Environmental Stewardship in San Diego Bay

• Agency Collaboration

• Consistency in Mission, Core Values

• Aligning Programs with Strategic Planning

• Improving bay conditions

• Trustee of tidelands
Implementing the San Diego Bay Strategy
SD Bay Strategy Alignment: REC-2 & Trash Abatement

Port-wide Trash Reduction Implementation Efforts

Baseline Programs
• Water Quality Improvement Plans
• Jurisdictional Program (JRMP)
• Monitoring
• Enforcement
• Education / Outreach

New Ideas & Efforts
• Zephyr Trash Project
• SUSTAIN sensors
• Pollution Prevention Campaign
Ultrasonic sensors detect bin fullness on an hourly basis.

Data is relayed to a central data dashboard.

The Zephyr Boat

SD Bay Strategy Alignment: New Port Initiatives
Pollution Prevention Campaign

#thatsmybay

https://www.portofsandiego.org/thatsmybay
Love this video .. and LOVE the message here ..

Port of San Diego
Be a Hero like Trash Trooper Troy & find out why it's important to 'Stache your trash! goo.gl/4ecNC #ThatsMyBay #SanDiego #SDCC2018 #SDCC18

9:37 AM - 18 Jul 2018

Love this! Great job @portofsandiego

Port of San Diego
No One Wants to be Seen With a Trashy Bay. Meet Trash Trooper Troy & find out why it's important to 'Stache Your Trash!
https://t.co/QcXDAJ75HS...

3 days ago

@dearestscarlet omg! This is great!
bigreja 😊😊😊😊 I love it!
punchdrunkprince that city is in serious need of a clean up and a little self policing and responsibility
jeremyfontaine @jennyjunem let's do something like this for the City storm water division!!!
grumpyhooker Death penalty for littering!
jkiss77 Possibly the best PSA I have ever seen
crystalbluevibrations Right on! Pride of a Clean City!
Port of San Diego: San Diego Bay Strategy Implementation

Karen Holman, Director of Environmental Protection, Port of San Diego
Kelly Tait, Senior Environmental Specialist, Port of San Diego
REC-2 and Trash Abatement

Key Beneficial Uses and Key Areas

- Assessments
- Priorities
- Goals
- Realign Work
- Track Progress
- Reevaluate
Agency Collaboration

Monitoring & Assessment

Assessing the Condition of San Diego Bay for Non-Water Contact Recreation

Types of Recreation in San Diego Bay

San Diego Bay provides opportunities for many types of recreation, as well as and around the water. Activities may include walking, water sports, kayaking, fishing, and even swimming. The Bay's diverse ecosystem supports a wide range of wildlife, making it an ideal location for nature lovers and outdoor enthusiasts. A separate status sheet describes the potential benefits and challenges associated with the water and its adjacent ecosystem in high-altitude parts of the Bay.

Stressors Impact Recreation

People cause “stressors” such as trash, oil spills, excessive growth of algae, and illegal discharge of sewage, which affect the RECs. The study evaluates the impact of these stressors on the Bay's ecosystem and human activities. The San Diego Water Board conducted a “Nutrients and Sediments Study” (2010-2015) to monitor water quality and collect data on various parameters. The study measured nutrient and sediment concentrations, and the results were used to assess the condition of the Bay.

Who is Collecting Data on Trash?

Data are available from sources such as permit reporters, monitoring, tracking by citizen volunteers, monitoring by the San Diego Water Board, and research scientists. The data collected are comprehensive and enable us to understand the extent and distribution of trash in the Bay.

Trash "Hot Spots" & Sources

Several studies have identified “hot spots,” where trash appears to accumulate in the Bay due to transport by riverine flows to the head or from prevailing winds concentrating existing trash in the Bay. For instance, the RECs evidence shows that trash found in the north or west of the Bay is mainly carried by the tides and wind. The study also found that trash collection mechanisms carried out by the Port of San Diego at the North and South ports are effective in reducing the number of trash "hot spots".

Trash on land adjacent to San Diego Bay damages people's ability to enjoy the bay. It is also a major source of trash found in the bay itself. Therefore, it is crucial to reduce the amount of trash entering the Bay.

San Diego Water Board: http://www.waterboards.ca.gov/sandiego

Monthly water and stream flow data are used to understand the impact of water flow and load on water quality and ecosystem health. The data are used to monitor and manage water resources and protect the Bay's environment.

Figure 1. Tons of trash collected from the north and south sides of the Bay. The graph shows a decrease in trash collection over time, indicating a successful reduction in trash in the Bay.

Figure 2. Graph showing the percentage of trash collected from the North side of the Bay compared to the South side. The South side has a higher percentage of trash collection, indicating a need for improved waste management on the South side.

Figure 3. Heat map showing the density of trash hot spots in the San Diego Bay. The map highlights areas with high concentrations of trash, indicating areas that require intervention and resource allocation to reduce trash accumulation.
The Sustain Platform

Ultrasonic sensors that detect receptacle fullness on an hourly basis.

Data is relayed to a central data dashboard.