Assessing Cumulative Ecosystem Effects of Multiple Restoration Projects

Workshop Background and Objective:

The intent of this workshop is to present an approach to answering the question, “When can we conclude that conservation and restoration projects have together made a significant improvement in the ecosystem?” Because of the high cost of restoration projects, it is critical to document whether actions are successful. Therefore, the development of methods to measure “net ecosystem improvement” at large scales is also important. Although large-scale restoration programs are beginning to supplement isolated projects in tidal estuaries, generally their effects continue to be evaluated at project scales or in an additive manner. Instead, lessons from assessing cumulative effects of ecosystem degradation can be applied ‘in reverse’ to evaluate the interactions among restoration projects in larger programs. This workshop will focus on the lower Columbia River, a large tidal river/estuary system, but the approach presented should have applicability to the evaluation of restoration programs in other ecosystems. Topics addressed will include the theory underpinning cumulative effects analysis, a ‘levels of evidence’ approach to addressing cumulative effects, selection of performance assessment metrics, development of monitoring protocols, performance goals, scales of analysis, identification of critical uncertainties, how to ‘roll up’ results, use of project prioritization frameworks, and adaptive management.

Who Will Attend:

The intended audience includes scientists, engineers, planners, and decision-makers who are pursuing ecosystem-based restoration; various land trusts, national estuary programs, as well as state agency scientists and planners trying to restore estuarine ecosystems; and, researchers interested in cumulative effects analysis applied to improving an ecosystem.

Session Organizers:

Ronald M. Thom leads the Coastal Ecosystem Research technical group at the Pacific Northwest National Lab’s Marine Sciences Laboratory in Sequim, Washington.

Blaine D. Ebberts is a Senior Fisheries Biologist with Portland District, Corps of Engineers, and has over 25 experience of research and program management experience.

ADVANCE REGISTRATION REQUIRED:

The number of participants will be limited to 60. Participants will be enrolled in the order in which their registration is received, but no later than July 1st. Note: The standard workshop fee will be required for participants to support a continental breakfast, break, audio visual equipment and room set up by NCER conference organizers.