



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105**

12/2/2009

Bart Prose
U.S. Fish and Wildlife Service
2800 Cottage Way, Room W-1729
Sacramento, CA 95825

Subject: Draft Hatchery and Stocking Program EIS/EIR (CEQ # 20090349)

Dear Mr. Prose:

We appreciate the opportunity to review the subject Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Thank you for agreeing to accept EPA's late comments, as agreed in your email communication to Tom Kelly, of my office, dated November 19, 2009.

EPA is pleased the U.S. Fish and Wildlife Service has joined efforts with the Department of Fish and Game to evaluate the impacts of the hatcheries, fish stocking, and other activities funded under the Sport Fish Restoration Act (SFRA) in California. We are also pleased that hatcheries no longer use copper sulfate to control external parasites and bacteria.

While we acknowledge the need for recreational fishing, we have rated the Draft Environmental Impact Statement (DEIS) as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*"). We are concerned about the project's alternatives evaluation, project purpose and need, project alternatives, wetland impacts, monitoring, additional aquatic toxicity data, and ammonia toxicity.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one (1) hard copy to the address above (mail code: CED-2). If you have any questions, please contact me at (415) 972-3521, or contact Tom Kelly, the lead reviewer for this project. Tom can be reached at (415) 972-3852 or kelly.thomasp@epa.gov.

Sincerely,

/s/

Kathleen M. Goforth, Manager
Environmental Review Office
Communities and Ecosystems Division

Enclosed: EPA Detailed Comments
 EPA Ratings Summary

cc: Jim Starr, California Department of Fish and Game

EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) FOR HATCHERY AND STOCKING PROGRAM, CALIFORNIA, DECEMBER 2, 2009

Alternatives Evaluation

While the DEIS discusses the NEPA requirements for a rigorous analysis and comparison of alternatives, Section 7 does not clarify which alternative is more protective from a biological or environmental standpoint. For alternatives 2 and 3, the DEIS provides tables in Chapter 7 that clearly state fishing days displaced for various water bodies, and long-term loss in trip-related fishing spending. Except for these measures of recreational and economic value, the relative merits of alternatives 2 versus 3 are unclear. We encourage USFWS to create similar tables comparing the alternatives against all evaluation factors. Where specific numeric values cannot be included, the FEIS can include qualitative scale (e.g. +/- or 1-3).

Even for the comparisons completed in Chapter 7, Alternative 1 (the No Project/No Action Alternative) is not included. The DEIS provides a confusing explanation for this: “existing practices analyzed in Chapters 3 through 6 represents the ongoing Program and constitute the No Project/No Action alternative.” Again, we are left to wonder whether Alternative 1 is more or less protective of biological and environmental resources than Alternative 2 (the preferred alternative) or Alternative 3.

Recommendation:

The FEIS should include objective measures to evaluate each alternative, including Alternative 1, for protection of biological and environmental resources. This will facilitate an understanding of the inherent trade-offs among recreational fishing, economic gain to the local community, and the environmental benefits for each alternative.

Project Purpose and Need

The DEIS project purpose is narrowly defined. “The purpose of USFWS’s proposed SFRA funding is to support operations of DFG’s 14 trout hatchery facilities, the Mad River Hatchery for steelhead, associated stocking of fish produced at those hatchery facilities, and operation of the DFG Fishing in the City and CAEP programs (page 1-5, Hatchery and Stocking Program Objectives, Purpose and Need).” The existing hatcheries represent a significant investment and should play a role in providing future recreational fishing opportunities, but the purpose of SFRA funding and the DEIS should not be limited to sustaining the hatcheries.

The DEIS screens alternatives proposed during the scoping process (page 7-5), with a logical set of criteria that include fish production goals in DFG regulations, recreational and (for the non-federal project) commercial fishing opportunities, avoiding impacts on native, sensitive, or legally protected fish and wildlife species. These criteria clearly shape both the purpose and need and would be valuable additions to the earlier chapters.

Recommendation:

USFWS should consider using the alternative screening criteria of Chapter 7 to broaden the purpose beyond sustaining hatchery operations, and clarify need for support of recreational fishing.

Project Alternatives

The DEIS considered but rejected an alternative to develop and operate conservation and restoration trout hatcheries (page 7-6). The reason provided related to a California Fish and Game Commission Policy. This policy is not binding on USFWS, so we suggest further discussion of this possibility for SFCA funding. Additionally, we encourage DFG to clarify how the policy prohibits changing the existing hatcheries to conservation and restoration trout hatcheries, providing that the hatcheries and stocking could continue to meet the needs of recreational anglers.

While the DEIS identifies and discusses alternatives considered and eliminated from detailed discussion (pages 7-5 to 7-6), many of the alternatives and management strategies raised during the scoping process are not similarly discussed. We encourage USFWS to specifically respond to each alternative or management strategy from the scoping process, and explain the reason for its exclusion or simply note its inclusion in an alternative.

Recommendations:

USFWS should either include the alternative to develop and operate conservation and restoration trout hatcheries, or provide additional justification for not evaluating it.

The FEIS should clearly respond to alternatives and management strategies suggested during the scoping process.

Wetland Impacts

The DEIS acknowledges the significant impacts of pumping groundwater to supply hatchery operations (page 4-51 to 4-52) at Blackrock Rearing Ponds and Fish Springs Hatchery. Groundwater pumping has dried nearby springs and rare alkali meadows. EPA has also received a comment letter from the Big Pine Paiute Tribe of the Owens Valley, dated November 16, 2009. The Tribe expressed many concerns in its letter, including the impact of groundwater pumping at both Blackrock Rearing Ponds and Fish Springs Hatchery. We encourage USFWS to work with the Tribe in the development of mitigation measure BIO-13 for the pumping to supply Blackrock Rearing Ponds.

No mitigation was proposed in the DEIS for groundwater pumping at Fish Springs Hatchery. In consultation with the Big Pine Piute Tribe of Owens Valley, USFWS should evaluate measures to mitigate the impact of pumping near Fish Springs Hatchery.

Groundwater pumping to supply the Fish Springs Hatchery has impacted rare alkali meadows and an endangered plant (*Calochortus excavaus*), protected under the California Endangered Species Act (page 4-52). Consequently, these impacts should be mitigated, not disregarded because the impacts also occurred during the baseline period from 2004 to 2008.

Recommendation:

USFWS should consult with the Big Pine Paiute Tribe of the Owens Valley on mitigation measures to restore rare alkali meadow habitat at both the Fish Springs Hatchery and the Blackrock Rearing Ponds.

Monitoring

The DEIS provides an adequate discussion of existing monitoring data in Chapter 3, but data gaps are readily apparent. Because USFWS uses the data to assess the impact of the hatcheries on streams, and both the native and hatchery fish are dependant on the quality of the water and habitat within the stream, the hatcheries should conduct consistent monitoring. We suggest systematically monitor for inexpensive indicators of water quality, such as Total Suspended Solids, Turbidity, pH, dissolved oxygen, ammonia and nutrients. These data are easy to collect and analyze. Additionally, the DEIS did not clarify whether data derived from grab (instantaneous) samples or composite samples which are aggregated over many hours or days.

Recommendation:

The FEIS should commit to systematic monitoring at hatcheries and clarify the type of sampling used to obtain data for Chapter 3.

Additional Aquatic Toxicity Data

The aquatic toxicity data in Table 3-47 do not appear comprehensive. USFWS should review additional data sources, including EPA's ECOTOX database (<http://cfpub.epa.gov/ecotox/>), for aquatic toxicity values. For example, ECOTOX contains an EC50 (half maximal effective concentration) for *Ceriodaphnia dubia* (a water flea) exposure to oxytetracycline HCL significantly lower than 40.4 mg/L. Because DFG may not know all the factors involved in the decision of the Regional Water Quality Control Board (the reference for the oxytetracycline HCL value), a wide range of reference values should be considered. To make evaluation of data simpler, EPA also encourages USFWS to include CAS numbers for treatment chemicals and drugs.

Recommendation:

USFWS should work with DFG to ensure the FEIS includes aquatic toxicity data available from EPA's ECOTOX database and other appropriate sources.

The FEIS should include CAS numbers for treatment chemicals and drugs.

Ammonia Toxicity

As the DEIS notes, hatchery fish produce ammonia, and ammonia is toxic to many aquatic species. The DEIS discusses ammonia as a nutrient, but not its toxic effects.

Recommendation:

The FEIS should compare ammonia concentrations measured in hatchery effluent to aquatic toxicity levels, similar to Tables 3-8 to 3-10.