



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802-4213

2005/00565:APS

JAN 08 2008

Karen Waln
City of San Buenaventura
P.O. Box 99
Ventura, California 93002-0099

Dear Ms. Waln:

NOAA's National Marine Fisheries Service (NMFS) is pleased to collaborate with the City of San Buenaventura, Casitas Municipal Water District, Golden State Water Company, Meiners Oaks County Water District, Ojai Valley Sanitary District, Ventura County Parks Department, Ventura County Watershed Protection District, and the Ventura River County Water District on the development of the draft Ventura River Habitat Conservation Plan (HCP). The draft HCP represents a major undertaking, given the extensive geographic boundary and the number of activities and listed species proposed for coverage through section 10(a)(1)(B) of the U. S. Endangered Species Act (ESA). Accordingly, submittal of the draft document to NMFS for review in this pre-application phase represents a noteworthy accomplishment.

In this pre-application phase, NMFS' role and responsibility is to extend recommendations to the applicant for improving the draft HCP. The recommendations NMFS provides are intended to increase the likelihood that the final draft HCP comports with internal NMFS policy, legal mandates of the ESA, and the life history and habitat requirements of endangered steelhead (*Oncorhynchus mykiss*). One important aspect of any HCP is that the proposed conservation program possesses a high likelihood of producing a net positive benefit to the listed species that are the basis of the program. It is in this regard that NMFS approaches the draft HCP and provides assistance to the applicants.

NMFS recently completed a review of section 5, "Potential Effects", of the draft HCP, and hereby relays its comments and recommendations for revision to you. This specific section was the basis of a November 19, 2007, teleconference among NMFS, the U. S. Fish and Wildlife Service, and the environmental consultant preparing the HCP. After a careful review of the subject section, NMFS determined the section must be revised to address (1) the use of approaches that underestimate effects of covered activities on endangered steelhead, (2) certain assumptions underlying the effects assessment, (3) the use of methods that are prone to intrusion of subjectivity, (4) inclusion of activities that appear related to a federal action, (5) the proposed permit duration, and (6) recent guidance concerning the recovery of endangered steelhead. Each of these issues is described more fully as follows, along with recommendations for revising the draft HCP.



Approaches Underestimate Effects of the Covered Activities

The approach for identifying effects of the covered activities on steelhead habitat underestimates the amount and extent of effects. For instance, the protocol for identifying impacted habitat precludes historical steelhead habitat upstream of Casitas Dam, which steelhead cannot presently access due to the ongoing impassable presence of this dam. While take coverage is sought for maintenance and operation of Casitas Dam, the entire suite of effects of the continued operation of the dam on steelhead habitat (including the lost habitat due to inundation by Lake Casitas) is not considered in the calculation of effects due to the covered activities. Such effects include those related to habitat loss and fragmentation, and alteration of the pattern and magnitude of discharge in Coyote Creek and the Ventura River downstream of the dam. The effects due to continued operation and maintenance of Casitas Dam must be considered in the draft HCP if take coverage for these activities is desired under section 10(a)(1)(B) of the ESA.

Quantifying effects of the covered activities based on impacts to “suitable” habitat alone underestimates the amount and extent of effects. To assess effects of the covered activities on steelhead habitat, the authors of the draft HCP undertook an approach to identify “suitable” and “unsuitable” steelhead habitat in the waterways within the boundaries of the HCP. The habitats determined to be unsuitable were excluded from further consideration, and thereafter only suitable habitat was considered when identifying the effects of the covered activities on steelhead habitat. Ignoring unsuitable habitat in the context of the draft HCP underestimates the effects due to the covered activities because the activities themselves create conditions that render habitat “unsuitable.” For example, operation of Casitas Dam has diminished the quality and quantity of steelhead habitat in the 3 miles of Coyote Creek downstream of Casitas Dam. The draft HCP must capture all of the effects due to all of the covered activities, including those covered activities that are expected to perpetuate past alterations in the quality and quantity of habitat for steelhead.

Not considering the effects of the covered activities on the function and value of the affected habitat is expected to underestimate the true effects of the activities on steelhead habitat. Currently, the draft HCP only estimates the amount of habitat (in terms of area) to be affected by the covered activities; information on how the projected effects would translate into impacts to the function and value of the affected habitat, as well as a quantification of such impacts, are lacking. Considering the consequences of the effects on habitat area is important because habitat alterations can degraded habitat, leading to reductions in habitat function and value. The draft HCP must also consider habitat degradation due to the covered activities because, for example, while a covered activity may have a “small” or no effect on habitat area, a decrease in the quality of the habitat can be still observed. If habitat degradation is already included in the estimate of the “magnitude of effects,” the criteria or threshold used to judge when habitat is sufficiently degraded to be considered impaired or “lost” should be detailed along with a description of whether the decision criteria varies according to the type and functional value of the habitats being considered or if the criteria is assumed to be constant.

The draft HCP estimates only the area of habitat that would be affected, without considering how the covered activities would affect those habitat attributes that contribute to define the appropriateness of habitat for steelhead. There are several attributes that contribute to define the appropriateness of habitat for steelhead. These attributes include water column depth and velocity, the amount and extent of canopy cover, and physical complexity. Alteration of one or more of these attributes can reduce the quality and quantity of habitat, leading to a reduced number of individual steelhead occupying the affected habitat. Therefore, when considering the effects of the covered activities on habitat for steelhead, the draft HCP should quantify how the covered activities would affect habitat attributes.

The procedure ranking the relative importance of the effects of the covered activities is of concern. The ranking seems to be undertaken as a means to avoid “double counting” effects of the covered activities, in particular where effects of the activities spatially overlap. However, the draft HCP has not demonstrated that this procedure results in a reliable outcome, i.e., the procedure produces unbiased estimates of the true effects of the covered activities on steelhead habitat.

When assessing the effects of the covered activities on steelhead habitat, the draft HCP must also consider the effects at the steelhead population level. Currently, the consequences of the effects to the survival of the species have not been analyzed because they are not presented in the draft HCP. Something to consider and discuss in the HCP is: will the anticipated type, amount, and extent of habitat-related effects reduce the long-term survival or prospects for recovering the species? Biological or scientific justification should provide the basis for determining effects of incidental take and should be presented in the draft HCP. The specific methods used to perform the analysis should be clearly described to the extent that others could perform the analysis unaided.

Assumptions of the Effects Assessment

The effects assessment is based on unstated assumptions, some of which appear to be either unreasonable or have not been properly validated. In the context of the draft HCP, inappropriate assumptions increase the likelihood that conclusions regarding the covered-activity effects would be spurious. The following is a discussion of such assumptions.

An unstated assumption underlying the estimates of the effects (i.e., “magnitude of effects”) is that the effects of the covered activities on steelhead habitat will not vary over time, but rather will remain constant throughout the duration of the incidental take permit. Given that stream habitat is temporally dynamic, this assumption is not reasonable. Habitat availability alone is expected to fluctuate over time due to natural and unnatural (anthropogenic) factors, and therefore the effects of the covered activities are expected to vary through the future as well (similarly, the effects of the covered activities themselves are likely to vary over time given fluctuations in environmental conditions). The analytical framework and current estimates of effects contained in the draft HCP must be revised to account for the fact that habitat availability, and effects of the covered activities, will vary over time. Ideally, the estimates of habitat effects that

ultimately form the basis of the conservation program should represent the “maximum” amount and extent of expected effects.

The approach to identify “suitable” habitat assumes the decision criteria are reliable predictors of the appropriateness of steelhead habitat in southern California streams. The subject criteria are those of Raleigh *et al.* (1984)¹ and the applicability of these criteria to the southern California environment is questionable because (1) the criteria were derived from a composite of habitat information for *O. mykiss* throughout much of their northern geographic range, not southern California, (2) the applicability of the criteria to southern California steelhead streams has not been validated through properly replicated manipulative experiments, (3) information indicates the criteria can incorrectly judge habitat suitability for steelhead in southern landscapes, with the criteria predicting “unsuitable” habitat when in fact steelhead are present, and (4) empirical evidence contained in published articles of steelhead behavior, ecology, and habitat use indicates reference values from northern California or the Pacific Northwest should not be used to make management decisions about what is appropriate living space for steelhead in southern California streams.

The estimates of effects assume that most impacts to instream habitat attenuate with distance downstream. Such an assumption does not appear appropriate because (1) the function and value of habitat for steelhead can vary spatially, and (2) effects are expected to vary depending on the response variable. In certain settings, effects may in fact increase with distance downstream, particularly when the functional value of habitat increases downstream (e.g., as defined by increasing thalweg depth, or stream width, both of which increase with distance downstream). Therefore, the effects of the covered activities on steelhead habitat are expected to be largely context specific.

The estimates of effects assume that a covered activity would not have an adverse effect if no change in the environmental baseline is expected. This assumption is problematic particularly when past effects of a covered activity have reduced the quality or quantity of habitat for steelhead and the covered activity is expected to perpetuate the adverse effects into the future. While the past construction and (or) operation of the existing covered activities are part of the environmental baseline, such activities will continue into the future. Consequently, the continued existence and operation of the existing covered activities represent effects of the proposed action that must be considered as effects of the proposed action in the draft HCP.

Use of Methods Prone to Subjectivity

The approach to estimate the effects of the covered activities is occasionally based on the professional judgment of biologists, including those who are central to the preparation of the draft HCP. Decision criteria or thresholds of significance could not be located in the

¹ Raleigh, R. F., T. Hickman, R. C. Solomon, and P. C. Nelson. 1984. Habitat suitability information: Rainbow trout. U. S. Fish and Wildlife Service FWS/OBS-82/10.60.

draft HCP; the criteria the biologists used to assess effects of a covered activity are unknown and, therefore, the estimates of effects conclusions contained in the draft HCP appear to be inconsistent with substantive due process. Defining decision criteria or thresholds of significance is important for a variety of reasons including for reducing the likelihood of subjectivity creep and related effects. Accordingly, NMFS recommends the authors of the draft HCP define and adopt decision criteria or thresholds of significance as part of the effects assessment for each of the covered activities.

Activities Related to a Federal Action

NMFS continues to identify covered activities in the draft HCP that have been, or will be, the basis of a federal action. The ESA section 10(a)(1)(B) permit is typically reserved only for those activities that do not possess a federal connection. Those activities that do have a federal nexus are reviewed and considered in the context of section 7 of the ESA. Accordingly, NMFS recommends the applicants carefully review the draft HCP, identify those activities that have already undergone, or will undergo, a consultation under section 7, and then remove these specific activities from the draft HCP.

Permit Duration

The requested permit duration in the draft HCP is 50 years, but NMFS recommends the duration be reduced to reflect expected uncertainty. Given that the draft HCP possesses considerable uncertainty (e.g., effects of the covered activities on steelhead and their habitat, effectiveness of the conservation program), as does the future of endangered steelhead, a reasonable permit duration would be ten years.

Recent Guidance for Recovery of Endangered Steelhead

When developing the conservation program, NMFS recommends that all feasible modifications be made to the covered activities to ensure the overall program would result in a net positive benefit to endangered steelhead. One way to achieve such a benefit is to include measures in the HCP that will promote essential habitat functions necessary to support long-term survival of steelhead. To attain this objective, the conservation program should comport with recent guidance for recovering the endangered steelhead.

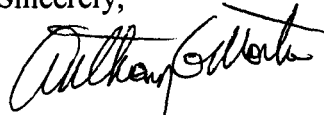
NMFS' Southwest Fisheries Science Center and Southwest Regional Office have completed and published a number of Technical Memoranda and reports regarding recovery of the endangered Southern California DPS of steelhead. These reports analyze and present new information about endangered steelhead, including information relevant to the Ventura River watershed. Additionally, the recent recovery outline² identifies a recovery strategy and a set of priority recovery actions, which have implications for

² National Marine Fisheries Service. 2007. 2007 federal recovery outline for the distinct population segment of southern California coast steelhead. NMFS Southwest Regional Office, Long Beach, California.

steelhead in the Ventura River watershed including putative resident steelhead (*O. mykiss*) that still reside upstream of Casitas Dam. The recovery outline is intended to serve as interim guidance to recovery efforts and planning until a full recovery plan is developed and approved, and contains recommendations that are relevant to the covered activities that are the basis of the draft HCP.

NMFS greatly appreciates the opportunity to review and comment on the selected section of the draft HCP and looks forward to review of the revised document. Please contact Matthew McGoogan at (562) 980-4026 if you have a question concerning this letter or if you would like additional information.

Sincerely,



~~For~~ Rodney R. McInnis
Regional Administrator

cc: Nic Huber, USFWS, Ventura
Laura Riege, Entrix, Inc., Ventura