**FILE NUMBER: 2025-063** 

**DATE:** Tuesday, May 6, 2025

SUBJECT: Continuance of a Local Emergency - Caulerpa Prolifera

DESCRIPTION: Presentation on the Continuing Response to the Presence of an Invasive Algae Caulerpa Prolifera in the Coronado Cays and South San Diego Bay and Adopt a Resolution Proclaiming the Continuance of a Local Emergency Due to the Presence of the Invasive Algae Caulerpa Prolifera

## **EXECUTIVE SUMMARY:**

In addition to requesting a continuation of a local emergency due to the presence of the invasive algae *Caulerpa prolifera*, staff will present a status update on the response to date, as well future activities to combat this invasive species. On November 14, 2023, by Resolution No. 2023-101, the Board of Port Commissioners (Board/BPC) adopted a proclamation of a local emergency due to the discovery of the extremely invasive algae, *Caulerpa prolifera* in the Coronado Cays, South San Diego Bay. BPC Policy No. 777, dated June 23, 2020, (Clerks Document #71570), details the District's Emergency Management policy, which requires the Board review the need for the continuation of the local emergency at least every 60 days until the local emergency is terminated.

Since the initial proclamation of a local emergency, there have been multiple continuances of the local emergency by the Board due to the existence of the invasive algae Caulerpa prolifera in the Coronado Cays, South San Diego Bay, all listed below. On December 5, 2023, by Resolution No. 2023-112, the Board continued the proclamation of a local emergency to February 5, 2024; on January 18, 2024, by Resolution No. 2024-002, the Board continued the proclamation to March 18, 2024; on March 12, 2024, by Resolution No. 2024-017, the Board continued the proclamation to May 12, 2024; on April 3, 2024, by Resolution No 2024-037, the Board continued the proclamation to June 2, 2024; on May 14, 2024, by Resolution No 2024-050, the Board continued the proclamation to July 14, 2024; on July 9, 2024, by Resolution No. 2024-067, the Board continued the proclamation to September 7, 2024; on August 13, 2024, by Resolution No. 2024-074, the Board continued the proclamation to October 12, 2024; on September 20, 2024, by Resolution No. 2024-087, the Board continued the proclamation to November 19, 2024; on November 13, 2024, by Resolution No. 2024-112, the Board continued the proclamation to January 12, 2025; on December 10, 2024, by Resolution No. 2024-124, the Board continued the proclamation to February 8, 2025; and on March 11, 2025 by Resolution No. 2025-025, the Board continued the proclamation to May 10, 2025. The proclamation will expire, unless continued by this action.

Another continuance of the proclamation of a local emergency is needed due to the continued presence of *Caulerpa prolifera* in the Coronado Cays and south San Diego Bay. The local emergency will assist in securing additional funding from federal and state grant sources to eradicate the invasive algae. Based on the continued presence and the threat presented by *Caulerpa* to San Diego Bay, staff recommends that the Board

continue the proclamation of a Local Emergency consistent with BPC Policy No. 777, which will continue the local emergency for an additional 60 days to July 5, 2025.

On September 21, 2023, an approximately 24 square meter patch of *Caulerpa prolifera* was discovered growing underneath and adjacent to boat docks along the eastern edge of Antigua Village. In October 2023, an approximately 0.25 acre patch of *Caulerpa prolifera* was discovered along the northern edge of Antigua Village within the Coronado Cays. While these algae are not harmful to humans, *Caulerpa* is highly invasive with the ability to rapidly expand reproducing even asexually, through vegetative fragmentation from contact with vessels, fishing, and tidal exchanges. Since *Caulerpa* can aggressively expand, it has the potential to displace native habitats including the 1,900 acres of eelgrass habitat in South San Diego Bay. Any impacts to eelgrass could displace numerous other species in San Diego Bay including the 70 different fish species and the 60-80 threatened green sea turtles which utilize eelgrass as foraging and resting habitat. Continuing a timely and assertive response is imperative to control the expansion of *Caulerpa prolifera*.

Since the discovery, staff has been working diligently with the Southern California Caulerpa Action Team (SCCAT) consisting of state and federal resource agencies to implement an immediate response to prevent the spread and further infestation of this algae.

In March 2024, divers completed the placement of benthic barriers over the known infestation areas in Antiqua Village, Coronado Cays. In April 2024, a 15 square meter patch of additional *Caulerpa* was discovered about 1,000 feet from the Cays shoreline, spread over 0.25 acres. On April 1, 2025, additional small patches of *Caulerpa* were found adjacent to the existing *Caulerpa* patches. These patches have all been covered with salt, netting and benthic barriers to prevent the spread and to assist with eradication efforts.

Diver surveys continue in south San Diego Bay to ensure the containment of this algae. Federal, state, and District funding has been used to complete this work to date and additional future resources are being sought and will be needed to continue this work throughout an extensive part of South San Diego Bay.

Staff recommends continuing the declaration of a local emergency at the May 6, 2025, meeting, as the current 60-day period will end on May 10, 2025, prior to the June 10, 2025, Board meeting. This action will continue the local emergency for an additional 60 days to July 5, 2025.

# **RECOMMENDATION:**

Adopt a Resolution proclaiming the continuance of a local emergency due to the presence of an invasive algae Caulerpa prolifera in the Coronado Cays and south San Diego Bay.

### FISCAL IMPACT:

There is no fiscal impact caused by approval of this action.

### **COMPASS STRATEGIC GOALS:**

This agenda item supports the following Strategic Goal(s).

- A Port that the public understands and trusts.
- A Port with a healthy and sustainable bay and its environment.

### **DISCUSSION**:

On September 21, 2023, an in-water pre-construction eelgrass/Caulerpa dive survey was conducted as an Army Corps of Engineers (ACOE) and Regional Water Quality Control Board (RWQCB) permit condition for the Antigua Village Dock Replacement project in the Coronado Cays. During this survey, divers identified an approximately 24 square meter patch of Caulerpa prolifera growing underneath and adjacent to the boat docks. Additional diver surveys in October 2023 found 0.25 acres of Caulerpa prolifera along the northern side of Antiqua Village and in April 2024 diver surveys found a 15-meter patch of Caulerpa prolifera in south San Diego Bay. On April 1, 2025, additional small patches of Caulerpa were found adjacent to the existing Caulerpa patches. These patches have all been covered with salt, netting and benthic barriers to prevent the spread and to assist with eradication efforts.

Caulerpa prolifera is invasive algae that has not previously been identified in San Diego Bay, despite routine monitoring since the early 2000s. Caulerpa typically occurs in subtropical and tropical soft-bottom locales and when introduced, can aggressively displace native habitats including critical eelgrass habitat. The presence of Caulerpa has caused significant and expensive damage to coastal waters in California and the Mediterranean Sea, warranting immediate action to eradicate any observed presence of the algae. Caulerpa infested part of Huntington Beach and Carlsbad in the early 2000s, which is now eradicated, and has been battled in Newport Bay since 2021.

South San Diego Bay is home to 1,900 acres of eelgrass an extremely important habitat which could be overgrown and displaced by *Caulerpa prolifera* without aggressive action. Any spread of *Caulerpa* into the south bay eelgrass beds, if left untreated, has the potential to impact the bay's 70 fish species and 60-80 threatened green sea turtles which reside in or forage on eelgrass. *Caulerpa* impacts to eelgrass could cause the loss of the main food source for the bays turtles and fish by eliminating fish protection from predators along with their food source. Eelgrass is also vital due to its ability to absorb carbon which helps offset greenhouse gas emissions and eelgrass also improves water quality by filtering sediment reducing the spread of turbidity and possible contaminants.

Due to its highly invasive and destructive nature, it is illegal to possess, sell, or transport any seaweed in the genus *Caulerpa* within the state of California. The most likely source of *Caulerpa* in the Coronado Cays was the release from an aquarium.

Upon the discovery of *Caulerpa prolifera*, notification was provided to the Southern California Caulerpa Action Team (SCCAT), a multi-agency group that includes representatives from the California Department of Fish and Wildlife, U.S. Fish and Wildlife (FWS), National Marine Fisheries Service, RWQCB, ACOE, California Coastal

Commission, and State Lands Commission, among others. The SCCAT meets bi-weekly to determine the extent and magnitude of the observed *Caulerpa prolifera* in south Bay and the Coronado Cays, to select survey areas, and to develop and implement the eradication plan to eliminate the infestation, including the need for permits and funding to complete eradication efforts.

### **Eradication Efforts**

On October 9, 2023, the infestation of *Caulerpa prolifera* found in the Coronado Cays within District jurisdiction was treated by the placement of a benthic barrier to prevent the spread of the algae. The District funded the eradication and survey work at an estimated cost of \$92,000 using funding from the Environmental Conservation non-personnel budget. Benthic barriers consist of thick plastic, typically used to line man-made ponds, were placed and secured with rebar and sandbags to create a sealed barrier to kill the algae by excluding any light, oxygen, and water circulation. The barriers are still in place.

In March 2024, benthic barriers were placed over the 0.25 acres of algae along the northern portion of Antiqua Village and in April 2024 benthic barriers were place over the 15-meter patch spread over 0.25 acres in south San Diego Bay. An additional small patch of *Caulerpa*, now covered with barriers, was found adjacent to the 15-meter patch in south San Diego Bay. In April 2025, an additional 1-meter patch was found in the refuge with smaller pieces found in the Cays. These areas have both been treated with salt, netting and benthic barriers to prevent any additional spread.

District staff was informed by representatives from the State Water Resources Control Board (SWRCB) and other granting agencies that the proclamation of a local emergency is required to fund eradication effort and to receive funding from the SWRCB Cleanup and Abatement Account. SWRCB provided \$500,000 in funding from the Cleanup and Abatement Account for the eradication of *Caulerpa prolifera* and for conducting surveys. This funding is exhausted.

Additional federal funding was secured to place benthic barriers at north Antigua Village over the known 0.25 acres of *Caulerpa prolifera*. This funding was also used to determine the extent of the *Caulerpa prolifera* infestation including surveying the south bay, on the east side of the Coronado Cays. The total costs for reasonably foreseeable eradication and surveys is estimated at \$3 million dollars. To assist in offsetting these costs, the FWS with assistance from the District, was awarded \$550,000 in grant funding from the Rapid Response Fund for Aquatic Invasive Species, \$19,546 from Station Funds and \$267,661 from Region 8 Strike team funds. This funding is also exhausted. Additionally, the District budgeted \$400,000 for surveys this fiscal year, which will be exhausted before July 2025. Additional funding has also been requested from the Regional Invasive Species Grant (\$250,000), Refuges Region 8 funds (\$49,814), Aquatic Invasive Species Rapid Response Fund (\$200,000), and California Department of Food and Agriculture (\$100,000). These funding sources also requested a declaration of a local emergency.

While all known patches of *Caulerpa prolifera* are covered with benthic barriers, divers continue to conduct *Caulerpa* surveys in south bay (Appendix A).

## **Emergency Proclamation**

BPC Policy No. 777, dated June 23, 2020, (Clerks Document #71570), details the District's Emergency Management policy, which requires the Board review the need for the continuation of the local emergency at least every 60 days until the local emergency is terminated.

BPC Policy No. 777, details the District's Emergency Management policy and defines an "Emergency" as the actual or threatened existence of conditions of disaster or peril to the health and safety of persons and/or property within the District including, but not limited to, those caused by such conditions or hazards as fire, flood, storm, tsunami, earthquake, epidemic, pandemic, hurricane, tornado, civil disturbance, significant technology or infrastructure disruption, act of terrorism, hazardous material spill, effect(s) of climate change or other conditions, including conditions resulting from war or imminent threat of war, or labor controversy.

BPC Policy No. 777, also defines a "Local Emergency" as the duly proclaimed existence of such conditions that are, or likely to be, beyond the control of services, personnel, equipment, and facilities of the District, and which may require the supplemental efforts and available resources of other local government entities, the state and/or federal government, and/or disaster relief organizations to help alleviate the damage, loss, hardship or suffering caused thereby.

# Continuance of Local Emergency

On November 14, 2023, by Resolution No. 2023-101, the BPC adopted a proclamation of a local emergency due to the discovery of the invasive algae *Caulerpa prolifera* in the Coronado Cays, South San Diego Bay.

Since the initial proclamation of a local emergency, there have been multiple continuances of the local emergency by the Board due to the existence of the invasive algae Caulerpa prolifera in the Coronado Cays and South San Diego Bay. On December 5, 2023, by Resolution No. 2023-112, the Board continued the proclamation of a local emergency to February 5, 2024; on January 18, 2024, by Resolution No. 2024-002, the Board continued the proclamation to March 18, 2024; on March 12, 2024, by Resolution No. 2024-017, the Board continued the proclamation to May 12, 2024; on April 3, 2024, by Resolution No 2024-037, the Board continued the proclamation to June 2, 2024; on May 14, 2024, by Resolution No 2024-050, the Board continued the proclamation to June 13, 2024; on July 9, 2024, by Resolution No 2024-067, the Board continued the proclamation to September 7, 2024; on August 13, 2024, by Resolution No. 2024-074. the Board continued the proclamation to October 12, 2024; on September 20, 2024, by Resolution No 2024-087; on November 13, 2024 by Resolution No. 2024-112, the Board continued the proclamation to January 12, 2025; on December 10, 2024 by Resolution No. 2024-124, the Board continued the proclamation to February 2, 2025; and on March 11, 2025 by Resolution No. 2025-025, the Board continued the proclamation to May 10, 2025. The proclamation will expire unless continued by this action.

### Conclusion

Due to the threat presented by *Caulerpa prolifera* and to receive funding from federal and state grants to support the eradication of *Caulerpa prolifera* in the Coronado Cays and South San Diego Bay, District staff recommends that the Board continue the proclamation of a local emergency in conformance with BPC Policy No. 777, for another 60 days until July 5, 2025.

### **General Counsel's Comments:**

The General Counsel's Office reviewed this agenda as presented to it as to form and legality.

### **Environmental Review:**

The proposed Board proclamation for the continuance of a local emergency is Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15307 and 150308: Actions by Regulatory Agencies for Protection of Natural Resources (Class 7) and Actions by Regulatory Agencies for Protection of the Environment (Class 8), respectively, as found in Section E.3. of the District's Guidelines for Compliance with CEQA because the project would consist of, 1) proclaiming a local emergency; and 2) the subsequent actions necessary to eradicate the invasive Caulerpa prolifera infestation. These are appropriate because Caulerpa prolifera can over-run natural habitats, disrupt the ecosystem, and displace native plants and the animals that rely on them. Further, this species grows very quickly, one centimeter per day and has the potential to swiftly overtake native species in the project area. Invasions have happened in several locations in southern California, as well as across the globe. The project applicants must rapidly remove this invasive species and it is critical that the response begin immediately to prevent additional spread, and to minimize the cost of the response effort while the infestation site is still geographically limited. The District has determined none of the six exceptions to the use of a categorical exemption apply to this project (CEQA Guidelines Section 15300.2). A CEQA Notice of Exemption was filed on October 2, 2023, for this emergency action.

The proposed Board proclamation for the continuance of a local emergency complies with Section 87(a)(7) of the Port Act which, allows for the establishment and maintenance of Tidelands for open space, ecological preservation, and habitat restoration. The Port Act was enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed Board proclamation of local emergency is consistent with the Public Trust Doctrine.

The proposed Board proclamation for the continuance of a local emergency is considered excluded development pursuant to Section 8.a, Existing Facilities of the District's Coastal Development Permit Regulations because this infestation of *Caulerpa prolifera* requires emergency action by the District and its partners, to rapidly remove this invasive species. On September 28, 2023, the District submitted a Categorical Determination in accordance with Section 30717 of the California Coastal Act, which listed this Exclusion, to the California Coastal Commission (CCC) staff. That Categorical Determination indicated the emergency condition due to *Caulerpa prolifera* and the need to take immediate remedial

actions. The approval became effective after the 10-working day appeal period after September 28, 2023, as no appeal was filed with the CCC, within that time frame.

# **Diversity, Equity, and Inclusion Program:**

This agenda sheet has no direct DEI impact on District workforce or contract reporting at this time.

# **PREPARED BY**:

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Attachment A: Coronado Cays Progress Map

Attachment B: Caulerpa diver surveys in south San Diego Bay