

# **Puget Sound Partnership 2008 Three Year Work Program Update Island Watershed**

## Introduction

In April 2008, each of the fourteen watersheds submitted three-year work program updates on accomplishments, status of actions, and proposed actions that built on the 2006 and 2007 three-year work programs. These work programs are intended to provide a road map for implementation of the salmon recovery plans and to help establish a recovery trajectory for the first three years of implementation. The 2008 Three-Year Work Program Update is the last of the first three years for implementation since the Recovery Plan was finalized in 2005. As salmon recovery in the Puget Sound is now part of the Puget Sound Partnership's legislative responsibility, the Puget Sound Partnership will perform an assessment of the development and review of these work programs in order to be as effective as possible in the coming years.

The feedback below is intended to assist the watershed recovery plan implementation team as it continues to address actions and implementation of their salmon recovery plan. The feedback is also used by the Puget Sound Recovery Implementation Technical Team (RITT), the Recovery Council Work Group, and the Puget Sound Partnership to inform the continued development and implementation of the regional work program. This includes advancing on issues such as adaptive management and capacity within the watershed teams. The feedback will also stimulate further discussion of recovery objectives to determine what the best investments are for salmon recovery over the next three years.

## Guidance for the 2008 work program updates

Factors to be considered by the Puget Sound Recovery Implementation Technical Team in performing its technical review of the Update:

- a. Is the Update consistent with the recovery plan hypotheses and strategy for the watershed's work program?
- b. Is the sequencing and timing of the action in your updated three-year work program appropriate?
- c. Are there significant components missing from the work program? If so, what is missing and what can be done about them in the three-year work program update or at a regional scale?

Watersheds were also provided with the following seven questions, answers to which the Recovery Council Work Group and the Partnership salmon recovery watershed liaisons assessed in performing their policy review of the three-year work program

1. Is the work program consistent with the policy feedback and recommendations from the 2004 documents, Puget Sound Salmon Recovery Plan Volume I, Watershed Profiles – Results section, NMFS Supplement, as well as the regional Nearshore Chapter, where applicable?

2. Is the work program tied to the identified three-year objectives and scheduled to proceed at a pace sufficient to achieve the watershed's ten-year goals?
3. Is the work program narrative tightly linked to individual projects and priorities?
4. Do programmatic actions address protection objectives?
5. To what extent are habitat, harvest and habitat actions integrated and included in the work program?
6. How is the capacity to implement the updated three-year work program addressed?
7. What are the three-year work program objectives and how well does the updated program address them? This includes:
  - Improves the level and certainty of protection of habitat and the 22 existing Chinook populations;
  - Preserves options for achieving the future role of this population in the ESU;
  - Ensures habitat protection and restoration and restores ecosystem processes for Chinook; and
  - Advances the coordinated/integrated management of habitat, harvest, and hatchery.

## **I. Puget Sound Recovery Implementation Technical Team Review**

The RITT reviewed each of the fourteen individual watershed chapter's salmon recovery three-year work program updates in May and early June 2008. Three primary questions were addressed along with additional regional questions. The questions and the RITT's review comments are below.

### **Island Watershed**

#### **Puget Sound Recovery Implementation Technical Team Review**

1. *Is their work plan consistent with the hypotheses and strategy for their watershed?*

In general, the actions identified in the three-year work plan are consistent with the hypotheses and strategies offered in the watershed recovery chapter with an emphasis on nearshore habitat restoration and habitat protection through acquisition. The work plan also contains actions for outreach/education and local plan implementation. Plan implementation, including capacity funding, is a good idea to enable stakeholders and those with jurisdiction to participate in plan integration and implementation, especially with WRIA 6's goal of "cultivating a supportive environment for salmon recovery." Needed research actions are also listed; some appear to be funded and are currently being implemented with a lead entity commitment to apply results to updates in the watershed's recovery chapter.

Although the existing actions are consistent with the Watershed's chapter of the Recovery Plan, there is not enough information to evaluate whether the pace of implementation is reasonable for year three of the Recovery Plan, and the likelihood to achieve recovery is uncertain. This is because not enough monitoring elements are currently in place, along with an adaptive

management plan, to evaluate the question and identify any necessary course corrections. More work is needed on this issue.

- 2. Is the sequencing and timing of their work plan appropriate for the first 3 years of implementation?*

The actions are appropriate for habitat restoration and habitat protection through acquisition. The sequencing of these actions is influenced by the geographic, habitat type, and landscape process priorities described in the watershed plan. There is also a commitment to use results from recently funded research projects to update these priorities, if necessary. These are positive aspects of plan implementation.

Implementation of an overall habitat monitoring plan (and the adaptive management process to course correct) to evaluate progress on WRIA 6's "net increase in salmon habitat" goal should be sequenced early in plan implementation. Efforts to develop these elements of the watershed's recovery strategy are being initiated and should remain an important focus of future work plan updates.

- 3. Are there significant components missing from the work plan? If so, what are these and what can be done about them in the 3-year work plan?*

Protection remains a critical piece of salmon recovery in WRIA 6. The NMFS Supplement calls for plans to act immediately to protect functioning habitat and habitat forming processes through a combination of regulatory, voluntary, and incentive-based tools. The work plan has elements to develop strategies for high priority geographic areas. Habitat restoration and habitat protection through acquisition is also planned for some high priority habitat and geographic areas. However, we don't know the net effect of habitat loss, habitat protection, and habitat restoration in WRIA 6 because there is no current monitoring program developed. This needs to be developed and implemented early in plan implementation or there can be no objective evaluation of the plan's effectiveness.

The lack of defined habitat goals shouldn't hinder WRIA 6's ability to monitor progress with respect to its "net increase in salmon habitat" goal. When regional research on the origins of Chinook salmon using WRIA 6 habitat and the synthesis of all existing Whidbey Basin fish use data has been completed, adequate understanding of nearshore salmon ecology may be available to quantify habitat goals for WRIA 6 beyond the "net increase" goal.

There also are some inconsistencies between the narrative text and spreadsheet.

- For Habitat Restoration, the spreadsheet indicates about \$4.3 million are needed for restoration, while the text indicates \$3.8 million. The cause of this difference is unclear and should be explained.
- For the Research section, the spreadsheet says \$200,000 while the text says \$30,000. The cause of this difference is unclear and should be explained.

Puget Sound Partnership Questions

- *Does the Update provide information on the improved level and certainty of protection for habitat and the 22 existing populations*

Habitat protection advanced significantly through acquisition actions at specific sites within WRIA 6. However, there currently isn't comprehensive habitat monitoring to determine whether or not the current level of habitat in WRIA 6 is being protected through the sum implementation of all the work plan protection elements (voluntary, regulatory, acquisition). This leads to an unknown level of certainty associated with implementing protection actions.

- *Does the Update provide information on preserving options for achieving the future role of this population in the ESU?*

This question is not explicitly addressed in the three-year work plan update. However, much of the material presented in the three-year work plan update, if implemented, will preserve options for recovery of Puget Sound Chinook populations, especially neighboring Whidbey Basin source Chinook populations (Snohomish, Stillaguamish, and Skagit).

Actions that benefit multiple populations preserve future recovery options. There are restoration actions identified in the work plan update that benefit multiple populations. These are nearshore habitat restoration and protection actions.

Additionally, the regional research projects focus on multiple populations. Coordinated regional studies that evaluate rearing areas of a mixture of populations and link them to their source watershed is a good approach. Conclusion of these studies may generate new options for protection or restoration actions, and link different parts of the Puget Sound ESU in a quantifiable way for salmon recovery.

Implementation of adaptive management preserves future options by allowing for recovery pathway course change if needed. However, this process is just being initiated and is not developed for WRIA 6, so it is uncertain whether managers will use monitoring results to course correct recovery actions if necessary. Developing the monitoring framework for Chinook populations using WRIA 6 habitat should be done in a regional context in order to integrate actions from source population watersheds. At a minimum this should be done in coordination with all neighboring Whidbey Basin source Chinook population watersheds.

Future recovery options are preserved when wild stock goals are given priority in the harvest and hatchery management plans. This is the case with both the harvest and hatchery actions of neighboring Whidbey Basin source Chinook population watersheds – the populations most likely benefiting from actions implemented through WRIA 6's actions.

- *Does the Update provide information on ensuring protection and restoration of ecosystem processes for Chinook salmon?*

The updated spreadsheet does include a category for limiting factors and the majority of the restoration projects focus on at least partial restoration of ecosystem process. The emphasis on

nearshore habitat with a focus on pocket estuaries and other low energy areas within the Whidbey Basin will likely directly benefit fry migrant Chinook salmon.

- *Does the Update provide a high level of protection and restoration for ecosystem processes for multi-species?*

The WRIA 6 recovery chapter addresses species other than Chinook salmon, however, priority is given to projects focused on Chinook salmon. Implementation of many of the restoration and protection actions aimed at Chinook will provide benefits for other species. For example, juvenile chum salmon will also benefit from pocket estuary restoration. I do not see actions listed that will reduce viability of other salmonid species.

Pocket estuary restoration will not likely provide significant benefits to coho unless there is a significant direct freshwater input to the system (i.e., Kristoferson Creek in Triangle Cove). In fact, the Kristoferson Creek Barnum Road project listed in the work plan should probably be considered an ESA listed species project (rather than non-listed species as it currently is categorized) because non-natal Chinook salmon fry have been shown to utilize the lower part of the creek and would likely colonize habitat upstream of the replaced culvert if hydraulic conditions were designed for up and downstream passage of juvenile Chinook salmon.

Forage fish spawning restoration and protection actions listed in the work plan will benefit multiple species, including several populations of fish, mammals, and birds.

- *Advance the integrated management of harvest, hatchery, and habitat*

There is little in the three-year work plan update about H-Integration. Nor is there much of the typical H-Integration responsibility for WRIA 6 (compared to other watersheds) because of their lack of a source Chinook population and corresponding harvest management or hatchery responsibilities. However, some level of H-Integration should be described for plan implementation. This could take the form of integration of subsets of the habitat H.

H-Integration in WRIA 6 should explain the process of integration during the implementation phase of the plan. During implementation, alternative (or additional) pathways are often proposed as actions, and projects are sequenced. There is a possibility of unanticipated positive or negative consequences without an integration process in place. For example in WRIA 6, how do habitat restoration opportunities influence voluntary protection actions, or visa versa? How do the education/outreach actions (2% of monetary value of the work plan) influence habitat restoration or protection opportunities?

The WRIA 6 studies of regional importance can inform H-Integration questions regarding hatchery/wild salmon interactions in nearshore habitat. The findings are potentially relevant to all of Puget Sound, but are certainly relevant to the specific hatchery or wild salmon populations using WRIA 6 habitat.

The integration plan should also consider factors requested in the NMFS supplement including the potential effects (1) of climate change, (2) predicted human population growth, and the status of protection of existing habitat.

## **II. Policy Review Comments**

The Recovery Council Work Group, an interdisciplinary policy team, evaluated each of the fourteen watershed work plans. In addressing the questions identified above, the interdisciplinary team noted accomplishments and strengths as well as gaps and issues warranting special attention. The team assessed each of the watersheds' three-year work plans, as well as the general themes that applied across the region. The general comments addressing common accomplishments and opportunities for advancement are discussed below as well as specific comments for Island Watershed.

### **General Comments for 2008 Three-Year Work Program Updates**

The 2008 watershed three-year work program updates reflect advancement in terms of project and programmatic identification. Watersheds received capital and non-capital funding through the 2007 biennial budget process, providing a significant increase in resources relative to previous years. Despite these gains, both in funds and in work program, many of the watersheds continue to have gaps, to varying degrees, that were identified in the NOAA supplement as well as the 2006 and 2007 work program reviews. Regional assistance to the watershed planning and implementation teams will be needed to address how best to fill the needs identified below.

*Work Plan Accomplishments, Status Updates, Sequencing and Prioritization:* As identified in 2007, work program updates are a useful tool for defining progress toward recovery plan goals and ESU-wide recovery. Narratives should continue to be refined to provide a sharper focus on what each watershed expects to accomplish within the three-year period. These narratives should also document what projects have been successfully completed, what programmatic actions are underway, and how successful the watershed has been in implementing the previous year's work plan. This includes documenting how the funds of the previous year are being applied for both on-the-ground projects and capacity within the watersheds.

Providing a more focused description of how needed recovery projects and actions are identified, developed, prioritized and sequenced can strengthen work program updates. It is also important that the narrative provide sufficient information to enable watershed teams and regional reviewers to determine whether the pace of implementation is appropriate to achieve each watershed's ten- year goals and if not, to be able to identify the types of changes necessary to get them on pace. This can include information on adaptive management, status updates on actions, and monitoring data.

*Integrated Management of Habitat, Harvest and Hatcheries:* All Puget Sound watersheds' work programs would benefit from additional efforts and regional resources to achieve H-Integration. Several watersheds advanced their understanding and application of the six steps of H-Integration during 2007 through the strong support of co-manager resources. It is noteworthy that there is a strong connection between full co-manager engagement within the watershed context

and significant progress toward salmon recovery implementation. By the end of 2008, it is anticipated all watersheds with Chinook populations will be engaged in actions that reflect an integrated management of habitat, harvest, and hatcheries for Chinook recovery. The Puget Sound Partnership and RITT liaisons will continue to assist those watersheds without independent Chinook populations to integrate management and capacity of the nearshore to sustain natural and hatchery-origin populations of all salmonids. As integration advances, it will be important for each watershed to document how their actions are integrated and advancing in the work programs.

*Monitoring and Adaptive Management:* At the end of 2007, Shared Strategy staff along with a work group of technical experts completed a regional draft monitoring and adaptive management plan. The completion of this draft plan included a workshop and a gathering of comments on the plan. Since the completion of this draft plan, the Puget Sound Partnership has officially assumed responsibility for completing a regional adaptive management and monitoring plan, including the monitoring of fish populations and the tracking of implementation and effectiveness of actions identified in the Chinook Recovery Plan. At the regional scale, several actions have been initiated to advance adaptive management, including: 1) a pilot program directed at developing an implementation tracking system at both the watershed and regional scale; 2) a status and trends approach for Washington State, which includes directed resources for the Puget Sound; and 3) an accountability system to identify and hold responsible the appropriate entities at the local, regional, state, and federal levels.

Some watersheds have already begun developing their own monitoring and adaptive management frameworks and initial monitoring tasks. The regional team working on the diverse aspects of adaptive management will coordinate with those watersheds to ensure that the monitoring and adaptive management plans are consistent and complementary. During this transitional time, the Puget Sound Partnership staff, the work group, and the RITT acknowledge that they play an important role in providing assistance to all of the Puget Sound watersheds to advance in their development, refinement, and implementation of an adaptive management and monitoring approach. This is important in order to enable watersheds and the region to assess progress in reducing uncertainties in the population and ESU-wide recovery.

*Protecting and restoring ecosystem processes for Chinook and other species by preserving options and addressing threats* are critical components of recovery planning both at the local and regional scale. The Chinook Recovery Plan is predicated on the assumption that existing habitat will be protected. Regional work to assess this assumption and to strengthen the regulatory framework is underway through the San Juan Initiative and through the Action Agenda work of the Puget Sound Partnership. Initial findings and recommendations from the San Juan Initiative are expected by the end of 2008. The Action Agenda will be completed by December 2008.

Recovery actions are continuing to become more complex and expensive. All watersheds are challenged in terms of their capacity to acquire land in order to secure future options and to implement large-scale, multi-year projects. It will be important for watersheds to coordinate and partner with other groups, organizations, and agencies locally and regionally to increase capacity and enhance their ability to successfully identify and implement habitat acquisition and restoration efforts. Increased capacity for the key participants in watershed recovery efforts is

essential to successfully implement their recovery chapters and protect and restore the ecosystem processes that Chinook and other species require. The Puget Sound Partnership staff and the work group members acknowledge that additional efforts will be needed at the regional scale to assist in securing on-going resources for the watershed groups to protect and restore ecosystem processes.

*Water quality and Water quantity:* Water quality and water quantity will continue to be important issues for the long-term recovery of all populations within the ESU.

Work on water quality issues is associated with both urban and rural sources. The authority to address these sources is within the purview of the Washington State Department of Ecology and is primarily being addressed through the NPDES permit program, the establishment of TMDLs under the Clean Water Act, and the Forest Practice Rules. It is important to apply these programs and resources in a manner that supports the watershed groups and advances the recovery of salmon in their areas. It is recognized that emerging water quality threats to the health of Puget Sound (e.g. endocrine disruptors) are not adequately addressed under current regulatory regimes and significant new resources are needed to identify and resolve these threats. Watersheds continue to play an important role in ensuring that local jurisdictions implementing these permits adopt water quality programs that include actions and regulations that protect and enhance water quality in rivers and streams critical for salmon recovery.

Work on water quantity issues is also important at both the regional and local watershed scale. At the regional level, the Water Quantity Sub-Committee, coordinated by the Washington State Department of Ecology, is working on advancing the science on instream flows and viable salmon populations (VSP). In May of 2008, the Water Quantity Sub-Committee held an instream flow and VSP workshop to discuss the current state of instream flow/VSP science and flow assessment tools, and to identify and develop a future science agenda for instream flow/VSP work over the next five to 10 years. The workshop also focused on trying to determine the appropriate scale for flow assessment tools and VSP concepts. Additionally, the impacts of climate change will need to be assessed and integrated into salmon recovery planning on a regional scale.

Locally, watershed groups can help move these issues forward in a manner that reflects their priorities for salmon recovery. Each watershed should consider (1) advocating for appropriate instream flow rules in places where they are needed; and (2) working with the Department of Ecology to begin creating protection and enhancement programs (PEPs) in areas where instream flows hinder the recovery of fish populations.

The RITT and the Puget Sound Partnership liaisons will continue to assist watersheds in advancing water quantity and water quality actions.

*Nearshore Habitats and Processes:* There continues to be a need to advance our understanding of nearshore habitats and processes associated with Chinook recovery. Several nearshore fish presence assessments were funded through the 2007 biennial budget and SRFB round. These assessments are a crucial step in advancing our knowledge of salmonid use of the nearshore and nearshore processes. The Puget Sound Partnership and RITT liaisons recognize the need to

support these watersheds in translating the assessments into protection and restoration projects. The Puget Sound Partnership and the work group also acknowledge that we need to increase the scientific certainty regarding sequencing and prioritizing which nearshore areas to protect across the Puget Sound. Finally, we need to develop a standardized framework to not only monitor nearshore fish presence, but to also assess fish utilization of those areas.

*Multi-species planning:* The Puget Sound Steelhead were listed in May 2007 and a NOAA-appointed Technical Review Team (TRT) is working to define the population and habitat criteria for the listing. This information is anticipated to be available in March 2009. The Puget Sound watersheds will play an instrumental role in sequencing and prioritizing actions across multiple species in order to gain the highest ecosystem benefit. NOAA, the co-managers, and the watersheds are currently discussing options for Puget Sound Steelhead recovery planning. It is expected that the planning process will be defined by the end of 2008. Resources are needed to support the watersheds in steelhead planning over the next several years.

### **Watershed-Specific Comments**

The Island Watershed Three-Year Work Plan Update is a coordinated effort through the Lead Entity to further salmon recovery, focusing specifically on advancing restoration and protection of nearshore and marine habitat, developing monitoring and adaptive management strategies, and using analytical work to further protection and restoration.

### **Significant Advancements**

- The work program is aligned with recovery goals, focusing on nearshore and marine areas.
- Good use of results from analytical work (e.g., watershed assessment, hydrologic modeling, forage fish and eelgrass monitoring) in support of 10-year goal to gain a better understanding of habitats and develop a protection strategy.
- Initiating steps for H-Integration to consider how hatchery and natural origin fish interact in the nearshore, and how and where hatchery and natural origin fish use nearshore habitat. Also coordinate H-integration with Skagit and Snohomish watersheds, whose fish are most likely to use Island habitats.

### **Issues Needing Advancement**

- Advance monitoring and adaptive management through programmatic action to initiate planning and implementation of an adaptive management plan.
- Develop a project sequencing strategy that involves social/political considerations for proposed project areas.
- Improve communications and dialogue between TAG, WRAC, and County Board of Commissioners.