

San Diego Unified Port District

CEQA and COASTAL DETERMINATIONS

Project: Floating Upweller System Technology for Oyster Nursery Aquaculture Pilot Program in San Diego Bay
Location(s): Tuna Harbor, San Diego, CA
Parcel No.(s): 018-000
Project No.: 2017-084
Applicant: Paula Sylvia, Planning and Green Port, San Diego Unified Port District, 3165 Pacific Highway, San Diego, California 92101
Date: June 13, 2017

Project Description

The proposed pilot project involves the installation of up to two Floating Upweller Nursery Systems (FLUPSYs) and associated dock repairs in Tuna Harbor in San Diego Bay (See Attachment A, Conceptual FLUPSY Design). The proposed pilot project is intended to analyze the feasibility of developing a year-round shellfish operation in San Diego Bay. As further described below, the FLUPSY technology would be used to grow Pacific oysters or other species of shellfish and algae and would consist of floating barges that are attached via brackets with rollers that surround existing pilings located in Tuna Harbor (See Attachment B, FLUPSY Location). The proposed project would operate one FLUPSY for several production cycles with the option for a second FLUPSY to be placed adjacent to the first FLUPSY. The footprint for one FLUPSY would be 26 feet wide by 80 feet long by three feet deep, for a total surface area of 2,080 square feet. An additional FLUPSY would increase the overall footprint to 40 feet wide by 80 feet long by three feet deep, for a total surface area of 3,200 square feet. A standard FLUPSY has 32 seed bins with a volume capacity of 533 liters each, giving a total capacity of 17,056 liters in rearing area volume. On each FLUPSY barge, a paddle wheel would move water through compartments, or bins, holding juvenile oysters. Bay water would be circulated over the shellfish enabling the seed to grow quickly and uniformly to provide a constant supply of food and oxygen. The pilot project would be installed for up to five years. A "Blue Economy Agreement" by and between the District and the San Diego Bay Aquaculture, LLC is also proposed. A Tidelands Use and Occupancy Permit, Right of Entry Licensing Agreement, or other similar agreements may also be required.

The proposed project would import diploid and triploid Pacific oyster (*Crassostrea gigas*) seed, rear them until they reach approximately ¾-inch, and then export them to a final grow out location in California, and other Pacific Northwest locations. The proposed project may provide research opportunities for other species of shellfish and algae, including Olympia oyster (*Ostrea lurida*), Green abalone (*Haliotis fulgens*), Pink abalone (*Haliotis corrugata*), Purple hinge rock scallop (*Crassadoma gigantea*), Keyhole limpet (*Megathura crenulata*), Dulse (*Palmaria palmata*), Red Ogo (*Gracilaria pacifica*), Red algae (*Gracilariopsis spp.*), Green algae (*Ulva spp.*), Giant kelp (*Macrocystis pyrifera*).

The proposed project involves minor repair of the docks, and potential utility improvements that would support the FLUPSY operations. Additionally, a fence would be installed around the FLUPSY and part of the dock to ensure no public or marine mammals disturb the operation of the FLUPSY. It is anticipated that construction of the dock repairs would commence in late summer 2017 and take approximately up to three months to complete. At the peak of construction activities, the proposed project would require approximately four to six employees, and would generate approximately 12 one-way truck trips per day. The workers would park at five designated District parking spaces at the G Street Mole. Upon completion of the dock repairs, the FLUPSYs would be delivered by approximately two trucks and take approximately 7-10 days to construct. The FLUPSY is modular, comprised of four

basic components, which are bolted together. The FLUPSY would be attached to the pilings via brackets with rollers that surround the existing pilings so the FLUPSY can move up and down with the tides or water movements, similar to how docks are installed along pilings.

Furthermore, no eelgrass resources are known to occur within the project area. Therefore, the proposed project would not result in any significant impacts to biological resources. Additionally, staff is applying for an Army Corps of Engineers (ACOE) Nationwide #48 "Commercial Shellfish Aquaculture Activities" permit as part of the entitlement process, which would be obtained prior to operation of the FLUPSY. Furthermore, the applicant would be responsible for complying with all applicable federal, state, and local laws regulating construction demolition debris, noise, and stormwater.

As part of the proposed project, the following Best Management Practices (BMPs) or project features would be implemented and are part of the Blue Economy Agreement.

Seed Stocking:

- The bottom of the upwelling bins of the FLUPSY are a 1.2 – 1.8 mm mesh screen, which allows water to come up through the upwelling bin and exit the bin at the top. Shellfish seed would be placed in the FLUPSY bins at 2.5 – 3.5 mm in size and removed before they reach 20mm in size. After removal from the FLUPSY the seed would be washed at a nearby onshore facility and shipped to various offsite locations for further grow-out.

Cleaning and Maintenance:

- The operator would carry out all daily maintenance activities on the FLUPSY rafts, including sorting and grading the shellfish and pressure washing the upwelling bins with seawater pumped from San Diego Bay to prevent establishing fouling organisms.
- All other maintenance and cleaning operations of the FLUPSY hull and bottom not including the seed bins would be done according to Best Management Practices that are recognized by the hull-cleaning industry and as being effective and environmentally sound. At minimum, hull and bottom areas would be scrubbed by divers before any buildup of biofouling organisms or materials occur. In the event that biofouling organisms or materials are sufficiently built up, scraping or scrubbing of the bottom can still occur but biofouling materials would be contained using tarps, or screens. No discharge of biofouling materials into San Diego Bay would occur during maintenance cleaning operations.

Non-native species management:

- The operator shall: 1) use screens during washdown of all seed and equipment to contain all seed regardless of size and prevent seed from falling into the bay; 2) remove all seed from the FLUPSY system prior to reaching 20 mm shell size, at which size they are not sexually mature; and 3) not discard culled shellfish into San Diego Bay.
- The pilot project would limit cultivation of seed to immature sizes, and all shellfish seed is to be collected and removed from the FLUPSY bins before individual shellfish reach maturity and are capable of reproducing or generating larvae.

Marine Wildlife:

- The FLUPSY would have handrails and exclusionary fencing installed along the perimeter of the barge to prevent marine mammal haul out on the barge itself.

Tuna Harbor is a commercial fishing marina and accordingly is a priority water-dependent use under the California Coastal Act. As shown in Table 1 below, currently the marina is operating with an approximate 57% occupancy rate and the FLUPSYs would be attached via brackets with rollers that

surround existing pilings that are currently not occupied or needed by commercial anglers. Hence, the FLUPSY will not occupy any physical slips in the marina. However, if the area is needed by commercial anglers, the Blue Economy Agreement requires the FLUPSYs be removed and the area repaired, if needed, within 30 days. The FLUPSY would not be bolted to the existing dock infrastructure or pilings to allow for this removal.

Table 1 Tuna Harbor Marina Historic and Current Occupancy Rates

Year	1988	1998	2008	2010	2011	2012	2013	2014	2015	2016	2017
Number of Slips	150	129	129	114	114	114	114	114	112	114	114
Average No. of Vessels	100	76	46	56	60	65	69	61	62	73	63
Average Occupancy (%)	66.7	58.9	35.7	60.2	53.7	55.6	48.9	52.3	56.7	64	57
<i>Source: October 2009 Commercial Fishing Revitalization Plan; San Diego Unified Port District Maritime Operations Department, 2017.</i>											

The following categorical determinations are based on the project submittal and all project information known to the District as of the date of this determination.

CEQA DETERMINATION

Based upon the above description, the project is determined to be 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)(7), 3.c (1)(2)(3), and/or 3.f of the District's *Guidelines for Compliance with CEQA* because the project involves installation of up to two FLUPSYs and associated dock repairs that would involve no expansion of use beyond that previously existing and would not result in a serious or major disturbance to an environmental resource. Sections 3.a (1)(7), 3.c (1)(2)(3), and 3.f of the District's CEQA Guidelines is as follows:

- 3.a. Existing Facilities (SG § 15301) (Class 1): Includes operation, repair, maintenance, or minor alteration of existing public and private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing, including but not limited to:
- (1) Repair, maintenance or minor alteration of existing mooring facilities, floats, piers, piles, wharves, bulkhead, revetment, buoys, or similar structures; marine terminal facilities; airport facilities; and commercial industrial, or recreational facilities.
 - (7) Existing facilities used to provide electric power, natural gas, sewerage, or other public utility service.

AND/OR

- 3.c. New Construction or Conversion of Small Structures (SG § 15303) (Class 3): Includes construction of limited number of new, small facilities or structures; installation of small new equipment and facilities in small structure; and conversion of existing small structures from one use to another with minor modifications to the exterior of the structure. Examples of this exemption include:
- (1) Commercial, industrial, recreational and marine oriented . . . facilities or structures if designed for an occupant load of 30 persons or less

- (2) Accessory (appurtenant) structures and mechanical equipment including, but not limited to . . . fences.
- (3) Water, sewer, electrical, gas, telephone, and other utility structures or facilities.

AND/OR

- 3.f Information Collection (SG § 15306) (Class 6): Includes basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. These may be for information gathering purposes, or as part of a study leading to an action which has not yet been approved, adopted or funded.

The Categorical Exemptions listed above are appropriate for the proposed project because the project involves installation of up to two FLUPSYs that would be attached via brackets with rollers that surround existing pilings in an underutilized marina, associated dock repairs, potential utility improvements, and fencing that would involve a negligible expansion or change of physical use of the site and would not involve an occupancy load of 30 or more. The pilot program would also collect data and information on the viability of aquaculture in the San Diego Bay. It also would not result in any significant cumulative impacts due to the minor impacts of the operation, small number of employees and negligible change in the physical use, and would not result in a serious or major disturbance to an environmental resource.

The proposed project 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 enacted by the California Legislature and is consistent with the Public Trust Doctrine. Consequently, the proposed project is consistent with the Public Trust Doctrine.

CALIFORNIA COASTAL ACT

PORT MASTER PLAN

The proposed project is located in Planning District 3, Centre City Embarcadero, which is delineated on Precise Plan Map Figure 11 of the certified Port Master Plan. The Port Master Plan water use designation within the limits of the proposed project is Commercial Fishing Berthing. The proposed project conforms to the certified Port Master Plan because it is a secondary and/or accessory use and a temporary pilot project in a location that is not needed for commercial fishing at this time and is not anticipated to be needed for commercial fishing during the term of the Blue Technology Agreement. In particular, currently the marina is operating with an approximate 57% occupancy. However, if the area is needed by commercial anglers, the Blue Economy Agreement requires the FLUPSYs be removed and the area repaired, if needed, within 30 days. The FLUPSYs would not be bolted to the existing dock infrastructure or pilings to allow for this removal. The project would not change the water use designation of the site nor would it interrupt commercial fishing operations.

CATEGORICAL DETERMINATION

The above project involves installation of up to two FLUPSYs that would be attached via brackets with rollers that surround existing pilings in an underutilized marina and associated dock repairs, potential utility improvements, and fencing that would involve no expansion of use beyond that previously

existing, and would not result in a serious or major significant disturbance to an environmental resource. Further, the Project would not interfere with the needs of the commercial fishing industry. In the event the commercial fishing uses do not have adequate space within the Tuna Harbor Marina, the pilot FLUPSY project would be relocated and undergo an additional environmental review process on the alternate location. This project is consistent with the existing certified water use designation and is Categorically Excluded under Sections 8.a (2)(10), 8.c (1)(2)(3), and/or 8.e of the District's *Coastal Development Permit Regulations*, as follows:

8.a. Existing Facilities: The operation, repair, maintenance, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that previously existing, included but not limited to:

- (2) Public and private utilities used to provide electric power, natural gas, sewer, or other utility services.
- (10) Repair, maintenance, or minor alteration of existing mooring facilities, floats, piers, bulkhead, revetment, buoys, or similar structures;

AND/OR

8.c New Construction or Conversion of Small Structures: Construction and location of limited number of new, small facilities or structures and installation of small, new equipment and facilities, involving negligible or no change of existing use of the property, including but not limited to:

- (1) Commercial, industrial and recreational structures designated for an occupant load of thirty (30) persons or less . . .
- (2) Water main, sewer, electrical, gas or other utility extensions of reasonable length to serve such construction.
- (3) Accessory structures, including, but not limited to, . . . fences, floats, or similar structures . .

AND/OR

8.e. Information Collection: Basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major significant disturbance to an environmental resource.

RANDA CONIGLIO
President/CEO

Determination by:
Ashley Wright
Associate Planner
Long Range Planning – Planning and Green Port

Deputy General Counsel

Signature: 
Date: 6/13/17
Signature: 
Date: 6/13/17



