

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

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Clean Water Act Section 401 Water Quality Certification
and Waste Discharge Requirements
for Discharge of Dredged and/or Fill Materials

PROJECT: **Agua Hedionda Outer Lagoon Maintenance
Dredging and Beach Nourishment
Certification Number R9-2020-0232
WDID: 9 000003572**

Reg. Meas. ID: 437275
Place ID: 865610
Party ID: 522151
Person ID: 339921

APPLICANT: **Cabrillo Power I LLC
4600 Carlsbad Boulevard
Carlsbad, CA 92008**

APPLICANT AGENT: **Poseidon Resources (Channelside) LLC
5780 Fleet St., Suite 140
Carlsbad, CA 92008**

ACTION:

- | | |
|---|---|
| <input type="checkbox"/> Order for Low Impact Certification | <input checked="" type="checkbox"/> Enrollment in SWRCB GWDR Order No. 2003-017-DWQ |
| <input checked="" type="checkbox"/> Order for Technically-conditioned Certification | <input type="checkbox"/> Enrollment in Isolated Waters Order No. 2004-004-DWQ |

PROJECT DESCRIPTION

An application dated March 18, 2020, was submitted by Cabrillo Power I LLC (hereinafter Applicant) and Poseidon Resources (Channelside) LLC (authorized agent for the Applicant) (hereinafter collectively referred to as Applicant), for Water Quality Certification pursuant to section 401 of the Clean Water Act (United States Code (USC) Title 33, section 1341) for the proposed *Agua Hedionda Outer Lagoon Maintenance Dredging and Beach Nourishment Project* (Project). The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) deemed the application to be complete on May 27, 2020, and Denied Without Prejudice on July 15, 2020, for procedural reasons not based on the technical merits of the Project. The Applicant subsequently submitted supplemental information revising the application package to correct the deficiencies which caused the Denial Without Prejudice. The Applicant proposes to discharge dredged or fill material to waters of the United States and/or State associated with maintenance dredging and beach nourishment activities at the Project site. The Applicant has a Clean Water Act section 404 permit from the United States Army Corps of Engineers for the Project (USACOE File No. SPL-2001-00328-RRS).

The Project is located within the City of Carlsbad, San Diego County, California at 4600 Carlsbad Boulevard. The Project center reading is located at latitude 33.141389° and longitude -117.341111°. The Applicant has paid all required application fees for this

Certification in the amount of \$167,150.00. On May 28, 2020, the San Diego Water Board provided public notice of the Project application pursuant to California Code of Regulations, title 23, section 3858 by posting information describing the Project on the San Diego Water Board's web site and providing a period of twenty-one days for public review and comment. No comments were received.

The Applicant proposes routine maintenance dredging of up to 500,000 cubic yards (cy) of accumulated beach quality sand from the bottom of the outer basin of Agua Hedionda Lagoon (Agua Hedionda Outer Lagoon), including the inlet bordered by two rock jetties at the northern end of the Outer Lagoon. The dredging will be conducted within defined dredge limits shown in the attached drawings. The Applicant also proposes placement of any suitable sand in the dredged material on the North Beach, Middle Beach, and South Beach areas of Carlsbad State Beach in the City of Carlsbad, California to meet beach nourishment needs. The authorization to dredge and deposit dredged sand material on area beaches under this Certification is limited to one dredge cycle between the years 2020-2021 (2020/2021 cycle) to allow for ongoing assessment of Project impacts.

The Agua Hedionda Outer Lagoon was originally dredged in 1954 as part of the construction of the Applicant's Encina Power Station and has been subject to routine maintenance dredging since that time. Between 1954 and 2018 routine maintenance dredging was conducted approximately every one to three years to allow for the maintenance of the tidal prism as required to provide the Encina Power Plant with an adequate volume of seawater for cooling purposes. The Encina Power Station was retired at the end of 2018 and ceased using the existing intake system to withdraw water from Agua Hedionda Outer Lagoon for cooling purposes. The Poseidon Resources (Channelside) LP, Claude "Bud" Lewis Carlsbad Desalination Plant (CDP) continues to utilize the existing intake structure to withdraw up to 299 MGD of seawater from the Agua Hedionda Outer Lagoon which is used to produce drinking water and dilute the brine discharge.

The maintenance dredging is performed to remove sediment transported into the outer lagoon basin by tidal action through the existing inlet rubble mound jetty structure. Sand transport into the lagoon system is further accelerated by the seawater pumping activities associated with operation of the CDP. According to the Applicant, the average historical sand influx is calculated at 400+ cubic yards per day but can range up to 800+ cubic yards per day based on background conditions and storm and wave energy. The proposed maintenance dredging will allow for the maintenance of the tidal prism required for the lagoon environment and to provide the CDP with an adequate volume of seawater of up to 299 million gallons per day (MGD) for desalination and brine dilution purposes. The intake structure for the CDP is located on the south shore of the outer basin of Agua Hedionda Lagoon within 300 feet of the Pacific Ocean. Other existing uses within the outer lagoon include aquaculture farming (Carlsbad Aquafarm) and marine research (Hubbs Fish Hatchery).

The sand material will be removed from the lagoon bottom by dredging within a pre-defined dredge limit area, as established by this Certification. Dredged sand material is proposed to be placed on North Beach (from the north inlet jetty to Pine Ave.), Middle Beach (between inlet and outfall channels), and South Beach (south of outfall channel). The sand placement

quantities for each receiver beach were determined based on an assessment of the minimal sand required to re-establish sand carrying capacity, residual sands remaining on the receiver beaches, and maximizing recreational beach widths in proportion to use, while avoiding impact to sensitive hard bottom habitat. As a result, the placement of sand is unlikely to have an adverse impact on nearshore marine habitat.

The dredged slurry will be pumped through a floating pipeline. For delivery of dredged material to the north, the pipe will float on the lagoon and be routed under the Carlsbad Boulevard Bridge and connected with a temporary land base pipeline on the north shore that will be placed along the beach. For disposal on South and Middle Beach, the pipe will float on the outer lagoon and connect to existing underground pipes under Carlsbad Blvd. The pipes will be extended along the surface of Carlsbad State Beach to reach Middle Beach and South Beach. Temporary dikes and berms will be used to de-water the slurry and aid in retention of sand at the beach. Bulldozers and front-end loaders would then be used to spread the sand on the beach. Equipment and material staging will occur on the north and west shore of the outer lagoon and along the beach. Temporary dredge disposal piping will remain on the North, Middle and South Beach during the dredging operation.

The Project application includes a description of the design objective, operation, and degree of treatment expected to be attained from equipment, facilities, or activities (including construction and post-construction BMPs) to treat waste and reduce runoff or other effluents which may be discharged. Compliance with the Certification conditions will help ensure that dredging and post-dredging discharges from the Project will not cause on-site or off-site erosion, damage to properties, or otherwise damage lagoon, beach, and near-shore habitats in violation of water quality standards in the *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan).

The proposed dredging operation is necessary to maintain the tidal prism in the Agua Hedionda Outer Lagoon to assure tidal exchange throughout the lagoon and the effective operation of the CDP. Project construction will impact approximately 39.1 acres, comprised of 32.4 acres of the Agua Hedionda Outer Lagoon and 6.7 acres of intertidal beach sand nourishment areas along the ocean shoreline. The Applicant reports that the Project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impacts to aquatic resources considering all potential practicable alternatives, such as the potential for alternate available locations, designs, reductions in size, configuration or density. Dredge-related turbidity impacts in Agua Hedionda Outer Lagoon will be limited to short-term and localized turbidity increases in the water column. These turbidity increases will be subject to the turbidity limitations set in this Certification and will be spatially limited to the dredge areas and areas immediately adjacent that may be impacted by re-suspended bottom sediments. The dredging activities may also disrupt benthic habitats and organisms, directly through removal or burial, or indirectly through effects related to the disturbance of bottom sediments. The temporary dikes and berms constructed at the dredged material discharge points on the receiver beaches will aid in ensuring shoreline ocean turbidity does not exceed the limits set in this Certification. Avoidance, minimization, and other best management practices (BMPs) that must be implemented under this Certification will reduce the potential

impacts to water quality, eelgrass, sensitive species and other aquatic resources to the maximum extent feasible. Potential adverse impacts to aquatic resources from the Project will be offset by the beneficial impacts of continuous tidal flushing and improved lagoon circulation resulting from the maintenance dredging as well as the beach restoration resulting from the placement of the dredged sand material on the receiver beaches. Therefore, compensatory mitigation is not required for the Project.

Additional Project details are provided in Attachments 2 through 3 of this Certification.

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ATTACHMENTS:

1. DEFINITIONS
2. PROJECT LOCATION MAPS
3. PROJECT SITE PLANS

The San Diego Water Board has independently reviewed the record of the Project to analyze the extent and nature of proposed Project impacts to the water quality and beneficial uses of waters of the United States and/or State. In accordance with this Certification, the Applicant may proceed with the Project under the following terms and conditions:

I. STANDARD CONDITIONS

Pursuant to section 3860 of title 23 of the California Code of Regulations, the following three standard conditions apply to all water quality certification actions:

- A. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to section 13330 of the Water Code and chapter 28, article 6 (commencing with title 23, section 3867), of the California Code of Regulations.
- B. This Certification action is not intended and shall not be construed to apply to any discharge from any activity involving a hydroelectric facility and requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license unless the pertinent Certification application was filed pursuant to California Code of Regulations title 23, section 3855 subdivision (b), and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
- C. This Certification action is conditioned upon total payment of any fee required under title 23, chapter 28 (commencing with section 3830) of California Code of Regulations and owed by the applicant.

II. GENERAL CONDITIONS

- A. **Term of Certification.** Water Quality Certification No. R9-2020-0232 (Certification) shall expire upon a) the expiration or retraction of the Clean Water Act section 404 (33 USC Title 33, section 1344) permit issued by the U.S. Army Corps of Engineers (USACOE) for this Project, or b) five (5) years from the date of issuance of this Certification, whichever occurs first.

The maintenance dredging project authorized under this Certification is for one dredge cycle (2020/2021 cycle) of up to 500,000 cubic yards, commencing upon the date of issuance of this Certification, after which time the authorization for continuation of dredging and deposition of dredged sand on area beaches shall cease. After the authorization for the 2020/2021 dredge cycle ends, the continuation of dredging and deposition on area beaches will require submittal of an application for issuance of a new water quality certification.

- B. **Duty to Comply.** The Applicant must comply with all conditions and requirements of this Certification. Any Certification noncompliance constitutes a violation of the Water Code and is grounds for enforcement action or Certification termination, revocation and reissuance, or modification.
- C. **General Waste Discharge Requirements.** The requirements of this Certification are enforceable through Water Quality Order No. 2003-0017-DWQ, *Statewide General Waste Discharge Requirements for Discharges of Dredged or Fill Material that have Received State Water Quality Certification* (Water Quality Order No. 2003-0017-DWQ). This provision shall apply irrespective of whether a) the federal permit for which the Certification was obtained is subsequently retracted or is expired, or b) the Certification is expired. Water Quality Order No. 2003-0017-DWQ is accessible at:

http://www.waterboards.ca.gov/water_issues/programs/cwa401/docs/generalorders/gdr401regulated_projects.pdf.
- D. **Project Conformance with Application.** All water quality protection measures and BMPs described in the application and supplemental information for water quality certification are incorporated by reference into this Certification as if fully stated herein. Notwithstanding any more specific conditions in this Certification, the Applicant shall construct, implement and comply with all water quality protection measures and BMPs described in the application and supplemental information. The conditions within this Certification shall supersede conflicting provisions within the application and supplemental information submitted as part of this Certification action.
- E. **Project Conformance with Water Quality Control Plans or Policies.** Notwithstanding any more specific conditions in this Certification, the Project shall be constructed in a manner consistent with the Basin Plan and any other applicable water quality control plans or policies adopted or approved pursuant to the Porter Cologne Water Quality Act (Division 7, commencing with Water Code Section 13000) or section 303 of the Clean Water Act (33 USC section 1313). The Basin Plan is accessible at:

http://www.waterboards.ca.gov/sandiego/water_issues/programs/basin_plan/index.shtml
- F. **Receiving Water Limitations.** The receiving water limitations set forth below are based on applicable water quality standards contained in the Basin Plan and are a required part of this Certification. Project activities shall not cause or contribute to exceedances of these receiving water limitations in Agua Hedionda Lagoon and/or the Pacific Ocean. Compliance with these limitations shall be determined from samples collected at the points of compliance described in the Monitoring Requirements in section VI of this Certification.

1. **Visual.** Floating particulates and grease and oil shall not be visible.
 2. **Hydrogen Ion Concentration.** The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
 3. **Turbidity.** If natural turbidity is between 0 to 50 nephelometric turbidity units (NTUs), the maximum increase from dredge activities must not exceed 20 percent of the measured natural turbidity. If natural turbidity is between 51 to 100 NTUs, the maximum increase from dredge activities must not exceed 10 NTUs. If natural turbidity is greater than 100 NTUs, the maximum increase from dredge activities must not exceed 10% above natural background levels.
 4. **Dissolved Oxygen.** The dissolved oxygen concentration in ocean waters shall not at any time be depressed more than 10 percent from that which occurs naturally as the result of oxygen demanding waste materials. The annual mean dissolved oxygen concentration in bays and estuaries shall not be less than 7.0 mg/l more than 10 percent of the time nor shall the minimum dissolved oxygen concentration be reduced below 5.0 mg/l at any time.
- G. **Maintain Water Quality Standards.** Project activities shall not be conducted if existing conditions indicate such activity would cause a violation of water quality standards. Planned activities must be postponed until the threat of causing a violation of water quality standards has been abated.
- H. **Project Modification.** The Applicant must submit any changes to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this Certification, to the San Diego Water Board for prior review and written approval. If the San Diego Water Board is not notified of a significant change to the Project, it will be considered a violation of this Certification.
- I. **Certification Distribution Posting.** During Project construction, the Applicant must maintain a copy of this Certification at the Project site. This Certification must be available at all times to site personnel and agencies. A copy of this Certification shall also be provided to any contractor or subcontractor performing construction work, and the copy shall remain in their possession at the Project site.
- J. **Inspection and Entry.** The Applicant must allow the San Diego Water Board or the State Water Resources Control Board, and/or their authorized representative(s) (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents as may be required under law, to:
1. Enter upon the Project or Compensatory Mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Certification;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Certification;
 3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Certification; and
 4. Sample or monitor, at reasonable times, for the purposes of assuring Certification compliance, or as otherwise authorized by the Clean Water Act or Water Code, any substances or parameters at any location.
- K. **Enforcement Notification.** In the event of any violation or threatened violation of the conditions of this Certification, the violation or threatened violation shall be subject to any remedies, penalties, process or sanctions as provided for under State law. For purposes of section 401(d) of the Clean Water Act, the applicability of any State law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this Certification.
- L. **Certification Actions.** This Certification may be modified, revoked and reissued, or terminated for cause including but not limited to the following:
1. Violation of any term or condition of this Certification;
 2. Monitoring results indicate that continued Project activities could violate water quality objectives or impair the beneficial uses of the Agua Hedionda Outer Lagoon and the coastal waters offshore of the North Beach, Middle Beach, and South Beach areas of Carlsbad State Beaches in the City of Carlsbad;
 3. Obtaining this Certification by misrepresentation or failure to disclose fully all relevant facts;
 4. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; and
 5. Incorporation of any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.
- The filing of a request by the Applicant for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Certification condition.
- M. **Duty to Provide Information.** The Applicant shall furnish to the San Diego Water Board, within a reasonable time, any information which the San Diego Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Certification or to determine compliance with this Certification.

- N. **Property Rights.** This Certification does not convey any property rights of any sort, or any exclusive privilege.
- O. **Petitions.** Any person aggrieved by this action of the San Diego Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with the California Code of Regulations, title 23, sections 3867 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Certification. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

III. CONSTRUCTION BEST MANAGEMENT PRACTICES

- A. **Approvals to Commence Construction.** The Applicant shall not commence Project construction until all necessary federal, State, and local approvals are obtained.
- B. **Personnel Education.** Prior to the start of each dredge cycle, the Applicant must educate all personnel on the requirements in this Certification, pollution prevention measures, spill response measures, and BMP implementation and maintenance measures.
- C. **Spill Containment Materials.** The Applicant must, at all times, maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the United States and/or State.
- D. **General Construction Storm Water Permit.** Prior to start of Project construction, the Applicant must, as applicable, obtain coverage under, and comply with, the requirements of the statewide Water Quality Order No. 2009-0009-DWQ, the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activity, (General Construction Storm Water Permit) and any reissuance. If Project construction activities do not require coverage under the General Construction Storm Water Permit, the Applicant must develop and implement a runoff management plan (or equivalent construction BMP plan) to prevent the discharge of sediment and other pollutants during construction activities.
- E. **Waste Management.** The Applicant must properly manage, store, treat, and dispose of wastes in accordance with applicable federal, state, and local laws and regulations. Waste management shall be implemented to avoid or minimize exposure of wastes to precipitation or storm water runoff. The storage, handling, treatment, or disposal of waste shall not create conditions of pollution, contamination or nuisance as defined in Water Code section 13050. Upon Project completion, all Project generated debris, building materials, excess material, waste, and trash shall be removed from the Project site(s) for disposal at an authorized landfill or other disposal site in compliance with federal, state and local laws and regulations.

- F. **Waste Management.** Except for a discharge permitted under this Certification, the dumping, deposition, or discharge of trash, rubbish, unset cement or asphalt, concrete, grout, damaged concrete or asphalt, concrete or asphalt spoils, wash water, organic or earthen material, steel, sawdust or other construction debris waste from Project activities directly into waters of the United States and or State, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited.
- G. **Downstream Erosion.** Discharges of concentrated flow during construction or after Project completion must not cause downstream erosion or damage to properties or aquatic habitats.
- H. **Construction Equipment.** All equipment must be washed prior to transport to the Project site and must be free of sediment, debris, and foreign matter. All equipment used in direct contact with surface water shall be steam cleaned prior to use. All equipment using gas, oil, hydraulic fluid, or other petroleum products shall be inspected for leaks prior to use and shall be monitored for leakage. Stationary equipment (e.g., motors, pumps, generator, etc.) shall be positioned over drip pans or other types of containment.
- I. **Process Water.** Water containing mud, silt, or other pollutants from equipment washing or other activities, must not be discharged to waters of the United States and/or State or placed in locations that may be subjected to storm water runoff flows. Pollutants discharged to areas within a stream diversion must be removed at the end of each workday or sooner if rain is predicted.
- J. **Hazardous Materials.** Except as authorized by this Certification, substances hazardous to aquatic life including, but not limited to, petroleum products, unused cement/concrete, asphalt, and coating materials, must be prevented from contaminating the soil and/or entering waters of the United States and/or State. BMPs must be implemented to prevent such discharges during each Project activity involving hazardous materials.
- K. **Limits of Disturbance.** The Applicant shall clearly define the limits of Project disturbance to waters of the United States and/or State using highly visible markers such as flag markers, construction fencing, or silt barriers prior to commencement of Project construction activities within those areas.
- L. **On-site Qualified Biologist.** The Applicant shall designate an on-site qualified biologist to monitor Project construction activities within or adjacent to waters of the United States and/or State to ensure compliance with the Certification requirements. The biologist shall be given the authority to stop all work on-site if a violation of this Certification occurs or has the potential to occur. Records and field notes of the biologist's activities shall be kept on-site and made available for review upon request by the San Diego Water Board.

- M. **Beneficial Use Protection.** The Applicant must take all necessary measures to protect the beneficial uses of waters of the Agua Hedionda Outer Lagoon and the coastal waters offshore of the North Beach, Middle Beach, and South Beach areas of Carlsbad State Beach. This Certification requires compliance with all applicable requirements of the Basin Plan. If at any time, an unauthorized discharge to surface waters occurs or monitoring indicates that the Project is violating, or threatens to violate, water quality objectives, the associated Project activities shall cease immediately and the San Diego Water Board shall be notified in accordance with Notification Requirement VII.B of this Certification. Associated Project activities may not resume without approval from the San Diego Water Board.
- N. **Sand Composition.** The dredged material used for beach replenishment or near shore disposal must have at least 80% sand and no more than 10% difference in sand composition from the receiving beach, and must not have significant chemical contamination. The Project must not impact the aesthetic characteristics of the receiving beaches and/or adjacent ocean waters.
- O. **Trash.** The dredged material deposited on beach areas must be free of trash and debris.

IV. **POST-CONSTRUCTION BEST MANAGEMENT PRACTICES**

- A. **Post-Construction Discharges.** The Applicant shall not allow post-construction discharges from the Project site to cause or contribute to on-site or off-site erosion or damage to properties or ocean habitats.

V. **PROJECT IMPACTS AND COMPENSATORY MITIGATION**

- A. **Project Impact Avoidance and Minimization.** The Project must avoid and minimize adverse impacts to waters of the United States and/or State to the maximum extent practicable.
- B. **Authorized Project Impacts to Receiving Waters.** Unavoidable Project impacts must not exceed authorized maintenance dredging of up to 500,000 cubic yards and 32.4 acres of Agua Hedionda Outer Lagoon and placement of the dredged sand material on 6.7 acres of intertidal beach sand nourishment areas along the North Beach, Middle Beach, and South Beach segments of Carlsbad State Beach.
- C. **Beach Recreational Activities.** Placement of sand on area beaches shall occur outside of the summer season (Memorial Day weekend through Labor Day of any year).

- D. **California Least Tern.** To avoid potential impacts to the California least tern breeding period dredging can occur between September 15 and April 15, with the option of extending the dredge period to April 30 if approved in writing by the San Diego Water Board in consultation with the USACOE, California Coastal Commission, and California Department of Fish and Wildlife.
- E. **Eelgrass Impacts and Mitigation.** A pre-construction eelgrass survey must be completed in accordance with the requirements of the California Eelgrass Mitigation Policy (CEMP; National Marine Fisheries Service 2014) by a qualified biologist, prior to initiation of construction activities at the site. This survey must include both aerial and density characterization of the beds. If eelgrass is found during the pre-construction survey, a post-construction survey must be performed by a qualified biologist within 30 days following project completion to quantify any unanticipated losses to eelgrass habitat. Impacts must then be determined from a comparison of pre- and post-construction survey results. Impacts to eelgrass outside of the dredge zone, if any, must be mitigated through conformance with the CEMP, which defines the mitigation ratio and other requirements to achieve mitigation for significant eelgrass impacts. If required following the post-construction survey, the CEMP defined mitigation must be developed; submitted and approved by the San Diego Water Board, USACOE, and National Marine Fisheries Service; and implemented to offset losses to eelgrass
- F. **Caulerpa Taxifolia.** If *Caulerpa taxifolia* is found prior to or during implementation of dredge and fill activities, the Applicant must not begin or continue dredge and/or fill activities until authorized by the San Diego Water Board. If the invasive seaweed is discovered, it must not be disturbed and the San Diego Water Board must be notified within 24 hours of the discovery.
- G. **California Grunion.** No excavation, construction, or maintenance activities authorized under this Certification shall be conducted within potential spawning habitat of the California grunion (*Leuresthes tenuis*), except as provided below. California grunion is a State managed species, and the intertidal zone at the Project site is potential spawning habitat. A fact sheet describing the unique reproductive behavior of grunion is available at:
<https://www.wildlife.ca.gov/Fishing/Ocean/Grunion#28352307-grunion-facts-and-faqs>
1. To the greatest extent possible, any work seaward of the semilunar high tide line must be scheduled to occur outside of the grunion spawning season, which is March 1 through August 31.
 2. If work during grunion spawning season is essential for Project effectiveness, the following conditions shall apply from March 1 through August 31:

- a. **Day before the First Date of a Run Series.** Project activity that entails sand disturbance seaward of the semilunar high tide line can be conducted on the day before the first date of a predicted run series. This day constitutes a narrow window of time during which egg nests and developing larvae are unlikely to be present in the sand; larvae from the previous run series likely would have been flushed by the previous night's high tide, and new eggs likely won't be deposited for at least 24 hours. As an example, sand disturbance seaward of the semilunar high tide line could occur on July 17, which is the day before the first date of the predicted run series that starts July 18 (the predicted four-day run series is July 18, 19, 20, and 21). Sand-disturbance activity performed on the day before the first date of a predicted run series allows time for the intertidal spawning zone to be smoothed by one high tide subsequent to the sand disturbance and prior to the first predicted spawning.
- b. **Other Days.** Prior to Project activity that entails sand disturbance seaward of the semilunar high tide mark on other days during the spawning season, the presence or absence of egg nests in or near the work area must first be determined by monitoring for the presence of adult grunion on the beach during predicted runs.
 - i. A qualified biologist or appropriately trained personnel shall monitor for the presence of adult grunion during the predicted grunion runs. Monitoring must be done on all four nights of the predicted run series prior to the work activity, except if grunion are observed spawning within the active placement, construction, or work area or a 10-yard buffer on a given night, the presence of egg nests can be assumed and surveys on subsequent nights are not required. For example, if grunion are observed in the active placement, construction, or work area or the 10-yard buffer on night 1, then monitoring on nights 2, 3, and 4 would not be required. If grunion are not observed within the active placement, construction, or work area or the 10-yard buffer on night 1, then night 2 must be surveyed and so forth.
 - ii. Monitoring must start at the time of the high tide and continue for two hours or until the grunion stop running, whichever is later. For each night of monitoring, recorded information must include the time period monitored, grunion run time and duration, approximate grunion density within the work area and 10-yard buffer, and approximate grunion density in a broader area (i.e., within approximately 50 yards up-coast or 50 yards down-coast of the work area).
 - iii. If grunion spawning at a Walker scale of 2 or above (per Martin et al. 1999) is observed within the active placement, construction, or work area or 10-yard buffer on any night of a four-day run series, then Project activity that entails sand disturbance seaward of the semilunar high tide line shall be postponed or relocate the discharge point to a different area without grunion concerns until after the egg incubation period (i.e., until the day before the

first date of the next predicted run, as described above in section V.2.a above).

- iv. If grunion spawning is *not* observed or if runs are observed at a Walker scale of 0 or 1 (per Martin et al. 1999) within the active placement, construction, or work area or 10-yard buffer on all four nights of a predicted run series, then the absence of egg nests and incubation activity near the active placement, construction, or work area can be assumed and, if needed, Project activity that entails sand disturbance can be conducted seaward of the semilunar high tide line up to and including the day before the date of the next predicted run. For example, if no grunion were observed during the predicted runs on July 4, 5, 6 and 7, and the date of the next predicted run is July 18, then work can occur seaward of the semilunar high tide line from July 8 through July 17.

VI. MONITORING AND REPORTING REQUIREMENTS

- A. **Representative Monitoring.** Samples and measurements taken for the purpose of monitoring under this Certification shall be representative of the monitored activity.
- B. **At least 10 days prior to the commencement of each dredge and disposal cycle,** the Applicant must notify the San Diego Water Board, in writing, of the scheduled start and stop dates for dredge and dredged material disposal activities.
- C. **USEPA Test Procedures.** Monitoring must be conducted according to United States Environmental Protection Agency (USEPA) test procedures approved under Title 40, Code of Federal Regulations (CFR), Part 136, *Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act* as amended, unless other test procedures have been specified in this Certification.
- D. **Monitoring Instruments.** All monitoring instruments and devices which are used by the discharger to fulfill the prescribed monitoring program must be properly maintained and calibrated as necessary to ensure their continued accuracy.
- E. **Certified Laboratory.** All laboratory analyses must be performed in a laboratory certified to perform such analyses under the State Water Resources Control Board's Environmental Laboratory Accreditation Program or a laboratory approved by the San Diego Water Board.
- F. **Monitoring Reports.** Monitoring results shall be reported to the San Diego Water Board at the intervals specified in section VI of this Certification.
- G. **Monitoring and Reporting Revisions.** The San Diego Water Board may make revisions to the monitoring program at any time during the term of this certification and may reduce or increase the number of parameters to be monitored, locations monitored, the frequency of monitoring, or the number and size of samples collected.

- H. **Retain Records.** The Applicant must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this Certification, and records of all data used to complete the application for this Certification. Records must be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the San Diego Water Board.
- I. **Records of Monitoring Information.** Records of monitoring information shall include:
1. The date, exact place, and time of sampling or measurements;
 2. The individual(s) who performed the sampling or measurements;
 3. The date(s) analyses were performed;
 4. The individual(s) who performed the analyses;
 5. The analytical techniques or methods used; and
 6. The results of such analyses.
- J. **Dredged Material Evaluation.** Dredged material must be sampled and tested according to the document entitled "*1991 Evaluation of Dredge Materials Proposed for Ocean Disposal*" under the direction and approval of the USACOE and USEPA. Prior to the commencement of dredging, the Applicant shall provide a copy of the results of the approved sampling analysis plan submitted to the USACOE and evidence the USACOE has approved the proposed dredged sand material as suitable for deposition at the approved beach locations, pursuant to the USACOE permit.
- K. **Water Quality Monitoring.** The Applicant shall perform water quality monitoring and at the authorized dredge sites located in Agua Hedionda Outer Lagoon and at the authorized beach sand nourishment sites in the North Beach, Middle Beach, and South Beach segments of Carlsbad State Beach.
1. Sampling shall occur at four sampling stations at the dredge site(s) in the Agua Hedionda Outer Lagoon as specified below:
 - a. Dredge Activity Station A is within 100 feet of the dredging operations;
 - b. Dredge Activity Station B is 100 feet down current of the dredging operations;
 - c. Dredge Activity Station C is 300 feet down current of the dredging operations;and

- d. Dredge Activity Station D is the control site in a nearby area not affected by the dredge operations.
2. Sampling shall occur in coastal waters within 100 feet beyond the surf zone at four sampling stations at each active beach sand nourishment site:
 - a. Beach Sand Nourishment Station E is 100 feet up current of the sand disposal site;
 - b. Beach Sand Nourishment Station F is 100 feet down current of the sand disposal site;
 - c. Beach Sand Nourishment Station G is 300 feet down current of the sand disposal site; and
 - d. Beach Sand Nourishment Station H is the control site in a nearby area not affected by the disposal operations.
3. **Dredge Activity Monitoring Frequency.** During dredging activities, weekly sampling, except TSS and TRPH which will be sampled by monthly grab sample, shall occur at the four locations outlined in section VI.K.1 above. Sampling and analyses shall, at a minimum, include: temperature; salinity; pH; turbidity; total suspended solids (TSS); total recoverable petroleum hydrocarbons (TRPH); and dissolved oxygen. Turbidity must be reported in percent transmittance and nephelometric turbidity units (NTUs). The monthly samples collected for TSS and TRPH must be mid depth grab samples. All other data must be collected at one-meter intervals from the water's surface to the seafloor. Monitored water quality measurements for turbidity, dissolved oxygen and pH, shall be compared to "ambient" reference measurements collected at Dredge Activity Station D. The results of the water quality monitoring and assessment must be submitted with the Maintenance Dredging and Beach Nourishment Report required under section VI.M of this Certification.
4. **Beach Sand Nourishment Monitoring Frequency.** During disposal at a receiver beach site, weekly sampling must occur at the four locations outlined in section VI.K.2 above at each receiver beach site. Sampling and analyses must, at a minimum, include: temperature; salinity; pH; turbidity; TSS; TRPH; and dissolved oxygen. Turbidity must be reported in percent transmittance and NTUs. Samples collected for TSS and TRPH must be mid depth grab samples. All other data must be collected at one-meter intervals from the water's surface to the seafloor. Monitored water quality measurements for turbidity, dissolved oxygen and pH, shall be compared to "ambient" reference measurements collected at Station H. The results of the water quality monitoring and assessment must be submitted with the Maintenance Dredging and Beach Nourishment Report required under section VI.M of this Certification.

5. **Compliance Criteria.** Receiving Water Limitations are provided in section II.F. of this Certification. The point of compliance with these receiving water limitations shall be located 300 feet from the edge of the Project construction area at Dredge Activity Station C for dredging activities and Beach Sand Nourishment Station G for beach sand nourishment activities. The Applicant must take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
- L. **Visual Observations.** During sample collection conducted pursuant to this monitoring and reporting program, visual observations must also be made and recorded and submitted as part of the required Maintenance Dredging and Beach Nourishment Reports required under section VI.M of this Certification. The following observations must occur and be recorded:
1. Speed and direction of the currents;
 2. Tidal stage;
 3. Appearance of rubbish or refuse (including cans, bottles, paper, plastic, etc.), garbage, trash or any other solid waste;
 4. Appearance of oil or other materials of petroleum origin;
 5. Discoloration and extent of any visible turbidity plume;
 6. Presence of nuisance odors attributable to the dredge activity or dredged material discharge to the beach disposal area; and
 7. Photo documentation of the Project activities. Photo documentation must be conducted in accordance with the State Water Resources Control Board Standard Operating Procedure 4.2.1.4.¹ The Applicant must conduct photo documentation of the Project site and shoreline disposal areas prior to, during, and after Project construction. In addition, photo documentation must include Geographic Positioning System (GPS) coordinates for each of the photo points referenced. The report must include a compact disc that contains digital copies of all required photos (jpeg or similar file type).
- M. **Maintenance Dredging and Beach Nourishment Reports.** The Applicant must submit a Maintenance Dredging and Beach Nourishment Report for the 2020/21 dredge maintenance cycle project authorized under this Certification. The Report shall describe the status of Project implementation, receiving water monitoring, compensatory mitigation (if required by CEMP) and compliance with all requirements of this Certification. The Report must be submitted to the San Diego Water Board no later than 90 days following the completion of the 2020/21 dredge maintenance cycle and must

¹ Available at

https://www.waterboards.ca.gov/sandiego/water_issues/programs/401_certification/docs/401c/401PhotoDocRB9V713.pdf

include the following information:

1. The names, qualifications, and affiliations of the persons contributing to the report; The status, progress, and anticipated future schedule for Project activities including dredging and soil placement activities;
 2. A description of Project delays encountered or anticipated that may affect the schedule for Project completion;
 3. A description of each incident of noncompliance during the monitoring period and its cause, the period of the noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance;
 4. Calculations of the daily volume (in cubic yards) of dredge material, the location from which the material was removed, and the disposal location of the material;
 5. The total volume (in cubic yards) of dredged material removed during the maintenance project and the total volume (in cubic yards) of material deposited at each final beach disposal location, and each locations' respective project commencement and completion dates;
 6. The results of the water quality monitoring required under section VI.K of this Certification. A summary table of the monitoring results with a comparison to receiving water limitation compliance criteria shall be provided;
 7. The results of the visual observations monitoring required under section VI.L of this Certification. A summary table of the monitoring results with a comparison to receiving water limitation compliance criteria shall be provided; and
 8. An evaluation and interpretation of the water quality data required under section VI.K and visual observations required under section VI.L including interpretations and conclusions as to whether applicable receiving water limitations were attained at each monitoring station.
- N. **Reporting Authority.** The submittal of information required under this Certification, or in response to a suspected violation of any condition of this Certification, is required pursuant to Water Code section 13383. Civil liability may be administratively imposed by the San Diego Water Board for failure to submit information pursuant to Water Code section 13385.

- O. **Electronic Document Submittal.** The Applicant must submit all reports and information required under this Certification in electronic format via e-mail to SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc or USB flash drive and delivered to:

California Regional Water Quality Control Board
San Diego Region
Attn: 401 Certification No. R9-2020-0232:865610:mporter
2375 Northside Drive, Suite 100
San Diego, California 92108

Each electronic document must be submitted as a single file, in Portable Document Format (PDF), converted to text searchable format using Optical Character Recognition (OCR), and not be password protected. All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Please direct questions about large document submittal procedures to Mission Support Services staff at (619) 516-1990. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: Certification No. R9-2020-0232:865610:mporter.

- P. **Document Signatory Requirements.** All applications, reports, or information submitted to the San Diego Water Board must be signed as follows:
1. For a corporation, by a responsible corporate officer of at least the level of vice president.
 2. For a partnership or sole proprietorship, by a general partner or proprietor, respectively.
 3. For a municipality, or a state, federal, or other public agency, by either a principal executive officer or ranking elected official.
 4. A duly authorized representative may sign applications, reports, or information if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated activity.
 - c. The written authorization is submitted to the San Diego Water Board Executive Officer.

If such authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the Project, a new authorization satisfying the above requirements must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative.

Q. Document Certification Requirements. All applications, reports, or information submitted to the San Diego Water Board must be certified as follows:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

VII. NOTIFICATION REQUIREMENTS

- A. Discharge Commencement Notification.** The Applicant must notify the San Diego Water Board in writing **at least 5 days prior to** the start of Project construction.
- B. Required Agency Permits.** Prior to the commencement of dredging, the Applicant shall submit to the San Diego Water Board, all necessary local, state, and federal discretionary permits, including approval from the U.S. Army Corps of Engineers (ACOE) and California Department of Fish and Wildlife (CDFW). The Applicant shall inform the San Diego Water Board of any changes to the Project required.
- C. Twenty-Four Hour Non-Compliance Reporting.** The Applicant shall report any noncompliance which may endanger health or the environment. Any such information shall be provided orally to the San Diego Water Board within **24 hours** from the time the Applicant becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Applicant becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The San Diego Water Board, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.
- D. Hazardous Substance Discharge.** Except as provided in Water Code section 13271(b), any person who, without regard to intent or negligence, causes or permits any hazardous substance or sewage to be discharged in or on any waters of the State, shall as soon as (a) that person has knowledge of the discharge, (b)

notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the County of San Diego, in accordance with California Health and Safety Code section 5411.5 and the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State toxic disaster contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.17), and immediately notify the State Water Board or the San Diego Water Board of the discharge. This provision does not require reporting of any discharge of less than a reportable quantity as provided for under subdivisions (f) and (g) of section 13271 of the Water Code unless the Applicant is in violation of a Basin Plan prohibition.

- E. **Oil or Petroleum Product Discharge.** Except as provided in Water Code section 13272(b), any person who without regard to intent or negligence, causes or permits any oil or petroleum product to be discharged in or on any waters of the State, or discharged or deposited where it is, or probably will be, discharged in or on any waters of the State, shall, as soon as (a) such person has knowledge of the discharge, (b) notification is possible, and (c) notification can be provided without substantially impeding cleanup or other emergency measures, immediately notify the California Office of Emergency Services of the discharge in accordance with the spill reporting provision of the State oil spill contingency plan adopted pursuant to Government Code Title 2, Division 1, Chapter 7, Article 3.7 (commencing with section 8574.1). This requirement does not require reporting of any discharge of less than 42 gallons unless the discharge is also required to be reported pursuant to Clean Water Act section 311, or the discharge is in violation of a Basin Plan prohibition.
- F. ***Caulerpa Taxifolia*.** The Applicant must conduct a surveillance-level survey for *Caulerpa taxifolia*, in accordance with the requirements in the National Marine Fisheries Service's *Caulerpa* Control Protocol (version 4), dated February 25, 2008, not more than 90 days before the initiation of construction to determine presence/absence of this species within the immediate vicinity of the project. If *Caulerpa taxifolia* is identified during a survey, or at any other time before, during, or within 120 days following completion of authorized activities, both National Marine Fisheries Service and California Department of Fish and Wildlife must be contacted within 24 hours of first noting the occurrence. In the event *Caulerpa taxifolia* is detected, all disturbing activity must cease until such time as the infestation has been isolated and treated, or the risk of spread from the disturbing activity is eliminated in accordance with the *Caulerpa* Control Protocol
- G. **Anticipated Noncompliance.** The Applicant shall give advance notice to the San Diego Water Board of any planned changes in the Project or the Compensatory Mitigation project which may result in noncompliance with Certification conditions or requirements.

H. **Transfers.** This Certification is not transferable in its entirety or in part to any person or organization except after notice to the San Diego Water Board in accordance with the following terms:

1. **Transfer of Property Ownership:** The Applicant must notify the San Diego Water Board of any change in ownership of the Project area. Notification of change in ownership must include, but not be limited to, a statement that the Applicant has provided the purchaser with a copy of the Section 401 Water Quality Certification and that the purchaser understands and accepts the certification requirements and the obligation to implement them or be subject to liability for failure to do so; the seller and purchaser must sign and date the notification and provide such notification to the San Diego Water Board **within 10 days of the transfer of ownership.**

Upon properly noticed transfers of responsibility, the transferee assumes responsibility for compliance with this Certification and references in this Certification to the Applicant will be interpreted to refer to the transferee as appropriate. Transfer of responsibility does not necessarily relieve the Applicant of responsibility for compliance with this Certification in the event that a transferee fails to comply.

VIII. CALIFORNIA ENVIRONMENTAL QUALITY ACT COMPLIANCE

- A. The City of Carlsbad is the Lead Agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000, et seq.) section 21067, and CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.) section 15304(g), and has determined that the Project is categorically exempt (September 21, 2017).
- B. The San Diego Water Board is a Responsible Agency under CEQA (Public Resources Code section 21069; CEQA Guidelines section 15381). The San Diego Water Board has independently determined that the project is categorically exempt because it is a maintenance dredging project where the spoil is deposited in a spoil area authorized by all applicable state and federal regulatory agencies.
- C. As a Responsible Agency under CEQA, the San Diego Water Board will file a Notice of Exemption in accordance with CEQA Guidelines section 15062.

IX. SAN DIEGO WATER BOARD CONTACT PERSON

Mike Porter, Engineering Geologist
Telephone: (619) 521-3967
Email: Mike.Porter@waterboards.ca.gov

X. WATER QUALITY CERTIFICATION

I hereby certify that the proposed discharge from the **Agua Hedionda Outer Lagoon Maintenance Dredging and Beach Nourishment** (Certification No. R9-2020-0232) will comply with the applicable provisions of sections 301 ("Effluent Limitations"), 302 ("Water Quality Related Effluent Limitations"), 303 ("Water Quality Standards and Implementation Plans"), 306 ("National Standards of Performance"), and 307 ("Toxic and Pretreatment Effluent Standards") of the Clean Water Act. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "Statewide General Waste Discharge Requirements for Dredged or Fill Discharges that have Received State Water Quality Certification (General WDRs)," which requires compliance with all conditions of this Water Quality Certification. Please note that enrollment under Order No. 2003-017-DWQ is conditional and, should new information come to our attention that indicates a water quality problem, the San Diego Water Board may issue individual waste discharge requirements at that time.

Except insofar as may be modified by any preceding conditions, all Certification actions are contingent on (a) the discharge being limited to, and all proposed mitigation being completed in strict compliance with, the applicants' Project description and/or the description in this Certification, and (b) compliance with all applicable requirements of the Basin Plan.

I, David W. Gibson, Executive Officer, do hereby certify the forgoing is a full, true, and correct copy of Certification No. R9-2020-0232 issued on November 25, 2020.

DAVID W. GIBSON
Executive Officer
San Diego Water Board

25 November 2020

Date

ATTACHMENT 1 – DEFINITIONS

Activity - when used in reference to a permit means any action, undertaking, or project including, but not limited to, construction, operation, maintenance, repair, modification, and restoration which may result in any discharge to waters of the state.

Buffer - means an upland, wetland, and/or riparian area that protects and/or enhances aquatic resource functions associated with wetlands, rivers, streams, lakes, marine, and estuarine systems from disturbances associated with adjacent land uses.

California Rapid Assessment Method (CRAM) - is a wetland assessment method intended to provide a rapid, scientifically defensible and repeatable assessment methodology to monitor status and trends in the conditions of wetlands for applications throughout the state. It can also be used to assess the performance of compensatory mitigation projects and restoration projects. CRAM provides an assessment of overall ecological condition in terms of four attributes: landscape context and buffer, hydrology, physical structure and biotic structure. CRAM also includes an assessment of key stressors that may be affecting wetland condition and a "field to PC" data management tool (eCRAM) to ensure consistency and quality of data produced with the method.

Compensatory Mitigation Project - means compensatory mitigation implemented by the Applicant as a requirement of this Certification (i.e., applicant -responsible mitigation), or by a mitigation bank or an in-lieu fee program.

Discharge of Dredged Material – means any addition of dredged material into, including redeposit of dredged material other than incidental fallback within, the waters of the United States and/or State.

Discharge of Fill Material – means the addition of fill material into waters of the United States and/or State.

Dredged Material – means material that is excavated or dredged from waters of the United States and/or State.

Ecological Success Performance Standards – means observable or measurable physical (including hydrological), chemical, and/or biological attributes that are used to determine if a compensatory mitigation project meets its objectives.

Enhancement – means the manipulation of the physical, chemical, or biological characteristics of an aquatic resource to improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s) but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Cabrillo Power I LLC
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Certification No. R9-2020-0232

Establishment – means the manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist. Creation results in a gain in aquatic resource area.

Fill Material – means any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of a water body.

Isolated Wetland – means a wetland with no surface water connection to other aquatic resources.

Mitigation Bank – means a site, or suite of sites, where resources (e.g., wetlands, streams, riparian areas) are restored, established, enhanced, and/or preserved for the purpose of providing mitigation for impacts authorized by this Certification.

Preservation - means the removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/ historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/ historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area.

Restoration - means the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Start of Project Construction - For the purpose of this Certification, "start of Project construction" means to engage in a program of on-site construction, including site clearing, grading, dredging, landfilling, changing equipment, substituting equipment, or even moving the location of equipment specifically designed for a stationary source in preparation for the fabrication, erection or installation of the building components of the stationary source within waters of the United States and/or State.

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Uplands - means non-wetland areas that lack any field-based indicators of wetlands or other aquatic conditions. Uplands are generally well-drained and occur above (i.e., up-slope) from nearby aquatic areas. Wetlands can, however, be entirely surrounded by uplands. For example, some natural seeps and constructed stock ponds lack aboveground hydrological connection to other aquatic areas. In the watershed context, uplands comprise the landscape matrix in which aquatic areas form. They are the primary sources of sediment, surface runoff, and associated chemicals that are deposited in aquatic areas or transported through them.

Water Quality Objectives and Other Appropriate Requirements of State Law – means the water quality objectives and beneficial uses as specified in the appropriate water quality control plan(s); the applicable provisions of sections 301, 302, 303, 306, and 307 of the Clean Water Act; and any other appropriate requirement of state law.

Waters of the State - means any surface water or groundwater, including saline waters, within the boundaries of the State. [Water Code section 13050(e)].

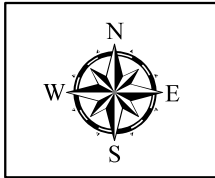
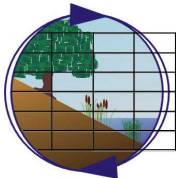
ATTACHMENT 2

PROJECT MAPS, FIGURES, PLANS

Figure 1 – Project Vicinity Map

Figure 2 – Pre-Dredge Eelgrass Survey

Figure 3 – Receiver Beaches



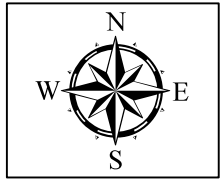
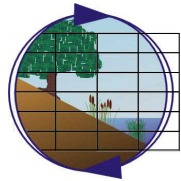
Project Vicinity Map
Encina Power Station - Agua Hedionda Lagoon
2017-2018 Agua Hedionda Lagoon Maintenance Dredging

Figure 1



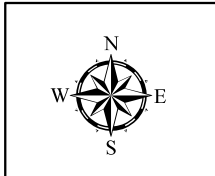
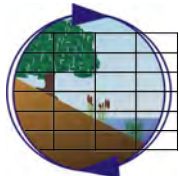
Legend

- Dredge Limit
- Eelgrass Vegetated Cover
- Eelgrass Areal Extent
- - - Eelgrass Spatial Distribution



Pre-dredge Eelgrass Survey - October 2017
Encina Power Station - Agua Hedionda Lagoon
2017-2018 Agua Hedionda Lagoon Maintenance Dredging

Figure 2



Receiver Beaches
2014 - 2015 Agua Hedionda Lagoon
Maintenance Dredging Project

Figure 3