



Environmental Assessment for the Proposed Relocation of the Underwater Electromagnetic Measurement System and Data Concentrator Shed, U.S. Naval Submarine Base New London



What is the Navy proposing?

The Navy proposes to relocate the existing underwater electromagnetic measurement system (UEMMS) and data concentrator shed (DCS) within and adjacent to the Thames River federal navigation channel in New London and Groton, CT (*Figure 1*). The UEMMS serves U.S. Naval Submarine Base New London and is a measurement system for determining if degaussing/magnetic silencing of submarines and ships is needed.

The Proposed Action would construct a new UEMMS and DCS approximately 2,000 to 2,500 feet south of the existing site and would demolish the existing UEMMS and DCS. The existing range control building at Fort Trumbull State Park would not be relocated. New data and power cables would be installed in the riverbed from the range control building to the new UEMMS and DCS.

The operation of the new UEMMS and DCS would be identical to operations of the existing system. There would be no change in operating procedures or the type and frequency of vessels transiting the UEMMS.

Why is the Navy preparing an EA?

The National Environmental Policy Act requires federal agencies to evaluate the potential environmental impacts of any proposed major action. The EA will include the purpose and need for the action, Proposed Action and alternatives considered, existing conditions of the affected environment, and evaluation of impacts.

Why is the Navy proposing this action?

The purpose of the Proposed Action is to relocate the existing UEMMS and DCS to avoid construction and operational conflicts with a proposed new floating dry dock at an adjacent facility owned and operated by General Dynamics Electric Boat Corporation. The Proposed Action is needed to maintain continuous and efficient electromagnetic measurement services currently provided by the existing UEMMS, which is critical to maintaining the operational readiness and capability of the U.S. Atlantic Fleet.

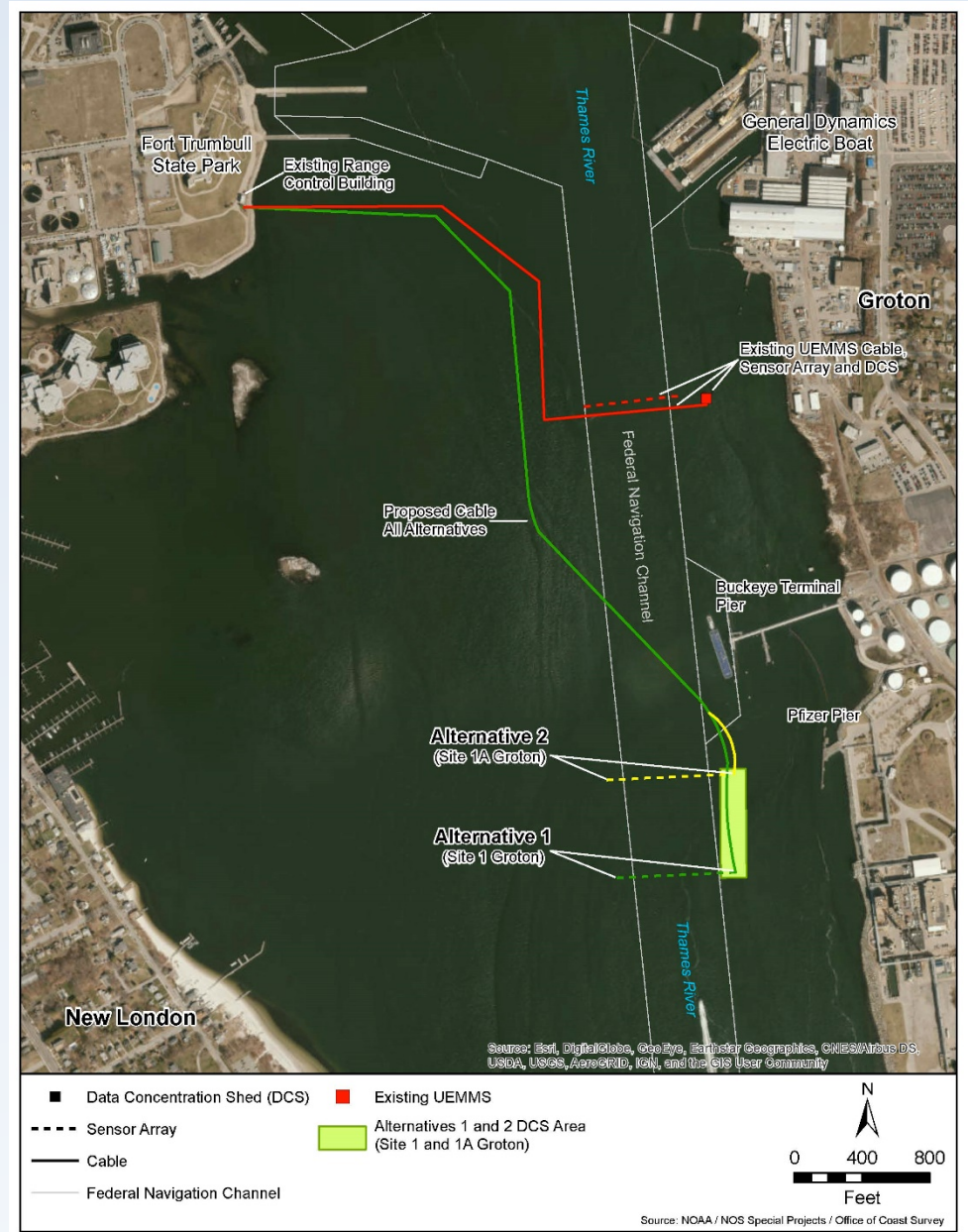


Figure 1 - Location of Proposed Action

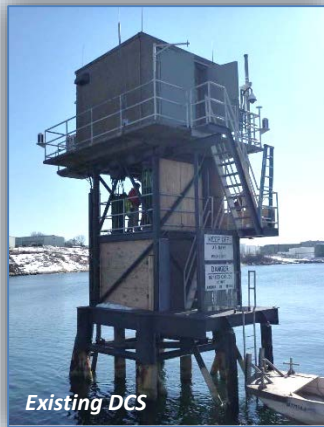


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Proposed Project

The Navy would construct the DCS first. The DCS would be similar to the existing DCS and would consist of a pile supported steel platform with an access ladder, stairway, concrete instrument enclosure, and a floating platform for boat docking. The top of the 18- foot by 18-foot enclosure would be approximately 36 feet above mean low water (MLW).



Existing DCS

Four 20- or 22-inch diameter steel pipe piles would be driven approximately 100 feet into the river bottom by vibratory hammer or impact hammer, at a rate of 1-2 piles per day. The floating platform would be tethered by four 16-inch pipe piles. The DCS would have electrical, communications, alarm, security features, fire suppression, cameras, lightning protection, and navigation markers and lights. The new sensor array would be installed across and centered on the

federal navigation channel and placed in a 13-foot deep trench below the authorized depth of the channel. The sensor array would be similar to the existing array, consisting of a 500-foot long sensor cable with 14 magnetometers and 13 electromagnetic triaxial sensors inside 8-inch diameter by 20-foot long sensor tubes embedded in the river bottom and connected by cables. New composite cables would provide the power and data link between the range control building and the new DCS. The cables would be routed through the existing concrete duct bank under an existing retaining wall and rip-rap bank to the riverbed and placed in a 1-foot wide by 4-foot deep water jet-plowed trench. The existing DCS and sensor array would be removed immediately after the new UEMMS is fully operational.

The DCS and sensor array construction would each take 6-8 months. Demolition of the existing UEMMS and DCS would take 2-3 months.

Alternatives Evaluated

The EA will evaluate two alternative locations for the DCS and UEMMS in the Thames River (*Figure 1*). Alternatives are based on technical needs and compatibility with navigation and the environment. A preferred alternative has not yet been selected. The EA also evaluates the no action alternative.



Submarine entering Thames River

Scope of the EA

The EA presents the existing conditions at the alternative sites and evaluates the potential environmental consequences of the Proposed Action. The EA evaluates potential impacts on air quality, water resources, geological resources, cultural resources, biological resources, visual resources, noise, infrastructure, transportation, public health and safety, and hazardous materials and wastes.

The Navy is consulting on the Proposed Action with key agencies, including the U.S. Army Corps of Engineers, U.S. Coast Guard, U.S. Fish and Wildlife Service, National Marine Fisheries Service, U.S. Environmental Protection Agency, federally recognized Indian Tribes, Connecticut Department of Energy and Environmental Protection, Connecticut Bureau of Aquaculture, Connecticut State Historic Preservation Office, and local New London and Groton stakeholders.

For more information on the Proposed Action, please contact:

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