NOAA

Center for Operational Oceanographic Products and Services

Water Level Program Overviews
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High Level Overview of Program

Our Mission: Meaningful oceanographic data for the Nation

CO-OPS is the authoritative source for accurate, reliable, and timely tides, water levels, currents, and other oceanographic information.

Vision

Supporting the Nation's economy and safeguarding coastal communities with oceanographic information accessible by anyone, at any time, from any place.

Supporting

Mapping and charting for the nation Safe and efficient navigation Coastal resilience and planning for coastal inundation

Important Legislative Mandates

Organic Act of Feb 10, 1807 founding of Survey of the Coasts US Coast and Geodetic Survey Act of 1947 Hydrographic Services Improvement Act (1998) **Boundary Waters Treaty of 1909**









What is the objective of your stations?

National Water Level Observation Network (NWLON)

- Real-time Water Levels
- Meteorological/physical oceanographic data
- <u>Tide predictions</u>
- Tidal datums
- Sea Level trends
- Operational Forecast Systems

210 NWLON Stations

https://tidesandcurrents.noaa.gov/









Who are your stakeholders / users?

- Mariners and vessel pilots
- Coastal planners
- Surveyors
- National Weather Service. Office of Coast Survey, National Geodetic Survey, and other NOAA offices
- •US Army Corps of Engineers
- US Geological Survey

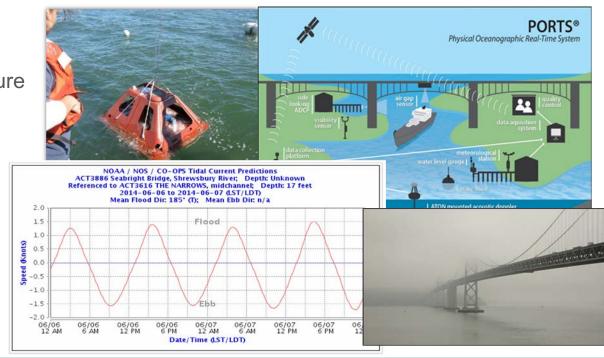
- US Coast Guard
- Recreational Community
- Commercial and Recreational Fishing
- Academia
- Emergency Managers
- Canadian government
- Power entities
- First Nations and Tribal Partners





What types of data do you collect?

- Currents
- Water temp
- Air temp, Barometric Pressure
- Salinity
- Wind Spd/Dir
- Waves
- Air gap
- Visibility, Relative Humidity
- Bench Mark Heights





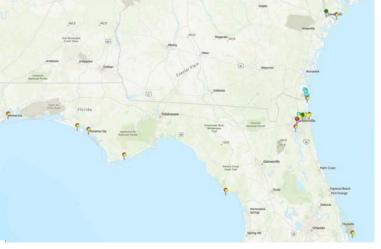


Where are your water level stations?

https://tidesandcurrents.noaa.gov/map/index.html



Southeast NWLON and PORTS stations











Expansion Opportunities

- <u>PORTS</u> program a partnership where local port partners fund the installation and O&M of sensors
- <u>Coastal Inundation Dashboard</u> partner data are not ingested into CO-OPS but instead displayed in real-time for decision making purposes
- <u>Datums partnerships</u> Partners help fill CO-OPS datum gaps



