

**THE UPGRADE AND EXPANSION OF THE NATIONAL OCEAN SERVICES'
NATIONAL WATER LEVEL OBSERVATION NETWORK
AS A MULTI-HAZARD PLATFORM**

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ABSTRACT

The National Oceanic and Atmospheric Administration's (NOAA), National Ocean Service (NOS) has had tsunami monitoring capabilities since 1947 in response to the Good Friday tsunami of April 1, 1946. History does repeat itself, especially in the volatile Pacific region as was shown in the 1960 Chilean tsunami and 1964 in Alaska. However, on December 26, 2004 a disaster occurred that truly made history and created headlines around the world. This single event made the world aware that the threat of tsunamis were not just constrained to volatile regions, but they could happen anywhere. After this event, the U.S. began a self assessment of its tsunami warning capabilities and found some areas that required improvement. NOAA's National Weather Service (NWS) operates the U.S. Tsunami Warning System (USTWS) home based in Ewa Beach, HI at the Pacific Tsunami Warning Center (PTWC). Coordinating with the PTWC, the West Coast and Alaska Tsunami Warning Center (WC/ATWC), and the Pacific Marine Environmental Laboratory (PMEL) requirements were developed for the National Water Level Observation Network (NWLON). The requirement calls for 16 new station installations and Data Collection Platform (DCP) upgrades at 33 more stations in the Pacific Ocean and Caribbean by FY 07. Fulfilling these requirements will not only increase the capabilities of the Warning Centers, but will benefit the entire country and its response to multiple hazards.