

2 In 2011, the city of Malibu (City) approved the formation of the Broad Beach Geologic  
 3 Hazard Abatement District (BBGHAD) by the Trancas Property Owners Association  
 4 (TPOA). The BBGHAD, or Applicant, is seeking approval from the California State  
 5 Lands Commission (CSLC), through the issuance of a lease, for a portion of the  
 6 BBGHAD’s proposed Broad Beach Restoration Project (Project). The Project includes:  
 7 (1) restoration of approximately 46 acres of beach and sand dunes primarily overlying  
 8 state sovereign land at Broad Beach, Los Angeles County, using an estimated 600,000  
 9 cubic yards (cy) of sand hauled from commercial quarries in Ventura County, and (2)  
 10 continued use of this sovereign land by limited portions of an existing, 4,100-foot-long,  
 11 emergency revetment (Figure 1-1). The CSLC did not previously authorize this  
 12 revetment.

13 Generally, the CSLC has exclusive jurisdiction over state sovereign lands (Pub.  
 14 Resources Code, §§ 6216, 6301) and relies on an environmental review pursuant to the  
 15 California Environmental Quality Act (CEQA; Pub. Resources Code, § 21000 et seq.) to  
 16 assess a project’s impacts to its lands and associated resources and uses. However,  
 17 implementation of the Project by the BBGHAD is statutorily exempt from CEQA as an  
 18 “[i]mprovement caused to be undertaken ... and all activities in furtherance thereof or in  
 19 connection therewith, shall be deemed to be specific actions necessary to prevent or  
 20 mitigate an emergency...” (Pub. Resources Code, §§ 26601 & 21080, subd. (b)(4).).  
 21 This statutory exemption precludes the CSLC from conducting a review under CEQA.  
 22 **Therefore, this Revised Analysis of Impacts to Public Trust Resources and Values**  
 23 **(Revised APTR) serves solely as an informational document to assist the CSLC in**  
 24 **deciding whether to issue a lease for portions of the Project within its jurisdiction.**<sup>1</sup>

25 As described in this Revised APTR, the BBGHAD’s Project area encompasses all of the  
 26 following three areas (see Figure 1-2):

- 27       · **CSLC Lease Area:** state sovereign lands that the BBGHAD is seeking to  
 28       lease, including numerous Lateral Access Easements (LAEs) held by the  
 29       CSLC;
- 30       · **Public Trust Impact Area:** includes the CSLC Lease Area and the following  
 31       adjacent areas: (1) offshore and down coast of Broad Beach; (2) Broad  
 32       Beach Road; and (3) sections of the sand transport route for the Pacific  
 33       coastline section of State Route 1 (Pacific Coast Highway [PCH]) to the  
 34       Project site;<sup>2</sup>

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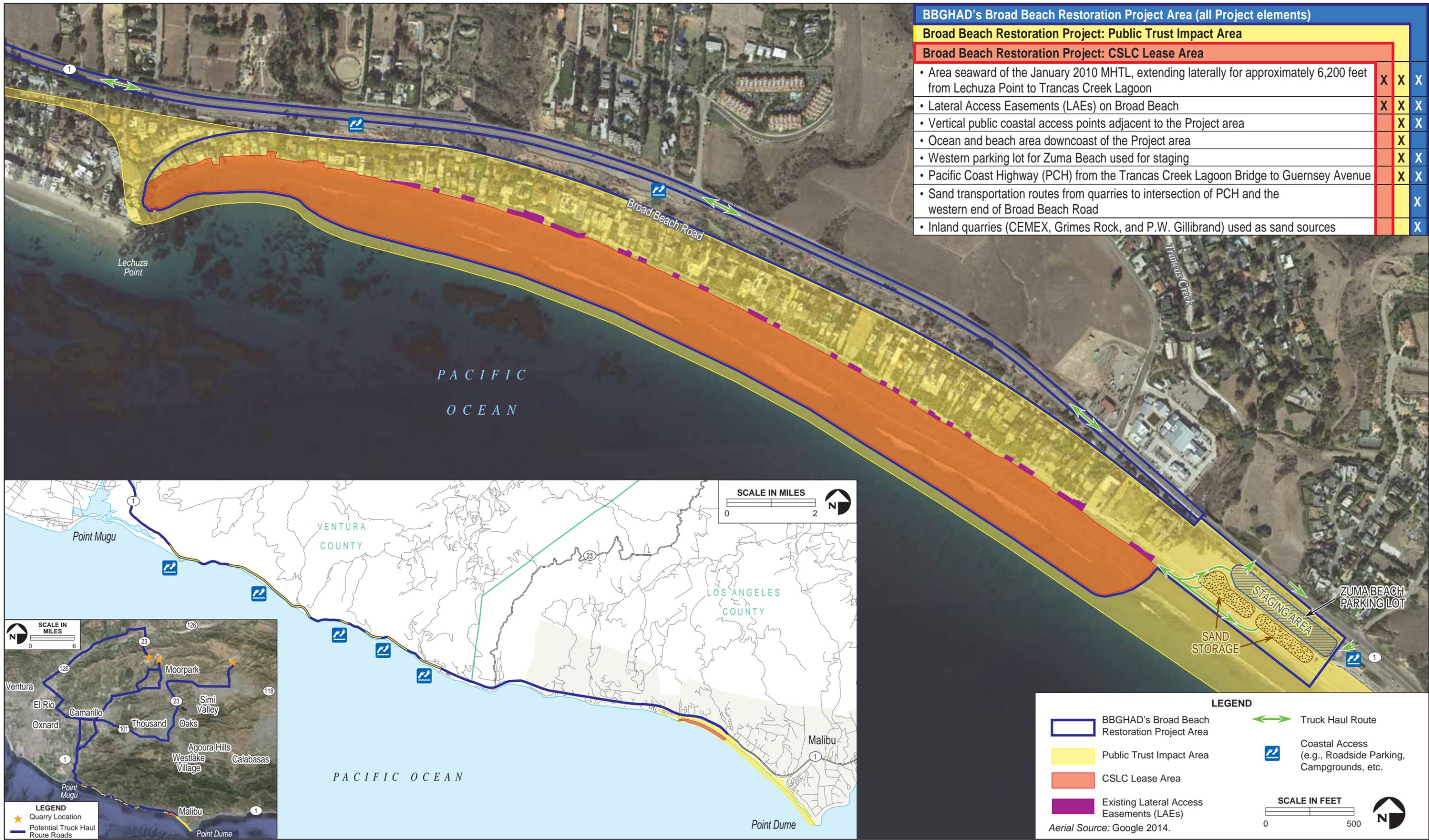
<sup>1</sup> This Revised APTR replaces a Draft APTR released in October 2012. (See Table 3-1 in Section 3.0, *Issue Area Analysis* for a summary of changes between the 2012 APTR and 2014 Revised APTR.)

<sup>2</sup> As a Trustee agency, the CSLC has a trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public trust easement in navigable waters.



Regional Setting and Project Location

**FIGURE 1-1**



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- 1 • **BBGHAD Inland Project Area:** Project areas outside the Public Trust Impact  
2 Area and CSLC’s jurisdiction, specifically three quarries in Ventura County and  
3 the sand transportation routes inland from the Pacific coastline section of PCH.

## 4 **1.1 APTR PURPOSE AND SCOPE**

5 This Revised APTR will assist the CSLC in deciding whether or not to issue a lease of  
6 state sovereign lands for the portion of the Project along Broad Beach, and if so, under  
7 what terms. Because the BBGHAD proposes to maintain the existing emergency rock  
8 revetment, which was installed with emergency permits in 2010 but without a lease from  
9 the CSLC, the CSLC will use this document to identify any conditions that should now  
10 be incorporated into the lease to avoid or minimize impacts associated with the  
11 revetment’s presence on sovereign lands. To the extent possible, using available  
12 information, the analysis considers the existing setting prior to installation of sand bag  
13 revetments and the emergency rock revetment. Analyses of impacts are evaluated  
14 against this baseline setting where possible. In addition to examining adverse and  
15 beneficial effects of the Project on public trust lands and resources, the Revised APTR  
16 identifies avoidance and minimization measures (AMMs) to lessen impacts and  
17 maximize public benefits associated with the Project’s use of sovereign lands and  
18 describes Project alternatives that may lessen or eliminate adverse Project effects.

19 The Revised APTR analyzes potential impacts to sovereign land and associated public  
20 trust resources and values, including affected resources outside the Public Trust Impact  
21 Area for qualitative information purposes (see subsection 1.1.2). Although the  
22 information in this Revised APTR may inform other agencies in their decision-making  
23 processes, the BBGHAD must obtain approvals from other local, state, and federal  
24 agencies, in addition to the CSLC, as noted in Section 1.4, *Leases, Permits, Approvals,*  
25 *and Other Requirements.*

### 26 **1.1.1 The Public Trust Doctrine and Public Trust Lands**

27 The origins of the Public Trust Doctrine are traceable to Roman law concepts of  
28 common property. Under Roman law, the air, the rivers, the sea, and the seashore were  
29 incapable of private ownership; they were dedicated to the use of the public (Institutes  
30 of Justinian 2.1.1). Under English Common Law, this principle evolved into the Public  
31 Trust Doctrine pursuant to which the sovereign held the navigable waterways and  
32 submerged lands, not in a proprietary capacity, but as a “trustee of a public trust for the  
33 benefit of the people” (*Colberg, Inc. v. State of California ex rel. Dept. Pub. Works*, 67  
34 Cal.2d 408, 416 [1967]).

35 Upon admission to the Union in 1850, California, as a sovereign state, received title to  
36 these tide and submerged lands and navigable waterways under the equal-footing  
37 doctrine (*Martin v. Waddell*, 41 U.S. 367, 410 [1842]). The Public Trust Doctrine, as a  
38 common law doctrine, is not static but is continuously evolving. Pursuant to the Public

1 Trust Doctrine, tide and submerged lands, including lands under navigable waterways  
2 (collectively referred to as “public trust lands”) are owned by the states and held in trust  
3 for the benefit of the public. Public trust lands are not alienable in that all of the public’s  
4 interest in them cannot be extinguished (*People v. California Fish Co.*, 166 Cal. 576,  
5 597-99 [1913]; *Illinois Central v. Illinois*, 146 U.S. 387 [1892]; Cal. Const. Article X,  
6 Section 4; Pub. Resources Code, § 7991). Public trust lands cannot be bought and sold  
7 like other State-owned lands; only in rare cases may the public trust be terminated, and  
8 only where consistent with the purposes and needs of the trust (*City of Long Beach v.*  
9 *Mansell*, 3 Cal. 3d 462 [1970]). These lands are to be used to promote the public’s  
10 interest in water dependent or water oriented activities including, but not limited to,  
11 water-related commerce, navigation, fisheries, environmental preservation and  
12 recreation. The Public Trust Doctrine and California’s Constitution establish the right of  
13 the public to access and use public trust lands, as well as the public’s right to fish on  
14 public trust lands (Cal. Const. Article X, Section 4; Cal. Const. Article I, Section 25).

15 The California Legislature, representing the people of California, is the ultimate trustee of  
16 California’s public trust lands and resources and exercises its authority and responsibility  
17 to enact laws to protect and promote prudent use of public trust lands and the living  
18 resources therein. *National Audubon Society v. Superior Court*, 33 Cal. 3d 419 (1983)  
19 states that the core of the Public Trust Doctrine is the State’s authority as sovereign to  
20 exercise a continuous supervision and control over the waters of the state to protect  
21 ecological and recreational values. The Legislature has delegated to the CSLC exclusive  
22 control and jurisdiction over ungranted public trust lands. (Pub. Resources Code, §§  
23 6216, 6301). The CSLC also retains the remaining State authority over lands that have  
24 been legislatively granted in trust to other governmental agencies (Pub. Resources  
25 Code, § 6301). The CSLC implements the Public Trust Doctrine through careful  
26 consideration of its principles and the exercise of discretion within the specific context  
27 and location of proposed uses. In administering its trust responsibilities, the CSLC  
28 exercises its discretionary authority in the best interests of the State, accommodating  
29 the changing needs of the public while preserving the public’s right to use public trust  
30 lands for the purposes to which they are uniquely suited. The California Department of  
31 Fish and Wildlife (CDFW), Department of Water Resources, and Department of Parks  
32 and Recreation also have responsibilities over public trust resources held in trust.

33 Use of public trust lands is generally limited to water dependent or related uses,  
34 including commerce, fisheries, and navigation, environmental preservation and  
35 recreation. Public trust uses include, among others, ports, marinas, docks and wharves,  
36 buoys, hunting, commercial and sport fishing, bathing, swimming, and boating. Ancillary  
37 or incidental uses – those that directly promote trust use, are directly supportive and  
38 necessary for trust use, or that accommodate the public’s enjoyment of trust lands – are  
39 also permitted; examples include facilities to serve visitors, such as hotels and  
40 restaurants, shops, parking lots, and restrooms. Other examples are commercial  
41 facilities that must be located on or directly adjacent to the water, such as warehouses,

1 container cargo storage, and facilities for the development and production of oil and  
2 gas. Uses that are generally not permitted on public trust lands are those that are not  
3 trust use related, do not serve a public purpose, and can be located on non-waterfront  
4 property, such as residential and non-maritime related commercial and office uses.  
5 Public trust lands may also be kept in their natural state for habitat, wildlife refuges,  
6 scientific study, or use as open space (*Marks v. Whitney*, 6 Cal 3d 251 [1971]). Because  
7 public trust lands are held in trust for all citizens of California, they must be used to  
8 serve statewide goals, as opposed to purposes that are purely of local benefit (*Mallon v.*  
9 *City of Long Beach*, 44 Cal.2d 199 [1955]; Pub. Resources Code, § 6009). In addition,  
10 the living resources (e.g., the fish and aquatic plant and animal life) inhabiting public  
11 trust tide and submerged lands and the overlying waters are public trust resources and  
12 also subject to the protections of the Public Trust Doctrine.

### 13 **1.1.2 Project Area Public Trust Resources and Impact Analysis**

14 As identified in Figure 1-2, the analysis focuses on public trust resources affected by  
15 initial construction and long-term operations over the estimated 20-year Project life. The  
16 Project areas with potential to affect public trust resources include the CSLC Lease  
17 Area and the Public Trust Impact Area. Affected public trust resources include: water  
18 and shoreline dependent recreation and related support facilities; public access  
19 (including LAEs dedicated by former or current owners of land within the BBGHAD and  
20 held by the CSLC); fish and wildlife and their habitats; and scenic resources. The  
21 analysis also considers impacts pertaining to geologic hazards and shoreline protection,  
22 marine water quality, air quality, cultural resources, noise, public health and safety  
23 hazards, traffic and parking, utilities and service systems, and environmental justice.

24 Also examined are areas down coast of Broad Beach (e.g., Zuma Beach) that may be  
25 affected by the deposition of Project-imported sand via littoral drift. During an informal  
26 public use survey of Broad Beach conducted in June 2012 to obtain a better  
27 understanding of public use of Broad Beach (see Appendix E), anecdotal observations  
28 were made regarding the interconnection between use of Zuma Beach and Broad  
29 Beach. Documented uses included surfing, swimming, tidepooling, dog walking,  
30 beachcombing, and walking and running for exercise and enjoyment. Since haul trucks  
31 carrying sand to Broad Beach may impact public coastal access to and recreation on  
32 public trust lands, impacts along PCH upcoast of Broad Beach are also evaluated.

33 As identified in Figure 1-2, the BBGHAD Inland Project Area includes the inland  
34 quarries and the sand transportation routes from the quarries to the PCH. Although this  
35 portion of the Project area is outside the Public Trust Impact Area, other resources may  
36 be affected by Project activities (e.g., traffic, air quality, etc.) in comparison to existing  
37 conditions. As these affected resources are outside the Public Trust Impact Area, they  
38 are evaluated qualitatively for information purposes.

1 **1.2 PROJECT OBJECTIVES**

2 The BBGHAD proposes to reestablish a wide sandy beach berm backed by a restored  
3 dune system at Broad Beach while maintaining and burying the existing emergency  
4 rock and sand bag revetments under these restored sand dunes. In order to explain the  
5 need for the Project, and to guide development and evaluation of Project alternatives,  
6 the BBGHAD was asked to define its Project objectives, which are as follows:

- 7       · Protect existing homes, structures, and other improvements – including septic  
8       systems – from ongoing coastal erosion along Broad Beach;
- 9       · Create and maintain a wide sandy beach backed by a restored dune system  
10      similar to that which historically occurred along this reach of coastline;
- 11      · Provide for enhanced public access along Broad Beach while maintaining  
12      homeowner beach access and privacy through establishment of consistent  
13      lateral access along the beach; and
- 14      · Restore and enhance native dune habitats along Broad Beach and add sandy  
15      intertidal habitat to support native fauna (e.g., grunion, shorebirds).

16 **1.2.1 Description of the Existing Emergency Revetment**

17 High erosion rates during the 2009-2010 winter season and widespread failure of  
18 temporary emergency sand bag revetments resulted in the TPOA applying for and  
19 receiving emergency permits from the city of Malibu and California Coastal Commission  
20 (CCC) to construct a temporary emergency rock revetment on Broad Beach. At that  
21 time, the emergency revetment was accepted as the minimum action necessary and the  
22 least environmentally damaging alternative to implement the interim shore protection  
23 required for structures, and to protect public health from accidental releases of sewage  
24 effluent related to threatened leach fields (Illustration 1-1). In total, approximately 36,000  
25 tons of boulders were placed along 4,100 feet of Broad Beach in front of homes located



**Illustration 1-1.** The existing emergency rock revetment completed in April, 2010, is 4,100 feet long, rises approximately 12 to 15 feet above the low tide beach, and is 22 to 38 feet wide at its base.

1 between 30760 and 31346 Broad Beach Road. (The property owner at 30822 Broad  
2 Beach Road opted to not participate in the revetment project, resulting in a more than  
3 100-foot-long break in the continuity of the revetment in front of this property.)

#### 4 **1.2.2 Project Summary**

5 The CSLC Lease Area and Public Trust Impact Area include Broad Beach and the  
6 western portions of Zuma Beach. The proposed beach and dune restoration would  
7 encompass 46 acres to extend laterally for approximately 6,200 feet from Lechuza Point  
8 on the west to Trancas Creek Lagoon on the east, and vertically from the inland limits of  
9 dune construction to the seaward limits of proposed beach nourishment (Figures 1-1  
10 and 2-3 through 2-6). Additionally, this area includes the construction staging area at  
11 the west-end Zuma Beach Parking Lot 12 (1.4 to 1.9 acres), and a sand stockpile area  
12 located along 1,000 feet of Zuma Beach adjacent to the parking lot.

13 Initial Nourishment. The initial nourishment event would take approximately 8 months to  
14 complete, including 30 days to construct the dune system and another 30 days for dune  
15 restoration, including planting, fencing, signage, and placement of temporary irrigation  
16 systems (Section 2.3, *Construction Operations and Procedures*). Hauling of inland  
17 quarry sand to Broad Beach is expected to take 5 months (102 working days at 5 days  
18 per week), and an additional 2 weeks would be required to complete hauling of imported  
19 sand from the stockpile area to complete construction of the sand dunes on Broad  
20 Beach. The western 1,000 feet of Zuma Beach, the Trancas Lagoon mouth, and Broad  
21 Beach would be closed for an estimated 102 weekdays during initial Project  
22 construction due to the intensity of construction activities and operation of heavy trucks  
23 and equipment (Section 2.3.4, *Construction Details*).

24 Heavy equipment (e.g., scrapers, large capacity trucks, and bulldozers) would distribute  
25 sand to desired locations and depths, cover the existing revetment, and create a  
26 restored sandy beach. Construction staging would use 1.4 to 1.9 acres of the public  
27 Zuma Beach Parking Lot 12 parking lot and 260 coastal access parking spaces; 42  
28 informal free road shoulder spaces along PCH would also be needed, a portion of which  
29 would be converted into a truck lane for the 8-month period (see Section 2.3,  
30 *Construction Operations and Procedures*).

31 After initial nourishment, the new beach and dune system is expected to extend over  
32 approximately 46 acres: 27 acres of dry sandy beach where intertidal wet sand beach  
33 currently exists; 11 acres of generally intertidal beach; and 8 acres of dunes backing the  
34 beach. The longevity of this nourishment will depend on a variety of natural factors at  
35 Broad Beach, including climatic cycles, wave energy and direction, longshore transport  
36 of sand in the littoral cell, sand grain size and sea level rise (see Section 3.1, *Coastal  
37 Processes, Sea Level Rise, and Geologic Hazards*). Proposed BBGHAD activities that  
38 may affect nourishment longevity include backpassing, renourishment, and installation  
39 of additional emergency sand bag revetments.

1 Backpassing. In order to extend the longevity of the proposed beach nourishment, the  
2 Applicant would conduct monthly beach profile measurements (Section 2.2.9, *Long-*  
3 *Term Beach Profile Monitoring*) and, based upon and in accordance with objective  
4 beach nourishment triggers, would use scrapers, bulldozers, or other heavy equipment  
5 to “backpass” sand from the wider dry sand beach berm on the eastern reach of beach  
6 to the narrower western reach of beach. The volume of sand backpassed would vary  
7 depending on sand availability and need, as determined by monitoring, but is  
8 anticipated to range from as low as 25,000 cy over 1.5 weeks to as high as 35,000 cy  
9 over 3 weeks (Section 2.2.10, *Future Beach Management Events*). Although the  
10 Applicant would attempt to provide public access to the beach during backpassing  
11 operations through implementation of a construction vehicle traffic management plan,  
12 signage, and flagmen, the majority of the working area below Mean Higher High Water  
13 (MHHW) would be closed to the public during these operations (Section 2.2.10, *Future*  
14 *Beach Management Events*).

15 Renourishment. Even with backpassing, maintenance of the newly established beach  
16 for a planned 20-year period is anticipated to require a second major renourishment  
17 event. Timing for renourishment would be determined via monitoring triggers and is  
18 projected to occur in 10 years (Section 2.2.9, *Long-Term Beach Profile Monitoring*).  
19 Renourishment would involve adding 450,000 cy of sand to Broad Beach, similar to the  
20 original nourishment. As renourishment operations progress, public access to portions  
21 of the beach would be maintained to the extent possible with implementation of a  
22 construction vehicle traffic management plan (see Section 2.3, *Construction Operations*  
23 *and Procedures*), but public lateral access to Broad Beach and the west end of Zuma  
24 Beach would likely be restricted during working hours (Monday through Friday, 7:00 AM  
25 to 6:00 PM) for an estimated 180 days due to heavy equipment traffic. On weekends  
26 and holidays the beach would remain open for public access.

27 Additional Emergency Sand Bag Revetments. During major periods of erosion (e.g.,  
28 toward the end of the useful life of either the initial or follow up nourishment events), the  
29 Project contains a provision to install emergency sand bag revetments on private  
30 property along the eastern 550 feet of Broad Beach (which is not protected by the  
31 emergency rock revetment) and the 100-foot break in the revetment. Sand bags would  
32 be filled using beach sand only, and the dunes would not be disturbed.

### 33 **1.3 PUBLIC REVIEW AND COMMENT**

34 In October 2012, a Draft APTR was released for review and comment by governmental  
35 agencies and the public, and verbal and written comments were also accepted at a  
36 noticed public meeting. All comments received were considered in the context of  
37 potential impacts to public trust resources and values. In May 2013, based on  
38 comments and a range of issues, the Applicant revised the Project description. Key  
39 public comments and new information addressed in this Revised APTR include:

- 1     · Changes to sand sources for beach nourishment from offshore dredged sources  
2       to inland quarry sources;
- 3     · Public access and recreational amenities;
- 4     · Impacts to sensitive marine habitat at the west end of the Project area and  
5       proposed impact minimization and monitoring;
- 6     · Long-term planning for septic systems management and protection and storm  
7       water management and flooding related to the existing storm drains, rock and  
8       sand bag revetment, and future nourishment activities;
- 9     · Concern about longevity, (i.e., that more than one major renourishment event  
10      might be required to maintain the beach for the life of the Project);
- 11    · Monitoring of CSLC Lease Area and adjacent Public Trust Impact Area;
- 12    · Consideration of a revised impact analysis using a baseline setting prior to  
13      installation of sand bag revetments and the emergency rock revetment; and
- 14    · Consideration of alternatives that further avoid and minimize impacts.

#### 15    **1.4    LEASES, PERMITS, APPROVALS, AND OTHER REQUIREMENTS**

16    The CSLC's discretionary action for this Project is the issuance of a lease that would  
17    allow for the continued occupation of state land by portions of the 2010 emergency  
18    revetment and underlying unpermitted sand bag revetments, as well as the proposed  
19    placement of 600,000 cy of sand at Broad Beach to create a sandy beach and dune  
20    system. Of the 46 acres that would be covered with the new beach and dune system,  
21    5.5 acres would be located on private land while the remaining approximately 40.5  
22    acres would be located on public land administered by the CSLC and would require  
23    issuance of the lease.

24    The lease would contain an end-of-lease provision that will require the BBGHAD to  
25    submit to the CSLC at least 2 years prior to the end of the lease term either an  
26    application requesting a new lease for the continued use and occupation of state land  
27    by the Project, or a plan to restore the lease area. At that time, the CSLC would  
28    consider the potential for continuation of nourishment or the disposition of the revetment  
29    and other improvements that overlie or block access to public lands or LAEs (e.g.,  
30    potential removal or retention of these protective structures).

31    The BBGHAD must also obtain other permits and approvals from reviewing authorities  
32    and regulatory agencies for the Project and any future Project beach nourishment  
33    efforts (e.g., annual transportation of sand via backpassing and major renourishment  
34    after a 10-year interval) (Tables 1-1 and 3.3).

1 **Table 1-1. Local, State, and Federal Permit/Consultation Requirements**

<b>Local</b>	Los Angeles County Department of Beaches and Harbors Right of Entry Permit (for use of Zuma Beach for Project construction and staging) and Encroachment Permit (for use of the parking lot at Zuma Beach for staging).
<b>State</b>	CCC consolidated Coastal Development Permit (CDP), issued pursuant to the Chapter 3 policies of the California Coastal Act, with the city of Malibu's certified Local Coastal Program (LCP) as guidance. <sup>3</sup>
	CDFW consultation pursuant to California Endangered Species Act (ESA) and Fish and Game Code for potential impacts to marine habitat and sensitive species and Point Dume State Marine Conservation Area; possible Streambed Alteration Agreement for work in Trancas Creek.
	California Department of Transportation approvals to allow ingress/egress via PCH.
	Los Angeles Regional Water Quality Control Board Section 401c Water Quality Certification and National Pollutant Discharge Elimination System permit.
<b>U.S.</b>	U.S. Army Corps of Engineers Sections 10 and 404 Permits.
	National Marine Fisheries Service/U.S. Fish and Wildlife Service consultation pursuant to federal ESA and/or Magnuson-Stevens Fishery Conservation and Management Act.

<sup>3</sup> Coastal Act section 30601.3 provides that when a project requires a CDP from a local government with a certified LCP and the CCC, the CCC may process a single, consolidated CDP if the applicant and local government agree. The BBGHAD, city of Malibu, and CCC have agreed to process the BBGHAD application as a consolidated CDP (see city of Malibu, Resolution No. 12-42, November 2012).