



**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

In reply refer to:
151422SWR02PR6198:APS

FEB 19 2002

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Al Hess
U. S. Forest Service
6755 Hollister, Suite 150
Goleta, California 93117

Dear Mr. Hess:

The National Marine Fisheries Service (NMFS) reviewed the Environmental Impact Statement (EIS) concerning oil and gas leasing (hereafter referred to as *proposed action*) on lands within the Los Padres National Forest (Forest). The following represents NMFS' views on the adequacy of the EIS.

The revised EIS should clearly identify the specific objectives for the proposed action and the underlying condition the Forest is attempting to address because the existing EIS provides no distinguishable description of the purpose and need that would justify the Forest's response to suggest the proposed action and the alternatives. An EIS must describe the "underlying purpose and need to which the agency is responding in proposing the alternatives, including the proposed action" (40 CFR 1502.13). The purpose and need section should also describe the problems that may result if the proposed action is not implemented. Without an understanding of the true purpose and need, it is unknown whether the alternatives and proposed action are adequate to meet the underlying purpose and need, and whether the resulting significant environmental impacts and effects are warranted.

The EIS does not adequately describe the distribution of steelhead or critical habitat within the area that would be affected by the proposed action. Steelhead are present in numerous coastal streams in San Luis Obispo County, though this is not stated in the EIS. For example, based on NMFS observations, steelhead are present in the following watersheds that are in or adjacent to areas expected to be affected by the proposed action: Old Creek, Toro Creek, Morro Bay (including Morro Creek, Chorro Creek and Los Osos Creek), San Luis Obispo Creek (including Stenner Creek), Arroyo Grande Creek, Pismo Creek (including West and East Corral de Piedra creeks). The EIS should also disclose that areas affected by the proposed action are within designated critical habitat¹ for the

¹ The Endangered Species Act of 1973, as amended, defines critical habitat as: "(i) the specific areas within the geographical area occupied by the species... on which are founded those physical or biological features (I) essential to the conservation of the species and (II) which may require special management and considerations or protections; and (ii) specific areas outside the geographical range occupied by the species... upon a determination by the Secretary that such areas are essential for the conservation of the species."



Southern California Evolutionarily Significant Unit (ESU) of federally endangered steelhead, and the South-Central California Coast ESU of federally threatened steelhead. Information concerning the areas designated as critical habitat for steelhead can be found at 50 CFR 226 or in the *Federal Register* (v. 65, No. 32, 7764 p., February 16, 2000).

The appropriateness and reliability of the sensitivity analysis for predicting potential effects of oil and gas exploration on steelhead are of concern, and therefore the EIS should describe the methods and assumptions that were used to perform the analysis in greater detail. Accordingly, the EIS should include a detailed list of the assumptions used to perform the analysis; a description of whether any validation methods were used to assess the predictive capability of the analysis; a full description of the specific methods used to perform the analysis; descriptions of any decision criteria used in the analysis; and the meaning of terminology such as, "significant," "sensitivity," and "low," "moderate" and "high" sensitivity (see Table 3-30) should be clearly described. The EIS should also elaborate on the categories used to assess sensitivity. For example, to evaluate sensitivity, the potential effects of the proposed action were divided into five categories including a category termed "habitat loss." However, it is unclear whether this specific category includes habitat degradation. If habitat degradation is not included in this specific category, habitat degradation should be added as a sixth category to the sensitivity analysis because a decrease in the quality of habitat for steelhead may result from the proposed action regardless of the stipulations or terms that may be added to lease agreements, but yet the affected habitat may not be necessarily "lost." If habitat degradation is already included in the category of habitat loss, the criteria or threshold used to judge when habitat is sufficiently degraded to be considered "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 among habitat types and values. The same consideration should be given to the category of direct mortality (i.e., does this category include harm, injury or disruption of steelhead behavioral patterns?).

The existing description of the environmental consequences does not provide a clear and complete understanding of (1) the manner in which the proposed action may affect steelhead and critical habitat; (2) the amount, extent and duration of the adverse effects; and (3) whether potential effects at the individual level would translate into effects at the population-level. Generally, such information is required for formal consultation under section 7 of the Endangered Species Act of 1973 (50 CFR 402.14). The environmental consequences of the proposed action on the fishery resources (section 4.4.2.3) presents only the potential impacts; this is not adequate because NEPA regulations (40 CFR 1502.16) require that the environmental consequences include a discussion of direct and indirect *effects*. Therefore it is insufficient to confine the discussion to the impacts themselves, rather it should be extended to consider the consequence of the impact itself on steelhead and critical habitat. For example, one of the direct impacts identified in the EIS is accidental release of materials that can be toxic to fish, resulting in mortality of fish and eggs. Thus, the EIS should describe the potential effect of the loss of fish and eggs on abundance of the affected year class and the local population. The EIS should also consider whether the anticipated type, amount, extent and duration of adverse effects are likely to measurably affect the long-term survival and recovery of the affected

steelhead ESUs. Biological or scientific justification should provide the basis for this assessment and should be presented in the EIS. The specific methods used to perform the analysis should also be clearly described to the extent that others could perform the analysis unaided. This specific analysis should be performed separately for the Southern California (endangered) and South-Central California Coast (threatened) ESU of steelhead.

The proposed action would occur in or adjacent to areas supporting steelhead, particularly endangered steelhead, and this is of concern to NMFS because there are relatively few remaining locations where instream habitat is suitable for steelhead ontogeny and survival. Moreover, despite the stipulations or terms that may be added to future leases, adverse effects to steelhead and their habitat are likely. For example, it is not sufficient to confine activities away from streams where steelhead are known or believed to be present because offsite effects can still occur (i.e., wet season runoff, water quality alterations, spills of contaminants). Consequently, all modifications should be made to the proposed action for the purpose of avoiding habitat alterations (both onsite and offsite) that may reduce the quality and quantity of habitat for steelhead and, in turn, inhibit recovery of the local population. Means to modify the proposed action could include the addition of the following measures to oil and gas exploration in watersheds where steelhead or critical habitat are present:

- Avoid contributing wet or dry season runoff to drainages (i.e., retain runoff onsite);
- Require applicants to implement spill-avoidance plans;
- Require applicants to implement contingency plans in the event of an accidental release of materials expected to be harmful to aquatic organisms;
- Preclude surface occupancy in areas designated as critical habitat for steelhead or in areas that may contribute runoff of sediment or pollution to areas containing critical habitat for steelhead.
- Preclude horizontal drilling under streams where steelhead are known or believed to be present or that contain critical habitat.
- Avoid creating roads; and
- Avoid installing stream crossings.

If impacts cannot be avoided, the impacts should be fully compensated. However, the EIS does not appear to specify any mitigation to offset potential effects of the proposed action on steelhead or critical habitat. An EIS must include a description of the "means to mitigate adverse environmental impacts" (40 CFR 1502.16(h)). Moreover, the EIS does not specify a program for determining if and when adverse effects occur, or the amount and extent of the effects. This is not surprising because there are many uncertainties associated with the proposed action and the amount and extent of environmental effects. Based on NMFS' understanding of the EIS, the uncertainties

appear to involve (1) the specific location of oil and gas exploration; (2) the type and amount of habitat that would be affected; (3) the type, amount, extent and duration of adverse effects to steelhead; (4) the effectiveness of avoidance and minimization measures; (5) the effectiveness of monitoring; and (6) the performance of mitigation. To address these uncertainties, the EIS should specify a program for determining (1) whether implementation of the proposed action has adversely impacted steelhead and critical habitat; (2) the magnitude and extent of the impacts; and (3) whether the impacts have been fully mitigated. To this end, the EIS should accomplish the following:

- Define a process for measuring the quantity and quality of habitat that is affected by the proposed action;
- Outline the compensatory mitigation program that will be implemented to offset impacts of the proposed action on instream and riparian habitat;
- Define a procedure for measuring and detecting spatial and temporal changes in habitat quality and quantity; and
- Define a protocol that will track performance of the mitigation program, respond to new information or changing conditions, and detect and reconcile deficiencies or problems in a timely manner.

The existing description of cumulative effects in regard to steelhead and critical habitat is inadequate because the description does not provide a sufficiently clear understanding of the amount, extent, location and type of cumulative effects that are expected. Ideally, the EIS should:

- Comprehensively describe all past, present and reasonably foreseeable future actions, and discuss the extent that these activities have or may in the future degrade the environment on which steelhead depend for survival and reproduction;
- The location, manner and degree to which the proposed action overlaps with past, present and future actions;
- Compare the existing environment with the expected impacts and effects of the proposed action when combined with the effects of past, present and future actions;
- Identify the local populations of steelhead (i.e., watershed or stream specific) that would be affected by cumulative effects;
- Identify the duration of the cumulative effects;
- Describe the types of cumulative effects (e.g., water quality changes, habitat alterations, reduced fish abundance) that would be expected to occur; and

- Consider cumulative effects to steelhead populations located onsite (i.e., within the Forest) and offsite (downstream of Forest boundaries).

The examination of Reasonable Foreseeable Developments (RFD) provides the basis for identifying leasing alternatives and predicting potential environmental effects. Because the RFD serves an integral role in the overall EIS, more information concerning its execution should be included in the EIS. Key information for including in the EIS are the accuracy and reliability of the RFD for making predictions (e.g., in past applications), and additional details concerning the manner in which the examination was performed. There is a statement in the EIS that indicates an alternative would meet species recovery goals for steelhead, based on the examination of RFD, yet NMFS has not yet developed a recovery plan and hence goals for steelhead. This leads one to question which specific goals were used by the Forest to arrive at such a conclusion.

While there is a stated desire in the EIS to comply with direction contained in the Land and Resource Management Plan (Plan), it is unclear whether this desire includes compliance with direction for protecting anadromous fish and their habitat. In 1995, the Plan was amended to include all standards, guidelines and direction specified by both the Interim Strategies for Managing Anadromous Fish-producing Watersheds in Eastern Oregon and Washington, Idaho, and Portions of California (hereafter *PACFISH*) and the Riparian Conservation Strategy (RCS). *PACFISH* and RCS amended the Plan by establishing direction to protect and conserve anadromous fish and their habitat. The direction includes riparian goals, riparian management objectives, standards and guidelines for application to proposed actions, and identification of key watersheds and development and trial application of watershed analysis. Thus, the EIS should clarify whether oil and gas exploration would be in compliance with management direction specified by *PACFISH* and the RCS. Moreover, it seems appropriate to identify both *PACFISH* and RCS in section 1.4 (Summary of Events and Decisions...) of the EIS.

Overall, the content of the EIS does not allow NMFS to develop a clear understanding of the manner in which the proposed action may affect steelhead and critical habitat, the amount, extent and duration of adverse effects, and the implications of these effects for survival and reproduction of the affected steelhead ESUs. NMFS appreciates the opportunity to review and comment on the EIS. Please call Anthony Spina at (562) 980-4045 if you have a question concerning this letter or if you require additional information.

Sincerely,



Rodney R. McInnis
Acting Regional Administrator