

National Marine Protected Areas Center West Coast Pilot: Human Use Patterns and Impacts Project



About the West Coast Pilot

Because the west coast—California, Oregon, and Washington—is currently at the forefront of federal, state, and tribal MPA activity, the National Marine Protected Areas Center is leading a collaborative initiative there to pilot key methods and approaches for developing regional systems of MPAs. This project involves developing, testing, and applying analytical tools, and gathering the best information, including science-based data and traditional ecological knowledge, to better understand how to more effectively use MPAs to sustain healthy marine environments. The products and lessons offered by this pilot will serve as a foundation for other regional MPA planning, as part of a larger effort to develop a U.S. national system of MPAs. The data collected will also be useful for numerous other ecosystem approaches to management that require the same comprehensive information.

Pilot Partners

The West Coast Pilot is an unprecedented effort that requires core partnerships among the region's federal, state, and tribal government agencies. Key NOAA partners include the National Marine Sanctuary Program, National Centers for Coastal Ocean Science, and the National Marine Fisheries Service. In addition, the participation of the following regional partners is instrumental to the effort's success: the Department of the Interior's National Park Service and U.S. Fish and Wildlife Service; the National Estuarine Research Reserves System; the Pacific Fishery Management Council; academic institutions, and other non-governmental organizations.

Background: The Human Use Patterns and Impacts Project

Human communities are tied to marine environments in many ways. The coasts and oceans provide people with numerous goods and services that meet social, cultural, and economic needs. These include, for example: fish and shellfish harvested for subsistence, commercial, and recreational use; waterways for commerce, trade, and navigation; natural resources for energy production, construction, and scientific research; and qualities that bring people to the shore for tourism, leisure, and spiritual and cultural renewal. Understanding how people use coastal and ocean environments is a critical need for ecosystem approaches to management. The way people interact with the marine environment has implications for the health and well-being of both the human communities and the resources on which they depend.

Project Description

The human use patterns and impacts project is designed to document the connections between people and the marine environment in order to inform regional, place-based, ecosystem approaches to management.

Project Objectives

- Identify and collect existing data on human uses of the marine environment on the west coast.
- Develop a GIS database for data storage, analysis, and representation.
- Assess the intensity and significance of spatial use patterns based on available secondary data.
- Identify key user groups on the west coast, the compatibility of their activities, and the potential sources of conflict among activities.
- Develop a participatory method and approach for gathering new data on human activities in the marine environment to fill gaps in existing data.

The results of the project will aid future efforts to identify locations where use patterns pose a potential threat to resources, the categories of user groups that need to be engaged in participatory management, user conflicts and equity issues that may need to be addressed, and the socioeconomic importance of activities to communities.

Products

- Multi-layered atlas of use activities on the west coast based on existing data.
- Tools for assessing compatibilities among use activities in the west coast region.
- A model for identifying potential threats to marine resources associated with use activities.

For More Information

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