



Los Angeles Regional Water Quality Control Board

October 6, 2017

Kenneth A. Ehrlich
Broad Beach Geologic Hazard Abatement District
(BBGHAD)
1900 Avenue of Stars, 7th Floor
Los Angeles, CA 90067

VIA CERTIFIED MAIL
RETURN RECEIPT REQUESTED
No. 7016 0750 0000 8035 3711

Dear Mr. Ehrlich:

RE: CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER FOR THE BROAD BEACH SHORE AND DUNE RESTORATION PROJECT (4WQC40111011)

Enclosed please find a CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER, authorized by Los Angeles Regional Water Quality Control Board Executive Officer, Samuel Unger. This Order is issued to the Broad Beach Geologic Hazard Abatement District (BBGHAD) for Broad Beach Shore and Dune Restoration Project (Project). Attachments A through C of the Enclosure are also part of the Order.

This Order is issued in response to an application submitted by BBGHAD for proposed Project discharges to waters of the state and United States, to ensure that the water quality standards for all waters impacted by the Project are met. You may proceed with your Project according to the terms and conditions of the enclosed Order.

If you require further assistance, please contact Valerie Carrillo Zara by phone at (213) 576-6759 or by email at Valerie.CarrilloZara@waterboards.ca.gov. You may also contact me by phone at (213) 576-6785 or by email at LB.Nye@waterboards.ca.gov.

Sincerely,

LB Nye, Senior Environmental Scientist
Section 401 Certification and Wetlands Unit
Los Angeles Water Quality Control Board

Enclosures (1): Order for Broad Beach Shore and Dune Restoration, File No. 11-011

cc: [Via email only] (w/ enclosure):

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Moffatt & Nicholas

Marshall Grossman, BBGHAD Vice-Chair

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Los Angeles Regional Water Quality Control Board

CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION AND ORDER

Effective Date: Date Signed

Program Type: Fill/Excavation

Project Type: Beach Nourishment

Project: Broad Beach Shore and Dune Restoration Project (Project)

Applicant: Broad Beach Geologic Hazard Abatement District (BBGHAD)

Applicant Contact: Kenneth A. Ehrlich
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If you have any questions, please call Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) Staff listed above or (213) 576-6600 and ask to speak with the Water Quality Certification and Wetlands Unit Program Manager.

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I. Order

This Clean Water Act (CWA) section 401 Water Quality Certification action and Order (Order) is issued at the request of Broad Beach Geologic Hazard Abatement District (BBGHAD) (hereinafter Permittee) for the Project. The purpose of the Order is to provide water quality certification to support an application for a dredge and fill permit issued pursuant to Clean Water Act section 404 and is fully described in the application and supplemental information submitted by the Permittee. The application was received on January 25, 2011. The Executive Officer of the Los Angeles Water Board issued a Denial Without Prejudice on February 27, 2012. The application was deemed complete on May 23, 2017.

II. Public Notice

The Los Angeles Water Board provided public notice of the application pursuant to California Code of Regulations title 23, section 3858 for a period of time beginning January 25, 2011 to the effective date of the Order.

III. Project Purpose

The purpose of this Project is to provide long-term protection of multiple residences and coastal dunes along the Broad Beach shoreline from storm surges and sea level rise that result in beach erosion. This shall be accomplished via sand nourishment and a restored dune system.

The Project aims to restore Broad Beach in a manner that reduces beach erosion and increases the natural shore protection afforded by the sandy beach. The Permittee has identified the following objectives for the Project:

- Provide shoreline protection for existing structures;
- Restore public beach access;
- Restore an eroded dune system;
- Create new beach habitat; and
- Nourish downcoast beaches.

IV. Project Description

The Project consists of:

- (1) Fortifying an approximately 4,150 foot-long rock revetment originally built in 2010 as a temporary measure;
- (2) Relocating approximately 1,600 linear feet of the 2010 rock revetment at the downcoast (eastern) end of the project further landward;
- (3) Implementing a beach nourishment program involving deposition of 300,000 cubic yards (cy) of sand on the beach from inland sand quarries during the first year with major renourishments of up to 300,000 cy of sand and interim renourishments of up to 75,000 cy of sand allowed when certain triggers are reached;
- (4) Periodic sand back passing operations to occur no more than once per year; and
- (5) Dune habitat restoration.

The Permittee will conduct the Project in accordance with the *Final Adaptive Management and Monitoring Plan*, September 2017.

An Alternatives Analysis under Clean Water Act Section 404(b)(1) was prepared for the Project, *Broad Beach Restoration Project, City of Malibu, County of Los Angeles, California, Clean Water Act Section 404(b)(1), January 2016 (404(b)(1) Alternatives Analysis)* to determine the least environmentally damaging practicable alternative (LEDPA) that will achieve the basic project purpose. Alternative '4C' was found to be the LEDPA and this alternative is the basis of the proposed Project.

The Project area is comprised of the shoreline area fronting approximately 124 residences and a beach club, which extends from approximately Lechuza Point to Trancas Creek. Broad Beach is currently a narrow ribbon of sand visible primarily at low tide, but inundated at high tide. Without the Project, the beach would continue to erode and existing structures would remain unprotected. The Project will return the beach to its prior state of an energy dissipative beach with a supralittoral dry margin.

The Project will place sand between 30708 Pacific Coast Highway and 31380 Broad Beach Road. Approximately three hundred thousand (300,000) cubic yards will be placed approximately every five (5) years, dune habitat will be restored, and the 2010 rock revetment will be realigned and fortified at its downcoast end. After the initial sand placement, additional 5-year sand placements may take place when the dry beach width upcoast is narrower than 30 feet for twelve (12) consecutive months as recorded by three (3) consecutive full beach profiles and in accordance with the *Final Adaptive Management and Monitoring Plan*.

As needed, interim (up to 75,000 cubic yards) nourishments may take place to maintain a relatively constant dry sand beach and dune system. Interim nourishments may take place when the dry beach width upcoast is narrower than 30 feet for six (6) consecutive months as recorded by two (2) consecutive full beach profiles, and in accordance with the *Final Adaptive Management and Monitoring Plan*.

Back passing, the use of heavy equipment to move sand from the downcoast end of Broad Beach upcoast, to extend the benefits of each nourishment event, will occur no more than once a year and only when the recorded dry beach berm width at the upcoast end of Broad Beach is 50 feet or less for three (3) consecutive months. Determination of backpass sand volume, borrow and placement areas as well as backpass cut depth will be in accordance with objective triggers identified in the *Final Adaptive Management and Monitoring Plan*.

The Project configuration avoids impacts to the western portion of Broad Beach including Lechuza Cove and the "boulder field" (roughly centered at 31418 Broad Beach Rd.).

The sand grain size proposed for renourishment is relatively coarse compared to the existing sand on the beach. However, the potential for nearshore habitat burial is reduced for coarser-grained sand because it generally remains higher on the beach profile than finer-grained sand. In addition, sand depth of cover will be greatest on the dry beach and very close to shore, and will be lesser further from shore.

Sand will be placed over the existing revetment to create a restored dune. The height of the proposed sand dunes will be typical of the existing dunes at the east end of the Project, which are approximately 20 feet higher than mean lower low water (MLLW). The top of the existing 2010 rock revetment will be buried beneath up to 8 feet of sand and currently exposed foundations, seawalls and piles of homes on the west end of the beach will be covered or abutted by sand.

Considering the environmental response uncertainties and modeling limitations, empirical observation of the beach and adjacent areas over time is needed to more fully understand the distribution of Project sand from the initial placement and required maintenance and renourishing activities and the effects of the sand on biological habitats. To either confirm minimal effects or quantify more substantial impacts, the Permittee will implement the marine habitat monitoring and mitigation plan, Final Broad Beach Restoration Project, Marine Habitat Monitoring and Mitigation Plan, October 2017 (MHMMP). This monitoring program will document the effects of the Project and impacts to marine resources. A Science Advisory Panel (SAP) has been established to oversee marine habitat monitoring and required mitigation. The SAP has guided the development of the MHMMP. SAP members include:

- Pete Raimondi (SAP Chair): Professor and Department Chair at the University of California, Santa Cruz (UCSC) - Ecology and Evolutionary Biology Department, Institute of Marine Sciences.
- Robert Hoffman (SAP Member): Formerly Assistant Regional Administrator for the Habitat Conservation Division of the Southwest Region of the NMFS (retired 2011).
- Mark Page (SAP Member): Research Biologist at University of California, Santa Barbara (UCSB) - Marine Science Institute.

The SAP shall also review the monitoring results and annual reports as they are available or prepared and provide conclusions and recommendations for potential adaptive management actions. If

marine habitat monitoring demonstrates that there have been adverse impacts to one or more marine habitats, the SAP shall review and guide development of specific habitat mitigation and monitoring plans. Mitigation, as required, will be conducted by Mitigation Responsible Parties under Memorandum(s) of Understanding with BBGHAD per Part XIV, J of this Order.

The Project is located entirely within an Area of Special Biological Significance (ASBS), ASBS No. 24, Mugu Lagoon to Latigo Point.

On October 9, 2015, the California Coastal Commission approved Coastal Development Permit No. 4-15-0390 requested by the BBGHAD, subject to nineteen (19) "prior to issuance" special conditions that are detailed in the Notice of Intent to Issue Coastal Development Permit dated January 11, 2016.

The California State Lands Commission issued a State Lands Lease, Lease PRC 9364.1, on August 9, 2016.

V. Project Location

The Project is located at 30708 Broad Beach Road to 6526 Lechuza Point Road in the City of Malibu, Los Angeles County. The Project location is shown in Attachment B of this Order.

<u>Latitude</u>	<u>Longitude</u>
34.262050	118.5139593
34.159934	118.5132870
34.158717	118.5134810
34.144630	118.5033972

VI. Project Impact and Receiving Waters Information

The Project is located within the jurisdiction of Los Angeles Regional Water Quality Control Board. Receiving waters and groundwater potentially impacted by this Project are protected in accordance with the applicable water quality control plan (Basin Plan) for the region and other plans and policies, including the statewide water quality control plan for ocean waters of California (California Ocean Plan), which may be accessed online at:

http://www.waterboards.ca.gov/plans_policies/. These plans set forth the water quality standards that apply to the Project; these standards consist of existing and potential beneficial uses of waters of the state and U.S., water quality objectives to protect those uses, and an anti-degradation policy. These plans also include programs of implementation to achieve compliance with the standards, including monitoring and surveillance.

Receiving Water: Malibu Beach, Pacific Ocean
(Hydrologic Unit Code: 404.21)

Designated Beneficial Uses: NAV, COMM, MAR, WILD, MIGR, SPWN, SHELL, BIOL, REC-1, REC-2

VII. Description of Direct Impacts to Waters of the State and United States

The Project will require the placement of 24.3 acres of fill (5,078 linear feet) into Waters of the state and United States (hereinafter Waters) for Year 0 beach nourishment. Back passing activities will result in a total of 3.3 acres of fill (4,000 linear feet) into Waters, utilizing existing residual material from the initial fill at Year 0.

By the end of Year 1, as the sand is resettled by wave action, the Project is anticipated to result in approximately 13.8 acres of fill 0-0.5 feet deep, 12.6 acres of fill 0.5-1.0 foot deep, and 27.2 acres of fill greater than a depth of 1.0 foot. Estimated area for a potential permanent loss of functions and services and/or Waters is 0.59 acre of surfgrass and 2.8 acres of rocky reef habitat.

The performance of the Project at Year 1 and further out was evaluated primarily using the Generalized Model for Simulating Shoreline Change (GENESIS), a numerical model developed for the Army Corps of Engineers to estimate long-term trends of shoreline change

for coastal engineering projects. GENESIS is intended to provide a generalized long-term trend in shoreline response from a specific action or actions. The methodology is described in the Section 404(b)(1) Alternatives Analysis.

Total Project fill/excavation quantities for all estimated Year 1 impacts are summarized in Table [2]. These impacts will be updated based on the results of the MHMMP. Permanent impacts are categorized as those resulting in a physical loss in area and also those degrading ecological condition only.

Table [2]: Total Project Fill/Excavation Quantity ^{1 2}									
	Temporary Impact			Permanent Impact					
				Physical Loss of Area			Degradation of Ecological Condition Only		
	Acres	CY	LF	Acres	CY	LF	Acres	CY	LF
Ocean	53.6	300,000	6,700						

VIII. Description of Indirect Impacts to Waters

Sand placed at Broad Beach will be distributed along the coast by longshore currents. Net transport down coast toward Zuma Beach, Westward Beach, and Point Dume State Beach was estimated at 35,000 to 45,000 cy/yr in the *Revised Analysis of Impacts to Public Trust Resources and Values for the Broad Beach Project, July 2014*.

IX. Avoidance and Minimization

Initial Broad Beach project proposals included placing sand from as far west as 31536 Victoria Point Road in the Lechuza Cove area of the Beach. In order to avoid impacts to sensitive marine habitats, the project was modified to eliminate any direct depositing of sand at the extreme west end, including Lechuza Cove and a "boulder field" (roughly centered at 31418 Broad Beach Rd.). In addition, the initial nourishment volume was reduced from 600,000 cy to 300,000 cy.

X. Compensatory Mitigation

The Permittee has agreed to provide compensatory mitigation described in **No. XIV Conditions**.

XI. California Environmental Quality Act (CEQA)

On September 12, 2011, the City of Malibu approved the formation of the Broad Beach Geologic Hazard Abatement District (BBGHAD) by the Trancas Property Owners Association (TPOA). A GHAD is an independent, state-level public agency that oversees geologic hazard prevention, mitigation, abatement and control. Under State law, GHAD formation is exempt

¹ Cubic Yards (CY); Linear Feet (LF)

² Includes only temporary direct impacts to waters and does not include upland areas of temporary disturbance which could result in a discharge to waters.

from review under the California Environmental Quality Act (CEQA). (Pub. Res. Code § 26559.) In addition, improvements caused to be undertaken under a GHAD and all activities in furtherance or in connection therewith are exempt from review under CEQA. (Pub. Res. Code § 26601.)

However, BBGHAD conducted environmental analysis and assessed the Project's impacts to the land, associated resources and uses via an Analysis of Impacts to Public Trust Resources and Values (APTR). The final APTR was the Revised APTR, prepared by AMEC Environment and Infrastructure, Inc., dated July 2014.

The Revised APTR considered the existing setting prior to installation of sand bag revetments and the emergency rock revetment. Impacts were evaluated against this baseline setting. In addition to examining adverse and beneficial effects of the Project on public trust lands and resources, the Revised APTR identified avoidance and minimization measures (AMMs) to lessen impacts and maximize public benefits associated with the Project's use of sovereign lands. The Revised APTR also analyzed a range of potential alternatives to the Project with the goal of avoiding or minimizing adverse effects to public trust resources while meeting basic Project objectives.

The Los Angeles Water Board has independently reviewed the Revised APTR. This Order includes conditions to ensure protection of water quality.

XII. Petitions for Reconsideration

Any person aggrieved by this action may petition the State Water Board to reconsider this Order in accordance with California Code of Regulations, title 23, section 3867. A petition for reconsideration must be submitted in writing and received within 30 calendar days of the issuance of this Order.

XIII. Fees Received

An application fee of \$640.00 was received on January 25, 2011. An additional fee of \$58,340.00 based on total Project impacts was received on July 3, 2012. The fee amount was determined as required by California Code of Regulations, title 23, sections 3833(b)(3) and 2200(a)(3), and was calculated as category A - Fill & Excavation Discharges (fee code 84) with the dredge and fill fee calculator.

XIV. Conditions

The Los Angeles Water Board has independently reviewed the record of the Project to analyze impacts to water quality and designated beneficial uses within the watershed of the Project. In accordance with this Order, the Permittee may proceed with the Project under the following terms and conditions:

A. Authorization

Impacts to waters of the state and of the United States shall not exceed quantities shown in Table [2].

B. Reporting and Notification Requirements

The following section details the reporting and notification types and timing of submittals. Requirements for the content of these reporting and notification types are detailed in

Attachment A, including specifications for photo and map documentation during the Project. Written reports and notifications must be submitted using the Reporting and Notification Cover Sheet located in Attachment C, which must be signed by the Permittee or an authorized representative.

1. Project Reporting

- a. **Annual Reporting:** The Permittee shall submit an Annual Report each year by June 30, starting with June 30, 2018. Annual reporting shall continue until a Notice of Project Complete Letter is issued to the Permittee.

The Annual Report shall include all survey data (full beach profile surveys, beach berm width measurements, wetted bound surveys, Trancas estuary mouth changes, and aerial photographs), and a written report prepared by a qualified coastal engineer indicating the results of the shoreline profile and beach width monitoring program. The monitoring report shall include conclusions regarding the level of success of the project, a detailed analysis of any change in shoreline position, increase or decrease in beach widths and footprint of dune systems within the project reach, details on any nourishment efforts undertaken during the year with the volume and placement location(s) specified, and any back passing operations that took place. More specifically, the report shall include, but not be limited to, the following:

- Quantification of the volumetric change in the beach and dune for each survey period, using the pre-project condition (2014 or 2015) as the baseline.
- Analysis of the seasonal and inter-annual changes in width and length of dry beach, subaerial and nearshore slope, offshore extent of nourished toe for profiles within the nourishment area, and overall volume of sand in the profile; changes in dune profile; and, estimates of the rate and extent of transport of material up- and down-coast from the beach nourishment receiver site.
- Comparison of the actual changes to the shoreline in relation to the predicted changes that were anticipated based on the results of the Pre-construction numerical and physical modeling.
- Analysis of the expected time period over which the beach benefits related to the initial nourishment volume can be identified as distinct from background conditions; and qualify any abnormal wave and current conditions that could account for changes to the beach outside what was anticipated.
- Provision of cumulative data detailing the annual quantity and placement of material, including interaction of the replenishment project with other beach replenishment projects or other shoreline projects that occur in the project area or in the same littoral cell.
- Utilization of aerial photographs, to the extent feasible, to prepare a summary of beach width and dune profile changes.
- Conclusions regarding the level of success and any adverse effects, including any observed beach/dune erosion, any adverse effects to offshore habitats, any changes in the frequency that the Trancas Estuary mouth opens and closes and/or changes to the duration the estuary mouth remains open/closed. The report shall include a brief history of all previous years' monitoring results to track changes in shoreline, dunes, and estuary mouth conditions over time.

The Annual Report shall also include any review of the monitoring reports, identification of additional impacts, or any recommendations for adaptive management or mitigation provided by the SAP.

Five-year Report: Five (5) years from the date of this Order, the Permittee shall submit a report documenting the status of the project, including the Beach Nourishment and Management Program. The report shall summarize the results and findings of the annual physical and biological monitoring reports and the status of septic conversion implementation. The Five-year Report shall also include any review of the monitoring reports, identification of additional impacts, or any recommendations for adaptive management or mitigation provided by the SAP.

Should the monitoring reports reveal any unanticipated significant adverse resource/ habitat or public access impacts not addressed in the Order, and/or document that the Beach Nourishment and Management Program is not maintaining a thirty foot-wide or wider sandy beach fronting the approved revetment, the Los Angeles Water Board may require the submittal of a permit amendment application for the review and approval by the Los Angeles Water Board to address and evaluate mitigation measures to compensate for any unanticipated adverse resource/habitat impacts, and/or require any mid-course corrections or adjustments to the Beach Nourishment and Management Program.

2. Communications Plan

The Permittee will shall comply with the Communications Plan per Section 1.3 of the MHMMP including the centralized data management system; email notification of monitoring data and reports including, but not limited to, monitoring related data, including final reports, raw survey results, and meeting minutes; annual and five-year reports; and semi-annual coordination meetings.

3. Project Status Notifications

- a. **Commencement of Construction:** The Permittee shall notify Los Angeles Water Board staff at least one week in advance of commencement of any construction/nourishment/back passing activities, and immediately upon completion of such activities.
- b. **Request for Notice of Completion of Discharges Letter:** The Permittee shall submit a Request for Notice of Completion of Discharges Letter following completion of active Project construction activities, including any required restoration and permittee-responsible mitigation. This request shall be submitted to the Los Angeles Water Board staff within thirty (30) days following completion of all Project construction activities. Upon acceptance of the request, Los Angeles Water Board staff shall issue a Notice of Completion of Discharges Letter to the Permittee, which will end the active discharge period and associated annual fees.

- c. Request for Notice of Project Complete Letter:** The Permittee shall submit a Request for Notice of Project Complete Letter when construction and/or any post-construction monitoring is complete,³ and no further Project activities will occur. This request shall be submitted to Los Angeles Water Board staff within thirty (30) days following completion of all Project activities. Upon approval of the request, the Los Angeles Water Board staff shall issue a Notice of Project Complete Letter to the Permittee which will end the post discharge monitoring period and associated annual fees.

4. Conditional Notifications and Reports: The following notifications and reports are required as appropriate.

a. Accidental Discharges of Hazardous Materials⁴

Following an accidental discharge of a reportable quantity of a hazardous material, sewage, or an unknown material, the following applies (Wat. Code, § 13271):

- i. As soon as (A) Permittee has knowledge of the discharge or noncompliance, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures then:
 - first call – 911 (to notify local response agency)
 - then call – Office of Emergency Services (OES) State Warning Center at: (800) 852-7550 or (916) 845-8911
 - Lastly follow the required OES procedures as set forth in: [http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill Booklet Feb2014 FINAL BW Acc.pdf](http://www.caloes.ca.gov/FireRescueSite/Documents/CalOES-Spill%20Booklet%20Feb2014%20FINAL%20BW%20Acc.pdf)
- ii. Following notification to OES, the Permittee shall notify Los Angeles Water Board, as soon as practicable (ideally within 24 hours). Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.
- iii. Within five (5) working days of notification to the Los Angeles Water Board, the Permittee must submit an Accidental Discharge of Hazardous Material Report.

b. Violation of Water Quality Standards: The Permittee shall notify the Los Angeles Water Board of any event causing a violation of water quality standards. Notification may be via telephone, e-mail, delivered written notice, or other verifiable means.

- i. Examples of noncompliance events include: lack of storm water treatment following a rain event, discharges causing a visible plume in a water of the state or of the United States, and water contact with uncured concrete.

³ Completion of post-construction monitoring shall be determined by Los Angeles Water Board staff and shall be contingent on successful attainment of restoration and mitigation performance criteria.

⁴ "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment. (Health & Saf. Code, § 25501.)

- ii. This notification must be followed within three (3) working days by submission of a Violation of Compliance with Water Quality Standards Report.

c. Modifications to Project

Project modifications may require an amendment of this Order. The Permittee shall give advance notice to Los Angeles Water Board staff if Project implementation as described in the application materials is altered in any way or by the imposition of subsequent permit conditions by any local, state or federal regulatory authority by submitting a Modifications to Project Report. The Permittee shall inform Los Angeles Water Board staff of any Project modifications that will interfere with the Permittee's compliance with this Order. The Los Angeles Water Board will determine if an amendment to this Order is needed.

d. Transfer of Property Ownership: This Order is not transferable in its entirety or in part to any person or organization except after notice to the Los Angeles Water Board in accordance with the following terms:

- i. The Permittee must notify the Los Angeles Water Board of any change in ownership or interest in ownership of the Project area by submitting a Transfer of Property Ownership Report. The Permittee and purchaser must sign and date the notification and provide such notification to the Los Angeles Water Board at least 10 days prior to the transfer of ownership. The purchaser must also submit a written request to the Los Angeles Water Board to be named as the permittee in a revised order.
- ii. Until such time as this Order has been modified to name the purchaser as the permittee, the Permittee shall continue to be responsible for all requirements set forth in this Order.

e. Transfer of Long-Term BMP Maintenance: If maintenance responsibility for post-construction BMPs is legally transferred, the Permittee must submit to the Los Angeles Water Board a copy of such documentation and must provide the transferee with a copy of a long-term BMP maintenance plan that complies with manufacturer or designer specifications. The Permittee must provide such notification to the Los Angeles Water Board with a Transfer of Long-Term BMP Maintenance Report at least 10 days prior to the transfer of BMP maintenance responsibility.

C. Septic Conversion Implementation Plan: By January 11, 2019, BBGHAD shall submit to the Los Angeles Water Board a detailed Septic Conversion Implementation Plan, prepared in part by a licensed civil/sanitary engineer or other qualified professional, analyzing alternatives for the removal of the existing on-site waste water treatment systems (OWTS) currently serving the residences within the BBGHAD boundaries and connection of those residences to a new package sewage treatment facility, an upgraded existing package sewage treatment facility, or alternative onsite wastewater treatment systems (AOWTS) consistent with the certified Local Coastal Program of the City of Malibu and the State Water Board's Water Quality Control Policy for Siting, Design, Operation, and Maintenance of Onsite Wastewater Treatment Systems, June 19, 2012 (OWTS Policy).

The plan shall include an analysis and technical engineering details and requirements for the removal of the existing OWTS within BBGHAD boundaries and conceptual design plans for either a new package sewage treatment plant, the upgrade of an existing treatment plant, or AOWTS.

The plan shall also include an analysis of permitting and regulatory requirements; potential environmental impacts; necessary infrastructure upgrades; alternative locations and technologies for a package sewage treatment plant; a preliminary budget, including any land acquisition costs; and a permitting, design and construction schedule for the preferred septic conversion alternative. The plan shall have a schedule that will accomplish the septic system conversions by January 11, 2022.

Every year by June 30, starting with June 30, 2018, BBGHAD shall submit to the Executive Officer of the Los Angeles Water Board a detailed progress report on the status of implementation of the preferred septic conversion alternative, including progress on design details, environmental impact analysis, and permitting. This requirement continues the annual reporting requirement of Certification 10-003.

D. Marine Habitat Monitoring and Mitigation Plan: The Permittee shall implement the marine habitat monitoring and mitigation plan, *Final Broad Beach Restoration Project, Marine Habitat Monitoring and Mitigation Plan, August 2017* (MHMMP).

E. Water Quality Monitoring

1. **General:** Continuous visual surface water monitoring shall be conducted to detect accidental discharge of construction related pollutants (e.g. oil and grease, turbidity plume, or uncured concrete).
2. **Accidental Discharges/Noncompliance:** Upon occurrence of an accidental discharge of hazardous materials or a violation of a water quality standard, Los Angeles Water Board staff may require water quality monitoring based on the discharge constituents and/or related water quality objectives and beneficial uses.
3. **In-Water Work**

During planned work in water any discharge(s) to waters of the state shall conform to the following water quality standards:

- a. **Oil and Grease.** Waters shall not contain oils, greases, waxes or other materials in concentrations that result in a visible film or coating on the surface of the water or on objects in the water, that cause nuisance, or that otherwise adversely affect beneficial uses.
- b. **Dissolved Oxygen.** The dissolved oxygen concentration shall not at any time be depressed more than 10 percent from that which occurs naturally.
- c. **pH.** The pH shall not be changed at any time more than 0.2 units from that which occurs naturally.
- d. **Turbidity.** Downcurrent TSS shall be maintained at ambient levels.

Sampling shall be conducted in accordance with Table 3 sampling parameters.⁵

Parameter	Unit of Measurement	Type of Sample	Minimum Frequency
Oil and Grease	N/A	Visual	Continuous
Dissolved Oxygen	mg/L & % saturation	Grab	Daily for the first week, weekly, thereafter
pH	Standard Units	Grab	Daily for the first week, weekly, thereafter
Turbidity	NTU	Grab	Daily for the first week, weekly, thereafter
Temperature	°F (or as °C)	Grab	Daily for the first week, weekly, thereafter

Baseline sampling shall be conducted at two locations within the project boundary and one location downcurrent prior to each nourishment or backpassing activity. All other sampling shall take place at the frequencies on Table 3 at, or near, the same three locations.

In addition, the environmental resource specialist shall visually monitor and document the turbidity of coastal waters during all beach nourishment or backpassing activities. The extent and duration of turbidity plumes shall be recorded and mapped by the monitor during each day of nourishment or backpassing activity. If the turbidity plume is observed to reach kelp beds or eelgrass beds, beach nourishment or backpassing shall be terminated until the turbidity plume has dissipated. If turbidity levels are significantly above ambient levels for more than three (3) consecutive days, then the rate of sand placement shall be reduced so that significant turbidity plumes (in spatial extent and/or duration) are no longer created. After all sand placement operations have ceased, the applicant shall monitor and document the extent and duration of any lasting turbidity plume.

Results of the analyses shall be submitted to this Regional Water 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.

Exceedances of water quality standards may result in corrective and/or enforcement actions, including increased monitoring and sample collection.

F. Standard

⁵ Pollutants shall be analyzed using the analytical methods described in 40 Code of Federal Regulations Part 136; where no methods are specified for a given pollutant, the method shall be approved by Los Angeles Water Board staff. Grab samples shall be taken between the surface and mid-depth and not be collected at the same time each day to get a complete representation of variations in the receiving water. A hand-held field meter may be used, provided the meter utilizes a U.S. EPA-approved algorithm/method and is calibrated and maintained in accordance with the manufacturer's instructions. A calibration and maintenance log for each meter used for monitoring shall be maintained onsite.

1. This Order is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330, and California Code of Regulations, title 23, chapter 28, Article 6 commencing with sections 3867-3869, inclusive. Additionally, the Los Angeles Water Board reserves the right to suspend, cancel, or modify and reissue this Order, after providing notice to the Permittee, if the Los Angeles Water Board determines that: the Project fails to comply with any of the conditions of this Order; or, when necessary to implement any new or revised water quality standards and implementation programs adopted or approved pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.) or federal Clean Water Act section 303 (33 U.S.C. § 1313). For purposes of Clean Water Act section 401(d), the condition constitutes a limitation necessary to assure compliance with water quality standards and appropriate requirements of state law.
2. This Order is not intended and shall not be construed to apply to any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license or an amendment to a FERC license, unless the pertinent certification application was filed pursuant to subsection 3855(b) of chapter 28, title 23 of the California Code of Regulations, and that application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. This Order is conditioned upon total payment of any fee required under title 23 of the California Code of Regulations and owed by the Permittee.
4. In the event of any violation or threatened violation of the conditions of this Order, the violation or threatened violation shall be subject to any remedies, penalties, process, or sanctions as provided for under state and federal law. For purposes of Clean Water Act, section 401(d), the applicability of any state law authorizing remedies, penalties, processes, 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 Order.

G. General Compliance

1. Failure to comply with any condition of this Order shall constitute a violation of the Porter-Cologne Water Quality Control Act and the Clean Water Act. The Permittee and/or discharger may then be subject to administrative and/or civil liability pursuant to Water Code section 13350 and/or 13385.
2. Permitted actions must not cause a violation of any applicable water quality standards, including impairment of designated beneficial uses for receiving waters as adopted in the Basin Plans by any applicable Los Angeles Water Board or any applicable State Water Board (collectively Water Boards) water quality control plan or policy. The source of any such discharge must be eliminated as soon as practicable.
3. In response to a suspected violation of any condition of this Order, the Los Angeles Water Board may require the holder of this Order to furnish, under penalty of perjury, any technical or monitoring reports the Water Boards deem appropriate, provide that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports. The additional monitoring requirements ensure that permitted discharges and activities comport with

any applicable effluent limitations, water quality standards, and/or other appropriate requirement of state law.

4. The Permittee must, at all times, fully comply with engineering plans, specifications, and technical reports submitted to support this Order; and all subsequent submittals required as part of this Order. The conditions within this Order and Attachments supersede conflicting provisions within Permittee submittals.
5. This Order and all of its conditions contained herein continue to have full force and effect regardless of the expiration or revocation of any federal license or permit issued for the Project. For purposes of Clean Water Act section 401(d), this condition constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements of state law.
6. **Construction General Permit Requirement:** The Permittee shall maintain compliance with conditions described in, and required by, NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0011-DWQ; NPDES No. CAS000002).

H. Administrative

1. Signatory requirements for all document submittals required by this Order are presented in Attachment A of this Order.
2. This Order does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, §§ 2050-2097) or the federal Endangered Species Act (16 U.S.C. §§ 1531-1544). If a "take" will result from any act authorized under this Order held by the Permittee, the Permittee must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Permittee is responsible for meeting all requirements of the applicable endangered species act for the Project authorized under this Order.
3. The Permittee shall grant Los Angeles Water Board staff, or an authorized representative (including an authorized contractor acting as a Water Board representative), upon presentation of credentials and other documents as may be required by law, permission to:
 - a. Enter upon the Project or compensatory mitigation site(s) premises where a regulated facility or activity is located or conducted, or where records are kept.
 - b. Have access to and copy any records that are kept and are relevant to the Project or the requirements of this Order.
 - c. Inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order.
 - d. Sample or monitor for the purposes of assuring Order compliance.
4. A copy of this Order shall be provided to any consultants, contractors, and subcontractors working on the Project. Copies of this Order shall remain at the Project

site for the duration of this Order. The Permittee shall be responsible for work conducted by its consultants, contractors, and any subcontractors.

5. A copy of this Order must be available at the Project site(s) during construction for review by site personnel and agencies. All personnel performing work on the Project shall be familiar with the content of this Order and its posted location at the Project site.
 6. This Order expires on October 9, 2025. If the Permittee wishes to retain the revetment and continue beach nourishment activities beyond October 9, 2025, then no later than six months prior to October 9, 2025, the Permittee or successor in interest shall submit a complete amendment application for the re-authorization of the beach nourishment program and to retain the rock revetment for an additional ten (10) year term. The amendment application shall include the results of the required annual and five year biological and physical beach monitoring reports and the septic conversion implementation plan in order to evaluate the effectiveness and impacts of the project; address changed circumstances and/or unanticipated impacts; consider modifications to the location and design of the sand fill area; and consider additional mitigation measures necessary to compensate for any adverse impacts to marine and/or upland coastal resources/habitats resulting from the continued retention of the rock revetment and implementation of the Final Adaptive Management and Monitoring Plan.
- I. **Best Management Practices** The Permittee will implement the Avoidance and Minimization Measures (AMMs) provided in Appendix B to the Revised APTR of August 2016 to include but not be limited to:
1. If possible, construction activities and beach nourishment and back passing shall be conducted outside the spawning season for grunion (March through August).
 2. Prior to construction activities and/or the commencement of any beach nourishment/back passing activities, the applicant shall have the environmental resource specialist conduct a survey of the project site to determine presence of California grunion during the seasonally predicted run period and egg incubation period, as identified by the California Department of Fish and Wildlife. If the environmental resources specialist determines that any grunion spawning activity is occurring and/or that grunion are present in or adjacent to the project site, then no construction, maintenance, grading, or grooming activities shall occur on, or adjacent to, the area of the beach where grunion have been observed to spawn until the next predicted run in which no grunion are observed. Surveys shall be conducted for all seasonally predicted run periods in which material is proposed to be placed at any of the above sites. If the applicant is in the process of placing material, the material shall be graded and groomed to contours that will enhance the habitat for grunion prior to the run period. Furthermore, placement activities shall cease in order to determine whether grunion are using the beach during the following run period.
 3. All construction materials and equipment placed on the beach during daylight construction hours shall be stored beyond the reach of tidal waters. All construction materials and equipment shall be removed in their entirety from the beach area by sunset each day that work occurs.

4. Staging areas shall be used only during active construction operations and will not be used to store materials or equipment between renourishment/back passing operations.
5. During construction, washing of trucks, paint, equipment, or similar activities shall occur only in areas where polluted water and materials can be contained for subsequent removal from the site. Wash water shall not be discharged to the storm drains, street, drainage ditches, creeks, or wetlands. Areas designated for washing functions shall be at least 100 feet from any storm drain, water body or sensitive biological resources. The location(s) of the washout area(s) shall be clearly noted at the construction site with signs. In addition, construction materials and waste such as paint, mortar, concrete slurry, fuels, etc. shall be stored, handled, and disposed of in a manner that prevents storm water pollution.
6. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris, which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
7. At the completion of the initial beach nourishment operation and any future beach supplemental beach nourishment and back passing activities, the sand deposited on the beach shall be graded and groomed to natural beach contours to restore the shoreline habitat and to facilitate recreational use at least one month prior to Memorial Day in May. Disturbance to wrack and coastal strand habitat shall be minimized to the extent feasible.
8. During all beach nourishment activities authorized pursuant to this Order, the applicant shall be responsible for removing all unsuitable material or debris within the area of placement should the material be found to be unsuitable for any reason, at any time, when the presence of such unsuitable material/debris can reasonably be attributed to the placement material. Debris shall be disposed at a debris disposal site outside of the Coastal Zone or at a location within the Coastal Zone authorized to receive such material.
9. The Permittee shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP).
10. The Project shall comply with the local regulations associated with the Regional Water Board's Municipal Separate Storm Sewer System (MS4) Discharges Permit issued to Los Angeles County and co-permittees under NPDES No. CAS004001 and Waste Discharge Requirements (Order No. R4-2012-0175 as amended). The project shall also 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.

J. Compensatory Mitigation

- 1. Final Compensatory Mitigation Plan** The Permittee shall provide compensatory mitigation for impacts to Waters in accordance with *Conceptual Habitat Compensatory Mitigation Plan, Broad Beach and Dune Restoration Project, July 13, 2017* (Compensatory Mitigation Plan) and incorporated herein by reference. The Compensatory Mitigation Plan describes the approach to compensatory mitigation should impacts be detected through implementation of the MHMMP.

There are multiple habitat types located within the Project area including eelgrass, surfgrass, algae, mussel, abalone, kelp forest and intertidal rocky habitat. Mitigation for marine habitat impacts will be compensated via sufficient fund contributions to appropriate parties identified below. Payments shall be made with the intent that mitigation would be implemented by the pre-approved parties.

The SAP shall review the monitoring results and annual reports as they are available or prepared. If marine habitat monitoring demonstrates that adverse impacts have occurred to one or more marine habitats, the SAP shall review and guide development of specific habitat mitigation plans. Prior to planning and implementing the mitigation, the Los Angeles Water Board shall be notified by the BBGHAD. The notification shall include the impacts that occurred, proposed party(ies) to receive the payment and the party's(ies)' mitigation proposal(s)/site location(s). No compensatory mitigation intended to offset impacts to Waters will be implemented without prior written approval by the Los Angeles Water Board. A formal Memorandum of Understanding (MOU) between the BBGHAD and one or more of the below parties shall be executed prior to formal mitigation coordination.

Primary Habitat	Mitigation Responsible Party	Point of Contact
Mussel	RC Lab University of California Santa Cruz	Kristin de Nesnera
Abalone	The Bay Foundation	Heather Burdick
Kelp Bed/Artificial Reef Enhancement	Marine Science Institute University of California Santa Barbara	Dr. Jennifer Caselle
Surfgrass	Marine Science Institute University of California Santa Barbara	D. C. Reed
Eelgrass	Orange County Coastkeeper	Sara Briley
Algae	RC Lab University of California Santa Cruz	Laura Anderson
Intertidal Rocky	Ambrose Lab University of California Los Angeles	Richard F. Ambrose

In addition, in order to offset impacts associated with the 2010 Emergency Rock Revetment Project, the BBGHAD proposed to provide funds to The Bay Foundation for the Restoration and Monitoring of 60-Acres of Kelp Forest. This is in order to offset the 1.43 acres of impacts to Waters. A MOU has been fully executed between the BBGHAD and The Bay Foundation. The MOU documents responsibilities, timing and mitigation to be completed.

2. Total Required Compensatory Mitigation

- a. Total required Project compensatory mitigation information for temporary impacts is summarized in Table 4. This represents a 1:1 ratio. Additional compensatory mitigation may be required for habitat-specific impacts, as described above, and Table 4 may be modified with additional requirements for mitigation for temporary or permanent impacts per the MHMMP and the Compensatory Mitigation Plan.

{CIWQS} Table 4.: Required Project Compensatory Mitigation Quantity for Temporary Impacts								
			Method^[5]					
			Est.	Re-est.	Reh.	Enh.	Pres.	Unknown
Ocean/ Bay/ Estuary	PR	Acres		53.6				

^[4] Compensatory mitigation type may be: In-Lieu-Fee (ILF); Mitigation Bank (MB); Permittee-Responsible (PR)

^[5] Methods: establishment (Est.), reestablishment (Re-est.), rehabilitation (Reh.), enhancement (Enh.), preservation (Pres.). Unknown applies to advance credits with an unknown method and or location.

XV. Water Quality Certification

I hereby issue the Order for the Broad Beach Shore and Dunes Restoration, 4WQC40111011 certifying that as long as all of the conditions listed in this Order are met, the authorized discharge from the referenced Project will comply with the applicable provisions of Clean Water Act 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).

This discharge is also regulated pursuant to State Water Board Water Quality Order No. 2003-0017-DWQ, which authorizes this Order to serve as Waste Discharge Requirements pursuant to the Porter-Cologne Water Quality Control Act (Wat. Code, § 13000 et seq.).

Except insofar as may be modified by any preceding conditions, all Order actions are contingent on: (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the conditions of this Order and the attachments to this Order; and (b) compliance with all applicable requirements of Statewide Water Quality Control Plans and Policies and the Regional Water Board's Water Quality Control Plans and Policies.



Samuel Unger, PE
Executive Officer
Los Angeles Water Quality Control Board



Date