

CALIFORNIA COASTAL COMMISSION

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Filed: 8/6/18
 180th Day: 2/2/19
 Staff: D. Christensen-V
 Staff Report: 8/23/18
 Hearing Date: 9/13/18

STAFF REPORT: REGULAR CALENDAR

Application No.: 4-18-0498

Applicant: County of Los Angeles Department of Beaches and Harbors

Location: Zuma County Beach, City of Malibu, Los Angeles County (APN No. 4469-027-901)

Project Description: Construction and maintenance of ten approximately 15 ft. high, 20 ft. wide, 215-300 ft. long seasonal sand berms to protect the adjacent public beach facilities from winter storm inundation, utilizing sand excavated from the dry beach area within a 75-ft. radius of each berm.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The County of Los Angeles Department of Beaches and Harbors is proposing to construct ten seasonal sand berms adjacent to the County's existing public facilities at Zuma Beach in the City of Malibu. Each of the sand berms would be approximately 15 feet high, 20 feet wide, and 215 to 300 feet in length, utilizing sand excavated from the dry beach area within a 75-foot radius of each berm. Construction of the proposed sand berms is anticipated to occur in late November, or early December, in order to protect the adjacent public beach facilities from winter storm inundation. The berms would be removed in spring (between March and before Memorial Day weekend) and the sand redistributed along the beach. No work would occur between Memorial Day in May through Labor Day in September to ensure public recreational use of the beach is not impacted.

Commission staff is recommending **approval** of the proposed development with seven special conditions regarding (1) timing of construction, (2) operational responsibilities, (3) sensitive species monitoring, (4) assumption of risk, waiver of liability, and indemnity agreement, (5) permit expiration, and (6) limitations on construction activities.

The proposed sand berms would be located on the back beach portion of Zuma Beach. While the proposed sand berms are designed to protect public shoreline structures that would otherwise be in danger from erosion, they are not strictly speaking shoreline protective devices. Rather, they are considered a “soft” solution in that sand berms will absorb wave or uprush energy, but will not result in hardening the shoreline or causing increased beach erosion. Further, any remaining berms will be removed in spring and the sand redistributed along the beach. As such, the project will not have impacts on the local sand supply or cause increased erosion.

The excavation of sand in the area of each proposed berm would not lower the sand elevation by more than approximately one foot below the existing sand elevation. Therefore, sand utilized for the construction of each berm will not create a large elevation difference between the excavated areas and the surrounding beach, and impacts to the grade of the sand excavation sites will be minimal. Access over the proposed sand berms will not be blocked or result in an impassable barrier for the average beachgoer, and beachgoers could potentially traverse the subject sand berms in order to access the beach. Additionally, the sand berms are spaced out and will not fully occupy the sandy beach at the project location. As such, a large area of beach will be available for pass, repass, and recreation. In order to ensure that maximum access is maintained for the public in the project area and to avoid the peak recreational season, Commission staff is recommending special conditions that would prohibit project operations from Memorial Day in May through Labor Day in September, and would require that the sand berms be lowered to pre-existing beach contours before Memorial Day.

Wildlife species of special concern that could potentially be in the project area include California grunion and the federally threatened Western snowy plover. Additionally, beach wrack, which has been shown to be a critical influence of diversity and abundance of invertebrates, plants, and birds, is present on the sandy beaches and intertidal areas of the site. The proposed temporary sand berms are not expected to directly impact the snowy plover or grunion once they are in place. However, project activities such as construction, reconstruction, maintenance, and lowering of the sand berms have the potential to adversely impact these species. Commission staff is recommending a special condition that requires biological monitoring during all project activities to ensure adverse impacts to grunion and snowy plover are avoided. While much of the berm construction activities take place well landward of the typical beach wrack line, given the importance of wrack in beach habitats, it is necessary to ensure that impacts to wrack are avoided. Staff is recommending a special condition that require disturbance or removal of beach wrack be avoided to the maximum extent feasible. Any beach wrack that is temporarily removed by necessary sand berm maintenance activities, including reconstruction following wave erosion, shall be relocated back to the area from which it was removed upon completion of the maintenance activities.

The Commission has previously authorized seasonal sand berms at Zuma Beach. These permits allowed the subject berms each winter for a period of five years, subject to special conditions. The most recent permit had a five-year term that expired on Memorial Day of 2018. The County is seeking a new permit to continue the project for another five-year period (until Memorial Day 2023). The term of the proposed project is limited in order to give the Commission the opportunity to reassess the project and, if necessary, make changes to address any identified problems.

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APPENDICES

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EXHIBITS

[Exhibit 1 – Vicinity Map](#)

[Exhibit 2 – Aerial View and Site Plan](#)

[Exhibit 3 – Representative Sand Excavation Area](#)

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 4-18-0498 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves coastal development permit application No. 4-18-0498 for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter Three of the Coastal Act and the policies of the certified Local Coastal Program for the City of Malibu. Approval of the permit complies with the California Environmental Quality Act because either (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

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

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Timing of Construction.

All project operations, including, but not limited to, construction, demolition, operation of equipment, sand excavation and placement, or other construction, maintenance, material removal, or activities involving mechanized equipment shall be prohibited on any part of the beach in the project area each year from Memorial Day in May through Labor Day in September to avoid impact on public recreational use of the beach.

2. Operational Responsibilities.

By acceptance of this permit, the applicant agrees that:

- a) The sand berms shall be constructed in accordance with project plans, subject to the timing restrictions specified in Special Condition One (1) above.
- b) The sand berms shall be removed each year (lowered) prior to Memorial Day, subject to the timing restrictions specified in Special Condition One (1) above. The sand berms shall be lowered to pre-existing beach contours to restore the shoreline and to facilitate recreational use, unless the pre-existing beach contours have already been restored naturally through wave action prior to Memorial Day.
- c) No construction materials, debris, or waste shall be placed or stored where it may be subject to wave erosion and dispersion.
- d) Any and all debris resulting from construction activities shall be removed from the beach immediately.
- e) Equipment shall not be in contact with coastal waters at any time.

3. Sensitive Species Monitoring.

- a) The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director. The applicant shall provide the environmental monitor's qualifications for review by the Executive Director at least two (2) weeks prior to commencement of project activities. The environmental monitor shall conduct a visual survey of the project site, to determine presence and behavior of the Western Snowy Plover, prior to any excavation, construction, reconstruction, maintenance, or removal activities, associated with the sand berm. Prior to any project activities, the environmental monitor shall examine the beach area to preclude impacts to the federally listed Western Snowy Plover. No excavation, construction, reconstruction, maintenance, or removal activities shall occur until any and all Western Snowy Plovers have left the project area or its vicinity. In the event that the Western Snowy Plover exhibit reproductive or nesting behavior, the applicant shall cease work, and shall immediately

notify the Executive Director and federal, state, and local resource agencies. Project activities shall resume only upon written approval of the Executive Director.

- b) By February 25 of each year, the applicant shall obtain the seasonally predicted run schedule for the California grunion, as identified by the California Department of Fish and Wildlife. In the event that excavation, construction, reconstruction, maintenance or removal activities will occur during the seasonally predicted run period and egg incubation period for the California grunion, then the environmental monitor shall document any grunion spawning activity, and if grunion are present in any lifestage, no excavation, construction, reconstruction, maintenance, or removal activities shall occur during the grunion spawning activity below the semilunar high tide mark.
- c) The environmental monitor shall be present during the excavation, construction, reconstruction, maintenance, or removal activities, of the sand berms. The monitor shall identify, in the field, the location of the wrack line at the time of any construction in order to assure compliance with the provisions of Special Condition Six (6). In the event the environmental monitor concludes that the applicant has violated, or is violating, any special condition of this permit, or if any unforeseen sensitive habitat issues arise, the applicant must cease work. The environmental monitor shall immediately notify the Executive Director if activities outside of the scope of Coastal Development Permit 4-18-0498 occur or if habitat is removed or impacted beyond the scope of the work indicated in Coastal Development Permit 4-18-0498. If significant impacts or damage occur to sensitive wildlife species, the applicant shall stop all work and be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised or supplemental program shall be processed as an amendment to this coastal development permit.

4. Assumption of Risk, Waiver of Liability, and Indemnity Agreement.

- a) By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from storm waves, surges, erosion, and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.
- b) *Prior to issuance of the coastal development permit*, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

5. Permit Expiration.

All sand berms approved and constructed pursuant to Coastal Development Permit 4-18-0498 shall be removed prior to Memorial Day weekend of each year, unless further

authorization has been granted under the Coastal Act. The approval of this project shall expire on Memorial Day 2023. Any construction, excavation, or sediment transport activities after the expiration of this permit will require the issuance of a new coastal development permit.

6. Limitations on Construction Activities.

Berm construction activities, including, but not limited to, excavation and deposition of sand, recontouring of sand, and berm maintenance shall be implemented in a manner that avoids the removal or disturbance of wrack to the maximum extent feasible. However, if berm maintenance activities cannot feasibly avoid removal or disturbance, wrack located within the maintenance area shall be removed for the duration of the maintenance work, and subsequently relocated to the area from which it was removed upon completion of the work. Unless temporarily relocated for the duration of maintenance work, this permit does not allow for the removal of wrack from this area with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed by hand as needed.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND BACKGROUND

The County of Los Angeles Department of Beaches and Harbors is proposing to construct and maintain ten (10) approximately 15 foot high, 20 foot wide seasonal sand berms at Zuma County Beach, located between Broad Beach and Point Dume within the City of Malibu ([Exhibit 1](#)). Six of the proposed sand berms would be 215 feet long, and would require approximately 1,194 cubic yards of sand; three of the proposed sand berms would be 300 feet long, and would require approximately 1,667 cubic yards of sand; and one of the proposed sand berms would be 250 feet long, and would require approximately 1,389 cubic yards of sand, as shown on [Exhibit 2](#). Sand utilized for construction of each of the ten berms would be excavated from the dry beach area, within an approximately 75 foot radius immediately surrounding the location of each berm, as shown on [Exhibit 3](#). Construction of all proposed sand berms would require approximately 13,554 cubic yards of sand. Construction of the proposed sand berms would occur seaward of the Pacific Coast Highway, existing beach parking lots, and public beach facilities, as shown on Exhibit 2. The berms are intended to protect the County’s beach facilities, such as restrooms, parking lots, and maintenance yards, from severe winter storm wave uprush and flood damage.

Construction of the proposed sand berms is anticipated to occur in late November, or early December, in order to protect the adjacent public beach facilities from winter storm inundation. Construction of each berm would take approximately 2 to 3 days to complete. It is anticipated that up to three of the proposed berms may be constructed concurrently, and that construction of all proposed sand berms would be completed in approximately two weeks. Tractors would excavate the sand adjacent to the location of each proposed sand berm, and would subsequently shape the sand berms so that the landward side of the berm would have a slope of 2:1, and the seaward side would have a slope of 4:1. Construction equipment would access the beach through

the adjacent beach parking lot. All construction materials would be removed from the beach each day, and stored at an existing maintenance facility located adjacent to the Zuma Beach parking lot. The berms would be removed in spring (between March and before Memorial Day weekend) and the sand redistributed along the beach.

Should any of the proposed sand berms become damaged by wave action during the winter storm season, periodic maintenance and/or reconstruction would occur. Maintenance of the damaged sand berm would require pushing sand from the excavation area onto the berm with tractors during the low tide periods. Based on past sand berm construction, the applicant does not anticipate that sufficient damage will occur that would completely destroy the sand berms or necessitate complete reconstruction.

The Commission has previously authorized seasonal sand berms at Zuma Beach. In November 2013, the Commission approved Coastal Development Permit (CDP) 4-13-0675 with special conditions that allowed for the construction of the subject ten seasonal sand berms at Zuma Beach each winter for a period of five years (2013 - May 2018). Prior to that, CDP 4-06-060 and CDP 4-02-252 were approved by the Commission, which allowed for the construction of six seasonal sand berms at Zuma Beach each winter for a period of five years.

Although the Commission has previously certified a Local Coastal Program (LCP) for the City of Malibu, the proposed project will be located within an area where the Commission has retained jurisdiction over the issuance of coastal development permits. Thus, the standard of review for this project is the Chapter Three policies of the Coastal Act, with the applicable policies of the City of Malibu LCP as guidance.

B. HAZARDS AND SHORELINE PROCESSES

Section 30235 of the Coastal Act states:

Revetments, breakwaters, groins, harbor channels, seawalls, cliff retaining walls, and other such construction that alters natural shoreline processes shall be permitted when required to serve coastal-dependent uses or to protect existing structures or public beaches in danger from erosion, and when designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Existing marine structures causing water stagnation contributing to pollution problems and fishkills should be phased out or upgraded where feasible.

Section 30253 of the Coastal Act states, in pertinent part, that new development shall:

- (1) *Minimize risks to life and property in areas of high geologic, flood, and fire hazard*
- (2) *Assure stability and structural integrity, and neither create or contribute significantly to erosion, instability, or destruction of the site or surrounding area or in any way require the construction or protective devices that would substantially alter natural landforms along bluffs and cliffs.*

Additionally, the City of Malibu LUP Policy 4.2 states:

All new development shall be sized, designed and sited to minimize risks to life and property from geologic, flood, and fire hazard.

Coastal Act Section 30235 specifically provides that shoreline protective devices must be permitted only when both of the following two criteria are met: (1) the device is required to serve coastal-dependent uses or to protect existing structures or public beaches provided that these areas/structures are in danger from erosion and (2) the device is designed to eliminate or mitigate adverse impacts on local shoreline sand supply. Section 30253 of the Coastal Act and City of Malibu LUP Policy 4.2 mandate that new development shall minimize risks to life and property in areas of high geologic and flood hazard.

The ten proposed sand berms would be approximately 15 feet high, and would range in length from 215 feet to 300 feet. The landward side slope of the sand berm would be approximately 2:1, and the seaward side slope would be approximately 4:1. It is anticipated that construction of the subject sand berms would occur in late November, or early December, in order to protect the adjacent public beach facilities from winter storm inundation. The sand berms would be maintained as necessary throughout the winter storm season should damage from wave action occur. The sand berms would be removed between March and before Memorial Day weekend.

Construction of each sand berm would require approximately 1,194 to 1,667 cubic yards of sand. Sand utilized for construction of each of the ten berms will be excavated from the dry beach area, within an approximately 75 foot radius immediately surrounding the location of each berm. The excavation of sand would not lower the sand elevation by more than approximately one foot below the existing sand elevation. Therefore, sand utilized for the construction of each berm will not create a large elevation difference between the excavated areas and the surrounding beach, and impacts to the grade of the sand excavation sites will be minimal.

While the proposed sand berms are designed to protect public shoreline structures that would otherwise be in danger from erosion, they are not strictly speaking shoreline protective devices. Rather, they are considered a “soft” solution in that sand berms will absorb wave or uprush energy, but will not result in hardening the shoreline or causing increased beach erosion. Further, any remaining berms will be removed in spring and the sand redistributed along the beach. As such, the project will not have impacts on the local sand supply.

The proposed sand berms will require the use of construction equipment on the sandy beach. As such, the Commission finds that construction of the proposed project could result in the potential generation of debris and or presence of equipment and materials that could be subject to tidal action. The presence of construction equipment and materials on the subject site could pose hazards to beachgoers or swimmers if construction site materials were discharged into the marine environment or left inappropriately/unsafely exposed on the project site. In addition, such discharge to the marine environment would result in adverse effects to offshore habitat from increased turbidity caused by erosion and siltation of coastal waters. Therefore, in order to ensure that adverse hazards are avoided, and effects to the marine environment are minimized, **Special Condition Two (2)** requires the applicant to ensure that no stockpiling or storage of dirt, construction materials, or equipment shall occur on the beach seaward of the proposed berm

location and that any and all debris that results from the construction period shall be immediately removed from the sandy beach.

The Commission notes, based on the information submitted by the applicant, the proposed development is located in an area of the Coastal Zone that has been identified as subject to potential hazards from wave action during the winter storm season. Although the proposed project will decrease the risk of hazards to the development on the subject site in relation to wave caused erosion, there remains some inherent risk to development on such sites. The Coastal Act recognizes that certain types of development, such as the proposed project to protect existing beach facilities from storm waves, may involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property.

In this case, the property is owned by a public agency and the hazards associated with developing facilities in such a location must be considered in conjunction with the public beach access use that is provided. The Commission finds that it is appropriate to protect the existing public facilities so long as the applicant assumes the risks associated with the unforeseen possibility of storm waves, surges, erosion, and flooding as a condition of approval. Therefore, **Special Condition Four (4)** requires the applicant to waive any claim of liability against the Commission for damage to life or property that may occur as a result of the permitted development. The applicant's assumption of risk will demonstrate that the applicant is aware of and appreciates the nature of the hazards which exist on the site and which may adversely affect the stability or safety of the proposed development.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Sections 30235 and 30253, and City of Malibu LUP Policy 4.2.

C. MARINE RESOURCES AND WATER QUALITY

Coastal Act Section 30230 states:

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

Section 30231 of the Coastal Act states:

The biological productivity and quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health

Section 30240 of the Coastal Act States:

(a) Environmentally sensitive habitat areas shall be protected against a significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

City of Malibu LUP Policy 3.8 states:

Environmentally sensitive habitat areas (ESHAs) shall be protected against significant disruption of habitat values, and only uses dependent on such resources shall be allowed within such areas.

City of Malibu LUP Policy 3.1 states in part:

New development shall be sited and designed to avoid impacts to ESHA. If there is no feasible alternative that can eliminate all impacts, then the alternative that would result in the fewest or least significant impacts shall be selected.

Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. Further, Section 30231 requires that the biological productivity and quality of coastal waters be maintained. In addition, Section 30240 of the Coastal Act, as well as City of Malibu LUP Policies 3.8 and 3.1, state that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could degrade those resources.

According to the California Department of Fish and Wildlife (CDFW), species of special concern that could potentially be in the areas of the proposed berms include the federally threatened Western snowy plover (*Charadrius alexandrinus nivosus*) and California grunion (*Leuresthes tenuis*). Additionally, beach wrack, which has been shown to be a critical influence of diversity and abundance of invertebrates, plants, and birds, is present on the sandy beaches and intertidal areas of the project location.

Western Snowy Plover

The Pacific Coast population of Western snowy plover (*Charadrius alexandrinus nivosus*) are small, sand colored shorebirds that use sandy beaches for nesting and roosting from southern Washington to southern Baja California, Mexico. The snowy plover forages on invertebrates in the wet sand, amongst surf-cast kelp, on dry sandy areas above the high tide, on salt pans, on spoil sites, and along the edges of salt marshes, salt ponds, and lagoons (USFWS 2001). Snowy plovers breed primarily above the high tideline on coastal beaches, sand spits, dune-backed beaches, sparsely-vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. They tend to be site faithful, with the majority of birds returning to the same

nesting location in subsequent years (USFWS 2001 citing Warriner et al. 1986). The breeding season for snowy plovers along the Pacific coast extends from early March to mid-September. The majority of California's wintering snowy plovers roost and forage in loose flocks on sand spits and dune-backed beaches, with some occurring on urban and bluff-backed beaches, which are rarely used for nesting (USFWS 2001). Roosting snowy plovers usually sit in small depressions in the sand, or in the lee of kelp, other debris, or small dunes (USFWS 2001 citing Page et al 1995).

The snowy plover was listed by the U.S. Fish and Wildlife Service (USFWS) as a threatened species in March 1993. Subsequently, USFWS designated 180 miles of coastline in California, Oregon, and Washington as critical habitat in 1999. Critical habitat for the snowy plover was revised in June 2012. Critical habitat is a specific designation that identifies areas that are essential to conservation of an endangered species. Critical habitat for the western snowy plover is designated at Zuma Beach and extends onto the downcoast area of Broad Beach. Zuma Beach supports the largest population of wintering snowy plovers in Los Angeles County.

The proposed temporary sand berms are not expected to directly impact the snowy plover once they are in place. However, project activities such as construction, reconstruction, maintenance, and lowering of the sand berms have the potential to adversely impact snowy plover. CDFW suggests that a qualified monitor be present during construction and removal of the berms to ensure that if snowy plover are present, all construction activity will be temporarily halted until it has been determined that the birds have moved from area. In order to ensure that excavation, construction, maintenance, or lowering of the proposed sand berms does not adversely affect the snowy plover, **Special Condition Three (3)** requires a qualified resource specialist to examine the beach area immediately prior to excavation or berm construction, maintenance, and lowering activities. The resource specialist shall ensure that prior to any excavation, construction, maintenance, or removal activities, there are no snowy plovers in the project area or its vicinity. Additionally, if snowy plovers are present within the project vicinity, **Special Condition Three (3)** requires that project activities do not commence until the snowy plovers have left the project area.

California Grunion

The California grunion is a small fish in the silversides family and is extremely unusual among fish in its spawning behavior. The grunion spawn on the sandy beaches in the project vicinity immediately following high tides from March to August. The eggs are incubated in the sand until the following series of high tide conditions, approximately 10 to 15 days, when the eggs hatch and are washed into the sea. California grunion is a species of concern due to its unique spawning behavior. Project activities within the intertidal zone may disturb adult grunion during the run period and/or may bury incubating grunion eggs.

According to CDFW, all gently sloping sandy beaches are potential grunion spawning habitat. Berm construction and activity could adversely impact grunion spawning. Therefore, CDFW has indicated that the proposed sand berms should, ideally, be removed prior to the start of the grunion spawning season (March). However, CDFW in consultation with the applicant, understands that removing the berms too early in the potential storm season will eliminate the protection the berms need to provide. Therefore, to mitigate any potential adverse impact to the grunion and allow the berms to remain for storm protection, CDFW recommends that sand

removed from the berms be relocated to dry sandy areas above the semilunar high tide mark during the grunion spawning season, and that heavy equipment be prohibited from operating and traveling below the high tide mark.

Excavation for initial construction would not occur during the grunion spawning season; however, it is possible that storms may occur in late March, requiring berm maintenance or reconstruction during grunion spawning season; and the berm would be lowered in approximately April or May, during the grunion spawning season. Therefore, the proposed operations have the potential to significantly impact California grunion by excavating or depositing sediment within the intertidal zone during the seasonally predicted protected grunion run period and egg incubation period of March through August.

In order to ensure that impacts to California grunion are avoided, **Special Condition Three (3)** requires that in the event that excavation, construction, maintenance or lowering activities occur during the seasonally predicted run period and egg incubation period for the California grunion, as identified by the California Department of Fish and Wildlife, then the resource specialist shall document the presence of grunion, and any grunion spawning activity. If grunion are present at any life stage during any run periods and corresponding egg incubation periods, **Special Condition Three (3)** prohibits project activities on any part of the beach below the semilunar high tide mark.

Beach Wrack

The Commission finds that regular grooming at beaches can impact the diversity and abundance of invertebrates, plants, and birds present on sandy beaches and intertidal areas. Grooming and beach nourishment can cause removal of kelp washed ashore during high tides and continual removal and disturbance to plants and invertebrates colonizing the sand. A study comparing ungroomed and groomed beaches in Santa Barbara and Ventura counties showed the abundance and species diversity of coastal strand plants to be approximately 15 times higher at ungroomed beaches than groomed beaches¹. Regularly groomed beaches also exhibit reduced richness, abundance, and biomass of many species of invertebrates, including crustaceans and insects². This reduction of invertebrates, in turn, impacts shorebirds, including sandpipers, plover, and sanderlings that feed on crustaceans and insects in the sand.

Wrack, the tangles of kelp and sea grass that wash up onto beaches and settle in large clumps along the tide line, are of particular importance for invertebrate, plants, and birds in the intertidal zone of the beach. A diverse macrofauna, including amphipods, isopods, and insects are found in wrack. According to one study at Southern California beaches, wrack associated macrofauna made up an average of greater than 37% of species on ungroomed beaches and comprised 25%

¹ Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

² Dugan, Jenifer E., et. Al. Macrofauna Communities of Exposed Sandy Beaches on the Southern California Mainland and Channel Islands.

or more of the total abundance on half of those beaches³. The presence and amount of wrack on beaches is, therefore, directly correlated with the abundance and diversity of crustaceans and insects at beaches. The same study also showed reduced presence of Western Snowy Plover and Black-Bellied Plover at beaches in Ventura and Santa Barbara counties where wrack used to be removed regularly as part of beach grooming activities. The presence of wrack on beaches has also been proven to reduce wind driven sand transport at beaches by more than 90%⁴.

While the proposed sand berm construction project does not specifically include any beach grooming activities, the proposed project does include excavation of dry sand for construction and maintenance of the sand berms and recontouring of the sand berm sites following berm removal in the spring. While much of the berm construction activities take place well landward of the typical wrack line, given the importance of wrack in beach habitats, it is necessary to ensure that impacts to wrack are avoided. Therefore, in order to avoid potential adverse impacts to sensitive habitat, **Special Condition Six (6)** requires that any excavation, deposition, recontouring, and maintenance associated with the proposed project shall avoid the disturbance or removal of wrack to the maximum extent feasible. Further, **Special Condition Six (6)** requires that wrack potentially impacted by sand berm maintenance activities, including reconstruction following wave erosion, be temporarily removed from the maintenance area and subsequently relocated back to the area from which it was removed upon completion of the maintenance activities. Furthermore, the term of the proposed project is limited by **Special Condition Five (5)**, which provides for the expiration of the term of approval on Memorial Day 2023. The term of the proposed project is limited in order to give the Commission the opportunity to reassess the project and, if necessary, make changes to address any identified problems.

For the aforementioned reasons, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, and 30240 of the Coastal Act and with City of Malibu LUP Policies 3.8 and 3.1.

D. PUBLIC ACCESS AND VISUAL RESOURCES

Coastal Act Section 30210 states:

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

³ Dugan, Jenifer E., et. Al. The Response of Macrofauna Communities and Shorebirds to Macrophyte Wrack Subsidies on Exposed Sandy Beaches of Southern California. Estuarine, Coastal and Shelf Science 58S pp. 133-148. 2003

⁴ Dugan, Jenifer E. and David M. Hubbard. Effects of Beach Grooming on Coastal Strand and Dune Habitats at San Buenaventura State Beach. Draft Final Report to California Resources Agency, Department of Parks and Recreation, Channel Coast District. Jan. 4, 2003.

Coastal Act Section 30211 states:

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

Coastal Act Section 30251 states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinated to the character of its setting.

City of Malibu LUP Policy 2.2 states in part:

New development shall minimize impacts to public access to and along the shoreline and inland trails.

Additionally, City of Malibu LUP Policy 6.5 states in part:

New development shall be sited and designed to minimize adverse impacts on scenic areas visible from scenic roads or public viewing areas to the maximum feasible extent.

Coastal Act Section 30210 and Coastal Act Section 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. Section 30251 of the Coastal Act requires that visual qualities of coastal areas shall be considered and protected, landform alteration shall be minimized, and where feasible, degraded areas shall be enhanced and restored. Additionally, LUP Policy 2.2 of the City of Malibu LUP requires that new development minimize impacts to public access to and along the shoreline. Further, City of Malibu LUP Policy 6.5 mandates that new development minimize adverse impacts to scenic areas.

The proposed sand berms would be located on the back beach portion of Zuma Beach. Public access is available along the entire stretch of the approximately 8,450 foot long project area. The proposed project involves the construction of ten approximately 15 foot high sand berms within areas that have high recreational use during the summer periods. As such, the proposed sand berms could result in some limited temporary effects to public access and views.

Access over the proposed sand berms will not be blocked or result in an impassable barrier for the average beachgoer, and beachgoers could potentially traverse the subject sand berms in order to access the beach. There will be large areas between the berms where the public can also cross the beach toward the ocean. Additionally, the sand berms will not fully occupy the sandy beach at the project location. As such, a large area of beach will be available for pass, repass, and recreation.

The sand berms will obstruct public views of the beach and ocean from areas directly inland of the berms. However, the impact will not be significant since access and viewing will be afforded atop, in front of, and adjacent to the berms. Additionally, Zuma Beach is long and broad, and therefore provides both viewing and access opportunities up and down coast of each berm location. Furthermore, the sand berms are temporary and will be in place only during the winter months when visitor use is lower. Finally, significant areas of coastal views from Pacific Coast Highway (north of the project site) will be maintained between the individual berms.

However, in order to ensure that maximum access is maintained for the public in the project area, **Special Condition One (1)** requires that all project operations involving mechanized equipment be prohibited on any part of the beach within the project area from Memorial Day in May through Labor Day in September to avoid impacts to public recreational use of the beach. Scheduling operations outside of peak recreational seasons will serve to minimize potential impacts on public access. Additionally, **Special Condition Two (2)** and **Special Condition Five (5)** are required to ensure that the sand berms are lowered to to pre-existing beach contours in order to facilitate recreational use prior to Memorial Day, before the peak recreational season. Furthermore, the term of the proposed project is limited by **Special Condition Five (5)**, which provides for the expiration of the term of approval on Memorial Day 2023. The term of the proposed project is limited in order to give the Commission the opportunity to reassess the project and, if necessary, make changes to address any identified problems.

The Commission finds that the proposed project, as conditioned, will not significantly impact recreational opportunities, public access, or visual resources at the project site, and therefore the project is consistent with Sections 30210, 30211, and 30251 of the Coastal Act, and City of Malibu LUP Policies 2.2 and 6.5.

E. CALIFORNIA ENVIRONMENTAL QUALITY ACT

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff

report. As discussed in detail above, the proposed project, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental impacts have been required as special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

CDP 4-18-0498 (County of Los Angeles Department of Beaches and Harbors)

APPENDIX A

Substantive File Documents

Coastal Development Permit Numbers 4-13-0675, 4-02-252 and 4-06-060 (County of Los Angeles Department of Beaches and Harbors).