

Shared Strategy for Puget Sound Comments on April 2007 Three-Year Work Program Update Elwha/Dungeness/Strait 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 update 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. The questions and the TRT’s review comments are below.

1. *Is their work program consistent with the hypotheses and strategy for their watershed? (The “work program” includes hypotheses and strategies in the larger plan, including the watershed plan, TRT review comments and Federal Supplement comments).*

The Three-Year Work Program Update provided by NOPL for TRT review appears to be, in essence, much the same technical materials as was provided for last year’s initial review. As such, the feedback from last year is still appropriate as to the general consistency of the work plan with the hypotheses and strategy for their planning area. Please refer back to the comments from last year for assurances that the TRT continues to consider the 3-year work program, in general, to be an excellent basis for plan implementation and adaptive management. However, our expectation is that the

watershed groups need to also consider all the guidance and feedback provided in the development of the Regional Recovery plan and the Federal Supplement, and use that direction to make needed advancements towards both the objectives and the remaining identified gaps.

Without re-statement of our positive overall opinion of the 3-year work program, the TRT is concerned that the following feedback may be viewed as overly harsh. We also wish to acknowledge that the TRT recognizes the North Olympic/Strait of Juan de Fuca Planning Area faces significant, and perhaps extraordinary, challenges in needed improvements in multi-watershed/lead entity coordination and research efforts. While we recognize there are socio-political complexities, timely solutions to meet the recovery needs of the Puget Sound Chinook and Hood Canal and Eastern Strait of Juan de Fuca (HCES) summer chum populations and their subunits are necessary to reduce the uncertainties of attaining paths toward recovery of the ESUs. The watershed and regional scale technical groups will need to freely exchange information communicating those solutions, responding to recovery needs; as identified in the watershed and Regional Recovery plans, Federal Supplements, and related technical guidance, in order that recovery progress can be tracked.

a) Work program - consistency with the 10-year plan priorities and revisions to those priorities based on the TRT reviews and related guidance, whether the distribution of funding requests reflects their priority order and guidance.

If the identified gaps remain unaddressed, the program leaves substantial uncertainty as to whether it is being implemented in a manner consistent with the 10-year plan priorities and revisions to those priorities based on the TRT reviews and related guidance.

b) Project types - Habitat – Protection and Restoration, Harvest, Hatchery.

No integration into an overall set of priorities has been provided.

c) Programmatic efforts

Not enough information has been provided to determine whether activities are consistent with objectives.

d) Research or multi-watershed/lead entity projects – consistency with technical guidance, Federal Supplement, Regional Recovery plan, and related technical considerations.

See comments elsewhere in this document. The take-home message is more coordination, synthesis, and reporting of all the moving parts and relationships is needed to enable communications in regard to whether progress towards recovery objectives and long-term goals is starting to occur.

2. *Are the sequencing and timing of the work program appropriate for this year of implementation?*

The TRT has inadequate information in the update materials provided to answer this question. The NOBLE 3-year work program is apparently proceeding with priority tasks. For example, our discussions with the NOBLE work group and others has indicated that they have been funded and are proceeding to develop a WRIA 19 salmon recovery plan. If the plan adequately details Hypotheses for PS Chinook and HCES summer chum utilization of the western strait nearshore habitats and follows through with an action plan to test those hypotheses and report results to the management entities responsible for appropriate management the task would address a significant gap identified in the recovery plan. However, there was not sufficient explanatory material provided in the watershed's three-year plan update documents to assess their intent or progress in regard to filling that gap. Without further explanation, it is not possible to determine whether the work program is or is not appropriate because we have no context for relating the list of activities to the (revised) ten-year plan priorities.

Similarly, there was not sufficient explanatory material provided in the watershed's 3-Year plan update to assess their intent or progress in regard to filling the same gap in our understanding regarding PS Chinook and HCES summer chum utilization of the eastern strait nearshore habitats. Without further explanation, it is not possible to determine whether the work program is or is not appropriate because we have no context for relating the list of activities to the (revised) ten-year plan priorities.

As an additional example, we have not been provided any indication of whether there is an intended sequence among the water conservation projects and the lower river and estuary stream corridor structural restoration projects to restore the Dungeness River and estuary. It appears appropriate to consider the merits of increasing low flow levels before restoration projects are implemented that will increase and improve off-channel habitats but may spread out flows thus exacerbating adverse conditions such as adult passage barriers via inadequate depths or high temperatures.

The Regional recovery plan highlights the importance of addressing flow issues and lower river functions and constrictions in implementation of the Dungeness watershed plan.

From the 2005 TRT review of the draft watershed recovery plan:

“Are the recovery actions consistent with the recovery strategy? (Consistent with Strategy)

No. The description of the requirements for low flows in the plan is not consistent with the IFIM analyses.

Ways to increase certainty in plan outcomes:

- Develop stronger empirical and analytical support for the relationships among protection and restoration actions, the hypotheses and strategies, and specific VSP characteristics or ESU persistence.
- Provide a scientifically sound basis for the low flow requirements that are necessary for the population to achieve recovery targets.”

The 2005 review discussion of the second bullet indicated that there was a need for further assessment work to understand what flows will be sufficient to maintain suitable habitat conditions in the lower river including side channel habitats. We suggest that sufficient progress needs to be made to reduce these uncertainties, in conjunction with the restoration projects planning and implementation to avoid unintended adverse consequences. For example, assessments of the effects of alternative sequencing scenarios among the water conservation projects and the lower river and estuary stream corridor structural restoration projects would help to better inform expected outcomes in habitat conditions outcomes over time.

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?

Also without further elaboration on the status and context for the nearshore work plan and projects, it is difficult for the regional process to engage NOAA Fisheries in a substantive plan and time schedule for considering the local recommendation to include the western straits nearshore environment as part of the PS Chinook ESU and critical habitat designations.

For much the same reasons, there are not adequate linkages between the nearshore assessment work now underway and the current uncertainties regarding the appropriateness of the HCES summer chum ESU boundary and critical habitat designations in the eastern straits geographic region. The comments in 4 c below may well also pertain to providing estuarine habitats supporting non-natal rearing for multiple spawning aggregations of the HCES summer chum ESU. The strait's technical group can perhaps anticipate hearing the response to 4 c posed again during review of the HCES summer chum work plan and projects. Utilization of the Elwha reach by summer chum appears plausible based upon the currently available information. The consideration of the area as a significant potential resource for summer chum recovery is a data gap that may be at least be partially addressed by the current assessment work.

The narrative description of the work program elements and the project descriptions for protection and restoration of the lower Dungeness River and estuary are mute as to their effects on the Dungeness River spawning aggregation component of the HCES summer chum ESU. It is reasonable to expect that the aggressive (and necessary) identified restoration actions pose significant additional short term adverse impacts to this listed species. Additional strategies and actions, such as documentation of utilization, rescue of embryos from reeds at high risk, and a summer chum stock rescue or supplementation program are examples of potentials for integrating the two recovery plans in effect for the Dungeness River. Beyond that, there is a need to coordinate with the regional entities responsible for both those plans to ensure selected strategies and actions are consistent with both regional plans.

4. Objectives, and how well does the plan address them:

- a. Improve the level and certainty of protection for habitat and the 22 existing Chinook populations.

From the 2005 TRT review of the draft watershed recovery plan:

“The most important ways to improve the certainty of an effective habitat strategy in the Dungeness recovery plan in the near-term plan are to:

- Provide any empirical data on the effectiveness of the protection actions described.
- Further develop an adaptive management plan for the habitat recovery strategy that more explicitly and quantitatively relates the interactions among the flow management regime, land use, habitat forming processes, habitat conditions to population responses.”

No update is provided on intent to improve understanding of the trends in the inventory of habitats (i.e. Provide any empirical data on the effectiveness of the protection actions described). No prioritization of non-capital elements, either within that category or in comparison to restoration projects, is provided to express a need for program funding to progress toward an objective of filling that gap.

Projects are still listed for stock assessments and enforcement, but no status update is provided (i.e. have they been proposed, funded, or implemented? Are the base level programs being built upon still intact?).

- b. Preserve options for achieving the future role of this population in the ESU.

No update is provided.

Again, from the 2005 TRT review of the draft Dungeness watershed recovery plan:

“Does the habitat recovery strategy preserve options for recovery in all 4 VSP attributes through all of the H’s? (Preserves Options)

No.

Preserving options requires an adaptive management plan to respond to changes and uncertainties as they occur. “

While the watershed groups are not expected to further develop and implement these plans without regional help, they can begin to coordinate and plan for implementation activities to describe how information on habitat-forming processes and ecosystem functioning will be collected as recovery proceeds, a prioritized list of monitoring needs (this may increase the chances that such monitoring will occur); and a decision-making system using the monitoring information.

Regional support for development and implementation of Adaptive Management and Monitoring programs also needs to be provided.

c. Ensure protection and restoration preserves and restores ecosystem processes for Chinook

As in 'a' above, no update is provided on intent to improve understanding to ensure that protection and restoration preserves and restores ecosystem processes. In particular, we are aware that various assessments are underway on the Elwha estuary and adjacent nearshore areas. However, no additional information is provided in the update on how the work is intended to improve certainty and (better) ensure protection and restoration of ecological processes that will best utilize the Elwha River Restoration Project as an opportunity to also restore nearshore habitats (including the estuary) supporting the 22 existing Chinook populations.

The update also does not take the opportunity to qualitatively describe protection and restoration "successes and failures" being experienced to note that the effectiveness of protection is an ongoing question that needs more work. Just one example: the update could have documented the group's concerns about a major marine bluff armoring project adjacent to the Elwha delta that may not be adequately protective to be consistent with the 10-year work plan objectives and the recovery plan goals.

From the 2005 TRT review of the draft Elwha watershed recovery plan:

"What is the nature of the analytical support for the model linking salmon population status to changes in habitat-forming processes and in-stream habitat conditions? (Analytical Support)?"

The analytical support was moderate.

- A well developed *qualitative* model was used to relate ecological processes, habitat conditions, and all four VSP characteristics. Quantitative models were applied to develop understandings of Abundance and Productivity (R:S and capacity estimates), flow and sediment transport processes and sediment effects from dam removal. It is not clear to what extent, if any, the effects of the restoration projects have been modeled for the estuary. Lower river floodplain land use management assumptions and diversity and spatial structure characteristics of the population are also not clear. A summary of the key assumptions for habitat and VSP in the plan itself would make the supporting evidence more readily available and transparent to various users. Similarly, a synthesis of the empirical support would strengthen the analytical support. Reviewers found no empirical support for productivity or for other VSP hypotheses. While there is some empirical support for the sediment transport and flow process hypotheses, linking these processes to VSP characteristics would strengthen the overall analytical support for the recovery plan. There is no explicit discussion provided of sensitivity testing, though some exists in the associated records. The plan also does not discuss empirical testing and validation of the models. Finally, habitat factors beyond the scope of the restoration project have clearly not been assessed.

Ways to improve certainty in plan outcomes:

Provide better documentation of the data, assumptions, and models used as they relate to the VSP characteristics and potential responses of the population;

Provide the empirical support used to relate ecological processes to land use and habitat conditions, and to all VSP characteristics.

Further develop explicit life stage specific linkages relating ecological processes, land use, and habitat conditions to responses in population viability characteristics, and potential responses of the population.”

An Update is needed from the watershed on when and how they intend to fill the identified gaps and improve certainty in plan outcomes.

d. Advance the coordinated/integrated management of harvest, hatchery and habitat

Advancements, including several we know of that are underway, are not reported in the update. For example, we understand there are efforts underway by the co-managers and federal agencies to address high harvest rates for Dungeness Chinook through the Pacific Salmon Treaty process. Yet there is no discussion of the status on these non-capital activities. We suspect there are a number of program status reports that need similar status updates; for example, status reports on proposed stock assessment projects to integrate hatchery and habitat strategies. Without update discussions, it is unknown whether these are capacity issues or communication pathway gaps between Hs management processes.

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 Elwha/Dungeness/Straits recovery planning area.

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 specific to the Elwha/Dungeness/Straits recovery planning area

The work program update reflects capital and non-capital projects and actions that are consistent with the watershed's recovery plan policy and previous feedback, and is tied to objectives identified in the watershed's ten-year goals. There is insufficient information to determine whether actions are being implemented at a pace sufficient to achieve the watershed's ten year goals. Some advancement has occurred in addressing gaps noted in previous comments, as noted below.

Significant Advances:

- WRIA 19 planning has begun and subsequent integration into the North Olympic recovery plan implementation processes will occur this year;
- The watershed has begun a dialogue with Hood Canal Coordinating Council concerning project identification and selection and implementation of the Hood Canal and Eastern Strait of Juan de Fuca Summer Chum Recovery Plan;
- Funding has been secured for the Nearshore Assessment, which is now underway; and
- Water quality and water quantity projects pursuant to continued work with the irrigation community and WRIA 19 - 2514 plan implementation are included in the update.

Issue Needing Advancement:

- As noted in 2006, with the exception of the Dungeness, the work program does not appear to directly address substantial uncertainties surrounding the role of harvest and hatcheries in the ecosystem. All-H efforts will advance this concern.
- Previous comments noted that support for the recovery hypotheses using watershed specific data was moderate; however, neither the 2006 work program nor the 2007 work program update address or include actions or funding for the development of a monitoring and adaptive management plan. Although regional guidance will be forthcoming, the watershed will benefit now from crafting specific predictions and triggers derived from hypotheses, indicators and metrics that allow early action-specific information to be used in a longer term assessment of ecosystem function and population response. A full adaptive management plan will inform the sequence and timing of the many activities called for in the recovery plan.
- Protecting and restoring ecosystem processes for Chinook, Bull Trout, summer chum and steelhead remain significant components of work that needs more attention.
- Increasing and diversifying project funding sources will enable the team to implement the work plan more aggressively.

Additional key issues that still need to be addressed as the 2007 work program update is refined:

- Prioritization and sequencing, as noted above;
- Capacity to implement the work program and recovery plan, including additional technical support and nearshore linkage to regional work;
- Expanding and deepening support for watershed-wide recovery program objectives;
- Monitoring and Adaptive Management Plan which would include more explicit detailed qualitative and quantitative interactions among a comprehensive list of land use, habitat forming processes, habitat conditions and population responses for specific protection and restoration action plans;
- Key improvements in harvest management portion of the recovery plan (per prior feedback); and
- Additional efforts to define non-capital needs in accordance with plan priorities.