



NORTHWEST ASSOCIATION OF NETWORKED OCEAN OBSERVING SYSTEMS (NANOOS)

The eye on the Pacific Northwest's ocean and coast

“ NANOOS provides critical life safety information to the public, aiding coastal communities to reduce risk. ”

- Jonathan Allan, Coastal Geomorphologist
Oregon Department of Geology and Mineral Industries



NANOOS is the Regional Association of the national Integrated Ocean Observing System (IOOS) in the Pacific Northwest, primarily Washington and Oregon. Investments in NANOOS have resulted in high-technology jobs, better-informed decisions, and new innovation.



We help improve:

HEALTH

Decision-making to protect human health

SAFETY

Enabling preparedness and security

ECONOMY

Preserving economic benefits of the ocean



NANOOS Increases Efficiency

The NANOOS Visualization System (NVS) integrates data from a wide variety of sources, and makes that data available in one online data portal, saving substantial time and money. Real-time observations and forecasts from a range of assets including buoys, shore and tidal stations, high-frequency radar, wave and current forecasts, and satellites are available in user-friendly data displays. NVS provides sophisticated yet accessible capabilities such as comparisons of forecasts with real-time observations, and customized presentations based on community feedback .



nanoos.org

IOOS in the Pacific Northwest



Benefits for People and Businesses in the Pacific Northwest



Innovative Technology for Safe & Profitable Resource Use

NANOOS detects toxins from harmful algal blooms (HABs) from an undersea robot at La Push. "Having the NANOOS automated HAB sampler, with toxin assessment capability, offshore between our harvest beaches and the HAB generation sites will give tribes the forewarning they need to adjust sampling protocols and better protect the health of coastal residents, tribal and non-tribal." - Joe Schumacker, Department of Fisheries, Quinault Indian Nation

NANOOS partners with industry to develop a lower cost sensor for effective shellfish growing. "This current generation of shellfish farmer is reliant upon data and services from NANOOS. Checking the NANOOS app before seeding a beach or filling a settling tank has become standard practice." - Margaret Barrette, Pacific Coast Shellfish Growers Association Director

Support for Maritime Operations, Safety & Fishing Commerce

NANOOS data products allow mariners to choose safe and efficient routing. High frequency radars in Oregon provide real-time data on surface currents, which decrease the size of search and rescue areas by two-thirds. We need to extend this radar system to the Washington Coast to fill the gap in coverage.

"Ships crossing the Columbia River Bar face one of the most dangerous harbor entrances in the world. The Columbia River Bar Pilots rely on weather forecasts, real time buoy data along with wave and current models when determining safe times for ships to cross the bar. NANOOS provides an excellent location for us to see and compare all the available data sources." - Captain Dan Jordan, Columbia River Bar Pilots



Information for Coastal Hazard Risk Reduction



NANOOS products help coastal communities minimize impacts from coastal hazards and keep the public safe. NANOOS data are used by the Oregon Department of Geology and Mineral Industries (DOGAMI) for coastal flood hazard maps; together NANOOS and DOGAMI provide tsunami hazard evacuation information to coastal populations. Both products aid risk reduction and increase coastal preparedness.

NANOOS support has "...provided us with invaluable information concerning our ongoing erosion problems. Without such assistance, we are operating blind." - Mayor Crystal Dingler, City of Ocean Shores

"The Oregon Office of Emergency Management (OEM) appreciates the tools that NANOOS provides. The online tsunami evacuation route viewer is especially useful in helping coastal residents and visitors understand and respond to the tsunami hazards." - Althea Rizzo, Oregon OEM Geologic Hazards Program Coordinator



nanoos.org

For More Information

Contact us if you have any questions, or to learn more about our program:

Jan Newton, NANOOS Executive Director

Tel: (206) 543-9152 | janewton@uw.edu