



SCCOOS News

The IOOS Regional Association Serving Southern California

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May Activities

May 3	Collaborative meeting with NOAA NWS Ocean Prediction Center Branch Chief – Scripps Oceanography
May 4	National Marine Mammal Foundation Safety meeting – San Diego, CA
May 10 & 11	NPREP Oil Spill Exercise – Oceanside, CA
May 11	Collaborative meeting with the California Natural Resources Agency & Ocean Protection Council – Scripps Oceanography
May 17	Southern California Beach Water Quality Work Group Meeting – Costa Mesa, CA
May 18 & 19	Channel Islands National Marine Sanctuary meeting – Santa Barbara, CA
May 23	Ocean Protection Council Meeting – CeNCOOS attended on behalf of SCCOOS



On May 11 Jenn Eckerle and Thomas Gibson at the CA Natural Resources Agency visited Scripps Oceanography and spent some time familiarizing themselves with near real-time ocean observations, as well as ocean modeling and High Frequency (HFR) capabilities.



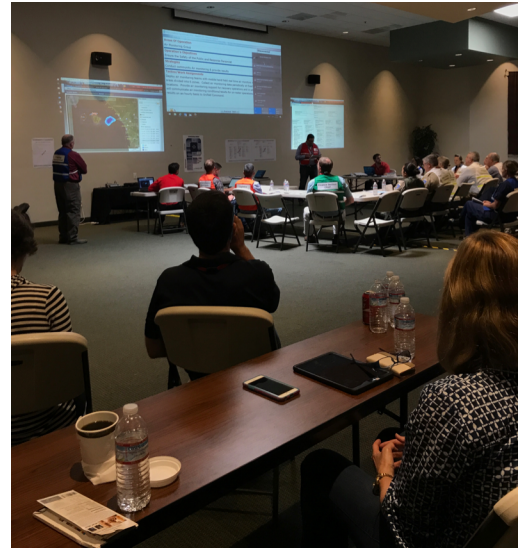


SCCOOS Participates in National Oil Spill Exercise, NPREP

SCCOOS has an ongoing and collaborative relationship with the oil spill prevention, response and recovery communities in Southern California. What is the oil spill community, you might ask? 1) It's federal, state and local government and agencies. 2) It's oil and gas companies, 3) It's a lot of effort, and SCCOOS spent May 10th and 11th in Oceanside, CA observing it all.

[Tom Cullen](#), the Administrator of CA Office of Spill Prevention and Response (OSPR), started the day by mentioning the importance of Ocean Observations to all participants in his kick-off speech.

Exercises like these allow for the oil spill community to be as prepared as they can, when the real thing happens. This was quite an event to observe, and oil spill exercises happen throughout the year. We learned it takes careful coordination, practice and preparation, as hundreds of people are involved. Oil spills are fraught with the worst challenges, but the oil spill community is filled with concerned citizens, just like you and me.



Thanks for the invite US Coast Guard/CA Department of Fish and Wildlife [Area Planning Committee](#)!

Southern California Harmful Algal Bloom (HAB) Update

Updates are still coming in about the water quality and the wildlife that have been affected by a Southern California Harmful Algal Bloom offshore that is being tracked by experts since early April.

The [C-HARM forecasting system](#) continues to capture the event, and this model relies heavily on the [3-km California ROMS model](#) produced by Yi Chao, a SCCOOS and CeNCOOS funded Principal Investigator.



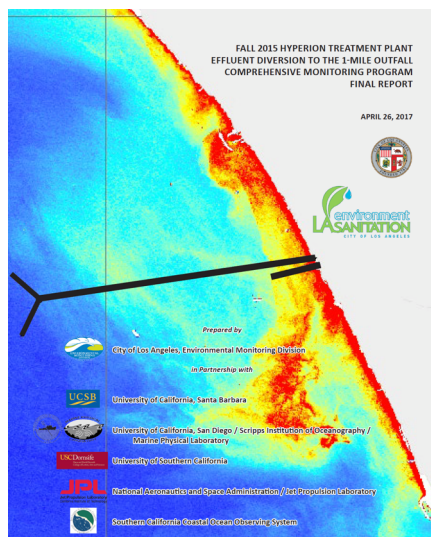
Clarissa Anderson, a HAB expert and SCCOOS Executive Director was quoted in the LA Times. She informed them that "this bloom, which stretches from Santa Barbara south to Baja California, is larger than what Southern California is used to seeing and is harming other wildlife, including many species of seabirds, and causing toxic shellfish. If we know where the toxins are in the water, we can tell where the phytoplankton are. If we can track where the bloom is going, we can understand the impact on animals."

Since April 4th Laguna Beach's Pacific Marine Mammal Center has rescued 40 adult sea lions infected with domoic acid, a naturally occurring neurotoxin produced by algal blooms.

Don Leach/Daily Pilot

To read more about this bloom here is a [link](#) to the article mentioned above and about NOAA's National Centers for Coastal Ocean Science ([NCCOS](#)) efforts.

Hyperion Water Reclamation Plant Releases Their 2015 Outfall Diversion



September 21-November 2, 2015 Hyperion Water Reclamation Plant in Santa Monica Bay, diverted flow from their 5-mile ocean outfall to their 1-mile ocean outfall to complete repairs to infrastructure.

During this diversion Hyperion partnered with academia, agencies and ocean observing organizations to create a comprehensive monitoring plan during the diversion.

[Learn more](#) about the comprehensive and multi-faceted monitoring program, which included several components, parameters and assets that were implemented over a 10-week period.

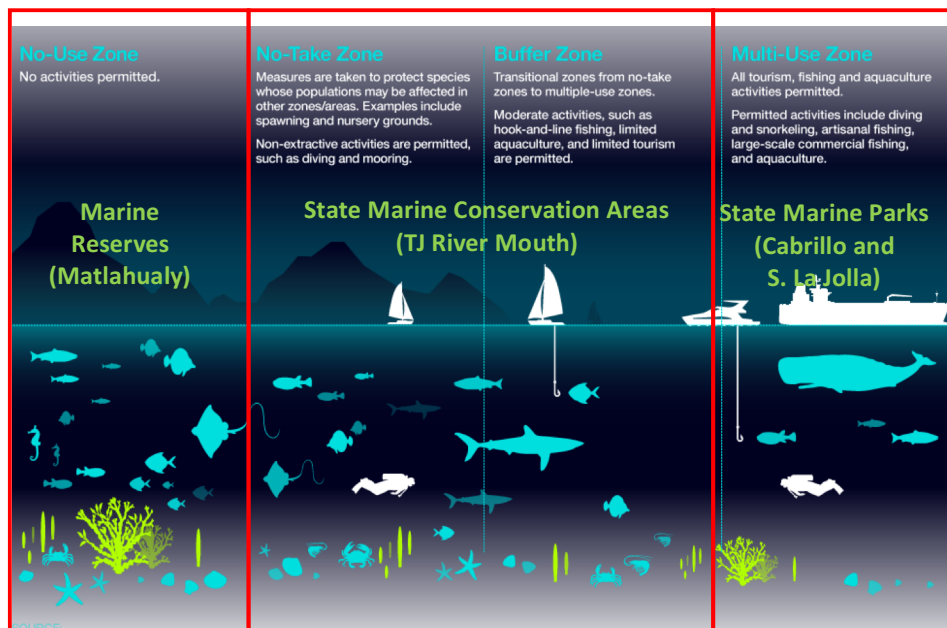
Southern California Marine Protected Area (MPA) Updates

SoCal [MPA Watch](#) baseline highlights are:

- WILDCOAST manages MPA Watch
- MPA Watch uses volunteer partnerships that actively engage the public, including [Junior volunteers](#) (15 yrs. and older)
- There are 4 MPA Watch [sites in San Diego](#) (pictured below)
 - Tijuana River Mouth - State Marine Conservation Area
 - Cabrillo - State Marine Reserve
 - South La Jolla – State Marine Reserve
 - Matlahualy - State Marine Reserve (pictured right)



Volunteers complete an MPA Watch survey at Matlahualy State Marine Reserve.
 PHOTO: Krissel Rivas/WILDCOAST



MPA BioBlitz
 June 23- July 2!

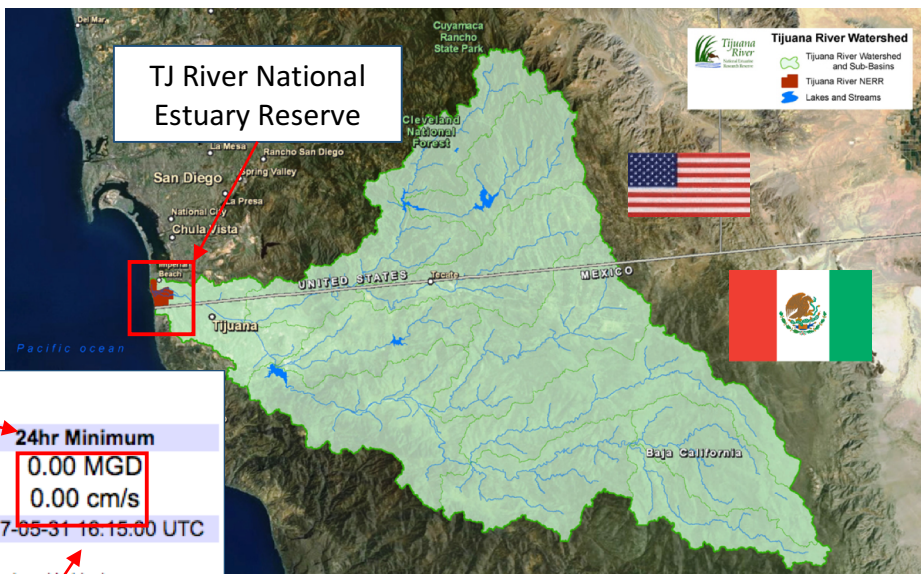
[Learn more](#)
 about how you
 can help!



Program Profile: Plume Tracking at the US/Mexico Border

You may already know that [SCCOOS](#) [hosts](#) a plume tracker for the Tijuana River discharge.

IT IS IMPORTANT TO NOTE: The Tijuana River is likely to transport pollution into our coastal waters is when the river IS **FLOWING**.



Tijuana River Flow Rate

Latest Observations	24hr Maximum	24hr Minimum
0.00 MGD 0.00 cm/s	0.00 MGD 0.00 cm/s	0.00 MGD 0.00 cm/s
2017-05-31 16:15:00 UTC	2017-05-31 16:15:00 UTC	2017-05-31 16:15:00 UTC

MGD = Millions of gallons per day. cm/s = Cubic meters per second.
Values in red indicate the data is greater than 24 hours old. Otherwise values are displayed in black.

The Tijuana flow rate below shows **ZERO** flow on 5/31/17.

One may then ask...why does this graph show that there is flow?

These displays are based ocean models that uses simulated bacteria particles. Simulated particles are acceptable in this case because they are a result of a 3-year research project from a [clean beach initiative](#) that was completed in 2009, specifically for tracking Tijuana River plumes.

Date: 2017-05-31 16:30 GMT (2017-05-31 09:30 PDT)

Station ID	Station Name	Particle Count	Plume Potential
1	Coronado (North Island)	0	NO
2	Silver Strand	0	NO
3	Silver Strand Beach	0	NO
4	Carnation Ave.	57	YES
5	Imperial Beach Pier	107	YES
6	Cortez Ave.	103	YES
7	End of Seacoast Dr.	77	YES
8	3/4 mi. N. of TJ River Mouth	128	YES
9	Tijuana River Mouth	36	YES
10	Monument Rd.	38	YES
11	Board Fence	16	YES

The table to the right was originally developed with the San Diego County Dept. of Public Health in mind, the 11 stations are their regular test sites. The 5/31/17 screen shot does show that IF there was flow, then 7 out of 11 stations would most likely have pollution flowing out into the coastal waters. Public health uses this visualization as an assessment tool of potential impacts and use it for monitoring and planning sampling efforts.

For any questions or clarification please contact SCCOOS: info@sccoos.org