MANAGEMENT STRATEGY · THE DELTA AS A LIVING PLACE

Maintain Delta outflows (45% unimpaired flow target)

A management strategy in the COEQWAL scenario library

> This strategy adapts USBR's "Alternative 3" configuration — increased Delta outflow requirements supported by upstream actions — with the December–May outflow requirement set to roughly 45% of unimpaired flow.

This brief describes *"maintain Delta outflows (45% unimpaired flow target)"*, one of 28 management strategies in the COEQWAL scenario library. Each strategy is simulated once under each of five hydroclimates; the references note at the end of this brief lists the model runs.

§2 WHAT THIS STRATEGY CHANGES

USBR undertook an exploratory modeling exercise while developing scenarios for what became the 2024 Long-Term Operations consultation. One set of scenarios, informed by discussions with environmental and non-governmental organizations, included increased Delta outflows and upstream actions to conserve water for environmental and ecological purposes. USBR formalized these actions as its "Alt3" (modified natural hydrograph) scenario; a detailed description appears in Chapter 3 of the Final Environmental Impact Statement for the consultation, published in November 2024.

This member of the set applies the maximum Delta outflow target at 45% of unimpaired flow, scaled down from the 65% level used in the original USBR studies. The NGO flow schedule that substitutes for the percentage requirement under a range of common conditions is scaled back proportionally.

The unimpaired-flow requirement applies only December through May and carries numerous overriding and off-ramping contingencies — simulated Delta outflow should not be expected to strictly match a 45%-of-unimpaired condition. Where unregulated flows are available (runoff on the valley floor during storms, for example), outflows can exceed the requirement level.

§3 THE CONFIGURATION IN DETAIL

The table compares the eight operational fields that define this strategy against current operations — the strategy that represents existing operational rules, recent (2020) land use, and TUCPs. Rows that match current operations are shown in light gray; rows that differ are highlighted.

ASPECT	CURRENT OPERATIONS	THIS STRATEGY
TUCP actions	Active	Active
SGMA actions	None	None
Land use	2020 LandIQ	2020 LandIQ
Delta regulations	Standard	Modified Delta outflow (45% unimpaired); limits on exports
BiOps	2019 / 2020 ITP	Modified versions of 2019 / 2020 ITP
Infrastructure	Standard	Standard
Flows	Standard	Delta outflow up to 45% unimpaired, supported by contributions from select tributaries
Allocation / priorities	Standard	Allows CVP Settlement allocations down to 0%

§4 LINEAGE AND SOURCE

This configuration was adapted from USBR's Alt3 scenario, made available after the Long-Term Operations consultation concluded in December 2024. The COEQWAL team replaced the hydrology with DWR's adjusted historical dataset, updated agricultural demands to the 2020 LandIQ land-use dataset, and set the outflow requirement to this strategy's level. The CalSim model files for this strategy are referenced by the run IDs in the references note at the end of this brief.

§5 RELATED STRATEGIES

RELATED STRATEGIES — THE DELTA AS A LIVING PLACE

Increase Delta outflows (65% unimpaired flow target). USBR Alternative 3 for the Long-Term Operation of the Central Valley Project, with Delta outflow requirements set to roughly 65% of unimpaired volume.

Reduce Delta outflows (35% unimpaired flow target). USBR Alternative 3 for the Long-Term Operation of the Central Valley Project, with Delta outflow requirements set to roughly 35% of unimpaired volume.

Increase Delta outflows (55% unimpaired flow target). USBR Alternative 3 for the Long-Term Operation of the Central Valley Project, with Delta outflow requirements set to roughly 55% of unimpaired volume.

Increase Shasta carry-over storage. Spring CVP allocation reductions that raise the target carry-over storage in Shasta reservoir by 20% relative to current operations.

Relax Delta salinity standards. Current operations with the fall X2 salinity requirement removed; other Delta flow and salinity requirements remain in place.

Delta Conveyance Project. The Delta Conveyance tunnel (6,000 cfs North Delta Diversion capacity) with 2025 voluntary-agreement flows and Sacramento Valley rice-fallowing actions.

§6 WHAT THIS DOESN'T SAY

This brief describes a scenario representation in CalSim, not a real-world policy proposal or implementation plan. The strategy as modeled may not capture all details necessary to support direct translation to actual operations. The brief does not predict, evaluate, or recommend any outcome — it describes what the scenario changes about CalSim's representation of the system. For what the model produces under this strategy, see the result briefs referenced in §7.

§7 SEE RESULTS FOR THIS STRATEGY

To see modeled outcomes under this strategy across all nine key outcomes at the reference hydroclimate, see the *The Delta as a living place* theme brief.

To see outcomes at a specific location of interest, see the relevant LOI briefs — particularly those for Delta locations and the tributaries that contribute to Delta outflow.

Compare this strategy in the data explorer → (https://coeqwal.org/explore?strategy=s0041)

REFERENCES — MODEL RUNS

Each strategy is simulated once under each of five hydroclimates. The table lists the model run behind this strategy and the current-operations run it is compared against, for each hydroclimate, so any reader can trace this page to specific CalSim runs.

HYDROCLIMATE	THIS STRATEGY	CURRENT OPERATIONS
Historical hydroclimate (adjusted)	s0041	s0020
Moderate climate stress (EC-Earth3-Veg)	s0152	s0134
Moderate-high climate stress (cc50)	s0080	s0047
High climate stress (cc95)	s0100	s0056
Extreme climate stress (TaiESM1)	s0126	s0108