



## Independent Scientific Review Panel

for the Northwest Power & Conservation Council

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**Memorandum (ISRP 2011-20)**

**July 20, 2011**

**To:** Bruce Measure, Chair, Northwest Power and Conservation Council

**From:** Richard Alldredge, ISRP Chair

**Subject:** Follow-up Review of Grande Ronde Spring Chinook on Lostine/Catherine Creek/  
Upper Grande Ronde Rivers (199800704) for the RME and Artificial Production  
Categorical Review

### **Background**

At the June 10, 2011 request of the Northwest Power and Conservation Council, the ISRP reviewed a revised proposal for the Oregon Department of Fish and Wildlife's project, Grande Ronde Spring Chinook on Lostine/Catherine Creek/ Upper Grande Ronde Rivers (199800704). The revised proposal is available at [www.cbfish.org/Proposal.mvc/Summary/230](http://www.cbfish.org/Proposal.mvc/Summary/230). As described in the proposal, "The purpose of this proposal is to integrate Bonneville Power Administration (BPA) efforts with the Lower Snake River Compensation Plan (LSRCP) in the Grande Ronde subbasin program utilizing Lookingglass Hatchery as the primary rearing facility. These integrated efforts focus on holding and spawning adults, rearing juveniles, fish health, and monitoring natural production (redd counts) for Catherine Creek, Lostine River, and Upper Grande Ronde stocks."

This is the third review iteration for this proposal. The ISRP reviewed the original proposal and requested a response as part of the Council's RME and Artificial Production Categorical Review. A response was provided, and the ISRP released a review of the response in February 2011 ([ISRP 2011-3](#)). In that review, the ISRP asked for more information to justify the project. Subsequently, the proposal was revised and provided for our review, which follows below.

### **ISRP Recommendation**

*Meets Scientific Review Criteria (Qualified)*

Although the proposal meets scientific criteria, the ISRP has three qualifications that the co-managers of the spring Chinook production projects in the Grande Ronde subbasin funded

through the LSRCP and the Fish and Wildlife Program need to address by the next project review: (1) develop an experimental design to evaluate whether supplementation is providing an increase in natural-origin adults in treatment streams, (2) develop a design to evaluate whether there is a “cost” to population productivity from supplementation, including the evaluation of possible density-dependent effects, and (3) develop a decision framework to guide efforts to recover these populations and to develop alternative strategies if supplementation is not working in order to provide fish for harvest obligations.

## **ISRP Comments**

The proponents provide an adequate description of the relationship of the project and tasks within the broader spring Chinook production program in the Grande Ronde subbasin. In addition, the proponents present adequate detail on the project’s integration with other projects in the Grande Ronde subbasin and the LSRCP. Overall coordination (M&E, CRHEET, AHSWG) appears adequately handled by experienced personnel.

The reporting of outcomes is improved in this response, but reports with details similar to those presented at the [LSRCP symposium in Boise, November 2010](#), would be required to fully interpret and evaluate the success of the program and the status of addressing limiting factors.

The ISRP notes that this project does not have the authority to decide whether to modify the programs based on recent program performance. Those decisions are made through US v. Oregon and other co-manager interactions at policy levels with technical input.

In response to the ISRP’s request that the proponents should clearly present objectives for restoration in terms of “adults-in” (hatchery and wild) and “smolts-out,” the proponents explain that adult return goals for the *captive brood* programs were met previously, and that those programs have been terminated, except for a small, ongoing amount of “safety-net” production. They go on to state the adult return goal and the smolt release goal for each stream’s *conventional brood* program are not being met, showing pertinent data in Tables 1 through 4.

The proposal states, “individual conventional programs would continue and be managed as Integrated Recovery programs until the TRT minimum abundance thresholds for viability are attained. At that point, management of the programs would be converted to Integrated Harvest programs and continue indefinitely in order to meet LSRCP mitigation goals.” This statement raises important questions regarding a decision framework and adaptive management for the Grande Ronde subbasin. First, no definition or explanation is provided for Integrated Recovery program, so the ISRP is not able to assess whether the project is actually functioning within the guidelines and definition. Second, there is no experimental design and decision framework under which the co-managers can recognize that the conventional program is or is not achieving the biological objectives set for an Integrated Recovery program. There should be a low performance threshold that triggers predetermined action on the part of co-managers.

There should also be a full performance threshold that triggers discussion of whether the program should be discontinued. These thresholds may be in the Northeast Oregon (NEOH) Hatchery Master Plan and NEOH monitoring plan, but they are not discussed in this proposal.

The ISRP requested that the proponents identify a clear procedure for evaluating whether supplementation is yielding an increase in natural-origin adults, and whether it is potentially compromising the density-independent productivity (even if this analysis is conducted under other LSRCP contracts). Although the proponents present PNI data in tables and text, they make no comments on the density-dependent implications of the project. The proponents should link the project to habitat restoration efforts in the watershed with the goal to increase smolts per spawner.

The proponents clarify the purpose of the project's redd counts by explaining that they are used in estimating the spawner abundances shown in Table 4.