Endangered Species Act
Section 7 Consultation

BIOLOGICAL OPINION

U.S. Bureau of Reclamation operation and maintenance of the
Cachuma Project on the Santa Ynez River in Santa Barbara County, California

Action Agency:
U.S. Bureau of Reclamation

Consultation Conducted By:
National Marine Fisheries Service,
Southwest Region

Date Issued: 9/11/00

CCRB/FD#1-253

F/SW3:EJS

Mr. William H. Luce, Jr.
Bureau of Reclamation
South-Central California Area Office
2666 North Grove Industrial Drive, Suite 106
Fresno, California 93727-1551

Dear Mr. Luce:

Enclosed is the National Marine Fisheries Service's (NMFS) biological opinion for the U.S. Bureau of Reclamation's (BOR) operation and maintenance of Bradbury Dam (the Cachuma Project) on the Santa Ynez River in Santa Barbara County, California. The biological opinion addresses the effects of the proposed project on Southern California steelhead (*Oncorhynchus mykiss*) and its designated critical habitat in accordance with section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.).

The biological opinion concludes the BOR's proposed operation and maintenance of Bradbury Dam is not likely to jeopardize the continued existence of the endangered Southern California Evolutionarily Significant Unit (ESU) of steelhead known to be present in the Santa Ynez River, nor is it likely to adversely modify critical habitat. The NMFS believes the action is likely to result in take of steelhead, and therefore, an incidental take statement is attached to this biological opinion. Additionally, the following documents, referred to in the biological opinion, are also enclosed: 1) NMFS's June 23, 1998, letter authorizing emergency fish rescue, and 2) NMFS's July 19, 1999, letter regarding the use of the temporary road crossing. Mr. Darren Brumback is the lead Fishery Biologist for this project. He can be contacted at 562-980-4026 if you would like additional information.

Sincerely,

Rebecca Lent, Ph.D.
Regional Administrator

Enclosures (3)

cc: Jim Lecky, Darren Brumback, NMFS
David Young, BOR

project. A lack of flow in the areas is likely to continue to reduce the survival chances of steelhead farthest from the dam (3.5 to 10 miles) if steelhead are present. As noted, this adverse effect is most likely to occur during the interim prior to approval and implementation of the 3.0 foot surcharge. Proposed long term flow targets will increase the survival chances of steelhead in the mainstem improving the Santa Ynez's populations viability. These effects are expected to continue in the mainstem for the duration of the project.

5. Steelhead passage impediment and barrier fixes scheduled to occur as part of the Cachuma Project will provide restored and/or improved access to 32 miles of habitat in the tributaries below Bradbury Dam. NMFS considers these actions to provide significant improvement in the survival chances of the steelhead population in the Santa Ynez when all are completely implemented. NMFS notes that the tributaries known to contain steelhead downstream of the dam have a total length of 40 miles. Eighty percent of this habitat will be made available for steelhead. Reclamation's supplemental flows for migration are also likely to improve steelhead access to these areas when compared with conditions in the recent past.

6. The adverse effects to steelhead and steelhead critical habitat caused by implementing the 11 passage impediment and barrier fixes, the three demonstration projects, and the temporary road crossing in the watershed below the dam are expected to be temporary; lasting less than a few months at most. The potential for contact between steelhead and construction equipment is unknown, but can be minimized by appropriate avoidance measures. Other potential enhancement projects described above are also likely to have only temporary effects. Based on the small number of projects anticipated due to the funding provided by Reclamation, NMFS does not believe that the levels of temporary turbidity and sedimentation, nor relocation of steelhead, are likely to rise to a level that might affect a substantial portion of the population.

Impacts on ESU Survival and Potential for Recovery

1. The Santa Ynez River steelhead population and the entire Southern California ESU population are very small. The steelhead population in the Santa Ynez River is comprised of very few adult fish. Redd counts, migrant trapping, and observations are all consistent with a very low population size, probably less than 200 adult fish. As noted previously, the information available on population numbers and distribution does not allow accurate quantification of the expected project effects on steelhead. The Southern California ESU was listed as endangered by NMFS due to its greatly reduced range and population size. The limited available information regarding fish abundance is insufficient to determine if the current ESU population is continuing to decline, has stabilized, or is increasing. In the absence of any significant actions to protect or recover the species, it is reasonable and conservative to assume that the population continues to decline. Less data are available on steelhead numbers in other rivers and streams in the ESU. As noted above, the entire Southern California ESU is thought to contain fewer than 500-600 adult fish, but the ESU's population cannot be reliably estimated due to a lack of consistent fish management data in Southern California such as redd counts and catch estimates. The existing data indicate that the Santa Ynez River population may be one of the largest remaining in the

ESU with a number estimated at less than 200 adult fish. The Santa Ynez River steelhead population is therefore an essential component of the Southern California ESU population as a whole.

2. NMFS' analysis indicates that proposed operations will: 1) Significantly increase the opportunity for steelhead to migrate to spawning areas in the Santa Ynez River below Bradbury Dam over recent conditions during 27% of years; 2) Increase the ability of steelhead to successfully rear within 3.5 miles of the dam; 3) Significantly increase habitat availability in tributaries downstream of the dam when all proposed passage fixes are fully implemented; 4) Continue to adversely affect steelhead rearing in some portions of the mainstem where steelhead are commonly found (3.5 - 10 miles downstream of the dam, most significantly during the proposed interim period); 5) Temporarily adversely affect steelhead in tributaries below the dam when passage fixes are implemented (turbidity, sedimentation, relocation); and 6) Result in additional migrant trapping stress (and possible mortalities) of Hilton Creek fish. NMFS cannot specifically predict the long term survival chances of this population based on the data available and the proposed project. However, in NMFS's best professional judgement, the improvements over recent conditions for migration, habitat access in the tributaries (once fully implemented), and rearing habitat in the mainstem near the dam are likely to outweigh the adverse effects noted above in #s 4, 5, and 6 because such adverse effects are temporary and/or occur to only a portion of the population or small portion of critical habitat. Improved migration and habitat access will likely benefit the entire population. Thus, it is likely that this population's chance of persisting into the foreseeable future will be appreciably improved when the project is fully implemented. NMFS remains concerned about steelhead farthest from the dam during the interim due to the current population's small size and restricted access to habitat.

The Cachuma Project is one of the major factors affecting steelhead in the Santa Ynez River. Proposed Cachuma Project operations and maintenance, if carried forward many years into the future, will provide the small Santa Ynez River steelhead population with improved critical habitat conditions in the form of increased migration opportunity and better access to spawning and rearing areas in the watershed below Bradbury Dam, allowing the population to increase in size. Therefore the proposed project is likely to appreciably increase the likelihood of survival and recovery of the ESU by increasing its numbers and distribution. Monitoring will be needed to confirm this expected population trend.

CUMULATIVE EFFECTS

Cumulative effects include the effects of future State, tribal, local, or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Endangered Species Act. NMFS maintains general familiarity with actions affecting steelhead in the Santa Ynez River,