MEMORANDUM

TO: Members of the Joint Legislative Audit & Review Committee
FROM: Linda Byers, JLARC Staff
RE: Status Report on Salmon Recovery Efforts in Washington

Washington has engaged in a two-pronged effort to deal with listings of salmon and steelhead under the federal Endangered Species Act. **One prong has been to undertake habitat projects and other direct actions to aid fish recovery.** The Legislature has received regular reports on this course of action, most frequently from the state’s Salmon Recovery Funding Board (SRFB), the Governor’s Salmon Recovery Office (GSRO), and the state Department of Fish & Wildlife. Fish & Wildlife has also been the major source of information for the Legislature on salmon and steelhead run sizes and harvest rates.

The state’s second prong of response to the ESA listings has been an extensive effort to develop regional salmon recovery plans. This effort is now nearing completion, and the state is currently in transition between this major planning effort and moving into implementation of these regional plans.

JLARC members called for this status report. JLARC was motivated in part by the significant financial investment the Legislature has made in salmon recovery. In a December 2004 briefing paper, House staff estimated that the Legislature has appropriated some $770 million in capital and operating budgets for direct salmon recovery efforts between the 1997-99 and 2003-05 Biennia, from a variety of funds. Legislators want to know what a state salmon recovery effort looks like and what additional financial investment is likely to be requested from the state for salmon recovery.

**Status Report In Summary**

- With regard to salmon and steelhead recovery, Washington is in transition **right now** between completing the drafting of regional recovery plans and moving into the implementation of those plans. Section 4 of this status report provides more detail on each of the six regional plans.

- Quite a bit of additional information will be available for legislators and staff by the end of 2005 or the beginning of 2006. Topics include recovery planning, plan implementation, recovery plan funding, and recovery monitoring. For more detail, see Figure 4 at page 12.
The Legislature will be faced with decisions about salmon recovery in the upcoming legislative session and in many sessions to come. Pending issues include the definition of “salmon,” recovery funding, and salmon recovery organizational structure.

Efforts are underway at a state and multi-state level to identify an adequate and consistent approach to monitoring and evaluating salmon recovery efforts. However, these efforts have not yet produced definitive conclusions, even as the state moves into recovery plan implementation. The Legislature may wish to keep tabs on the state’s progress in identifying and implementing an appropriate monitoring and evaluation program for salmon recovery, with its attendant price tag.

With the completion of these regional salmon recovery plans, there is more contextual information available to legislators and staff than has ever been available before. State agencies and other plan implementers may be more likely to report this contextual information if legislators and staff make an early habit of requesting and using it.

The remainder of this status report is organized into four sections:

- **History**: An abbreviated history of salmon listings and the state’s response;
- **Current Status**: A snapshot of where we are now;
- **What’s Next**: This includes issues that will likely be before the Legislature; and
- **Regional Recovery Plan Profiles**: One for each of the six regional planning efforts.

The status report also includes three appendices as attachments:

- Appendix 1 is the Status Report Scope and Objectives;
- Appendix 2 describes salmon recovery entities and terminology; and
- Appendix 3 illustrates the current definition of “salmon” in the state’s salmon recovery laws.

**History: An Abbreviated History of Salmon Listings and the State’s Response**

The Fish Are Listed

In 1991, the National Marine Fisheries Service (NMFS) listed Snake River sockeye salmon as endangered under the federal Endangered Species Act (ESA). Between 1992 and 1999, NMFS listed 12 salmon or steelhead species in Washington as either threatened or endangered under the ESA. During the course of assembling this status report, NMFS listed one additional species (Lower Columbia coho) as threatened. NMFS listed salmon and steelhead in other Northwest states as well.

The ESA directs the listing agency, in this case NMFS, to develop a recovery plan for the listed species. As part of its recovery planning efforts, NMFS has designated “recovery domains” in the Pacific Northwest. These are “geographically-based areas for preparing multi-species recovery plans” in Washington, Oregon, and Idaho.¹ Figure 1 on the following page shows these recovery domains. Note that some are contained within Washington’s borders, and others are not.

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A recovery plan for each domain is to address all “Evolutionarily Significant Units” (ESUs) within the geographic area. An ESU is a population of fish or a group of populations that is reproductively isolated from other populations and that contributes substantially to the ecological/genetic diversity of the species. For example on Figure 1, the area identified as Puget Sound shows the selected boundaries for the fish that make up the ESU for Puget Sound chinook, which in turn is made up of 22 independent chinook populations.

**Legislative Response to the Listings: “Let Washington Take the Lead”**

In 1998, the Legislature passed a salmon recovery planning act, staking out the following position: “The Legislature finds that it is in the interest of the citizens of the state of Washington for the state to retain primary responsibility for managing the natural resources of the state, rather than abdicate those responsibilities to the federal government.” NMFS has been amenable to the state’s desire to take the lead in developing salmon recovery plans for the portions of the recovery domains in Washington.

The 1998 legislation introduced the concept of Lead Entities for salmon habitat restoration projects. Lead Entities are volunteer groups who work in their watersheds to identify what factors are limiting salmon production and what habitat projects will address those limiting factors. Lead Entities have been the cornerstone for the state’s “first prong” response to the fish listings. The 1998 legislation also created the Governor’s Salmon Recovery Office.

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3 Section 1, ESHB 2496. The bill is now codified in Chapter 77.85 RCW.
(GSRO) “to coordinate state strategy to allow for salmon recovery to healthy sustainable population levels with productive commercial and recreational fisheries.” The 1998 bill included a rather broad definition of “salmon” (see Appendix 3). At the time, there was a perception that salmon habitat issues could be addressed sufficiently through habitat restoration projects.

**Regions as the Basis for Salmon Recovery Planning**

In 1999, the Governor’s Salmon Recovery Office released *The Statewide Strategy to Recover Salmon: Extinction Is Not an Option*. In this document, the GSRO identified specific regions within the state and introduced the idea of using these regions for salmon recovery planning. Figure 2 shows the state’s salmon recovery regions. They are similar to the boundaries of the NMFS recovery domains in Washington. This GSRO concept took root, and these state-designated recovery regions are indeed now the basis for salmon recovery planning efforts in the state.

![Figure 2 – State-Designated Salmon Recovery Regions](image)

With recovery regions identified, the GSRO needed planners to work within them:

- Two of the regional planning groups have been established in statute (the Lower Columbia Fish Recovery Board and the Hood Canal Coordinating Council for chum salmon).
- The Puget Sound Shared Strategy group created itself as a non-profit corporation to address recovery planning for chinook in Puget Sound, sharing part of the Puget Sound domain with the Hood Canal group.
- In other areas, the GSRO and the state Department of Fish & Wildlife encouraged groups to take on the task of planning. They found planners for the Mid Columbia, Upper Columbia, and Snake River regions.
- They have not yet found a group for the Coastal region, where Lake Ozette sockeye is a listed species. 

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4 Section 5 in ESHB 2496; now codified at RCW 77.85.030. The goal of recovery to harvestable levels has been an issue of some debate in the Upper Columbia salmon recovery planning region.

5 The Northeast region shown on the map is a planning area for the recovery of another listed species (bull trout); salmon and steelhead have not had access to this region since the construction of the Grand Coulee Dam.
Fish & Wildlife created a model outline of elements to be included in a recovery plan, and NMFS designated Technical Recovery Teams to aid the planning effort. Six regional planning groups embarked on this effort to draft salmon recovery plans for their respective regions.

As part of its continuing involvement, the Legislature in 1999 created the Salmon Recovery Funding Board. The Board has been instrumental in funding habitat projects while this regional planning effort has been underway. The Board has also provided funding for the regional planning efforts.

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ESA – Endangered Species Act
NMFS – National Marine Fisheries Service
ESU – Evolutionarily Significant Units
(a “species” under the ESA)
GSRO – Governor’s Salmon Recovery Office
SRFB – Salmon Recovery Funding Board
For more on this and other terminology, see Appendix 2.

Current Status: Where Are We Now?

Filing Regional Salmon Recovery Plans with NMFS

The Lower Columbia Fish Recovery Board completed a draft regional salmon recovery plan and submitted it to NMFS in December 2004. The other five groups completed drafts of regional recovery plans and submitted them to the GSRO in time to meet a statutory deadline of July 1, 2005. These plans are currently undergoing additional review and revision.

Once a draft recovery plan is submitted to NMFS, that agency reviews and provides comment. NMFS may also draft its own supplement to the draft plan. The next step is for NMFS to publish the draft plan and any supplement in the Federal Register. This publication triggers a 60-day comment period. NMFS and the planning group would then make any needed adjustments to the plan based on the comments received.

The presumed next step would be for NMFS to adopt the regional plan as its recovery plan. This may happen in the three recovery planning areas where the ESU area is contained within the borders of Washington. However, this is not the case for the Lower Columbia, Mid Columbia, and Snake River regions. As Figure 1 illustrated, the complete ESU areas for these three regions include parts of other Northwest states. For the Lower Columbia, NMFS has indicated its intent to designate the area covered by the regional plan as a “management unit” within the ESU and to move forward with the plan's implementation as an “interim regional recovery plan.” NMFS may be able to make the same arrangement for the Mid Columbia and Snake River regions. GSRO staff note that approving a recovery plan for a portion of an ESU area before the whole ESU plan is complete is paving new ground for NMFS. There is still uncertainty about exactly how this process will proceed.

Figure 3 on the following page provides a snapshot of where the six regional planning efforts are in the NMFS review process as of August 15, 2005.

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6 2ES2SSB 5595; also now codified as part of Chapter 77.85 RCW.
### Figure 3 - Status of Draft Regional Salmon Recovery Plans in NMFS Review Process

**Snapshot of Status as of August 15, 2005**

**Steps in the NMFS Process for Reviewing Draft Regional Salmon Recovery Plans**

<table>
<thead>
<tr>
<th>Recovery Region/Planner</th>
<th>Approx Size of Planning Area</th>
<th>Status in NMFS Process</th>
<th>Timeframe for Regional Recovery Plan</th>
<th>Planners' Early Estimate of Plan Implementation Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Columbia/Lower Columbia Fish Recovery Board</td>
<td>5,700 square miles</td>
<td>Plan published in the <em>Federal Register</em>; comment period ended June 20. Board and NMFS are working on final version.</td>
<td>25 years</td>
<td>Not yet estimated; parties are currently preparing estimate of implementation costs for the next six years.</td>
</tr>
<tr>
<td>Mid-Columbia/Yakima Subbasin Fish and Wildlife Planning Board</td>
<td>6,100 square miles</td>
<td>Submit to NMFS by October 17.</td>
<td>10 to 30 years</td>
<td>$160 million</td>
</tr>
<tr>
<td>Upper Columbia/Upper Columbia Salmon Recovery Board</td>
<td>6,000 square miles</td>
<td>Unclear when Board may submit plan to NMFS; Board has not yet adopted a regional plan.</td>
<td>10 to 30 years</td>
<td>$95 million</td>
</tr>
<tr>
<td>Snake River/Snake River Salmon Recovery Board</td>
<td>4,400 square miles</td>
<td>Submit to NMFS by October 17.</td>
<td>15 years</td>
<td>$105.5 million</td>
</tr>
<tr>
<td>Puget Sound/Shared Strategy for Puget Sound</td>
<td>13,800 square miles land/2,800 water</td>
<td>Submitted plan to NMFS the end of June; anticipate publication in <em>Federal Register</em> in October.</td>
<td>50 years; emphasis in plan is on first 10 years</td>
<td>$1.422 billion for first 10 years</td>
</tr>
<tr>
<td>Hood Canal/Hood Canal Coordinating Council</td>
<td>1,400 square miles</td>
<td>Submit to NMFS by October 17.</td>
<td>Not specified; emphasis in plan is on first 12 years</td>
<td>$136.1 million for first 10 years</td>
</tr>
<tr>
<td>Washington Coastal</td>
<td></td>
<td>No regional recovery planning group in area; NMFS may draft recovery plan for Lake Ozette sockeye.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast Washington</td>
<td></td>
<td>No listed salmon or steelhead in the area; this is a recovery planning area for listed bull trout.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3 also provides the planners’ timeframe for their regional recovery plans and the planners’ early estimates of the costs to implement these plans. Regional recovery plan timeframes range between 10 and 50 years, and early estimates of costs indicate pending requests for millions of dollars, in some combination of local, state, and federal funds. Section 4 of this report contains a more detailed profile about each of the six regional recovery plans.

Recovery Plans Include Land Use Provisions

In interviews conducted for this report, planners made a common observation about the habitat sections of their plans. As mentioned earlier, when the Legislature created the process to fund habitat projects in 1998, the thinking at the time was that habitat issues could be addressed sufficiently through restoration projects. Most of the planning groups found this was not the case. While the plans count on habitat projects to play an important role in salmon habitat improvement, the planners found that local land use regulations are often also necessary. The draft recovery plans often propose the use of local authority such as adoption of critical areas and shorelines regulations to help address salmon habitat needs.

Resolution Still Needed On Appropriate/Consistent Monitoring

NMFS has indicated the need for recovery plans to include a monitoring and evaluation program to gauge the effectiveness of the actions and progress toward recovery. The Legislature has also weighed in on the importance of salmon recovery monitoring. Each of the draft regional recovery plans contains sections on monitoring. Depending on the specifications, monitoring and evaluation can increase a recovery plan’s costs considerably. One challenge is to identify the amount of monitoring that is necessary for compliance with the ESA and any other monitoring program goals. Another concern is measurement consistency across recovery regions. There needs to be agreement on how to measure and monitor plan implementation and species recovery so that the information gathered from each region can be aggregated to the state and multi-state levels. The Hood Canal group’s Executive Director describes the situation with regard to monitoring as follows: “Everyone wants to play ball, but some of us are playing soccer; others, lacrosse; and others, football. We need the state to be the referee so that we can all follow the same rules.”

Efforts Are Underway To Address Adequacy and Consistency . . .

There are efforts underway to help address these issues. Within Washington, then-Governor Locke created by executive order the Governor’s Forum on Monitoring Salmon Recovery and Watershed Health. The Forum is co-

7 There is little detail available now on these cost estimates, nor do we know if the estimates were made on a comparable basis. The figures are provided here to give members a ballpark estimate of implementation costs as envisioned by the planners. Estimates may include assumptions of federal, state, and local fund sources. As part of their transition activities, the planners are working on more detailed plans for the 18-month period beginning in January 2006, including more refined cost estimates, identification of who would be responsible for which actions, and in what timeframe. These more detailed implementation plans are expected by the end of 2005.
9 See SSB 5637 from the 2001 Session, with its connection to JLARC’s Investing in the Environment report [Report 01-01, January 2001].
chaired by the Chair of the Salmon Recovery Funding Board and the Director of the Department of Fish & Wildlife. Eleven state agencies are represented on the Forum, and local and federal agencies have been invited to participate as well. The Forum has made a commitment that state government operations be conducted in a manner that improves coordination of the state’s monitoring efforts associated with salmon recovery and watershed health.

For the greater Pacific Northwest, state agencies from Washington, Oregon, and California have voluntarily joined forces with federal agencies, tribes, and multi-state entities to form the Pacific Northwest Aquatic Monitoring Partnership. The purpose of this partnership is:

To provide a forum for coordinating state, federal, and tribal aquatic habitat and salmonid monitoring programs. Improved communication, shared resources and data, and compatible monitoring efforts provide increased scientific credibility, cost-effective use of limited funds and greater accountability to stakeholders.

There is cross-over between the Governor’s monitoring forum and the Pacific Northwest monitoring group.

. . . But Work Remains To Be Done

While these two forums on monitoring show a move in the right direction, these efforts have not yet reached conclusions on what constitutes an appropriate salmon recovery monitoring and evaluation program. The regional planners express some frustration that we are now moving into the recovery plan implementation phase without clear direction on exactly what monitoring and evaluation work needs to be done, who will be responsible to do the work, and how information will be collected and reported.

Additionally, NMFS is supposed to provide a guidance document on its monitoring expectations. However, this NMFS guidance document on monitoring is not yet available. The Legislature may wish to keep track to see how these monitoring issues are resolved and what the implications are for recovery plan costs.

Another ESA Listed Fish Species in Washington: Bull Trout

Bull trout populations in Washington are listed as threatened under the Endangered Species Act. There are bull trout in each of the regional planning areas discussed in this status report. Five of the draft plans include detailed information about that region’s bull trout populations. (Bull trout in Puget Sound are included in the Shared Strategy plan and are not a part of the Hood Canal group’s plan.)

Bull trout recovery planning falls under the jurisdiction of the U.S. Fish & Wildlife Service rather than the National Marine Fisheries Service. In April 2004, the U.S. Fish & Wildlife Service announced that it is conducting a status review of bull trout. At the completion of this review, the agency will recommend whether to retain the “threatened” classification, change the classification to “endangered,” or de-list the species. The outcome of the bull trout status review is pending.

Note that bull trout are “salmon” under the state’s current definition of the term (see Appendix 2).

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10 For additional information on the Governor’s Forum on Monitoring Salmon Recovery and Watershed Health, see http://www.iac.wa.gov/monitoring/default.htm (as of August 15, 2005).

11 For additional information on the Pacific Northwest Aquatic Monitoring Partnership, see http://www.reo.gov/PNAMP/ (as of August 15, 2005).
What's Next?

For Recovery Plans

Over the next few months, Washington’s regional salmon recovery planning groups will be revising their plans and submitting them to NMFS for review as described in Figure 3 above and in more detail in the profiles in Section 4.

Additionally, NMFS announced in a July 2005 Federal Register notice that the agency is working with state, federal, tribal, and local entities in Washington, Oregon, and Idaho to produce draft recovery plans for all the Northwest listed salmon and steelhead ESUs by December 2005. In Washington, this would mean NMFS drafting recovery plans for areas or species not included in Washington’s regional recovery planning efforts. (Currently, there is no Washington-drafted plan for the recovery of Lake Ozette sockeye on the coast, nor is there a plan covering the part of Washington excluded from the Mid Columbia plan [mostly Klickitat County]. The Snake River plan currently does not cover Fall chinook in that recovery area, nor does it cover the “Hs” other than habitat for any of the listed fish.) The NMFS-drafted plans would also include the portions of the ESU areas that cross state boundaries in the Lower Columbia, the Mid Columbia, and the Snake River recovery domains. The Legislature should know by early 2006 the extent to which NMFS was successful in this undertaking.

What's Next For the Legislature

The Legislature will be faced with a number of salmon recovery issues in the coming session and in many sessions to come. Legislators are likely to be asked about:

- Whether to retain the broad definition of “salmon” in the salmon recovery statutes;
- Their preference for a state and regional salmon recovery organizational structure as the state makes the transition from a two-pronged response to the ESA listings (habitat restoration/other direct actions plus regional planning) to a more singular approach of implementing regional salmon recovery plans; and
- Salmon recovery funding.

The Definition of “Salmon”

Under the salmon recovery statutes, current law defines “salmon” to include “all species of the family Salmonidae which are capable of self-sustaining, natural production.” As Appendix 3 illustrates, this definition includes a number of fish species that one does not typically think of as salmon or steelhead. The Legislature may wish to consider whether it wants to retain this broad definition.

Organizational Structure

With regard to the state’s salmon recovery organizational structure, this transition period offers the Legislature an opportunity to step back and reassess what structure is most appropriate as the state moves into plan implementation. The current organization of Regional Fisheries Enhancement Groups, Lead Entities, the GSRO, the SRFB, etc., was created sequentially over a period of years (more detail in Appendix 2). The Legislature may wish to consider what the best organizational structure is for the state as it moves into the salmon recovery plan implementation phase.

For example, in three of the recovery regions (Hood Canal, Lower Columbia, and Snake River), the regional planning body is the Lead Entity for applying to the Salmon Recovery Funding Board for funds for habitat projects.
These groups are in a position to adopt the perspective of a recovery region as a whole when proposing projects. There is one Lead Entity in the part of the Mid Columbia covered by a regional salmon recovery plan. However, the Puget Sound and Upper Columbia recovery regions have multiple Lead Entities. The Legislature and the SRFB may want to consider whether they want proposals for habitat projects and other actions from these areas to reflect the priorities within individual Lead Entity planning areas or that reflect the priorities of the regional recovery area as a whole.

One of the major prompters of this legislative discussion on salmon recovery organizational structure will be the Legislature’s decision on the future of the Governor’s Salmon Recovery Office. The GSRO is scheduled to terminate in June 2007. Beyond its function of submitting the regional recovery plans to NMFS for adoption, the GSRO may assist people and agencies as they seek assurances from NMFS that they won't be found to be in violation of the ESA if they are acting according to the regional recovery plans, and the GSRO acts as a liaison to local governments, the state Congressional delegation, Congress, tribes, and the federal executive branch agencies for issues related to the state's salmon recovery plans. GSRO is also to assemble the Governor’s periodic reports to the Legislature on implementation of the state’s salmon recovery strategy. Since the GSRO is set to terminate, the state’s organizational structure for salmon recovery will change if the Legislature takes no action.

Funding Requests

The Legislature will also be faced with a variety of funding requests related to salmon recovery. These will include funding requests for projects pursuant to regional recovery plans and for state agency action plans. The Legislature will have to choose how to allocate funds among the different recovery strategies within a region and how to allocate funds among recovery regions. More detailed information about regional salmon recovery proposals for the 18-month period beginning January 2006 should be available to legislators and staff by the end of 2005.

Another funding challenge facing the Legislature and the Salmon Recovery Funding Board will be to find the appropriate balance between allocating funds to recover listed fish and allocating funds to prevent fish from being listed. There are salmon and steelhead populations within the recovery regions that are not listed under the ESA, and there are populations outside of regional recovery areas (such as on the coast) that Lead Entities and Regional Fisheries Enhancement Groups hope to keep from being listed. The Legislature and the SRFB will have to strike some correct balance.

A third funding issue relates to the earlier discussion on reassessing the state’s salmon recovery organizational structure. If the Legislature rearranges this structure as the state moves into plan implementation, the state will also need to determine how to pay for the new structure.

Contextual Information May Help Legislators and Legislative Staff

In numerous legislative briefings on the “first prong” of the state’s response to the ESA listings, legislators frequently asked questions to try to get a sense of how proposals before them fit into the broader picture of salmon recovery. For example, when presented with requests for funding for changes to hatchery operations for compliance with the ESA, legislators would ask questions about how many hatcheries in total needed changes, how many had already been changed, and why it was more important to change the proposed set of hatcheries next rather than some other set. Similarly for habitat project proposals, legislators would ask about what had already been accomplished and why the proposed set of habitat projects was more important to implement next.

12 GSRO duties are described in RCW 77.85.030 as amended by SSB 5610 from the 2005 Legislative Session.
rather than some other mix of habitat projects. Legislators and staff were both seeking information to help put requests into context with recovery.

With the crafting of the regional recovery plans and the more detailed 18-month implementation plans available by the end of the year, more contextual information will be available to legislators and legislative staff than has even been available before. **State agencies and other recovery plan implementers may be more likely to regularly report this contextual information if legislators and staff make an early habit of requesting and using it.**

**Additional Information Available Soon**

Additional information about salmon recovery planning, plan implementation, funding, and monitoring will be available to legislators and other decision makers soon, much of it by December 2005 or January 2006. Figure 4 on the following page provides a list of some of the additional information legislators and staff can anticipate in the near future to aid in their salmon deliberations.

**Other Emerging Salmon Issues**

A number of other events have recently occurred or are occurring that may have an impact on Endangered Species Act salmon recovery planning and plan implementation in Washington, though the extent of that impact is unclear at this point. These events include:

- In May 2005, a U.S. District Court found that the “biological opinion” by NMFS and other federal agencies on the operation of the Federal Columbia River Power System (federal dams on the Columbia and Snake Rivers) was legally flawed. The biological opinion addresses dam operations such as spilling water to transport fish, and it also includes measures for improving Columbia River spawning, rearing, and estuary habitat. The parties are to reconvene with the judge in September.

- In June 2005, NMFS issued a new policy on how hatchery fish will be accounted for in deciding whether a salmon or steelhead population is threatened or endangered under the ESA. This new policy applies to hatchery fish within areas covered by the draft regional recovery plans. The new hatchery policy stems from litigation involving Oregon Coast listed fish populations.

- In August 2005, NMFS released its critical habitat designations for 19 salmon and steelhead ESUs in the Pacific Northwest and California. Critical habitat areas are those that contain physical or biological features essential to species conservation and that may require special management considerations or protection. These critical habitat designations have been the subject of two previous legal challenges.

Another “emerging issue” is the clarification of exactly how NMFS will make use of Washington’s regional salmon recovery plans. This is new terrain for NMFS as well as for Washington.
Information About Salmon Recovery Plans/Plan Implementation

- The versions of the six regional salmon recovery plans as actually submitted to NMFS.
- Any changes to the six regional plans as they have moved through the NMFS review process.
- Any supplements that NMFS drafts for the regional plans (NMFS supplement to Lower Columbia Plan is already available).
- Status on plan publication in Federal Register and NMFS adoption actions.
- Versions of salmon recovery plans drafted by NMFS for areas/listed species that are not covered by the six regional recovery plans.
- A report from each of the regional recovery planning groups on its proposal for the roles, functions, and structure for implementing its recovery plan. This includes discussion on the relationships to others engaged in salmon recovery within the region such as Lead Entities and RFEGs.
- A report from each of the regional recovery planning groups on an 18-month schedule and cost estimates for implementing actions contained in its proposed recovery plan. This includes a list of actions each group agrees will receive priority attention for implementation in the 18 months beginning January 2006. This also includes a table with top actions that will be undertaken, identification of who is to accomplish the action, a cost estimate, and an estimated timeframe.
- Proposals for state agency actions as part of salmon recovery plan implementation.
- A guidance document from the Northwest Power and Conservation Council on how to structure its fish and wildlife project selection cycle to implement the priorities of subbasin plans.

Information About Salmon Recovery Costs and Funding

- Cost component of the reports noted above for each recovery region’s 18-month plan of action and for early state agency proposals.
- Outcome of the 2005 round of Salmon Recovery Funding Board funding allocations.
- Level of salmon recovery funding available to Washington from the federal Pacific Coastal Salmon Recovery Fund.
- Anticipated level of Bonneville Power Administration funding to support the Northwest Power and Conservation Council’s Fish & Wildlife Program, including implementation of subbasin plans.

Information About Salmon Recovery Monitoring

- Monitoring portion of each of the six regional recovery plans.
- GSRO summary matrix of the monitoring component of each of these plans.
- Governor’s Forum on Monitoring report on its activities and recommendations.
- Recommendations from natural resource agencies and OFM to improve or eliminate monitoring activities related to salmon recovery and watershed health. The Governor’s Forum is coordinating this effort for the agencies. A status report is due March 2006; a final report by September 2006.
- May have guidance document from NMFS about its monitoring expectations (specific time of availability unknown).
Regional Salmon Recovery Plan Profiles

What follows are profiles for each of the six regional recovery plans. Each profile uses the following organization:

- Description of the region
- The listed salmon and steelhead addressed by the plan
- The planning board
- Staffing for the planning effort
- Information about the plan itself
  - The plan's goal or vision
  - Plan coverage
  - Numerical recovery targets
  - Plan approach to recovery
  - Plan timeframe for recovery
  - Planners’ early estimate of costs
- Connections to other related planning efforts
  - Subbasin planning
  - Watershed planning
  - Lead Entities
- Additional comments
- Plan status and next steps
- Websites for additional information

For more on the acronyms and other terminology used in these profiles, see Appendix 2.
The Region: Area Size: 5,700 square miles
Area Population Estimate: 464,000
All of Clark, Cowlitz, Skamania, and Wahkiakum Counties, and portions of Lewis and Pacific Counties

The Fish: Fall Chinook Salmon – 15 populations
Spring Chinook Salmon – 7 populations
Chum Salmon – 10 populations
Coho Salmon – 18 populations
Winter Steelhead – 17 populations
Summer Steelhead – 5 populations

The Planners: Lower Columbia Fish Recovery Board. The composition of the Board is prescribed by statute (RCW 77.85.200, enacted in 1998). The statute calls for one county commissioner or designee from Clark, Cowlitz, Lewis, Skamania, and Wahkiakum Counties; a member representing the cities within the planning area; a representative of the Cowlitz Tribe; a state legislator from one of the legislative districts in the planning area; one representative of hydro utility interests; one representative of the environmental community; and five citizen representatives, each appointed by one of the five counties. The citizen representatives include at least one representative of private property interests.

Planning Staff: The Board has its own centralized staff, including an Executive Director and four additional staff members. Statute also directs the Board to appoint and consult a technical advisory committee.

The Plan

The Goal/Vision: “It is the vision of this plan to:
- Recover Washington lower Columbia salmon, steelhead, and bull trout to healthy, harvestable levels that will sustain productive sport, commercial, and tribal fisheries through the restoration and protection of the ecosystems upon which they depend and the implementation of supportive hatchery and harvest practices; and
• Sustain and enhance the health of other native fish and wildlife species in the lower Columbia through the protection of the ecosystems upon which they depend, the control of non-native species, and the restoration of balanced predator/prey relationships."

Plan Coverage:

Entire ESU Area? No; the planning area excludes the White Salmon River area in Klickitat County in Washington, and then much of the ESU area is in Oregon. In an April 2005 publication, NMFS indicates its intent to designate the area covered by this plan as a “management unit” within the ESU and to move forward with this plan's implementation as an “interim regional recovery plan.”

All listed salmon populations? Yes, but there is one complication here. The Board’s plan includes much, but not all information, about coho populations in the planning area, which were a candidate species for ESA listing at the time the plan was assembled. In its April 2005 publication, NMFS indicated it was not proposing this plan as an interim regional recovery plan for lower Columbia coho at that time. After the plan was published in the Federal Register, NMFS listed Lower Columbia coho as threatened. The Board will be developing a supplement to the plan for coho by the end of 2005.

Numerical Recovery Targets:

See the tables on the following two pages for information on targets for fish populations in Washington. The Board’s plan explains that the biological goals are based on, and explicitly incorporate, the work of the NMFS Lower Columbia/Willamette Technical Recovery Team. This includes the identification of three sub-regions or strata within the ESU on both the Oregon and Washington sides (Coast, Cascade, and Gorge), and the need for at least two populations within each stratum to be at high or better viability. The tables also portray the plan's intent for individual fish populations to contribute to recovery in one of three roles: (1) “primary” – restored to a “high” or “high+” viability level; (2) “contributing”—where some restoration is needed to achieve a stratum-wide average of medium viability; and (3) “stabilizing”—where populations would be maintained at current levels, likely of low viability.

Plan Approach: The plan identifies six salmon limiting factor or threat categories: stream habitats, estuary and mainstem habitats, hydropower, harvest, hatcheries, and ecological interactions. An example of the latter category is the threat to salmon from predation. A working hypothesis of the plan is that recovery cannot be achieved based solely on improvements for any one threat; a plan strategy is to “prescribe improvements in each factor/threat category in proportion to its magnitude of contribution to salmon declines.” Additional details for specific areas are included in the individual subbasin plans.

Plan Timeframe: 25 years

Planners’ Early Estimate of Costs: Not yet included. The plan indicates that the various parties with implementation responsibilities are to estimate the incremental costs associated with implementation of their recovery actions, beginning with a six-year estimate.
<table>
<thead>
<tr>
<th>Strata (Sub-region)</th>
<th>Washington Populations</th>
<th>Chinook</th>
<th></th>
<th></th>
<th></th>
<th>Chum</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Role in Recovery</td>
<td>Abundance</td>
<td>Needed Improvement in Productivity</td>
<td>Role in Recovery</td>
<td>Abundance</td>
<td>Needed Improvement in Productivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Current</td>
<td>Goal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coast</td>
<td>Grays/Chinook</td>
<td>Primary</td>
<td>73</td>
<td>1,400</td>
<td>30%</td>
<td>Primary</td>
<td>960</td>
<td>6,000</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elochoman/Skamakowa</td>
<td>Primary</td>
<td>140</td>
<td>1,400</td>
<td>30%</td>
<td>Primary</td>
<td>&lt;150</td>
<td>1,100</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mill/Germany/Abernathy</td>
<td>Contributing</td>
<td>250</td>
<td>1,100</td>
<td>20%</td>
<td>Primary</td>
<td>&lt;150</td>
<td>1,100</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Cascade</td>
<td>Lower Cowlitz</td>
<td>Contributing</td>
<td>602</td>
<td>2,300</td>
<td>20%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Cowlitz -- Fall</td>
<td>Stabilizing</td>
<td>0</td>
<td>na</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-- Spring</td>
<td>Primary</td>
<td>365</td>
<td>5,400</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Toutle -- Fall</td>
<td>Stabilizing</td>
<td>1,000</td>
<td>1,000</td>
<td>0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-- Spring</td>
<td>Contributing</td>
<td>150</td>
<td>800</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coweeman</td>
<td>Primary</td>
<td>425</td>
<td>3,600</td>
<td>200%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kalama -- Fall</td>
<td>Primary</td>
<td>1,192</td>
<td>1,300</td>
<td>30%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-- Spring</td>
<td>Primary</td>
<td>105</td>
<td>1,400</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lewis/Salmon</td>
<td>Primary</td>
<td>235</td>
<td>2,900</td>
<td>230%</td>
<td>Primary</td>
<td>&lt;150</td>
<td>1,100</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lewis NFork -- Late Fall</td>
<td>Primary</td>
<td>6,493</td>
<td>11,600</td>
<td>110%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-- Spring</td>
<td>Primary</td>
<td>300</td>
<td>2,200</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Washougal</td>
<td>Primary</td>
<td>1,225</td>
<td>5,800</td>
<td>30%</td>
<td>Primary</td>
<td>&lt;150</td>
<td>5,200</td>
<td>350%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cispus</td>
<td>Primary</td>
<td>150</td>
<td>1,800</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tilton</td>
<td>Stabilizing</td>
<td>150</td>
<td>150</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gorge</td>
<td>White Salmon</td>
<td>Contributing</td>
<td>0</td>
<td>400</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lower Gorge</td>
<td>Primary</td>
<td>542</td>
<td>2,800</td>
<td>90%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upper Gorge</td>
<td>Contributing</td>
<td>&lt;100</td>
<td>600</td>
<td>960%</td>
<td></td>
<td></td>
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## Lower Columbia Salmon Recovery Goals – Steelhead and Coho

<table>
<thead>
<tr>
<th>Strata (Sub-Region)</th>
<th>Washington Populations</th>
<th>Steelhead</th>
<th>Coho</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>Role in Recovery</td>
<td>Role in Recovery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Current</td>
<td>Goal</td>
</tr>
<tr>
<td>Coast</td>
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</tr>
<tr>
<td>Coast</td>
<td>Grays/Chinook</td>
<td>Primary</td>
<td>150</td>
</tr>
<tr>
<td>Coast</td>
<td>Elochoman/Skamakowa</td>
<td>Contributing</td>
<td>150</td>
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<tr>
<td>Coast</td>
<td>Mill/Germany/Abernathy</td>
<td>Primary</td>
<td>150</td>
</tr>
<tr>
<td>Cascade</td>
<td>Lower Cowlitz</td>
<td>Contributing</td>
<td>Na</td>
</tr>
<tr>
<td>Cascade</td>
<td>Coweeman</td>
<td>Primary</td>
<td>228</td>
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<tr>
<td>Cascade</td>
<td>Toutle – S Fork</td>
<td>Primary</td>
<td>453</td>
</tr>
<tr>
<td>Cascade</td>
<td>Toutle – N Fork</td>
<td>Primary</td>
<td>176</td>
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<td>Upper Cowlitz</td>
<td>Contributing</td>
<td>0</td>
</tr>
<tr>
<td>Cascade</td>
<td>Cispus</td>
<td>Contributing</td>
<td>0</td>
</tr>
<tr>
<td>Cascade</td>
<td>Tilton</td>
<td>Contributing</td>
<td>0</td>
</tr>
<tr>
<td>Cascade</td>
<td>Kalama -- Winter</td>
<td>Primary</td>
<td>541</td>
</tr>
<tr>
<td>Cascade</td>
<td>Kalama -- Summer</td>
<td>Primary</td>
<td>291</td>
</tr>
<tr>
<td>Cascade</td>
<td>Lewis – NFork -- Winter</td>
<td>Contributing</td>
<td>na</td>
</tr>
<tr>
<td>Cascade</td>
<td>Lewis – NFork -- Summer</td>
<td>Stabilizing</td>
<td>na</td>
</tr>
<tr>
<td>Cascade</td>
<td>Lewis – EFork -- Winter</td>
<td>Primary</td>
<td>77</td>
</tr>
<tr>
<td>Cascade</td>
<td>Lewis – EFork -- Summer</td>
<td>Primary</td>
<td>463</td>
</tr>
<tr>
<td>Cascade</td>
<td>Salmon</td>
<td>Stabilizing</td>
<td>Na</td>
</tr>
<tr>
<td>Cascade</td>
<td>Washougal -- Winter</td>
<td>Contributing</td>
<td>Primary</td>
</tr>
<tr>
<td>Cascade</td>
<td>Washougal -- Summer</td>
<td>Contributing</td>
<td>Primary</td>
</tr>
<tr>
<td>Cascade</td>
<td>Lower Gorge</td>
<td>Primary</td>
<td>na</td>
</tr>
<tr>
<td>Cascade</td>
<td>Upper Gorge</td>
<td>Stabilizing</td>
<td>na</td>
</tr>
<tr>
<td>Cascade</td>
<td>Wind</td>
<td>Primary</td>
<td>391</td>
</tr>
<tr>
<td>Cascade</td>
<td>White Salmon</td>
<td>Primary</td>
<td>na</td>
</tr>
</tbody>
</table>
Connections to Other Related Planning Efforts

Subbasin Planning: The Board authored the plans for the 11 subbasins in the Lower Columbia.

Watershed Planning: The Board acted as lead for the two watershed planning units in the area (WRIAs 25/26 and 27/28).

Lead Entities: The Board is the Lead Entity in the recovery area.

Additional Comments: The Lower Columbia Board’s plan also contains information about bull trout populations in the region. Bull trout are listed as a threatened species under the Endangered Species Act. The U.S. Fish & Wildlife Service (the federal agency with jurisdiction over the bull trout listing) is currently conducting a review of the status of bull trout under the ESA. The results of the status review are pending.

Because the Lower Columbia Board authored the recovery plan and the subbasin plans, and the Board administered the watershed planning processes, all of these plans for the region fit together. Because the Board is also the Lead Entity for the recovery area, it can adopt a recovery region perspective in selecting its project submittals to the Salmon Recovery Funding Board. The Board as Lead Entity reports that it took a new approach this year by soliciting specific project proposals, based on the recovery plan.

The Lower Columbia Plan is the only regional recovery plan in the state to date that expressly prescribes that improvements to fish populations in each major threat category should be in proportion to the magnitude of that threat’s contribution to salmon declines. The Executive Director indicated that they couldn’t find a model to help put sources of mortality into context like this, so they developed the analysis on their own. He also noted that taking this approach helped diffuse the use of one-simple-solution proposals for recovery; the various participants in the planning process could see that recovery was more complicated than that. This helped shape the conversation in a positive way.

The Lower Columbia Plan includes a section on implementation actions that lists the different entities responsible for taking actions under the plan, the individual actions, the type of threat the action is intended to address, and in which location within the planning area. The list is some 70 pages long in a small font. If a reader is interested in getting a sense of how many different parties would be involved in a recovery plan’s implementation and what kinds of actions the parties would be asked to take, this chapter in the Lower Columbia Plan offers the most comprehensive list available in any of the regional plans to date.

Status and Next Steps: The Lower Columbia Board’s plan is furthest along in the NMFS recovery plan adoption process. The Board submitted its plan to NMFS on December 15, 2004. In April 2005, NMFS published the plan in the Federal Register, accompanied by a NMFS-authored supplement. The publication triggered a 60-day comment period, which ended June 20. The Board and NMFS are making any appropriate changes to the plan based on the comments. The Executive Director hopes that the plan will be adopted by NMFS and in place sometime this autumn. NMFS has indicated its intent to designate the area covered by this plan as a “management unit” within the larger ESU area and to move forward with this plan’s implementation as an “interim regional recovery plan.”

The Board now has an implementation steering committee in place. The various parties involved in implementation are working on six-year implementation plans, schedules, and costs. The Executive Director intends to have the information on the six-year implementation plans completed this autumn as well. The Board will be reporting later this year to GSRO on its priority actions for the coming 18 months, on its efforts to secure
implementation commitments from the various implementing parties, and on ESA assurance discussions or negotiations underway that are related to the recovery plan.

**Additional Information:** Lower Columbia Fish Recovery Board website:
http://www.lcfbr.gen.wa.us/default1.htm (as of August 15, 2005)
**Mid Columbia Regional Salmon Recovery Plan**  
Snapshot as of August 15, 2005

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**The Region:**  
**Planning Area Size:** The planning region is just over 6,100 square miles  
**Map Shaded Area Population Estimate:** 395,000

This Mid Columbia plan covers a portion of the Middle Columbia area shaded in the map above. The recovery plan covers most of Yakima, Benton, and Kittitas Counties.

**The Fish:**  
Steelhead – 4 populations

**The Planners:**  
The Yakima Subbasin Fish and Wildlife Planning Board. The Board is made up of a Yakima County Commissioner; a Benton County Commissioner; a Tribal Council member of the Yakama Nation; and representatives of 12 cities within the planning region.

**Planning Staff:**  
The Board does not have its own centralized staff, though the Board Administrator indicates the Board may pursue its own staffing in the future. Staff support comes in the form of five people who work for entities involved in the planning: two from Yakima County Public Works (one of whom acts as Board Administrator), one from the Yakama Nation, one from Benton County Planning, and one from the state Department of Fish & Wildlife. Four of the five have work duties in addition to their work to support the Board. The Administrator functions as a central point of contact about the Board and its plan.

**The Plan**

**The Goal/Vision:** The vision is “Yakima basin communities have restored the Yakima River basin sufficiently to support self-sustaining and harvestable populations of indigenous fish and wildlife while enhancing the existing customs, cultures, and economies in the basin. Decisions that continuously improve the river basin ecosystem are made in an open and cooperative process that respects different points of view and varied statutory responsibilities and benefits current and future generations.”

In the interview for this profile, the Administrator made it clear that the elements contained in this recovery plan are expected to move the region toward the delisting of steelhead under the ESA; implementing this plan alone is not expected to take the region to the larger vision described above.
Plan Coverage:

Entire ESU Area? No. A portion of the Mid Columbia ESU area in Washington is being picked up in the Snake River plan. Another portion, mainly in Klickitat County, is not included in this Mid Columbia Plan. A large portion of the total ESU area is in Oregon.

All listed salmon populations? Yes.

Numerical Recovery Targets:

<table>
<thead>
<tr>
<th>Steelhead Populations</th>
<th>Current Conditions</th>
<th>Recovery Criteria</th>
<th>Extinction Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average # of Spawners</td>
<td>Productivity (Recruits per Spawner)</td>
<td>Average # of Spawners</td>
</tr>
<tr>
<td>Satus</td>
<td>471</td>
<td>Close to 1.0</td>
<td>500</td>
</tr>
<tr>
<td>Toppenish</td>
<td>332</td>
<td>Less than 1.0*</td>
<td>500</td>
</tr>
<tr>
<td>Naches</td>
<td>412</td>
<td>Less than 1.0*</td>
<td>2,000</td>
</tr>
<tr>
<td>Upper Yakima</td>
<td>83</td>
<td>Less than 1.0*</td>
<td>2,000</td>
</tr>
</tbody>
</table>

*Note: a productivity value less than 1.0 means that the population is not replacing itself.

The plan also notes the additional recovery criteria from the NMFS Interior Columbia Technical Recovery Team that at least two of the populations must be at recovered abundance levels, with the other populations being maintained.

Plan Approach: At the time of the drafting of this profile, the full draft plan was not yet widely available to the public, so this question cannot be answered yet in detail. The executive summary indicates that the plan includes 153 specific recovery actions. Some are to be implemented for the subbasin as a whole, while others are for specific streams or stream reaches. The Board plans to have the complete draft plan posted on its website before the end of August.

Plan Timeframe: 10 to 30 years

Planners’ Early Estimate of Costs: $160 million

Connections to Other Related Planning Efforts

Subbasin Planning: The Board authored the Yakima Subbasin Plan before moving on to draft the salmon recovery plan.

Watershed Planning: There is one watershed planning unit operating in the recovery planning area (WRIAs 37 – 39). The planning unit approved a watershed plan in December 2002; the county approval process is still pending. Yakima and Benton Counties provide overlap with the regional salmon recovery board. The Yakama Nation has not participated in the watershed planning effort.

Lead Entities: A single Lead Entity operates in the recovery planning area. There is considerable overlap between the membership of the Lead Entity and the membership of the Board. One difference is that Kittitas County is a member of the Lead Entity but not the Board.
**Additional Comments:** The Board’s plan also contains information about bull trout populations in the region. Bull trout are listed as a threatened species under the Endangered Species Act. The U.S. Fish & Wildlife Service (the federal agency with jurisdiction over the bull trout listing) is currently conducting a review of the status of bull trout under the ESA. The results of the status review are pending.

Kittitas County chose not to participate as part of the Board, though cities within Kittitas County are participating. The absence of the County may complicate plan implementation if the plan calls for the three county governments (Kittitas, Yakima, and Benton Counties) to take various recovery actions.

The Board Administrator makes clear his view that this is *not* a final version of a salmon recovery plan for the area. He believes the Board will need to be vigilant as other parties such as NMFS draft plans for the remainder of the ESU area that is in Washington (mainly Klickitat County) and the large part of the ESU area that is in Oregon. He assumes the plan will undergo additional revisions as the plan for the whole ESU comes together.

The Board Administrator also points out the importance of the role of the federal Bureau of Reclamation in the planning area. He reports that NMFS and the Bureau are negotiating separately on the Bureau's needed actions as part of salmon recovery.

**Status and Next Steps:** The Board is awaiting some initial review from NMFS before releasing its full draft of the recovery plan more broadly and hosting a set of public forums about the draft. The Board plans to hold these forums the end of August or shortly thereafter. The executive summary of the plan also indicates the establishment of a larger “Policy Forum” made up of representatives of state and federal agencies, the Yakama Nation, counties, and other stakeholders to “coordinate discussions associated with recovery actions.” The Board Administrator feels this effort will put the Yakima portion of the ESU area in a better position as the planning for the rest of the ESU area in Washington and Oregon unfolds.

In terms of contract deliverables to the GSRO, the Board is to have a revised draft recovery plan available for submission to NMFS by October 17, 2005. Also by October, the Board is to have a proposal identifying the roles, functions, and structure for implementing the recovery plan, and an initial list of actions the Board agrees should receive priority attention in the coming 18 months. By December, the Board is to complete a table identifying the top actions to be undertaken, who is to take the action, the cost estimates, and the estimated timeframe.

**Additional Information:** Yakima Subbasin Fish and Wildlife Planning Board website: [http://www.co.yakima.wa.us/yaksubbasin/](http://www.co.yakima.wa.us/yaksubbasin/) (as of August 15, 2005)
The Region: **Area Size:** Approximately 6,000 square miles  
**Area Population Estimate:** 115,200  
Major portions of Chelan, Douglas, and Okanogan Counties

The Fish:  
- Spring Chinook Salmon – 3 populations  
- Steelhead – 4 populations

The Planners: Upper Columbia Salmon Recovery Board. The Board is comprised of one Commissioner each from Chelan, Douglas, and Okanogan Counties; a representative from the Colville Confederated Tribes; and a representative from the Yakama Nation.

Planning Staff: Each of the five entities above has a staff representative. Unlike the other regions, there is no designated main staff contact person for this Board such as an executive director or an administrator. Chelan County’s staff representative is from its Natural Resources Program. The Douglas County staff representative used to work for that county’s Transportation and Land Services program; he now works on contract for the county in this role. Okanogan County’s staff representative works for the county’s Water Resource Division. The Colville Confederated Tribes have contracted with a person as their staff representative, and the Yakama Nation’s staff representative is from the Nation’s Fisheries Program.

The Upper Columbia Regional Technical Team contributed a biological strategy to protect and restore habitat for salmon in the Upper Columbia region. This technical team is comprised of representatives from federal, state, tribal, and local government agencies and consultants; this is also the team that reviews the technical merits of project proposals heading for the Salmon Recovery Funding Board. Interviewees for this profile also discussed a Habitat Coordinating Committee. A webpage identifies membership on the HCC as also comprised of representatives from federal, state, tribal, and local government agencies and consultants. There is one footnote in the plan referencing the HCC; otherwise, the plan does not identify the specific role that the HCC has played in development of the Upper Columbia Plan.
The Plan (June 30 version)

The Vision/Goal: The plan’s vision statement is to “develop and maintain a healthy ecosystem that contributes to the rebuilding of key fish populations by providing abundant, productive, and diverse populations of aquatic species that support the social, cultural, and economic well being of the communities both within and outside the recovery region.” This is the same vision statement that the Snake River Board adopted. There has been some discord in the planning area over whether to include a return of fish to harvestable levels as part of the recovery plan’s goal or vision.

The Upper Columbia Plan goes on to say that its vision statement includes (1) meeting recovery goals established for listed populations; (2) achieving sustainable harvests of key species within the recovery region and the Columbia River; (3) realizing these objectives while recognizing that “agriculture and urban development are beneficial to the health of the human environment within the recovery region;” (4) considering that limited harvest (tribal and non-tribal) could occur during the recovery period; and (5) “a road map of non-regulatory, voluntary measures that is not intended to override anyone’s authority over habitat, hydropower, hatcheries, and harvest.”

Chapter 1 of the Upper Columbia Plan indicates that the specific goal for chinook and steelhead is “to ensure long-term persistence of viable populations of naturally produced spring chinook and steelhead distributed across their native range.” Chapter 4 of the plan identifies the specific goal for chinook and steelhead as “to ensure long-term persistence of viable and harvestable (including recreational, ceremonial, and subsistence) populations of naturally produced spring chinook and steelhead distributed across their native range.”

Plan Coverage:

Entire ESU Area? Yes.

All listed salmon populations? Yes.

Numerical Recovery Targets: See table on the following page.

Plan Approach: The Upper Columbia Recovery Plan has a discussion of the four “H’s” (harvest, hatcheries, hydropower, and habitat).

For harvest, the plan calls for maintaining closed fisheries for naturally-produced chinook and steelhead and for continuing or developing harvest opportunities to catch hatchery fish. The plan also calls for additional enforcement efforts to reduce illegal harvest.

For hatcheries, common themes are continuation of hatchery operations using locally-derived stocks, reducing or eliminating the presence of out-of-basin stocks on spawning grounds, and not constructing new hatchery facilities that would have negative effects.

For hydropower, the plan notes the five hydroelectric projects on the Upper Columbia River operated by the local public utility districts and the agreements for action that the utilities have in place (such as habitat conservation plans) to avoid a federal determination that their operations are harming listed fish. The plan calls for the utilities to implement the actions in their plans and agreements.

The habitat section identifies two general types of habitat recovery actions: restoration and protection. The plan then identifies “classes” of restoration actions such as “riparian restoration” and “side-channel reconnection.”
The plan also points to work by the Regional Technical Team to divide the recovery area into “assessment units” using four categories as a means to prioritize these assessment units according to their contribution to recovery. An appendix provides a listing that includes the individual assessment unit, the primary limiting factor within that area, the primary cause, and specific actions that may be appropriate. “Local habitat groups will be responsible for identifying specific habitat restoration actions and coordinating activities within their respective subbasins.”

**Upper Columbia Plan Recovery Targets, June 30, 2005 Draft Plan**

<table>
<thead>
<tr>
<th>Populations</th>
<th>Current Population Characteristics</th>
<th>Recovery Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># of Spawners</td>
<td>Returns per Spawner*</td>
</tr>
<tr>
<td>Spring chinook</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wenatchee</td>
<td>383 – 3,499</td>
<td>0.31 – 1.19</td>
</tr>
<tr>
<td>Entiat</td>
<td>18 – 1,197</td>
<td>0.41 – 1.12</td>
</tr>
<tr>
<td>Methow</td>
<td>480 – 2,231</td>
<td>0.41 – 1.02</td>
</tr>
<tr>
<td>Steelhead</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wenatchee</td>
<td>185 – 919</td>
<td>0.18 – 0.32, 0.71 – 1.96</td>
</tr>
<tr>
<td>Entiat</td>
<td>24 – 118</td>
<td>0.18 – 0.32, 0.71 – 1.96</td>
</tr>
<tr>
<td>Methow</td>
<td>36 – 242</td>
<td>0.07 – 0.16, 0.82 – 2.28</td>
</tr>
<tr>
<td>Okanogan</td>
<td>11 – 64</td>
<td>0.07 – 0.16, 0.82 – 2.28</td>
</tr>
</tbody>
</table>

Note: Numbers represent a 12-year geometric mean. See the plan for details on the range of dates used to calculate the current population characteristics. These generally range from the 1960s through 2003.

* For the steelhead populations, there are two calculations: the top one uses the assumption that hatchery fish are as effective as naturally-produced steelhead, while the lower one is calculated using the assumption that hatchery fish do not contribute to returning adults.

**Plan Timeframe:** 10 to 30 years

**Planners’ Early Estimate of Costs:** $95 million

**Connections to Other Related Planning Efforts**

**Subbasin Planning:** Organization for the six subbasin plans for the region reflects the county-based nature of planning in the recovery area. Chelan County was the lead organization for the Lake Chelan Subbasin Plan, while Chelan County and the Yakama Nation were the leads for the Wenatchee and Entiat Subbasin Plans. Douglas County and the Department of Fish & Wildlife coordinated the subbasin plan for the upper middle stem of the Columbia River. Okanogan County and the Colville Confederated Tribes joined other parties as leads for the Okanogan and Methow Subbasin Plans.

**Watershed Planning:** The Chelan County Natural Resources Program is the lead for watershed planning in WRIA 45 (Wenatchee), while the Chelan County Conservation District has the lead role in WRIA 46 (Entiat). In Douglas County, the Foster Creek Conservation District is the lead agency for planning in WRIAs 44 and 50 (Moses Coulee/Foster Creek). The Okanogan Water Resources Program is the lead for WRIA 48 (Methow), and the Okanogan Conservation District has the lead role for watershed planning in WRIA 49 (Okanogan).
**Lead Entities:** Chelan County is the Lead Entity in WRIAs 45 and 46 (Wenatchee and Entiat). In Douglas County, the Foster Creek Conservation District is the Lead Entity in WRIAs 44 and 50. Okanogan County and the Colville Confederated Tribes are the Lead Entities in WRIAs 48 and 49 (Methow and Okanogan).

**Additional Comments:** The Upper Columbia Board's draft plan also contains information about bull trout populations in the region. Bull trout are listed as a threatened species under the Endangered Species Act. The U.S. Fish & Wildlife Service (the federal agency with jurisdiction over the bull trout listing) is currently conducting a review of the status of bull trout under the ESA. The results of the status review are pending.

As noted above, the Upper Columbia Board does not have a designated point of contact such as an executive director or a board administrator. For this profile, JLARC staff interviewed staff with Chelan and Douglas Counties, staff with the Yakama Nation Fisheries Program, and two representatives from the Okanogan Farm Bureau and the Okanogan County Citizens Coalition. The staff person for Okanogan County made himself available but has only worked on the planning effort since July. Several Board members are being contacted as well.

The Upper Columbia is the most county-centric of the planning areas, with little in the draft plan itself or the Board's organization or staffing to provide a more region-wide perspective. GSRO staff noted that the geography of the area contributes to this, with the individual watersheds/subbasins contained within individual county boundaries. The subbasin planning, watershed planning, and Lead Entity organization all follow this general model as well.

Concerns about the June 30 draft plan expressed in the course of interviews conducted for this profile include a lack of opportunity for citizen participation; a lack of inclusion of relevant locally-generated information; harvest policies in the area and the goal of returning listed fish to harvestable levels; a lack of time and clear guidance from the state and NMFS as to how planning should be conducted and planning dollars spent, particularly for public involvement; and inadequate discussion to date on the appropriate sharing of the responsibilities for salmon recovery. The latter concern includes allocating responsibility appropriately among the four “H's” within the recovery region, as well as accounting for the degree to which out-of-basin effects are posing a threat to salmon recovery.

**Status and Next Steps:** The Upper Columbia Board submitted a draft plan to the Governor’s Salmon Recovery Office to meet a statutory June 30 submittal deadline. Importantly, however, **the Board itself has not yet taken official action to approve a regional salmon recovery plan.** The Board recently extended the public comment period on the plan until October 1. Okanogan County has announced it will host a series of four public discussion meetings in August and September to find out what changes local citizens would like to see made to the draft plan before its submittal to NMFS. NMFS is sponsoring what it calls a “policy forum” to work towards achieving broadly-supported recommendations in the region for salmon recovery. This forum may operate sometime within the next several months.

There will be a similar path of review and publication by NMFS as for other draft regional plans if the Upper Columbia Board does adopt a regional salmon recovery plan. If is not clear exactly what the next steps will be and in what timeframe if the Board does not adopt a regional recovery plan.
**Additional Information:** Unlike the other recovery regions, the Upper Columbia Salmon Recovery Board does not have a centralized place for information about the Board and its plan. Some information is available on websites within departments of the three counties:

Douglas County Natural Resources Department website:
http://www.douglascountywa.net/departments/tls/salmon.html (as of August 15, 2005)

Okanogan County Water Resource Division website:
http://okanogancounty.org/water/Salmon%20Recovery.htm (as of August 15, 2005)

Chelan County Natural Resource Program website:
http://www.co.chelan.wa.us/nr/nr9.htm (as of August 15, 2005)
The Region: Area Size: 4,400 square miles Area Population Estimate: 82,900
All of Asotin, Garfield, Columbia, and Walla Walla Counties, and portions of Whitman and Franklin Counties

The Fish: Spring/Summer Chinook – 3 populations
Steelhead – 5 populations

The Planners: The Snake River Salmon Recovery Board. The Board is comprised of one County Commissioner each from Asotin, Columbia, Garfield, and Whitman Counties; three representatives of the Confederated Tribes of the Umatilla Indian Reservation; five citizens and three landowners from the planning area; a person from the irrigation district in Walla Walla County; and the Walla Walla County Watershed Planning Coordinator.

Planning Staff: The Board has a centralized staff consisting of an Executive Director and an Administrative Assistant. In addition, representatives from the Nez Perce Tribe, the Department of Fish & Wildlife, the Department of Ecology, the U.S. Army Corps of Engineers, the U.S. Fish & Wildlife Service, and NMFS serve on a regional technical team to the Snake River Board.

The Plan

The Vision/Goal: The Board indicates its vision statement is based largely on the statements from the four related subbasin plans: “Develop and maintain a healthy ecosystem that contributes to the rebuilding of key fish populations by providing abundant, productive, and diverse populations of aquatic species that support the social, cultural, and economic well-being of the communities both within and outside the recovery region.” The Board indicates that this vision includes: (1) meeting recovery goals established by NMFS for listed populations; (2) achieving sustainable harvests; and (3) realizing these objectives while recognizing that “agriculture and urban development are beneficial to the health of the human environment within the recovery region.” The plan states that setting recovery goals within the recovery region is the responsibility of NMFS, rather than the Board.
Plan Coverage:

Entire ESU Area?  No. The Snake River ESU areas for steelhead and chinook extend past Washington’s borders into Oregon and Idaho.

All listed salmon populations?  No. Fall chinook are a listed species within the recovery region. The Snake River plan reports that, “VSP criteria and viability curves have not been developed for them by the ICTRT. Therefore, fall Chinook cannot be evaluated for delisting at this time. It is expected that once the criteria have been developed, the recovery plan will be revised to include fall Chinook. At this point the plan can only include basic biology and demographics for fall Chinook.” Additionally, “because sockeye salmon are not resident within the recovery region, they are not addressed by the (Snake River Salmon Recovery Plan).”

Numerical Recovery Targets:

<table>
<thead>
<tr>
<th>Basin</th>
<th>Species</th>
<th>Recovery Goal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Number of Spawners)</td>
</tr>
<tr>
<td>Asotin Creek and Lower Snake Mainstem Tributaries</td>
<td>Spring/Summer Chinook</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>Steelhead</td>
<td>1,000</td>
</tr>
<tr>
<td>Tucannon River and Small Mainstem Tributaries</td>
<td>Spring/Summer Chinook</td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td>Steelhead</td>
<td>1,000</td>
</tr>
<tr>
<td>Walla Walla River</td>
<td>Steelhead</td>
<td>1,000</td>
</tr>
<tr>
<td>Touchet River</td>
<td>Steelhead</td>
<td>1,000</td>
</tr>
<tr>
<td>Grande Ronde River (Wenaha)</td>
<td>Spring/Summer Chinook</td>
<td>500</td>
</tr>
<tr>
<td>Grande Ronde River (Lower Grande Ronde and Joseph Creek)</td>
<td>Steelhead</td>
<td>1,000</td>
</tr>
</tbody>
</table>

The Board did not select specific numerical targets for salmon productivity. Instead the plan shows the viability curves developed by the NMFS Interior Columbia Technical Recovery Team for the spring/summer chinook and steelhead populations within the recovery area. These curves show various combinations of abundance and productivity, and the idea is to reach a combination of the two attributes that is somewhere above the NMFS viability curve.

Plan Approach: The Snake River Board has taken an approach different from the other regional planners in drafting its recovery plan. First, the plan consciously excludes any “H” actions except for habitat: “Actions related to the hydroelectric system, hatcheries, and harvests are outside the control of the SRSRB and the region; actions related to these “Hs” are expected to come from other planning and regulatory systems.”

The habitat strategy in the plan includes actions for both the protection and restoration of habitat. The Executive Director explains that the Board did not select habitat targets that would result in recovery, and then choose actions to reach those targets. Instead the Board looked at “what habitat actions are attainable in the near future,” then modeled to see if the resulting changes placed the fish populations on the correct side of the NMFS TRT viability curves. The plan is candid that the proposed habitat actions are projected to boost several, but not
all, of the fish populations to that desired place above the viability curve (three populations do not achieve the viability curve criteria).

**Plan Timeframe:** 15 years

**Planners' Early Estimate of Costs:** $105.5 million for habitat actions. The Executive Director reports that the majority of costs are expected to be addressed through ongoing programs like the Conservation Reserve Enhancement Program.

**Connections to Other Related Planning Efforts**

**Subbasin Planning:** The county conservation districts had the lead on developing three of the four subbasin plans for the region, while Walla Walla County led development of the fourth. The Board then used the vision, proposed habitat actions, and other information from the subbasin plans to craft the regional recovery plan.

**Watershed Planning:** Three watershed plans are under development in the recovery region (WRIAs 32, 34, and 35). There is some cross-over in the representation of entities on the three WRIA planning entities with the Snake River Salmon Recovery Board.

**Lead Entities:** The Asotin Conservation District had been the original Lead Entity in the region. The Board now has this role.

**Additional Comments:** The Snake River Board's plan also contains information about bull trout populations in the region. Bull trout are listed as a threatened species under the Endangered Species Act. The U.S. Fish & Wildlife Service (the federal agency with jurisdiction over the bull trout listing) is currently conducting a review of the status of bull trout under the ESA. The results of the status review are pending.

In our interviews with planners and others in the Columbia Basin, there was interest in identifying the degree to which obstacles to fish recovery were inside the planning region versus outside. The Snake River planners used modeling to estimate the extent to which recovery relies on actions outside of the recovery region, for each of the chinook and steelhead populations. The percentage ranged significantly among the eight listed populations modeled.

As mentioned earlier, the Snake River Plan authors are candid that the proposed actions in the plan are not projected to move all of the listed populations above the viability curves. This means that someone other than the Board will have to identify (1) actions other than habitat in the recovery region, (2) actions in the ESU areas outside of Washington, and/or (3) actions addressing out-of-region effects to meet the NMFS TRT viability criteria. Additionally, absent any NMFS viability criteria, a recovery plan for fall chinook is not included in the June version of the Snake River Plan.

**Status and Next Steps:** The Snake River Salmon Recovery Board is working to finalize its draft plan, with the target of having a version ready to submit to NMFS by October 17, 2005. The Board is also currently working on three tasks for completion before the end of this year: (1) working with local governments to prepare for their use of the recovery plan in their planning processes; (2) defining its proposal for the roles, functions, and structure for implementation of the recovery plan; and (3) development of a detailed schedule and cost estimates for actions for the first 18 months of plan implementation.

**Additional Information:** Snake River Salmon Recovery Board website:
http://www.snakeriverboard.org/ (as of August 15, 2005)
Puget Sound Regional Salmon Recovery Plan
Snapshot as of August 15, 2005

The Region: Area Size: 13,800 square miles land and 2,800 square miles water
Area Population Estimate: 3.8 million
All or portions of Whatcom, Skagit, Island, San Juan, Snohomish, King, Pierce, Thurston, Mason, Kitsap, Jefferson, and Clallam Counties

The Fish: Puget Sound Chinook Salmon – 22 populations

The Planners: Shared Strategy for Puget Sound. The Shared Strategy umbrella organization is a non-profit corporation, with a six-member Board of Directors and a 22-member Development Committee. There are also planners in 14 separate planning areas within the region (of different composition in each planning area). The plan uses the term “watersheds” to describe these separate planning areas. Puget Sound tribes, the Department of Fish & Wildlife, and the Puget Sound Action Team also authored pieces of the plan.

Planning Staff: The Shared Strategy umbrella organization has a centralized staff, including an Executive Director and four additional staff members. Shared Strategy also has a nine-member Work Group comprised of federal, state, local, and tribal government staff. State and tribal government staff and numerous others provided information and other input within the 14 individual watershed planning areas. The NMFS Puget Sound Technical Recovery Team had direct involvement in the development of the Puget Sound Plan, more so than the TRTs for other areas in the state.

The Plan

The Goal: “To recover self-sustaining, harvestable salmon runs in a manner that contributes to the overall health of Puget Sound and its watersheds and allows us to enjoy and use this precious resource in concert with our region’s economic vitality and prosperity.”

Plan Coverage:

Entire ESU Area? Yes, though there is no plan yet for the Skokomish planning area.

All listed salmon populations? All Puget Sound chinook populations. Chum populations in Hood Canal are the subject of the Hood Canal Salmon Recovery Plan.
Numerical Recovery Targets:

<table>
<thead>
<tr>
<th>Populations</th>
<th>Mean Spawner Abundance for 1996 – 2000</th>
<th>Abundance Range from the NMFS TRT*</th>
<th>Co-managers’ Targets (Low Productivity*)</th>
<th>Co-managers’ Targets (High Productivity*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Fork Nooksack</td>
<td>120</td>
<td>16,000 – 26,000 (1.0)</td>
<td>16,000 (1.0)</td>
<td>3,800 (3.4)</td>
</tr>
<tr>
<td>South Fork Nooksack</td>
<td>200</td>
<td>9,100 – 13,000 (1.0)</td>
<td>9,100 (1.0)</td>
<td>2,000 (3.6)</td>
</tr>
<tr>
<td>Lower Skagit</td>
<td>2,300</td>
<td>16,000 – 22,000 (1.0)</td>
<td>16,000 (1.0)</td>
<td>3,900 (3.0)</td>
</tr>
<tr>
<td>Upper Skagit</td>
<td>8,920</td>
<td>17,000 – 35,000 (1.0)</td>
<td>26,000 (1.0)</td>
<td>5,380 (3.8)</td>
</tr>
<tr>
<td>Upper Cascade</td>
<td>330</td>
<td>1,200 – 1,700 (1.0)</td>
<td>1,200 (1.0)</td>
<td>290 (3.0)</td>
</tr>
<tr>
<td>Lower Sauk</td>
<td>660</td>
<td>5,600 – 7,800 (1.0)</td>
<td>5,600 (1.0)</td>
<td>1,400 (3.0)</td>
</tr>
<tr>
<td>Upper Sauk</td>
<td>370</td>
<td>3,000 – 4,200 (1.0)</td>
<td>3,030 (1.0)</td>
<td>750 (3.0)</td>
</tr>
<tr>
<td>Suiattle</td>
<td>420</td>
<td>600 – 800 (1.0)</td>
<td>610 (1.0)</td>
<td>160 (2.8)</td>
</tr>
<tr>
<td>North Fork Stillaguamish</td>
<td>660</td>
<td>18,000 – 24,000 (1.0)</td>
<td>18,000 (1.0)</td>
<td>4,000 (3.4)</td>
</tr>
<tr>
<td>South Fork Stillaguamish</td>
<td>240</td>
<td>15,000 – 20,000 (1.0)</td>
<td>15,000 (1.0)</td>
<td>3,600 (3.3)</td>
</tr>
<tr>
<td>Skykomish</td>
<td>1,700</td>
<td>17,000 – 51,000 (1.0)</td>
<td>39,000 (1.0)</td>
<td>8,700 (3.4)</td>
</tr>
<tr>
<td>Snoqualmie</td>
<td>1,200</td>
<td>17,000 – 33,000 (1.0)</td>
<td>25,000 (1.0)</td>
<td>5,500 (3.6)</td>
</tr>
<tr>
<td>N. Lake WA/ Sammamish</td>
<td>194**</td>
<td>17,000 – 37,000 (1.0)</td>
<td>4,000 (1.0)</td>
<td>1,000 (3.0)</td>
</tr>
<tr>
<td>Cedar</td>
<td>398**</td>
<td>17,000 – 37,000 (1.0)</td>
<td>8,200 (1.0)</td>
<td>2,000 (3.1)</td>
</tr>
<tr>
<td>Green</td>
<td>7,191**</td>
<td>17,000 – 37,000 (1.0)</td>
<td>27,000 (1.0)</td>
<td>Unknown</td>
</tr>
<tr>
<td>White</td>
<td>329**</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Puyallup</td>
<td>2,400</td>
<td>17,000 – 33,000 (1.0)</td>
<td>18,000 (1.0)</td>
<td>5,300 (2.3)</td>
</tr>
<tr>
<td>Nisqually</td>
<td>890</td>
<td>13,000 – 17,000 (1.0)</td>
<td>13,000 (1.0)</td>
<td>3,400 (3.0)</td>
</tr>
<tr>
<td>Skokomish</td>
<td>1,500**</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Mid-Hood Canal</td>
<td>3,000 – 4,700 (1.0)</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Dungeness</td>
<td>123**</td>
<td>4,700 – 8,100 (1.0)</td>
<td>4,700 (1.0)</td>
<td>1,200 (3.0)</td>
</tr>
<tr>
<td>Elwha</td>
<td>1,319**</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
</tbody>
</table>

* Low productivity in both the TRT ranges and the Co-managers’ targets represents one adult fish returning from the sea for each spawner (1:1). The high productivity number in the Co-managers’ targets represents the number of spawners at the point where the population provides the highest sustainable yield for every spawner.

The Puget Sound Plan contains both the range of population targets identified by the NMFS Technical Recovery Team and the set of planning targets identified by the co-managers. The co-manager targets are often at the low end or are lower than the TRT ranges.

In addition to the population targets, the NMFS TRT has divided the 22 chinook populations into five biogeographical sub-regions. Within each sub-region, a recovery goal is to have none of the remaining populations at a high risk of extinction and to have at least two populations achieve a low risk of extinction.

**Plan Approach:** It is difficult to generalize about the components of the Puget Sound Plan because the plan is comprised of the 14 independently-developed watershed plans. Each watershed plan does follow a template, which was guidance provided by the TRT. The plan also includes a chapter with a more region-wide discussion on nearshore habitat protection, relations to forestry, and relations to farming. The co-managers developed regional harvest and hatchery management strategies.

**Plan Timeframe:** Executive Director reports 50 years, with a detailed focus on the first 10 years.

**Planners’ Early Estimate of Costs:** $1.422 billion for the first 10 years. Of this, $1.2 billion is for capital needs. The Executive Director notes this would be a doubling of current combined contributions of local, state, and federal governments.

**Connections to Other Related Planning Efforts**

**Subbasin Planning:** Not in Columbia Basin, so no related subbasin planning.

**Watershed Planning:** The planning area contains all or parts of WRIAs 1 through 19, and there are watershed planning units in place in 14 of these. The individual salmon recovery planning areas are made up of one or more WRIAs or only part of a WRIA. Shared Strategy is encouraging the watershed planners to incorporate the recovery plan fish population targets into their watershed planning efforts. Also, the Shared Strategy groups used information compiled by the watershed planning groups and the Lead Entities in crafting the salmon recovery plans for their areas.

**Lead Entities:** There are 15 separate Lead Entities operating within the recovery area.

**Additional Comments:** The Shared Strategy plan also contains information about bull trout populations in the region. Bull trout are listed as a threatened species under the Endangered Species Act. The U.S. Fish & Wildlife Service (the federal agency with jurisdiction over the bull trout listing) is currently conducting a review of the status of bull trout under the ESA. The results of the status review are pending.

With regard to the current recovery plan drafted for the Skagit River area, the Shared Strategy Development Committee notes that “the draft Skagit Chinook Recovery Plan submitted to Shared Strategy by the state and tribal co-managers currently provides a pathway to recovery. The co-managers have agreed to work in a collaborative venue over the coming weeks and months with the agricultural community and others in an attempt to reconcile issues regarding the pathway.” Additionally, the Department of Fish & Wildlife and the Skokomish Tribe are developing a proposal by December 2005 for the Skokomish River planning area.

The Executive Director describes the Shared Strategy planning approach as follows: “The basic approach of the plan is to build on existing efforts by local, tribal and state governments using past and current efforts in growth management, water planning, salmon recovery and scientific processes. Recovery goals were provided by the Tribes, state and federal governments to watershed groups. The groups provided technical analysis and
policy recommendations for how to achieve the goals. The work of each of the watersheds was reviewed and supplemented by the NOAA Technical Recovery Team and the Shared Strategy Intergovernmental Work Group. Each watershed group was encouraged to work collaboratively with key stakeholders to determine how best to achieve the recovery results and to get local commitments to implement their local piece of the plan. The success of the local collaborative efforts varied by watershed. In general the engagement of key stakeholders increased dramatically over the last three years. However, there are several notable exceptions like the Skagit watershed where the tribes, agricultural community and County are still just beginning to find a means to work effectively together."

The Puget Sound Plan contains a special section entitled a “Proposal for the Prosperity of Farming and Salmon.” A premise of the section is that a major opportunity for salmon habitat preservation and restoration will be lost if farmland is converted to urban and suburban uses. The proposal identifies tools farmers can use to protect and restore salmon habitat, tools for keeping farmland in farming, and tools for improving farming’s “bottom line.”

The Puget Sound Plan also includes information on a financing strategy for recovery plan implementation. This strategy discusses maximizing the use of existing salmon funding sources and drawing on additional existing sources that could be, but have not been, used for salmon recovery. The principle untapped source identified in the plan is mitigation funding provided as compensation for the environmental impacts of public and private construction projects.

The Shared Strategy organization has indicated from the beginning that its purpose was to facilitate the development of and agreement on a Puget Sound recovery plan. Shared Strategy reports it is currently fostering a discussion about the organizational structures needed for implementation of the plan. The non-profit corporation intends to dissolve unless the parties agree to some continued role for the organization. What organizational structure might replace it remains to be determined.

**Status and Next Steps:** The Puget Sound Plan was filed with NMFS the end of June and is under review; the planners’ target is to have the plan published in the Federal Register by October. The planners are currently working on a public engagement process for the plan as a whole (some, but not all, individual watershed planning areas have had such processes already for their parts of the whole). The planners are also designing a more comprehensive adaptive management plan. Deliverables to GSRO include identification of a proposed structure, roles, and functions for implementation of the plan and identification of actions to receive priority attention in the next 18 months (by October 17); and completion of a financing strategy and a table showing the top implementation actions to be taken, by whom, cost estimates, and estimated timeframes (by December 31).

**Additional Information:** Shared Strategy for Puget Sound website:
http://www.sharedsalmonstrategy.org/ (as of August 15, 2005)
The Region: Area Size: 1,400 square miles
Portions of Mason, Jefferson, Clallam, and Kitsap Counties

The Fish: Hood Canal Summer Chum Salmon – 8 populations

The Planners: The Hood Canal Coordinating Council. The Council is comprised of one Commissioner each from Jefferson, Kitsap, and Mason Counties; a Tribal Council Member from the Port Gamble S’Klallam Tribe; and a Tribal Council Member from the Skokomish Tribe. The Council has been operating as a unit since 1985 and has responsibilities beyond salmon recovery planning, including designation as the local management board for the Hood Canal rehabilitation program (ESHB 2097 from the 2005 Legislative Session).

Planning Staff: The Council has its own centralized staff, including an Executive Director and five additional staff members. Of these, the Executive Director reports 1.5 FTEs are devoted to salmon recovery planning, and 1 FTE is devoted to the Council’s Lead Entity program.

The Plan

The Goal: “To protect, restore and enhance the productivity, production and diversity of Hood Canal summer chum salmon and their ecosystems to provide surplus production sufficient to allow future directed and incidental harvests of summer chum salmon.”

The Hood Canal Plan notes this goal is adopted from the overall goal presented in the Summer Chum Salmon Conservation Initiative, a summer chum initiative drafted by the co-managers.

Plan Coverage:

Entire ESU Area? Yes.
All listed salmon populations? All summer chum populations. Chinook populations in Hood Canal are a subject of the Puget Sound salmon recovery plan.

Numerical Recovery Targets:

<table>
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</thead>
<tbody>
<tr>
<td>Quilcene</td>
<td>Escapement avg 4,999, Effective pop size 3,599</td>
<td>4,570</td>
<td>2,860</td>
<td>Low</td>
</tr>
<tr>
<td>Dosewallips</td>
<td>Escapement avg 1,057, Effective pop size 761</td>
<td>3,080</td>
<td>1,930</td>
<td>Low</td>
</tr>
<tr>
<td>Duckabush</td>
<td>Escapement avg 507, Effective pop size 365</td>
<td>3,290</td>
<td>2,060</td>
<td>Moderate</td>
</tr>
<tr>
<td>Hama Hama</td>
<td>Escapement avg 1,010, Effective pop size 727</td>
<td>6,060</td>
<td>3,790</td>
<td>Low</td>
</tr>
<tr>
<td>Lilliwaup</td>
<td>Escapement avg 246, Effective pop size 77</td>
<td>3,310</td>
<td>1,960</td>
<td>High</td>
</tr>
<tr>
<td>Union</td>
<td>Escapement avg 817, Effective pop size 77</td>
<td>550</td>
<td>340</td>
<td>Low</td>
</tr>
<tr>
<td>Salmon/Snow</td>
<td>Escapement avg 2,375, Effective pop size 1,710</td>
<td>1,560</td>
<td>970</td>
<td>Low</td>
</tr>
<tr>
<td>Jimmycomelately</td>
<td>Escapement avg 91, Effective pop size 66</td>
<td>520</td>
<td>330</td>
<td>High</td>
</tr>
</tbody>
</table>

Note: the Hood Canal planners used the interim targets established by the co-managers; they are still awaiting viability goals and targets from the NMFS Technical Recovery Team.

Plan Approach: The Executive Director indicates that the plan calls for the co-managers to continue to do what they are currently doing with regard to harvest and hatcheries. The harvest and hatchery elements of the plan are from the earlier Summer Chum Salmon Conservation Initiative and its annual supplements/updates. With regard to habitat, the plan contains both projects and what it calls “programmatic actions.” The latter are actions such as floodplain and shoreline management planning that the counties have agreed to undertake. As a Lead Entity, the Council has had a strategy for projects in place since 1998, and that strategy for chum salmon is not expected to change. What will likely drop out are project proposals for unlisted species.

Plan Timeframe: Not specified; the Executive Director reports that, until recovery is reached, the plan’s initial focus is on the first 12 years.

Planners’ Early Estimate of Costs: $136.1 million for the first 10 years

Connections to Other Related Planning Efforts

Subbasin Planning: Not in Columbia Basin, so no related subbasin planning.

Watershed Planning: There are planning units in place for the four watershed areas in the region (WRIAs 15, 16, 17 and 18). For WRIAs 15, 16, and 17, there is some cross-over of membership entities with the Hood
Canal Coordinating Council, for example, with the county or tribal government represented on the watershed planning group.

**Lead Entities:** The Hood Canal Coordinating Council is the Lead Entity for the region.

**Status and Next Steps:** The plan is under review now by the NMFS Technical Recovery Team and a second NMFS review group. Following this review, the Council will make any necessary changes to the draft. The Council is to submit a revised draft recovery plan to NMFS by October 17, 2005. The Council is also developing a detailed plan implementation matrix. Two additional deliverables to GSRO by mid-October are (1) a proposal for roles, functions, and structure for implementing the recovery plan, and (2) a more detailed 18-month schedule and cost estimates for implementing actions in the plan. By December, the Council is to complete a table with top actions that will be undertaken, who is to accomplish the action, cost estimates, and estimate timeframe. The Executive Director points out the difficulty in putting together a definitive project list without knowing the amount and timing of funding and other resources.

**Additional Information:** Hood Canal Coordinating Council website:

http://www.hccc.wa.gov (as of August 15, 2005)
Appendix 1: Scope and Objectives

SALMON LISTINGS IN WASHINGTON

In 1991, the National Marine Fisheries Service listed Snake River sockeye salmon as endangered under the federal Endangered Species Act (ESA). Between 1992 and 1999, the Fisheries Service listed another 12 salmon “evolutionarily significant units” in Washington as threatened or endangered under the ESA.

The ESA directs the listing agency to develop a recovery plan for listed species. At our state’s request, the National Marine Fisheries Service has indicated a willingness to develop its plan for Washington using state and local recovery planning efforts. Many such planning efforts are underway now. According to the Fisheries Service, recovery plans must contain (1) objective, measurable goals for delisting; (2) a comprehensive list of actions to achieve those goals; and (3) an estimate of the costs and time required to carry out those actions. Recovery plans should also include a monitoring and evaluation program to gauge the effectiveness of the actions and progress toward recovery.\(^\text{13}\)

MANY PLAYERS CONTRIBUTE TO RECOVERY

A host of entities play some role in Pacific salmon survival and enhancement, at the international, multi-state, state, regional, and local levels. Measures range from U.S. fishing treaties with Canada, to the operation of the federal hydropower system on the Columbia and Snake Rivers, to numerous local groups working to improve fish habitat. Many players are involved in developing recovery plans, and many will likely be involved in implementing those plans.

A SIGNIFICANT LEGISLATIVE INVESTMENT

The Legislature has played a significant role to date in salmon recovery in the state, even in the absence of an official recovery plan. In terms of statutory measures, the Legislature established a framework for recovery planning and for identification and implementation of habitat improvement projects at the watershed level (1998), created the Governor’s Salmon Recovery Office (1998) and the Salmon Recovery Funding Board (1999), adopted the “forests and fish” agreement to align forest practices with salmon recovery (1999), and incorporated the need for comprehensive watershed monitoring as part of fish recovery (2001).

The Legislature has also made a significant financial investment in salmon recovery. In a December 2004 briefing paper, House staff estimate that the Legislature has appropriated some $770 million in capital and operating budgets for direct salmon recovery efforts over the last four biennia (1997-99 through 2003-05), from a variety of funds. This total includes $360 million in operating budget appropriations and $410 million appropriated in capital budgets. Operating budget expenditures for salmon recovery include dollars for inventories of fish passage barriers and implementation of the “forests and fish” agreement on forest practices. Capital appropriations funded items such as hatchery improvements and grants to local entities working on habitat projects.

WHAT DOES SALMON RECOVERY LOOK LIKE?

Accompanying this investment of dollars and effort, legislators are asking how Washington will know when the state is “done” with salmon recovery. Legislators and others want to know what a complete salmon recovery plan for the state looks like and what additional financial investment is likely to be requested from the state for recovery. At the same time, Congress and the President’s Office of Management and Budget are expressing concerns about a lack of concrete information showing what federal investments in Pacific salmon recovery are yielding.

STATUS REPORT SCOPE & OBJECTIVES

The purpose of this status report is to assess the extent to which we know what statewide salmon recovery will look like in Washington. Four objectives contribute to meeting this end:

1) Identify, from the multitude of entities involved in some way with salmon enhancement or recovery, those who are actually developing ESA recovery plans.

2) Identify the goals these entities have established for recovery and whether they have adopted numerical recovery targets.

3) Determine if these entities have summarized progress to date and if they have identified the set of future projects or other actions that need to be completed pursuant to the recovery plan. Determine if they have identified who will be responsible for implementing the project or action and who will be asked to fund the project or action.

4) Examine the plans to see how they address the need to measure and monitor (a) progress toward the recovery targets, and (b) implementation and effectiveness of the elements of the recovery plans. Check for alignment with monitoring efforts already underway in the state.

Timeframe for the Study

This status report will be completed during the summer of 2005.

JLARC Staff Contact for the Study

Linda Byers (360) 786-5183 byers.linda@leg.wa.gov
Appendix 2: Salmon Recovery Entities and Terminology

National Marine Fisheries Service (NMFS) – The federal agency responsible for implementing and enforcing the provisions of the Endangered Species Act for Pacific salmon and steelhead. NMFS is an agency within the National Oceanic and Atmospheric Administration, which is within the U.S. Department of Commerce. NMFS is also sometimes identified as NOAA-Fisheries.

Evolutionarily Significant Units (ESUs) – An ESU is a population of fish or a group of populations that is reproductively isolated from other populations and that contributes substantially to the ecological/genetic diversity of the species. ESUs are identified by NMFS. A group of fish must represent an ESU in order to be considered a “species” as defined by the Endangered Species Act.

Technical Recovery Teams (TRTs) – NMFS appointed a Technical Recovery Team of scientists for each recovery domain (Figure 2). A major role of these scientists was to recommend “viability criteria” which could be translated to fish population recovery targets within a recovery planning area. The TRTs chose to operate differently in the different regions. The Puget Sound TRT worked very closely with the Shared Strategy planning group in developing the Puget Sound plan. The Willamette/Lower Columbia TRT operated at more of an arm’s distance with the Lower Columbia Board. Recovery planning groups in Eastern Washington report that the TRT appointed for the Interior Columbia was thwarted by the large size and amount of work for the planning area and was simply not able to keep up with the workload.

Co-managers – Based on treaties that have been interpreted through a series of court cases, mainly U.S. v. Oregon and U.S. v. Washington, the tribes and the state fish and wildlife agencies share jurisdiction over many fisheries decisions including many management decisions about salmon harvest and hatcheries. The parties are referred to as the co-managers. In the U.S. v. Washington case area, the co-managers are Washington’s Department of Fish & Wildlife and the Puget Sound tribes, the latter often represented by the Northwest Indian Fisheries Commission. In the Columbia River Basin, the co-managers are the Oregon and Washington Fish & Wildlife agencies and Columbia River tribes, the latter often represented by the Columbia River Intertribal Fish Commission. Additionally, the Intertribal Fish Commission has developed its own salmon recovery plan.

Governor’s Salmon Recovery Office (GSRO) – Established in 1998, the primary purpose of the GSRO is to coordinate and assist in the development of salmon recovery plans as an integral part of a statewide salmon recovery strategy. In its first publication of a statewide strategy in 1999, the GSRO identified seven salmon regional recovery areas within the state and introduced the idea of using these regions for salmon recovery planning.

Regional Recovery Planners – Six groups have undertaken the development of regional salmon recovery plans in Washington: the Lower Columbia Fish Recovery Board, the Yakima Subbasin Fish and Wildlife Planning Board, the Upper Columbia Salmon Recovery Board, the Snake River Salmon Recovery Board, Shared Strategy for Puget Sound, and the Hood Canal Coordinating Council.

Salmon Recovery Funding Board (SRFB) – Created in 1999, the SRFB has made funding allocation decisions to aid listed and non-listed fish populations. Lead Entities apply to the SRFB for funding for their salmon habitat projects. The SRFB has also funded the development of the regional salmon recovery plans. The Interagency Committee for Outdoor Recreation provides staff support for the SRFB.
**Lead Entities** – Authorized in 1998, Lead Entities are volunteer groups who work in their watersheds to identify what factors are limiting salmon production in their areas and what habitat projects will address those limiting factors. Lead Entities submit their project lists to the SRFB for funding. There are 26 Lead Entities operating in the state, 19 in Western Washington. Lead Entities work both within and outside of salmon regional recovery areas. Three of the six regional recovery planning groups are the Lead Entity for their area. The Department of Fish & Wildlife provides some staff support for the Lead Entities.

**Regional Fisheries Enhancement Groups (RFEGs)** – Authorized in 1989 before the salmon and steelhead were listed, these are groups of volunteers who have worked on habitat and production projects to benefit fish and fishing. RFEGs apply for funding through the SRFB/Lead Entity process but also receive funding from a portion of recreational license fees and surcharges on commercial fishing licenses. There are 14 RFEGs in the state, 11 in Western Washington. Like the Lead Entities, RFEGs operate both within and outside of salmon regional recovery areas. The Department of Fish & Wildlife provides some staff support for the RFEGs.

**WRIAS/Watershed Planning** – WRIA stands for Water Resource Inventory Area, and Lead Entities use these as a geographic basis for their operations. Under separate legislation from 1998, local WRIA-based planning units may plan for the water needs of their communities. If a planning unit decides to take up this task, the group must look at the question of water quantity. The local group also has the option to look at water quality, habitat needs for fish and wildlife, and instream flows. There are 62 WRIAs in the state. As of December 2004, there were local planning units in place for 45 of them. The Department of Ecology provides support for the watershed planning effort.

**Northwest Power and Conservation Council** – The Council is a federally-created entity with representatives from the states of Washington, Oregon, Idaho, and Montana. The Council deals with the portions of these four states that are affected by the operation of the Federal Columbia River Power System. One of the Council’s main tasks is to develop a program to protect and rebuild fish and wildlife populations affected by federal hydropower development in the Columbia River basin. The Council’s Fish & Wildlife Program is funded by the Bonneville Power Administration (BPA), so ultimately the program is paid for by customers of the utilities that buy power from BPA. One of Washington’s Council members is also a member of the Salmon Recovery Funding Board.

**Subbasin Plans** – As part of the Council’s Fish and Wildlife Program, various parties in the four states developed “subbasin plans.” Geographically, subbasins are similar in concept to but don’t align exactly with WRIAs. The subbasin plans include proposals for salmon and steelhead protection and enhancement as well as proposals for “resident fish” and wildlife. The plans were just recently completed, reviewed, and approved, and the Council is in a similar position to Washington as it determines how to move into implementation of these plans. Four of the salmon recovery regions in Washington (Lower Columbia, Mid Columbia, Upper Columbia, and Snake River) have subbasin plans that cover the same geographic area as the regional salmon recovery plans.

**Four “H’s”** – In discussions about factors that limit or pose threats to salmon and steelhead, the discussion is frequently framed around four categories: harvest, hatcheries, habitat, and hydropower. Collectively these are often referred to as the Four “H’s.”
RCW 77.85.010 defines “salmon” to include “all species of the family Salmonidae which are capable of self-sustaining, natural production.”

Kingdom: Animalia
Phylum: Chordata
Class: Actinopterygii
Order: Salmoniformes
Family: Salmonidae
Genera: 
- Oncorhynchus
- Salmo
- Salvelinus
- Coregonus
- Prosopium
- Thymallus

Species Include:
- Chinook salmon
- Sockeye salmon
- Coho salmon
- Chum salmon
- Pink salmon
- Steelhead
- Rainbow trout
- Cutthroat trout
- Bull trout
- Brook trout
- Dolly Varden
- Lake trout
- Whitefish
- Cisco
- Pygmy whitefish
- Mountain whitefish
- Arctic grayling