



Post Office Box 1949
San Pedro, CA 90733
Phone: 310.519.3134
24-Hr. 310.832.6411
FAX: 310.241.0300
info@mxsocial.org
www.mxsocal.org

A non-profit organization providing vessel traffic and maritime information service for Southern California

22 February 2019

Julie Thomas
Co-Program Manager
Coastal Data Information Program
Scripps Institution of Oceanography
9500 Gilman Drive, 0214
La Jolla, CA 92093-0214

SUBJECT: Letter of Support for CDIP and SCCOOS

Dear Ms. Thomas and Dr. Anderson:

On behalf of the Marine Exchange of Southern California, I enthusiastically endorse the valuable data and services provided by the Coastal Data Information Program (CDIP) and the Southern California Coastal Ocean Observing System (SCCOOS) at the Scripps Institution of Oceanography, UC San Diego.

The Marine Exchange, in partnership with federal, U.S. Coast Guard, state, and local port partners, is a private, non-profit firm that provides maritime information and vessel traffic services for the maritime community in the waters of Southern California and the ports of Los Angeles and Long Beach. Our firm continually works to anticipate and fully meet the maritime information and vessel traffic requirements necessary to promote a safe, secure, efficient, reliable, and environmentally sound maritime transportation system.

More than 28,000 vessels participated in the Vessel Traffic Service in 2018 and 4,547 large vessels arrived in Los Angeles or Long Beach. Each day, there are there are approximately 45 movements of some of the largest vessels in the world, and they are getting bigger. For example, container ships that are 1,300 feet long and carrying 14,000-18,000 containers are common. Tankers that are 1,100 feet long, weigh 330,000 tons, and have a draft of 69 feet are now arriving in Long Beach routinely. Bringing these ships safely into port is only possible if there is extremely accurate and reliable wave information such as provided by the CDIP.

At the other end of the size scale, daily, there are dozens of movements of smaller vessels such as ferries, crew boats to and from anchored ships and offshore oil platforms, water taxis, tugs and barges, whale watch and charter fishing boats, and school ships. Hundreds of pleasure vessels transit these waters every day of the year. These vessels also rely on the CDIP program to help make their decision whether to get underway or stay in port. The ferries to and from Catalina adjust their speeds based on wave heights reported by the CDIP buoys.

SUBJECT: Letter of Support for CDIP and SCCOOS

The ports of Los Angeles and Long Beach are the #1 and #2 container ports in the country and together are 9th in the world. Together, the 2 ports moved 17.5 million containers in 2018, an increase of 1.4 million over 2017. The value of all cargo moving through the ports is \$1.3 billion per day. California only has a 5-day supply of oil ashore, so keeping the tankers moving in and out of the ports and the offshore terminal in El Segundo is critical to preventing fuel shortages.

Example uses of CDIP buoy reports and SCCOOS data by my firm and our partners include:

1. **TUGS & BARGES:** Local tugs with freight barges use buoy measurements before making transits between Los Angeles and Long Beach to Catalina and the offshore islands such as San Clemente and San Nicholas to help determine if they can safely make the transit and move their cargo in marginal weather. This keeps food and supplies flowing safely and undamaged.
2. **FERRIES:** Ferries to and from Catalina from Los Angeles, Long Beach, Dana Point, and Newport use buoy information to help determine safe vessel speed for the safety of their vessels, crews, and passengers. This enables residents to get jobs on the mainland, school teachers who live on the mainland get to Catalina to teach, and keeps tourism alive on Catalina.
3. **HARBOR PILOTS:** The CDIP notifies the harbor pilots when there is a large, long-period southerly swell running, which can prevent the safe movement of very large crude oil carriers into Long Beach. This keeps oil flowing to California.
4. **DYNAMIC UNDER KEEL CLEARANCE PROJECT:** This is a wildly successful project and CDIP success story whose goals of increasing safety, increasing efficiency, and reducing emissions associated with the transit of very large crude oil tankers into the Port of Long Beach have been completely met since the project went operational in April 2017. To date, more than 50 very large tankers have safely and smoothly entered Long Beach. The project's partners are a unique mix of the Port of Long Beach, California Office of Spill Prevention and Response, Marathon Oil, and the Jacobsen (Long Beach) Pilot Service, who saw the shared value of working together to accomplish the 3 goals. CDIP buoy information is fed into a computer model that predicts movement of the tankers and resulting under keel clearance. If the clearance is too small, the tanker does not enter port and must wait for calmer weather.
5. **CHEVRON OFFSHORE OIL TERMINAL IN EL SEGUNDO:** Approximately 250 tankers moor at the Offshore Oil Terminal in El Segundo each year, and CDIP buoy information helps determine if it is too rough for the tankers and tugs to conduct oil offload operations safely at this facility. A significant fraction of the jet fuel used at Los Angeles International Airport is refined at this terminal.
6. **COAST GUARD:** We brief the Coast Guard with buoy information every morning, which enables them to conduct their missions more effectively and safely.


SUBJECT: Letter of Support for CDIP and SCCOOS

CDIP's timely and accurate wave data update every 30 minutes at <http://cdip.ucsd.edu> and are highly utilized by the maritime community, these data are critical to safe and efficient navigation by dredging project managers as well as by military, commercial, and recreational mariners. These observations throughout the coastal US—including Alaska, Hawaii, South Pacific Islands, the Great Lakes, and the Caribbean—enhance and expand the efforts of the national Integrated Ocean Observing System (IOOS), including the regional Southern California Coastal Ocean Observing System (SCCOOS) and the Central and Northern California Ocean Observing System (CeNCOOS). In addition, CDIP's observation-based models of wave-driven coastal flooding help address the vulnerability, resilience, and adaptation of the coastal zone. The robust methods and models that are being developed for the prediction of shoreline evolution, including beach processes, will validate and support regional sediment management. Without these data, life and property would be at risk. The SCCOOS observations for water quality, ecosystems and climate variability continue to contribute to technical and scientific operations and research.

I understand that CDIP is funded primarily by the US Army Corps of Engineers' Coastal and Ocean Data System (CODS) in addition to the state of CA, US Navy, and various industry partners. SCCOOS is funded by the National Oceanic Atmospheric Administration (NOAA). Sustained funding these Programs will be crucial to the maintenance of the program's buoy network and to the continuity of the important data products and services that these observations enable.

Please feel free to contact me if I may be of assistance.

Sincerely,



J. Kipling Louttit
Captain, U.S. Coast Guard, Retired
Executive Director
Marine Exchange of Southern California and
Vessel Traffic Service of Los Angeles and Long Beach