

W. Bill Booth
Chair
Idaho

James A. Yost
Idaho

Tom Karier
Washington

Dick Wallace
Washington



Bruce A. Measure
Vice-Chair
Montana

Rhonda Whiting
Montana

Melinda S. Eden
Oregon

Joan M. Dukes
Oregon

April 2, 2009

DECISION MEMORANDUM

TO: Council Members

FROM: Mark Fritsch, project implementation manager

SUBJECT: Council decision on Project # 2008-470-00, *Yakama Nation Pacific Lamprey Program*, a Columbia Basin Fish Accord project.

PROPOSED ACTION: The Council staff recommends that the Council support this project for implementation.

BUDGETARY/ECONOMIC IMPACTS

The total amount associated with this accord project equals \$2,738,629 (e.g., approximately \$250,000 to \$304,601 per year¹) in expense funds for Fiscal Year 2008 through 2017. The Contract Request (CR-103387) associated with the Project has been approved and reflects a start date of March 1, 2009 and an end date of February 28, 2010.

BACKGROUND

In May 2008, Bonneville, the U.S. Army Corps of Engineers, and the U.S. Bureau of Reclamation signed agreements with the Confederated Tribes of the Umatilla Indian Reservation (CTUIR), the Confederated Tribes of the Warm Springs Reservation (CTWSRO), the Confederated Tribes and Bands of the Yakama Nation (YN), the Columbia River Inter-Tribal Fish Commission (CRITFC), the Confederated Tribes of the Colville Reservation, and the states of Idaho and Montana to implement a set of projects and actions that will deliver specific, scientifically sound results for the region's fish and wildlife. Collectively these agreements are known as the Columbia Basin Fish Accords.

As with all projects in the Fish and Wildlife Program, the Accord projects are subject to scientific review by the ISRP. As outlined in the guidance document associated with the review process for the Accords, the Council recognizes Bonneville's commitments to the projects under the Accords. However, the Accords do not alter the Council's responsibilities with respect to ISRP review or the Council's role following ISRP review. Consequently, the Council will

¹ Includes the anticipated 2.5-percent annual inflation adjustment, beginning in Fiscal Year 2010.

provide its recommendation on each project based on full consideration of the ISRP report and the Council's Program.

On February 12, 2009, the Council received from Bonneville a set of two Columbia Basin Fish Accords proposals. Included in this set was a proposal from the Yakama Nation (YN) for Project #2008-470-00, *Yakama Nation Pacific Lamprey Program*.² This proposal represents a compellation of the following three accord proposal from the May 2008 agreement.³

The proposal was submitted to the ISRP for review, and on March, 6, 2009 the ISRP provided a review (ISRP document 2009-5). The ISRP found that the proposal "Meets Scientific Review Criteria (In Part)".

ANALYSIS

The objective of this project is to restore natural production of Pacific lamprey to a level that will provide robust species abundance, significant ecologic contributions and meaningful harvest within the Yakama Nation Ceded Lands and in the Usual and Accustomed areas. The YN is proposing a phased approach to the implementation of this project. The first phase of the project is to collect and report critical information to evaluate status, relative abundance and distribution of Pacific Lamprey. The second phase will identify known and potential limiting factors for Pacific lamprey within Columbia River tributaries within the Yakama Nation Ceded Lands (YNCLs), and the third phase will develop and implement Pacific lamprey restoration actions and evaluate the effects of implemented actions. To accomplish this approach the YN have defined eight objectives.

- 1) Document historic distribution of adult lamprey from historical records, literature reviews and oral interviews and compare with known current distribution.
- 2) Participate in and contribute to regional consistency in data collection, data management, analysis and reporting.
- 3) Document current status of larval Pacific lamprey with presence/absence surveys to determine distribution of recruitment.
- 4) Document biologic condition, migration behaviors and environmental cues that trigger migration for both adult and juvenile Pacific lamprey.
- 5) Identify habitat characteristics that are preferred at various life stages and determine the extent these habitats are available and are being utilized (habitat mapping).
- 6) Identify and inventory all known and potential limiting factors, and current threats existing in tributary habitats. Develop and implement a Pacific Lamprey Action Plan for the following subbasins: Methow, Entiat, Wenatchee, Crab Creek, Yakama, Rock Creek, Klickitat, White Salmon, Wind, and Little White Salmon (including all perennial tributary streams to the Columbia River within the YNCLs).
- 7) To increase larval abundance in tributary streams, implement a pilot adult Pacific lamprey translocation program from main-stem Columbia River hydro-electric projects into

² The proposal is listed in the May 2008 agreement in Attachment B, Lamprey.

³ #2008-450-00, *Ameocoete Densities*; #2008-451-00 *Lamprey-U. Columbia & Yakima*; #2008-452-00, *Translocation & Other Data*.

various subbasins (to be determined) and evaluate methodology and potential biological benefits and risks of expanding this program as appropriate.

- 8) Evaluate the potential for and participate in the development of supplementation / artificial propagation techniques of Pacific lamprey.

The ISRP found the proposal to be technically justified and clearly linked to other regional programs and plans. They found that 4 of the objectives were scientifically supported (i.e., Obj. 1, 2, 4 and 5) and provided the following recommendations for the remaining four objectives.

- Objective 3 – document current status of larval Pacific lamprey with presence/absence surveys – the ISRP requests a response to the concerns raised about the survey design before implementation; this memo provides suggestions to be included in the final survey design.
- Objective 6 – identification of “all known and potential” limiting factors – is a very large undertaking and should be described in greater detail, particularly with regard to the specific life history requirements of Pacific lamprey in the Yakima subbasin. Taking a full life-cycle approach, the major limiting factor may be either adult or ammocoete passage at mainstem Columbia River dams, so this really needs to be recognized and discussed more in Objective 6. The ISRP concludes that enough published data exist on this species to scope a more strategic approach before beginning the extensive field work proposed.
- Objectives 7 and 8, which involve lamprey reintroductions and initiation of a supplementation program, can be phased in pending the outcome of the survey and limiting factor analysis.

On March 19, 2009 the Council received a submittal from the YN addressing the response that the ISRP requested. This was provided to the ISRP and on March 31, 2009 the ISRP provided their review (ISRP document 2009-9). The ISRP found that the response “Meets Scientific Review Criteria (Qualified)”.

The ISRP stated that the response was a significant improvement to the proposal and found that all aspects of the project met review criteria except for concerns raised regarding the proposed distribution sampling strategy for lamprey (i.e., Objective 3). The ISRP is concerned that the estimates of distribution would be biased and not properly inform the other activities that are proposed (e.g., restoration actions). The ISRP also appreciated the additional detail and clarity on the activities associated with the implementation of objectives 7 and 8 (i.e., translocation and supplementation), that is, the dependence of future reviews if those objectives are deemed to be necessary to met project goals.

It is important to note that that very little is currently known about the full extent of juvenile distribution (or about adult holding and spawning locations) within the ceded lands of the Yakama Nation. What the Yakama Nation is proposing in this initial phase of the project is to establish a coarse scale understanding of the relative abundance prior to designing a more systematic sampling approach. The Yakama Nation will then follow these initial surveys with a systematic sampling that would meet the ISRP concerns and assist in establishing a standard of statistical power. Due to the limited information and lack sampling standards for lamprey surveys in the Columbia basin, Council staff feels this is a cost effective way and a more

strategic approach with the current financial resources available to this accord project. In addition, Bonneville through contracting can also ensure that the sampling approach is sequenced to the other activities and actions that the project will address to assist in addressing the ISRP concerns.

Based on the ISRP review and the understanding outlined above the Council staff recommends that the Council support this project for implementation.