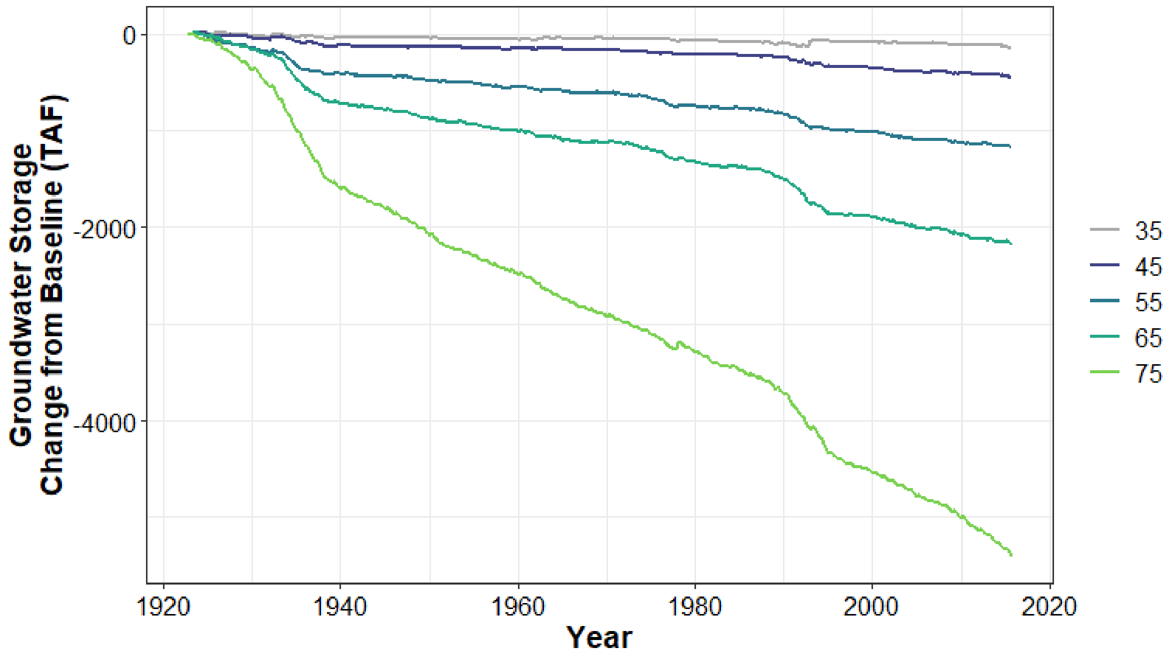

Figure A1-250. Butte Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

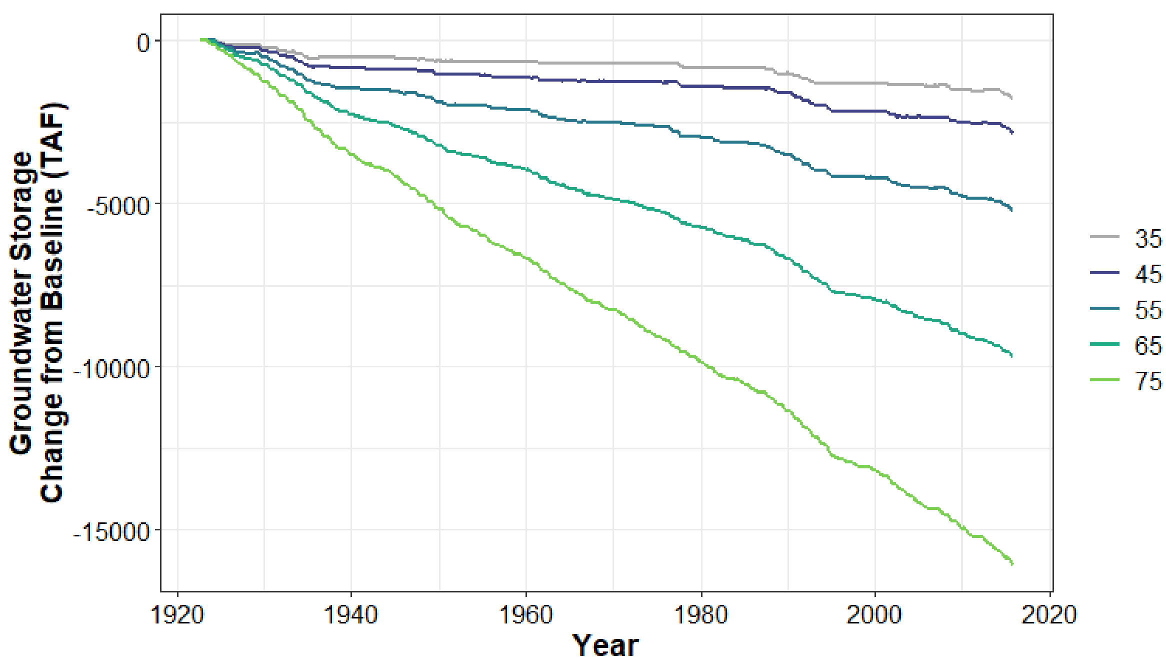

Figure A1-251. Colusa Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

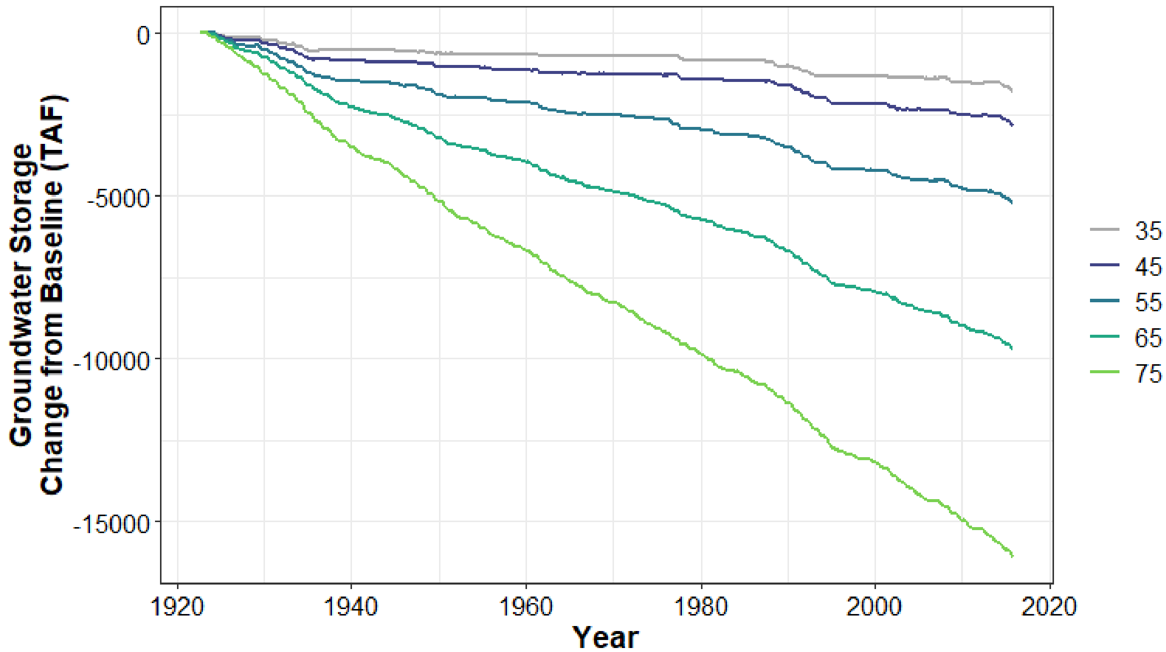

Figure A1-252. Cosumnes Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

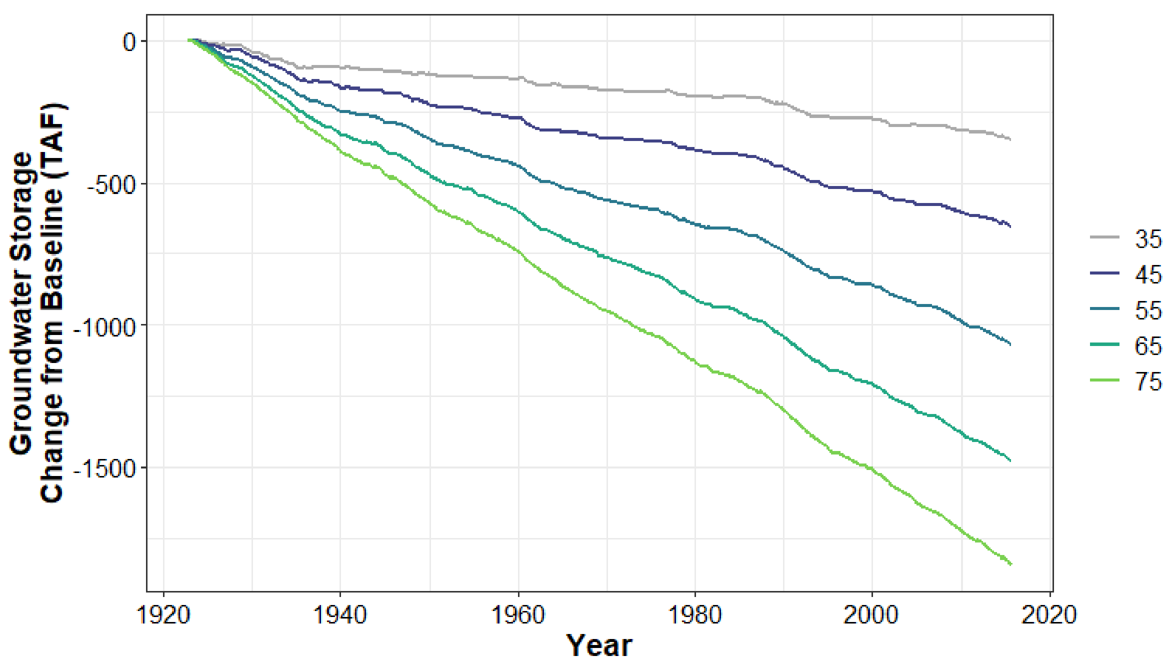

Figure A1-253. Eastern San Joaquin Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

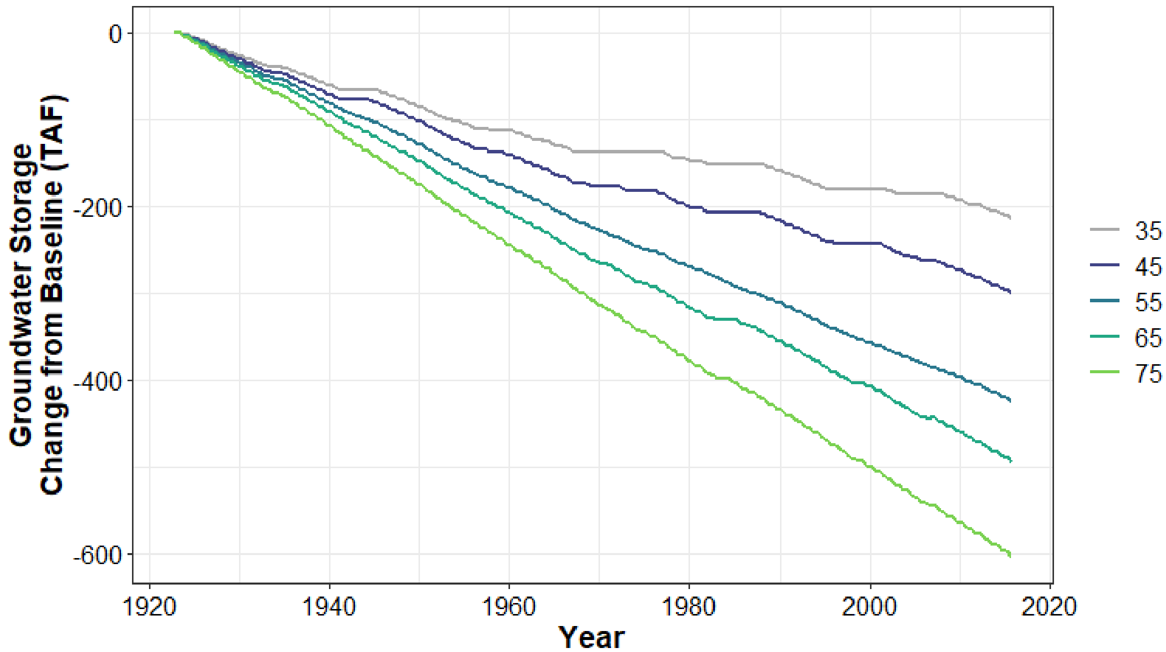

Figure A1-254. Suisun Groundwater Basin End-of-Year Storage (TAF)

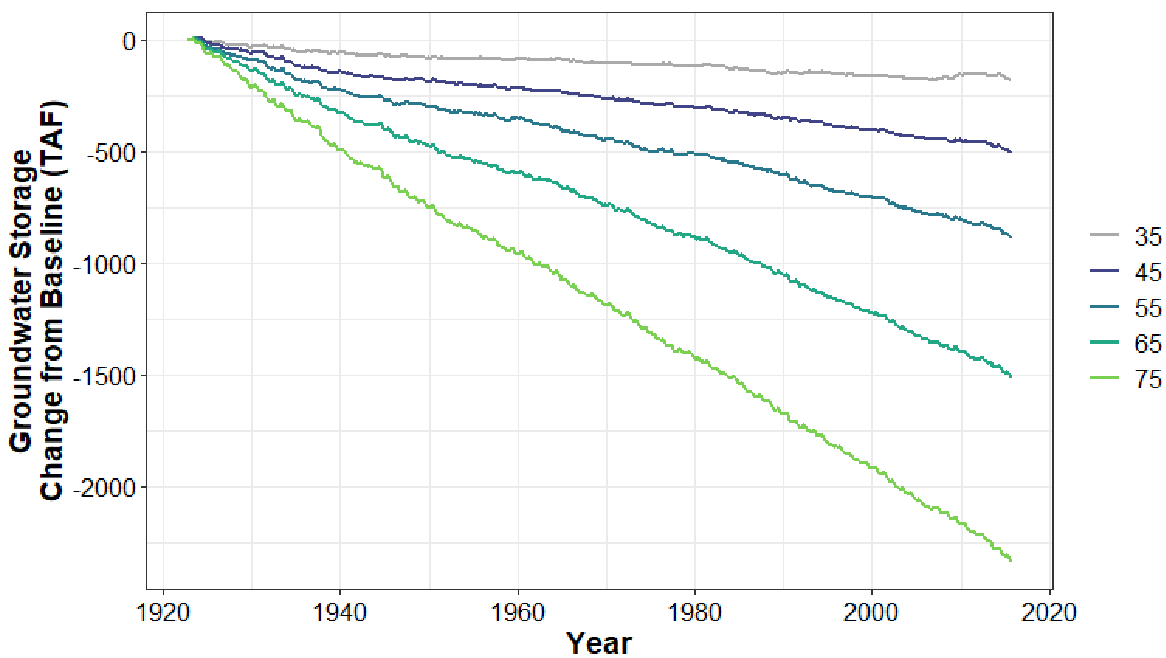

Figure A1-255. Red Bluff Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

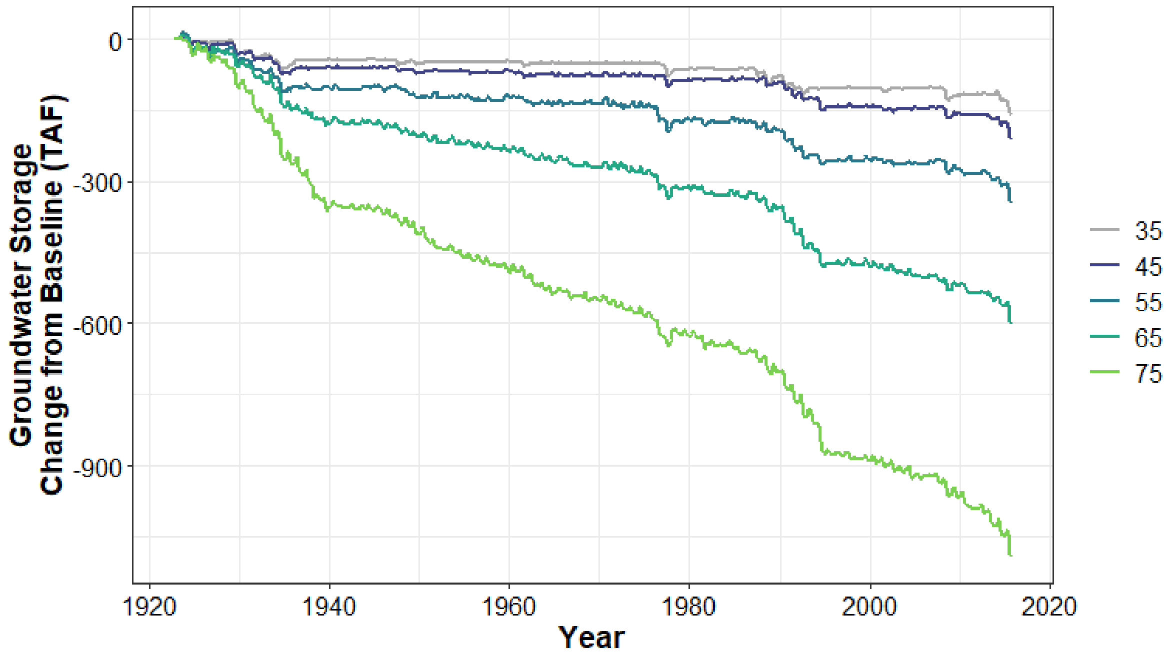

Figure A1-256. Redding Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

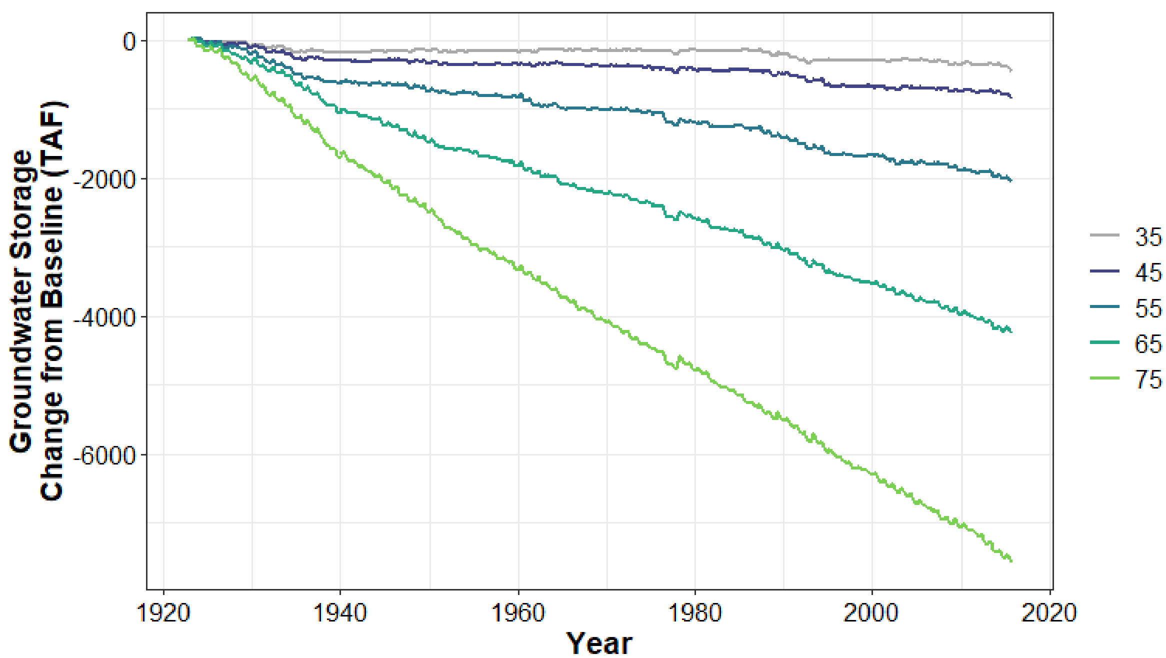

Figure A1-257. Sutter Yuba Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

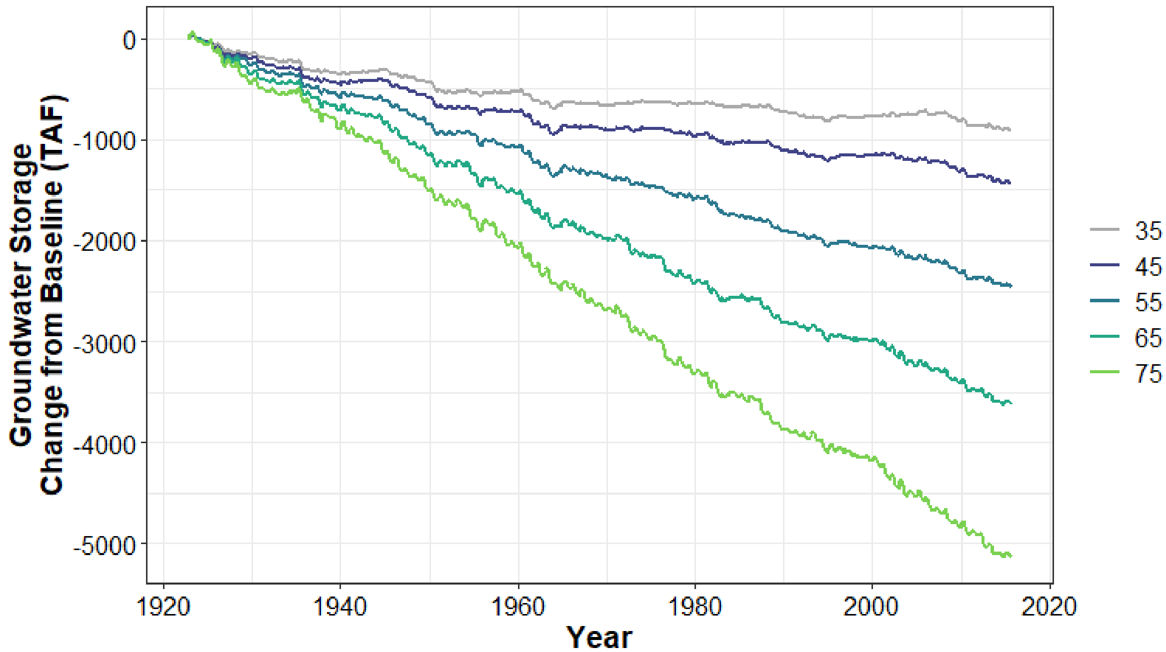

Figure A1-258. Yolo Solano Groundwater Basin End-of-Year Storage – Change from Baseline (TAF)

A1.12.10 Unmet Instream Flow Requirements

Unmet IFRs are presented as a count of months and percent of months in which the flow requirement was not met. A total of 1,116 months are in the 1923–2015 simulation period presented here, though many IFRs are not in effect in every month of the simulation period. The flow requirement was considered unmet if the shortfall was greater than 5 percent of the monthly requirement. Results are presented for "REG" flow requirements, which represent existing regulatory flow requirements, and "SWRCB" flow requirements, which represent flow requirements imposed to implement the flow scenarios.

Table A1-554. Number of Months (Percent of Months) with Unmet Regulatory Instream Flow Requirement

Requirement	Baseline	35	45	55	65	75
REG American River at Fair Oaks	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	61 (5)
REG Bear River below Canal Wasteway	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
REG Bear River below Dutch Flat Afterbay	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
REG Bear River below Lower Bear Dam	15 (1)	17 (2)	19 (2)	20 (2)	24 (2)	29 (3)
REG Below Little Grass Valley Dam	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)
REG below SFF Tunnel	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)
REG Below Tiger River Regulator	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	3 (0)
REG Canyon Creek below Bowman Dam	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
REG Clear Creek below Igo	134 (12)	140 (13)	136 (12)	127 (11)	128 (11)	132 (12)
REG Cole Creek below Diversion Dam	10 (1)	12 (1)	12 (1)	13 (1)	15 (1)	17 (2)
REG D893 H St	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	25 (2)
REG Downstream of Forbestown Dam	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)
REG Downstream of Lost Creek Dam	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)

Requirement	Baseline	35	45	55	65	75
REG Duncan Creek below Diversion Dam	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	27 (2)
REG Fordyce Creek below Fordyce	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (0)
REG Kellogg Creek below Los Vaqueros	183 (16)	183 (16)	183 (16)	183 (16)	183 (16)	183 (16)
REG Little Rubicon below Diversion	37 (3)	37 (3)	37 (3)	37 (3)	37 (3)	35 (3)
REG Lodi1950 Base	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)
REG Lodi1950 HiMayStorage	65 (6)	66 (6)	60 (5)	43 (4)	26 (2)	13 (1)
REG Lodi1950 LoMayStorageHiEOMStorage	42 (4)	63 (6)	106 (9)	179 (16)	251 (22)	334 (30)
REG Lodi1950 LoMayStorageLoEOMStorage	0 (0)	1 (0)	5 (0)	17 (2)	32 (3)	69 (6)
REG Lodi22415 Base	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)	10 (1)
REG Lodi22415 HiPrecipHiEOMStorage	16 (1)	16 (1)	16 (1)	19 (2)	31 (3)	63 (6)
REG Lodi22415_HiPrecipLoEOMStorage	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	1 (0)
REG Lodi22415 LoPrecipHiEOMStorage	0 (0)	4 (0)	10 (1)	17 (2)	32 (3)	69 (6)
REG MF American below French Meadows Dam	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)	91 (8)
REG MF American below Interbay Dam	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	64 (6)
REG Middle Yuba below Jackson Meadows Dam	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
REG Middle Yuba below Milton Dam	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0)
REG Middle Yuba below Our House Dam	49 (4)	49 (4)	49 (4)	48 (4)	49 (4)	49 (4)
REG Mormon Ravine	93 (8)	93 (8)	93 (8)	93 (8)	93 (8)	93 (8)
REG NF American below Lake Valley Canal	115 (10)	115 (10)	115 (10)	115 (10)	115 (10)	115 (10)
REG NF Mokelumne below Salt Spring Dam	2 (0)	2 (0)	2 (0)	2 (0)	2 (0)	3 (0)
REG NS Fork Long Canyon below Dam	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	7 (1)
REG Rubicon below Rubicon Dam	36 (3)	36 (3)	36 (3)	36 (3)	36 (3)	36 (3)
REG Rubicon River below Hell Hole	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	66 (6)
REG Sacramento at Rio Vista	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	3 (0)
REG Sacramento at Keswick	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)	2 (0)
REG Silver Creek below Oyster Creek	90 (8)	90 (8)	90 (8)	90 (8)	90 (8)	90 (8)
REG Stony Creek below Black Butte	3 (0)	16 (1)	31 (3)	40 (4)	68 (6)	114 (10)
REG Stony Creek below East Park Dam	3 (0)	18 (2)	29 (3)	39 (3)	66 (6)	110 (10)
REG Stony Creek below Northside Dam	3 (0)	14 (1)	25 (2)	32 (3)	56 (5)	99 (9)
REG Stony Creek below Stony Gorge	3 (0)	15 (1)	25 (2)	34 (3)	60 (5)	99 (9)
REG Trinity River below Lewiston	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)	1 (0)
REG Yuba River near Marysvillle	2 (0)	0 (0)	0 (0)	1 (0)	5 (0)	20 (2)
REG Yuba River near Smartville	3 (0)	0 (0)	1 (0)	2 (0)	11 (1)	42 (4)

Table A1-555. Number of Months (Percent of Months) with Unmet SWRCB Instream Flow Requirements

Requirement	Baseline	35	45	55	65	75
SWRCB American River	-	0 (0)	0 (0)	0 (0)	0 (0)	4 (0)
SWRCB Black Butte	-	11 (1)	21 (2)	32 (3)	54 (5)	100 (9)
SWRCB Black Butte Inflow	-	0 (0)	0 (0)	6 (1)	20 (2)	52 (5)
SWRCB Cache Creek	-	0 (0)	0 (0)	1 (0)	1 (0)	12 (1)
SWRCB Calaveras River	-	0 (0)	0 (0)	0 (0)	0 (0)	7 (1)
SWRCB Clear Creek	-	0 (0)	0 (0)	0 (0)	0 (0)	3 (0)
SWRCB Clear Lake	-	110 (10)	134 (12)	153 (14)	165 (15)	177 (16)
SWRCB Cosumnes River	-	1 (0)	1 (0)	2 (0)	14 (1)	21 (2)
SWRCB Feather River	-	0 (0)	0 (0)	0 (0)	1 (0)	5 (0)
SWRCB Folsom	-	0 (0)	0 (0)	0 (0)	0 (0)	4 (0)
SWRCB New Hogan	-	0 (0)	0 (0)	0 (0)	0 (0)	5 (0)
SWRCB Oroville	-	5 (0)	6 (1)	11 (1)	15 (1)	19 (2)
SWRCB Stony Creek	-	4 (0)	8 (1)	15 (1)	24 (2)	41 (4)
SWRCB Thomes Creek	-	0 (0)	0 (0)	0 (0)	13 (1)	38 (3)

A1.13 References

A1.13.1 Common References

^National Marine Fisheries Service (NMFS). 2009. Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project. June 4. Endangered Species Act Section 7 Consultation. Southwest Region.

^SacWAM 2023: State Water Resources Control Board (SWRCB). 2023. Sacramento Water Allocation Model (SacWAM) Documentation.

A1.13.2 Section References

State Water Resources Control Board (SWRCB). 2000. *Revised Water Rights Decision 1641*. Available: https://www.waterboards.ca.gov/waterrights/board_decisions/adopted_orders/decisions/d1600_d1649/wrd1641_1999dec29.pdf. Accessed: November 2, 2018.

U.S. Bureau of Reclamation. 2018. *Summary of Water Supply Allocations.* Available: https://www.usbr.gov/mp/cvo/vungvari/water_allocations_historical.pdf. Accessed: December 17, 2018.