Northwest Power and Conservation Council

February 23, 2012

MEMORANDUM

TO: Fish and Wildlife Committee Members

FROM: Patty O'Toole – Manager, Fish and Wildlife Program Implementation
Tony Grover - Director, Fish and Wildlife Division

SUBJECT: Review tasks to be completed before Program Amendment process starts

At the March Fish and Wildlife Committee meeting the staff will review 1) a draft list of tasks to be completed before the next Fish and Wildlife Program amendment process and 2) considerations for a science-policy exchange workshop on the topic of predation.

1. Preparing for the amendment process

The next Fish and Wildlife Program amendment process is slated to begin in the spring of 2013, roughly a year from now. A draft list of tasks to complete ahead of the amendment process was compiled from two sources: the staff memo for the January committee meeting (http://www.nwcouncil.org/news/2012/01/f5.pdf) and the staff draft work plan for the remainder of 2012. These tasks are organized below by topic area (table 1) and by month (table 2).

Table 1. Program amendment tasks (Committee and staff) for 2012 (draft)

Habitat
• Discuss protected areas • Habitat restoration ongoing discussions
Hatcheries and Supplementation
• Hatcheries and supplementation ongoing discussions
Monitoring and evaluation
• Discuss staff draft of MERR revised language, release for public comment (tentative) • MERR work session • Staff draft biological objectives, release for public comment (tentative) • Biological objectives work session • Staff update on status of MERR implementation strategies

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Predation
• Predation science-policy exchange workshop
Research
• Staff draft research plan, release for public comment (tentative) • Draft research plan work session
Program amendment tasks
• Review existing program & policies (in two or so sessions) • Staff develop online structure and database for recommendations and process • Staff recommendation on when to call for recommendations to amend the F&W Program

Table 2. Program amendment tasks (Committee and staff) by month for 2012 (draft)

March
• Discuss staff draft of MERR revised language, release for public comment (tentative)
April
• MERR work session
May
• Discuss protected areas • Predation science-policy exchange workshop (tentative)
July
• Staff draft biological objectives, release for public comment (tentative)
August
• Biological objectives work session • Staff develop online structure and database for recommendations and process
September
• Staff draft research plan, release for public comment (tentative)
October
• Draft research plan work session • Review existing program & policies
November
• Review existing program & policies • Staff update on status of MERR implementation strategies
December
• Staff recommendation on when to call for recommendations to amend the F&W Program
Ongoing
• Habitat restoration • Hatcheries and supplementation

2. Predation science-policy exchange workshop

One of the tasks noted in the tables is a science-policy workshop on predation. At the March committee meeting staff intends to review the scope and the timeframe for the workshop *tentatively* scheduled for May.

The concept for the predation workshop was discussed in the January staff memo to the Fish and Wildlife Committee:

> The ISAB has advised the Council to look at the issue of predation as a systemwide, integrated issue instead of a species-by-species approach. The ISAB notes that the Council's Fish and Wildlife Program and the NOAA Fisheries' recovery strategies only tangentially consider impacts of changes to food webs and implicitly assume stable conditions. Moreover, substantial changes in physical conditions and in biotic communities, combined with the ongoing proliferation of non-native species and hatchery-reared fish, have resulted in hybrid assemblages of organisms and environmental conditions. Together, these changes have reverberated throughout the Columbia Basin affecting the aggregate carrying capacity of the river to produce sustainable populations of native fish.
>
> At a minimum, the science and policy aspects of the following topics should be discussed prior to initiating the next Fish and Wildlife Program amendment process in early calendar year 2013.
> a. Current conditions across all predators (sea lions, birds, fish)
> b. A broad range of native fish versus non-native fish, including lake trout
> c. Predation functions within a broader ecological context
>
> - Predation is a science policy topic that may be best addressed through a one or two day workshop. A possible approach is to invite subject matter experts to talk to Council members and the ISRP about items a. and b., above. Item c. may best be discussed between the subject matter experts, ISAB members and Council members, with the help of a facilitator. The subject could be how ecosystem principles play out with the various predators and prey in the Columbia, and what policy options for managing those predator-prey interactions may be available. This workshop could be scheduled for mid to late summer of 2012.

The staff suggests the committee consider for discussion a draft statement of purpose for the workshop:

The purpose of the science-policy exchange workshop is to facilitate an exchange of information and ideas among members of the Council, the scientific community and fish and wildlife managers regarding predation in the Columbia River Basin. Specifically, the workshop will consider how ecosystem principles play out with the various predators and prey in the Columbia, and what policy options for managing those predator-prey interactions may be available. Staff suggests that one outcome of the workshop could be a staff discussion paper focusing on these policy options and how they could be applied under the Council's Columbia River Fish and

Wildlife Program. These suggestions can be discussed further at the committee meeting in March.

Attached to this memo is a staff memo from August of 2007, describing follow-up actions from a predator control panel discussion with the Council in July of that year. This attachment is provided as additional background information on the topic of predation in the Columbia River Basin.

Northwest Power and Conservation Council

August 1, 2007

MEMORANDUM

TO: Council Members

FROM: Jim Ruff, Manager, Mainstem Passage and River Operations
Peter Paquet, Manager, Wildlife and Resident Fish
Mark Walker, Director, Public Affairs Division

SUBJECT: Follow-up actions from the Predator Control Panel discussion

BACKGROUND

At its meeting in Portland last month, the Council heard from a panel of experts about the various ongoing predator control programs funded by both the Bonneville Power Administration (Bonneville) and the Corps of Engineers (Corps). The Council heard from Oregon Department of Fish and Wildlife (ODFW) about the Northern Pikeminnow Management Program and piscivorous predation in general. The Corps discussed its avian predation efforts in the Columbia River estuary. NOAA Fisheries presented information about Section 120 Pinniped Task Force process and schedule, and representatives from the Umatilla Tribe and Washington Department of Fish and Wildlife (WDFW) provided the Council with information on marine mammal predation rates and ongoing hazing efforts. There was also a brief discussion about next steps and what the Council could do to assist with these programs and efforts.

The purpose of this memo is to outline the various predator control follow-up actions that were mentioned or discussed briefly at the July Council meeting with the panelists and identify which of those actions the Council could undertake.

DISCUSSION

Piscivorous Predator Control Actions

The Northern Pikeminnow Management Program (NPMP) is the primary program being implemented to reduce piscivorous predation on juvenile salmon and steelhead. The program has been implemented over the past 16 years. Its objective is to increase the survival of outmigrating juvenile salmon and steelhead by reducing the number of larger, predatory pikeminnow in the mainstem Columbia and Snake rivers. Studies have shown a direct relationship between the numbers of pikeminnow removed and reduced predation losses, as well

as a direct relationship among rewards, angler participation and resulting catch of pikeminnow. These studies have also shown that, since the late 1990s, the NPMP has been meeting its program objective of achieving between a 10 and 20 percent annual exploitation rate on northern pikeminnow. This has resulted in a potential 40 percent reduction in pikeminnow predation on salmonids.

The NPMP is funded by Bonneville under the Council's Fish and Wildlife Program. A sport reward fishery is the primary method used by the NPMP for catching these fish. Bonneville administers this program through a contract with the Pacific States Marine Fisheries Commission with subcontracts to ODFW and WDFW to implement various components of the program. The Council recommended continuing the NPMP during the recent FY07-09 project solicitation process. Bonneville has also committed to funding this program with the general increase in reward structure for the sport-reward fishery that has been implemented over the past several years.[1] Fishery managers are also continuing to study and monitor other potential piscivorous predators, especially smallmouth bass. No other specific follow-up actions were identified in this area.

Avian Predator Control Actions

Caspian Terns – Increases in the number of Caspian terns nesting in the Columbia River estuary led to significant concerns over their potential impact on the recovery of threatened and endangered Columbia River salmonids. In 1999, NOAA Fisheries issued a biological opinion requiring the Corps to eliminate Caspian tern nesting from Rice Island (located in the upper estuary) in an attempt to decrease the number of juvenile salmonids eaten by terns. In the same year, the Corps initiated a pilot project to relocate the Rice Island tern colony to East Sand Island, near the mouth of the estuary, where non-salmon marine fish were abundantly available to foraging terns. In 2000, the Corps proposed to complete the relocation effort to prevent all Caspian tern nesting on Rice Island while attracting terns to nest on East Sand Island. The USFWS issued a Migratory Bird Treaty Act (MBTA) permit authorizing the potential take of tern eggs as part of this proposal to aid in the prevention of tern nesting on Rice Island.

As a result of the proposed actions in 2000, Seattle Audubon, National Audubon, American Bird Conservancy, and Defenders of Wildlife filed a lawsuit against the Corps and Service. The four groups alleged in the suit that compliance with NEPA was not sufficient for the proposed action of relocating terns from Rice Island to East Sand Island. Furthermore, the groups objected to the Service's issuance of the MBTA permit authorizing the potential take of tern eggs on Rice Island. The plaintiffs prevailed in their lawsuit before the United States District Court, Western District, and an injunction was granted on August 7, 2001.

In 2002, all parties reached a Settlement Agreement. Terms of the agreement required the Service (lead agency), Corps, and NOAA Fisheries prepare an EIS addressing long-term management of terns in the Columbia River estuary. Interim management measures were

[1] The 2007 Sport reward payment schedule is as follows: For the first 100 fish caught the reward is $4 per fish; for between 101-400 fish caught, the reward is $5 per fish; and for all fish over 400 caught, the award goes up to $8 per fish. In addition, specially-tagged pikeminnow rewards are $500 per tagged fish.

provided in the 2002 Settlement Agreement to allow habitat management and research activities in the Columbia River estuary to continue.

In November, 2006 the USFWS issued their record of decision on the EIS in which they identified the current course of action which calls for reducing the East Sand Island tern and redistributing the population at six locations in Oregon and California. At this time, the COE is seeking authorization and funding to implement these activities. It is possible that project implementation could begin this year. The implementation process will require the identification and securing of several offsite mitigation areas not identified in the EIS process. The Council could assist the COE in the process of securing these sites.

The problem of avian predation on juvenile salmonids is not limited to the Lower River and estuary. There are a variety of avian species that are predatory on juvenile salmon and they occur throughout their range. The vast majority of these birds are native to the Columbia and Snake rivers and they are natural predators on salmonids. However, because of human activities which have both altered existing reproductive habitat and created increased habitat for many of these species, they have greatly expanded both their geographic and population size. Although Caspian terns and Double-crested cormorants have received the most attention to date, recent studies in the Mid-Columbia indicate that both gulls and mergansers may be of significant concern whereas, terns and cormorants may have no significant impact on juvenile fish. Additionally, we are faced with increasing populations of Double-crested cormorants in the estuary, which are diminishing or offsetting the effectiveness of the tern relocation program.

Marine Mammal Predator Control Actions

California sea lion numbers have greatly increased, from tens of thousands of sea lions to 244,000 animals in 2003, since passage of the Marine Mammal Protection Act in 1972 (MMPA; see http://www.nmfs.noaa.gov/pr/laws/MMPA/) became a federal law administered by NOAA Fisheries. Studies conducted by the Corps below Bonneville Dam from 2002-2007 estimate the amount of fish eaten by sea lions has been increasing every year, from 0.3 percent of the annual spring Chinook salmon run in 2002 to about 4 percent in 2007. Studies also indicate the sea lions are arriving earlier and staying longer at Bonneville Dam, with approximately 80 to 100 individuals being present in recent years. Moreover, the sea lions' efficiency in catching salmon and lamprey has been increasing and an increased level of boldness has been observed with several pinnipeds entering adult fishways at Bonneville Dam and/or hauling out of the water on or near the dam.

In 2004, a marked sea lion made the first brief excursion into the entrances of the Washington shore fish ladder at Bonneville Dam. In 2005, it traveled extensively up into the adult fishways. Up to six different sea lions were observed in the lower sections of the fish ladders in a single day in 2005. Due to concerns that sea lions in the fishways could block or significantly delay passage of upstream migrating threatened or endangered salmonids and the reduced spring Chinook run, efforts began to keep pinnipeds out of the fish ladders at Bonneville Dam.

To accomplish this, in 2006 the Corps installed sea lion exclusion devices (SLEDs) and used acoustic deterrents from the dam structure next to the fish ladder entrances to give adult fish a potential refuge from sea lion presence near the entrances where fish tend to congregate and

hold. The Corps is expected to continue the following actions during the spring salmon migration at and below Bonneville Dam:

- Provide and improve SLEDs to limit the sea lions' ability to enter adult fishways.
- Use acoustic deterrent devices to try to move sea lions away from the immediate adult ladder entrances, away from project facilities and out of the navigation lock.
- Support and participate in hazing efforts to keep sea lions away from the tailrace area below Bonneville Dam.
- Continue working with the states and tribes and provide support for harassment efforts downstream of Bonneville Dam.

Based on information contained in a preliminary Status Report on Pinniped Predation and Hazing at Bonneville Dam in 2007, the interagency hazing effort began on February 28 this year and appeared to be effective at reducing the number of Stellar sea lions and their take of sturgeon. Hazing also altered the behavior of the California sea lions by keeping them further away from the dam and from surfacing as much. However, the increased harassment effort this year did not appear to have an overall substantial impact on reducing predation in the tailrace below Bonneville Dam nor the number of sea lions.

Section 120 Process

At the June meeting, the Council heard that the states of Idaho, Oregon and Washington are pursuing federal authorization under Section 120 of the MMPA to lethally remove individual problem animals, if necessary to protect ESA-listed salmon. The states' Section 120 application is subject to a federal review process that could take up to several years. Under this process, a Pinniped Task Force (PTF) will be created. To date NOAA Fisheries has not identified individual PTF members, but has indicated that the task force will likely consist of representatives from the following:

- U.S. Department of Commerce
- NOAA Fisheries marine mammal scientist
- Three independent marine mammal scientists
- States of Oregon and Washington
- A member from each of the four lower Columbia River tribes
- Columbia River Inter-Tribal Fish Commission scientist
- 3-4 conservation organizations
- Commercial fishing organization
- Recreational fishing organization
- Corps of Engineers

Schedule for the Section 120 Process

NOAA Fisheries has indicated the individual PTF members will be selected by the first week in August, and is scheduled to hold its initial meeting on September 4, 2007. In addition, the agency is preparing a document called a "Section 120 Overview and Task Force Instructions," which will provide the PTF with background material and schedule, as well as their instructions and charges. That document will also be available in August when the PTF members are named.

By early November, the PTF will submit its recommendation to NOAA Fisheries as to whether to approve or deny the states' application under the Section 120 process, as well as alternative management actions to be incorporated into the NEPA process that will be required before any

sea lion control plan is implemented. In the meantime, NOAA Fisheries will begin preparation of an Environmental Assessment (EA) while the PTF is meeting during the fall, with a draft EA and ESA authorization scheduled to be completed by early January 2008.

After a 30-day public comment period, NOAA Fisheries will complete all necessary NEPA and ESA documentation by the end of February. If authority is granted under Section 120, then state fish managers would be allowed to remove a limited number of California sea lions that have been identified as preying on salmon and steelhead in the area below Bonneville Dam. The actual number of sea lions that might be removed will depend on various factors, but it would be less than one percent of the number that could be lethally removed without affecting the overall health of the population. Renewed efforts to haze the pinnipeds away from the Bonneville Dam tailrace would precede any lethal removal, and an evaluation period would follow.

Congressional Action

Congressmen Brian Baird and Doc Hastings have introduced legislation (H.R. 1769) to amend the Marine Mammal Protection Act by expediting the process to address aggressive sea lion behavior on threatened and endangered salmon and steelhead in the Columbia River and its tributaries. The legislation would establish a process that could allow states and tribes to apply to the Secretary of Commerce for permits for the lethal taking of sea lions. If approved, a permit would be effective for no more than one year and would authorize no more than 10 takings. The legislation also would waive existing environmental analyses required under NEPA. Due to the NEPA provisions, in particular, prospects for the legislation are uncertain.

On August 2, the House Subcommittee on Fisheries, Wildlife, and Oceans will conduct a hearing on H.R. 1769. Witnesses include NOAA Fisheries, the Marine Mammal Commission, State of Washington, Columbia River Inter-Tribal Fish Commission, and the Humane Society. On July 23, the Council sent a letter (see attached) to the members of the Subcommittee in support of th2 legislation.