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Pacific Marine and Estuarine Fish Habitat Partnership 2013 Annual Report



Our mission is to work with partners to protect, enhance, and restore ecological processes and habitats within estuaries and nearshore marine environments to sustain healthy native fish communities and support sustainable human uses that depend on healthy fish populations.

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On-the-Ground Restoration

In 2013, the Pacific Marine and Estuarine Fish Habitat Partnership (PMEP) provided \$50,000 in funding for two projects focused on estuarine protection and restoration—the [Bear River Estuary Project](#) (\$25,000) in Willapa Bay, Washington, and the [Grays Harbor Derelict Gear Removal Project](#) (\$25,000) in Grays Harbor, Washington.

In 2013, PMEP also approved a new project reporting form to track accomplishments of all PMEP-funded projects in the region.

The Bear River Estuary project is a multi-year project to restore a large area of the Bear River estuary that has been degraded by past human activities to a healthy, naturally functioning condition. The sponsors will remove 5.16 miles of existing dike, 38 culverts, two fish ladders, two tide gates, and two foot bridges. As a result, nearly 500 acres of estuarine habitat will be restored, including 226 acres in 18 tidal channels that would convey water from upland and tidally-influenced areas directly to Willapa Bay. Re-establishment of natural estuarine processes and habitats will benefit a diverse array of aquatic and avian species, including marine invertebrates, salmon and trout, shorebirds, and waterfowl, with corresponding ecological and economic benefits. PMEP's contribution helps to advance the goals and outcomes of this large restoration project.

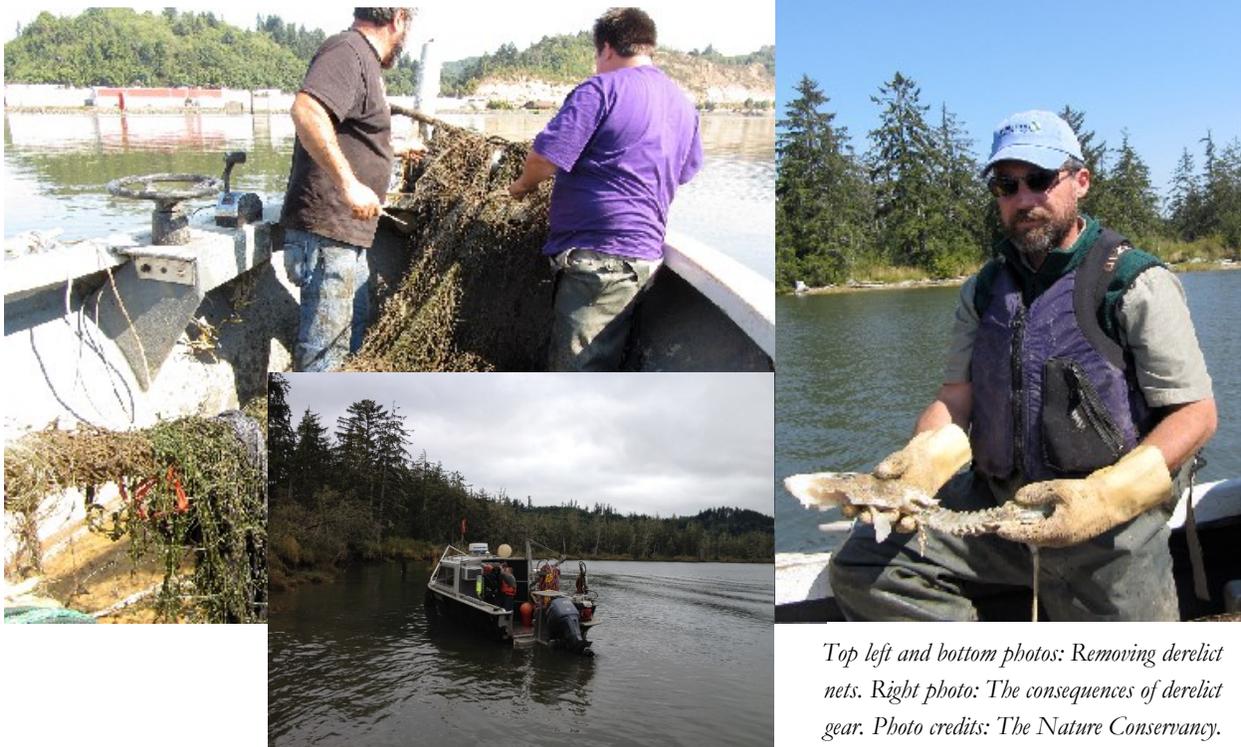


Top left: Fish ladder removal. Photo credit: USFWS. Lower: Restored tidal flow in the Porter Point Unit. Photo credit: USFWS.

Upper right: Aerial view of Porter Point Stream restored to its historic channel with dike removed. Photo credit: Kathleen Sayce.

The Grays Harbor Derelict Gear Removal Project is a multi-year, multi-partner project with an objective of mapping and removing all derelict nets and fishing gear in the areas in the Chehalis River and Grays Harbor and the lower five miles of the Quinault River. The project's two primary components are net mapping and removal of derelict gear; and creation of a lost net reporting program, together with an outreach strategy, to ensure derelict nets and other gear are found, removed, and do not continue to accumulate. The benefits of this project include:

- In 2013, 58 nets (1.5 acres of derelict nets across 30 square kilometers of stream and estuarine habitat in the Chehalis River) were removed.
- Establishment of a net recovery program with Quinault Indian Nation Fishery, including a set of best management practices for lost fishing gear.
- A map made using side-scan sonar mapping techniques from the Puget Sound Derelict Net Removal Program, of nets in the prioritized areas of the river and estuary.
- A habitat characteristics map of the project area, including a wall chart of locations where lost nets are likely to accumulate.
- A workshop to inform fishermen of the effects of derelict nets, and identified ways for them to support the project.



Top left and bottom photos: Removing derelict nets. Right photo: The consequences of derelict gear. Photo credits: The Nature Conservancy.

Science and Data

Background

The PMEP and its assessment partners (National Oceanic and Atmospheric Administration [NOAA], National Fish Habitat Partnership [NFHP], and The Nature Conservancy [TNC]) launched [three Pacific Coast fish habitat assessments](#) to inform future estuary resource protection and restoration efforts along the West Coast and enhance understanding of the role estuaries play in the health and production of commercially important marine fishes:

- (1) [PMEP's Nursery Habitat Assessment](#), focusing on nursery functions for juvenile fish in West Coast estuaries.
- (2) The [National Fish Habitat Plan](#) (NFHP) [National Estuary Assessment](#), focusing on condition and key threats to habitats of recreationally and commercially important fish and shellfish stocks.
- (3) A [Nearshore Forage Fish Assessment](#), focusing on habitat-related changes over time in distribution and abundance of nine species of forage fish inhabiting estuary and nearshore habitats.

These assessments have several tasks in common, including application of a consensus estuary classification scheme, creation of a spatial framework, gathering and compiling habitat and fish data, and developing shared tools and products. In addition, the tasks overlap with two other needs across the region: (1) The NOAA Restoration Center provided seed funding for the spatial framework to simultaneously achieve initial products necessary for studying the contribution of nearshore habitats to recruitment of commercial stocks to offshore fisheries; (2) NOAA's National Marine Fisheries Service (NMFS), in its California Current Integrated Ecosystem Assessment, has approved development of a habitat ecosystem component, with needs of a classification and spatial framework as initial products, to support analysis of habitat indicators in estuary and nearshore habitats.

PMEP Nursery Habitat Assessment	NFHP National Estuary Assessment	Nearshore Forage Fish Assessment
<ul style="list-style-type: none"> • Build an online database of existing data on juvenile fish presence, abundance & distribution. • Characterize nursery roles of estuaries for focal group of 12-15 spp. • Improve knowledge of habitat requirements of these species to improve management. 	<ul style="list-style-type: none"> • Assess threats to fish habitats across the United States. • Provide national perspective on prioritizing habitat restoration and protection. 	<ul style="list-style-type: none"> • Determine whether nearshore restoration actions can ameliorate habitat conditions for forage fish stocks. • Improve our understanding of anthropogenic impacts on forage fish, and potential effects on recreational fisheries caused by changing food supply. • Support prioritization of restoration and protection actions that have the greatest benefits to the food chain of recreational fishes.

The Utility of the Assessments

Information gained by the assessments will help West Coast communities and resource managers to:

- Better understand the role of estuaries in sustaining native species of fish and shellfish, including those most important to people;
- Identify nursery habitats for fish and shellfish in estuaries, and determine restoration and protection priorities;
- Identify and evaluate key threats to fish habitat in estuaries ; and
- Demonstrate how protecting and restoring juvenile fish habitat in estuaries contributes to the overall ecological health and economic sustainability of commercial and recreational fisheries.

The Partners

Partners in the effort include National Oceanic and Atmospheric Administration (NOAA), The Nature Conservancy (TNC), Pacific States Marine Fisheries Commission (PSMFC), National Fish Habitat Board (NFHP), West Coast Governors Alliance on Ocean Health (WCGA), and the North Pacific Landscape Conservation Cooperative (North Pacific LCC).

Pacific Marine and Estuarine Fish Habitat Partnership is:

- Producing a nursery assessment report that includes recommendations to inform estuary restoration and protection efforts.

- Soliciting historical and current fish presence, abundance and other data for fish and shellfish for each assessment.
- Working with PSMFC staff to analyze fish data and information for each assessment.
- Statistically analyzing datasets for fisheries and habitat associations.
- Hosting a West Coast-wide summit to:
 - Achieve consensus on the selection of estuarine-dependent fish and shellfish species, and compile information and data sources regarding their nursery requirements, timing of their use of estuaries, biophysical factors, key threats, and presence/abundance information.
 - Identify key data and research gaps relative to these West Coast estuarine-dependent fish and shellfish species.
 - Identify and achieve consensus on how best to assimilate existing fish data and habitat assessments on West Coast juvenile fish species.
 - Discuss:
 - Existing geospatial data for estuarine nursery habitats, including data on conditions and alterations.
 - How the results of the West Coast fish habitat assessments may inform management decisions.
 - Key management needs.
 - Inform how the results of the West Coast fish habitat assessments may influence policy or management decisions and how these results affect management of stocks (e.g., restoration activities, fisheries management, mitigation banking).
- Coordinating deliverables and timelines across the three assessments.
- Supporting state-led efforts to provide data on focal species.
- Coordinating synthesis of wetland datasets.
- Synthesizing contaminant, eutrophication, and hypoxia risks.

[NOAA/NMFS](#) is:

- Providing funding support to PMEP.
- Providing overall guidance and direction to assessment outcomes.
- Encouraging work products that inform understanding of the role of estuaries in offshore fish stock production.
- Working with Pacific States Marine Fisheries Commission to develop and compile spatial data on habitat types and impacts to juvenile fish.
- Helping to define the spatial extent of estuaries.
- Prioritizing research and information needed to expand understanding of the nursery function of estuaries for fish and shellfish.

The Nature Conservancy (with the assistance of Industrial Economics, Inc., the Central Coast Wetlands Group, and several other contractors) is:

- Inventorying all West Coast estuaries.
- Classifying each estuary using a common scheme.
- Creating an estuary geodatabase.
- Producing a State of Knowledge report of estuary nursery habitats.

Pacific States Marine Fisheries Commission is:

- Serving as the fiscal agent for PMEP.
- Providing GIS support for the three assessments.
- Serving as the lead repository for all data associated with the three assessments.

West Coast Governors Alliance on Ocean Health is:

- Working with partners to incorporate data, information and outcomes from assessments via data portals.

North Pacific Landscape Conservation Cooperative

is:

- Working with partners to incorporate data, information and outcomes from assessments into a data portal for the West Coast.
- Creating a workspace/community to share information among partners as assessments progress, but before information becomes public.

West Coast Assessment Partners



Progress in 2013

- Received \$230,000 from NOAA and \$50,000 from a multi-state conservation grant to advance PMEP assessment efforts.
- Scheduled and planned for the January 2014 West Coast-wide summit.
- Formed a PMEP Assessment Team consisting of the PMEP Governance Committee, TNC contractors, and key NOAA officials.
- Formed a Spatial Data Committee with representatives from numerous state, federal, and nonprofit organizations along the West Coast to ensure work products can be shared across data portals.
- Worked with TNC to select contractors to inventory and characterize West Coast estuaries and prepare a State of Knowledge report.
- Worked with PSMFC for GIS support for the assessments as well as a repository for all incoming data.
- Described the list of focal species for the PMEP and NFHP assessments.
- Developed a job description and announced a contract for a PMEP Assessment Scientist to assist with information and data analysis across the three assessments.
- Began preparations for a formal West Coast data call for the West Coast to inform all three assessments.
- Created a [visual presentation](#) and other supporting information to describe the three assessments on the PMEP website.

In preparation for 2014, PMEP solicited project proposals for 2014 NFHP funding and received a total of 8 proposals from the states of Washington and California.



Top left: Pacific sardines. Photo credit: NOAA SW Fisheries Science Center. Upper right: A commercial crab fishing boat. Photo credit: Wordpress. Bottom photo: Surf fishing in Oregon. Photo credit: www.eugenecascadescoast.org.

Outreach and Education

The Coastal Fish Habitat Partnerships and Other FHPs

The PMEP Coordinator is helping to arrange regular conference calls with the coastal fish habitat partnerships in the United States, and launched the development of [quarterly coastal FHP newsletters](#). In addition, PMEP coordinated the development of a [coastal FHP poster](#) and coastal FHP background document.

The PMEP wrote a letter of support for the establishment of a new fish habitat partnership in southeast Alaska.

The PMEP assisted in the development of a letter to the Joint Ocean Commission in support of fish habitat partnerships being recognized for the role they play in implementing the National Ocean Policy.

Presentations

The PMEP gave a presentation to the Pacific Coast Joint Venture, West Coast Sustainable Salmon Partnership, and Salmon Summit, and participated in a meeting with the North Pacific Landscape Conservation Cooperative and West Coast Governors Alliance on Ocean Health.

PMEP produced a [poster](#) for printing and distribution at conferences.

PMEP Logo and Website

The PMEP approved a new logo and improved and maintained the PMEP website.

10 Waters to Watch

PMEP was selected by NFHP to highlight the Bear River Estuary Project in the national “[10 Waters to Watch](#)” campaign.

Other Partners

Invited representatives of the California Landscape Conservation Cooperative, Atlantic Coastal Fish Habitat Partnership, Wild Salmon Center, Lower Columbia River Estuary Partnership, and South Slough National Estuarine Research Reserve to serve as facilitators of breakout sessions for the January 2014 PMEP summit.

Finances

The PMEP applied for a total of \$5,875,005 in funding in 2013:

- Worked with NOAA staff in the Pacific Northwest to secure \$260,000 for funding to conduct a West Coast-wide juvenile fish habitat assessment; coordinated with TNC to add a component to the assessment relative to characterizing West Coast estuaries and nursery function (\$150,000); worked with NOAA staff on the third leg of the assessment relative to forage fish habitat on the West Coast (\$50,000).
- Worked with West Coast entities to solicit 24 proposals for consideration as part of the 2013 NOAA Coastal Habitat Restoration Grant Proposal. Selected 11 proposals totaling \$4,481,241. Completed and submitted final grant totaling over \$4 million.
- Worked with the California Fish Passage Forum to jointly apply for a \$347,000 multi-state conservation grant for the West Coast. Expected to receive \$75,000-\$100,000, which will help support PMEP operations, on-the-ground restoration projects, and the West Coast-wide juvenile fish habitat assessment.

The PMEP received a total of \$405,000 in funding in 2013:

- NOAA (for assessment work)—\$265,000
- Multi-state conservation grant (for PMEP summit in January 2014)—\$50,000
- National Fish Habitat Partnership (USFWS)—\$90,000

In addition, the PMEP worked with partners to assist them in securing funding for the three West Coast assessments:

The Nature Conservancy \$110,000

Freshly harvested oysters from Yaquina Bay, Oregon. Oyster production on the West Coast is valued at \$84 million annually, which supports more than 3,000 jobs. Photo credit: NOAA.

