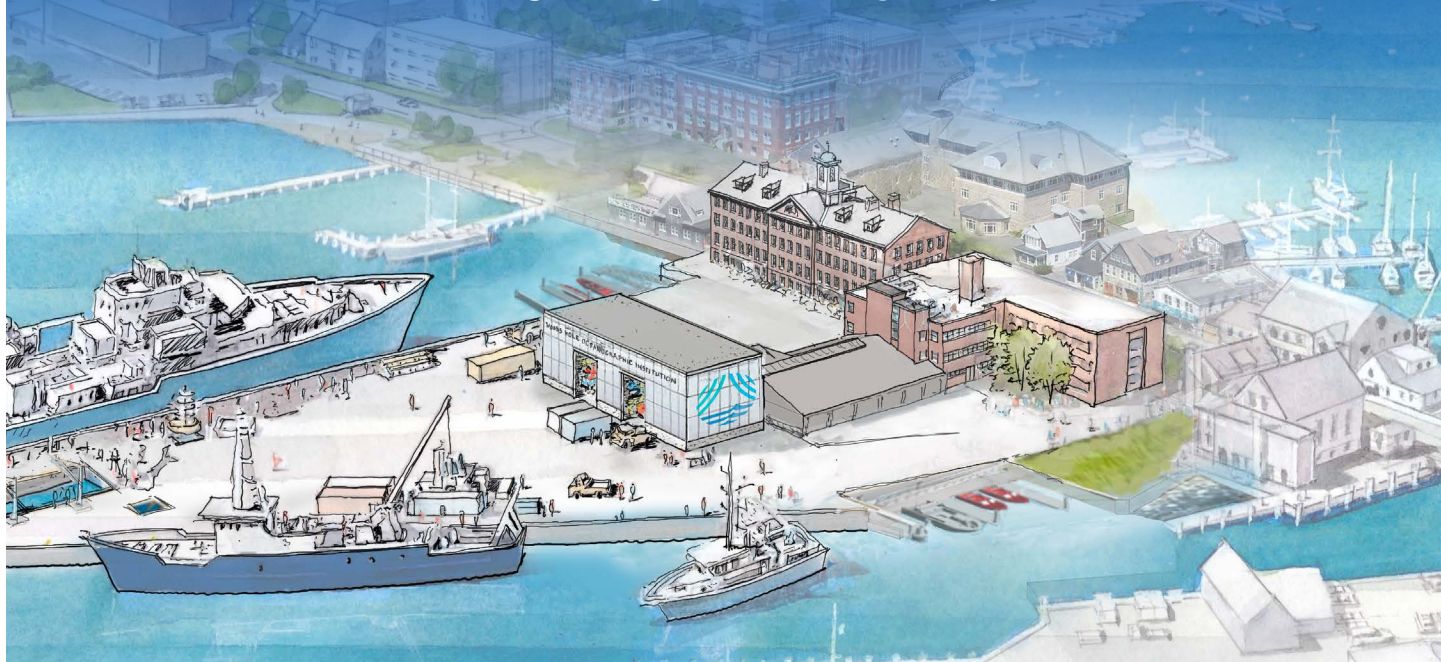




WOODS HOLE
OCEANOGRAPHIC
INSTITUTION
Our Ocean. Our Planet. Our Future.

CWATER

COMPLEX FOR WATERFRONT ACCESS TO EXPLORATION AND RESEARCH



*Meeting the needs of the nation
for the next 75 years.*

ISELIN MARINE FACILITY

WHOI's Iselin Marine Facility is a vital component of national infrastructure supporting ocean science, engineering, operations and innovation. It is the foremost waterfront research complex on the US East Coast, serving as the hub for access to the sea for the greater oceanographic community. With its deepwater dock, test wells, shops, laboratories and flexible high bay space, the facility is the origination for global oceanographic research missions including the North Atlantic, Arctic and beyond. From 2014 to 2023, WHOI conducted 217 missions on the *Armstrong* and *Atlantis* led by chief scientists from over 36 institutions with participation from 250 universities, government agencies, and private organizations. The facility is also regularly used by other research vessels, including visits by the academic research vessels *Thompson*, *Endeavor*, *Connecticut*, the NOAA research vessels *Henry Bigelow* and *Auk*, and commercial and private research vessels *Alucia*, *Discovery*, and *Scarlett Isabella*, among others. WHOI's facilities support scientific and engineering testing from its test well, shipboard scientific systems group test lab,

10,000-square-foot fabrication shop, scientific diving operation, staging area for Ocean Observing Initiative, Atlantic-based coastal and global ocean observing arrays, National Deep Submergence Facility vehicles (*Jason*, *Sentry* and *Alvin*) as well as a host of other underwater vehicles such as REMUS, *Nereus*, *Nereid Hybrid Tether* and *Nereid Under Ice*. Periodic overhauls and upgrades to the research submersible *Alvin* are performed at Iselin, including the upgrade to 6500 m depth.

A NATIONAL ASSET AT RISK

The Iselin Marine Facility was constructed in 1969 and the pile supported dock has reached the end of its 50-year design life. Over the last decade, sections of the concrete deck have undergone repair or replacement; advancing deterioration of the structure requires increasing investment in maintenance and repairs. Such repair efforts are not financially or structurally sustainable and are inhibiting the Institution's ability to meet its mission. Detailed analyses show that sea level rise and storm surge are also growing threats to the viability of the facility in its current state.

CWATER

Oceanography Starts Here

NEXT GENERATION ACCESS TO THE SEA

CWATER builds upon WHOI's 90-year history of providing the ocean science community access to the sea through the modernization of its water dependent facilities that support WHOI's mission of research, science, and education. CWATER is designed to be resilient in the face of sea level rise and storm events. Moreover, WHOI and its waterfront underpin the economic vitality of the blue economy in New England and beyond.

FEATURES

- » Pier provides wide berths for the Navy-owned, WHOI-operated global-class research vessels: the 238-foot RV Neil Armstrong and 273-foot RV Atlantis as well as the WHOI-owned 60-foot RV and other visiting vessels.
- » Building provides interior space to fabricate, maintain, and repair research vehicles plus work needed to perform on-site vessel repairs and maintenance.
- » Lifting platforms and dock cranes, a float system used for robotics vehicle access, several small boat slips.
- » Test well where sensors and underwater vehicles are routinely tested prior to being mobilized on research vessels for deployment at sea.
- » 2.8 acre site will be elevated 2.5' with an additional 1.5' increase possible for resiliency and adaptation well into the future.

STATUS

- » Design Complete
- » CWATER building schematic design complete
- » Permitting complete

