

An Example of Integrated Mapping: NOAA and Oregon State University Map Oregon's Seafloor

(Adapted from an August 12, 2009 NOAA News Release)

Over the next two years, surveyors and scientists from [NOAA's Office of Coast Survey](#), private contractors, and Oregon State University (OSU) 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 seabeds 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. Additional information acquired during the survey include seafloor imagery data to provide detailed habitat mapping. A moving vessel water column profiler is also used to help define dead zones by measuring dissolved oxygen levels in the water. The survey area extends from a depth of 10 meters out to three miles, the boundary of Oregon's territorial sea.

Note: photo credit is Jon Dasler or his company – check with Jon