

LAND PROTECTION



Most coastal managers would prefer to choose habitat restoration sites and design an action plan based solely on ecological need and benefit. However, the availability of property, cooperative landowners, funding, and a variety of other factors are often what drive restoration decisions, at least partially. Yet despite challenges that may exist, some NEPs are finding successful ways to enhance restoration and protection decision-making by identifying sites and projects that will provide the greatest benefit to their study areas and resources.

THE NATIONAL ESTUARY PROGRAM IN ACTION

Lower Columbia River Estuary Partnership

The Lower Columbia River Estuary Partnership (Estuary Partnership) recently developed a Strategic Habitat Restoration Prioritization Framework (the Prioritization Framework)* with the help of many partners. The Prioritization Framework adds an important element to the Estuary Partnership's habitat strategy and assists them in making better-informed decisions when prioritizing sites and selecting restoration projects.

Placing potential projects through the Prioritization Framework and using a priority ranking process helps them select projects that provide the best opportunity for

environmental benefits while still staying within the context of opportunity. The Prioritization Framework utilizes a conceptual model and is structured to help the Estuary Partnership identify

areas most suitable for restoration and the types of restoration strategies appropriate for those areas. Since physical controlling factors in a location drive the habitats that can form, and ulti-



Mirror Lake, OR, an Estuary Partnership restoration site. Photo Credit: Yvonne Vallette

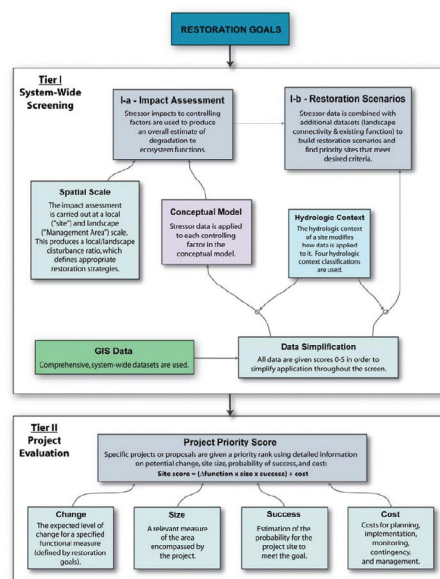


Figure 6. Overview of the Prioritization Framework.

mately the ecological functions that develop, the Geographic Information System-based Prioritization Framework links an extensive collection of pertinent data to geographical areas and then utilizes that data within the program to rank sites for their suitability for restoration. Data used includes the site's ecologi-

cal properties and existing functions and the impacts suffered from specific stressors, such as diking, agriculture, flow restrictions, etc. Additional site data would enhance the reliability and usability of the Prioritization Framework, and the Estuary Partnership is pursuing additional data sets. While the Prioritiza-

tion Framework provides a helpful tool, the Estuary Partnership still must evaluate projects using a variety of other criteria and ultimately make the best decisions possible with the information available. However, the Prioritization Framework is a new and helpful means toward smarter decision-making, and one that the Estuary Partnership anticipates utilizing more as new data improves the robustness and reliability of the Prioritization Framework.

Effectiveness monitoring, adaptive management, and the Prioritization Framework will all help the Estuary Partnership select important restoration projects for funding in areas where restoration will have the greatest ecological benefit and be most likely to succeed. So while there remains an opportunistic element to project development, the Es-

tuary Partnership is taking steps to enhance its ability to prioritize projects based on a wide variety of ecological conditions.

Visit **www.lcrep.org** to learn more about this and other LCREP efforts.

EPA's National Estuary Program (NEP) is a unique and successful coastal watershed-based program established in 1987 under the Clean Water Act Amendments. The NEP involves the public and collaborates with partners to protect, restore, and maintain the water quality and ecological integrity of 28 estuaries of national significance located in 18 coastal states and Puerto Rico.

For more information about the NEP go to www.epa.gov/owow/estuaries.

A CHECKLIST FOR SELECTING HABITAT RESTORATION PROJECTS

The Estuary Partnership ranks restoration and protection project proposals based on specific selection criteria and any criteria required by the funding agency. Estuary Partnership project criteria include:

ECOSYSTEM

- Habitat Connectivity
- Areas of Historic Habitat Type Loss
- Improvement in Ecosystem Function
- Adequate Size and Shape
- Level of Complexity
- Accessibility for Target Species

IMPLEMENTATION

- Use Natural Processes to Restore and Maintain Structure Over Habitat Creation
- Community Support and Participation
- Potential for Self Maintenance and Certainty of Success
- Potential for Improvement in Ecosystem Function While Avoiding Impacts to Functioning Ecosystems
- Avoid Sites Where Irreversible Change Has Occurred
- Capacity of Sponsor/Partnership
- Project Context Within Broader Management and Planning Objectives

MONITORING

- Monitoring and Evaluation with Relationship to Stated Goals and Objectives
- Linkages to Reference Sites
- Transferability of Results

* The Prioritization Framework developed by the Estuary Partnership in 2006 is based in part on concepts developed previously in the Brainbridge Island Nearshore Habitat Assessment, Management Strategy Prioritization, and Monitoring Recommendations (Williams et al., 2004) and An Ecosystem-Based Restoration Plan with Emphasis on Salmonid Habitats in the Columbia River Estuary (Johnson et al., 2003).