



Montana Fish, Wildlife & Parks

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July 24, 2007

Patty O'Toole
Program Implementation Manager
Northwest Power & Conservation Council
851 SW 6th Avenue, Suite 1100
Portland, Oregon. 97204-1348
Fax 503-820-2370

Re: Montana Fish, Wildlife & Parks' Comments on the Innovative Project selection process.

Dear Ms. O'Toole,

Montana Fish, Wildlife & Parks (FWP) appreciates the opportunity to provide recommendations on the Innovative Project review and selection process. Our comments focus on proposals ranked A and B by the Independent Scientific Review Panel (ISRP).

As currently ranked, the existing \$2 million dedicated to Innovative Projects would not fully fund all five category A1 and A2 projects and funding would be insufficient to implement category B projects. This would severely limit the scope of the innovative project program and miss opportunities to assess the feasibility of other top-ranking innovative proposals. Project 200753500 - Physical and Biological Testing of a Flow Velocity Enhancement System (FVES), ranked B1 by the ISRP, is of special interest to Montana for several reasons.

The FVES may offer an innovative solution to improve the survival of downstream migrating salmon and steelhead smolts through dams in the Columbia River Watershed. Concentrating smolts and directing them toward safe passage routes could result in improved fish passage using a smaller volume of water, which could reduce the need for flow augmentation from headwater reservoirs including Hungry Horse Dam in the Flathead Subbasin and Libby Dam in the Kootenai Subbasin. Research by MFWP and others has shown that summertime flow augmentation for anadromous fish restoration impacts biological productivity in the reservoirs and rivers downstream. Biological production in the reservoirs is impacted by reservoir drawdown, reduced surface area and volume during the biologically productive summer months. The Flathead and Kootenai Rivers downstream of the dams are impacted by unnaturally high and fluctuating flows during the productive warm months. Successful implementation of FVES would provide researchers and decision makers with a solution to conflicts between anadromous and resident fish recovery needs in the Pacific Northwest.

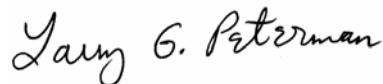
If FVES proves to be an effective fish guidance tool, it could have broad applicability for guiding upstream and downstream migrating fish safely past impediments such as dams and water diversions. These devices could be strategically installed relatively inexpensively to improve the performance of previously installed passage structures (e.g. screens, surface collectors, bypass channels, entrances to fish ladders).

BPA should consider funding this project as a potential cost-saving tool to increase fish passage efficiency and reduce costs attributed to foregone energy production resulting from spill at Columbia and Snake River Dams. Reduced spill would also mitigate excess gas supersaturation in dam tailwaters that causes gas bubble trauma in fish. Cost savings could then be directed toward other fish restoration actions including fish passage improvements into restored or reconnected or spawning and rearing habitat.

Empirical measurements of turbulent flow-fields generated by FVES could be directly applied to flow eductor experiments called for by the endangered Kootenai white sturgeon recovery plan to facilitate sturgeon recovery actions. Eductors could also be used to create turbidity needed for endangered pallid sturgeon recovery. The device may be used to create water velocities and turbulence to attract spawning adult sturgeon or to cleanse river substrate required for egg deposition and early-life rearing, a known limiting factor for natural sturgeon reproduction.

We recommend that the Council and BPA either reduce the budgets on category A projects or increase the innovative project funding to accommodate additional category B projects.

Sincerely,

A handwritten signature in black ink that reads "Larry G. Peterman". The signature is written in a cursive, flowing style.

Larry G. Peterman
Chief of Field Operations

C: Bruce Measure
Rhonda Whiting