



# *A Coordinated Federal Strategy for the Recovery of the Columbia-Snake River Basin Salmon*

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A caucus of federal agencies today announced a long-term strategy to restore threatened and endangered salmon and steelhead stocks throughout the Columbia-Snake River Basin of the Pacific Northwest. If it is funded and implemented as written, this strategy should reverse the decline of these species over the next 10 years by restoring habitat, limiting harvest, reforming hatchery operations, and reducing the impacts of hydropower. To succeed, this strategy requires extensive restoration of estuary and tributary stream habitat and modification of hatcheries, in part to address hydropower system impacts that will continue. Salmon science indicates that these actions can provide solid, predictable improvements needed to ensure the continued existence and recovery of threatened and endangered salmon species. This strategy recognizes that the long-term survival of these species requires effective actions in the next few years, so it establishes a program to review implementation in 2003, 2005 and 2008, with biological and physical standards to gauge the success of these actions. Consequences for failure on these actions will result in more aggressive actions, including seeking authorization to breach Snake River dams.

## **Working to Recover an Important Natural Resource**

Native salmon and steelhead in the Pacific Northwest are in a serious, long-term state of decline due to the cumulative impacts of hydropower systems, habitat degradation, harvest, and hatchery management practices. Unless the region makes major changes to reduce these impacts, many salmon and steelhead populations in the Columbia River Basin will be extinct or nearly so by the end of this century. Federal agencies have a fundamental responsibility under the Endangered Species Act to prevent extinction and foster recovery of these listed species. Today, the managers of the Federal Columbia River Hydropower System completed consultation with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on a program of hydropower system modifications and off-site mitigation to avoid jeopardizing threatened and endangered fish. The agencies responsible for land management programs participated in the Federal Caucus to ensure actions throughout the salmon life cycle are coordinated and aimed at fish recovery. Fulfilling their broader responsibilities to conserve threatened and endangered species, today these federal agencies concerned with salmon conservation (the "Federal Caucus") released a Basinwide Salmon Recovery Strategy.

## **Announcing a Framework for Recovery**

The Basinwide Strategy (All-H Strategy) announced today represents a framework for federal activities over the next 10 years. It calls for changes to recover salmon and steelhead needed to address human impacts

to fish in all life stages, including additional improvements to the hydropower system. It also tries to account for natural cycles of environmental variation. This strategy uses new research that indicates that the greatest opportunities for survival improvements may lie outside the scope of the hydropower corridor, and that actions to restore health to the tributaries and estuaries where these species spawn and rear are necessary for salmon and steelhead recovery.

In its Biological Opinion for the federal hydropower system, the National Marine Fisheries Service has set specific performance standards to achieve survival of the listed species for habitat (based on environmental conditions), hydropower (based on juvenile and adult fish survivals), and hatchery reforms (based on hatchery genetic management plans). These performance standards will help measure progress and determine whether alternative strategies are needed to rebuild populations and achieve recovery. In addition, the U.S. Fish and Wildlife Service has established specific measures to protect bull trout and Kootenai River White Sturgeon. These measures focus on the Upper Columbia dams where the two species live. Under the Fish and Wildlife Service Biological Opinion, federal dam management agencies will develop detailed one- and five-year implementation plans to guide their actions and describe the results they expect to achieve. The federal dam management agencies will report on their progress annually. The land management agencies may develop implementation plans as well.

### **Three-, Five- and Eight-Year Review with Performance Measures**

To ensure that federal agencies fulfill their responsibilities for the conservation of threatened and endangered salmon and trout, the strategy includes a rigorous program of compliance review in three, five, and eight years. The fisheries service will issue a report at each of these check-in years, documenting whether activities are on track in habitat restoration, hydro system improvements, and harvest and hatcheries management for salmon recovery. This analysis will include scientific peer review at years five and eight.

The *three-year review* will assess whether agencies have taken steps to achieve the goals for salmon and steelhead populations. Key activities are those that:

- result in near-term survival benefits for the listed stocks;
- prepare for implementation of additional survival improvement measures; and
- set planning, research and monitoring actions that are important for implementation and the evaluation of progress by 2005 and 2008.

In making its review, the fisheries service will determine whether implementation is substantially meeting expectations, significantly falling short of expectations, or failing. If the fisheries service issues a failure report, it will identify necessary corrective actions, including actions that are not currently authorized for implementation, to avoid jeopardizing the listed species and adversely modifying their critical habitat. Failure to implement sufficient improvements for Snake River salmon and steelhead would require that the agencies seek authorization for more aggressive action, such as authorization to breach Snake River dams, to ensure that all options are available in 2005.

The *five and eight-year reviews* will assess the status of agency implementation of the strategy and reassess the salmon and steelhead populations to ensure that agency activities are providing sufficient improvements for these populations. The fisheries service will reevaluate the performance of the listed species based on performance standards, new monitoring data, results of research on critical uncertainties, and initial results from pilot studies. It will verify: (1) that population growth rates are improving compared to current levels; (2) that the population trend improvement is at predicted levels; and (3) that the improving trend will meet levels needed for recovery standards. A fourth standard establishes a “floor” of population levels that cannot be reached as a test for avoiding loss of genetic diversity needed for long-term survival and recovery.

Based on this review, the fisheries service will determine whether:

- the hydropower agencies have demonstrated (through pilot studies, historical data assessments, and implementation monitoring) that proposed actions can increase life-stage survivals; and
- the actions with demonstrated survival improvements are being implemented at a scale sufficient to avoid jeopardy for the salmon and steelhead.

## **Non-Federal Efforts and Partnerships**

The strategy recognizes that federal actions alone cannot ensure survival and recovery of protected salmon stocks in the Columbia Basin. It identifies a range of tribal, state, and local actions that can complement federal efforts and will be essential to a successful recovery strategy. These are particularly critical in the area of habitat restoration, where the plan calls on states and the Northwest Power Planning Council to lead efforts to improve flows and water quality, protect and rebuild habitat in salmon-supporting tributaries; reform land use statutes governing growth management, forestry, and agricultural practices; and establish programs to screen all pumps and diversions. Progress in these areas will be considered in three-, five- and eight-year reviews.

## **The Consequences of Failure**

If agencies and the Region fail to implement this strategy, or salmon and steelhead populations fail to improve, the fisheries service will identify additional actions that would avoid jeopardizing the continued existence of those species. Because this strategy makes use of all existing authorities, additional actions would likely include the breach of dams for those Snake River stocks that would benefit from dam breaching. Dam breaching is likely to significantly improve the survival of Snake River salmon and is the potential remedy for a failure to achieve performance standards, due to implementation failure or an adverse change in the species' populations. For Mid-Columbia and Upper Columbia species, another remedy may be appropriate, though the state of the science is not as well developed at this time. Failure to implement the strategy may also have consequences for the scope and timing of other federal agency actions that affect threatened and endangered species in the Columbia River Basin, particularly hatchery management and those actions that may affect the estuarine or tributary habitat.

## **Conclusion**

This plan marks the transition from planning to implementation. This Basin Recovery Strategy sets up a rigorous accountability program to ensure action on immediate and near-term actions to recover salmon and steelhead. The plan is based on the best available science. The strategy is based on the scientific evidence that if this strategy is implemented, it can achieve recovery with the hydro system in its current configuration by relying heavily on habitat improvements in the estuary and tributaries, and a radical overhaul of the hatchery system. A plan for enhancing the science, and a monitoring and evaluation system, will ensure that actions can be refined and new decisions made if needed.