

**Job Nelson**  
**Vice President, Strategy & Policy**  
**Port of San Diego**  
**Select Committee on Sea Level Rise and the CA Economy Informational Hearing**

Port of San Diego (Port) is a Special District of the State of California and the fourth largest port in the state. The Port manages 34-miles of waterfront comprising over 14,000 acres of tidal and submerged lands in San Diego Bay, which is located in the southwestern corner of the United States. Port activities include two marine cargo terminals, two cruise ship terminals, 22 public parks, a Harbor Police Department, natural resources, and visitor-serving facilities and businesses including but not limited to hotels, restaurants, museums, marinas, and sports fishing.

Although Port of San Diego does not directly deal with groundwater issues, there are several priority areas for the Port that do relate to groundwater issues.

- **Tijuana River**
  - Yesterday staff attended Senator Butler's Tijuana River government stakeholder working group meeting and received updates from IBWC, EPA, FEMA, and other stakeholders
  - The Tijuana River Sewage crisis and its resolution is a priority area for Port of San Diego due to the significant impacts to the health and wellbeing of southern San Diego Bay, as well as Imperial Beach and its residents, which is a member city within the Port's southern jurisdiction.
  - Beaches in Imperial Beach have been closed to the public for over 1000 days, with the exception of a few open days last month prior to closing again.
  - The Tijuana River has been at the center of a transboundary pollution crisis on the US/Mexico border for decades and has continued to get worse as Tijuana's population has grown rapidly, immigration pressures at the border persist, and the U.S. agency responsible for treating much of the sewage has let its treatment plant fall into almost complete disrepair. 50 million gallons of raw sewage flow across the border daily, resulting in polluted stormwater and trash flowing down the Tijuana River into the Tijuana River Valley and the Pacific Ocean, closing numerous San Diego beaches, and sparking major concerns over public health risks, coastal water pollution and the degradation of the Tijuana River Estuary. This failure has significant repercussions for cross-border water quality and the well-being of communities in the San Diego region.
  - The Port continues to advocate for sustainable funding to address this issue. The Legislature included money for border rivers within its climate bond that will be before the voters this November.

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- **Sea Level Rise**

- The Port is responsible for managing granted lands and submerged lands in trust for the people of the State of California. This includes protecting coastal-dependent uses and critical infrastructure into the future from future coastal hazards, such as sea level rise. Sea level rise also has the potential to impact the Port's ability to restore historically polluted lands.
- In 2019 as a trustee of State Lands, the Port was required to assess the impacts of sea level rise and propose adaptation strategies to build resiliency to coastal climate change impacts in response to AB691.
- The Port prepared a report evaluating potential impacts from future sea level rise for the years 2030, 2050, and 2100, as well as feasible adaptation strategies and estimated cost of damages based on data projections.
- The amount of money needed for the planning, design, and implementation of adaptation and resilience projects is extremely large. Often these types of projects will include replacing and/or upgrading bulk heads, groins, sea walls, and other shoreline infrastructure that is very expensive. Even habitat restoration requires significant investment. In other words, these are large scale infrastructure projects that require a great deal of funding now and in the coming decades.

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- **Stormwater**

- The San Diego Bay receives water for discharges originating from within the 444-square miles of San Diego Bay Watershed. Controlling urban runoff or discharge that is not entirely composed of rainwater is critical to preserving the Bay's resources.
- Storms have been increasing in intensity, leading to microbursts that produce significant rainfall in a short duration which overwhelm drainage systems and lead to severe flooding. If this occurs on contaminated sites, pollution can be dispersed into water and/or groundwater. In addition, the intensity of the storms can deposit upstream pollution on top of in-bay capped sites. Further, storm surges cause increased coastal erosion leading to structural damage and loss.
- Current stormwater infrastructure is aging past its useful life. We are seeing more sinkholes, broken storm drain/ sewer pipes that cannot adequately channel the heavy rain flows.
- Sea-level rise causes inundation into existing stormwater systems, resulting in upstream flooding because the storm flows cannot properly discharge into the bay.
- Port staff is focused on this issue and has taken steps to address it but our biggest challenge is obtaining adequate funding.
- Adequate funding needs to be made available to improve aging storm drain infrastructure; upstream capture/retention systems, and improved sewer overflow alert systems.

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- **Copper TMDL**

- The Port of San Diego is a regional leader in improving water quality in San Diego Bay. Through the Copper Reduction Program, the Port is engaging with the boating community to reduce levels of dissolved copper in marina basins around the bay as it can be harmful to marine animals and plants.
- The Port's Copper Reduction Program focuses on the largest source of copper - boat hull paints - and identifies an approach to improve water quality and achieve compliance with regulations while balancing economic and public interests. The Board of Port Commissioners champions copper reduction as part of its environmental stewardship mission.
- In San Diego Bay, Shelter Island Yacht Basin (SIYB) has been identified as an area where high copper levels exceed federal and state standards. A regulatory order requires the Port of San Diego, marinas, yacht clubs, hull cleaners and boaters to reduce copper pollution in this area by 76 percent by 2022.
- San Diego Regional Quality Control Board is currently re-assessing how to evaluate Shelter Island Yacht Basin using a more holistic, ecosystem-based approach while ensuring that beneficial uses are protected. Port staff will be working with Regional Board staff as this takes shape.
- Most importantly, while awaiting next steps from the Regional Board, the Dissolved Copper TMDL is still in place, and the legally available copper-based antifouling paints remain the main source of copper loading in the basin.
- Copper impairments across the state are the result of a legally available product. State resources could be directed at finding viable alternatives that still work to limit invasive species and fouling while meeting environmental needs. With climate change, we anticipate there will be more issues with invasive species in San Diego Bay.

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- **Blue Economy**

- Expansion of nature-inclusive or nature-based solutions to increase shoreline resiliency (ECONcrete expansion, other types based on results of a Shoreline Atlas that we are developing for potential types of nature based solutions that could work on soft and hardened shorelines around the Bay).
- Support for innovations in water and sediment remediation technologies;
- Research on bioremediation capabilities of seaweed-implications for seaweed aquaculture at scale.
- Port staff is very excited about the outcome of nature-based solutions to increase shoreline resiliency and extend an invitation to those interested in learning more about the exciting initiatives coming out of our Blue Economy Incubator.