

# Item 14: Consider Authorization for General Manager to Amend Contract for Los Padres Alternatives Study



# Los Padres Dam (background)



- Constructed on the Carmel River in 1948/1949
- Located at River Mile (RM) 24.8 just upstream of Cachagua
- Primary Purpose is to provide storage for domestic and municipal water supply to the Monterey Peninsula area and plays a critical role in maintaining instream flow augmentation throughout the summer and fall
- Original Storage in 1949 = 2,709 acre-feet
- Storage in 2017 = 1,697 acre-feet
- Usable storage approximately 1,300 acre-feet

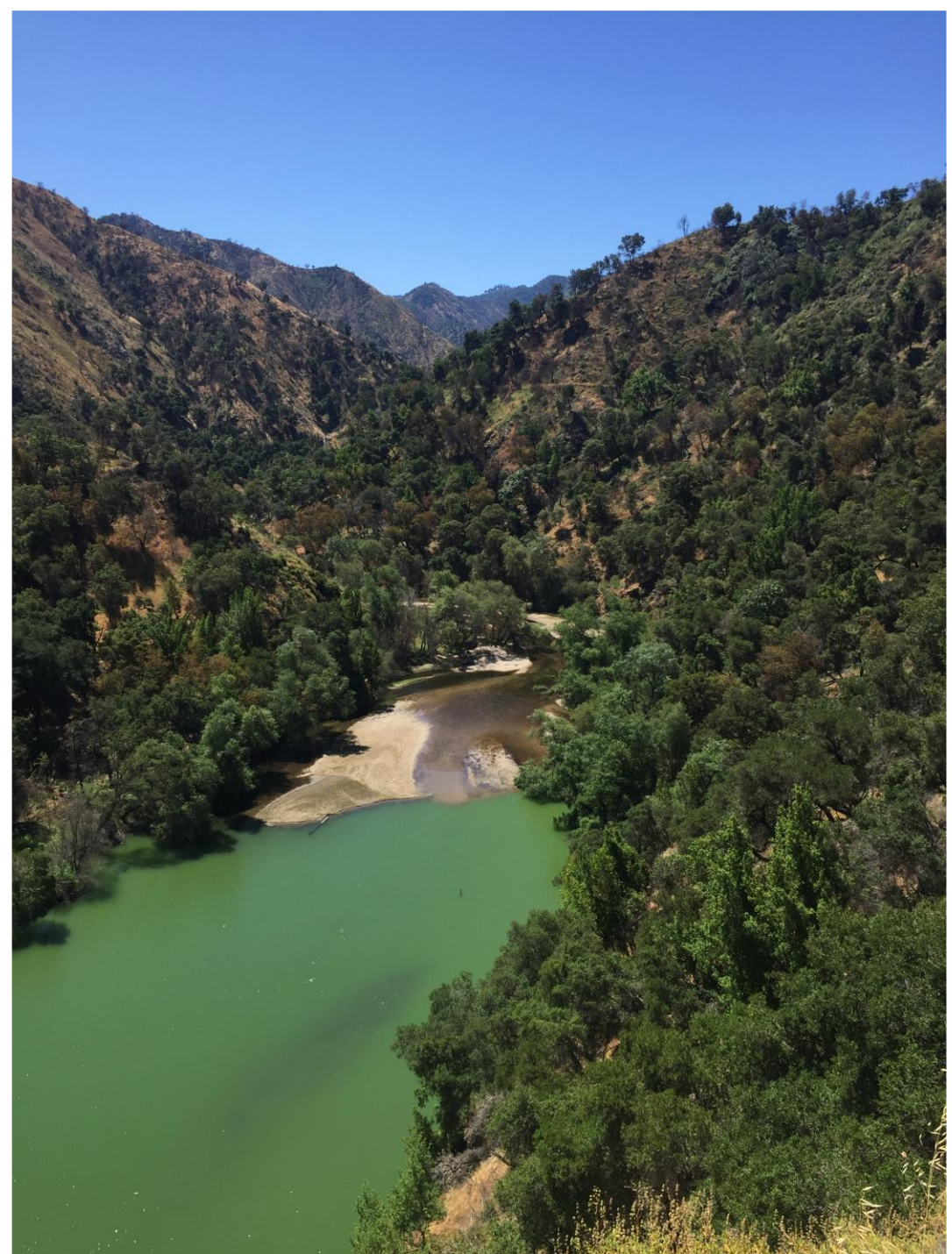
# A short history of the Los Padres Alternatives Study

- The Los Padres Alternatives Study is a series of technical reports that are seeking to answer complex questions regarding the long-term management and fate of Los Padres Reservoir.
  - AECOM - consultant
  - HDR - consultant
  - Normandeau - consultant
  - National Marine Fisheries Service (NMFS)
  - California Department of Fish and Wildlife (CDFW)
  - Cal-Am
  - MPWMD plus others
- AECOM developed the cost and scope of study in 2016
- Contract with AECOM started in 2017

# Reason for the Study

- Los Padres Reservoir (LPR) is 72 years old and approximately 1,110 acre-feet have been lost to sedimentation. Remaining capacity would be filled in approximately 100 to 210 years (approx. 7.5 AF per year).
- LPR creates complex issues for federally threatened steelhead
  - Fish passage (trap and truck over the dam)
  - Water temperature
  - Traps spawning gravel
- However, it also releases water during the summer to help maintain flows and habitat in the lower river
- It's a source of water supply for the community

During the past 72 years  
an estimated 1,110 acre-  
feet of reservoir storage  
has been lost to  
sedimentation



# The Study will

- Identify positive and negative effects associated with various alternatives for Los Padres Reservoir
  - No Sediment Management
  - Dam Removal
  - Restore Reservoir Capacity
  - Storage Expansion
- Help identify fish passage solutions
- Quantify habitat below the reservoir

# Example Questions from NMFS

- How effective is the upstream trap for capturing adults?
- What is adult survival and movement time through the reservoir- both moving upstream to spawn and moving downstream to out migrate?
- What is smolt and adult survival over the spillway vs. through the bypass?
- How much lower river habitat would be lost by decreased summer flows?
- Is lower summer flow associated with lower juvenile densities or growth?
- How many smolts are produced above Los Padres? How does that compare to below Los Padres? Can increased above Los Padres smolt production compensate for lower smolt production in the lower river?

# Two Studies about Los Padres Reservoir Supported by Individual Technical Reports

- Los Padres Alternatives Study
  - Comanaged by MPWMD and Cal-Am
  - With input from the Technical Review Committee (NOAA,CDFW, and others)
- Cal-Am and NOAA Feasibility Study on the Removal of Los Padres Dam (to pull information from Alternatives Study)



# Where we are today (completed tech. reports)

## AECOM Products

- Los Padres Dam and Reservoir Alternatives and Sediment Management Study Draft Alternatives Descriptions Technical Memorandum
- Los Padres Dam and Reservoir Alternatives and Sediment Management Study

## • HDR Products

- Standard Operating Procedures (Los Padres Dam Fish Passage and Regulating Outlet Facilities)

## • Normandeau Products

- Assessing Instream Flow Requirements for Steelhead in the Carmel River, California
- Carmel River Instream Flow Habitat Time Series Memorandum

## • MPWMD

- Calibrated Historic Carmel River Basin Hydrologic Model and Scenarios

# Documents to be produced

- HDR-Steelhead Passage Alternatives Study at Los Padres Reservoir
- AECOM- Effects to Steelhead
  - Currently waiting for HDR's Report
  - Currently waiting for NMFS' steelhead field study
- AECOM- Final Report ...Identify Feasible Alternatives
- Final Report from AECOM anticipated in June 2022

# In Summary

- AECOM is now preparing to complete the remaining tasks of the Study and incorporate some new information from NMFS' own steelhead studies on the Carmel River.
- AECOM is requesting a contract amendment of \$94,220 because their original cost proposal did not account for this long of a study duration (annual rate increases), additional technical review meetings, and incorporation of new steelhead studies.
- This would bring the total contract budget from \$700,700 to 794,920