

Puget Sound Partnership 2008 Three Year Work Program Update Snohomish 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.

Snohomish Watershed

The RITT reviewed updates to fourteen individual watershed salmon recovery three-year work programs in May 2008. Three questions were addressed. The questions and RITT's review comments on the Snohomish (WRIA 7) three-year work program are below.

1. Is the Update consistent with the hypotheses and strategy for the watershed's Work Program? (The 'work program' includes hypotheses and strategies in the Puget Sound Recovery Plan, including the watershed plan, TRT review comments and NOAA Supplement comments).

Yes. The updated 3-year action plan presents excellent logic for how effort is to be distributed among the sub basin strategy groups outlined in the Snohomish salmon recovery chapter of the Puget Sound Salmon Recovery Plan. The projects on this three-year list are consistent with the sub basin strategy group priorities in the recovery chapter. To select and design specific projects within the guidance of the three-year plan, the watershed used detailed analyses of physical processes and fish use (e.g. Skykomish River Braided Reach Assessment, Snohomish County Surface Water Management, May 2006), where available. This provides some assurance that specific projects will be successful.

Although restoration projects continue to dominate the habitat project list, this three-year plan includes a useful analysis of the role of protection. The inclusion of a “scorecard” of currently intact habitat, allows the benefits of restoration to be seen in context with the overall tradeoff between habitat gains and losses in the basin. This is a very important first step towards elevating the role of habitat protection in the recovery plan, as called for in the NOAA supplement.

The Snohomish watershed has also made significant progress in developing a watershed adaptive management plan as well as contributing to the regional adaptive management effort. The recent H-integration work will be the foundation for a review of how well the suite of habitat, harvest, and hatchery actions are working together to promote Chinook recovery. This addresses a gap that was highlighted in the NOAA supplement.

All projects are grouped into priority tiers based on first the priority of the project in the watershed recovery chapter and second the ability and capacity of sponsors to complete them. This illustrates how capacity building is critical for the success of the recovery plan. There are projects listed for each “h”, harvest, hatchery, and habitat management, which is consistent with the basin’s coordinated all-h strategy. Monitoring and research projects, a necessary component of a complete recovery approach, are directed towards specific questions that will lead to implementation of the plan’s overall strategies.

2. Is the sequencing and timing of the actions in the updated 3-Year Work Program appropriate for this third full year of implementation of the Puget Sound Salmon Recovery Plan?

Yes. The work plan focuses on the most important protection and restoration actions in the sub-basins of the Snohomish, putting the greatest effort in the subbasin strategy groups identified as having the highest priority but including projects for all subbasin strategy groups in the plan. The plan is comprehensive in its inclusion of actions in harvest and hatchery management as well as habitat projects and programs. The watershed’s “H-integration” analysis will allow them to evaluate how well harvest and hatchery actions mesh well with the habitat actions.

This updated three-year plan reflects coordinated efforts within the Whidbey Basin thanks to the Nearshore Consortium and other efforts to coordinate among the watersheds with shorelines in the Whidbey basin area. The nearshore protection and restoration projects resulting from this coordination will be important to support the productivity of the Snohomish basin Chinook populations as recovery actions in other areas are implemented.

The three-year plan does point out that implementation of habitat recovery actions has fallen short of planned pace in some areas, mainly due to funding shortfalls. This plan does a very nice job of illustrating that problem, the specific areas where the shortfalls are occurring, and what the remedies are to get back on track. As a result of this, the watershed will be able to make a credible case for the funding necessary to implement this plan at the needed pace.

3. Are there significant components missing from the work program? If so, what are these and what can be done about them in the three-year work program update or at a regional scale?

This plan is very comprehensive and well organized towards specific recovery goals, with clearly delineated strategies and actions that follow from the strategies. Several gaps noted in previous reviews have been aggressively addressed by this watershed, most notably climate change and habitat protection. However, the watershed group will continue to need to move forward in both of these areas, as they move from modeling results into actions. In addition, addressing water quantity, especially limits on production due to low flows, will be key to Chinook recovery in the Snohomish basin. This is addressed through several capacity-building projects in the three-year plan. These are a necessary first step, but they must be designed to lead to specific efforts that will protect and restore natural flow patterns.

Partnership Questions

1. Improve the level and certainty of protection for habitat and the 22 existing populations.

Habitats in the Snohomish basin that are currently intact are listed and projects are encouraged to preserve these through acquisition or other means. However, the work program only has a placeholder for developing a comprehensive plan for identifying and protecting currently functioning habitat processes. There still does not appear to be an approach to integrating land use planning directly with salmon recovery objectives. The importance of protecting instream flows for salmon recovery is addressed through capacity building and initiation of a process for bringing the appropriate parties together to set water quantity guidelines keyed to salmon recovery objectives. Although there is also a good deal of water quality work underway in the basin, the plan does not include a similar process for coordinating this with salmon recovery.

2. Preserve options for achieving the future role of this population in the ESU?

The work program preserves options for the future role of the Skykomish and Snoqualmie populations in the ESU. The habitat actions in the plan emphasize protection where possible. Wild stock goals are given priority in the harvest and hatchery management plans. The critical life stages that occur in the nearshore marine waters of the Whidbey Basin are now addressed through inter-watershed coordination focusing on that area. The plan includes monitoring of actions in each of the “h”s as well as significant progress towards an adaptive management plan.

3. Ensure protection and restoration preserves and restores ecosystem processes for Chinook salmon?

The sub basin strategy groupings provide an appropriate structure for assuring that the right kinds of projects are implemented in locations where they will have the greatest effect on protecting and restoring basin-wide ecosystem processes. Several large projects are backed up by analyses that address large-scale basin processes.

4. High level of protection and restoration of ecosystem processes for multi-species?

This plan includes bull trout and coho as well as Chinook. The three-year work plan is structured by subbasin strategy groups, which were delineated and given priorities based on analyses that included all of the species in the plan. So, though the original watershed chapter and supporting analyses, this three-year plan addresses the needs of several species. Steelhead

were not specifically addressed in the original watershed chapter, but, concurrent with their listing as threatened, the watershed contracted for a Snohomish steelhead “state of the knowledge” report to inform steelhead recovery planning. As time allows, this work should be folded into the watershed plan so that recovery actions can be designed to address steelhead as well. There are harvest and hatchery programs in place for coho, which, although not fully described in this three-year plan, are based on the same thinking and logic as the Chinook programs. Harvest and hatchery management plans for steelhead are currently being revised due to the listing, and the revised plans should be incorporated into the Snohomish plan as they become available.

5. Advance the integrated management of harvest, hatchery, and habitat

The coordination among the habitat, harvest, and hatchery management sectors that was clearly evident in the recovery chapter is advanced further in this three-year implementation plan. In 2007 the basin completed a modeling exercise to formally examine the coordination among the three h’s. The analysis includes work on hatchery effects on the Snoqualmie population where there is no in-system hatchery program as well as in the Skykomish where the in-system hatchery program is integrated with the wild stock. In 2008 this analysis will be the basis for an h-integration summary that will review how well the programs are coordinated and make recommendations for changes, if any are warranted. Hatchery, harvest, and habitat management actions are all designed to move the populations towards the same recovery goals. Harvest management guidelines are based on population performance under current habitat conditions and designed to be modified when habitat conditions change. The hatchery program is designed to provide fish for harvest while minimizing impacts on wild stock recovery goals.

Implementation actions in this three-year plan focus on genetic integration of wild fish into the hatchery broodstock and increasing naturalization of the offspring of hatchery-origin fish in the watershed. The 3-year implementation plan also includes one project for documenting ecological interactions between hatchery and wild fish in the estuary, but ecological interactions of hatchery and wild fish merit even more attention in this basin.

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 the Snohomish 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.

Work program updates can be strengthened by providing a more focused description of how needed recovery projects and actions are identified, developed, prioritized and sequenced. 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.

Snohomish Watershed-Specific Comments

The 2008 Work Program provides a clear and detailed status update on activities, programs, and actions across the Snohomish Basin. The update also provides the progress towards the 10-year

targets as of 2007 for each of the major categories identified in the Recovery Plan: 40% complete for Nearshore and 9.1% complete for Estuary; Mainstem Primary Restoration: 9.9% complete for edge habitat, 25.4% complete for riparian habitat, 3% complete for off-channel habitat, 4.9% complete for large woody debris; and Other Sub-Basin Restoration: 100% for restoration of riparian habitat and off-channel habitat.

Significant Advancements

- The 2008 work program continues to advance on a thoughtful and technically rigorous recovery plan and reflects the priorities of this plan in terms of what actions need to be taken in the near-term in order to fulfill the long-term goals;
- The Snohomish Watershed has made significant advancements over this past year including, completion of the AHA-modeling for H-Integration, incorporation of information developed through the UW Climate Impacts Group study on how to refine actions across the basin, and restoration of habitat across the basin;
- Completion of a steelhead ‘state of the knowledge’ report that will help advance local and regional understanding for steelhead planning;
- Cross-watershed coordination, including a nearshore workshop, an outreach strategy, and a funding strategy.

Issues Needing Advancement

- Continuing to address capacity needs in order to advance on the implementation of the salmon recovery plan. This is especially true as projects are becoming more complex and there is a greater regional need within the Snohomish Basin;
- Continued support and refinement of protection activities identified in the work program;
- Support to continue adaptive management and monitoring actions, including identification and the reasons for potential losses of monitoring information;
- Consistent with the 2007 comment, connecting work relating to in-stream flows and water quality to the salmon recovery plan.