Seafloor mapping project begins off Oregon

Boone assists with support for project

Surveyors and scientists from NOAA's Office of Coast Survey and Oregon State University over the next two years will create the most detailed maps ever generated of the seafloor along Oregon's coast.

Using the latest technologies, they will measure water depth, search for navigational hazards, and record the natural features of coastal seafloors and fragile aquatic life. The images will help researchers and coastal managers protect coastal communities and marine habitat.

"These projects help Oregon prepare for future challenges," said Oregon Gov. Ted Kulongoski. "With the data collected from these surveys, we can model tsunamis, identify marine habitats, select alternative energy sites, identify geological hazards, and enhance safe and efficient marine transportation."

NOAA awarded $5 million to private contractors to assist in the joint effort. The state of Oregon provided $1.3 million in funding to OSU. NOAA will use the data from the surveys to update nautical charts that currently contain depth information acquired before 1939.

"Officials need the best possible information to manage ocean and coastal resources," said John H. Dunnigan, assistant administrator for NOAA's National Ocean Service. "Updated nautical charts will also make ocean shipping and recreational boating along Oregon's coasts much safer."

"Along with the governors of California and Washington, I set a goal of mapping our three states' ocean areas by the year 2020," Kulongoski added. "Thanks to the strong partnership between NOAA, academia, private industry, fishermen, state legislators, and multiple state and federal agencies, Oregon is on track to reach that goal."

With a resolution of a half-meter, the maps will cover about 34 percent of the state waters and 75 percent of its rocky reefs, recording every bump, depression, reef and boulder on the seafloor from a depth of 10 meters out to three miles, the boundary of Oregon's territorial sea.

Chris Goldfinger, an associate professor of oceanic and atmospheric sciences at OSU, says the university's work will begin immediately and will focus initially on sites important for tsunami modeling, wave energy, and marine reserves. Some maps of Oregon's territorial sea and seafloor habitats, showing water depths and topography, are already online.

Goldfinger previously led an effort to create a map of Oregon's territorial sea and seafloor habitats, which show water depths and topography and can be overlaid with information about buoys, seabirds, marine life, and kelp beds.

Oregon state legislators from districts along the coast, led by state Rep. Deborah Boone, D-Cannon Beach, spearheaded the OSU project. The Oregon Department of State Lands and other state agencies supported the effort which also meets goals set in the West Coast Governors' Agreement on Ocean Health.