

Shared Strategy for Puget Sound Comments on April 2007 Three Year-Work Program Update Nisqually Watershed

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; and
- 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 have you resolved it, and provide suggestions, if the issues were not resolved, on 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 actions in 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? If so, what are these and what can be done about them in the 3-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 section), 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 that protection and restoration preserve and restore 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. This section presents the questions and the TRT's review comments.

As noted in the 2007 Nisqually Work Program, the major pieces of the three year work program have not changed since 2006 and the list of projects is not significantly different. Consequently, nearly all of the TRT's comments and conclusion from our review in 2006 apply to the 2007 work program.

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 work program is consistent with the hypotheses and strategy for the watershed. As noted in the work program description, the watershed has spent considerable effort developing watershed hypotheses and protection and restoration strategies based on modeling using EDT and more recent AHA models. The work program continues to use the conclusions of those modeling efforts to guide and prioritize watershed restoration and salmon recovery. The work program includes projects aimed to improving all four attributes of viable salmonid populations (abundance, productivity, diversity and spatial structure), although improvements in spatial structure are not directly described.

A key recommendation from the TRT's 2005 review of Nisqually plan and the 2006 review of the work program was to actually monitor changes in fish and habitat. We continue to emphasize that recommendation. Key data on this population are lacking. At some point fairly soon, the watershed's reliance on qualitative EDT analyses, which were useful for developing recovery and protection strategies, needs to switch to analysis of quantitative monitoring data. EDT model runs simply cannot replace data in monitoring and adaptive management. The 2006 work program identified 2 FTE positions that would be used to develop monitoring and adaptive management for the watershed. However, these positions have not yet been filled, which indicates a need for increased technical capacity that is not being met. In the TRT's view, it is critical for Nisqually to develop and implement monitoring not only because of the data limitations in the watershed but also because the watershed is leading the way in many areas of salmon restoration and the region cannot afford to lose the opportunity to learn from these efforts.

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

In general, it appears that the sequencing and timing of the actions in the work program are appropriate. The work program does not explicitly address sequencing—except for the issue of whether control of excess hatchery fish or harvest management changes should come first—but it is possible to infer a sequencing strategy from most of the projects that were selected and the recent history of protection and restoration in the watershed. As noted, in recent years the watershed has invested considerable effort in protection of key habitats and restoration of the estuary. The work program builds on that success and continues with that direction. Most of the highest priority projects emphasize protection and with focused efforts on restoring key areas, such as the 700 estuarine acres in the Nisqually Wildlife Refuge.

The Nisqually watershed, like many others in the Puget Sound, was not able to fully implement all the programs identified in the 2006 3-year work program. Consequently, watersheds may need to reprioritize and sequence projects based on the availability of funding or opportunity. The current list of projects in the Nisqually watershed does not really give reviewers a sense of how this might occur. It might be useful in the future to indicate which projects are likely under current budgeting scenarios and which are important but unlikely to be funded or may be hampered by other issues.

It was clear from the 2005 TRT review of the Plan that successful H-sector integration, especially changes in hatchery and harvest management, will be a major challenge in this watershed. The work program strongly asserted that hatchery management changes, especially the operation of the weir, depend on successful harvest management negotiations to lower harvest rates. In 2006, the TRT noted that it might make sense to begin construction and trial operation of the weir sooner than planned to be able to work through logistical and technical problems that are likely to occur. Although it is not explicitly stated, the 2007 3-year work plan appears to address this recommendation. The work plan, for example, identifies a technical need for policy and technical staff to work on renegotiating pre-terminal harvest rates through 2010 but targets 2008 for beginning operation of the weir, which suggests the watershed is moving forward with testing and implementing the weir as harvest negotiations continue.

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?*

In general, the major components needed to move forward are here. As noted earlier, key data on this population are not available. It is good to see that this was addressed at least partly in the work program and in the TRT's view this is an important piece although it was not specifically highlighted. Likewise as noted earlier, it would be useful for the watershed to incorporate spatial structure into their thinking. This may be occurring, but it is not as explicit as other VSP attributes.

Shared Strategy Objectives

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

Yes. The work program builds on successful protection efforts. Protection and acquisition projects in the tributaries, mainstem, and estuary appear to be sufficiently large or accumulative so that channel, floodplain, and riparian processes and functional linkages are maintained and improved with restoration.

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

Yes. The work program preserves options for the future role of this population in the ESU. The recent abundance, productivity, diversity, and spatial structure of this population (which is largely derived from introduced hatchery stocks) have depended mostly on operation of the hatchery program. Nothing indicated in the program indicates a change that would threaten what is currently there and the direction of the work program is to improve the future role of the population. This depends on harvest changes that are not entirely within local watershed control.

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

See comments on protection above. The work program's emphasis on restoration in the estuary, mainstem, and tributaries supports this objective.

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

The Nisqually's analysis of the interactions of harvest, hatchery, and habitat management needed to achieve goals has been careful and systematic. As currently described, overall success depends on the ability to negotiate lower harvest rates on the population, which in turn will lead to changes in hatchery management. The amendments to the Plan and the work plan have described this well. If these actions do occur, the watershed will need an improved adaptive management system to determine if the actions were successful in meeting population goals.

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. A short discussion of comments common to all watersheds is provided below, followed by comments specific to the Nisqually watershed.

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 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.

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 have 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. 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 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) 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.

Comments and special issues specific to the Nisqually Work Program Update

The policy review team found that the work program update is consistent with previous feedback and recommendations and that it is tied to the objectives identified to achieve the watershed's goals. There are no significant elements missing from the work program update. Continued implementation of project and programmatic actions at a pace sufficient to achieve the watershed's ten-year goals appears largely dependent upon resolving capacity needs.

Significant Advances

- 6-Step process for H-Integration completed;
- Monitoring and Adaptive Management plan is being refined to reflect integrated management of Hs;
- Projects addressing Water Quality and Instream Flows are included in the update; and
- Update includes multi-species projects, including steelhead smolt acoustic tag study needed for recovery planning for declining Nisqually steelhead run.

Issues needing advancement:

- Adequacy of resources and capacity needed to implement high priority actions remains a concern.