OREGON

Coastal Habitat Decision Tool—2001 to 2003

In 2001, the Center solicited proposals to develop decision-support tools related to coastal habitat management. As a result of this process, Ecotrust was awarded funding to develop and deploy a primary component of the Oregon Coastal Atlasdecision—specific tools to facilitate both access to and use of data by local-level resource managers and scientists via the Web.

Coastal Management Fellowship—1996 to 1998

www.csc.noaa.gov/cms/1996Fellows.html

A Coastal Management Fellow worked with the Oregon Ocean-Coastal Management Program to develop an estuary management information system for Oregon. The fellow developed the Dynamic Estuary Management Information System (DEMIS) using the Coos Bay estuary and watershed as a pilot area. Goals of the project were to conserve and restore estuarine habitat, mitigate for adverse estuarine effects from development, employ the best available scientific information for making coastal resource management decisions, and improve communication among local, state, and federal agencies.

Coastal Management Fellowship—1998 to 2000

www.csc.noaa.gov/cms/fellow98.html

A Coastal Management Fellow worked with the Oregon Ocean-Coastal Management Program to create a computerized database and computerized maps of potential sites for estuarine wetland creation, restoration, and enhancement, and wetland mitigation banking. This project also benefited the Dynamic Estuary Management Information System (DEMIS) in the targeted estuaries and their watersheds, and created GIS data layers for DEMIS in each estuary.

Coastal Management Fellowship—2000 to 2002

www.csc.noaa.gov/cms/00_fellows.html

A Coastal Management Fellow worked with the Oregon Ocean-Coastal Management Program on a project entitled “Littoral Cell Management Plan.” The purpose of the fellowship was to initiate and develop littoral cell management plans for two high-need jurisdictions, the City of Bandon and an unincorporated urbanized area in Lincoln County.

Coastal Oregon Land Cover and Change Data—2002, 2003

This project is mapping terrestrial land cover in coastal watershed environments and identifying changes in these areas. The project relies on satellite multispectral imagery as the primary information source. These data will be used to distinguish major land cover classes, and previous images will be studied to locate areas that changed over time. For this project, the data will be acquired according to the Center’s Coastal Change Analysis Program (C-CAP) methods.

Columbia River Estuary Land Cover and Change Data—1996

www.csc.noaa.gov/crs/lca/col_riv.html

This project mapped terrestrial land cover in coastal watershed environments and identified changes in these areas that occurred between 1989 and 1992. The project relied on satellite multispectral imagery as the primary information source. These data were used to distinguish major land cover classes, and previous images were studied to locate areas that changed over time. For this project, the data were acquired according to the Center’s Coastal Change Analysis Program (C-CAP) methods.

Columbia River Estuary Land Cover Change CD-ROM—1997

www.csc.noaa.gov/products/crest/startup.htm

This land cover classification and change detection analysis for the Columbia River includes the coastal drainage area from Willapa Bay, Washington, south to Tillamook Bay, Oregon. In 1992, the Coastal Change Analysis Program (C-CAP) entered into a cooperative project with the Columbia River Estuary Study Task Force (CREST), the National Marine Fisheries Service Point Adams Field Station (Hammond, Oregon), and the State of Washington Department of Natural Resources to perform this work, which followed the C-CAP methods. CREST is a bi-state council

of local governments providing coastal and estuarine planning services in the Columbia River estuary region. Members include cities, counties, and port districts in Washington and Oregon.

Needs Assessment Training—2001
South Slough National Estuarine Research Reserve (NERR) served as a local host for a workshop entitled "How to Conduct a Training Needs Assessment." Participants in the two-day training included staff from NERR sites, Sea Grant, the Bureau of Land Management, state coastal management programs, and other local partners. The goals of the training were to familiarize participants with terminology, tools, and methods, and to help them understand how and when to use needs assessments.

Northwest Fisheries Science Center Collaboration—2002, 2003
The Center is working with the National Marine Fisheries Service Northwest Fisheries Science Center (NWFSC) to develop a salmon data management system for the Pacific Northwest. The goal of this project is to provide and maintain corporate data, metadata, applications, and project management services for research scientists and external constituents.

Oregon Coastal Shorelands Access Inventory—1999, 2000
www.csc.noaa.gov/funding/PastAwards1.html
A database inventory and geographic information system (GIS) of coastal shoreland access points was created through this project. The database and GIS products are being used as tools to improve the management of public access sites by state agencies and local governments. The comprehensive inventory is available from the Internet and includes pedestrian, vehicle, and visual access and incorporates site information on location, ownership, access type, management, facilities, landscape features, and services. This project was funded with a special project grant from the Center.

Performance Indicators Visualization and Outreach Tool (PIVOT)—1999 to 2001
www.csc.noaa.gov/products/pivot/
The PIVOT prototype developed for Tillamook County, Oregon, supports and enhances the community accountability and reporting efforts of a local watershed sustainable management initiative. Using geographic information system (GIS) data in educational graphics and interactive maps, this Internet-based outreach tool helps bring complex sustainable management plans to life for the community. The tool is useful for clarifying issues, outlining action steps, and encouraging stakeholders to interpret the effectiveness of management decisions. The Center will continue to showcase the prototype and produce a CD-ROM that adapts the interactive Internet application to other sustainable community initiatives.

Protected Areas GIS (PAGIS)
www.csc.noaa.gov/pagis/
The PAGIS project brought compatible geographic information systems (GIS), geographic data management, and Internet capabilities to each of the nation's 25 Estuarine Research Reserves and 13 Marine Sanctuaries. Through PAGIS, the reserves and sanctuaries also developed advanced data sets, underwent extensive training, and found innovative ways to make the most effective use of their new data and technological capabilities.

Protecting Our Ports and Harbors (POPAH)—2000, 2001
The goal of this project was to increase the resilience of ports, harbors, and their surrounding communities to earthquake and tsunami hazards in the Pacific Northwest. A demonstration project was undertaken to develop, test, and evaluate various strategies and tradeoffs to increase the resiliency of lifelines, infrastructure, and facilities in and around ports and harbors. The Center will continue developing an educationally based Internet site about tsunamis and work with local stakeholders and the Oregon Sea Grant to acquire data to be used for local risk assessments and a regional risk atlas.

Risk and Vulnerability Assessment Tools—2002, 2003
www.csc.noaa.gov/csi/projects/assessment-tool.html
As part of the NOAA Coastal Storms Initiative, the Center is developing risk and vulnerability assessment tools for the Florida and Pacific Northwest pilot projects. Local planners within the St. Johns River Watershed in Florida and the Columbia River Watershed in Washington and Oregon use this information to develop coastal hazard mitigation strategies. This project helps protect coastal communities from storm impacts by providing new and improved hazard and weather-related services and data.

Rocky Reef Habitat Survey—2002, 2003
The Oregon Department of Fish and Wildlife is using multibeam sonar to map a shallow water rocky reef area off the Oregon coast to define important fish habitat. The Center is assisting the department in determining ways to best study and develop high-quality hydrographic data that will support NOAA Ocean Service nautical chart data collection programs. The final products of this project include tidal survey data sets, Remotely Operated Vehicle (ROV) video footage, topographical model and shaded-relief bathymetry maps, and written descriptions of the habitat. These habitat maps will help Oregon public agencies better manage the state's groundfish fishery.

Topographic Change Mapping—1998
www.csc.noaa.gov/lidar/
High-resolution Light Detection and Ranging (LIDAR) measurements of coastal beach topography were made during 1998. These measurements can be used for beach change studies and are available to the public. A CD-ROM, *Topographic LIDAR: The Northwest Project*, discusses the management uses of these data and was released in 2001.