



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 build resiliency. ”

*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:

SAFETY By enabling preparedness and security

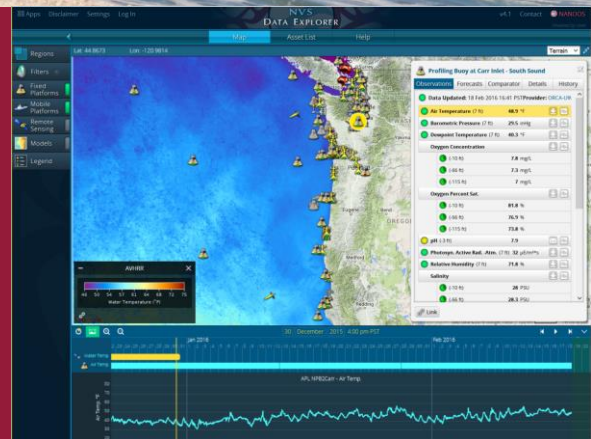
ECONOMY By preserving economic benefits of the ocean

ENVIRONMENT By protecting vital marine resources

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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.



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 to Aid Coastal Resiliency

Data from NANOOS is integral to helping coastal communities mitigate coastal hazards. Winter waves can erode ocean beaches and dunes, damage jetties that protect ports, and result in periodic flooding of homes. NANOOS beach and shoreline morphology data along with wave and water level data are used by the Oregon Department of Geology and Mineral Industries (DOGAMI) in a new suite of coastal flood hazard maps which project extreme wave run-up and backshore flooding. DOGAMI is also developing new coastal erosion hazard maps that account for future changes in sea level and storms for OR coastal counties. The diverse data sources that NANOOS has consolidated enable more efficient access to critical data streams essential to model and map coastal hazards, keeping businesses and homeowners safe from dangerous storm conditions and building resilience against future conditions.



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For More Information

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

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