



California Environmental Protection Agency
STATE WATER RESOURCES CONTROL BOARD



Agricultural Research Service
The National Research Service of the U.S. Department of Agriculture



News Release

FOR IMMEDIATE RELEASE

Agency Contacts Listed at End of News Release

July 12, 2006

Caulerpa Taxifolia Eradication – Officials Proclaim Victory Over “Killer Algae” But Remain Vigilant to New Sightings

CARLSBAD, Calif. – Governmental agencies and community-based environmental organizations came together today to celebrate the successful eradication of the invasive seaweed, *Caulerpa taxifolia*, from the two locations where it was detected nearly six years ago. The algae, first detected in Agua Hedionda Lagoon (near San Diego) and Huntington Harbour (near Los Angeles) in 2000, is one of only a few known eradications of an invasive marine alga species.

Caulerpa taxifolia, also referred to as “killer algae” because of its ability to devastate and overwhelm underwater ecosystems, was popular in home aquariums and likely introduced accidentally into California's waters several years ago. Legislation in 2001 made it illegal to sell, possess, or transfer *Caulerpa taxifolia* and eight other similar looking *Caulerpa* species in California. In other parts of the world, especially the Mediterranean Sea, *Caulerpa taxifolia* has rapidly, and permanently, displaced native marine plants and animals.

“The proliferation of *Caulerpa* in these waters would have irreversibly changed the ecosystem in California’s near-shore coastal environment,” said Tim Keeney, NOAA’s Deputy Assistant Secretary of Commerce for Oceans and Atmosphere. “It was only through the rapid response and cooperative efforts of organizations at all levels that we were successful in preventing an ecological crisis.”

The Southern California Caulerpa Action Team (SCCAT) immediately formed following discovery of the seaweed in 2000, to develop a plan to eradicate it from the two known infestation locations. The team is composed of a number of agencies and organizations including the National Marine Fisheries Service (NOAA Fisheries Service), San Diego Regional Water Quality Control Board, Santa Ana Regional Water Quality Control Board, California Department of Fish and Game (DFG), the U.S. Department of Agriculture, the Agua Hedionda Lagoon Foundation and Merkel & Associates, the program’s eradication contractor. The cooperative nature and scientific response utilized by SCCAT is being viewed as an effective model for the eradication of invasive species.

“Invasive species can be like oil spills that reproduce, and can cause great environmental and economic harm,” said DFG Director Ryan Broddrick. “Eradicating this harmful marine alga took quick action, collaboration and hard work from dedicated professionals and volunteers. The Southern California Caulerpa Action Team helped make this a success and a model for future actions of this kind.”

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Officials continue to be concerned about possible outbreaks of the algae in other coastal areas and stress that it is vitally important to continue surveillance efforts throughout California and other susceptible coastal waters to ensure that other infestation sites do not exist. Sustained public education is essential to ensure there are no further introductions of this banned invasive species from home aquariums into our waterways.

Still, the members of SCCAT are relieved that this eradication effort was successful and hope they will not need to convene the team at a later date.

“Agua Hedionda Lagoon Foundation is pleased to host the celebration of the eradication of *Caulerpa taxifolia*,” said Craig Elliott of the Agua Hedionda Lagoon Foundation. “The Foundation will honor its mission of caring for the lagoon by continuing to support educational programs promoting awareness of the menace of invasive species and encouraging lagoon users to watch for evidence of new infestations of *Caulerpa*.”

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Contacts

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On the Web

Southern California Caulerpa Action Team

<http://www.sccat.net>

San Diego Regional Water Quality Control Board

<http://www.caulerpa.cjb.net>

Caulerpa taxifolia: The “killer algae” is in Southern California – UC Davis

<http://www.ridnis.ucdavis.edu/Caulerpataxifolia.html>

Agua Hedionda Lagoon Foundation

<http://www.aguahedionda.org/AHLFhomepage3.htm>

NOAA Fisheries Service Southwest Region

<http://swr.nmfs.noaa.gov/hcd/caulerad.htm>

*Southern California Caulerpa Action Team
Steering Committee*

Bill Paznokas

California Department of Fish and Game

Chiara Clemente

California Regional Water Quality Control Board, San Diego Region

Wanda Cross

California Regional Water Quality Control Board, Santa Ana Region

Bob Hoffman

National Marine Fisheries Service

Lars Anderson

United States Department of Agriculture – Agricultural Research Service

The eradication would not have been possible without the support of numerous participants and funders. We wish to acknowledge and thank:

Program Funding and Key Supporters

- State Water Resources Control Board
 - Cleanup and Abatement Account
 - Proposition 13 grant
 - EPA Clean Water Act Section 319h grant
- California Coastal Conservancy
 - Southern California Wetlands Recovery Project grant
- California Department of Fish and Game
- NOAA National Marine Fisheries Service
- USDA – Agricultural Research Service
- Cabrillo Power I LLC
- U.S. Fish and Wildlife Service
- National Fish and Wildlife Foundation
- FishAmerica Foundation
- NOAA Community-Based Restoration Program
- California State Parks
- Agua Hedionda Lagoon Foundation
- California Resources Agency
- Supervisor Pam Slater
- SD Council President Scott Peters
- Assemblyman Mark Wyland

Special Acknowledgement

The success of the Caulerpa taxifolia eradication program is gratefully dedicated to Greig Peters, of the San Diego Regional Water Quality Control Board, who was among the first to recognize the immediate threat posed by Caulerpa taxifolia and was instrumental in mobilizing an immediate response. We regret that he passed away before the successful completion of the project, but his dedicated contributions will long be remembered.

The Southern California *Caulerpa* Action Team
is pleased to announce:

**The Eradication of the
Invasive Seaweed
Caulerpa taxifolia from
Agua Hedionda Lagoon and
Huntington Harbour**



**Agua Hedionda Lagoon Foundation
Discovery Center**
Carlsbad, CA

**July 12, 2006
10:30 a.m.**



What is Caulerpa taxifolia and why is it a problem?

Caulerpa taxifolia is a marine seaweed commonly used in saltwater aquariums. It does not occur naturally in California. It has proven to be extremely invasive and damaging when released into waters where it is not native. It can form dense mats that cover the seafloor and displace native plants and animals. It can grow rapidly, on any type of seafloor, and at a wide range of depths. Even tiny fragments of this seaweed can grow and form new infestations or spread existing infestations. It can easily be spread (by movement of boat anchors or fishing gear, for example). It contains toxins that make it unpalatable to many animals that feed on other seaweeds.

When and where were the infestations discovered in California?

In mid-2000, *Caulerpa taxifolia* was found growing in two embayments in southern California – first in Agua Hedionda Lagoon in Carlsbad in San Diego County and shortly thereafter in Huntington Harbour in Huntington Beach in Orange County. The infestations resulted from releases of *C. taxifolia* from saltwater aquariums.

How were these infestations eradicated?

Eradication efforts were initiated promptly after the infestations were found. Intensive surveys were conducted in waters near where the infestations were found. Wherever *Caulerpa taxifolia* was found, it was covered with black plastic tarps, and chlorine was placed under the tarps. Eradication efforts took more than five years of work and expenditure of over \$7 million.

How are we sure it is eradicated?

The efficacy of the eradication approach used has been thoroughly investigated both in the laboratory and the field. Tests of samples taken from underneath the treatment tarps where *Caulerpa taxifolia* previously grew have demonstrated that no viable *C. taxifolia* remains. Additionally, small removals of tarps at the infestation sites have been monitored for over 4 years with no regrowth of *C. taxifolia*. Finally, repeated, intensive surveys of the infested waters conducted by SCUBA divers have detected no *C. taxifolia* at either location since fall 2002.

Event Schedule

10:30 a.m. Meet and Greet

10:45 a.m. Welcome and Introductions

Craig Elliott

Agua Hedionda Lagoon Foundation

Bob Hoffman

NOAA's National Marine Fisheries Service

11:00 a.m. Invited Speakers

Ryan Broddrick, Director

California Department of Fish and Game

**Timothy Keeney, Deputy Assistant Secretary for
Oceans and Atmosphere**

National Oceanic and Atmospheric Administration

Dr. Dwayne Buxton, Area Director

USDA- Agricultural Research Service

David Lloyd, Secretary

Cabrillo Power I, LLC

Dr. Daniel Simberloff, Ecologist

University of Tennessee

11:30 a.m. Closing Remarks

Bob Hoffman

NOAA's National Marine Fisheries Service

11:35 a.m. Refreshments