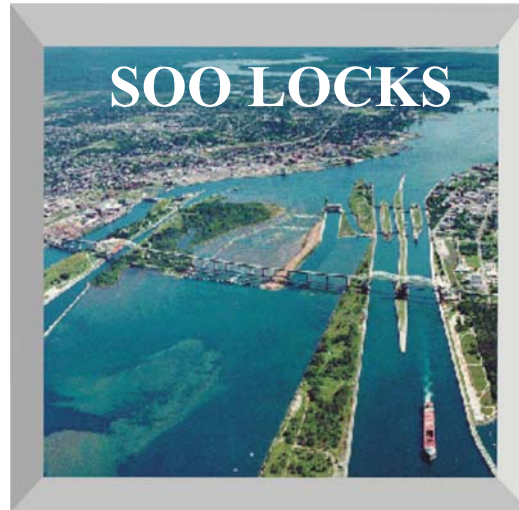




Physical Oceanographic Real-Time System **PORTS[®]**

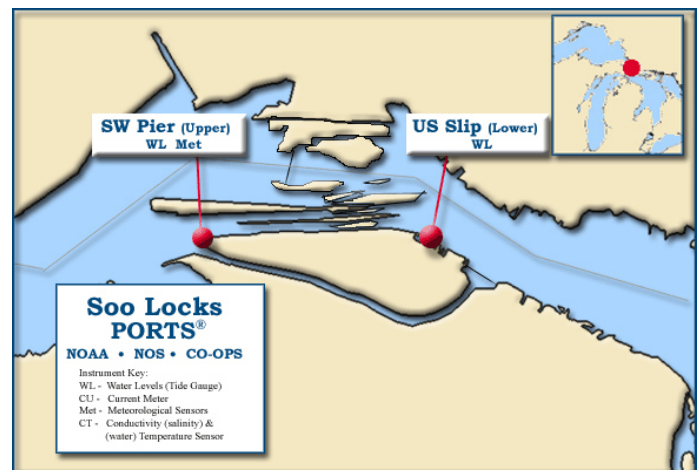


Internet: <http://co-ops.nos.noaa.gov/> (select PORTS)

The Physical Oceanographic Real-Time System (PORTS[®]) is a National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS) partnership program designed to provide the maritime community with high quality, real-time oceanographic and meteorological data. PORTS[®] is a decision support tool which improves the safety and efficiency of maritime commerce, assists coastal resource management, and aids recreational boaters.

Early in 1999 NOAA was approached by the Lake Carriers' Association (LCA) and the U.S. Army Corps of Engineers (USACE) to provide real-time water level information to aid in the operation of the Soo Locks, Sault Ste Marie, Michigan. Using funding provided by the USACE and LCA, NOAA installed a PORTS[®] prior to the opening of the navigation season in the Spring of 1999.

NOAA's contributions to this partnership include the development of national PORTS[®] standards, technical support and oversight of the design, installation and operation of PORTS[®], and data quality control. In addition, NOAA continues to develop, test, and evaluate new sensors, data collection, and data telemetry systems that enhance real-time measurement capabilities.



For Further Information Contact:
Center for Operational Oceanographic Products and Services
NOAA/National Ocean Service
ports@mail.nos.noaa.gov
301-713-2981

This PORTS[®] accesses data from two existing NOS water level measurement systems located above and below the locks - Upper (S.W. Pier) and Lower (U.S. Slip) gauges. The 6 minute primary and back-up average water levels are displayed in tabular form at the Locks Control Tower. This information is collected by a centralized Data Acquisition System located in the Tower and forwarded to NOAA's Continuous Operational Real-Time Monitoring System (CORMS), located in Silver Spring, Maryland, which provides 24 hours/day, 7 days/week quality control of the data to ensure that only accurate, reliable information is disseminated to users.

Recently both the USACE and the LCA have requested several enhancements to the system including the installation of meteorological equipment, enhanced information dissemination and independent access to the back-up data collection platform. The real-time information will be provided to users via local graphics displays, Internet and through a telephone voice data response system. Funding for the system enhancements and the operation of the PORTS[®] will be provided by the USACE.

The Soo Locks PORTS[®] has proven to be an invaluable asset to the USACE as a management tool in the locks operations as well as providing critical information to enhance navigation safety for vessels transiting through the locks. The shipping interests have now been provided a tool to accurately, maximize their loading capabilities to safely transit the locks as well as the St Mary's River reach. Some 85.5 million tons of cargo transit the locks each year. In addition to the real-time data display in the lock control tower, the NOAA SOO Locks PORTS[®] internet site receives over 2,500 visits per month.

