Print

Woods Hole Sea Grant: Coastal Processes Extension

Woods Hole Sea Grant's Coastal Processes Extension program helps to identify the risks and impacts associated with the region's coastal natural hazards. Partners include U.S. Geological Survey (USGS), Cape Cod Cooperative Extension (CCCE), Massachusetts Coastal Zone Management (MCZM), the Cape Cod Commission, the Federal Emergency Management Agency (FEMA), and coastal communities throughout Massachusetts.

Related Multimedia

Jim O'Connell Interview on The Point
» View Video (Media Player)

Coastal Erosion on NPR

Jim O'Connell, Sea Grant's coastal processes specialist, was recently interviewed by Mindy Todd for the NPR program "The Point." To listen to the broadcast, click here.

Shoreline Change

Woods Hole Sea Grant, working with USGS, CCCE, and MCZM, generated long-term shoreline change data along 856 miles of the Massachusetts shore. Working with the regional planning agency, the Cape Cod Commission, Woods Hole Sea Grant analyzed the data and produced a Barnstable County-wide map identifying erosion-prone areas as part of the FEMA-funded Pre-disaster Mitigation Initiative. Sea Grant Extension staff continue to actively work with local communities in identifying erosion control mitigation methods to reduce the environmental and economic impacts associated with shoreline change. *Photo by Jim O'Connell, Woods Hole Sea Grant/CCCE*

Cape Cod Landforms and Coastal Processes Poster

Woods Hole Sea Grant, working with CCCE, produced a large-format poster to illustrate how coastal landforms function in response to coastal natural processes and the impacts that human activities impart on these beneficial functions. The poster expands science-based coastal processes knowledge that will lead to prediction of potential impacts from human activities along the shore and thus further protection of coastal resources. For more information, click here.

Beach and Dune Profile Monitoring

Beaches, dunes and near-shore areas are the most dynamic areas on the face of the earth, changing constantly in response to winds, waves, tides, storms, relative sea level rise, and human activities. Yet the complex interactions that produce such changes are not well understood or documented. Recognizing this data gap in monitoring beach and dune changes, Woods Hole Sea Grant and CCCE established a volunteer monitoring program for beach and dune profiling. Volunteers—including citizens, waterfront homeowners, town officials, students, and teachers—monitor monthly, seasonal, and pre- and post-storm beach and dune changes at several Massachusetts beaches. The goal is to document changes and make correlations to long-term shoreline changes. A beach and dune profile monitoring training DVD has been produced to help train and expand participation in the project. *Photo by Jim O'Connell, Woods Hole Sea Grant/CCCE*

Technical Assistance

Woods Hole Sea Grant's coastal processes outreach focuses on providing the most up-to-date scientific and technical information relating to erosion control, flooding, human impacts on the beneficial functions of coastal landforms, relative sea level rise, and other coastal issues. We routinely work in the field with local officials in identifying and suggesting alternatives to minimize potential impacts from proposed shoreline development. We also provide workshops, field trips, training, lectures and one-on-one discussions. *Photo by Sheri DeRosa, Woods Hole Sea Grant*

Last updated: June 24, 2014

Copyright ©2007 Woods Hole Oceanographic Institution, All Rights Reserved.
Mail: Woods Hole Oceanographic Institution, 266 Woods Hole Road, Woods Hole, MA 02543, USA.
E-Contact: info@whoi.edu; press relations: media@whoi.edu, tel. (508) 457-2000
Problems or questions about the site, please contact webdev@whoi.edu