

**DRAFT Sub-basin Summary**  
**Regional Nearshore and Marine Chapter of the Puget Sound Salmon Recovery Plan**

**PORT MADISON AND SINCLAIR INLET**

**Introduction:**

This document summarizes discussions between the Puget Sound Technical Recovery Team (TRT), NOAA Fisheries scientists, the Puget Sound Action Team (PSAT) and Shared Strategy staff about salmon recovery in the Port Madison and Sinclair Inlet Sub-basin. People with an interest in this area should also review recommendations provided to watershed planning groups in the Shared Strategy Feedback for Decision Makers (October 2004) and Technical Feedback from the TRT (November 2004). The nearshore and marine chapter of the recovery plan which is under development will expand upon the information in this summary and will provide the scientific foundation for the recommendations that follow. This summary is intended to help regional and watershed planning groups synthesize the technical and policy information that has been compiled to date and stimulate policy discussions on the conditions that are necessary to implement actions that will support recovery in the nearshore and marine environments.

**Fish Story:**

The TRT did not identify any historically independent Chinook populations which originate in the Port Madison and Sinclair Inlet sub-basin. The sub-basin supports abundance, productivity, spatial structure and diversity for populations from the main basin (Central Puget Sound). Juvenile Chinook salmon from non-natal populations use the area for feeding and growth, refuge, physiological transition and as a migratory corridor. Adults from non-natal populations also use the area. There are no known occurrences of Hood Canal/Eastern Strait of Juan de Fuca summer chum populations in this sub-basin. Port Madison supports important prey resources such as surf smelt and herring stock. Many hatchery fish are released in this area.

**Landscape Story:**

The Port Madison and Sinclair Inlet sub-basin nearshore area is only 3% of the entire Puget Sound nearshore. Of the 96 miles of shoreline, 59% is armored. This is a very heavily developed area that includes the US Navy yard in Bremerton. Small tributaries are a dominant feature. The PSAT identified and analyzed 39 pocket estuaries, which represents the greatest concentration of pocket estuaries in Puget Sound with 1.86 per square mile. Most of the pocket estuaries were considered at risk in PSAT's analysis. All three Chinook functions (feeding, osmoregulation, refuge) were observed in most of the pocket estuaries, along with shoreline development, urbanization, diking and filling, and susceptibility to spills and discharges. Water pollutant loads and contaminated sediments are a concern in the sub-basin. Continuous eelgrass bands are sparse, though present in Dyes Inlet and a few segments of Port Orchard.

### **Key Actions:**

At the September 9, 2004 meeting of the PSAT, the TRT and Shared Strategy, actions for marine and nearshore sub-basins were organized under two strategy types – **protection** and **restoration**. Protection is recommended as the primary strategy direction for nearshore and marine areas, given the current state of knowledge. This strategy is designed to protect what is currently functioning, while leaving options open for future restoration. In the next five years, the Puget Sound Nearshore Ecosystem Restoration Program (PSNERP) is expected to provide additional information that will better inform the development of large-scale restoration efforts. Restoration actions in the near-term should occur where benefits to fish are reasonably certain and there is local support.

### **Key Protection Actions:**

In addition to the recommendations identified in the WRIA plans, the following actions should be considered in the near-term if possible, and in the longer-term as part of a regional Puget Sound assessment:

- Ensure a diversity of shoreline habitats that provide adequate functions for Chinook salmon, and the opportunity for movement within and between habitats.
- Protect pocket estuaries regardless of their current function or proximity to natal deltas within the central Puget Sound sub-basin.
- Protect water quality through existing programs (TMDL, NPDES) and other processes (such as HB2415).
- Consider wastewater reclamation and reuse for all existing and planned sewage discharges.
- Add enhanced treatment, to the same standards as for salmon bearing streams, for stormwater discharging directly to Puget Sound.
- Work with regional authorities to protect against catastrophic events, such as oil spills.
- Work with the US Navy, EPA and others on sediment remediation.
- Protect Port Madison herring stock and other important prey resources and their habitats.
- Protect all remaining functional nearshore habitat throughout the sub-basin via shoreline master programs, critical areas ordinances, enforcement and incentives.

### **Key Restoration Actions:**

There is not sufficient information to evaluate the regional benefit of restoration actions in this sub-basin. The following actions should be considered as part of a Puget Sound regional assessment and prioritized for their benefit.

- Due to the high level of shoreline armoring in this sub-basin, some restoration of drift cell function and riparian condition may be needed.
- Improve water quality throughout the sub-basin.
- Restore areas containing contaminated sediment hot spots and ongoing toxic discharges.
- Encourage voluntary revegetation of cleared residential shorelines. Put special emphasis on maintaining connectivity, primary production of forage fish and water quality.

- Evaluate the effects of hatchery fish using nearshore habitats under current and restored conditions—how will their presence affect the status of wild salmon in the area?