Effective Integration of Sediment Cleanup with Habitat Restoration in Shelton Harbor, Washington

Clay Patmont (Anchor QEA, LLC, Seattle, WA, USA)
Dave McEntee (Simpson, Tacoma, WA, USA)
Scott Steltzner (Squaxin Island Tribe, Shelton, WA, USA)

Background/Objectives. Integrating aquatic habitat restoration early in the planning and design phases of sediment remediation projects can lead to coordinated approaches that both enhance recovery and improve ecological functions of aquatic systems, and can also be cost effective partnerships to achieve cleanup and habitat enhancements. Contaminated sediment cleanup projects in waterfront areas present unique opportunities to restore nearshore habitat functions degraded by a range of anthropogenic changes; benefits in this case were to recovering aquatic populations, with emphasis on coho salmon (*Oncorhynchus kisutch*) runs.

Approach/Activities. Building on earlier successful combined sediment cleanup/habitat restoration projects completed in Puget Sound, a cooperative partnership comprising a small group of industry, tribe, and stakeholder representatives is implementing an integrated cleanup and restoration project to restore estuarine habitat targeting benefits to juvenile coho salmon as they migrate from Goldsborough Creek into Shelton Harbor, Washington. The integrated cleanup and restoration plan will restore more than 50 acres of saltmarsh habitat and facilitate improved salmon runs. Sediment cleanup actions consisting of protective engineered caps were designed to be fully compatible with habitat restoration plans. Sediment cleanup permitting and construction actions are also being coordinated with habitat restoration to provide further overall project synergies.

Results/Lessons Learned. Early planning and partnerships using creative tools to address changing land uses and combining sediment cleanup and habitat restoration is an efficient strategy to achieve multi-faceted environmental benefits in a timely and cost-effective manner. If the strategy were applied more broadly around Puget Sound and the United States, working waterfronts could make a much more substantial contribution to biological recovery.