HABITAT COMMITTEE REPORT ON CURRENT HABITAT ISSUES

Summary of Council tasks associated with this report:

- Provide comments on proposed Federal Energy Regulatory Commission (FERC) letter
- Provide comments on Klamath report outline
- Provide input on proposed future meeting between Habitat Committee (HC) and Scientific and Statistical Committee (SSC) Ecosystem-based Management Subcommittee

Klamath Issues

Proposed letter to FERC

The HC made some minor edits to the proposed letter to the FERC (Attachment 1). The purpose of the changes was to reflect issues settled by the Administrative Law Judge and the fact that FERC's draft environmental impact statement fails to address the removal of all four dams as an option.

Klamath Overfishing Concern outline

The HC has developed a draft outline for the Klamath overfishing concern report (Attachment 2). Some minor formatting changes and simplifications were made during the HC meeting yesterday. As required by the Salmon Fishery Management Plan, the report will be prepared for the March Council meeting.

Joint Meeting of the Habitat Committee and Ecosystem-based Management Subcommittee of the Scientific and Statistical Committee (SSC)

The HC met with the SSC's Ecosystem-based Management Subcommittee. Due to time constraints and the absence of the subcommittee chairperson, a joint statement is not possible at this time. However, the group agreed that there is mutual interest in helping the Council move forward on this issue.

The group seeks permission to meet again in joint session to:

- Explore ways to summarize the status of the ecosystem in a manner oriented to assisting Council decision making.
- Make recommendations to the Council on the utility of pursuing an umbrella Fishery Ecosystem Plan (FEP) that supports existing fishery management plans (FMPs) and meets current goals (e.g. rationale for managing essential fish habitat (EFH) in the water column) and future needs.
- Work towards a joint statement regarding Council direction with regard to ecosystem-based fishery management (EBFM).

The group also agreed that the definition of EBFM found in the Pacific States Marine Fisheries Commission panel report is a useful one:

> "Ecosystem-based Fishery Management recognizes the physical, biological, economic, and social interactions among the affected components of the ecosystem and attempts to manage fisheries to achieve a stipulated spectrum of societal goals, some of which may be in competition."

The group also reviewed the table that the HC drafted entitled "Current Council Actions Contributing to an Ecosystem Approach (and Possible Next Steps) November 14, 2006 (draft)" (Attachment 3). The table is an initial attempt to address the Council's request to summarize existing activities that contribute to EBFM and suggest ways of moving forward. The table should be considered a draft working document and does not require Council action at this time.

In response to the Council's request, the group also reviewed the summary of other Councils' actions on EBFM produced by Hal Weeks (Attachment 4).

Other Habitat Issues:

Hypoxia on the Central Oregon Coast

The low-oxygen (hypoxia) observed near the central Oregon Coast is dissipating as is expected with the shift to fall weather and oceanic patterns. Oregon Department of Fish and Wildlife collaborated with Oregon State University (OSU) oceanographers and zoologists in early September in preparing a research proposal to NOAA to model the development of seasonal hypoxic conditions and to better understand the population level effects on harvested fishery resources. A decision on this funding proposal is expected in April 2007. A coastal hypoxia research and planning meeting is scheduled for late November at OSU.

Bradwood Landing Liquified Natural Gas (LNG) Project

The Northern Star LLC company has filed a Biological Assessment (BA) with FERC for their Bradwood Landing LNG terminal project in the lower Columbia River. At this time, FERC has not forwarded the BA to the U.S. Fish and Wildlife Service and National Marine Fisheries Service, so it is not yet an appropriate time for the Council to provide comments on the EFH consultation which will be done with the BA. The EFH consultation will include a consultation on salmon habitat as well as a consultation on groundfish habitat for starry flounder.

In general the BA does indicate that they expect some adverse impacts to listed salmon and steelhead populations. These impacts are primarily expected to occur during construction of the terminal and pipeline. The proponents expect much lower impacts associated with the operation of the facility. The proponents are proposing mitigation activities through various habitat restoration activities, land acquisition, as well as a "Salmon Enhancement Initiative" which will provide funding to various salmon, sturgeon, or even lamprey restoration activities in the Columbia Basin.

The project proponents have expressed interest in giving a presentation on the project to the HC at the April Council meeting. A meeting such as this would probably be helpful to the Council should they want to comment on the EFH consultation for this project.

Letter on Recreational Fishing and EFH

At the September Council Meeting, the HC suggested writing a letter clarifying the effects of EFH closures on recreational fisheries. After further discussion, the HC realizes that this is a complex legal question that will require further input and discussion.

U.S. Army Corps of Engineers Nationwide Permits

In a Federal Register notice published in September of this year, the U.S. Army Corps of Engineers (Corps) solicited comments on the reissuance of existing nationwide permits (NWPs) with some modifications, and proposed to issue six new NWPs. A nationwide permit is intended to streamline the regulatory process by authorizing actions that have no more than minimal adverse impacts, either individually or cumulatively. The Corps intends to conduct EFH consultations between regional Corps districts and National Marine Fisheries Service regional offices. The HC believes that some of the proposed activities would adversely affect EFH. If the EFH consultation timeline matches the Council meeting schedule, the HC may recommend the Council provide comments and recommendations.

PFMC
11/15/06

Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384
Phone 503-820-2280 | Toll free 866-806-7204 | Fax 503-820-2299 | www.pcouncil.org

Habitat Report Attachment 1

November 15, 2006

The Honorable Magalie Salas
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Re: Pacific Fishery Management Council's essential fish habitat recommendations and comments on the Klamath Hydropower Project (FERC No. P-2082) Draft Environmental Impact Statement.

Dear Secretary Salas:

Enclosed for filing please find the original and eight (8) copies of a letter providing the Pacific Fishery Management Council's comments and essential fish habitat recommendations related to the Klamath Hydropower Project (FERC No. P-2082).

Sincerely,

DRAFT

Donald. O. McIsaac
Executive Director
(503)820-2280

Enclosures

DRAFT

Note: Additions and ~~deletions~~ made at Nov. 13 HC meeting are noted.

November 15, 2006

The Honorable Magalie Salas
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

RE: Docket Number P-2082 (Pacific Fishery Management Council's Comments on the Draft Environmental Impact Statement, and Essential Fish Habitat [EFH] Recommendations for the Klamath Hydropower Project).

Dear Secretary Salas:

The Pacific Fishery Management Council (Council) submits these comments regarding the Draft Environmental Impact Statement (DEIS) for Hydropower License for the Klamath Hydroelectric Project (P-2082).

First, we reiterate our comments sent in a letter dated April 24, 2006 (enclosed). In that letter, the Council submitted its recommendation that the Federal Energy Regulatory Commission (FERC) order the removal of the lowermost four dams on the Klamath River (Iron Gate, Copco 1 and 2, and JC Boyle Dams). The current draft EIS does not include this option, and, therefore, is inadequate in addressing the full range of reasonable alternatives as required by 40 CFR 1502.14.

FERC replied to the Council's letter on May 12, 2006, noting that "We will consider your April 24, 2006, EFH comments under section 10(a) of the Federal Power Act as we prepare our Draft Environmental Impact Statement (DEIS)… We will look forward to your comments and any EFH recommendations after you've reviewed our DEIS and EFH Assessment."

We note with disappointment that the DEIS contains no alternative for the removal of all four lower Klamath dams. Instead, FERC's proposed final action is unclear. Although FERC is mandated to follow prescriptions submitted to it by the Secretaries of Commerce and Interior under Section 18 of the Federal Power Act, it has failed to adopt these prescriptions for fishways in its "Staff Alternative." Similarly, FERC has failed to include many of the mandatory 4(e) conditions in its "Staff Alternative." These mandatory conditions were based upon facts that were affirmed by the Administrative Law Judge in September of 2006. FERC needs to clearly lay out a preferred alternative that includes these mandatory terms and conditions.

The Council requests that FERC augment its analysis of the removal of two dams (Iron Gate and Copco 1) with a full analysis of the removal of the lowermost four dams. In addition, we strongly urge FERC to modify its "Staff Alternative" to reflect the mandatory conditions placed upon the new license by the Departments of Interior and Commerce and upheld by the courts.

The Council believes that FERC's ~~essential fish habitat (EFH)~~ analysis is ~~completely~~ inadequate. On page 5-88, FERC addresses essential fish habitat (EFH) issues as they relate to the Klamath River Hydroelectric Project. This ~~"~~analysis~~"~~ reiterates the measures that PacifiCorp and FERC propose in the DEIS, and then, comparing with today's extremely impaired baseline, states that the proposed action will "not adversely affect EFH." We believe that this analysis misses the point – that the current facilities and operations have caused the degradation of EFH below the Klamath River Hydroelectric Project, and that measures should be taken to address those damages.

The Council further notes that of the five additional measures proposed by FERC (in addition to PacifiCorp's proposed measures), four are requirements for PacifiCorp to make maps or plans with no obligation to implement any actual measures to improve EFH downstream. This is unacceptable. Measures to protect or enhance EFH must encompass real actions, not simply more plans and studies.

As the near-shutdown of ocean fisheries demonstrated this year, Klamath stock abundance affects economies up and down the coast. Thus, the economic consequences that result from the degradation of EFH located below the Klamath Hydroelectric Project can be quite large. Thus, it is important to address effects to EFH completely, and to fully explore ways to mitigate for such impacts.

In summary, the Council requests that FERC add a *four* dam removal scenario to its analysis, and further, based upon the recommendations of numerous individuals, agencies, and other organizations, select the removal option as the preferred alternative. Volitional, or other fish passage scenarios, do nothing to address serious water quality problems that FERC's own analyses show impact anadromous fish. We anticipate a new draft EIS that includes the requested analyses will soon be available for further review. Thank you for the opportunity to comment.

Sincerely,

DRAFT

Pacific Fishery Management Council

Enc: April 24, 2006 letter from PFMC to FERC

Factors Affecting the Low Abundance of Klamath Naturally-Spawning Fall Chinook salmon in 2004 and 2005

1. Introduction
    - 1.1. Status of stock
        - 1.1.1. Historical numbers
        - 1.1.2. 2004-2005 status
            - 1.1.2.1. Years directly affecting 2004/2005 stocks (2000-2003)
    - 1.2. Salmon FMP charge
    - 1.3. Process of this document
2. Fishing
    - 2.1. Harvest management objectives
        - 2.1.1. Stock recruit analysis
        - 2.1.2. 66% spawner reduction rate
        - 2.1.3. 35,000 minimum natural spawning escapement floor
        - 2.1.4. Amendment 15
    - 2.2. Possible effects of Fishing
        - 2.2.1. Overfishing in parent years
        - 2.2.2. Overescapement in parent years
        - 2.2.3. Overfishing in return years
    - 2.3. Harvest rate
        - 2.3.1. In parent years
        - 2.3.2. In years leading to 2004 and 2005
        - 2.3.3. In 2004 and 2005
    - 2.4. Technical infrastructure
        - 2.4.1. F_1 generation – hatchery fish counted as natural spawners
            - 2.4.1.1. Spatial trends of hatchery/natural composition of spawners
        - 2.4.2. Other issues

3. Habitat
    - 3.1. Historical perspective
        - 3.1.1. Early impacts
        - 3.1.2. Decline of fish and fisheries
    - 3.2. Dams and their effects
        - 3.2.1. General dam operations
        - 3.2.2. Mainstem Dams
        - 3.2.3. Dwinell Dam
        - 3.2.4. Trinity River Diversion Project
        - 3.2.5. Lack of fish passage
            - 3.2.5.1. Unreachable habitat
        - 3.2.6. Impacts of impoundment/alteration of the natural hydrologic regime
            - 3.2.6.1. Changes to water temperature
            - 3.2.6.2. Changes to dissolved oxygen
            - 3.2.6.3. Changes to nutrient loads

3.2.6.4. Gravel depletion
3.2.6.5. Loss of thermal refugia
3.2.6.5.1. Loss of ecosystem function

3.3. Water Management
3.3.1. Low flows and drought conditions
3.3.1.1. Recent droughts
3.3.1.2. Crisis water management
3.3.1.3. Relationship between flows and temperatures
3.3.1.4. Low flows as barriers to upstream migration
3.3.1.5. Water temperatures and dissolved oxygen
3.3.1.6. Restricted fish movement
3.3.1.7. Decreased water quality
3.3.2. Federal Klamath Irrigation Project
3.3.2.1. BO for Klamath operations; long-term nature of impacts
3.3.3. Private Off-Project Upper Basin water diversions
3.3.4. Shasta River water use
3.3.5. Scott River water use
3.3.6. Trinity River Water diversion
3.3.7. Miscellaneous water diversions

3.4. Fish Disease
3.4.1. Adult disease issues
3.4.1.1. 2002 adult fish kill
3.4.1.2. Other years
3.4.1.2.1. Pathogens
3.4.1.2.2. Causative environmental factors
3.4.2. Juvenile disease issues
3.4.2.1. Overview of problem
3.4.2.2. Pathogens
3.4.2.3. Causative environmental factors

3.5. Other inriver habitat impacts
3.5.1. Water withdrawals (see dams, etc.)
3.5.2. Timber harvest practices
3.5.3. Road building
3.5.4. Mining
3.5.5. Grazing
3.5.6. Channel alteration

3.6. Ocean conditions

4. Hatcheries
4.1. Mitigation purpose
4.2. Juvenile interactions
4.2.1. Magnitude, size and timing of hatchery releases with regard to competition with naturally produced juveniles
4.3. Adult interactions
4.3.1. Contributions to natural spawners in 2004 and 2005 (less than anticipated, as a “cause” of shortfall?)

Current Council Actions Contributing to an Ecosystem Approach
(and Possible Next Steps)
November 14, 2006 (DRAFT)

Topics	Current Council Actions	Potential Steps and/or Tools to Improve Fisheries Management/Move Towards an Ecosystem-Based Approach
Formalize Council intentions toward EBFM	• Joint HC/SSC EBMSC meeting • Questions regarding fishing regulations in NMS (CINMS)	• Establish ongoing committee to continue explore implementing EBFM
Establish EFH	• Groundfish EFH mapping & EIS • comprehensive assembly of groundfish life history info • Study fishing gear types and their environmental effects • Habitat suitability index – species assemblages	
Spatial management (Place-based management) / Habitat protection measures	• Bottom contact gear closures in areas of biogenic habitat • Gear restrictions; beam trawl, dredge gear • SSC Marine Reserves White paper	
Protect prey	• Krill ban • Low CPS harvest rates in recognition of roles as prey for other managed species	• Expand list of protected forage species
Weak stock protection measures	• Cowcod and RCA closures (effect benefits ecosystem) • Bycatch Reduction measures	
Coordination with place-based processes / programs	• Council consultations on nonfishing impacts in EFH (including comments to FERC and Klamath report) • Coordination between NMS and Council	• Foster coordination with state (and other federal) processes • Expand state MPAs into federal waters where appropriate

Topics	Current Council Actions	Potential Steps and/or Tools to Improve Fisheries Management/Move Towards an Ecosystem-Based Approach
Acknowledge climate, oceanic, terrestrial, life history factors specifically in management (tools; models)	• CPS FMP Temp elements • OPI coho forecast incorporates upwelling • Sablefish model incorporates ecosystem components (predation; forage; temperature)	• Ask NOAA's help in synthesizing available information relevant to California Current ecosystem and useful for management • Consider incorporating environmental or climatic/oceanographic factors into salmon forecasts • Expand use of freshwater, estuarine, juvenile survivals, pelagic age structures into models.
Ecosystem monitoring	• Research and data needs document describes data needed	• Track metrics: bird, mammal, and baitfish populations; socioeconomic trends; other ecosystem metrics/indicators in an Ecosystem SAFE document • More effective use / distribution to Research and Data Needs document to NMS and Academic communities • Partner with NMS to synthesize current monitoring information (incorporate ecosystem considerations chapter in rebuilding plans and Our Living Oceans document)
Stock assessments	•	Questions used in NPFMC to enhance SAFE document: • What are the ecosystem impacts on the stock you're assessing? (Oceanographic conditions, status of forage and predators). • What are the ecosystem effects of the fishery for the stock that you're assessing? (Impacts of mobile-tending bottom gear on habitat features, removal of prey and predator (impacts to food web), etc.)