

## CALIFORNIA COASTAL COMMISSION

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 Commission Action:

## STAFF REPORT REGULAR CALENDAR

### Coastal Development

Permit No.:

**E-02-023**

Applicant:

**Avila Beach Community Services District**

Project Location:

Offshore of the Avila Beach Pier, San Luis Obispo County

Project Description:

Repair an existing marine outfall pipeline by (a) removing a 15-foot section of the existing terminus of the pipeline and a non-functioning diffuser, (b) extending the pipeline by 480 feet, and (c) installing a new diffuser unit.

Substantive File Documents:

See Appendix A

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### SYNOPSIS

The Avila Beach Community Services District ("District") proposes to repair and extend its existing 12-inch steel marine outfall pipeline located offshore of Avila Beach within San Luis Obispo Bay (See Exhibit 1, "Project Location"). The outfall runs parallel to the Avila Beach Pier, and its terminus is approximately 2,200 feet offshore (about 650 feet beyond the end of the pier). An underwater October 2001 video inspection shows a corroded hole in the pipeline about five feet from its terminus and that the diffuser is disconnected. The District believes that continued use of the existing outfall poses a potential threat to public health because it cannot

produce output flow necessary to transmit wastewater away from the shoreline. Instead, prevailing currents push the wastewater toward Avila Pier and the beach.

The proposed project consists of: (1) removing a 15-foot corroded section of the pipeline's terminus and a non-functioning diffuser, (2) extending the pipeline by 480 feet, and (3) installing a new diffuser unit. The project will take about 10 days to complete.

Potential project impacts, mitigation measures proposed by the applicant, and recommended conditions of this coastal development permit include:

- Gray whales could go near or into the project area during northbound or southbound migrations, and the traffic caused by marine vessels could potentially divert whales on a shallow, inshore track or further offshore. Vessel traffic could also potentially collide with and injure marine mammals or cause them to temporarily avoid using the area for foraging. In addition, anchoring of the barge will involve dropping anchors with long lengths of cable, with the potential to injure marine mammals during installation. The applicant has prepared a Marine Wildlife Contingency Plan that proposes a marine mammal monitor to be present during all marine vessel operations. **Special Condition 2** would require the monitor to be approved by the Executive Director and to report immediately to the Executive Director any project-related impacts to or collisions with marine mammals.
- The invasive alga *Caulerpa taxifolia* has never been found at the project area, but due to the significant marine resource impacts that would result if *Caulerpa* were spread by the project activities, **Special Condition 3** would require the applicant to survey the area for *Caulerpa* prior to project commencement. If *Caulerpa* is found, the project cannot proceed unless and until the applicant submits evidence to the Executive Director that all *Caulerpa* discovered within the project area has been eradicated or the project has been revised to avoid any contact with *Caulerpa*.
- Public access to Avila Pier will be restricted for 15-minute intervals when the support vessel docks at the pier to pick up personnel and supplies. The District will post signs and caution flagging along the Avila Pier stairs with directions to piers users (e.g., timing of use restrictions and directions to open pier areas). At least two weeks prior to commencement of project operations, the applicant also will issue a Notice to Mariners describing the project, its timing and location. A 50-foot by 900-foot area (or 45,000 square feet) offshore will be restricted to ocean users for about five days.

The Commission staff believes that the proposed project, as conditioned, will be carried out in a manner consistent with the Chapter 3 policies of the Coastal Act.

The Commission staff therefore recommends approval of coastal development permit application E-02-023, as conditioned.

## 1.0 STAFF RECOMMENDATION

### 1.1 Approval with Conditions

The staff recommends conditional approval of Coastal Development Permit Application No. E-02-023.

#### Motion:

I move that the Commission approve Coastal Development Permit Application No. E-02-023 subject to the conditions specified below.

The staff recommends a YES vote. To pass the motion, a majority of the Commissioners present is required. Approval of the motion will result in the adoption of the following resolution and findings.

#### Resolution

The Coastal Commission hereby **grants** permit No. E-02-023, subject to the conditions below, for the proposed development on the grounds that (1) as conditioned, the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976 and (2) there are no feasible alternatives or feasible mitigation measures, other than those specified in this permit, which would substantially lessen any significant adverse impact which the activity may have on the environment.

## 2.0 STANDARD CONDITIONS      Appendix A

## 3.0 SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Proof of Easement Approval.** Prior to permit issuance, the applicant shall submit to the Executive Director of the Coastal Commission (hereafter, "Executive Director") a copy of a signed new easement granted by the Port San Luis Harbor District and the Avila Beach Community Services District.
2. **Marine Mammal Monitoring.** A marine mammal monitor approved by the Executive Director shall be aboard the support vessel during all marine vessel operations, as described in the applicant's Marine Wildlife Contingency Plan (dated December 26, 2002). The marine mammal monitor shall immediately report to the Executive Director any impacts to or collisions with marine mammals.
3. ***Caulerpa Taxifolia* Pre-Construction Survey.** Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this permit, the applicant shall undertake a survey of the project area, and a buffer area at least 10 meters beyond the project area, to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate. The survey

protocol shall be prepared and conducted as specified in Section D, "Surveys within Caulerpa-Free System," in the Caulerpa Control Protocol dated November 22, 2002 (attached as Exhibit 3, "Caulerpa Control Protocol"). Within five (5) business days of completing the survey, the applicant shall submit the survey: (a) for the review and approval of the Executive Director; and (b) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Game (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (562/980-4043). If *Caulerpa taxifolia* is found within the project or buffer areas, the applicant shall not proceed with the project until (a) the applicant provides evidence to the Executive Director that all *Caulerpa taxifolia* discovered within the project and/or buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or (b) the applicant has revised the project to avoid any contact with *Caulerpa taxifolia*. No revisions to the project shall occur without a Coastal Commission-approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

4. **Notification to Update Navigational Data.** Within 30 days of project completion, the applicant shall provide written verification to the Executive Director that it has submitted project-related information to the National Oceanic and Atmospheric Administration ("NOAA") to be included on area nautical charts. Information submitted to NOAA shall include as-built drawings, blueprints, or other engineering documents that depict the completed development; geographic coordinates of the location, using a Differential Geographic Positioning System (DGPS) unit or comparable navigational equipment; and the applicant's point of contact and telephone number. The letter shall be submitted to Ms. Lyn Preston, Chief, Nautical Data Branch, NOAA, N/CS26 Station 7350, 1315 East West Highway, Silver Springs, MD 20910.
5. **Air Quality Approvals.** Prior to permit issuance, the applicant shall submit to the Executive Director evidence that the project contractor has obtained for portable construction equipment either (a) registrations from the State Air Resources Board, or (b) permits from the San Luis Obispo Air Pollution Control District.

#### 4.0 FINDINGS AND DECLARATIONS

##### 4.1 Project Description and Background

The Avila Beach Community Services District ("the District") proposes to repair and extend its existing 12-inch steel marine outfall pipeline located offshore of Avila Beach within San Luis Obispo Bay (See Exhibit 1, "Project Location"). The project consists of: (1) removing a 15-foot section of the existing terminus of the pipeline and the non-functioning diffuser, (2) extending the pipeline by 480 feet, and (3) installing a new diffuser unit.

The District currently treats wastewater collected from the Avila Beach community and the Port San Luis Harbor District, which is then discharged into the ocean under an existing National Pollution Discharge Elimination System ("NPDES") Permit No. CA0047830. Once wastewater is collected and treated, the existing outfall conveys wastewater effluent from the treatment plant

to the offshore terminus of the pipeline approximately 2,200 feet offshore. The pipeline runs parallel to the Avila Beach Pier and its terminus is approximately 650 feet beyond the end of the pier. At its current terminus, the outfall pipeline is approximately 30 feet below sea level.

The District has determined that the outfall's current use to be a potential threat to public health. An October 2001 underwater video inspection of the outfall shows that the existing diffuser at the pipeline terminus is disconnected, and that a corroded hole in the outfall exists approximately five feet from its terminus. The hole is approximately 200% larger than when the opening was first documented in a September 2000 inspection report. Due to the corroded hole and non-functioning diffuser, and the corresponding undiffused release of wastewater, the outfall can no longer produce the output flow necessary to transmit the wastewater away from the shoreline. Instead, prevailing currents push the wastewater toward Avila Beach Pier, an area held in trust for public uses such as fishing, swimming, and other recreation (*Unocal Avila Beach Cleanup Project: Environmental Impact Report/Statement, February 1998*). Therefore, the objective of the proposed project is to repair and extend the outfall pipeline in order to preserve nearshore water quality and public recreational uses in the Avila Beach Pier area.

Immediately prior to and during construction, wastewater effluent output will be discontinued and temporarily contained within the storage facilities at the Avila Beach Treatment Plant. Project operations will require use of a marine construction dive crew and two vessels, a 120-foot derrick barge and a 60-foot tender and support workboat. Prior to connecting the new 480-foot segment, divers will cut and remove the damaged 15-foot section of the outfall using an underwater cutting torch. Prior to cutting the line with a torch, divers will either use a zero-thrust, high-pressure water blaster or a hydraulic chipping hammer to clear the pipeline surface of the concrete casing. Divers will then weld a flange onto the end of the existing pipeline and ensure that the flange is attached to a non-corroded section of the pipeline. Once the flange is welded, a sacrificial anode will be installed to prevent any further corrosion. The damaged diffuser pipe assembly and any residual pieces will be removed from the ocean floor using the barge crane and disposed of at an appropriate onshore disposal facility.

Once the flange has been attached, twelve new 40-foot pipeline assembly sections will be loaded onto the project derrick barge. The 480-foot steel pipeline extension will be welded and assembled on the deck of the 120-foot derrick barge while anchored over the existing outfall pipeline. The workboat will pull the pipeline off the anchored barge and assist in floating the pipe segment until it is complete and lowered into position by the barge crane in 120-foot segments. The derrick barge will be anchored using differential GPS, a four-point mooring system, and "fly-over" vertical anchoring techniques with the assistance of the workboat. Anchors will be retrieved in the same manner upon completion of the project. The total area required for construction, winching, and anchoring is approximately 45,000 square feet (See Exhibit 2, "Project Diagram"). Flotation devices will be used to hold the pipeline segments on the water's surface while the positioning and lowering of the pipeline to the seafloor is coordinated. Divers will be positioned to safely coordinate the placement of the line while it is being lowered to the seafloor. Once the pipeline is positioned correctly, divers will install a gasket between the existing pipeline flange and the new pipeline flange, and both flanges will be secured onto the seafloor. Finally, divers will install a new diffuser manifold, which will be flanged and assembled at the new terminus of the new 480-foot segment and stabilized with a concrete support structure. The divers will then use hand jetting tools along the pipeline to

ensure proper burial of the new pipeline segment. Natural deposition of marine sediments and the shore currents are expected to ensure full pipeline burial. Anchoring, staging, jetting, cutting, welding, and pipe installation will take approximately five days to complete; mobilization and demobilization will take another five days.

## **4.2 Other Permits, Approvals, and Authorizations**

### **4.2.1 Port San Luis Harbor District**

The Port San Luis Harbor District, as landowner of the submerged tidelands where the proposed project is located, is scheduled to approve a new easement on February 25, 2003 through a contractual agreement with the Avila Beach Community Services District, which itself is scheduled to approve the easement on February 11, 2003. The Commission is requiring in **Special Condition 1** that prior to permit issuance, the applicant submit to the Executive Director a copy of a signed and executed easement for the project by the Port San Luis Harbor District and the Avila Beach Community Services District.

### **4.2.2 Avila Beach Community Services District**

The applicant, the Avila Beach Community Services District, is also the California Environmental Quality Act ("CEQA") lead agency for the project. On November 12, 2002, it adopted a Mitigated Negative Declaration ("MND") for the project.

### **4.2.3 Regional Water Quality Control Board**

On January 10, 2003, the Regional Water Quality Control Board, Central Coast Region, issued a Standard Letter of 401 Certification for the project.

### **4.2.4 San Luis Obispo Air Pollution Control District**

The San Luis Obispo Air Pollution Control District ("APCD") requires that portable internal combustion engines either obtain Statewide Portable Equipment registration from the State Air Resources Board, or that the contractor obtain permits from APCD for the operation of the portable engines for equipment such as cranes with dedicated engines and portable generators. No other permits or approvals are required by the APCD for this project.

### **4.2.5 U.S. Army Corps of Engineers**

The District intends to conduct this project under the authority of Nationwide Permit Number 12. Approval of this coastal development permit will serve as the functional equivalent of a consistency certification from the Coastal Commission.

## 4.3 Coastal Act Issues

### 4.3.1 Fill in Coastal Waters

Coastal Act Section 30233(a) states:

*(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.*
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (7) Restoration purposes.*
- (8) Nature study, aquaculture, or similar resource dependent activities.*

Coastal Act Section 30108.2 defines "fill" as "earth or any other substance or material ... placed in a submerged area." The proposed 480-foot outfall extension and new diffuser unit constitute "fill" as that term is defined in the Coastal Act. Coastal Act Section 30233 restricts the Commission from authorizing a project that requires filling open coastal waters unless it meets three tests. The first test requires the proposed activity to fit within one of eight categories of uses described in Coastal Act Section 30233(a)(1)-(8). The second test requires that there be no feasible less environmentally damaging alternatives to the fill. The third test mandates that feasible mitigation measures be provided to minimize the project's adverse environmental effects.

- 1) Allowable Use Test: Coastal Act Section 30233(a)(5) allows fill in open coastal waters for "incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines." The

purpose of the proposed fill is to improve water quality and protect public health by extending the existing wastewater outfall at Avila Beach. Therefore, the Commission finds that the proposed extension of the outfall and diffuser qualifies as an allowable use pursuant to Coastal Act Section 30233(a)(5).

- 2) No Feasible Less Environmentally Damaging Alternatives: The second test of section 30233 requires an assessment of whether there are feasible less environmentally damaging alternatives. The applicant considered the following project alternatives:
  - (a) No Project. The no-project alternative would not solve the problem of effluent flow from the corroded outfall terminus and diffuser, thus allowing wastewater effluent to continue to flow toward Avila Pier and the shoreline.
  - (b) Replacement of the existing diffuser with a new diffuser. The replacement of the diffuser would still allow effluent to flow via prevailing currents towards Avila Pier, which would continue to degrade public use and recreation and public health in the vicinity of the pier.
  - (c) Extension of the pipeline an additional 500 feet, in excess of the proposed 480-foot extension. Extending the outfall pipeline an additional 500 feet would disturb additional soft-bottom sediments without significantly improving water quality in the vicinity of the pier.

The above-described alternatives either do not achieve project objectives, or would have greater environmental impacts than the proposed project. The Commission thus agrees that the proposed project is the least environmentally damaging feasible alternative.

- 3) Feasible Mitigation Measures: The third test under section 30233 requires that the project include feasible mitigation measures to minimize adverse environmental effects. In other sections of this report, the Commission has identified several feasible mitigation measures that will minimize those effects. By imposing the special conditions described in this report as part of the coastal development permit, the Commission finds that the third test of Coastal Act Section 30233(a) has been met.

The Commission therefore finds the project consistent with Coastal Act Section 30233(a).

#### **4.3.2 Marine Resources**

Coastal Act Section 30230 states:

*Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.*



The proposed project will take place in San Luis Obispo Bay in coastal waters approximately 2,200 feet offshore of Avila Beach. This area is soft-bottom and marine habitat for numerous marine species.

#### 4.3.2.1 Soft-bottom Habitat and Invertebrates

On August 13, 2002, the applicant conducted a biological diver survey of the project site. On August 5, 2002, the applicant conducted a bathymetry survey of the area to determine whether any rock reef or hard bottom substrate exists. Both surveys confirmed that the project area consists entirely of soft-bottom habitat. The subtidal hard substrates nearest to the project site are the rock reefs off Fossil Point to the east, adjacent to the Cal Poly/Unocal Pier to the west, and offshore to the southeast, all within 0.3 to 0.6 miles (0.5 to 1.0 km) of the project site.

Due to the absence of hard bottom substrate in the immediate project area, no sensitive species such as seagrasses, kelp, or abalone are present in the project area. The principal marine resources present in the immediate project area are marine invertebrates. Epifauna present in shallow sedimentary habitat in the area include sand stars (*Astropecten* spp.), hermit crabs (*Pagurus* spp.), and slender crabs (*Cancer gracilis*). Infauna includes polychaete worms and mollusks. Potential impacts to sand dollar beds are typically a concern for projects that disturb soft-bottom substrate, but the diver biological survey did not record any sand dollars present in the project area. Overall, impacts to invertebrates will not be significant, as they typically recolonize disturbed areas rapidly.

#### 4.3.2.2 Marine Mammals

Within the project area, the California gray whale (*Eschrichtius robustus*), common dolphin (*Delphinus delphis*), coastal bottlenose dolphin (*Tursiops truncatus*), California sea lions (*Zalophus californianus*), Pacific harbor seals (*Phoca vitulina*), and Southern sea otters (*Enhydra lutris*) could be present, and some sites near the project area have been identified as harbor seal haulout areas. Other whale and dolphin species are not expected in the nearshore project area because they are usually only present in offshore waters. Although most marine mammals avoid areas of habitat disturbance, project-related impacts to marine mammals are nevertheless possible. Gray whales could go near or into the project area during northbound or southbound migrations, and the traffic caused by marine vessels could potentially divert whales on a shallow, inshore track or further offshore. Vessel traffic could also potentially collide with and injure marine mammals or cause them to temporarily avoid using the area for foraging. In addition, anchoring of the barge will involve dropping anchors with long lengths of cable, with the potential to injure marine mammals during installation.

In order to minimize potential impacts to marine mammals, the applicant prepared a Marine Wildlife Contingency Plan dated December 26, 2002 (hereinafter, "the Plan"). The Plan specifies how vessel operations will be conducted and contains specifications for a pre-construction training seminar for construction personnel to inform them of the potential activities of marine mammals in the project area and how to avoid potential impacts. This training will ensure that anchors or other heavy construction equipment are not deployed from the work vessels if marine mammals are present. The Plan also requires an agency-approved marine wildlife monitor to be aboard the support vessel during vessel transit from Morro Bay to the

project site in order to identify any marine wildlife in the path of project vessels. The monitor will have the authority to halt or reroute project vessels to avoid or minimize potential impacts. The National Marine Fisheries Service has approved the Plan (*Tina Fahy, personal communication, January 22, 2003*). The requirements and precautionary measures of the Plan will ensure that potential impacts to marine mammals will be avoided or mitigated to the maximum extent possible. In addition, the Commission is requiring in **Special Condition 2** that the marine mammal monitor responsible for implementing the Marine Wildlife Contingency Plan be approved by the Executive Director and that the monitor immediately report to the Executive Director any impacts to or collisions with marine mammals.

#### 4.3.2.3 Invasive Species *Caulerpa taxifolia*

A current concern affecting coastal waters is the invasive green alga, *Caulerpa taxifolia* (referred to hereafter as "Caulerpa") that was discovered within inner Agua Hedionda Lagoon and Huntington Harbor in the summer of 2000. Caulerpa grows quickly as a dense smothering blanket, covering and killing all native aquatic vegetation in its path when introduced in a non-native marine habitat. Fish, invertebrates, marine mammals, and sea birds that are dependent on native marine vegetation could be displaced or die off from the areas where they once thrived. Although warmer southern California habitats are most vulnerable, until better information is available, the whole California coast is at risk. All shallow marine habitats could be impacted. If this alga were to become permanently established along the state's coastline, it would have devastating ecological consequences.

In response to the threat that Caulerpa poses to California's marine environment, the Southern California Caulerpa Action Team ("SCCAT") was established to respond quickly and effectively to the discovery of Caulerpa infestations in Southern California. The group consists of representatives from several State, federal, local and private entities. The goal of SCCAT is to completely eradicate all Caulerpa infestations.

On August 7, 2000, the Executive Director issued Emergency Permit 6-00-99-G<sup>1</sup> for Caulerpa eradication work in a small area of the inner Agua Hedionda Lagoon. The program includes placement of tarps over areas of Caulerpa, treatment with chlorine, and capping the areas to preclude regrowth. To date, no Caulerpa has been found in San Luis Obispo Bay. However, to ensure that the project does not cause the dispersal of Caulerpa, the Commission is requiring in **Special Condition 3** that prior to construction, the applicant survey the project area and a buffer area around the project site for the presence of Caulerpa as specified in the most recent Caulerpa survey protocol (See Exhibit 3, "Caulerpa Control Protocol"). If Caulerpa is found in the project area prior to commencement of project construction, the applicant must provide evidence to the Executive Director that the Caulerpa within the project site has been eradicated or that the project has been revised to avoid any disturbance of Caulerpa. If revisions to the project are proposed to avoid contact with Caulerpa, then the applicant must apply for a permit amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

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<sup>1</sup> On April 17, 2002, the Executive Director issued a second Emergency Permit (E-02-012-G) for further eradication work that wholly replaced and superceded Emergency Permit 6-00-99-G.

#### 4.3.2.4 Conclusion – Marine Resources

For the reasons described above, the Commission finds that the proposed project, as conditioned, will be carried out in a manner that will maintain healthy populations of all species of marine organisms and is therefore consistent with Coastal Act Section 30230.

#### 4.3.3 Water Quality

Coastal Act Section 30231 states:

*The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas, that protect riparian habitats, and minimizing alteration of natural streams.*

The Avila Beach Community Services District and the Port of San Luis are currently permitted to discharge waste into the ocean under existing NPDES Permit No. CA0047830. However, the existing outfall pipeline's diffuser is not functioning and the pipeline itself has a corroded section approximately 15 feet long with a hole in it, near the pipeline terminus. Due to prevailing currents that carry wastewater toward the Avila Beach pier and shoreline, water quality and beneficial uses of nearshore waters are currently significantly impaired. The proposed project would repair and extend the existing outfall to improve nearshore water quality, public health, and recreation. The proposed project will comply with existing wastewater discharge requirements and the Central Coast Basin Plan Criteria for wastewater systems.

Project-related construction activities such as hand-jetting and pipeline placement are expected to have short-term, temporary, and localized impacts to water quality from increased turbidity. A maximum of 3,000 cubic feet of soft-bottom sediments will be disturbed and discharged into the water column over the two-day period when hand jetting is conducted. This estimate is based on a worst-case scenario in which the entire 480 feet of new pipeline would require placement within a trench two feet deep and three feet wide in order to ensure proper burial of the pipeline by natural processes. Increased turbidity could reduce available light concentrations underwater and result in slightly decreased photosynthesis and decreased dissolved oxygen levels in the immediate project area. Disturbed sediments could also suspend organic matter into the water column, resulting in eutrophication and possibly algal blooms. However, due to the short two-day duration of disturbance, impacts related to increased turbidity will be less than significant. Affected waters will be diluted by nearby ocean currents, waves, and tidal action.

Despite short-term and temporary water quality impacts, the project will have an overall beneficial impact on water quality because wastewater will be discharged and diffused further away from the Avila Beach Pier and shoreline. The Commission thus finds the project consistent with Coastal Act Section 30231.

#### 4.3.4 Oil and Fuel Spills

Coastal Act Section 30232 states:

*Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.*

The proposed project does not involve the transport, use, or disposal of hazardous materials other than the marine fuel oil, lubricants, and petroleum products that will be on the derrick barge and work vessel. The pipeline to be repaired is a sewage outfall and is not located near any petroleum pipeline. The risk of an oil spill due to project related activities is low; nevertheless, the proposed project could result in an accidental release of hydrocarbons from one of the following sources:

##### ***Potential Project-Related Spills***

Primary work vessel (derrick barge). There is potential for hydrocarbon leakage or spillage of diesel fuel or lubricants from deck equipment to be used on the derrick barge. Specifically, equipment items aboard the derrick barge (e.g., crane engine, compressor, generator, pumps) have small sized, dedicated tanks containing fuel or lubricant oils. Fuel could also be spilled if the derrick barge collided with another vessel.

Support vessel (barge tender workboat). If the hull of the support vessel were breached in the area of the tankage, or if a vessel sinks due to a collision with another vessel, a spill could occur.

Underground hydrocarbon plume. The proposed project site is located about 660 feet from the known limits of an offshore hydrocarbon plume (referred to as the "outlier plume") located at the Avila Pier area.<sup>2</sup> Although the proposed project does not lie within the known limits of the outlier plume area, there is the potential, albeit low, that the repair and extension of the marine outfall line and associated hand-jetting operations could result in the exposure of petroleum-hydrocarbon contaminated sediments. To determine whether project-related disturbance of sediments could introduce organic compounds and trace hydrocarbons into the water, the District conducted sediment sample collection and chemical analyses along the outfall pipeline alignment. Sediment samples were analyzed for total petroleum hydrocarbons ("TPH") and polynuclear aromatic hydrocarbons ("PAH"). No detectable concentrations of TPH in the "gasoline range" (C<sub>4</sub> to C<sub>12</sub>) or PAHs were found in the sample, although TPH in the "diesel fuel and residual range" (C<sub>16</sub> to C<sub>38</sub>) was found in the samples at concentrations of 13 milligrams per

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<sup>2</sup> In 1998, Unocal discovered a subsurface petroleum-hydrocarbon plume in the nearshore sediments around the north end of the base of the Avila Pier and along the length of the Pier. The discovery was a part of Unocal's larger investigation into large leaks that escaped Unocal's bluff-top tank farm in Avila Beach. This plume is referred to as the "Avila Beach Outlier Plume." In 2000 and 2001, Unocal delineated the boundaries of the plume and characterized the contaminant constituents through sediment sampling. The multi-agency Avila Pier Technical Committee was formed to assess ecological and human risks and determined with several studies that there was limited or no risk to human health or marine species due to low levels of exposure risk, under existing conditions.

kilogram (mg/kg) and 15 mg/kg, respectively. However, the project Mitigated Negative Declaration cites previous sampling from 1997 that indicated that background hydrocarbon concentrations in surficial sediments near the project site averaged 69/kg, and concludes that the concentrations detected in the recent samples are representative of background conditions.

### ***Oil Spill Prevention Measures***

Coastal Act Section 30232 requires an applicant to undertake measures to prevent an oil spill from occurring. To minimize risks of a vessel collision, and to ensure that area mariners would have prior notice of the project location and schedule, the District will issue a *Notice to Mariners* a minimum of two weeks prior to the commencement of project operations. The District also prepared an Oil Spill Response Plan ("OSRP") (dated January 29, 2003) that describes the potential sources of spills and the contingency measures and notification procedures that will be taken in the event of a spill.

According to the OSRP, the work vessels are constructed with multiple watertight compartments to isolate flooding and reduce the risk of sinking should a tank be punctured. The fuel is contained in integral tankage that is built into the vessel's hull. While the vessel is considered a potential spill source, the likelihood of a spill from the vessel is extremely remote, as a spill could only occur if the hull of a vessel is breached in the area of the tankage, or if the vessel sinks. To prevent spillage from the deck equipment onboard the derrick barge, all the deck equipment is equipped with engine spill pans, and no vessel-to-vessel fuel transfers will be permitted. Additionally, all deck equipment will be welded or chained to the deck of the work barge to prevent its movement or loss during rough seas. Work crews will be directed to monitor equipment for leakage and will cease operations immediately and correct any leakage that occurs. All hydrocarbon-based fluids stored on board will have a double containment system.

### ***Oil Spill Response***

Notwithstanding the prevention efforts described above to avoid and minimize the risk of an oil spill, there remains the possibility of an oil spill occurring. The District will provide oil spill response equipment onboard the barge tender workboat (support vessel), including 500 feet of sorbent boom, 1000 feet of container boom, and 200 sorbent pads. This on-site equipment is sufficient to respond to and clean-up a small oil spill. In addition, the offshore work crews have been trained in the deployment and operation of the oil spill response equipment. The MND also requires that in the event that a petroleum spill or sheen develops during project activities, all operations shall immediately cease and booms and/or sorbent materials shall be deployed around the sheen.

In the remote chance that an oil spill occurred that was larger than the crew could contain and clean-up with the on-site equipment, the District will have access to the large scale oil spill containment and clean-up capability availability from the Clean Seas Oil Spill Response Organization ("Clean Seas") through the "orphan spill agreement" between California's Office of Spill Prevention and Response and Clean Seas' oil spill cooperative. In such an event, Clean Seas would be able to respond to a spill at the project site within 2-4 hours.

With these oil spill prevention and response measures in place, the Commission finds the project consistent with the requirements of Coastal Act Section 30232.

#### 4.3.5 Public Access and Recreation

Coastal Act Section 30210 states:

*In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.*

Coastal Act Section 30211 states:

*Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.*

Coastal Act Section 30220 states:

*Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Avila Beach is one of San Luis Obispo County's most popular beaches; its adjacent marine waters in San Luis Obispo Bay are also a principal recreation and tourist area. Offshore recreation in San Luis Obispo Bay consists of swimming, fishing, kayaking, boating, sailing, jet-skiing, and underwater diving. Sport fishing takes place near rocky reef habitat areas in the eastern part of the bay, and at kelp beds located near Point San Luis. In addition, fishing from Avila Pier is a popular recreational activity.

The total project area offshore affected by construction activities is about 50 feet by 900 feet (or approximately 45,000 square feet). The public will be precluded from this area for about five days. Public access to the terminus of Avila Pier will also be restricted for 15-minute intervals when the support vessel docks at the pier landing to pick up project personnel and supplies.

The offshore work area is relatively small compared to the total area available for boating within San Luis Obispo Bay and therefore preclusion of the public from the work area will not have a significant impact on recreational opportunities in the area. At least two weeks prior to commencement of construction activities, the District will issue a Notice to Mariners so that boaters will be informed of the project, its location and construction schedule.

The project Mitigated Negative Declaration also requires signs and caution flagging to be placed along the stairwell area of the Avila Pier stating the duration that the area will be restricted from recreational activities and recommending use of the remaining open portion of the pier or other adjacent areas for these activities until project work is completed. Signs also will be posted at

several locations within Port San Luis informing the public of the duration of the proposed project work and identifying alternative areas within San Luis Obispo Bay where the public can recreate.

To ensure that mariners and other ocean users are aware of the outfall extension, the Commission is requiring in **Special Condition 4** that within 30 days of project completion, the applicant provide written verification to the Executive Director that it has submitted to the National Oceanographic and Atmospheric Administration project-related information such as as-built drawings or other documents that depict the outfall's location. Notification to NOAA will ensure that the outfall extension will be added to NOAA's navigational charts.

The Commission finds that the project, as conditioned, will be carried out in a manner that will not interfere with the public's access to and recreational use of the coast and is therefore consistent with Coastal Act Sections 30210, 30211, and 30220.

#### **4.3.6 Commercial and Recreational Fishing**

Coastal Act Section 30234.5 states:

*The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.*

The only commercial fishing operations that occur in the project area are a small live bait fishery for northern anchovy and sardine (from late spring to fall in San Luis Obispo Bay). Project operations would occupy a small portion of the available fishing area for five days only. Further, the outfall extension will have no long-term impact (*i.e.*, preclude continued bait fishing in the area) because purse seining for this fishery primarily occurs near the water surface due to "schooling" behavior of these species within the upper water column. After project completion, all previously conducted purse seining activities can resume. The District will advise all fishermen of project plans and schedule through issuance of a Notice to Mariners at least two weeks prior to project commencement.

As described in section 4.3.5 of this report, nearshore and offshore sportfishing will not be impacted by this project. Some fishing from the Avila Pier may be disrupted, but only temporarily, during the 10-day project duration when the project vessel is docked at the pier to pick up personnel and supplies.

The Commission thus finds that the project will be carried out in a manner that the economic and commercial importance of fishing activities will be protected and therefore is consistent with Coastal Act Section 30234.5.

#### **4.3.7 Air Quality**

Coastal Act Section 30253 states in part:

*New development shall:*

*...(3) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Control Board as to each particular development.*

The proposed project will generate exhaust emissions from vehicles and offshore work vessels (e.g., onboard portable generators and cranes). Vehicle use will include autos and light-duty trucks used to transport workers, equipment operators, and pipeline segments. Estimates for project emissions are: 126.6 pounds per day (ppd) of NO<sub>x</sub> during mobilization and 144.3 ppd of NO<sub>x</sub> during pipeline repair and installation; 7.3 ppd of ROC during mobilization and 11.8 ppd of ROC during pipeline repair and installation; and for PM<sub>10</sub>, 4.9 ppd during mobilization and 9.6 ppd during pipeline repair and installation. The project will not exceed the San Luis Obispo Air Pollution Control District's ("APCD") construction thresholds for NO<sub>x</sub>, ROC, or PM<sub>10</sub>, and therefore short-term air quality impacts are considered less than significant. The APCD will not require permits or mitigation measures for the project, except for the use of portable construction equipment. **Special Condition 5** requires prior to starting construction that the District provide evidence to the Executive Director that the project contractor has obtained for portable construction equipment either (a) registration from the State Air Resources Board, or (b) permits from APCD.

For the reasons above, the Commission finds the project, as conditioned, consistent with Coastal Act Section 30253.

## **5.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act ("CEQA"). Section 21080.5(d)(2)(A) of the CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment. The project as conditioned herein incorporates measures necessary to avoid any significant environmental effects under the Coastal Act, and there are no less environmentally damaging feasible alternatives. Therefore, the Commission finds that the proposed project is consistent with the CEQA.



**APPENDIX A  
STANDARD CONDITIONS**

1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. Expiration. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the executive director or the Commission.
4. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. Terms and Conditions Run with the Land. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

**APPENDIX B**  
**SUBSTANTIVE FILE DOCUMENTS**

**Coastal Development Permit Application Materials**

Application for Coastal Development Permit E-02-023.

Draft Marine Wildlife Contingency Plan, prepared by Padre Associates, Inc. for the Avila Beach Community Services District, December 26, 2002.

Oil Spill Response Plan, prepared by Padre Associates, Inc. for the Avila Beach Community Services District, January 29, 2003.

**Environmental Documents**

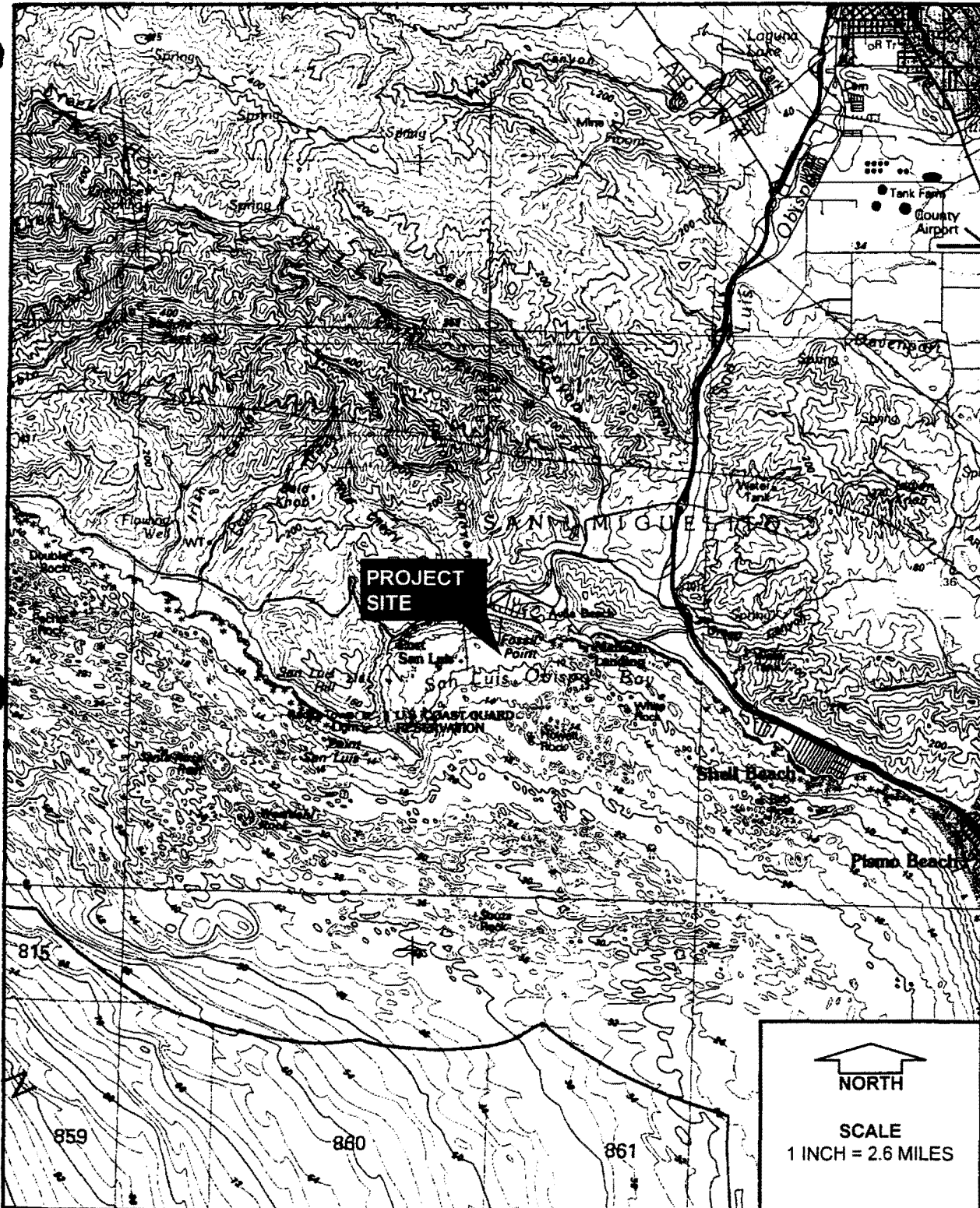
Arthur D. Little, *Unocal Avila Beach Cleanup Project: Environmental Impact Report/Statement*, prepared for County of San Luis Obispo Department of Planning and Building, February 1998.

Padre Associates, Inc. and Ternera Environmental, *Final Mitigated Negative Declaration for the Avila Beach Community Services District Marine Outfall Repair and Extension Project*, prepared for the Avila Beach Community Services District, November 12, 2002.

**References and Correspondence**

Tina Fahy, National Marine Fisheries Service, Personal Communication, January 22, 2003.

E-mail from Brian Dugas, Padre Associates, Inc., to Alison Dettmer, Coastal Commission, February 11, 2003.



SOURCE: USGS, SAN LUIS OBISPO, CA 15-MINUTE QUADRANGLE

**padre**  
associates, inc.  
ENGINEERS, GEOLOGISTS &  
ENVIRONMENTAL SCIENTISTS

ABCSD Marine Outfall Repair and Extension Project  
Avila Beach, CA

EXHIBIT NO. 1
APPLICATION NO.
E-02-023
Project Location



**CAULERPA CONTROL PROTOCOL**  
(Version 1.2, adopted November 22, 2002)

**A. Background Information:**

*Caulerpa taxifolia* (“*Caulerpa*”) is a green alga native to tropical waters that typically grows in limited patches. A particularly cold tolerant clone (tolerant of temperatures at least as low as 10 °C for a period of three months) of this species has already proven to be highly invasive in the Mediterranean Sea and efforts to control its spread have been unsuccessful. In areas where the species has become well established, it has caused ecological and economic devastation by overgrowing and eliminating native seaweeds, seagrasses, reefs, and other communities. In the Mediterranean, it is reported to have harmed tourism and pleasure boating, devastated recreational diving, and had a significant impact on commercial fishing both by altering the distribution of fish as well as creating a considerable impediment to net fisheries.

This alga and potentially other *Caulerpa* species pose a substantial threat to marine ecosystems in California, particularly to the extensive eelgrass meadows and other benthic environments that make coastal waters such a rich and productive environment. The eelgrass beds and other coastal resources that could be directly impacted by an invasion of *Caulerpa* are part of a food web that is critical to the survival of numerous native marine species including those of commercial and recreational importance..

Currently, *Caulerpa* has been detected in two locations in southern California and other infestations may also exist but remain undetected. In order to minimize the spread and introduction of this species and other potentially invasive species of this genus to other systems, the following provisions have been established for California nearshore coastal and enclosed bays, estuaries, and harbors from Morro Bay to the U.S./Mexican border.

**B. Definitions:**

Disturbing Activity – a work activity initiated by a permit holder which could fragment or disseminate *Caulerpa*.

Area of Potential Effect (APE) – the area surrounding an authorized project site that could be affected by a Disturbing Activity related to the implementation of the project work. This includes the project footprint, areas where equipment is stored, areas where vessel prop-wash could occur in association with work, or in-water disposal areas used by the project. It does not include EPA designated deep-ocean disposal sites.

High Growth Period – May 1 to September 30.

EXHIBIT NO. 3
APPLICATION NO.
E-02-023
Caulerpa Control Protocol

**Infected System** – any bay, harbor, estuary, or lagoon in which *Caulerpa* has been identified, regardless of where the infestation occurs geographically within the system. Following eradication and subsequent verification surveillance for at least two High Growth Periods, an Infected System may be re-designated as a “*Caulerpa*-Free System” by the National Marine Fisheries Service (NOAA Fisheries) and California Department of Fish and Game (CDFG). Currently identified infected systems are:

Agua Hedionda Lagoon  
Huntington Harbour

**NOAA Fisheries/CDFG Contacts** – the designated federal and state agency contacts for submittal of survey reports and reports of *Caulerpa* findings. All submitted material must be provided to these agencies at the following addresses:

**National Marine Fisheries Service  
Southwest Regional Office**  
501 West Ocean Boulevard, Suite 4200  
Long Beach, CA 90802  
Attn: Robert Hoffman  
ph.: (562) 980-4043  
fx.: (562) 980-4092  
e-mail: Bob.Hoffman@noaa.gov

**Calif. Dept. of Fish & Game  
South Coast Region**  
4949 Viewridge Drive  
San Diego, CA 92124  
Attn: William Paznokas  
ph.: (858) 467-4218  
fx.: (858) 467-4299  
e-mail: wpaznokas@dfg.ca.gov

**Survey Area** – the area over which surveys are conducted, typically synonymous with the Area of Potential Effect.

**Survey Level** – the level of intensity of the survey within the survey area. Survey levels are defined as either:

- 1) *Surveillance Level* – General survey coverage providing a systematic sub-sampling of the entire APE during which at least 20% of the bottom is inspected and widespread occurrences of *Caulerpa* would be expected to be identified if present. Surveys may be accomplished using diver transects, remote cameras, or acoustic surveys with visual ground truthing.
- 2) *High Intensity Level* – More intensive survey using a systematic sub-sampling of the entire APE during which at least 50% of the bottom is inspected. Surveys may be accomplished using diver or remote camera transects that provide.
- 3) *Eradication Level* – This is the most intensive survey using a systematic and comprehensive survey of the entire APE during which 100% of the bottom is inspected. Surveys must be accomplished using divers moving at a rate appropriate to the site conditions to ensure that all areas are comprehensively searched irrespective of site conditions which may complicate surveys.

**C. Reporting Requirements:**

1. Surveys conducted in accordance with requirements outlined in this document shall be submitted to the NOAA Fisheries/CDFG Contacts within 15 days of completion of each survey. Surveys shall be submitted on the attached survey form or in a suitable reproduction of the form fields.
2. If *Caulerpa* is identified at a permitted project site during a survey or at any other time prior, during, or within 120 days after completion of authorized activities, the NOAA Fisheries/CDFG Contacts shall be contacted within 24 hours of first noting the occurrence.
3. For survey actions requiring input or coordination with NOAA Fisheries/CDFG Contacts, please provide information in a timely fashion and allow at least 5 working days for agency coordination and feedback.

**D. Surveys within *Caulerpa*-Free System:**

The following survey conditions shall apply to permitted Disturbing Activity within *Caulerpa*-Free Systems.

1. Prior to initiation of any permitted Disturbing Activity, a pre-construction survey of the project APE shall be conducted to determine the presence or absence of *Caulerpa*. This survey shall be conducted at a Surveillance Level. Survey work shall be completed not earlier than 90 days prior to the Disturbing Activity and not later than 30 days prior to the Disturbing Activity.
2. In the event that *Caulerpa* is detected, the Disturbing Activity shall not be conducted until such time as the infestation has been isolated, treated and the risk of spread from the proposed Disturbing Activity is eliminated in accordance with section F.
3. Exemptions – Individual, privately owned boat docks and related structures are exempt from provisions 1 and 2 of this section when such facilities are found in *Caulerpa*-Free Systems and permitted activities are limited to structural repairs, replacement, modification, and pile driving and do not include dredging or other significant bottom disturbing activities.

**E. Surveys within Infected Systems:**

The following survey conditions shall apply to permitted Disturbing Activity within Infected Systems.

1. Prior to initiation of any permitted Disturbing Activity within an Infected System, two surveys, initiated not less than 60 days apart, shall be conducted within the project APE during the High Growth Period. The first survey shall be conducted

using High Intensity Level techniques and the second survey shall be conducted using Eradication Area Level techniques.

2. At least one survey shall be conducted within 45 days of initiation of permitted Disturbing Activity dredging (a "Pre-Act Survey"). This survey could be the second (Eradication Area Level) survey conducted during the High Growth Period. However, project timing may require that a third survey be conducted prior to initiation of Disturbing Activity in order to meet this 45 day requirement. If a third survey is required, this survey shall be conducted at either a High Intensity Level or Eradication Area Level as determined by the NOAA Fisheries/CDFG Contacts based upon site circumstances and proximity to infestations. To determine appropriate survey level, please contact the NOAA Fisheries/CDFG Contacts with project specific information.
3. If the Disturbing Activity extends for over 90 calendar days, the portions of the APE that would be expected to be impacted by a Disturbing Activity within the subsequent 90 days must be surveyed at a High Intensity Level. This subsequent survey must be conducted within 15 days following the first 90 days. Prolonged activities would require a repetition of this phased survey requirement.
4. If dredged material is removed from the APE and placed elsewhere in the marine environment, then no sooner than 60 days after placement of the dredged materials and during the next High Growth Period, the applicant shall conduct a Surveillance Level survey at all disposal areas except where material is disposed of within an existing EPA designated deep ocean disposal site. The specific survey requirements shall be determined by NOAA Fisheries and CDFG on a case-by-case basis.

**F. If *Caulerpa* is Found:**

1. If *Caulerpa* is found, then the NOAA Fisheries/CDFG Contacts shall be notified within 24 hours of the discovery.
2. All *Caulerpa* assessment and treatment shall be conducted under the auspices of the CDFG and NOAA Fisheries as the state and federal lead agencies for implementation of *Caulerpa* eradication in California.
3. Within 96 hours of notification, the extent of the *Caulerpa* infestation within the project APE shall be fully documented. *Caulerpa* eradication activities shall be undertaken using the best available technologies at the time and will depend upon the specific circumstances of the infestation. This activity may include in situ treatment using contained chlorine applications, and may also incorporate mechanical removal methods. The eradication technique is subject to change at the discretion of NOAA Fisheries and CDFG and as technologies are refined.



4. The efficacy of treatment shall be determined prior to proceeding with permitted activities. To determine effectiveness of the treatment efforts, a written Sampling and Analysis Plan (SAP) shall be prepared. The plan shall be developed in conjunction with the CDFG and NOAA Fisheries and shall be approved by these agencies prior to implementation.
5. This policy does not vacate any additional restrictions on the handling, transport, or disposal of *Caulerpa* that may apply at the time of permit issuance or in the future. It is incumbent upon the permittee to comply with any other applicable State or Federal regulations, restrictions, or changes to the Protocol that may be in effect at the time of initiation of permitted activities.

## Caulerpa Survey Reporting Form

This form is required to be submitted for any surveys conducted for the invasive exotic alga *Caulerpa taxifolia* that are required to be conducted under federal or state permits and authorizations issued by the U.S. Army Corps of Engineers or Regional Water Quality Control Boards (Regions 8 & 9). The form has been designed to assist in controlling the costs of reporting while ensuring that the required information necessary to identify and control any potential impacts of the authorized actions on the spread of *Caulerpa*. Surveys required to be conducted for this species are subject to modification through publication of revisions to the *Caulerpa* survey policy. It is incumbent upon the authorized permittee to ensure that survey work is following the latest protocols. For further information on these protocols, please contact: Robert Hoffman, National Marine Fisheries Service (NOAA Fisheries), (562) 980-4043, or William Paznokas, California Department of Fish & Game, (858) 467-4218.

<b>Site Name:</b> (common reference)	
<b>Survey Contact:</b> (name, phone, e-mail)	
<b>Permit Reference:</b> (ACOE Permit No., RWQCB Order or Cert. No.)	
<b>Hydrographic System:</b> (name of bay, estuary, lagoon, or harbor)	
<b>Specific Location:</b> (UTM, Lat./Long., datum, accuracy level, and an electronic survey area map or hard copy of the map <b>must be included</b> )	
<b>Was <i>Caulerpa</i> Detected:</b> (if <i>Caulerpa</i> is found, please immediately contact the permitting agency project staff and NOAA Fisheries or CDFG personnel identified above)	<p style="text-align: center;">                 _____ <b>Yes, <i>Caulerpa</i> was found at this site and</b>                  _____ <b>has been contacted on _____ date.</b>                  _____ <b>No, <i>Caulerpa</i> was not found at this site.</b> </p>
<b>Description of Permitted Work:</b> (describe briefly the work to be conducted at the site under the permits identified above)	

<b>Description of Site:</b> (describe the physical and biological conditions within the survey area at the time of the survey and provide insight into variability, if known. Please provide units for all numerical information).	<i>Depth range:</i>	
	<i>Substrate type:</i>	
	<i>Temperature:</i>	
	<i>Salinity:</i>	
	<i>Dominant flora:</i>	
	<i>Dominant fauna:</i>	
	<i>Exotic species encountered (including any other Caulerpa species):</i>	
<i>Other site description notes:</i>		
<b>Description of Survey Effort:</b> (please describe the surveys conducted including type of survey (SCUBA, remote video, etc.) and survey methods employed, date of work, and survey density (estimated percentage of the bottom actually viewed). Describe any limitations encountered during the survey efforts.	<i>Survey date and time period:</i>	
	<i>Horizontal visibility in water:</i>	
	<i>Survey type and methods:</i>	
	<i>Survey personnel:</i>	
	<i>Survey density:</i>	
<i>Survey limitations:</i>		
<b>Other Information:</b> (use this space to provide any additional information or references to attached materials such as maps, reports, etc.)		

