

# What You Need to Know: All About Caulerpa

#### What is it?

Caulerpa is a green algae native to Florida and other subtropical and tropical areas. It grows along the sea floor in shallow areas, similar to grass on land.

#### What does it look like?

Caulerpa has bright green, elongated, oval-shaped leaves that taper where they connect to the stalk. Each leaf is connected underground by runners (similar to roots) that attach through the sediment.

### How did it get in the bay?

Caulerpa most likely entered the Coronado Cays from the unlawful dumping of a private saltwater aquarium.

### Why is it bad for San Diego Bay?

Caulerpa grows quickly and can aggressively spread through contact with boats, fishing activities, and even the tides. It can easily overgrow and outcompete native species, harming the bay's marine life through loss of habitat. South Bay is home to 1,900 acres of eelgrass, a state and federally protected seaweed that provides habitat and food for many animals, including Pacific green sea turtles, a threatened species, and 70 different kinds of fish. Caulerpa has caused significant, costly damage to coastal waters in California and the Mediterranean Sea, which is why immediate, aggressive removal of any Caulerpa found in San Diego Bay is needed to protect eelgrass and other important species.

# CORONADO CAYS CAULERPA PROLIFERA

2024 INVASIVE SPECIES ALERT

# Invasive seaweed found in Coronado Cays in South San Diego Bay

Caulerpa (Caulerpa prolifera), an invasive marine seaweed, has been discovered underwater in the Coronado Cays, a residential area of south San Diego Bay. The Port, along with a team of local, state, and federal resource agencies, are proactively working together to kill, remove, and prevent further spread of this invasive seaweed.



The Southern
California Caulerpa
Action Team includes
representatives from

the U.S. Army Corps of Engineers,
California Coastal Commission,
California Department of Fish & Wildlife,
NOAA National Marine Fisheries Service,
Santa Ana and San Diego Regional
Water Quality Control Boards, State
Lands Commission, State Water
Resources Control Board, and U.S. Fish
& Wildlife Service Refuges. The Port of
San Diego, the City of Coronado, and
the Coronado Cays Homeowners
Association (CCHOA) are also involved
in the effort to address the infestation in
the Coronado Cays area. (Photo credit:
Merkel & Associates, Inc.)



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## What You Can Do: How to avoid the spread of Caulerpa

## If you have or sell saltwater aquariums

- DO NOT use Caulerpa in your aquarium.
- DO NOT dump aquariums into California waters, including storms drains. Drain only down sinks or toilets.
- DO NOT share or sell Caulerpa.
   It is illegal to posses, sell, or transport
   Caulerpa in California, and could result
   in fines of \$500 to \$10,000 per violation.

## If you are a boater, diver, or fisherman

- Learn what Caulerpa looks like and keep an eye out.
- Inspect anchors, fishing gear, or nets for Caulerpa that may have been picked up from the bottom.
- Learn more and report sightings to the California Department of Fish & Wildlife at: wildlife.ca.gov/Conservation/Invasives/Species/Caulerpa

# WHAT IS BEING DONE TO REMOVE CAULERPA FROM SAN DIEGO BAY

Caulerpa Rapid Response Eradication Plan: Containment and Surveys

The Port and partners are coordinating with CCHOA and boat owners to *control the infestation* by reducing disturbance from boating activity. Boating causes water movement that can spread Caulerpa to new areas. Divers trained to identify Caulerpa *perform surveys* of and around the infested area to locate and map all Caulerpa. Divers then *cover the Caulerpa with sealed barriers*, like tarps, to smother it. Smothering *excludes all light, oxygen, and water circulation*, which reduces the Caulerpa's ability to grow until, eventually, it dies.

After the Caulerpa is killed, the barriers are removed. Divers then perform a *post-removal survey* to locate any new infestations. *Future surveys* will also be performed to ensure complete eradication. Barriers are expected to remain in place for six months. Full eradication of Caulerpa is expected to take at least two years.

#### **Funding**

The Port contributed \$92,000 for barriers and dive surveys and supported the U.S. Fish & Wildlife Service in securing a \$350,000 Rapid Response Fund for Aquatic Invasive Species grant. The State Water Resources Control Board approved \$500,000 to support barrier installation and additional surveys.



Figure 1. Area in the Coronado Cays affected by Caulerpa, provided by Robert Mooney (Marine Taxonomic Services).

