



## Legislation Text

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**DATE:** July 17, 2018

**SUBJECT:**

**RESOLUTION AUTHORIZING AN AGREEMENT UNDER THE BLUE ECONOMY INCUBATOR THIRD ROUND OF INCUBATOR PROPOSALS WITH SUNKEN SEAWEED LLC FOR A 1-YEAR PILOT PROJECT TO DEMONSTRATE FEASIBILITY OF SEAWEED AQUACULTURE IN SAN DIEGO BAY FOR A TOTAL AMOUNT NOT TO EXCEED \$137,000**

**EXECUTIVE SUMMARY:**

Since 2015, the District has been exploring new Blue Economy business opportunities, consistent with its public trust purposes, as a way to diversify its portfolio and strengthen its collective economic impact. In 2015, the District established the Aquaculture and Blue Technology Program to conduct studies, planning, and pre-development work to support and inform aquaculture and blue tech opportunities in and around San Diego Bay. Under this Program, in 2016, the District established a Blue Economy incubator to assist in the creation, early development, and initial scaling of new Blue Economy business ventures in and around San Diego Bay. As the state-legislated trustee of tidelands around San Diego Bay, fostering sustainable domestic aquaculture and driving Port-related blue tech innovation helps fulfill the Port's public trust responsibility to promote fisheries and commerce, as well as aligning with our mission to enhance and protect the environment.

The Blue Economy incubator was launched on May 9, 2016, inviting early stage and market-ready ventures that align with the incubator objectives to submit business and pilot project proposals as the first stage of a four step competitive review process. On June 20, 2017, by Resolution No. 2017-085, the Board authorized four agreements to initiate pilot projects as part of the incubator first round of proposals. The first round included pilot projects for shellfish aquaculture nursery operations, copper remediation applications, a Drive-in Boatwash technology, and a smart marina software application. As part of the incubator second round of proposals, on January 9, 2018, by Resolution No. 2017-0628, the Board authorized one agreement to initiate a pilot project to demonstrate a custom-made vessel and skimming technology to remove marine debris.

Under the Blue Economy incubator third round of proposals, staff is now recommending the Board authorize a pilot project with Sunken Seaweed to demonstrate feasibility of seaweed aquaculture in San Diego Bay for \$137,000 for one year (Attachment A). The Board's Blue Economy Planning Ad Hoc Committee recommended that this project move forward for full-Board consideration.

**RECOMMENDATION:**

Adopt a Resolution Authorizing an Agreement with Sunken Seaweed LLC for a 1-year pilot project to demonstrate feasibility of seaweed aquaculture in San Diego Bay for a total amount not to exceed

\$137,000.

### **FISCAL IMPACT:**

Funding for the Blue Economy portfolio is included in the approved FY 18/19 Aquaculture and Blue Technology non-personnel budget.

### **COMPASS STRATEGIC GOALS:**

Advancing the Blue Economy incubator directly aligns with the District's core mission and with the Public Trust Doctrine and Port Act for the promotion of commerce, navigation, fisheries, and recreation. This agenda item supports the following Strategic Goal(s).

- A Port with a healthy and sustainable bay and its environment.
- A Port with a comprehensive vision for Port land and water uses integrated to regional plans.
- A Port that is a safe place to visit, work and play.
- A financially sustainable Port that drives job creation and regional economic vitality.

### **DISCUSSION:**

#### **Blue Economy Incubator**

The District is a long-time champion and catalyst of the region's Blue Economy with its shipbuilding, commercial fishing, marine research, cruise, and cargo business lines. Since 2015, the District is actively exploring new Blue Economy business opportunities, consistent with its public trust purposes, as a way to diversify its portfolio and strengthen its collective economic impact. In 2015, the District established the Aquaculture and Blue Technology Program to assist in the creation, early development, and initial scaling of new Blue Economy business ventures in and around San Diego Bay. To advance development of both aquaculture and blue tech initiatives, staff has initiated marine spatial planning efforts in and around San Diego Bay; reviewed prospects and logistics for early pilot projects; and initiated a baywide aquaculture and blue tech infrastructure feasibility study to assess infrastructure capable of supporting aquaculture and blue tech business incubator projects.

Under the Aquaculture and Blue Tech program, staff is also building and managing a Blue Economy Incubator to support entrepreneurship and develop 'innovation partnership' to build a Blue Economy portfolio of new businesses who can deliver multiple social, environmental, and economic benefits to the Region. The District's Blue Economy incubator represents a launching pad for innovative projects by providing aquaculture and blue tech entrepreneurs with key assets and services focused on pilot project facilitation such as permit-ready infrastructure, entitlements, market access, and strategic funding. As the state-legislated trustee of tidelands around San Diego Bay, fostering sustainable domestic aquaculture and driving blue tech innovation helps fulfill the Port's public trust responsibility to promote fisheries and commerce, as well as aligning with our mission to enhance and protect the environment.

Since the launch of the Blue Economy incubator, staff has received and reviewed over 80 proposals and multiple inquiries. Proposals are reviewed following a four step cross-departmental due diligence process culminating in a staff recommendation to the Board. To be selected for review the proposals

need to provide the required business plan information for staff to analyze the market feasibility, operational/financial viability of the proposal, and alignment with the incubator objectives. The selection process balances each proposal's potential social and environmental benefit; alignment with the District's core mission and Public Trust obligation; as well as the project feasibility and potential financial return on investment. All companies that apply to the Incubator are extensively vetted through the formal four-step competitive review process and any of the selected proposals are required to undergo California Environmental Quality Act review, and coastal review where applicable, and obtain all necessary permits.

### **Round #3 / Recommended Pilot Project Proposal**

- **Sunken Seaweed LLC**

Sunken Seaweed is an aquaculture start-up company led by two marine ecologists committed to pioneering sustainable, seaweed aquaculture in San Diego Bay. Sunken Seaweed is pursuing to establish a seaweed pilot farm in San Diego Bay to cultivate, outplant, grow, and harvest several species of native marine macroalgae as a culinary product, and eventually take to market via direct sale to chefs, distribution companies, and Consumer Packaged Goods (CPG) companies.

The Sunken Seaweed pilot project is to demonstrate the feasibility of using existing pier pilings, ropes, buoys, and anchors for seaweed aquaculture in San Diego Bay. The pilot project consists of establishing a seaweed pilot farm (4,140sq ft (92ft by 45ft)) at the northwestern end of Grape St. Pier No. 1. The proposed pilot farm structure will consist of a three-dimensional rectangular grid system (25ft depth) in which various seaweed species will grow from anchored lines at two different depths (5ft and 20ft below sea level). During the proposed pilot project, Sunken Seaweed will cultivate, outplant, grow, conduct biological surveys and measurements, and harvest several species of native marine macroalgae. Additionally, Sunken Seaweed will collaborate with kelp ecologists from San Diego State University to optimize kelp farm structure, growout methods, and harvesting techniques.

The pilot farm will contribute valuable baseline information to inform future potential of seaweed aquaculture in California. The global commercial seaweed market was valued at USD \$10 billion in 2015 and expected to reach \$22 billion by 2024. Expanding and developing domestic uses of seaweed include human and animal food production, biofuels, as well as potential for bioremediation, carbon sequestration, and mitigation banking.

The duration of the proposed pilot project is one year. If successful, Sunken Seaweed may propose new projects for District consideration.

The Incubator Committee offered the following comments in support of the proposal including:

- Provided strategic mission alignment and multiple co-benefits opportunities;
- Proposal offering new, scalable line of business that is complementary to District's fisheries mission; and
- Proposer's principals are well-qualified and experienced.

On June 4, 2018, the Board's Blue Economy Planning Ad Hoc Committee recommended that Sunken Seaweed's proposal go to the full Board for consideration. Staff recommends the Board authorize an

agreement with Sunken Seaweed for a one-year pilot project to demonstrate feasibility of seaweed aquaculture in San Diego Bay (Attachment A). The agreement includes the District investment in the amount of \$137,000, with the District providing certain permit rights, and use of District-owned property and/or equipment in exchange for royalties on future revenue in connection with Sunken Seaweed operations and related equipment and services and other consideration.

## **Conclusion**

Staff recommends the Board authorize an agreement with sunken Seaweed LLC, for a one-year pilot project to demonstrate feasibility of seaweed aquaculture in San Diego Bay for a total amount not to exceed \$137,000.

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

The Office of the General Counsel has reviewed and approved the proposed agreement as to form and legality.

## **Environmental Review:**

This Board item is Categorically Exempt pursuant to California Environmental Quality Act (CEQA) Guidelines Sections 15301 (Existing Facilities), 15303 (New Construction or Conversion of Small Structures), and/or 15306 (Information Collection) and Sections 3.a (1), 3.c (1)(2), and/or 3.f of the District's Guidelines for Compliance with CEQA because the pilot project involves installation and operation of a new, small structure (a pilot project seaweed farm) attached to an existing pier, that would involve negligible expansion of use beyond the existing uses at Grape Street Pier No. 1 and would not result in a serious or major disturbance to environmental resources. Further, there would be no dredging or fill impacts and the project would not cause any disturbance to sensitive species or habitat. 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) because the project is not located in an area that would impact an environmental resource of hazardous or critical concern, would not have cumulative impact of successive projects of the same type in the same place, would not have a significant effect on the environment due to unusual circumstances, is not within a highway officially designated as a state scenic highway, is not located on a site which is included on any list compiled pursuant to Section 65962.5 of the Government Code, and would not cause a substantial adverse change in the significance of a historical resource.

This Board item complies with Section 87 of the Port Act, which allows for the establishment, improvement, and conduct of a harbor, and for the construction, reconstruction, repair, maintenance, and operations of wharves, docks, piers, slips, quays, and all other works, buildings, facilities, utilities, structures, and appliances incidental, necessary, or convenient, for the promotion and accommodation of commerce and navigation. The Port Act was established by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed project is consistent with the Public Trust Doctrine.

Finally, this Board item is considered an "excluded development" pursuant to Sections 8.a (10) (Existing Facilities), 8.c (1)(3) (New Construction or Conversion of Small Structures), and/or 8.e (Information Collection); therefore, issuance of a Coastal Development Permit is not required.

**Equal Opportunity Program:**

Not applicable.

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Attachment A: Sunken Seaweed LLC - Agreement