

## **Nooksack Watershed (WRIA 1) Shared Strategy Feedback for Decision-Makers**

**I. Key Questions for Regional Summit: The following questions are important to determine the contribution of the Nooksack watershed to regional salmon recovery in the next ten years. Answers to these questions by the end of December 2004 will support regional consensus on the direction for Puget Sound salmon recovery at the January 2005 summit. The following questions are intended to confirm the goals and measurable outcomes the watershed is pursuing for salmon recovery and key decision-maker support for this approach.**

1. We are asking many watersheds to answer the question of where they can make significant progress in the 10 year timeframe relative to the planning targets. It is our understanding from the draft materials submitted on June 30, 2004 and the August meeting with the TRT and Work Group that the significant proposals summarized below in Section IV comprise the answer to this question for the Nooksack watershed.
2. The draft plan submitted by Whatcom County as the Lead Entity acknowledges the imminent formation of the WRIA 1 Salmon Recovery Board and that the June 30, 2004 submission was not yet endorsed by Board members. Does the WRIA 1 Salmon Recovery Board endorse pursuing the planning targets and the proposed 10 year actions?
3. What policy conditions are necessary to pursue the planning targets and other viable salmonid population parameters and the proposed 10 year actions identified in the plan? Are these policy conditions supported by those responsible for implementation (for example: Tribal Governments, Whatcom County Council, forest land managers, Army Corps of Engineers)?
  - i. Specifically, protection of existing function is still highly uncertain in Puget Sound. What actions are necessary to achieve the protection of existing functions? What terms and conditions must be in place to achieve protection? Are those supported by those responsible for implementation?
  - ii. The current submission has two different statements on harvest and hatchery. Will the co-managers submit a final plan that integrates and describes the results expected from the proposed habitat, harvest and hatchery management actions?
  - iii. Hatchery management and a reduction in international harvest have the potential to decrease the immediate risk to the South Fork. As such they are critical steps in the short-term for ESU recovery and increased certainty of

local viability of the South Fork population. Do the co-managers agree to include a strategy with actions and timeframes that can be evaluated for their ability to decrease the risk of South Fork population extinction?

4. If funding during the next ten years is not available for all areas where you would like to make significant progress, how will decision-makers prioritize actions?

**II. Essential Decisions for Final Watershed Chapter: Based on the June submittal, the summer review process, and our best scientific understanding, the Technical Recovery Team and the Work Group consider the following policy decisions as the most important to answer and include in the chapter by April 30, 2004. This will increase the certainty that actions taken in the next ten years will move us on a trajectory toward recovery. The questions below are intended to provide more detailed information for the final plan by focusing specifically on how the goals and measurable outcomes will be accomplished.**

1. Protection of existing function will be critical to achieving the desired 10 year results. How will local governments protect existing function as detailed in the policy recommendations outlined in the plan? How will stakeholders such as land trusts, non-profits, and individual landowners protect existing functions and habitats not protected through regulatory mechanisms consistent with the habitat goals stated in the plan?
2. How will adaptive management be structured to monitor and manage progress toward recovery? Will existing programs and resources, such as Regional Fisheries Enhancement Groups, contribute to monitoring efforts?
3. What harvest and hatchery actions will the co-managers include for the 10-year plan and what results will those actions, combined with the habitat actions, have for fish?
4. How will a strategy with actions and timeframes that can be evaluated for their ability to decrease the risk of South Fork population extinction be developed by April 2005?

**III. Increasing ESU Certainty: The Technical Recovery Team suggests that addressing the following will increase the certainty of meeting ESU recovery and should be noted in the plan with a brief statement of long-term strategy to address even if it is not possible to develop actions at this time.**

1. Completing further analysis of the role of nearshore habitats, including the two deltas, play for Nooksack chinook and other ESU populations. This should include a discussion of sequencing, protection and restoration strategies and

actions and identification of the conditions under which various actions could be taken.

2. Moving low flows and floodplain management from the poised to the significant proposal categories.
3. Protection of small creeks such as Dakota for direct rearing utilization by natal and non- natal juvenile chinook.
4. Protection of the Cherry Point herring spawning populations because they are an important prey fish for the chinook populations in the ESU and may be especially important for bull trout recovery.
5. H-integration: A habitat, harvest and hatchery integration strategy must be reflected in the recovery plans. The strategy should describe the development and use of tools to assess the combined effects of habitat, harvest and hatchery actions.
6. Protection: Each jurisdiction's Critical Area Ordinance, Shoreline Master Program and other ordinances and voluntary programs need to be evaluated relative to the needs stated for recovery in the plan. Where gaps exist in protection, actions need to be taken to ensure protection is occurring.

**IV. Highlights of Summer Review 2004: This section summarizes our understanding of your responses to the six questions from your June submissions and August discussions.**

**A. Information about the planning approach, conditions necessary to achieve recovery, and measurable goals.**

**Planning Group:** Is there a group working to complete a chapter? Yes, the WRIA 1 Salmon Recovery Board is comprised of the co-managers and local jurisdictions and is in the process of signing an ILA that commits them to developing and implementing a salmon recovery plan.

**Recovery Conditions:** Has the watershed group identified the conditions (habitat, harvest and hatchery) necessary to reach the planning target?  
Yes

**Measurable Goals:** Has the watershed group endorsed the planning targets as a long-term goal? If not, what is their goal?  
No, the WRIA 1 Salmon Recovery Board has not yet endorsed the planning targets.

**Long-term Contribution to ESU Recovery:** What is the long-term contribution of the independent spawning populations using this watershed for ESU recovery? To achieve ESU recovery the TRT draft delisting criteria recommends that all populations show significant improvements. Also based upon the delisting criteria 2-4 populations in each of the five sub-regions must achieve the planning targets and other viable salmonid population parameters. These criteria are not intended to limit additional populations in each of the five regions from achieving the planning targets.

WRIA 1 comprises the entire northern region of the TRT's five regions of diversity and risk. Based upon the draft TRT delisting criteria, the North and South Fork Nooksack populations must achieve the planning targets in the long-term. Populations that achieve the planning targets are described as core or low risk populations.

Chinook populations from other natal streams also use the nearshore and marine environments of WRIA 1. Based on the TRT delisting criteria, nearshore, marine and tributaries to Puget Sound not identified as primary freshwater habitat for any of the 22 identified chinook populations should be functioning in a manner that is sufficient to support an ESU-wide recovery scenario.

**B. Highlights of improvements completed or underway and existing protections of ecological functions that support recovery (Note: Results for fish have not been evaluated).**

1. Protection: The implementation of each jurisdiction's Critical Area Ordinance, Shoreline Master Program and other ordinances and voluntary programs contribute to the protection of habitat functions and values that support chinook and bull trout.
2. Water quality: A concerted effort, with improvements in water quality, was undertaken to reduce the impacts from farming practices, especially from the dairy industry.
3. Floodplain conditions: Protection and restoration actions have been taken to improve floodplain conditions.
4. Riparian restoration and protection: There is a large voluntary program that has been implementing protection and restoration programs throughout the last decade.
5. Sediment reduction: Some logging road decommissioning is currently being implemented.
6. Harvest: Significant reductions in harvest have been made by the co-managers.
7. Hatchery: Significant reductions in hatchery production of chinook and coho salmon in order to reduce potential genetic and ecological interactions with other vulnerable stocks.

**C. Significant proposals – proposed strategy that strives to significantly protect or improve an important factor for recovery with actions that can be evaluated qualitatively or quantitatively for their results for fish); total cost of proposal(s)**

The following proposals were included in the June 30<sup>th</sup>, 2004 submittal and results are based on EDT modeling that has not been verified by the TRT.

- Access: Remove two barriers which would open up approximately 29% of the habitat formerly available in the uplands (currently well-protected) and 4.1 miles of tributary spawning grounds in the lowland that would contribute significantly to diversity and spatial structure.
- Sediment: Decommission logging roads, address landslide impacts and minimize impacts from logging. Some projects are already being implemented.
- Channel conditions (LWD): Aggressively pursue instream large wood debris placements with a few channel improvement projects though feasibility of implementation is a significant unknown.
- Riparian conditions: Aggressively pursue riparian corridor restoration in the Forks and tributaries.
- Floodplain conditions: Restore riparian conditions, improve channel conditions, and improve wetland and floodplain connectivity.
- Water quality: Initial improvements are being implemented and need continued support to continue to improve mainstem water quality through BMPs, filter strips, stormwater management, and pesticide and nutrient application.
- Estuary: Setback levees in the lower river.

The result that EDT predicts these proposals will have for fish is:

North/Middle Fork:      Diversity: 37% to 89%  
                                    Productivity: 1.8 to 4.7  
                                    Capacity: 2,723 to 6,342  
                                    Abundance: 1,219 to 4,988

South Fork:                Diversity: 42% to 87%  
                                    Productivity: 1.4 to 5  
                                    Capacity: 1,215 to 3,483  
                                    Abundance: 317 to 2,784

**Total Cost of Proposal:** The total cost for habitat improvements for the 10 year timeframe: Ranges from approximately \$60,000,000 to \$64,000,000  
Note: Does not include costs associated with riparian management of timber lands, North Fork tributary riparian restoration and water quality improvements.

**D. Poised – the watershed has designed or initiated a process that will result in the development of significant proposals to improve conditions for fish. Anticipated or resulting proposals should be included in the recovery chapter.**

1. Protection: Update the CAO and SMP consistent with the needs provided in the salmon recovery chapter.
2. Floodplain conditions: Develop a comprehensive approach to floodplain management and commit to describing and implementing actions within 3 to 5 years.
3. Water quantity: Addressing peak and low flows includes a combination of actions involving headwater forest management and floodplain connectivity.
  - i. Low flows: There is an extensive planning structure to explore the protection and restoration of low flows.
  - ii. Peak flows: Strategies and some potential actions have been identified though the partnerships to implement a comprehensive strategy are not developed.
4. Contaminated sediments: Several programs have identified and initiated remediation efforts of contaminated sediments in Bellingham Bay but their efforts have not been described relative to their contribution toward salmon recovery.