

The Issue: Chinook Salmon Conservation & Recovery

Wild Pacific salmon – and the waters in which they live – have great cultural, economic, recreational and symbolic importance in the Pacific Northwest. Consequently, the decline in their species, caused by numerous, interacting causes, provokes wide-ranging concern.

Native tribes have long seen the salmon as not only a source of sustenance but also a religious symbol – a symbol of the cycle of life. So important is the salmon to tribes that it is a major provision in treaties between the United States and native nations. Our rivers not only nurture salmon, they also supply water for our cities, and serve as conduits for trade and transportation. For instance, in King County, the Cedar River alone provides the water for nearly 900,000 customers to drink and use, along with many recreational opportunities. The Green-Duwamish River system supports a range of rural and industrial uses. The Snoqualmie River and its famous falls are an important tourist attraction and the site of an early hydropower generator in our area.

Over the years, King County has undertaken major efforts to protect our salmon resources – well before an Endangered Species Act (ESA) listing of chinook salmon was even considered. Starting in 1987 with the first basin plan on Soos Creek and 1989 with passage of the county's Open Space Bond, King County has been very proactive on environmental planning and habitat conservation. Efforts include watershed basin planning, water quality programs, studies on the potential use of water reuse, and open space and resource land purchases. In just the past four years, more than \$20 million has been invested to acquire critical habitat. We have implemented new regulations to improve protection of our waterways, and have offered incentives to landowners so they will voluntarily protect critical habitat on their lands.

King County realizes, however, that the benefits of its recent past efforts will not be fully realized for many generations of chinook salmon. On the West Coast, Pacific salmon have disappeared from about 40 percent of their historical breeding ranges over the last century, and many remaining populations are severely reduced. In fact, more than 75 percent of Pacific salmon populations are severely depleted or at risk of extinction. Eighteen of the 214 salmon stocks reviewed appear to be extinct already; 101 more were found to be at high risk of extinction.

This situation not only threatens our quality of life, it has caused economic impacts to commercial and recreational fisheries and related industries. Further, because of the species' decline, the Puget Sound chinook salmon will be listed as "threatened" under the Endangered Species Act – an action which could have a major, negative impact upon the region's economy.

King County believes that the impact of its past actions, combined with early actions it has taken already to conserve our salmon resource as well as its commitment to long-term recovery strategies, will gradually reverse the decline and lead to the recovery of the species.

Impact of Endangered Species Act Listing

In early March of 1999, the National Marine Fisheries Services (NMFS) will list the chinook salmon as “threatened” under the Endangered Species Act. The listing of a species under the ESA is cause for great concern. A proposal to list generally means that existing management and conservation measures have failed to protect the species. Once a species is “listed” as either “threatened” or “endangered,” any actions that might harm the species itself or its habitat, are restricted and efforts are required to try to recover the species to sustainable levels.

Thus, listing the chinook salmon as threatened under the ESA could potentially impact an enormous number of county programs that deal with land use and development, roads maintenance and construction, agriculture and forestry, as well as many ongoing activities that the county performs or regulates. Most King County regulatory, inspection and enforcement, land acquisition, landowner incentive, technical assistance, education, maintenance, construction and engineering programs also would be affected in response to a listing.

Protection of “threatened” chinook is left to the discretion of the Secretary of Commerce under section 4(d) of the Endangered Species Act. The Secretary may “issue such regulations as he deems necessary and advisable to provide for the conservation of such species.” Following the expected listing, the National Marine Fisheries Service will begin the process to develop this regulatory rule, commonly referred to as a 4(d) rule, under the Endangered Species Act. This rule is a regulation that legally establishes the protective measures that are necessary and advisable to provide for conservation of the species. NMFS has broad discretion and flexibility in making this rule and can consider the substantive efforts of local governments and other parties to protect the species and its habitat.

One option NMFS can follow is to begin the process by proposing a draft rule that would define almost all of our governmental activities as a “take” of the species. Under Section 9 of the Endangered Species Act, a “take” is defined as any actions that harass, harm, pursue, hunt, shoot, wound, kill, trap or collect any threatened species, or to modify its habitat where it impairs essential behavioral patterns – including breeding, feeding or sheltering.

A general prohibition on “take” would subject our governmental activities to the threat of sanctions, or third party lawsuits under the ESA. If implemented, the probable outcome of such a 4(d) rule is that federal courts would define which of our specific activities constitute “take” of the species, and could enjoin us from continuing those activities or order remedial ac-

tions. Any number of governmental activities could be subject to challenge – ranging from our land uses and permitting of development to water supply and road maintenance.

King County does not believe it is in the best interests of this region, the federal government, or the salmon, for NMFS to take the approach of issuing a general prohibition under a 4(d) rule.

A general 4(d) rule that simply prohibits “take” will not lead to conservation of the species, which is our goal and the requirement of the act itself. Instead of actions to recover the species, local governments and private entities will expend resources and effort to determine their liability and develop defenses to third party challenges.

Instead, King County is advocating that NMFS follow a different option for development of a 4(d) rule, one that calls for a more complex approach of developing a package of actions that together will lead to conservation of the species. This approach, developed collaboratively, recognizes the challenge of recovering salmon in a complex urban landscape, while also providing our region the flexibility to meet that challenge.

Local governments would be mandated to carry out specified conservation actions within designated timelines, or they would face legally enforceable sanctions by NMFS for non-compliance. By complying with this 4(d) rule, governmental activities and regulated actions of private interests would be exempt from “take” for an interim period until conservation plans can be developed and implemented.

This approach to a 4(d) rule provides an incentive for King County and our regional partners in our Tri-County process to continue our commitment toward conservation and recovery of the Puget Sound chinook salmon. Government and private sector resources will not be spent on legal strategies, instead, funds will be invested in collaborative approaches to preserve and restore habitat and improve water quality and quantity. Finally, this approach will allow us to continue developing plans that will ensure the efficient expenditure of federal funds that are being invested in salmon recovery.

For NMFS to accept the Tri-County proposal for a “complex” 4(d) rule there must be scientifically supported conservation actions that will preserve and restore the ecosystem that supports the chinook salmon. The following provides an overview of the Tri-County approach and its substantive habitat conservation proposal contained in this report.

Tri-County Approach

The proposed federal listing of Puget Sound chinook has challenged the Puget Sound region to reverse the trends that threaten or endanger the existence of our native salmon. Our goal is to ensure long-term protection of our salmon resources at not only sustainable, but harvestable levels for today and tomorrow with the least economic impact possible.

We want both the salmon and the region's economy to thrive.

To survive, salmon must have clean, abundant, cool water. However, water that flows from the Cascades to Puget Sound is affected by land uses from within many political boundaries and often is shared in many, sometimes conflicting, ways. Unfortunately, this can affect the quality and quantity of habitat conditions needed for salmon to survive.

We recognize that the salmon problem took many years to develop, and its solution will require the commitment of considerable time, money and effort. Further, successful restoration and maintenance of healthy salmon populations and protection of the estuaries, rivers and streams in which they reside, require that state, tribal and local governments work together to conserve the species and avoid the negative impacts of an Endangered Species listing.

To this end, King County Executive Ron Sims, Pierce County Executive Doug Sutherland and Snohomish County Executive Bob Drewel in February 1998 formed a Tri-County partnership that includes federal, state, tribal and local governments, as well businesses, environmental groups and citizens. Through this collaborative effort, local governments and organizations are working to set aside policy differences under the mutual interest of salmon recovery.

Working cooperatively, Tri-County is developing a comprehensive, science-based recovery plan that identifies immediate actions and commits to long-term conservation plans that will lead to recovery of the chinook salmon, while maintaining the economic vitality and strength of the region.

This multi-jurisdictional, multifunctional approach to salmon restoration is the largest, most comprehensive, cooperative effort ever undertaken in our region's history.

Principles that guide our approach

The following principles, adopted by the Tri-County partnership, are guiding the development of both our short-term and long-term strategies for preservation and recovery of the chinook salmon:

- Water supply, water quality and sustainable fisheries are inseparable, shared interests of Washington citizens. Salmon are valuable to our state's quality of life, and therefore salmon protection is an inherent aspect of accommodating population and economic growth.
- The region is best served if water supply, water quality and fisheries are enhanced through a cooperative, collaborative process that reduces conflicts through better understanding of each interest. We all benefit from a constructive approach to the complex maze of regulations, laws, and court decisions that could reinforce conflicts between interests.

- Providing water for fish and people is best achieved through coordination of programs and financial resources of local, state, federal, and tribal governments. We want to ensure that local taxpayers and ratepayers share equitably in the cost of the ESA response.
- Our response to the ESA listing of chinook salmon will support the net gain in overall production of salmon to assure a long-term, harvestable fishery.

Principles that guide our regional partnership

The success of our efforts will be determined by the strength of our partnership between state, tribal, local and federal governments and private sector interests. To that end, we must:

- Invite all levels of government and non-government stakeholders to participate in a coordinated effort.
- Ensure effective implementation of initiatives in partnership with the executive and legislative branches of state government.
- Use local governments to play a central role in coordinating, implementing and monitoring local, regional, and public-private resource protection efforts.
- Recognize the current responsibilities and obligations of different governments and stakeholders.
- Secure consensus on the size of investments needed, how the costs should be allocated, and long-term commitment of various sectors and interests.
- Educate policy-makers, opinion leaders, state and local officials and all citizens of the State will be vital to the success of the strategy.
- Include statewide and locally driven strategies and initiatives done in partnership with tribes, private and public interests.

Principles that guide development of our ESA Response Strategy

In order for our strategy to be successful, it must embody the following principles:

- The strategy must be comprehensive, long-range, and action-oriented. This means it must be based on best available science; set priorities; and be adaptive in response to ongoing data collection, monitoring, and review.
- The strategy must recognize local watershed initiatives and develop linkages between such efforts. This means that in order to implement solutions at the local level we must:
 - Seek ways to use limited resources effectively in meeting water resource needs.

- Avoid actions that require expenditure of resources on programs and projects that do not address priority needs.
- Build on existing, successful programs to address priorities without creating new layers of government and bureaucracy.
- The strategy must avoid inflexible region-wide mandates and standards that might impede unique local programs; include regulatory and non-regulatory approaches; and enable us to maintain a healthy economy.
- The strategy must take full advantage of existing state and local authorities, tools and programs in support of immediate action to restore salmon. It should build on existing laws, regulations and programs that make a contribution to salmonid protection and restoration.
- The successful strategy should reduce the risk of unnecessary federal intervention.

Overview of the Tri-County Proposal: An Ecosystem Approach

The Tri-County proposal includes both short-term and long-term strategies that draw together the efforts at the Tri-County and Water Resource Inventory Area (WRIA) levels and set the groundwork for the long-term recovery of chinook salmon. (Note: Water Resource Inventory Areas were established in the early 1970s by the State of Washington for the purpose of resource planning and management. A WRIA essentially is an administrative unit that closely follows watershed boundaries. In the Tri-County area, there are six WRIs: Stillaguamish, Snohomish, Cedar-Sammamish, Green/Duwamish, Puyallup-White and Nisqually. The following map shows the WRIA boundaries.)

Short-term strategies entail immediate, aggressive actions needed to protect the chinook salmon from further declines. Sustained planning and actions to rebuild and maintain the chinook salmon are outlined in the long-term recovery plan.

Short-term strategies

Over the short term, King County and its Tri-County partners are striving to provide NMFS with as much substantive information as possible about ongoing, effective local conservation efforts. This will afford NMFS the opportunity to take such actions into account in drafting a proposed 4(d) rule.

As part of that effort, King County has undertaken **an evaluation of its programs and policies** most directly relevant to the conservation and recovery of salmon. The intent of this evaluation is to identify elements of programs, policies and regulations that may either benefit or harm the conservation and recovery of candidate and listed species and the ecosystems upon which they depend. These programmatic and policy evaluations can be found in Chapter 6 of this report.

Included in Chapters 5 and 6 is a **review of “early actions”** King County has undertaken since March 9, 1998 (when a listing was first proposed) or is proposing to undertake by 1999-2000. These are actions that clearly will provide benefits to chinook salmon and their habitat. Chapter 8 discusses the funding commitments to these early actions with existing federal, state and local resources, as well as a fund-raising strategy to meet new funding needs.

These early actions include:

- habitat protection and acquisition projects drawn from existing science-based plans and information;
- increased use of the State Environmental Policy Act to better protect salmon habitat;
- evaluation of programs and regulations to determine their effectiveness in contributing species conservation;
- enhanced enforcement of existing protective regulations;
- public education and involvement; and other initiatives.

These early actions come from both the work of individual jurisdictions as well as coordinated efforts at the WRIA level.

Also during this short-term period, King County and its Tri-County partners have made major commitments to conservation planning in terms of staff and financial resources at the WRIA level.

We have convened key decision-makers and stakeholders to form WRIA Steering Committees. The Tri-County Habitat Work Group provides coordination among the WRIs to ensure all the conservation plans contain the elements in which they have in common. Meanwhile, technical staff from each WRIA also have developed a more detailed outline that reflects the unique circumstances at the individual WRIA level. (See Chapter 7 for a discussion of WRIA Conservation Plans.) We have embarked upon the scientific analysis necessary to make good decision in the long run. (See Chapters 2 and 3) We have devised strategies for prioritizing our funding needs. (See Chapter 8)

As work in the WRIs progresses, and more is learned about what is needed to ensure species conservation, the chinook 4(d) rule may need to be revised to reflect that new understanding. Ideally this would result in a 4(d) rule that is tailored to local watershed conditions and that incorporates the efforts of watershed stakeholders in protecting the species and its habitat.

Long-term strategy

Over the long-term, the Tri-County effort fundamentally is a coordinated, WRIA-based salmon recovery strategy and will be focused on implementing an adaptive management approach to conservation through the WRIA Conservation Plans. By shifting the emphasis in the long-term to the WRIA/watershed scale, we are able to use WRIs as geographic planning units to

bring together all the parties affected by and interested in the long-term recovery of the chinook salmon.

Basing the long-term recovery plan upon WRIA Plans will allow stakeholders to help shape the overall strategy and to show good faith and a commitment to the long-term goal of species recovery. This outreach is critical in order to effect the changes in our cultural and institutional structures (e.g. political jurisdictions, public values, etc.) ultimately necessary to recover threatened and endangered species.

This ecosystem or multi-species approach dovetails with the Endangered Species Act, which has as one of its express purposes to “...provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved....”

This approach provides the conceptual framework (as described in Chapter 2) against which every action in our long-term recovery plan will be tested. It recognizes that conservation activities at the individual landowner, watershed, local, state and federal levels will be most effective if woven into an overall, regional habitat and salmon restoration program.

This report, in its totality, describes how we propose to meet the following five, broad biological and ecological objectives that are central to salmon conservation, again as defined by NMFS in its 1996 document:

- **Objective 1. Maintain and restore natural watershed processes that create habitat characteristics favorable to salmonids.** Through our emphasis on WRIA plans, this proposal recognizes that it is essential that whole, contiguous landscapes must be managed to protect natural processes (i.e., the natural rates of delivery of water, sediment, heat, organic materials, nutrients, and other dissolved materials), rather than to achieve a specific state.
- **Objective 2. Maintain habitats required by salmonids during all life stages from embryos and alevins through adults.** Chapter 3 provides the scientific findings that discuss the factors for the decline of chinook salmon and their habitat, and establishes the empirical basis for our actions.
- **Objective 3. Maintain a well-dispersed network of high-quality refugia to serve as centers of population expansion.** Conservation biology suggests that the most fundamental goal of species and ecosystem protection is to preserve those habitats that retain a high degree of ecological integrity. Populations within these “healthy” habitats have the greatest probability of surviving natural disturbance events or long-term shifts in environmental conditions. Chapter 5 describes both historical efforts as well as early actions we are undertaking for salmon conservation.
- **Objective 4. Maintain connectivity between high-quality habitats to allow for re-invasion and population expansion.** The high degree of landscape fragmentation that has resulted from human activities has left many salmonid populations in relative isolation.

Chapter 7 discusses how the WRIA Conservation Plans will meet this objective.

- **Objective 5. Maintain genetic diversity.** Maintaining genetic diversity and integrity within and among salmonid stocks and species is an important objective of both hatchery and harvest management, but cannot be achieved without well-dispersed, properly functioning habitat. See Chapters 5, 6 and 7 for discussion.

In order to meet the five objectives described above, a comprehensive salmon restoration strategy must contain the following critical elements, as defined by NMFS in its 1996 document:

1. Identify at appropriate scales the factors that have contributed to decline of the ESU(s). (See Chapters 3 and 7)
2. Establish priorities for action. (See Chapters 5, 6, 7 and 8)
3. Establish explicit objectives and timelines for eliminating or reducing all major factors for decline and for achieving desired population characteristics. (See Chapter 7)
4. Establish quantifiable criteria and standards by which progress toward each objective will be measured. (See Chapter 7)
5. Adopt measures (actions) needed to achieve the explicit objectives. A plan should include measures to protect and restore habitat wherever habitat condition is a factor of decline, whether on private or public lands. (See Chapters 5, 6 and 7)
6. Provide high levels of certainty that the identified measures and actions will be reliably implemented, including necessary authorities, commitments, funding, staffing, and enforcement measures. (See Chapters 5, 6, 7 and 8)
7. Establish a comprehensive monitoring program, including methods to measure whether objectives are being met and to detect population declines and increases in each ESU. (See Chapters 5 and 7)
8. As much as possible, integrate federal, state, tribal, local, corporate, and nongovernmental activities and projects that are designed to recover salmon populations and the habitats upon which they depend. (This is the goal of the Tri-County approach described in this Chapter)
9. Utilize an adaptive management approach that actively shapes management actions to generate needed information. (see Chapters 2 and 7)

Relationship to Statewide Strategy

In January, 1999, the State of Washington issued its draft statewide strategy to recover salmon, “Extinction Is Not An Option.” Highlights of the strategy are discussed here.

The state strategy recognizes that salmonid conservation issues ultimately need to be addressed at the ESU (evolutionarily significant unit) level, recognizing that the Tri-County is a sub-regional effort of the ESU. (ESUs are defined by NMFS policy to be equivalent to “distinct population segments,” which are treated as “species” under the ESA.)

The state strategy addresses the “4 H’s” – Habitat, Harvest, Hydropower and Hatcheries. The strategy recognizes that local governments have the primary role and accountability for urban and rural habitat issues, while tribal, state and federal governments have the greatest responsibility for harvest, hatchery and hydropower issues. King County’s authorities for land use and responsibility for habitat derive in large part from the state under the Growth Management Act and other statutes.

Tribal treaty rights are fundamental to the effort in a variety of ways. Although tribal treaty rights are a federal obligation, the state and tribes are “co-managers” of harvest issues. Within King County, there are treaty fishing grounds and significant tribal land holdings, and the major rivers in King County support tribal fisheries.

Joint Efforts with Tribes

Both the state and King County recognize that the long-term effort to conserve and recover salmon cannot be successful without the involvement of the tribes, who are affected by all of the actions that will be taken.

Even though the paramount responsibility for tribal relationships rests with the federal government, King County, as a political subdivision of the state, has been delegated authorities for portions of land and water resources that are inextricably linked with the tribes’ needs, treaty rights and reserved rights, as described above.

King County recognizes the tribes’ rights of co-management of the salmon resources itself and knows that this piece of the overall effort will be critical to salmon recovery. And with the rivers and habitats that support the essence of tribal life being a major stewardship responsibility of the state and local, general purpose governments, King County and its Tri-County partners have reached out to the tribes for their advice, counsel, assistance, expertise and knowledge. The tribes are joining in the Tri-County partnership, when appropriate, in the comprehensive effort to conserve and recover salmon.

Conclusion

The proposal we are making is substantive and will lead to conservation of the Puget Sound chinook salmon. By advocating for a complex 4(d) rule we are not requesting a delay in the listing, and we are not advocating for a delay in the promulgation of a final 4(d) rule. Instead, we are proposing the

collaborative development of a 4(d) rule that recognizes the challenge of recovering salmon in a complex urban landscape and provides our region the flexibility to meet that challenge.

The chinook listing is anticipated to be followed in June by the United States Fish and Wildlife Service (USFWS) listing of the bull trout, and within a year or two, potentially by listings of the kokanee and coho salmon. Multiple listings will require coordinated rule making by NMFS and USFWS, under the ESA, to ensure consistency and a multi-species or ecosystem approach to recovery.

Thus, inherent in this proposal is a recognition that this is a long-term endeavor, one that will never really be “finished.” Our ultimate challenge will be to successfully alter past behaviors that impede our ability to long-term recovery of our salmon resources.

We believe that our proposal for a “complex” 4(d) rule is the only approach that will accomplish the goal of multi-species conservation plans to recover salmonids and bull trout in the Puget Sound region.

“...like the problem itself, solutions will be complex and often hard to agree on; to be successful they will need to be based on scientific information, including information provided by social and economic sciences. In addition, to be successful, consensus will be needed about the size of the investments to be made in solving the problem and how the costs should be allocated. This means that solutions will have to be regionally based, just as the salmon problem has regional variations.”

— excerpted from the Executive Summary of
“Upstream: Salmon and Society in the Pacific Northwest,”
National Research Council, 1996