Chapter	Reference	Comment
Executive Summary	ES-15	The new preferred alternative (number 3), eliminates the discharge into the Sacramento River via the Dunnigan Pipeline. Why was this project element eliminated?
Project Description	Feb-79	The project description asserts that, "The Project would not affect or result in changes in the operation of the CVP, Trinity River Division facilities (including Clear Creek)" (Page 2-79). However, Trinity River and Clear Creek operations are closely tied to Shasta operations, and the CVP/SWP in general. The EIS explicitly states that, "The proposed operation of the Project includes exchanges of water with the CVP and SWP" (Page 2-89). More specifically, in the description of surface water resources, page 5-11 it specifies that, "Sites Reservoir would operate in conjunction with the operations of Shasta Lake, and flows in the Sacramento River downstream of Shasta Lake would be affected by Sites Reservoir diversions and releases." If Sites Reservoir will effect Shasta operations, then it has the potential to improve, or exacerbate, conditions on the Trinity.
Project Description	Feb-81	NMFS appreciates the Bend Bridge Pulse Protection being implemented based on forecasted flows. Building on that, we'd suggest that diversions cease on the ascending limb of the hydrograph (based on forecasted flows) until it's been demonstrated that fish passage is low (based on rotary screw trap observations). For example, under this approach, the protection can cease earlier than 7 days if, after 4 days, there are not substantial detections of fish. We suggest this approach since it can reduce fish exposure during increasing flows (when a disproportionate percentage of the fish may be mobilized) and also to circumvent the problematic lag times in earlier proposals (due to the use of 3-day trailing averages as well as the delay inherent in monitoring to detect of fish or flow events). Additionally, the bypass criteria on the mainstem shouldn't be contingent on tributary flows, since Keswick pulses, in isolation, have been shown to mobilize fish (e.g. the Fall 2019 experimental pulses).
Project Description	Feb-81	The project division criteria set bypass flows of 3,250 cfs at Red Bluff Pumping Plant (RBPP) and 4,000 cfs at Hamilton City Pump Station. NMFS would suggest developing criteria beyond these minimum static flows - for example targets that better reflect the intra- and inter- annual variability of a natural hydrograph with criteria that vary by season and water year. The criteria should also take into consideration the Fall Reclamation's Base flows (e.g. when Shasta Storage is ≤ 2.2 MAF, flow is 3,250 cfs; ≤ 2.8 MAF, flow is 4,000 cfs; ≤ 3.2 MAF, flow is 4,500 cfs; > 3.2 MAF, flow is 5,000 cfs). NMFS appreciates that language was added to this draft acknowledging the 3,250cfs bypass flow could be, "...overridden by regulatory requirement for higher flow, e.g., requirements, biological opinions" but nonetheless it's unclear what assumptions were used in modeling to represent the Minimum Bypass Flows in the Sacramento River at the RBPP.
Project Description	Feb-87	The project description states that in late summer and fall (i.e., August through November) Reclamation would release water from Shasta Lake and/or CVP share of Sites Reservoir for Storage Partners. It should be noted, however, that releases in this time period can have adverse impacts on salmon spawning, rearing, redd dewatering, and stranding. In short, and as previously noted, the exchanges for Cold Water Pool maintenance could exacerbate the challenge of stabilizing flows for Fall-Run Redd Maintenance.
Environmental Analysis & Cumulative Effects	31-3	NMFS would recommend the use of a future baseline, considering the Project would not be operational until at least 2030.
Environmental Analysis & Cumulative Effects	32-18	FISH Impacts 2-5 (Operations effects on winter-run Chinook salmon, spring-run Chinook salmon, fall-run/late fall–run Chinook salmon, Central Valley steelhead) were previously described (before mitigation) as having substantial adverse effect for all alternatives, but are now described as no effect or no adverse effect. What was the basis for this change?

Chapter	Reference	Comment
Environmental Analysis & Cumulative Effects	Chapter 11	NMFS appreciates the commitment to avoid any adverse impacts from Sites Reservoir to the Big Notch Project as stated in the EIR/EIS, "The Project would operate to avoid effects on the Big Notch's ability to achieve the same level of performance for salmonids in the Sacramento River as it would absent the Project." In addition to proposal for monitoring, NMFS would appreciate further discussions with Reclamation regarding the operational changes needed to mitigate these impacts.
Environmental Analysis & Cumulative Effects	Chapter 6	The proposed monitoring of water quality impacts to Yolo Bypass is sparse and there's a substantial amount of river miles between Wallace Wier to Lisbon Wier and downstream to the Cache Slough complex - with variable intervening habitat, land use, and hydrology. The mitigation measure (to reduce flows when the temperatures are too high and dissolved oxygen is too low) seems counterintuitive since it will potentially increase residence time and reduce reaeration. The monitoring strategy proposed may also not be effective if, for example, the cause of hypoxia are nitrogen and phosphorus loadings from the CBD into the bypass during the winter, but those don't drive eutrophication until the summer. Similarly, loadings of mercury may methylate under certain conditions, and, along with pesticides and herbicides, accumulate in fish tissues or sediments - so that they're not adequately detected in the proposed water column monitoring. Considering Sites Reservoirs potential to methylate, and then export mercury downstream, a more effective approach may be to develop a water quality model for the relevant parameters (metals, nutrients, Hg Se, temperature, DO, etc.) for the receiving waters of interest (CBD and Yolo Bypass). A hydrodynamic water quality model would allow forecasting of water quality impacts of Sites Reservoir to determine the fate and transport of pollutants and prioritize locations to mitigate pollutant loadings.
Environmental Analysis & Cumulative Effects	Chapter 6	Applying a water quality model for the proposed reservoir to anticipate trophic status and risk of mercury methylation should be considered. The use of CALSIM monthly data (for metals, pesticides, salinity, HABs) lacks the temporal resolution to analyze acute water quality exceedances. The CE-QUAL-W2 model being used for temperature analysis in Sites could be further developed to analyze the other potential water quality impacts in reservoir: namely metals, including mercury, salinity, and especially eutrophication and HABs.