# **W6 Implementing The Recovery Plan— How We Organize Ourselves For Action**

Draft Platform Statement 1-20-05

### **Introduction to Platform Statements**

This "platform statement" is one of nine papers drafted to stimulate discussion and make progress on topics related to salmon recovery that cross all the Puget Sound watersheds. These platform statements are not intended to represent positions or decisions of any individual or organization. Rather, they have been developed by the Shared Strategy staff with help from others and are intended to describe the ideas and questions that have been identified to date by a variety of people working on these issues.

The expectation is that together, Shared Strategy participants will be able to forge a regional consensus on how to make progress on the ideas and questions identified in the papers and that these ideas will be incorporated into the draft regional recovery plan submitted to NOAA and U.S. Fish and Wildlife Service this June.

Under the Endangered Species Act, a recovery plan must identify the threats to survival, the actions necessary to address the threats, measures for delisting, cost of the actions and a schedule for implementation. In the Shared Strategy, all governments and interest groups agreed to add to the federal requirements by including commitments to implement the plan to ensure its success. This will be the first recovery plan ever developed through a partnership of affected parties that includes commitments for implementation.

The Puget Sound recovery plan will be a living document that evolves and improves over time through implementation. Parts of it will be well defined by June, and other parts will need more work in the future, due to limited knowledge, resources or current political or public commitments. Where additional detail is needed to address a significant threat to salmon survival, the plan must provide a schedule with measurable decision points for how the gap will be filled.

We encourage your comments at the Summit or by contacting the Shared Strategy staff directly. It will be most helpful for you to indicate where the draft statement is generally heading in the right direction and how to take it further to help achieve recovery goals, as well as to identify which questions or issues will need to be addressed at a future time.

## Implementing The Recovery Plan—How We Organize Ourselves For Action

#### Draft January 20, 2005

#### Implementation of the Recovery Plan

This paper is intended to provide an overview of the elements to consider in designing an implementation approach for the forthcoming Puget Sound salmon recovery plan. It outlines a set of implementation functions specific to the Puget Sound, identifies lessons learned from similar efforts, discusses content needed for adaptive management, and identifies key elements and key questions to consider in designing and operationalizing an implementation effort for the recovery plan.

Across the state, successful implementation of salmon recovery plans will require on-going efforts at the state, region and local watershed scales. Any organizational structure for implementation, whether new or existing, must facilitate strong relationships between local government elected officials, tribes, state and federal agencies, watershed groups, business and environmental communities.

#### **Functions of Implementing Entities**

There are many components to implementing a salmon recovery plan for Puget Sound. Some will be the responsibility of the public sector and some the private sector, some will be led by local governments, tribes, state and federal agencies. Some functions will be best addressed at the watershed level, and others will be more appropriately located at a coordinating level of the region or state. Some will probably occur at multiple levels and/or be implemented by multiple entities. It will be important to carefully locate responsibility for each function at the appropriate scale or, where appropriate, at multiple scales.

There are a set of functions that are should occur prior to implementation. These include:

- Define watershed and regional needs and actions to recover salmon: the recovery plan will do this.
- Define the core mission of the implementation effort.
- Design the governance mechanisms, decision processes, participant norms, and accountability mechanisms.
- Develop appropriate indicators, benchmarks and metrics related to the mission to facilitate accountability.

#### Watershed Scale/Local Government Scale Functions

In listing salmon and bull trout under the Endangered Species Act, the whole region of Puget Sound was considered as a unit. However, many of the recovery actions are best accomplished at the local level in each watershed. Consequently, when considering implementation in Puget

Sound there must be a strong effort in each watershed in concert with the ability to set priorities and track results at the scale of the whole region.

While some functions may be located at multiple scales, implementation functions that should be considered at the local/watershed scale include:

- a. Management of the *localized* institutional structure, decision processes, participant norms, and rules governing decision-making.
- b. Project identification, prioritization, refinement and implementation.
- c. On-the-ground program/project operations and maintenance and support of project sponsors.
- d. Coordination and integration with other conservation, restoration, and development activities in the watershed. Coordination and integration of local projects and programs into the larger regional initiative.
- e. Habitat protection
  - Regulations: adopting, administering, enforcing.
  - Voluntary conservation programs.
- f. Education/outreach on *regional mission and local programs* to the general public; encourage citizen participation and ownership of both regional plan and local projects.
- g. Monitoring and enforcement of *local* programs.
- h. Tracking and reporting results. Develop appropriate indicators related to *projects and watershed improvements*, conduct progress assessments, issue final project reports.
- i. Communication, cooperation and negotiation with the regional implementation body, other governments, and project sponsors (financial and otherwise) as needed.
- j. Fundraising for *local* projects.

#### Regional Functions

Responsibilities for implementation that should be considered at the regional scale (all of Puget Sound) are listed below. These will not necessarily be implemented by a single entity and responsibilities may be located at multiple levels. They include:

- a. Plan adoption, refinement, and adaptive management. Initial and on-going negotiations with federal and state governments.
- b. Management of overall structure and process to ensure integration of habitat, harvest and hatcheries.
- c. Coordination with other related programs and projects (such as mitigation, forest practices, growth management) and creating opportunities for watershed integration of projects and programs.
- d. Prioritization of programs and projects to match available funds and multiple year work program.
- e. Allocation of regional funds: review proposals, track projects, assure fiscal accountability (currently handled through Salmon Recovery Funding Board).

- f. Fundraising and communication with funding organizations.
- g. Information management:
  - i. Integration and management of scientific data.
  - ii. Strategic research and planning to help guide decision-making, monitoring and data management (integrating technical and social sciences).
  - iii. Support for on-going science group to assist in adaptive management and strategic research.
  - iv. Support and advise stakeholders and local decision-making bodies on technical, planning, program, and fundraising matters.
  - v. Facilitating learning among those involved in salmon restoration, especially between watershed entities and between the local and the regional/state levels.
- h. Communication, Education and Outreach:
  - i. Report and track results: conduct progress assessments, issue reports.
  - ii. Create template for outreach and education to public and stakeholders.

#### **Adaptive Management**

One important element of implementation that needs to occur at both the watershed and regional scale is adaptive management. This section provides some of the basic elements necessary for success and provides technical examples of some the questions that need to be addressed over the time of plan implementation.

Adaptive management is an integral component of implementation. Adaptive management is a systematic process for improving future management actions by learning from the outcomes of implemented actions. An adaptive management framework includes an institutional structure that, in combination with monitoring and evaluation, allows you to judge whether you are making progress towards your plan objectives. Furthermore, an adaptive management framework explicitly lays out how information from monitoring and evaluation will guide decisions about future strategies and actions.

A monitoring and evaluation plan in an adaptive management framework provides answers to two important technical questions in salmon recovery: (1) What is the status of the population for each of the 4 VSP parameters? And (2) Which factors among all of the "H's" (Habitat, hydro, harvest, \*\*) are limiting recovery for each population/ESU? An adaptive management approach that shapes actions to generate needed decision-making information is a critical element of salmon recovery plans (NOAA 1996¹). Such adaptive management frameworks should be an integral part of watershed-scale plans, the nearshore plan, and the regional salmon recovery plan in Puget Sound.

Most draft watershed plans in Puget Sound already have begun to answer the first question in

 $<sup>^{\</sup>rm 1}$  NOAA, 1996, "COASTAL SALMON CONSERVATION: WORKING GUIDANCE FOR COMPREHENSIVE SALMON RESTORATION INITIATIVES ON THE PACIFIC COAST"

establishing an adaptive management framework: What are you trying to achieve? Most draft recovery plans already include the goals and objectives, threats that are limiting attainment of the goals, and a strategy to achieve the goals. In this section, we briefly discuss what the next stages of the evaluation cycle will look like for salmon recovery and the resulting decision framework that will emerge to guide implementation for each plan.

The principles of Adaptive Management are:

- Include management strategies that are revisited regularly;
- Use conceptual or quantitative models of the system being managed to develop and test hypotheses and guide strategy and action planning;
- Incorporate a range of potential management actions that could be used to meet strategy;
- Design and conduct monitoring and evaluation to track progress;
- Include mechanisms for incorporating learning from monitoring and evaluation into future decisions on actions and strategies;
- Employ a collaborative structure for stakeholder participation in adjusting management strategies and actions.

#### Elements of an Adaptive Management Plan

An adaptive management (AM) plan involves several key elements outlined below. *In short, an AM plan provides a clear statement of the metrics by which progress towards achieving goals can be tracked, a monitoring and evaluation plan for tracking such metrics, and a decision framework through which new information from monitoring and evaluation can be used to adjust strategies or actions aimed at achieving the plan's goals. Once the AM plan is designed, it guides implementation of salmon recovery plans through iterative adjustments in strategies and actions as information from monitoring and evaluation comes forth. Having an AM plan in place at the outset of plan implementation provides greater assurances that the plan will succeed in achieving its objectives. Through the AM plan, strategies and actions needed for salmon recovery can evolve as uncertainties in the effectiveness of actions are reduced through monitoring and evaluation.* 

#### Elements of an AM program integrated into a recovery plan

The necessary elements of an AM plan for Puget Sound salmon recovery plans are contained in this list below, with examples provided for each element:

- Goals for recovery plan
- Hypotheses about how key habitat, hatchery and harvest factors limit population recovery
- Strategies designed to address the "H" factors identified above
- Specific actions believed to contribute to achieving the goals
- Measures and data collection to assess the effectiveness of the actions
- Communication at all levels of the results of actions and adjustments in decisions based on improvement of knowledge
- An institutional structure that defines roles and responsibilities for each element
- Resources sufficient to carry out each element over the necessary time period and geographic area
- Commitments to implement the program

Goals: What objectives for salmon does the recovery plan aim to achieve?

e.g., Healthy salmon populations at sustainable, harvestable levels. These levels correspond to population targets we have adopted as 10,000 spawners with a

productivity of 3 returning adults per spawner. Our objective also is to maintain the remaining early- and late-run diversity types in our population spread out in at least 3 distinct spawning aggregations for each type.

*Hypotheses*: What are your hypotheses for what life stages are most limiting recovery of the salmon populations covered in your plan? What habitat, hatchery or harvest factors do you hypothesize have the biggest potential to improve population status?

e.g., We hypothesize that the distribution and survival of juvenile salmon in the lower river and estuary are the most significant bottlenecks limiting recovery of the population. The primary factors hypothesized to be contributing to the reduced number of rearing sites and survival of juveniles are floodplain channelization and blocked side-channels, elevated stream flows, competition with hatchery fish for restricted rearing areas, and predation on juveniles by hatchery and wild salmonids.

*Strategies*: What habitat, hatchery and harvest strategies will you use to address the primary factors hypothesized to be limiting recovery of your salmon population(s)?

*e.g.*, The plan is designed to increase floodplain connectivity and the area of side-channel habitats available, reduce peak flow events through addressing sources of peak flows throughout the river basin, and to reduce opportunities for interactions between wild and hatchery salmon.

**Actions:** What specific actions are included in your plan to implement your strategies and achieve your objectives?

*e.g.*, Our plan includes dike removal and levee setback projects, protection of natural bank areas in the lower river, targets for reducing impervious area and forest road density in the upper regions of the basin, and adjustments in the numbers of hatchery juveniles released and changes in the release locations.

*Measures*: What metrics will you use to indicate population status and the effectiveness of actions aimed at improving status? What data will you collect to track progress in the metrics over time?

e.g., Our indicator of changes in salmon diversity is the proportion of sub-yearling and yearling emigrants in the basin. We will sample otoliths from juveniles caught in traps and seined in the lower river and from adults on the spawning grounds to assess the fraction of yearlings in the population each year. We will monitor the proportion of hatchery and wild (un-marked) juveniles in lower river habitats and examine stomach contents of larger salmon to estimate the intensity of hatchery-wild fish interactions.

**Communication and decision-making**: How will key people be made aware of the results of actions on fish? How will the increase in understanding of how the river ecosystem works affect decisions about strategies and actions in the plan?

e.g., The WRIA planning group, with representatives of state and tribal members who influence hatchery management policies and County officials who oversee floodplain

projects, need to communicate about habitat quantity in the lower river and how juveniles are faring in lower river habitats. Land owners in the lower river will be able to see how their levee set-back projects are contributing to increased juvenile rearing habitats. Co-managers can fine-tune locations and timing of releases of hatchery juveniles to continue to maximize the benefits of hatchery policies to wild salmon.

*Institutional structure*: What is an institutional structure that supports the implementation of the recovery plan and clearly defines roles and responsibilities for each element?

e.g., A WRIA-wide, multi-stakeholder group which includes representation from all levels of local, state, tribal and Federal governments, citizens, land-owners, and groups influencing the quantity and quality of habitats in the nearshore regions of Puget Sound will ensure that diverse interests in the Basin are informed about how the plan is progressing towards its goals and what adjustments in decisions are appropriate.

**Resources**: What are the resources necessary to carry out each element of the plan over the necessary time period and geographic area?

e.g., Financial and staff resources contributed by each sector represented in the multistakeholder group and sources of outside support are clearly identified and judged to be sufficient.

Commitments: What will key players necessary for plan implementation provide?

e.g., The landowners in the lower river commit to participating in voluntary levee set-back program until the target area of improvement is reached; state and tribal hatchery managers commit to working with the County planners to coordinate hatchery management policies with habitat improvements. The field staff necessary for monitoring juveniles and habitat conditions in key areas will be provided by the County, state and tribal staff within the Basin.

#### Developing an Adaptive Management Plan

The steps that Puget Sound recovery planning groups need to go through in order to design an adaptive management plan as part of their recovery plans will be worked out through a workshop to be held in late February-early March, 2005. Once key questions are addressed through this workshop, a decision framework with the elements outlined above can be developed.

#### **Key Elements-Key Questions for Implementation**

There are numerous elements involved in preparing the region for implementation of the regional plan, including adaptive management, funding, education and outreach, coordination with other programs, oversight, and knowledge sharing. Based on conversations with a small sample of the many people involved in Puget Sound salmon recovery, the following five items are suggested as key elements for consideration at the summit.

**Mission**: What does it mean to implement salmon recovery? Does it mean simply funding projects that have passed scientific muster and are in accord with regional priorities, or would it also be appropriate to address the systemic social and economic drivers affecting salmon? Do we focus solely on salmon or are there credible reasons to operate on a broader scale (i.e. aquatic

ecosystem health or mountains to sound). Would efficiencies be created by combining the implementation of plans for salmon, terrestrial wildlife, and water?

Some are concerned the mission of the implementation effort will be too narrow; others are concerned it will be too broad. All recognize that salmon restoration is the goal. Some have promoted a balanced approach that supports salmon recovery, protection and enhancement of habitat, and maintenance of a healthy business climate. Others have said that while a broader ecosystem focus is worthy of consideration, we should not lose or dilute the focus on salmon.

A key question is what formulation of the mission will be most likely to lead to greater public, political, and financial support, and therefore to a greater likelihood of success. The funding potential from federal, state, and regional resources may be affected by how the mission is defined. Public polling data suggests that concern for salmon recovery is soft and declining, while support for a broader ecosystem restoration effort is still significant. Businesses may also support such an additional public funding if it could lead to delisting in a significantly shorter period of time.

• **Question**: What should the mission for implementation be such that it provides appropriate focus to salmon recovery (and possibly broader ecosystem goals) and leads to the greatest potential for increased and sustained public, political, and financial support for the effort?

Governance Mechanisms: Many have voiced concerns over what the governance mechanisms will look like and how they will affect existing entities. Many have said they are concerned about the creation of a large bureaucratic salmon infrastructure and about the potential for an additional layer of bureaucracy and regulation. Many have noted that flexibility will be necessary during implementation and that a "one-size-fits-all" approach is unlikely to be successful. Relatedly, some are also concerned about the potential for yet another environmental entity that might compete for attention, resources or authority in Puget Sound.

Most have said that the strength of the Shared Strategy planning effort resides with the watershed groups. In most cases, these groups have developed knowledge, relationships, and support through the planning process. Their enthusiasm should be capitalized upon during implementation. Many suggested drawing from the strengths and expertise of these existing entities where possible rather than building something new. However, others have expressed the need for a "visible center" that provides a focal point for salmon recovery. Some are concerned that the watershed-oriented structure may not adequately address marine, nearshore, and systemwide issues. Some principles that seem to be emerging include: minimize bureaucracy; maximize participation; maintain co-management and local authorities; and effectively coordinate and integrate the many entities at all levels that will be involved in the implementation effort.

Important drivers for the form and functions of the governance mechanisms include:

• Should the effort be led/coordinated by a state entity, private entity, or a public-private partnership? Can an existing entity play a lead role (some possibilities include Puget Sound Action Team, Puget Sound Nearshore Ecosystem Restoration Project, Salmon

Recovery Funding Board, Governors Salmon Recovery Office, others?)? Can an existing entity be modified appropriately, or should a new entity be created?

- Should it be led/coordinated at the regional or the state level?
- At what level or levels should authority and responsibility for decision making be located?
- Should the lead/coordinating entity receive funds and/or allocate project money (this function is currently handled by Salmon Recovery Funding Board)? If so, the formality of structure increases to ensure fiscal accountability; the entity would then also need technical and policy review capability to evaluate project readiness and progress.
- Will the lead/coordinating entity manage projects itself? If so, it would have a large effect on staffing (i.e. design and engineering) as well as on the size and complexity of the organization.
- Will the group need to lobby for funding and policy?
- How will it relate to existing entities?

**Accountability Mechanisms**: Accountability mechanisms help answer the questions: Are we doing what we said we'd do? And, are the actions achieving the desired result? Information regarding performance measures also feeds into adaptive management processes to test effectiveness and fine tune the efforts if necessary. Some common accountability mechanisms include:

- Performance measures: These are specific, measurable benchmarks on each of the key items of concern that establishes criteria for measuring the effectiveness of the effort. Metrics for each item of concern could be established for the region and for each watershed, and derived from the regional plan and from each of the individual watershed plans. Clear responsibility for who, what and by when should be spelled out for each performance measure.
- Sunset provision: A fixed period of life for an entity (10 years?) helps focus attention toward results. Near the end of this period, a thorough, independent, external sunset review should be undertaken to assess all aspects of the implementation effort and recommend any changes to improve effectiveness. Such a review would be necessary before the entity was reauthorized to continue, if appropriate.
- Evaluation and reports: In addition to a sunset review, annual progress reports and a thorough mid-term evaluation help assess how effective investments have been.
- Accessible data: making data publicly available (via web pages or elsewhere) allows all parties to track progress and creates additional incentives for results.
- **Questions**: Are the mechanisms listed above sufficient to motivate action and support accountability among the responsible parties at all levels? How could they be improved?

**Establishing the Governance Mechanism**: How does the governance mechanism gain authority and legitimacy? Some are wary of assigning responsibility statutorily for salmon recovery

suggesting the task is so complex that it has to be everyone's responsibility and should remain a voluntary, collaborative effort. The mandate comes from everyone's expectations. Others have said it would be useful if an entity were chartered by the state, as this offers legitimacy and greater opportunities for funding. In addition, placing agreements in statute creates an enhanced level of accountability. A third option is for the entity to be federally constituted (as was done with the Northwest Straits Initiative).

• **Question**: What method of establishing the governance mechanism would lead to the greatest legitimacy, effectiveness, and support among the many entities involved in salmon recovery?

Where to go from here? Following the summit, it will be necessary for these and other questions to be thoroughly analyzed and considered. One proposal is to create a small group of regional leaders tasked with developing recommendations regarding mechanisms, structures, and approaches most likely to achieve success. The group could spend several months consulting with all the interested and affected parties and develop a cohesive set of options that could be presented to the Governor, legislature and the region in June. The options would include recommendations for governance mechanisms and strategies capable of integrating the restoration efforts contained in the recovery plan and would include additional key elements including funding, science, accountability, and adaptive management.

#### Questions for discussion at the Summit

- 1. Are there other items that should be added to the list of functions at the watershed and regional scale, or for adaptive management?
- 2. Are there other questions that should be considered in addition to those in the Key Elements-Key Questions section?
- 3. What should the mission for implementation be such that it provides appropriate focus to salmon recovery (and possibly broader ecosystem goals) and leads to the greatest potential for sustained public, political, and financial support for the effort? What elements are needed to ensure sustained efforts at both the watershed and regional levels?
- 4. What method of establishing the governance mechanism would lead to the greatest legitimacy, effectiveness, and support among the many entities involved in salmon recovery?