

APPENDIX B. MITIGATION MONITORING PLAN

The California Department of Water Resources (CDWR) proposes implementation of modified water operations guidelines for Pyramid Dam to simulate the natural hydrology of middle Piru Creek to the extent operationally feasible and consistent with safety considerations. The primary objective of simulating the natural hydrological regime of middle Piru Creek is to avoid the incidental take (direct and indirect injury and mortality) of a federally endangered species, the arroyo toad (*Bufo californicus*) by State Water Project operations. A second objective of the proposed project is to allow State Water Project water deliveries to United Water Conservation District via middle Piru Creek to Lake Piru to continue at current levels.

The purpose of this Mitigation Monitoring Plan is to ensure effective implementation of the mitigation measures imposed by the CDWR. This plan includes:

- A brief description of the impact expected to occur from the proposed project
- The mitigation measure(s)
- The actions required to implement these measures
- Monitoring/Reporting requirements
- Timing of the implementation (Implementation Phase).

Table B-1 Mitigation Monitoring Plan

Impact	Mitigation Measures	Monitoring/Reporting Requirement	Implementation Phase/Action
Water Resources			
The proposed project could alter the existing drainage pattern in a manner which would result in erosion.	H-3: Prevention of Erosion Damage to Infrastructure. The CDWR shall perform an engineering analysis to determine the potential for expected releases to damage Old Highway 99, the Old Highway 99 bridges, utilities, and other infrastructure in or adjacent to the channel. The engineering analysis shall be used as a basis for establishing procedures and guidelines for monitoring erosion at infrastructure during flood releases. CDWR shall monitor erosion at key potential infrastructure damage areas during large flow releases and temporarily curtail releases should the monitoring determine the infrastructure to be at risk. CDWR shall subsequently install engineered erosion protection to prevent erosion damage to the areas determined to be at risk.	CDWR will ensure completion of an engineering analysis for infrastructure adjacent to the creek per Mitigation Measure H-3. CDWR will develop procedures and guidelines to monitor erosion based on the engineering analysis within the specified timeframes of the analysis. CDWR will monitor erosion at key areas during large flow releases. CDWR will install and maintain engineered erosion protection as needed in at risk areas. Engineered erosion protection will be monitored following large storm events, defined as storm events that generate flows of 1,000 cfs or more in upper Piru Creek, to determine whether erosion damage has occurred. If damage has occurred, CDWR will notify USFS and USFWS.	Following adoption of the proposed operations guidelines and issuance by FERC of a license amendment
The proposed project could expose people or structures to a risk of loss, injury or death involving flooding, including flooding as a result of the failure of a dam.	H-8: Development of flood warning signage. The CDWR shall work with the USFS and landowners to develop a warning system and place signage warning the public of dangerously high flows in middle Piru Creek.	CDWR will work with USFS to design and install flood warning signage. CDWR will inspect signage at least annually and repair or replace waning signs as needed. Monitoring results will be provided to the USFS.	Following adoption of the proposed operations guidelines and issuance by FERC of a license amendment
Recreation			
Altered Recreational Opportunities for Anglers.	R-3: Stock some or all of the additional 1,000 pounds of trout allotted in Piru Creek each year as determined appropriate by CDFG fisheries biologists. In addition to the 3,000 pounds of trout stocked annually in middle Piru Creek, some or all of the remaining 1,000 pounds of trout allotted may be stocked between the base of Pyramid Dam and the weir upstream of Frenchman's Flat (the catch-and-release area). Prior to the beginning of the stocking season, CDWR shall consult with CDFG fishery biologists to determine a suitable amount of trout, up to 1,000 pounds, to stock upstream of the weir to maintain a catch-and-release trout population.	CDWR will contract with CDFG to stock the catch-and-release section of middle Piru Creek with up to 1,000 pounds and Frenchman's Flat with 3,000 pounds of rainbow trout annually. Following each dry season, CDWR will consult with qualified CDFG fishery biologists to determine the appropriate amount of trout to be stocked during the rainy season. CDFG will stock the additional trout and provide stocking records to CDWR to verify the amount of additional trout stocked.	Following adoption of the proposed operations guidelines and issuance by FERC of a license amendment