MANAGEMENT STRATEGY · BASELINE

Current operations

A management strategy in the COEQWAL scenario library

> This "Current Operations" strategy represents current operating rules for the major Central Valley water systems: the operational logic of DWR's 2023 Delivery Capability Report, with agricultural demands set by the 2020 LandIQ land-use dataset and Temporary Urgency Change Petition (TUCP) actions active. It is the comparison anchor for the scenario library — every other strategy brief describes its configuration as a set of changes from this one.

This brief describes *the "Current Operations" scenario*, 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.

A variant of this strategy, Current operations with reintroduction (https://coeqwal.org/documents/Strategy_Documentation/strategy_brief_current-operations-with-reintroduction.html), adds one action that is not a water management action: reintroduction of winter-run Chinook salmon to cold-water habitat upstream of Shasta Dam. The two strategies share the same CalSim 3 simulation; modeled results differ only for the winter-run salmon key outcome.

§2 WHAT THIS STRATEGY CHANGES

This strategy makes no intentional change: it is the current-operations reference the other strategies in the library are compared against. The model code and operating rules were taken directly from the CalSim3 files accompanying DWR's

2023 Delivery Capability Report (DCR) final version and represent the operating rules for the major Central Valley systems up to and including the 2019 Biological Opinions and the 2020 SWP Incidental Take Permit.

Two details distinguish this configuration from the DCR release it is built on: agricultural demands are determined using a 2020 map of crop types in the Central Valley (the LandIQ dataset) rather than the older 2004–2013 average, and TUCP actions are activated. TUCP actions can be triggered February through May when the Sacramento Valley index and Shasta storage both fall below certain thresholds. The TUCP actions relax certain Delta regulations to conserve upstream storage and follow the model implementation used by DWR in their 2023 DCR models.

Because this strategy is the primary COEQWAL reference scenario and comparison anchor, the configuration table in §3 shows every field at its reference value — the strategy's own values fill both columns, and every row reads as a match by definition.

§3 THE CONFIGURATION IN DETAIL

This strategy is the primary COEQWAL reference scenario and comparison anchor: the eight operational fields below define current operations, and the other strategy briefs compare against these values. Both columns therefore show the same values, and every row reads as a match by definition.

ASPECT	CURRENT OPERATIONS	THIS STRATEGY
TUCP actions	Active	Active
SGMA actions	None	None
Land use	2020 LandIQ	2020 LandIQ
Delta regulations	Standard	Standard
BiOps	2019 / 2020 ITP	2019 / 2020 ITP
Infrastructure	Standard	Standard
Flows	Standard	Standard
Allocation / priorities	Standard	Standard

§4 LINEAGE AND SOURCE

This configuration was assembled by the COEQWAL team from DWR's 2023 Delivery Capability Report model release in two steps: TUCP actions were activated on the DCR baseline, and agricultural land use was then updated to the 2020 LandIQ dataset. Unless otherwise noted, the operations and assumptions in this configuration form the basis of the other strategies in the library. 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 — BASELINE

Current operations with historical land use. Current operational rules with agricultural demands set from the older 2004–2013 average land use.

Current operations without TUCPs. Current operations with TUCP actions deactivated.

Current USBR operations without TUCPs. Operating rules from USBR's 2024 Long-Term Operations plan (Alt2v1), with TUCP actions deactivated.

Current USBR operations. Operating rules from USBR's 2024 Long-Term Operations plan (Alt2v1), with 2020 land use and TUCP actions active.

§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 for the current-operations family across all nine key outcomes at the reference hydroclimate, see the *BASELINES* brief.

To see outcomes at a specific location of interest, see the relevant LOI briefs — particularly those for the locations closest to your question — the LOI set spans rivers, reservoirs, groundwater basins, and community water systems.

Compare this strategy in the data explorer → (https://coeqwal.org/explore?strategy=s0020)

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)	s0020	s0020
Moderate climate stress (EC-Earth3-Veg)	s0134	s0134
Moderate-high climate stress (cc50)	s0047	s0047
High climate stress (cc95)	s0056	s0056
Extreme climate stress (TaiESM1)	s0108	s0108