Officer Eric Lopez
Tidelands Capital Improvement Program
City of Long Beach
333 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802

VIA CERTIFIED MAIL
RETURN RECEIPT REQESTED
No. 7009 2820 0001 6537 7344

TECHNICALLY CONDITIONED WATER QUALITY CERTIFICATION FOR THE PROPOSED COLORADO LAGOON RESTORATION AND MITIGATION BANK PROJECT (Corps' Project No. 2013-00656-BLR), COLORADO LAGOON, CITY OF LONG BEACH, LOS ANGELES COUNTY (File No. 14-100)

Dear Officer Lopez:

Board staff has reviewed your request on behalf of the Tidelands Capital Improvement Program (Applicant) for a Clean Water Act Section 401 Water Quality Certification for the above-referenced project. Your application was deemed complete April 9, 2015.

I hereby issue an order certifying that any discharge from the referenced project 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, and with other applicable requirements of State law. This discharge is also regulated under State Water Resources Control Board Order No. 2003 - 0017 - DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges that have received State Water Quality Certification" which requires compliance with all conditions of this Water Quality Certification.

Please read this entire document carefully. The Applicant shall be liable civilly for any violations of this Certification in accordance with the California Water Code. This Certification does not eliminate the Applicant's responsibility to comply with any other applicable laws, requirements and/or permits.

Should you have questions concerning this Certification action, please contact Dana Cole, Section 401 Program, at (213) 576-5733.

Samuel Unger

Samuel Unger, P.E.
Executive Officer

June 18, 2015
Date

DISTRIBUTION LIST

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ATTACHMENT A

Project Information
File No. 14-100

1. Applicant:

Officer Eric Lopez
Tidelands Capital Improvement Program
City of Long Beach
333 West Ocean Boulevard, 9th Floor
Long Beach, CA 90802

Phone: (562) 570-5690 Email: eric.lopez@longbeach.gov

2. Applicant's Agent:

Jack Malone
Anchor QEA Mission Viejo
27201 Puerta Real
Suite 350
Mission Viejo, CA 92691

Phone: (949) 347-2780 Fax: (949) 334-9646

3. Project Name:

Colorado Lagoon Restoration and Mitigation Bank

4. Project Location:

Colorado Lagoon, Los Angeles County

Latitude	Longitude
33.773447	-118.132802
33.773465	-118.131738
33.770847	-118.131690
33.770734	-118.130700
33.769958	-118.130664
33.768154	-118.129579
33.767591	-118.130037
33.769029	-118.131766
33.769901	-118.131861
33.769936	-118.134224
33.771767	-118.137165
33.772685	-118.137101
33.772728	-118.136079
33.771778	-118.134341
33.771609	-118.132878

5. Type of Project:

Lagoon Restoration within a mitigation bank

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6. Project Purpose:

The proposed project (Project) will restore upland, intertidal, and subtidal habitats in an established mitigation bank. Long-term improvements are planned for ecological functions and values of the Colorado Lagoon through habitat creation, restoration, and enhancement activities.

7. Project Background:

The Mitigation Bank will be used to provide mitigation credit(s) for impacts to waters of the United States, consistent with the 2008 *Compensatory Mitigation for Losses of Aquatic Resources, Final Rule*.

The Interagency Review Team (IRT) for the Mitigation Bank was convened by the Army Corps regulatory project manager along with staff from agencies including the U.S. Environmental Protection Agency, the California Coastal Commission, the California Department of Fish and Wildlife, the National Marine Fisheries Service, the U.S. Fish & Wildlife Service, the Southern California Coastal Water Research Project, the California State University Long Beach, and the Los Angeles and Santa Ana Regional Water Quality Control Boards.

The Army Corps released a public notice for the Mitigation Bank inviting public comment from February 19, 2014 through March 21, 2014. Public involvement was also made available through the City of Long Beach's California Environmental Quality Act (CEQA) Environmental Impact Report process.

8. Project Description:

The primary users of the mitigation bank will be the City and Port of Long Beach, private parties within the City of Long Beach, and other private entities within the mitigation bank's service area.

The service area for the Colorado Lagoon mitigation bank includes the geographic area between Point Fermin (San Pedro) to Newport Bay (Newport Beach). The Colorado Lagoon Bank can provide habitat similar to other sites within this geographic service area based on the same climate, sediments, watershed characteristics, and biological species.

Project activities include improving tidal connectivity between Colorado Lagoon and Marine Stadium, re-contouring the existing

lagoon shoreline to expand waters of the United States and create new aquatic habitats, filling deep portions of the lagoon to create shallow subtidal and intertidal habitat, creating a vegetated bioswale, planting eelgrass beds, and planting intertidal and upland transition areas with native vegetation. Incidental improvements to park amenities will also be completed, including replacing existing restrooms at Marina Vista Park, improving roadway crossings to accommodate the improved tidal connectivity, rearranging the existing sports fields complex, extending an existing pedestrian bridge to accommodate the restored shoreline contours, and constructing a walking trail.

Project activities that will affect waters of the State and United States will include:

- improving tidal connectivity between Colorado Lagoon and Marine Stadium;
- re-contouring the existing lagoon shoreline to expand waters of the State and United States;
- creating new aquatic habitats;
- filling deeper portions of the lagoon to create shallow subtidal and intertidal habitat;
- planting eelgrass beds;
- and planting intertidal and upland transition areas with native vegetation.

Additionally, the Project will include incidental upland improvements to maintain existing beneficial uses of the lagoon for recreation, and changes to existing infrastructure to accommodate the newly created waters of the United States.

Temporary construction-related impacts will occur within the footprint of the restoration activities. These temporary impacts will result from the presence of construction equipment required to perform the restoration activities described above. These are improvements designed with the single goal of improving ecological functions and values in Colorado Lagoon and adjacent

upland areas. Restoration of Colorado Lagoon has been a priority for the City for several years, and the proposed activities (Phase 2) will add to the improvements resulting from the already completed Phase 1 restoration activities.

Phase 1 restoration removed approximately 72,000 cubic yards of contaminated sediment from the lagoon. While beneficial, the dredging deepened the lagoon. The proposed Phase 2 restoration will make these areas shallower, consistent with the historical condition of the lagoon. Enhancement (functional lift) will occur over the entire project area by increasing the tidal range within the lagoon and increasing the tidal circulation and exchange in the lagoon. Thus, the proposed project will result only in temporary construction-related impacts and long-term ecological benefits.

The existing underground culvert between Colorado Lagoon and Marine Stadium will be replaced with an open earthen tidal channel. The new channel will improve tidal exchange between Colorado Lagoon and Marine Stadium and will create new tidal habitat including salt marsh and subtidal eelgrass habitat areas as well as intertidal habitat by converting existing upland areas.

The channel alignment generally follows the curvature of Eliot Street to its west. It will be approximately 1,160 feet long and have a varying cross section (varying slopes) with a bottom elevation of minus seven feet National Geodetic Vertical Datum of 1929 (NGVD29). The channel lining will be earthen, except in the channel sections under the bridges, which will have rock slope protection required to protect the bridge foundations. Salt marsh vegetation will be established in the intertidal areas. Although eelgrass will not be purposely transplanted into the open channel, it is expected to spread into the open channel from the adjacent eelgrass beds in Marine Stadium. Installed native vegetation along the top of the channel banks will serve to buffer the tidal habitat from the adjacent park use and provide a habitat transitional area for future sea level rise.

The Colorado Lagoon restoration project was initially designed to provide Total Maximum Daily Load (TMDL) compliance for pesticides and metals in the surface sediment. The City, which is required to meet Waste Load Allocations by 2018, decided to improve on that approach by developing a full habitat restoration program and mitigation bank while at the same time complying

with the sediment TMDLs.

Approximately 45,000 cubic yards of on-site sediment will be used as fill to create shallow subtidal and intertidal habitat and eelgrass beds in Colorado Lagoon. Restoration of shallower depths throughout the lagoon will provide conditions favorable for eelgrass, while also providing new soft-bottom shallow subtidal habitat for other species. However, in order to determine the best approach for:

(1) capping the western and northern portions of the lagoon sediment at elevations that will sustain eelgrass growth, and

(2) developing a target dredge depth for the central portion of the lagoon that would restore the surface sediment conditions while complying with TMDL requirements,

design assessments were made of the shoreline and sediment conditions. Sediment core samples were collected throughout the lagoon to supplement previous investigations and document geotechnical characteristics and chemical conditions.

Core samples were also collected throughout the shoreline area that will be excavated to create new intertidal and subtidal habitat and used as an onsite fill source to ensure the material meets the chemical and physical requirements needed to support the proposed benthic habitats. That portion of the lagoon has physical properties and organic carbon suitable to support plant and animal communities. All of the core samples were advanced past the target excavation depth to ensure that we considered the full range of excavation. All of the sediment is currently onsite and would be beneficially reused onsite, so there is no risk of introducing incompatible materials from offsite sources. In order to support the pile design effort, a subsequent evaluation was conducted near the floating bridge location to measure geotechnical data to a depth of approximately 50 feet below the ground surface.

The project is designed to meet TMDL compliance requirements as well as habitat restoration goals. The dredging and excavation will be sequenced so that if existing surface sediments do not meet TMDL requirements, they will be covered by onsite sediment that is chemically and physically suitable for biotic communities. Surface sediment will first be dredged from the Central Lagoon and placed

in the West Arm, to begin restoring the elevation of the West Arm to create valuable shallow water habitat. Sediment will be dredged or excavated from the North Arm shoreline and Central Lagoon shoreline areas and placed in the North Arm to elevations suitable for eelgrass to grow.

Once the target elevations in the North Arm have been reached, the remaining sediment from the North Arm shoreline and Central Lagoon shoreline will be placed into the West Arm as a habitat cap. Data show that in the area proposed for cut along the Central Lagoon shoreline and the North Arm shoreline, PCBs and pesticides were not detected in the samples. In two of the samples arsenic and nickel were slightly above the Effects Range Low (ERL) but well below the Effects Range Median (ERM) and in one of the samples copper was slightly above the ERL but well below the ERM. All of the other concentrations were below the ERL values. In all instances, the chemical concentrations observed in the proposed fill material were below aquatic risk thresholds.

Upland areas will be re-contoured to create tidally influenced habitat areas. Additional refinement of the conceptual restoration plans will occur as the construction plans are developed in coordination with the Interagency Review Team. All cut and fill and acreage values are approximate based on the conceptual plans and the current design expectations.

Eelgrass will be transplanted from donor sites in Marine Stadium and other areas of Alamitos Bay to the lagoon sites within the lagoon once they are filled to the appropriate elevation. Divers will use the anchor-bundle technique, a standard for eelgrass mitigation in Southern California. The method involves collecting eelgrass donor material, assembling into eelgrass transplant bundles, and transplanting bundles into the lagoon. Eelgrass donor material will be collected by experienced divers by hand from Marine Stadium and other areas of Alamitos Bay, and brought to Colorado Lagoon where the eelgrass site will be located. Eelgrass will be separated into the bundling units and then transplanted by divers on the day collected. Divers will plant bundles one meter on center throughout the transplant zone. The eelgrass transplant will occur during an approximate six-week period in late spring or early summer.

Native vegetation will be planted in upland areas to buffer the tidal habitat from the adjacent park use and provide a habitat transitional

area for future sea level rise. A bioswale of native vegetation, primarily coastal sage scrub and southern dune scrub, will be installed along the north shore and north arm of the lagoon to provide a buffer area between the lagoon and adjacent golf course and to provide transitional habitat area as sea level rises in the future. The bioswale will capture stormwater and sheet flow from surrounding areas before it enters the lagoon, benefitting water quality in the lagoon.

The existing pedestrian bridge currently extends across the west arm of the lagoon. Since the new subtidal and intertidal habitat will be re-contoured along the northern shoreline of the lagoon, the pedestrian bridge must be lengthened by approximately 150 feet to accommodate the habitat change.

As a result of creating the open channel to improve tidal exchange and create new subtidal and intertidal habitat, certain existing infrastructure and amenities in the upland areas will need to improved, moved, or reconstructed. These improvements and modifications include replacing existing restrooms, improving roadway crossings, rearranging the existing sports field complex, extending an existing pedestrian bridge, and constructing walking trails. These improvements will be completed entirely in upland areas outside of jurisdiction.

9. Federal Agency/Permit:	U.S. Army Corps of Engineers Individual Permit No. 2013-00656-BLR
10. Other Required Regulatory Approvals:	California Coastal Commission, Coastal Development Permit #5-14-1390
11. California Environmental Quality Act Compliance:	The City of Long Beach approved the project's *Final Environmental Impact Report* (FEIR) State Clearinghouse No. 2007111034) on October 8, 2008. A Notice of Determination for the FEIR was filed with the Los Angeles County Clerk on October 15, 2008. The City of Long Beach approved the project's FEIR *Addendum* on November 16, 2010. A Notice of Determination for the FEIR *Addendum* was filed with the Los Angeles County Clerk on November 17, 2010.

ATTACHMENT A

Project Information
File No. 14-100

12. Receiving Water:	Colorado Lagoon, tributary to Alamitos Bay, Los Cerritos Channel Watershed (Hydrologic Unit Code: 180701040702)
13. Designated Beneficial Uses:	REC-1, REC-2, COMM, WARM, WILD, BIOL, SHELL
14. Impacted Waters of the United States:	Ocean/Estuary/Bay: 4.75 temporary acres (3,380 linear feet)
15. Dredge Volume:	45,000 cubic yards
16. Related Projects Implemented/to be Implemented by the Applicant:	The City of Long Beach completed Phase 1 of the Colorado Lagoon restoration project, which entailed removing 72,000 cubic yards of contaminated sediments from the lagoon. Phase 1 included planting native vegetation in certain areas, removing storm drains, installing low-flow diversions and trash traps, and clearing the existing culvert connecting the lagoon with Marine Stadium. Phase 1 of the project was authorized by *Water Quality Certification No. 09-024.*
17. Avoidance/ Minimization Activities:	The Applicant has proposed to implement several Best Management Practices (BMPs), including, but not limited to, the following: <u>Eelgrass and Caulerpa</u> • The Applicant will perform a field survey to investigate the presence of the invasive algae *Caulerpa taxifolia* is conducted 30 to 60 days prior to commencement of construction, by qualified divers certified by the National Marine Fisheries Service (NMFS) to conduct such surveys. • The pre-construction Caulerpa surveys will be conducted according to the accepted criteria of the Southern California Caulerpa Action Team (SCCAT) for conducting surveys for the invasive algae and in accordance with the NMFS Caulerpa survey protocols. In accordance with the recommendations of the SCCAT and according to the NMFS Caulerpa Control Protocol

(Version 3, adopted March 12, 2007 [NMFS 2007]), a survey must be conducted in harbor areas that may be disturbed.

- In areas that are expected to be free of Caulerpa, such as Colorado Lagoon, a 20% visual Surveillance Level survey is required prior to any dredging.

- The pre-construction survey will also identify any other marine vegetation in the proposed construction area.

- The Applicant will transmit the survey results via Caulerpa Survey Reporting Form to NMFS within 48 hours of completion of the survey.

- If Caulerpa is identified in the project area, the City of Long Beach and NMFS will be notified within 24 hours of completion of the survey.

- The Applicant will ensure that a pre-construction eelgrass survey is conducted of the entire Lagoon and within 100 feet from the opening of the culvert into Marine Stadium during the period of March through October.

- The survey is considered valid by NMFS for a period of no more than 60 days, with the exception that surveys conducted in August through October will be valid until the following March 1.

- Pre-construction survey results will be provided by the Director of Parks, Recreation, and Marine to NMFS in an appropriate data format for the information to be mapped on the project drawings.

- The Applicant will ensure that a post-construction survey is conducted within 30 days of the cessation of construction activities to determine the actual area of eelgrass affected for mitigation purposes.

- If loss of eelgrass is noted in the post-dredge survey, the Applicant will be required to mitigate the loss of eelgrass in accordance with the Southern California Eelgrass Mitigation Policy (SCEMP), as per the SCEMP Revision 11 (NMFS 1991)

the loss of eelgrass habitat must be mitigated at a minimum 1.2:1 ratio.

- The Applicant will ensure that eelgrass mitigation be initiated within 135 days of project inception; projects requiring more than 135 days to complete may result in additional mitigation.

- A mitigation plan with a schedule is required 30 days prior to any construction or dredge activities. The amount of mitigation necessary will be determined by the difference between a pre-construction and post-construction survey.

- The Applicant will ensure that an eelgrass transplant report is completed following construction (Initial Report) and monitoring reports conducted at 6, 12, 24, 36, 48, and 60 months post-transplant.

- The Applicant will ensure that project achievement of specific milestones and criteria for success, as directed in the SCEMP along with guidelines for remedial actions, are documented. If the success criteria are not met, construction of a Supplementary Transplant Area and monitoring, for an additional 5 years may be required by NMFS.

Water Quality

- Prior to issuance of demolition and grading permits, the Applicant will demonstrate to the City that coverage has been obtained under the Construction NPDES Permit by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board (SWRCB) and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) number to the City Building Official.

- Prior to issuance of a grading permit, the Applicant will ensure that construction plans for the project include features meeting the applicable construction activity best management practices (BMPs) and erosion and sediment control BMPs published in the California Storm water BMP Handbook–Construction Activity or equivalent.

- The Applicant will submit a Storm Water Pollution Prevention Plan (SWPPP), in part to reduce the discharge of pollutants to

the maximum extent practicable using BMPs, control techniques and systems, design and engineering methods, and such other provisions as appropriate.

- The SWPPP will be prepared by a civil or environmental engineer and approved by the City Building Official prior to the issuance of any grading or building permits.
- A copy of the SWPPP will be kept at the project site.
- The Applicant will inspect BMP facilities before and after every rainfall event predicted to produce observable runoff and at 24-hour intervals during extended rainfall events, except on days when no ongoing site activity takes place.
- Pre-storm activities will include inspection of the major storm drain grate inlets and examination of other on-site surface flow channels and swales, including the removal of any debris that blocks the flow path.
- Post-storm activities will include inspection of the grate inlets for evidence of unpermitted discharges.
- Inspections will be scheduled monthly during the dry season and weekly during the wet season for the duration of project construction or until all areas are revegetated.
- During cleaning or clearing the culvert will be opened once every two weeks during the period of the greatest tidal fluctuations for two to three consecutive days to allow for maximum tidal exchange between Marine Stadium and Colorado Lagoon.
- The tidal exchange will occur during spring tides, if feasible, to allow for exchange during the period of greatest tidal fluctuation to achieve maximum water quality benefit.
- If tidal exchange during spring tides is not feasible due to erosion, flooding, or other engineering reasons, an alternative tidal exchange regime will be implemented by the Applicant.
- In addition to the tidal regime two subsurface aeration systems will be installed and utilized during construction activities that

will also close off the tidal flow of the culvert.

- The use of silt screen around each end of the culvert will be implemented during culvert flushing to minimize sediment and turbidity impacts to the adjacent receiving waters.

- The Applicant will monitor bacteria levels in the Colorado Lagoon on a daily basis during cleaning of the culvert and during construction of the open channel in order to ensure the integrity of the water is maintained for swimming in Colorado Lagoon during construction activities associated with the culvert and open channel.

- If water quality impacts the beneficial use (REC-1, REC 2) water quality standards, the Applicant will close the beach if necessary.

- Prior to grading activities, if groundwater dewatering will be necessary during project construction the Applicant will maintain compliance with the Waste Discharge Requirement for Discharges of Groundwater from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties (Order No. R4-2003-0111, NPDES No. CAG994004), or subsequent permit.

- Compliance will include a Report of Waste Discharge (ROWD) and an application for coverage under the permit to the Los Angeles Regional Water Quality Control Board at least 45 days prior to the start of dewatering and compliance with all applicable provisions in the permit, including water sampling, analysis, and reporting of dewatering related discharges.

- During dredging, the Applicant will require any contractor or employees to follow measures to control dispersion of contaminated sediments.

- Equipment used for dredging will be modified or specifically designed to control the dispersion of sediments.

- The Applicant will require any contractor or any employee to implement specific measures as required by the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and other regulatory agencies

during the process.

- Automatic systems (AS) will monitor the dredging operations with continuous data logging with automated interpretation and adjustments to the dredging operations with real-time feedback to the dredge operator.
- AS will monitor turbidity and other water quality conditions in the vicinity of the dredging operations with real-time adjustments by the dredging operators to control temporary water quality effects.
- AS measures to be implemented will be in compliance with the Corps, this Regional Board, and other regulatory agencies during the process.
- Prior to the issuance of any construction permits, the Applicant will verify that BMPs for all dredging activities, including silt curtain(s), have been incorporated into project plans.
- The Applicant will be responsible for performing and documenting the application of all BMPs.
- After construction activities the Applicant will monitor bacteria levels in the Colorado Lagoon on a weekly basis. If water quality exceeds the water contact recreational beneficial use water quality standards, the Applicant will close the beach if necessary.
- The Applicant will review the monitoring data on an annual basis and evaluate the water contact recreational beneficial use of the Lagoon.

18. Proposed Compensatory Mitigation: None

19. Required Compensatory Mitigation: The project is restoration, and as such requires no compensatory mitigation. See *Attachment B, Conditions of Certifications, Additional Conditions* for modifications and additions to the above.

ATTACHMENT B

Conditions of Certification
File No. 14-100

STANDARD CONDITIONS

Pursuant to §3860 of Title 23 of the California Code of Regulations (23 CCR), the following three standard conditions shall apply to this project:

1. This Certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to §13330 of the California Water Code and Article 6 (commencing with 23 CCR §3867).

2. This Certification action is not intended and shall not be construed to apply to 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 23 CCR Subsection 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.

3. Certification is conditioned upon total payment of any fee required pursuant to 23 CCR Chapter 28 and owed by the Applicant.

ADDITIONAL CONDITIONS

Pursuant to 23 CCR §3859(a), the Applicant shall comply with the following additional conditions:

1. The Applicant shall submit to this Regional Board copies of any other final permits and agreements required for this project, including, but not limited to, the U.S. Army Corps of Engineers' (ACOE) Section 404 Permit and the California Coastal Commission's (CCC) Coastal Development Permit. **These documents shall be submitted prior to any discharge to waters of the State.**

2. The Applicant shall adhere to the most stringent conditions indicated with either this Certification, the CCC's Coastal Development Permit, or the ACOE Section 404 Permit.

3. The Applicant shall comply with all water quality objectives, prohibitions, and policies set forth in the *Water Quality Control Plan, Los Angeles Region (1994),* as amended.

4. The Avoidance/Minimization activities proposed by the Applicant as described in Attachment A, No. **17**, are incorporated as additional conditions herein.

5. The Applicant and all contractors employed by the Applicant shall have copies of this Certification and all other regulatory approvals for this project on site at all times, and shall be familiar with all conditions set forth.

6. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to waters of the State. At no time shall the Applicant use any vehicle or equipment which leaks any substance that may impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of waters of the State.

7. All excavation, construction, or maintenance activities shall follow best management practices to minimize impacts to water quality and beneficial uses. Dust control activities shall be conducted in such a manner that will not produce downstream runoff.

8. No construction material, spoils, debris, or any other substances associated with this project that may adversely impact water quality standards, shall be located in a manner which may result in a discharge or a threatened discharge to waters of the State. Designated spoil and waste areas shall be visually marked prior to any excavation and/or construction activity, and storage of the materials shall be confined to these areas.

9. All waste or dredged material removed shall be relocated to a legal point of disposal if applicable. A legal point of disposal is defined as one for which Waste Discharge Requirements have been established by a California Regional Water Quality Control Board, and is in full compliance therewith.

10. The Applicant shall implement all necessary control measures to prevent the degradation of water quality from the proposed project in order to maintain compliance with the Basin Plan. The discharge shall meet all effluent limitations and toxic and effluent standards established to comply with the applicable water quality standards and other appropriate requirements, including the provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act. This Certification does not authorize the discharge by the applicant for any other activity than specifically described in the 404 Permit.

11. The discharge shall not: a) degrade surface water communities and populations including vertebrate, invertebrate, and plant species; b) promote the breeding of mosquitoes, gnats, black flies, midges, or other pests; c) alter the color, create visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters; d) cause formation of sludge deposits; or e) adversely affect any designated beneficial uses.

12. The Applicant shall allow the Regional Board and its authorized representative entry to the premises, including all mitigation sites, to inspect and undertake any activity to determine compliance with this Certification, or as otherwise authorized by the California Water Code.

13. Application of pesticides must be supervised by a certified applicator and be in conformance with manufacturer's specifications for use. Compounds used must be appropriate to the target species and habitat. All pesticides directed toward aquatic species must be approved by the Regional Board. Pesticide utilization shall be in accordance with State Water

Resources Control Board Water Quality Order Nos. 2011-0003-DWQ, for Aquatic Animal Invasive Species Control; 2011-0004-DWQ, for Spray Applications; 2011-0002-DWQ, for Vector Control; and 2013-0002-DWQ, for Weed Control

14. The Applicant shall not conduct any construction activities within waters of the State during a rainfall event. The Applicant shall maintain **a five-day (5-day) clear weather forecast** before conducting any operations within waters of the State.

15. If rain is predicted after operations have begun, grading activities must cease immediately and the site must be stabilized to prevent impacts to water quality, and minimize erosion and runoff from the site.

16. The grading, stabilization and re-vegetation will be phased to limit the exposed or working face such that the graded area can be stabilized within 24 hours after the first prediction of rain during the 5-day forecast or within 24 hours after final grading of the phased area.

17. The Applicant shall utilize the services of a qualified biologist with expertise in riparian assessments during any vegetation clearing activities. The biologist shall be available on site during construction activities to ensure that all protected areas are marked properly and ensure that no vegetation outside the specified areas is removed. The biologist shall have the authority to stop the work, as necessary, if instructions are not followed. The biologist shall be available upon request from this Regional Board for consultation within 24 hours of request of consultation.

18. No activities shall involve wet excavations (i.e., no excavations shall occur below the seasonal high water table). A minimum **5-foot** buffer zone shall be maintained above the existing groundwater level. If construction or groundwater dewatering is proposed or anticipated, the Applicant shall file a **Report of Waste Discharge** (ROWD) to this Regional Board and obtain any necessary NPDES permits/Waste Discharge Requirements prior to discharging waste.

    Sufficient time should be allowed to obtain any such permits (generally 180 days). If groundwater is encountered without the benefit of appropriate permits, the Applicant shall cease all activities in the areas where groundwater is present, file a Report of Waste Discharge to this Regional Board, and obtain any necessary permits prior to discharging waste.

19. All project and construction activities not included in this Certification, and which may require a permit, must be reported to the Regional Board for appropriate permitting. Bank stabilization and grading, as well as any other ground disturbances, are subject to restoration and revegetation requirements, and may require additional Certification action.

20. Lagoon water quality monitoring shall be performed by the Applicant. A Water Quality Monitoring Plan shall be submitted prior to any project construction activities. Baseline sampling may be conducted at one location within the project boundary for each phase. All other sampling shall take place on both sides of silt curtains at a minimum of two locations (4 locations total). Monitoring for the following shall be included:
    - pH
    - temperature
    - dissolved oxygen
    - turbidity
    - total suspended solids (TSS)
    - visual assessment for floating particulates (oil and grease shall not be visible)

    Analyses must be performed using approved US Environmental Protection Agency methods, where applicable. These constituents shall be measured at least once prior to project commencement (baseline sampling) and then monitored on a daily basis during the first week of construction, and then on a weekly basis, thereafter, until the work is complete. Monitoring shall ensure compliance with all water quality objectives specified in the 2012 Ocean Plan.

    Results of the analyses shall be submitted to this Regional Board by the 15th day of each subsequent sampling month. A map or drawing indicating the locations of sampling points shall be included with each submittal. Construction activities shall not result in the degradation of beneficial uses or non-compliance of any water quality objectives. Any such violations may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

21. The Applicant shall restore **all acres** of TEMPORARY IMPACTS to waters of the United States and all other areas of temporary disturbance which could result in a discharge or a threatened discharge to waters of the State. Restoration shall include revegetation with native species. Restored areas shall be monitored and maintained with native land and marine species as necessary for five years.

22. The Applicant shall submit to this Regional Board **Annual Monitoring Reports** (Annual Reports) by **January 1st** of each year for a minimum period of **five (5) years** following this issuance of 401 Certification or until project completion has been achieved and documented. The Annual Reports shall describe in detail all of the project and construction activities performed during the previous year and all restoration and mitigation efforts; including percent survival by plant species and percent cover. The Annual Reports shall describe the status of other agreements or any delays in the process. At a minimum the Annual Reports shall include the following documentation:

    (a) Color photo documentation of the pre- and post-project site conditions;

(b) Geographical Positioning System (GPS) coordinates in decimal-degrees format outlining the boundary of the project areas;

(c) The overall status of project including whether or not work has begun on the Project and a detailed schedule;

(d) Copies of all permits revised as required in Additional Condition 1;

(e) Water quality monitoring results for each reach (as required) compiled in a spreadsheet format;

(f) A certified Statement of "no net loss" of wetlands associated with this project;

(g) Discussion of any monitoring activities and exotic plant control efforts; and

(h) A certified Statement from the permittee or his/her representative that all conditions of this Certification have been met.

23. All applications, reports, or information submitted to the Regional Board shall be signed:

(a) For corporations, by a principal executive officer at least of the level of vice president or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates.

(b) For a partnership, by a general partner.

(c) For a sole proprietorship, by the proprietor.

(d) For a municipal, State, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee.

24. Each and any report submitted in accordance with this Certification shall contain the following completed declaration:

"I declare under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who managed the system or those directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Executed on the _____ day of _____ at _____.

_____ (Signature)
_____ (Title)"

25. All communications regarding this project and submitted to this Regional Board shall identify the Project File Number **14-100**. Submittals shall be sent to the attention of the 401 Certification Unit.

26. Any modifications of the proposed project may require submittal of a new Clean Water Act Section 401 Water Quality Certification application and appropriate filing fee.

27. The project shall comply with the local regulations associated with the Regional Board's **Municipal Stormwater Permit** issued to the City of Long Beach under NPDES No. CAS004003 and Waste Discharge Requirements Order No. R4-2014-0024.

28. The project shall comply with all requirements of the National Pollutant Discharge Elimination System (NPDES) **General Permit** for Storm Water Discharges Associated with Construction Activity, Order No. 2012-0011-DWQ. All stormwater treatment systems shall be located outside of any water of the State and shall not be used as a wetland or riparian mitigation credit.

29. Coverage under this Certification may be transferred to the extent the underlying federal permit may legally be transferred and further provided that the Applicant notifies the Executive Officer at least 30 days before the proposed transfer date, and the notice includes a written agreement between the existing and new Applicants containing a specific date of coverage, responsibility for compliance with this Certification, and liability between them.

30. The Applicant or their agents shall report any noncompliance. Any such information shall be provided verbally to the Executive Officer 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 Executive Officer, 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.

31. *Enforcement:*

    (a) 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.

(b) In response to a suspected violation of any condition of this Certification, the State Water Resources Control Board (SWRCB) or Regional Water Quality Control Board (RWQCB) may require the holder of any permit or license subject to this Certification to furnish, under penalty of perjury, any technical or monitoring reports the SWRCB deems appropriate, provided that the burden, including costs, of the reports shall be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

(c) In response to any violation of the conditions of this Certification, the SWRCB or RWQCB may add to or modify the conditions of this Certification as appropriate to ensure compliance.

32. This Certification shall expire **five (5) years** from date of this Certification. The Applicant shall submit a complete application at least 90 days prior to termination of this Certification if renewal is requested.