# Trinity River Fishery Restoration

## Supplemental Environmental Impact Statement/ Environmental Impact Report

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Alternative, to determine the incremental effects of each alternative. For CEQA purposes, comparisons are made against existing conditions (see Section 1.8).

The results from a single simulation are not intended to necessarily represent the exact operations for a specific month or year, but instead reflect long-term trends.

CALSIM II includes a variety of model enhancements to better characterize and simulate the operations of both the CVP and SWP systems. These enhancements are briefly described below.

CALSIM II includes an updated hydrology developed jointly by DWR and Reclamation that represents an improvement over the hydrology used previously. As defined in CALSIM II, hydrology includes water diversion requirements (demands), stream accretions and depletions, rim basin inflows, irrigation efficiency, return flows, nonrecoverable losses, and groundwater operation. Historical hydrology is adjusted to account for constant future levels of development. Adjustments to historical water supplies are determined by imposing future projections of land use on historical meteorological and hydrologic conditions.

Alternatives that include release schedules that vary by water-year class all determine the type of water year according to Trinity Reservoir inflow. CALSIM uses perfect foresight to predict water-year classification, whereas during normal operations some forecasting is necessary to predict the type of water year during the spring runoff period. To maintain the desired exceedance probabilities prescribed for the alternatives, a 50 percent exceedance forecast would be used. Use of a 50 percent exceedance forecast would ensure over the long-term that the desired year-type probabilities are achieved, and also that the effects of implementing the alternatives most closely matches the CALSIM results. See Table 3.2-1 for water-year class.

TABLE 3.2-1
Water-year Class

| Water-year Class | Exceedance Probability | Occurrence Every 100 Years | Trinity Reservoir Inflow for Designation (acre-feet) |
|---|---|---|---|
| Critically dry | p > .88 | 12 | <650,000 |
| Dry | .60 < p < .88 | 28 | 650,000-1,024,999 |
| Normal | .40 < p < .60 | 20 | 1,025,000-1,349,999 |
| Wet | .12 < p < .40 | 28 | 1,350,000-1,999,999 |
| Extremely wet | p < .12 | 12 | >=2,000,000 |

Note: Water-year classifications would be forecast using 50 percent exceedance methodology.

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