

Shared Strategy for Puget Sound Comments on April 2007 Three Year Work Program Update (Nooksack)

Introduction

In April 2007, watersheds submitted three-year work program updates on accomplishments and proposed actions that built on the 2006 three year work program they developed to get on a recovery trajectory in the first three years of implementation.

This feedback 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 being used by the TRT and Recovery Council Work Group to inform the continued development and implementation of the regional work program components such as adaptive management. The feedback will also stimulate further discussion on recovery objectives to determine what the best investments are for salmon recovery over the next three years.

Guidance for the 2007 work program updates

Guidance for the preparation of the 3 year Work Program update emphasized the importance of stating what has changed in the Update of the 3-year Work Program from the prior adopted Work Program. Watersheds were asked to:

- Describe why you have made the changes proposed, including rationale for including omitting or changing the rank of a project
- Describe any adjustments related to considering sequencing, timing, or H-Integration issues
- Discuss the status of implementation of your three year work program. – what have you accomplished in terms of the priority actions, what have you struggled with and how you resolved it, and provide suggestions, if the issues were not resolved, how we might work together to improve the situation in the future.

The guidance for preparation of the work program update provided the following as factors to be considered by the Puget Sound Technical Recovery Team in performing its technical review of the Update

- a. Is the Update consistent with the hypotheses and strategy for the watershed's work Program?
- b. Is the sequencing and timing of the action sin your updated 3-Year work Program appropriate for this first full year of implementation of the Puget sound Salmon Recovery Plan>
- c. Are there significant components missing from the work program? Is so, that are these and what can be done about them in the three-year work program update or at a regional scale?

Watersheds were provided with the following 7 questions that the Recovery Council Work Group would address in performing its 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 (See Volume I, Watershed Profiles – Results sections, and the NMFS supplement to the Puget Sound Salmon Recovery Plan, as well as the regional nearshore chapter guidance, 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. To what extent do programmatic actions address protection identified in the work program and non-capital project list?
5. To what extent are habitat, harvest and habitat actions integrated and included in the work program?
6. To what extent does the work program address the watershed’s capacity to implement the updated three year work program?

Guidance noted that the Work Group would also examine the objectives of the three year work Program and how well the program addresses them. This includes considering whether the Work Program Update:

- Improves the level and certainty of protection for habitat and the 22 existing Chinook populations;
- Preserves options for achieving the future role of this population in the ESU;
- Ensures protection and restoration preserves and restores ecosystem processes for Chinook, and
- Advances the coordinated/integrated management of harvest, hatchery and habitat

I. Puget Sound Technical Recovery Team Review

The TRT reviewed fourteen individual watershed salmon recovery three-year work program updates in April and early May 2007. Three questions were addressed. The questions and the TRT’s review comments are below.

Nooksack (WRIA 1)

Puget Sound Technical Recovery Team Review

May 24, 2007

1. *Is their work program consistent with the hypotheses and strategy for their watershed? (The ‘work program’ includes hypotheses and strategies in the Puget Sound Draft Plan, including the watershed plan, TRT review comments and NOAA Supplement comments).*

Yes, the WRIA 1 (Nooksack) work program is consistent with the hypotheses and strategy for their watershed. The WRIA 1 work program builds on the eight major suites of 10-year actions identified in Appendix B of the WRIA 1 Salmonid Recovery Plan and also includes prioritizing actions that the TRT concluded needed more emphasis. When the TRT reviewed the WRIA 1 plan, they noted “one of the strengths of the Plan is its detailed list of habitat recovery objectives

and the 10-year and long-term strategies to improve landscape forming processes and habitat conditions.”

Of the list of actions, the WRIA 1 work program gives highest priority to actions for early Chinook salmon that are expected to produce quick and significant improvements in the populations. According to the work program description in the Overview document (see “Prioritization of Actions”, p.3), these actions primarily fall into those that protect the populations from immediate extinction and that address major limiting factors in the freshwater, especially hatchery supplementation of the South Fork population, habitat restoration in the South, Middle and North forks, and instream flow negotiations in the Middle Fork. These are consistent with known threats and limiting factors to the populations. These high priority actions total over \$17 million, however, and the prioritization does not make it clear which ones are most essential to do in the next three years if not all this money were available.

We are encouraged to see the addition of two projects to begin a captive brood stock program for early Chinook salmon in response to new information on the increased risk of extinction for this population. Although these represent a different kind of hatchery action than the recovery plan describes, they are consistent with the overall intent and strategy for using hatcheries to protect and recover the population.

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

The sequencing of the work program appears to be appropriate for the first 3 years, although as noted above, if there were less than \$17 million available, it is not clear which programs the watershed would prioritize and whether the sequence of those would be appropriate. As noted in earlier the 2006 TRT review and question #1 (above), the TRT supports initiating a recovery hatchery program for South Fork Chinook salmon as an immediate, high priority.

In the TRT 2006 comments and earlier reviews, we identified a potential sequencing problem that could occur if the proposed large scale implementation of logjam projects began before the hatchery recovery program. The restructuring gravel beds where South Fork Nooksack salmon potentially spawned although desirable for habitat recovery could impact natural production in a population with already very low abundance. With the ongoing effort to begin the captive brood stock program, which should buffer the population against further decreases in abundance, this concern is mostly moot. However, if the watershed gets the funding to implement large scale logjam projects, we would encourage the watershed to test alternative scenarios for how to use engineered logjams across a large geographical scale. For example, should logjams be clustered to have the biggest impact on a smaller area or should they be dispersed throughout the watershed? This could be an excellent opportunity to improve knowledge of how to use this tool where it is appropriate across the Puget Sound.

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

The Overview of the habitat work program and the Action Matrix appear to be comprehensive.

Although the 2006 Overview of the work program and the Action Matrix identify actions that should be useful in H-integration, the work program does not identify H-integration as a significant component. Particularly in the Nooksack where hatchery actions are important both for preventing near-term extinction (see above) and potentially the source of other significant risks and where regional and international harvest changes would increase the likelihood of rebuilding the populations as habitat is rehabilitated or restored, additional detail about how these actions are expected to occur is critical to ensure that they are achieved in this timeframe. Although the TRT understands that some of these actions, such as regional and international harvest negotiations or monitoring of the effectiveness of SMPs in protecting habitat and ecological function, cannot be addressed by Nooksack watershed group alone, the uncertainty around making progress on these issues remains high given there is no clear work program at either the watershed or the regional scale.

Similarly, although the work plan identifies projects that are important for adaptive management, there is no proposed action to develop the adaptive management framework, which was missing from the recovery plan for the watershed.

Shared Strategy Objectives

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

The work plan adds five acquisition projects (four in the South and one in the North Fork) that would add over 13 miles of protected habitat. The 2006 Overview identified updating of shoreline master plans for Bellingham and other Whatcom County cities as regulatory actions for protection. Instream flow negotiations are another action that could improve the certainty of protection if they deliver appropriate flows for Chinook salmon.

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

The captive brood stock programs and supplementation of the South Fork early-Chinook salmon population is the major near-term action that addresses the need to preserve options for the future role of this population. The purpose of this program is to protect the unique, genetic diversity of South Fork Chinook salmon which is threatened by low abundance and straying of North Fork and late-returning Chinook hatchery Chinook salmon.

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

Projects focused on restoration in the three major forks of the river are high priority and appear to be developed consistent with the hypotheses and strategies of the plan which is to restore ecosystem function and processes.

4. Advance the integrated management of harvest, hatchery, and habitat?

Integration of the Hs is generally identified as an action in the plan, but as noted above, the work plan lacks the specificity for developing this further to understand the necessary magnitude of specific actions, likely results, or gaps in substance or sequencing.

II. Policy Review Comments

The Recovery Council Work Group, an interdisciplinary policy team, evaluated each of the fourteen watershed work plans. The following questions guided the evaluation of the work plans updates.

1. Is the work program update consistent with the policy feedback and recommendations from the 2004 policy feedback summary, Recovery Plan Watershed Profiles - Results section, and NOAA's Federal Supplement?
2. Is the work program update tied to the objectives identified and at a pace sufficient to achieve the watershed's ten year goals?
3. Are there significant elements missing and how might these be addressed?

In addressing these three questions, the interdisciplinary team noted accomplishments and strengths of the three year work program update and also identified and discussed gaps and special issues warranting attention. Specific comments are provided below, followed by a short discussion of comments common to all watersheds.

General comments on 2007 watershed work program updates

Although the watershed 2007 work program updates reflect advancement in terms of project identification, many of the watersheds continue to have gaps, to varying degrees, that were identified in the 2006 work program review. Regional assistance to the watershed planning teams will be needed to address how best to fill the needs identified below.

Work Plan Accomplishments, Sequencing and Prioritization: Work program updates are a useful tool for defining progress toward plan goals and ESU-wide recovery. Narratives should be crafted to give a sharper focus on what each watershed expects to accomplish within the three year period and identifying alternatives if they are unable to implement a given suite of actions. All work program updates could be strengthened by providing more focus on how projects and actions are prioritized and sequenced. It is also important the narrative provides 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.

Integrated Management of Habitat, Harvest and Hatcheries: *Integrated Management of Habitat, Harvest and Hatcheries:* All Puget Sound watersheds' work programs would benefit from additional efforts to achieve H-Integration. During 2006, all watersheds with Chinook populations have engaged in actions that reflect increased attention to the integrated management of habitat, harvest and hatchery. By the end of 2008, it is anticipated that those watersheds will completed or substantially advanced efforts to accomplish the 6 Step process developed at the regional level by the H-Integration sub-group of the Adaptive Management and Monitoring Steering Committee and that the region . The Shared Strategy and TRT liaisons will continue to assist watersheds without independent Chinook populations concerning integrated management and the capacity of the nearshore to sustain natural – and hatchery-origin populations of all salmonids.

Monitoring and Adaptive Management: A regional monitoring and adaptive management plan is currently being drafted by Shared Strategy staff along with a work group of technical experts, which will guide monitoring efforts at the regional and fish population scales. Some watersheds have already begun putting together their own monitoring and adaptive management frameworks and initial monitoring tasks. The regional team will coordinate with those watersheds to ensure that both of the monitoring and adaptive management plans are consistent and complementary with each other. During the intervening time, the Shared Strategy staff, work group and TRT acknowledge that they play an important a role in providing assistance during the coming year to ensure that all Puget Sound watersheds can engage in a coordinated and efficient process to develop, refine and implement a robust monitoring and adaptive management approach. This will enable watersheds and the region to assess progress in reducing uncertainties in the population and ESU-wide recovery. Shared Strategy anticipates that the regional plan will be adopted by the Recovery Council by the end of 2007. In the meantime, the Puget Sound TRT and Shared Strategy liaisons will assist watersheds who are poised to take the next steps in the development of their watershed monitoring and adaptive management plans.

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. Recovery actions have progressed from relatively straightforward work to

complex and more expensive multi-year projects. All watersheds are challenged in terms of their capacity to acquire land in order to secure future options, and to implement the large-scale projects. The Shared Strategy staff and work group members acknowledge that additional efforts are needed at the regional scale to assist in securing resources that will enable watersheds to protect restoration options in rapidly developing areas and to implement projects at an appropriate pace to achieve ESU-wide recovery.

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 within the authority of the Washington State Department of Ecology and will be primarily pursued through its implementation of the NPDES permit program and the establishment of TMDLs under the Clean Water Act throughout the ESU. However, watersheds can play an important role in ensuring that local jurisdictions implementing NPDES permits adopt water quality programs that include actions and regulations that protect and enhance water quality in rivers and streams that are critical for salmon recovery.

At the regional level, a work group has been established on instream flows to determine how to move forward the protection strategy identified in the Recovery plan. At present, the Plan calls for a 3-pronged approach to improving instream flows: (1) setting and/or revising instream flows under the authority of the Department of Ecology; (2) improving our scientific understanding of fish population needs in relation to instream flows, groundwater dynamics and relationship to surface water, as well as the implications of climate change on instream flows over time; and (3) coordinating water management decisions and actions within each watershed to avoid further degradation of instream flow conditions through the creation of Protection and Enhancement Programs (PEPs). Watersheds will play an important role in moving these issues forward in the near term. Each watershed should consider (1) advocating for appropriate instream flow rules in places where they are needed; (2) participating in the development of new science by sending technical staff to instream flow workshops planned in 2007; and (3) by working with the Department of Ecology to begin creating PEPs in areas where instream flows hinder the recovery of fish populations. The TRT and Shared Strategy liaisons will assist watersheds in advancing water quantity and water quality actions.

Nooksack Specific Comments

The 3-year work program for 2006 was believed to advance habitat and process protection and restoration of key threat to the populations and to protect the South Fork population through a broodstock program consistent with the plan goals and objectives. The 2006 3-year program was estimated to achieve approximately 50-70% of the 10-year work program. The 2007 submittal is a continuation and improvement in the 2006 work program.

Significant Advancements:

- The Nooksack work plan improves upon an already well thought-out plan for how to implement the goals and approach identified for salmon recovery in the watershed.

- The advancement of the captive brood supplementation program detail and policy commitment to implement is significant to protecting the South Fork population from extinction.
- The specificity and focus of the habitat restoration programs and projects increased in the 2007 submittal.

Issues Needing Advancement:

- It is important that the WRIA 1 Salmon Recovery Board utilize the existing decision-making structures to implement the salmon recovery plan and establish and implement a functioning adaptive management and monitoring program.