

EMECS 7/ECSA 40 abstract submission:

Title:

A Strategic Approach to Comprehensive, Spatially-Explicit and Ecosystem Process-Based Restoration of Nearshore Puget Sound (USA)

Authors and affiliation:

Charles A. Simenstad, Wetland Ecosystem Team, School of Aquatic and Fishery Sciences, University of Washington, Seattle, Washington, USA
On behalf of the Puget Sound Nearshore Ecosystem Restoration Program (PSNERP), Nearshore Science Team (NST)

Presenter address and contact information:

Wetland Ecosystem Team
School of Aquatic and Fishery Sciences
Box 355020
University of Washington
Seattle, Washington 98195-5020 USA
Ph: 1 206 543 7185
Fax: 1 206 685 7471
Cell: 1 206 612 5367
E-mail: simenstd@u.washington.edu

Presentation preference:

Oral

Abstract:

Nearshore ecosystems of the complex inland sea of Puget Sound, and the associated eastern Strait of Juan de Fuca and southern Strait of Georgia, are increasingly threatened by a diverse suite of cumulative impacts from shoreline and adjacent watershed development. As the resultant consequences to valuable natural resources, such as Pacific salmon (*Oncorhynchus* spp.) become more evident, the need for restoration, preservation and other management actions becomes increasingly imperative. The Puget Sound Nearshore Ecosystem Restoration Project (PSNERP) is a joint federal and local government response, lead by the US Army Corps of Engineers, to identify priority restoration and protection needs of Puget Sound nearshore ecosystems, and to advance a portfolio of specific feasible restorative actions. The PSNERP Nearshore Science Team (NST) is chartered to provide rigorous scientific guidance to the project. Through the development of Guiding Restoration Principles, a Nearshore Ecosystem Conceptual Model, a Nearshore Typology, historic-to-future Change Analyses, and assessment of alternative Management Actions, the NST is assisting the program to develop a comprehensive, spatially-explicit and ecosystem process-based approach to restoration and conservation of Puget Sound's shorelines and its associated goods and services. The NST has focused largely on physical and biological science disciplines in developing the technical approach. However, we recognize that social/cultural sciences must also be integrated into our development and implementation of a regional restoration/conservation portfolio if reversal of nearshore ecosystem degradation

necessary to support desired future conditions of valuable biological resources is to be feasible.