



## Department of Energy

Bonneville Power Administration  
P.O. Box 3621  
Portland, Oregon 97208-3621

ENVIRONMENT, FISH AND WILDLIFE

July 24, 2007

In reply refer to: KEW-4

Ms. Patty O'Toole  
Program Implementation Manager  
Northwest Power & Conservation Council  
851 SW Sixth Avenue, Suite 1100  
Portland, OR 97204-1348

Dear Ms. O'Toole:

We are pleased to provide the Bonneville Power Administration's (BPA) comments on the proposals received in the Northwest Power and Conservation Council's (Council) Innovative Project Solicitation Process for FY07-09. Our brief technical analysis is focused on the three highest ranked categories of proposals as characterized by the Independent Science Advisory Panel (ISRP). We understand that the purpose of this solicitation process is to facilitate the application of ideas or techniques that have not generally been used in the Fish and Wildlife Program (Program). We support this purpose, and hope that the Council agrees as it recommends projects to BPA for funding.

After reviewing the innovative proposals and ISRP review comments, we would like to emphasize our support for those proposals that provide direct on-the-ground benefits to fish and wildlife, consistent with our February 9, 2007, letter to you regarding FY07-09 Program implementation, rather than funding those that help refine research methodologies or techniques. There are a number of very well thought out demonstration projects within the first two categories of ISRP ranked proposals that would best fit these criteria for on-the-ground work.

We also provide a preliminary in lieu analysis, based upon review of the paper proposals only, for the three highest ranked categories of innovative proposals. Since these proposals are primarily "demonstration or feasibility studies" designed to test or refine new techniques, our preliminary in lieu assessment represents an early "flag" of potential in lieu concerns that may require an acceptable in lieu treatment should the proposal be subsequently submitted through a future Council solicitation review process for BPA funding. As you are aware, BPA is in the midst of taking public comment on questions imbedded in it's in lieu draft decision key and anticipates having completed in lieu guidelines for sponsors in place prior to future proposal solicitations.

Our analyses of innovative proposals are included in the enclosed table. Please contact me or Bob Austin (503-230-4748) if you have questions about this letter or our analysis.

Sincerely,



William C. Maslen  
Director, Fish and Wildlife

Enclosure

cc:

Mr. Bill Booth, Northwest Power & Conservation Council  
Mr. Jim Kempton, Northwest Power & Conservation Council  
Ms. Joan Dukes, Northwest Power & Conservation Council  
Mr. Bruce Measure, Northwest Power & Conservation Council  
Ms. Rhonda Whiting, Northwest Power & Conservation Council  
Mr. Larry Cassidy, Northwest Power & Conservation Council  
Ms. Melinda Eden, Northwest Power & Conservation Council  
Mr. Tony Grover, Northwest Power & Conservation Council  
Mr. Brian Lipscomb, Columbia Basin Fish & Wildlife Authority  
Chairman Dean Adams, Burns Paiute Tribe  
Chairman Chief Allen, Coeur d'Alene Tribe  
Chairman Michael Marchand, Confederated Tribes of the Colville Reservation  
Chairman Glen Nenema, Kalispel Tribe  
Chairperson Jennifer Porter, Kootenai Tribe of Idaho  
Chairperson Samuel Penney, Nez Perce Tribe  
Chairman James Steele Jr., Confederated Salish & Kootenai Tribes  
Chairperson Alonzo Coby, Shoshone Bannock Tribes of Fort Hall  
Chairman Kyle Prior, Shoshone Paiute Tribes of the Duck Valley Reservation  
Chairman Richard Sherwood, Spokane Tribe of Indians  
Chairman Antone Minthorn, Confederated Tribes of the Umatilla Indian Reservation  
Chairman Ron Suppah, Confederated Tribes of the Warm Springs Reservation  
Chairman Lavina Washines, Yakama Indian Nation  
Ms. Mary Verner, Upper Columbia United Tribes  
Mr. Olney Patt Jr., Columbia River Intertribal Fish Commission

**BPA (Draft) Comments on FY 07 - 09 Innovative Proposals**

Proposal No.	Title	Funding Request	ISRP Priority	Proposer	Province	Subbasin	FY2008	FY2009	BPA Preliminary In Lieu Analysis	BPA In Lieu Comments	BPA Proposal Comments
200752100	Improving Fish Habitat Using Innovative Strategies to Remediate Contaminated Sediments in the Columbia River Basin	\$185,112	A1	Washington State University	Intermountain	Coeur d'Alene	\$55,534.00	\$129,578.00	3.0	Other entities required to address remediation from log processing; no cost-share.	Project research may help to reduce toxic exposure to resident fish and wildlife. This alternative methodology research for reducing toxics in the environment may be applicable to other areas of the basin where dredging or capping may be considered to address contaminated sediment issues. In lieu and NEPA considerations of potential beneficial and adverse effect will exist for this project that plans to use prime fish habitat as areas for testing the use of reactive solids [CaO(OH)2] as a cleanup strategy for toxic sediments.
200752400	Integrated Non-Lethal Electric Barrier and Sonar System to Deter Marine Mammal Predation on Fish in the Columbia River System: A Demonstration Project	\$1,440,483	A1	Smith-Root, Inc	Lower Columbia	Columbia Lower	\$615,690.64	\$824,791.98	1.0	Test area limited initially to Willamette Subbasin.	Addresses an immediate problem with a promising new technique. Successful implementation would directly benefit returning adult salmon of all upriver ESU's as well as all non-listed adult fish. Needs evaluation of acoustic discrimination capability, any deleterious effects on adult lamprey, salmon, steelhead and sturgeon, and feasibility of creating impervious barrier to sea lions due to changing flows, debris, etc., in a large and dynamic river system. Coordination with Corps and NOAA Fisheries essential. Best benefit may be achieved if implemented further downriver/close to Astoria.
200751300	Eelgrass enhancement and restoration in the Columbia River Estuary through innovative site selection and planting techniques	\$252,794	A2	Pacific Northwest National Laboratory	Lower Columbia	Columbia Estuary	\$180,394.00	\$72,400.00	1.0	Potentially benefits all anadromous fish populations.	Promises quick and direct benefits previously untried in the estuary. May provide essential new information on the complexities of estuary communities and specifically more clarity on the relationship of eelgrass cover to survival of migrating juvenile salmon.
200751600	Enhancing Summer Instream Flow and Reducing Temperature in Agricultural Watersheds	\$224,766	A2	Washington State University	Blue Mountain	Tucannon	\$151,264.00	\$73,502.00	1.0	Focused on increasing instream flows for fish.	Research may show no till farming practice has potential to help augment summer flows and reduce stream temperatures. If practice is more broadly used, researchers should consider how augmented flows could be used to improve fish and wildlife habitat conditions, perhaps through state water efficiency and water trust programs. ISRP has recommended similar research and favorably reviewed similar proposal in the past.
200755700	What was old is new again: evaluate traditional gears for selective harvest	\$444,971	A2	Washington Department of Fish and Wildlife	Lower Columbia	Columbia Lower	\$333,728.30	\$111,242.70	2.3	11% cost share; similar to 200710700 in recent Council solicitation.	Evaluation of past examples on non-lethal adult salmon collection gear may serve an important role for future selective harvest in terminal areas or at mainstem facilities.
	<b>Total Request Top Five ISRP Ranked Proposals</b>	<b>\$2,548,126</b>									
200753500	Physical and Biological Field Testing of a Flow Velocity Enhancement System (FVES)	\$318,310	B1	Natural Solutions	Mainstem/Systemwide	Cowlitz	\$318,310.00		2.3	24% cost share; similar to 200753500 in recent Council Solicitation.	Somewhat high tech proposal that may prove valuable in creating direct local turbulent flow patterns capable of efficiently guiding fish. May work in a wide range of situations from remote locations to larger diversions and mainstem projects.
200752600	Lake oxygenation pilot study: Improving Redband Trout habitat quality in Twin Lakes, WA	\$271,634	B2	Washington State University	Intermountain	Columbia Upper	\$217,990.00	\$53,644.00	1.0	Initial rating contingent upon whether redband trout is part of BPA-funded mitigation in Twin Lakes.	Appears to be a very well thought out experimental design to test a new, highly technical technique within the allotted timeframe.
200751800	Evaluation of artificial upwelling to enhance lower Columbia River Gorge chum salmon spawning	\$173,590	B3	Pacific Northwest National Laboratory	Lower Columbia	Mainstem on the ground/Multiprovince	\$109,369.00	\$64,221.00	1.0	Addresses mitigation for FCRPS chum impacts.	Proposal focused upon an environmental metric, spring water discharge through the hyporheic zone, that current literature cites as significantly limiting chum spawning success.

200754200	Shad for Nutrient Enhancement -- Demonstration of Fishery Supply, Disease Evaluation, Product Type and Potential Use	\$163,400	B4	Washington Department of Fish and Wildlife	Mainstem/Systemwide	Columbia Lower	\$96,526.00	\$66,874.00
<b>Total Request Proposals ISRP Ranked Five through Nine</b>		<b>\$926,934</b>						
200753800	Predicting the future effects of climate-induced stream warming on spring Chinook salmon and their predators in the John Day River Basin	\$214,959	R1	University of Washington	Columbia Plateau	John Day	\$161,802.00	\$53,157.00
200755400	Using advanced technologies to help reduce the impacts of global warming on anadromous and resident fish populations in the Columbia Basin	\$294,302	R2	US Forest Service - Rocky Mt Research Station	None Selected	Systemwide	\$187,466.00	\$106,836.00
200750800	Designing Pre- and Post-Fire Restoration Strategies For Recovery of Salmonid Habitats in a Period of Climate Change and Increased Forest Fire Disturbance	\$88,300	R3	Earth Systems Institute	Columbia Cascade	Methow	\$38,500.00	\$49,800.00
200750200	Application of Innovative Acoustic Telemetry Technology to Underpin Statistically-Valid Survival Estimates for Chinook Salmon in the Nearshore Ocean Off the Mouth of the Columbia River	\$532,680	R4	Pacific Northwest National Laboratory	Mainstem/Systemwide	Systemwide	\$447,928.00	\$84,752.00
200751100	DNA typing to identify native inland Oncorhynchus mykiss	\$217,364	R5	Washington State University	Mainstem/Systemwide	Systemwide	\$128,705.00	\$88,659.00
<b>Total Request ISRP Ranked Research-oriented Proposals</b>		<b>\$1,347,605</b>						

2.3 11% cost share; others also authorized/required to address lack of marine mammal derived nutrients. A shared responsibility of FCRPS and other parties. Similar in scope to previous BPA-funded innovative nutrient enhancement projects, although utilizing shad as the nutrient source.

3.0 Other entities required to address modeling of climate induced stream warming; requires treatment such as cost-share; similar to 200723600 in recent Council solicitation. All proposals in this category are more research oriented and propose to refine techniques or methodologies as opposed to a field demonstration of a new technique. BPA prefers projects for funding in the innovative category that provide direct benefits to fish and wildlife.

2.2 advanced technologies to help address global warming on salmon; 62% cost share. All proposals in this category are more research oriented and propose to refine techniques or methodologies as opposed to a field demonstration of a new technique. BPA prefers projects for funding in the innovative category that provide direct benefits to fish and wildlife.

1.0 Fire restoration strategies for salmon habitat; Include under BPA/USFS MOU. All proposals in this category are more research oriented and propose to refine techniques or methodologies as opposed to a field demonstration of a new technique. BPA prefers projects for funding in the innovative category that provide direct benefits to fish and wildlife.

2.1 acoustic telemetry near shore; up to 90% cost share. All proposals in this category are more research oriented and propose to refine techniques or methodologies as opposed to a field demonstration of a new technique. BPA prefers projects for funding in the innovative category that provide direct benefits to fish and wildlife.

3.0 DNA typing; similar to 200717500 in recent Council solicitation; other entities required/authorized; no cost share. All proposals in this category are more research oriented and propose to refine techniques or methodologies as opposed to a field demonstration of a new technique. BPA prefers projects for funding in the innovative category that provide direct benefits to fish and wildlife.