

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: June 26, 2025

TO: The Honorable Adrin Nazarian, Chair
The Honorable Katy Yaroslavsky, Vice Chair
The Honorable Ysabel Jurado, Member
The Honorable Nithya Raman, Member
The Honorable Imelda Padilla, Member
Energy and Environment Committee

FROM: Barbara Romero, Director and General Manager
LA Sanitation and Environment



SUBJECT: REPORT BACK RELATIVE TO OCEAN WATER QUALITY / PUBLIC SAFETY AND HEALTH / MARINE LIFE / BEACHES / HAZARDOUS DEBRIS / PALISADES FIRE / 2025 WINDSTORM AND WILDFIRE RECOVERY (COUNCIL FILE NO. 25-0006-S69)

On March 19, 2025, the Los Angeles City Council adopted Council File 25-0600-S69, which instructed the Bureau of Sanitation (LASAN) to present the most recent data regarding ocean water quality and conditions following the hazardous debris created by the Palisades Fire. Additionally, the Council requested testing and guidance from LASAN in order to ensure the health and safety of the public, the beaches, and marine life.

DISCUSSION

Beach and Ocean Monitoring Summary

On the following dates (January 22, January 27, February 6, February 18, and March 13), the Los Angeles County Department Public Health (LACDPH) and the Los Angeles Regional Water Quality Control Board (LARWQCB) collected seawater samples from 12 beaches for heavy metals, bacteria, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). Results showed the following:

- Heavy metal concentrations were lower than expected. However, arsenic, copper, and zinc concentrations were higher than marine health standards.
- Naturally occurring metals, i.e., iron, manganese, selenium and polycyclic aromatic hydrocarbons (PAH) concentrations were above water quality standards.
- PAH concentrations were high at Topanga and Will Rogers.
- Nutrients (phosphorus) concentrations were elevated at select beaches. Limiting nutrient in marine waters is nitrate.
- Turbidity measurements were high at Surfrider and Dockweiler.
- Heavy rain occurred on January 28 and on February 13.
- On March 13, nine of the twelve stations were collected by the LARWQCB.
- LA County Department of Public Works and County Department of Beaches and Harbors declared that levels of heavy metals, petroleum hydrocarbons, chlorinated pesticides, PCBs,

volatile and semi-volatile organics, and asbestos were below levels that would be considered hazardous.

Beginning on February 25 and repeated before Memorial Day, the LA Regional Water Quality Control Board tested sediment and sand for fire related chemicals such as heavy metals, PCBs, and PAHs at 11 beaches and 4 storm drain/creek outfalls along Santa Monica Bay from Zuma Beach to RAT Beach. The board compared sediment/beach sand results with US EPA risk screening levels for residential soil and California-specific risk screening levels for residential soil in the Los Angeles region. All results from the February 25 sampling event were below these values or within background concentrations.

SIO CalCOFI Ocean Sampling

California Cooperative Oceanic Fisheries Investigations (CalCOFI), members include National Oceanic and Atmospheric Administration (NOAA), Scripps Institution of Oceanography (SIO), and California Dept of Fish and Wildlife.

- CalCOFI scientists detected ash 100 miles offshore.
- Burn scars have less organics to absorb pollutants and hold them, so they run off into the ocean.
- CalCOFI is investigating how far ash dispersed across the ocean, and how deep and how fast the ash settled. CalCOFI has 76-years of ocean data that can be used as baseline information in order to compare the post-fire data. The CalCOFI post-fire analyses are pending and results are not yet available.

Heal the Bay Beach Sampling and Testing

Samples were collected and analyzed from 10 stations, Paradise Cove to Malaga Cove.

- Aluminum, iron, selenium, and magnesium were higher than drinking water standards.
- Arsenic, copper, and zinc were higher than marine health standards.
- The correlation between the wildfires and harmful algal blooms, e.g., the domoic acid outbreak, has not yet been determined.
 - The fires did contribute nutrients to the ocean, but the algal blooms have occurred 4 years in a row off our coast; that is, without the Palisades fire contribution.
 - Upwelling, which is a natural phenomenon that brings deeper nutrient-rich waters to the surface, occurred in mid-February of this year (earlier than typical) and may have contributed to the toxic algal bloom earlier this year than previous blooms.

Dr. Dan Pondella of Occidental College and Southern California Marine Institute Kelp Forest Studies off Malibu

Kelp forests are homes to a diverse array of marine organisms, including many species of fish.

- Debris and toxins can adversely affect kelp forests and their associated communities of organisms.
- The kelp can be denuded by scouring action from post-fire debris, mud, rocks, and rubble.
- Ash in water reduces light, which reduces photosynthesis.
- Dr. Pondella just concluded a 2-yr study off of Malibu before the Palisades fire, so his study results will provide a baseline for the post-Palisades fire study, which he is currently conducting.

LASAN's Efforts

LASAN continues to sample and test for fecal indicator bacteria (FIB) at Santa Monica Bay beaches.

- Sampling sites that typically exceed state water quality standards, especially during rain events, are:
 - Topanga Canyon
 - Santa Monica Pier
 - Malibu Creek
 - Pico-Kenter
 - Mother's Beach in Marina del Rey
 - Inner Cabrillo Beach
- Working with NASA/JPL on satellite imagery along our coast to study turbidity, as a result of the ash, and chlorophyll a, which is a proxy for phytoplankton biomass (abundance).
- Assisting CalCOFI on ash dispersion, vertical distribution in the water column, and settling.
- Participating in the SCCWRP-led Post-fire Aquatic Habitats Monitoring Workgroup.
- LASAN's Ocean Assessment Unit (OAU) conducted the routine NPDES-required first set of semiannual epibenthic trawl survey (January 15, 16, 28 and 30) and the first quarter water quality survey (February 4 and March 4, 10 and 11). Preliminary water quality data analysis and observation of trawl hauls did not indicate any immediate anomalous data or biological community conditions as a result of the Palisades fire.
- Members of Scripps/CalCOFI joined OAU staff on water quality cruises on February 4, March 10, May 7 and May 8. On February 4, they collected an air sample during the entirety of the cruise and water samples at select sites. Air samples collected size-fractionated trace metal measurements of the air. The instrument was set up on the bow of our monitoring vessel and ran continuously starting upon passing the Marina del Rey sea wall and ending at the same location on the return trip. Water samples included sampling at the surface, chlorophyll-max layer, and the deepest depth where measurements were collected for chlorophyll-a, total organic carbon, particulate organic matter, and nutrients. At each station, surface water samples were collected for analysis of trace metals. On March 10, May 7th and 8th,, they collected water samples at select sites with the same methods as on February 4th.
- In early April 2025, during the LA fires Aquatic Habitat Monitoring Workgroup meeting, the Los Angeles Water Board asked attendees for water column data within Santa Monica Bay (SMB). LASAN reached out to the LA Water Board informing them of years of water quality data in SMB for the Hyperion NPDES permit. The LA Water Board requested data for the year leading up to the fires. LASAN's OAU provided CTD (conductivity-temperature-depth) and discrete microbiological and ammonia results to the LA Water Board from May 2024 to March 2025. The Los Angeles Water Board is looking to analyze pre- and post-fire data.
- During the summer season (July-September), the second half of the semiannual epibenthic trawl will be conducted, which will include collection of fish for bioaccumulation (pollutant levels in fish tissue) analyses. Annual sediment samples will be collected for sediment chemistry testing, toxicity testing, and benthic invertebrate monitoring. LASAN's OAU will conduct the NPDES permit-required Local Seafood Safety Survey during the months of September and October. These monitoring programs are required by Hyperion's NPDES permit, which LASAN has been monitoring for decades. Having historical data sets from the same locations during the same time of the year will allow for LASAN staff to analyze pre- and post-fire results and see if there is an increase in metals and semivolatile organics from the fires. Staff can also compare if there are similar fish and invertebrate species in the area or if pollutants from the fires have affected the distribution of species in the area, for example if there are more pollutant-tolerant species present than in the prior years.
- LASAN will continue to conduct water quality monitoring with the CTD, sediment chemistry testing, benthic invertebrate monitoring, demersal fish and invertebrate trawling, and fish tissue chemistry studies all in Santa Monica Bay to study the long-term impacts of the fires on the Bay.

Post-fire Aquatic Habitats Working Group

This Working Group is led by our Joint Powers Agency - Southern California Coastal Water Research Project (SCCWRP) - at the request of the Los Angeles Regional Water Quality Control Board.

- 26 different agencies participated in this post-fire aquatic habitat working group.
- Over 110 sites were sampled at different intervals for different parameters.
- Bacteria was measured at most sites.
- Metals (total or dissolved measured at ~ half of the sites) were measured at most sites.
- PAHs, nutrients, contaminants of emerging concern (CECs) were measured for a subset of sites.
- Limited biological observations were recorded.
- Data will be available through the LA County Department of Public Health website.