

**CALIFORNIA COASTAL COMMISSION**

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**STAFF REPORT: AMENDMENT**

<b>Application No.:</b>	<b>6-07-021-A2</b>
<b>Applicant:</b>	<b>Los Penasquitos Lagoon Foundation</b>
<b>Agent:</b>	Mike Hastings
<b>Location:</b>	Mouth of the Los Penasquitos Lagoon at North Torrey Pines Road (Highway 101), North City, San Diego, San Diego County.
<b>Original Project Description:</b>	Excavation of a temporary channel (maximum dimensions 1,000' x 20' x 6') to open the mouth and enhance the outflow of Los Penasquitos Lagoon, and placement of excavated materials on the adjacent beach, as needed to maintain biological resources, for five years.
<b>Proposed Amendment:</b>	Modification of Special Condition #1 to extend the term of the original permit an additional five years.
<b>Staff Recommendation:</b>	Approval with Conditions

**SUMMARY OF STAFF RECOMMENDATION**

The Los Penasquitos Lagoon Foundation is proposing to modify one of the special conditions incorporated into Coastal Development Permit (CDP) No. 6-07-021 to allow dredging to open the lagoon mouth for another five year term. The original permit authorized excavation of a temporary channel (maximum dimensions 1,000' x 20' x 6') to open the mouth and enhance the outflow of Los Penasquitos Lagoon and placement of excavated materials on the

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adjacent Torrey Pines State Beach, as needed to maintain the biological productivity of the lagoon, for five years, and the first amendment allowed an second five-year term. The permit has now reached its expiration date. The Commission has approved artificial lagoon mouth openings for this lagoon a number of times over the last 17 years (ref. CDP Nos. 6-00-051-G; #6-02-013-G; #6-00-134; 6-02-013).

The primary Coastal Act issue associated with the proposed amendment is potential adverse impacts to the California Grunion. Although the Commission has approved openings of this lagoon for many years and the placement of beach quality sand on beaches a benefits public access and recreation, the Commission has recently been more closely evaluating the impacts sand placement can have on marine resources. In this case, the placement of the sand may impact grunion either by crushing incubating eggs by heavy machinery used to move the sand, or be smothered by the sand itself. Usually these impacts can be lessened or avoided by prohibiting work during the grunion spawning season, or prohibiting work if any grunion are identified as present prior to or during construction activities. However, in this case, such prohibitions could result in severe impacts to other important biological resources, because inlet work occurs only when one of a number of criteria are met, including reduced oxygen and salinity levels, that indicates the overall health of the lagoon ecosystem has been compromised, effecting a number of sensitive marine habitats and organisms including, fish, benthic invertebrates, and native vegetation. It is only through the mechanical opening of the inlet that the health of the lagoon is restored.

Therefore, a number of conditions of the original permit have been revised and two new conditions of approval have been included to address this concern. Specifically, new **Special Condition No. 5** requires the applicant to monitor grunion runs before and during any proposed inlet maintenance work. If a significant number of grunion are recorded, **Special Condition No. 5** requires the applicant to first avoid the area where spawning occurred, or to notify both the Executive Director and CDFW if avoidance is not possible. Additionally, **Special Condition No. 5** requires the applicant to monitor one grunion spawning event each month between March and August in order to gain an understanding of grunion use at this location. This will give the Commission data on to what extent grunion are both present and impacted as a result of the opening. New **Special Condition No. 6** further requires the applicant to conduct shoreline profile surveys before, during and after any proposed maintenance activities in order to gain a better understanding of how the sand moves after being placed on the proposed disposal site. Additionally, **Special Condition Nos. 2, 3, 4** have been revised to reduce work restrictions from 14 to 7 days before any holiday or beach event, allow inlet maintenance when the County Department of Health determines there is a public safety concern regarding mosquito breeding in the lagoon, and expand monitoring requirements to include those required by new **Special Condition Nos. 5 & 6** respectively. Finally, staff is recommending the revision of **Special Condition No. 1** to extend the terms of the permit for an additional two and not five years. By extending the permit for only two years, the proposed amendment can be used as a pilot project, where data will be collected over the next two years, and then submitted to the Commission in order to determine if the current conditions of approval are adequate to both provide appropriate

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protection to the California Grunion as well as maintain overall health of the lagoon and its associated resources.

Commission staff, therefore, recommends **approval** of coastal development permit application 6-07-021-A2 as conditioned herein.

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## APPENDICES

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## EXHIBITS

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## I. MOTION AND RESOLUTION

### Motion:

*I move that the Commission **approve** the proposed amendment to Coastal Development Permit Application No. 6-07-021 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 conditional approval of the amendment 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 amendment 6-07-021 and adopts the findings set forth below on grounds that the development as amended and conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. 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.

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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

This permit is granted subject to the following special conditions:

NOTE: Appendix A, attached, includes all standard and special conditions that apply to this permit, as approved by the Commission in its original action and modified and/or supplemented by all subsequent amendments, including this amendment No. 6-07-021-A2. All of the Commission's adopted special conditions and any changes in the project description proposed by the applicant and approved by the Commission in this or previous actions continue to apply in their most recently approved form unless explicitly changed in this action. New conditions and modifications to existing conditions imposed in this action on amendment No. 6-07-021-A2 are shown in the following section. Within Appendix A, changes to the previously approved special conditions are also shown in strikeout/underline format. This will result in one set of adopted special conditions.

1. Special Condition No. 1 of CDP No. 6-07-021 shall be replaced, in its entirety by:

1. **Term of Permit.** This permit as amended is valid for a period of two years from the date of Commission action. Future lagoon mouth openings beyond this date will require an amendment to this coastal development permit or a new coastal development permit from the California Coastal Commission. Any modification of the Commission-approved project within the two year period, such as changes in channel size or location, timing of work, staging areas, or biological criteria used to determine the need for dredging of the lagoon mouth opening, will require an amendment to this permit unless the Executive Director determines that no amendment is legally required.

2. Special Condition No. 2 of CDP No. 6-07-021 shall be modified as follows:

2. **Timing of Work/Staging Areas.** Lagoon openings shall only occur with the authorization of the California Department of Fish and ~~Game~~ Wildlife (CDFW) that the dredging, on the date proposed, will not cause adverse impacts on sensitive, threatened, or endangered species or the biological productivity of the area, and shall adhere to the following criteria:

- a. No dredging may occur within ~~7~~14 days before a holiday or scheduled beach event such as a marathon, surfing contest, etc.

- b. No equipment shall be stored on the beach overnight.
- c. No work shall occur during the two-week period spanning Easter (i.e., spring break) of any year.
- d. Commission staff shall be notified by phone prior to commencement of any dredging.
- e. Staging areas shall not be located in any environmentally sensitive habitat areas located within or beyond the limits of the proposed project. Use of the Torrey Pines State Beach north parking lot for staging of equipment shall be designed to minimize disturbance of public use of the parking lot.

Openings during the summer months shall be avoided if possible; however, if openings are necessary during the summer, the following additional requirement shall be met:

- f. No work shall occur on Fridays, weekends or holidays, between Memorial Day weekend and Labor Day.

The permittee shall undertake each development in accordance with its approved staging/storage plan. Any proposed changes to the approved staging/storage plan shall be reported to the Executive Director. No changes to the approved staging/storage plan shall occur without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. Special Condition No. 3 of CDP No. 6-07-021 shall be modified as follows:

- 3. **Biological Criteria for Opening.** The proposed channel excavation work shall be performed only:
  - a. when the dissolved oxygen levels in the lagoon reach 5 milligrams per liter (mg/L), or
  - b. when the water salinity level in the lagoon is below 25 parts per thousand (ppt) and dissolved oxygen levels are determined by a qualified biologist to be likely to drop below 5 ppm within the next two-week sampling interval, or
  - c. when the water salinity level in the lagoon is above 33 ppt (hypersaline) or
  - d. correspondence is received by the Los Penasquitos Lagoon Foundation from the County of San Diego Department of Environmental Health indicating concerns over public safety.

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The sampling results or biologist's determination which results in a decision to open the lagoon mouth shall be reported in writing, if time permits, or verbally, with written follow-up, to the San Diego Commission office within one business day of any proposed opening, and shall be submitted to the Coastal Commission as part of the annual report required in Special Condition No. 4.

4. Special Condition No. 4 of CDP No. 6-07-021 shall be modified as follows:

4. **Monitoring Report.** By April 1 of each year, the applicant shall submit a monitoring report for the project for the review and written approval of the Executive Director. The report shall be submitted annually beginning the first year after Commission approval of the permit. The report shall summarize the impacts of the multiple openings, including the project's impacts on public access and recreation, and the biological productivity of the lagoon, any changes in the tidal prism caused by external factors (such as upstream development impacts, extreme storm conditions or unusual tides) which may have contributed to the need for the lagoon mouth openings, and shall include recommendations for any necessary changes or modifications to the project. In addition, the annual report shall include the following information for each of the openings that occurred during the year addressed in the report:

- a. The date of the opening(s) which occurred, along with the date of each subsequent closure.
- b. The specific biological criteria (described in Special Condition #3) which authorized each opening, along with a site map indicating the location where the determining samples were taken.
- c. All grunion monitoring data (as required by Special Condition #5).
- d. All beach sand profiling data (as required by Special Condition #6).

5. Special Condition No. 3 of CDP No. 6-07-021-A1 shall be removed in its entirety.

6. Special Conditions No. 5 shall be added as follows:

**5. Grunion Monitoring & Avoidance Plan**

(a) **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director, for review and written approval, a Grunion Monitoring and Avoidance plan that provides for the following:

- i. The applicant shall retain the services of a qualified biologist or environmental resources specialist (hereinafter, "environmental resources specialist") for all monitoring activities. The annually published California Department of Fish and Wildlife (CDFW)

expected grunion runs shall be used to determine possible grunion spawning periods:

ii. Construction Related Monitoring:

A During the grunion spawning period of March 1 through August 31, beginning at least two weeks prior to commencement of sand placement activities, and throughout the sand placement work, the area of Torrey Pines State Beach approved for sand deposition (ref. [Exhibit #2](#)) shall be monitored for grunion runs.

B Grunion monitoring shall be conducted by the environmental resources specialist for each of the predicted runs, for 30 minutes prior to, and two hours following the predicted start of each spawning event. Sufficient personnel shall be utilized to ensure that the entire potential sand replenishment site is monitored during the specified period. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale.

1. If a grunion run consisting of 0-100 individual fish per segment (Walker Scale of 0 or 1) is reported within two weeks prior to, or during, sand placement work, the applicant does not need to take any avoidance action for grunion eggs.

2. If a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2, 3, 4, or 5) is reported within two weeks prior to, or during, sand placement work, the applicant shall avoid identified run areas, including a 100-foot buffer on either side of the segment. This area shall be memorialized through multiple GPS coordinates, and then marked with irrigation flags. To the maximum extent possible, all sand deposition activities (including vehicle mobilization and sand deposition) shall be avoided within the identified area. If avoidance of the area (area with walker Scale 2 or above grunion run) is not possible, the applicant must immediately notify CDFW and the Executive Director to let them know work will be going forward under these circumstances. No work shall occur inland of +3 Feet MHWL.

iii. Baseline Grunion Monitoring:

A. Beginning in March of each year, the applicant shall monitor at least one grunion run each month within the area of Torrey Pines State Beach approved for sand deposition (ref. [Exhibit #2](#)).

B. Grunion monitoring shall be conducted by the environmental resources specialist for 30 minutes prior to, and two hours following, the predicted start of each spawning event. Sufficient personnel shall be utilized to ensure that the entire potential sand replenishment site is monitored during the specified period. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale.

iv. A report to the Executive Director of the Coastal Commission annually and by April 1<sup>st</sup> of each year. The report shall compile the results of the above monitoring requirements including dates, location and size of all recorded grunion runs and shall be incorporated into the general annual monitoring report as required by Special Condition No. 4.

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

7. Special Conditions No. 6 shall be added as follows:

**6. Shoreline Monitoring Plan**

**(a) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director, for review and written approval, a detailed Beach Profile Monitoring Plan for shore and nearshore monitoring at and near the receiver site at Torrey Pines State Beach that provides for the following:

i. Monitoring at and adjacent to the receiver site shall address the following:

A Confirm as-built project plans for location and deposition amounts and document any plan revisions;

B Seasonal and inter-annual changes to the receiver sites, in width of dry beach, subaerial and nearshore slope, offshore extent of nourished toe, and overall volume of sand in the profile;

C Extent of transport of material up- and down-coast from the receiver sites; and

D Time period over which the beach benefits related to the project can be identified as distinct from background conditions.

- ii. The plan shall be prepared by a qualified engineer with experience in coastal engineering and include, at a minimum, the following:
  - A. Field surveys of the receiver sites and adjacent areas. Unless otherwise indicated, all profiles shall extend from an upland fixed location or monument, across the beach, through the nearshore, to closure depth. Profiles shall be prepared within six months prior to sand placement, promptly upon completion of sand placement (this survey may be terminated offshore at the toe of the project rather than going to closure), and 3 months after completion of sand placement.
  - B. There shall be a minimum of two profiles through the receiver site, and at least one profile up-coast and one profile down-coast of this receiver site. The transect downcoast shall be at least 400 feet from the southern end of the receiver site and no further than 2,000 feet from the southern end of the receiver site.
  - C. A site specific determination of the current location of the Mean High Tide Line (MHTL) shall be conducted at the beach receiver sites prior to beach nourishment, with the consultation and written confirmation of the State Lands Commission.
  - D. Oblique aerial photographs of the receiver sites shall be taken at the time each profile is taken, as determined in subsection (i) of this Special Condition.
- iii. A report to the Executive Director of the Coastal Commission annually and by April 1<sup>st</sup> of each year. The report shall compile the results of the above monitoring requirements and shall be incorporated into the general annual monitoring report as required by Special Condition No. 4
  - (b) The permittee shall undertake development in conformance with the approved final plan unless the Commission amends this permit or the Executive Director provides a written determination that no amendment is legally required for any proposed minor deviations.

### **III. FINDINGS AND DECLARATIONS**

#### **A. PROJECT HISTORY/ AMENDMENT DESCRIPTION**

##### Amendment Description

## 6-07-021-A2 (Los Penasquitos Lagoon Foundation)

The Los Penasquitos Lagoon Foundation (Lagoon Foundation) is proposing to amend the language of Special Condition No. 1, included in previously approved Coastal Development Permit (CDP) No. 6-07-021, to extend the term of the permit an additional five years. Special Condition No. 1 limits the term of the permit to 5 years, which was to expire in November, 2017. The original permit authorized excavation of a channel to open the mouth and enhance the outflow of Los Penasquitos Lagoon when certain biological criteria are met. The permit has already been amended once, in 2012, (ref. 6-07-021-A1) to extend the permit. Future openings will utilize the same location and equipment that have been previously used.

### Project History

Los Penasquitos Lagoon (lagoon) is an approximately 565-acre, predominantly coastal salt marsh lagoon, located in the northern portion of San Diego County. The lagoon is part of the Torrey Pines State Reserve. The lagoon provides critical habitat to Federally and State Listed Special that include the Light-footed Clapper Rail, the Western Snowy Plover, the Brown Pelican, and Belding's Savannah Sparrow. The lagoon is also refuge for migratory bird species using the Pacific Flyway, as well as other important marine, terrestrial and avian species native to the Southern California Bight. The lagoon contains Essential Fish Habitats and is the closest coastal lagoon to the only two Areas of Special Biological Significance (ASBS) located offshore of San Diego County. The lagoon also serves as a natural system for flood control for surrounding urban areas and provides water quality improvements for coastal waters.

Evidence indicates that historically the lagoon inlet remained open year round. However, land use changes, including urban encroachment, during the last two centuries have reduced the lagoon's ability to flush out sediment after storm events, constrained the lagoon inlet to a fixed location south of the historic location, and introduced perennial freshwater input from the watershed. All of which result in closure of the lagoon inlet. Closure of the inlet can reduce both salinity and oxygen in lagoon waters and ultimately can lead to impacts to a number of marine resources. Specifically, reduction in salinity (hyposaline conditions) can result in habitat conversion from salt marsh to a less-desirable, freshwater habitat, dominated by willows, cattails and tules. Additionally, the applicant has indicated that low salinity levels in the lagoon also raises serious public health risks due to mosquito breeding and potential spread of West Nile Virus. Reductions in oxygen, especially during times of warm weather (summer months); can result in fish kills and loss of invertebrate species.

To combat this concerns, and maintain the ecological healthy of the lagoon, the Lagoon Foundation has performed mechanized lagoon inlet openings approved by the Commission both through emergency permits or, most recently, through multi-year CDPs (ref. CDP Nos. 6-00-051-G, 6-00-134, 6-02-013-G, 6-02-013) . Historically, the Commission has authorized mechanical opening of the lagoon when one of a number of biological criteria are met. These criteria were developed in cooperation with the Commission's technical staff and are intended to help determine when lagoon ecology has become stressed.

Most recently in 2012, the Commission approved amendment No. 6-07-21-A1. This amendment extended the permit term limits through November, 2017. Additionally, 6-07-021-A1 modified the biological criterion levels necessary to begin work opening the lagoon inlet. Previously, the Commission approved work to begin when the level of dissolved oxygen measured in the lagoon waters *drops below* five milligrams per liter (mg/L). As amended, opening the inlet was authorized when the level of dissolved oxygen *reaches* five milligrams per liter (mg/L). This has allowed the Lagoon Foundation to take a more proactive approach to maintaining the inlet and in turn has resulted in better protection of the Lagoon’s marine resources. Since approval of the amendment, the criterion for inlet maintenance has been met, and the inlet subsequently opened, eleven times (ref. Table No. 1).

Table No. 1

Date of Inlet Maintenance	Cubic Yards Removed
5/13/13	5,000
6/12/13	35,000
4/7/14	30,180
4/21/14	21,184
5/19/14	4,170
4/22/15	25,575
3/2/16	2,500
4/2/16	2,500
5/18/16	30,690
6/9/16	3,500
8/25/16	27,300

The sand removed from the inlet is placed on the beach south of the lagoon inlet and on Torrey Pines State Beach to enhance these recreational beaches.

The City of San Diego has a fully-certified LCP, with the certified Los Penasquitos Lagoon Enhancement Plan as a component, and issues its own coastal development permits for most of its coastal areas. However, the lagoon, river mouth and beach areas that are the subject of this permit are all tidelands, such that the Commission retains permit jurisdiction over this particular site. Therefore, the Chapter 3 policies of the Coastal Act are, and will continue to be, the standard of review, with the City's certified LCP used as guidance.

**B. WATER QUALITY AND MARINE RESOURCES**

Section 30230 of the Coastal Act states:

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*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 the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30232 of the Coastal Act states:

*Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and clean up facilities and procedures shall be provided for accidental spills that do occur.*

Section 30233 of the Coastal Act states:

*(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:*

*(1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*

*(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*

*(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*

*(4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*

*(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*

*(6) Restoration purposes.*

*(7) Nature study, aquaculture, or similar resource dependent activities.*

*(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.*

*(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.*

Section 30240 of the Coastal Act states:

*(a) Environmentally sensitive habitat areas shall be protected against any 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.*

The subject site is located at the mouth of Los Penasquitos Lagoon, an environmentally sensitive habitat area that is one of the 19 priority wetlands listed by the State Department of Fish and Wildlife. The lagoon provides critical habitat to Federally and State Listed Species that include the Light-footed Clapper Rail, the Western Snowy Plover, the Brown Pelican, and Belding's Savannah Sparrow. The lagoon also contains areas of Essential Fish Habitats and is the closest coastal lagoon to the only two Areas of Special Biological Significant (ASBS) located in San Diego County. The proposed amendment will facilitate continued dredging of the lagoon inlet in order to maintain tidal action within lagoon waters. The dredging of the inlet will result in no direct impacts to ESHA and is

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considered a restoration project, such that the surrounding environment will be improved post-construction. Specifically, while work will occur within wetlands, the removal of sand from the inlet will not result in the loss of wetlands, as the inlet is not considered “Essential Fish Habitat” and is not near any current nesting areas of endangered birds. The dredging will stop west of the deep water mark, where the bathymetry of the lagoon changes, and sediments become more silty (i.e., not suitable for use as beach sand).

Generally speaking, lack of tidal action has a number of adverse effects on a lagoon environment. The lagoon water becomes stagnant, reducing the oxygen levels in the water. Reduced oxygen can lead to eutrophication, the condition where a closed body of water can “turn over,” and cause large amounts of methane and hydrogen sulfide gas to be released at the bottom and absorbed into the water, leading to fish and benthic invertebrate kills. Another problem facing the lagoon environment is the salinity levels of the water. Together, lack of tidal influence and low levels of freshwater inflow increase the salinity and temperature of the water, creating a hypersaline situation which is stressful, if not deadly, to many forms of plant and animal life in the lagoon. Conversely, decreased salinity caused by the combination of high levels of freshwater inflow and lack of tidal action allows for the establishment and growth of freshwater vegetation such as willows, cattails and tules in areas formerly entirely covered by salt marsh vegetation.

Most of the lagoon is now publicly owned, specifically by the California Department of Parks and Recreation, which also administers the adjacent Torrey Pines State Beach and nearby Torrey Pines Reserve. In addition, the Commission certified the Los Penasquitos Lagoon Enhancement Plan as a component of the City of San Diego LCP. The enhancement plan policies stress the importance of keeping the lagoon mouth open to maintain tidal flushing and an appropriate saltwater/freshwater balance.

The enhancement plan, certified land use plans, and many past permit actions identify dredging to maintain a tidal flow into the lagoon as an important part of an overall management strategy to enhance the biological productivity of the lagoon. The proposed sediment removal will allow the mouth to remain open longer to flush out stagnant water, replace low-salinity water and allow for the reestablishment of estuarine and marine invertebrates, fish and plant species, which are prevented from entering the lagoon while the inlet is closed.

The development approved pursuant to CDP #6-07-021 involved the removal of sediments from the mouth of Los Penasquitos Lagoon. Under the Coastal Act, dredging of open coastal waters, like a lagoon, is allowed under limited circumstances. To be allowable under Section 30233, the proposed development must be one of the listed permitted uses. In this case, the proposal is for restoration purposes and thus, a permitted use pursuant to Section 30233 cited above. Section 30233(c) further limits the purpose of dredging in the 19 coastal wetlands identified in CDFW’s report titled, “Acquisition Priorities for the Coastal Wetlands of California.” Los Penasquitos is one of those listed wetlands, and consistent with Section 30233(c), the proposed dredge project is for restoration purposes. The proposed inlet maintenance will ensure continued health of the lagoon and associate marine resources.

In addition, the development must be found to be the least environmentally damaging feasible alternative, incorporate feasible mitigation measures for any associated adverse impacts, and either maintain or enhance the functional capacity of the wetland system. In this case, potential alternatives include the no project alternative or a smaller-sized inlet opening. The no project alternative would eliminate tidal flushing and result in significant impacts to the overall productiveness of the lagoon ecosystem.

A reduced-project alternative would require constructing a smaller inlet, which in turn would require more frequent inlet opening and the lagoon environment would become stressed on a more frequent basis.

While the opening of the inlet can be considered restoration work and will result in an improved surrounding environment post-construction, the project does raise concerns regarding adequate protection of certain marine resources including short-term impacts to water quality, and potential impacts to the California grunion. Specifically, the sand removed from the inlet is then placed on the beach south of the lagoon inlet and on Torrey Pines State Beach. Section 30233(b) encourages the reuse of dredge spoils on neighboring beaches where appropriate. However, grunion eggs can be crushed by heavy machinery transporting the sand from the inlet to the beach or smothered by the deposited sand. In addition, the removal and deposition of the sand can impact water quality through increased turbidity, as well as a release of contaminants as the opened inlet drains into the ocean.

### California Grunion

The California grunion (*Leuresthes tenuis*) is a sardine-sized fish endemic to the coast of California. It is unusual because it comes ashore on sandy beaches to spawn. Although grunion are not listed as threatened or endangered, NMFS requires that their eggs be protected from disturbance. California grunion have been protected and managed as a game species by the California Department of Fish and Wildlife (CDFW), due to their vulnerability during spawning runs. Spawning occurs from March through August, and occasionally in February and September. Peak spawning typically occurs from late March to early June. Every year the CDFW publishes and posts online the dates of the expected grunion runs. Mature grunion may spawn during successive runs, with females spawning up to six times each season. Females lay between 1,600 and 3,600 eggs during one spawn, with larger females producing more eggs. Eggs are deposited during the high tides of the month and incubate in the sand during the lower tides, when they will not be disturbed by wave action. The eggs are kept moist by residual water in the sand. They hatch about 10 days later, during the next high tide series, when they are inundated with sea water and agitated by rising surf.

Subsequent to any maintenance dredge of the Lagoon, any beach quality sand dredged is the transported and placed south and along Torrey Pines Beach between Lifeguard Tower Nos. 3 and 4 (ref. [Exhibit No. 2](#)). Placing the dredged sand onto the beach could bury or crush grunion eggs or change the beach profile such that juvenile grunion are unable to return to the ocean. In addition, grunion spawning behavior and grunion eggs are sensitive to turbidity and disturbance. In recent actions, the Commission has taken a

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position that, in order to protect grunion, sand placement activities should occur outside peak grunion season (April 1<sup>st</sup> – August 31<sup>st</sup>) and/or prohibit work when large grunion spawning events are documented (ref. CDP Nos. 6-16-0275, 6-16-0528).

However, in this case, these restrictions are not feasible and could result in greater impacts on biological resources. Specifically, annual reports provided by the applicant from the last 5 years indicate that the lagoon inlet closes at least once yearly during the spring/summer months (grunion spawning season). And, as discussed previously, once the lagoon mouth is closed, the health of the lagoon ecosystem begins to rapidly deteriorate. Inlet maintenance is only authorized when specific criterion are met that are reliable indicators that the lagoon is stressed, and allowing the lagoon to remain stressed may result in large-scale impacts to marine resources. So while restricting work during the spring and summer months would eliminate potential impacts to grunion, it would do so at the cost of a number of other sensitive species, inconsistent with Section 30240 of the Coastal Act. Additionally, a closed inlet also facilitates the breeding of mosquitos and the potential spread of West Nile Virus, which is a significant public safety concern.

As such, the Commission finds, that in this case, alternative measures need to be put in place that will provide an acceptable balance between the protection of the California Grunion and the protection of a number of other sensitive species and public safety. Therefore, in order to find the proposed amendment consistent with the Coastal Act, **Special Condition Nos. 1, 2, 3, and 4** have been revised and new **Special Condition Nos. 5 and 6** have been included.

**Special Condition No. 1** – Term of Permit – has been modified to reduce the extension of the permit from five to two years. The Commission is considering this project to be a pilot program, where additional monitoring is required in order to better understand the use of Torrey Pines State Beach by grunion and to gain an understanding of how the sand placed on the beach affects the profile of the beach. As modified, this information will be gathered for the next two years, and then submitted to the Executive Director. At that time, the Commission’s ecologists can review this information and use it to guide future restrictions and/or mitigation measures.

**Special Condition No. 3** - Biological Criteria for Opening – has been expanded at the applicant’s request to include when correspondence is received by the applicant from the San Diego Department of Environmental Health indicating concerns over public safety. As previously discussed, elevated temperatures in summer months, and reduced tidal influence can create favorable conditions for mosquito breeding to occur in the lagoon. Thus, even if the thresholds for salinity and oxygen levels have not been met, inlet maintenance may still be permitted if it is necessary to protect public safety. Previously, there was no way to open the inlet if the biological criteria were not yet met. As amended, the applicant will now have the ability to address public safety concerns rapidly. The County of San Diego Department of Health is in favor of this revision, and has submitted a letter of support (ref. [Exhibit No. 3](#)).

**Special Condition No. 5** – Grunion Monitoring and Avoidance Plan – has been included as a new condition that contains mitigation measures intended to protect grunion

spawning and grunion eggs. In addition, **Special Condition No. 5** requires the applicant to submit a grunion monitoring plan that will record grunion use at the proposed deposition site both associated with any proposed inlet maintenance activities as well as monthly during the standard grunion spawning season.

Specifically, **Special Condition No. 5** requires the applicant to monitor grunion spawning events that may occur 14 days before or during inlet any proposed maintenance activities. If grunion are reported at Walker Scale Levels 1 or higher, the applicant must take GPS coordinates of the grunion run, and then mark the area, including a 100 foot buffer on all sides) with irrigation flags. The condition requires to applicant to avoid the flagged off area to the maximum extent possible. If the applicant is unable to avoid the area, and work must continue, **Special Condition No. 5** requires the applicant to contact CDFW and the Executive Director to notify both parties that work will be moving forward under such circumstances. **Special Condition No. 5** further requires the applicant to limit all work (including heavy machinery use and sand placement) on portions of the beach below the +3 feet MHWL. Typically, grunion spawning events are located at beach elevations higher than +3 feet MHWL; thus, the condition limits any work and/or sand placement seaward of where grunion eggs are most likely to be located. Finally, **Special Condition No. 5** requires the applicant to monitor at least one grunion spawning event each month during the typical grunion spawning season (April-August). Again, this condition has been developed and included to allow the Commission to gain a better understanding of the use by grunion of the sand placement site over the next two years. The next two years should be considered a pilot program, whereby the data collected will be used to determine what the appropriate mitigation measures are at this location, to provide adequate protection to the California grunion.

**Special Condition No. 6** – Shoreline Monitoring Plan – is the second new condition incorporated into the proposed amendment. **Special Condition No. 6** requires the applicant to submit a Shoreline Monitoring Plan for the review and approval by the Executive Director. At a minimum, **Special Condition No. 6**, requires that the applicant conduct four monitoring transects (one north of the sand placement site, two at the sand placement site, and one south of the sand placement site) once 6 months or less prior to any proposed placement of sand on the beach, one immediately following placement, and once 3 months after placement. **Special Condition No. 6** further requires that the applicant submit monitoring results to the Commission annually. The primary intent of the condition is to gain a better understanding of how long the placed sand stays on the beach and where it moves as the tides wash the sand off the beach. The applicant has indicated that the sand placed on the beach is washed into the ocean quickly and is usually not detectable within the next tidal cycle. If the sand does in fact wash off the beach and into the littoral cell within one tide, then there is little chance that the placed sand will smother incubating grunion eggs, or change the beach profile such that juvenile grunion are unable to return to the ocean; and, therefore, additional mitigation measures may not be necessary.

**Special Condition No. 2** – Timing of work/Staging Areas – is condition of the original permit that includes a number of restrictions on when construction activities may occur. These include restriction on working within 14 days of any holiday or scheduled beach

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events, and restrictions on working on Fridays or weekends during the summer. As modified, the restriction during holidays and beach events will be reduced from 14 to 7 days. Originally, the condition was included to assure that the beach will be open to the public during times of peak use. However, previous monitoring reports received by the Commission indicate that inlet maintenance is generally completed in a few days, and up to a week, after which the beach is re-opened. As such, 14 days places an unnecessary restriction on the applicant. As modified, the condition will still assure the beach is open during peak times, but will also allow the applicant greater flexibility to schedule inlet maintenance activities and sand placement can be shifted to better accommodate grunion spawning events.

**Special Condition No. 4** – Monitoring Report – is a condition of the original permit that requires the applicant to submit annual reports by April 1 annually. These reports must include the dates the inlet was opened and the criteria met which authorized the opening. As revised, **Special Condition No. 4** also requires the data collected associated with new **Special Condition Nos 5** (Grunion Monitoring and Avoidance Plan) & **6** (Shoreline Monitoring Plan ) into the annual reports submitted to the Commission.

### Water Quality

Re-opening of the inlet (and release of ponded water) as well as removal and deposition of sand can result in impacts to water quality. Based on the experience of previous lagoon mouth openings and well as indication from the applicant, for a short period after the lagoon mouth is opened (up to a week), bacteria levels (fecal and total coliform counts) in the water exiting the lagoon usually exceed health standards in the mouth and surf zone surrounding the mouth. To protect the public, County health officials close the beach. However, this impact to water quality is temporary and is localized to the beach area within 500 feet of the inlet. Additionally, allowing the ponded lagoon waters to release into the ocean provides long-term improved water quality to the lagoon.

### Conclusion

While the proposed development is maintenance and is considered to be restorative, the development also includes the placement of sand on a public beach. The placement of sand on beaches benefits public access and recreation, but can also result in impacts to the California grunion. Therefore, the revised conditions restrict work on the beach to the areas least likely to contain grunion eggs. Additionally, the amended conditions require two new monitoring plans, one to gain a better understanding of how the grunion are currently utilizing this beach and one to understand how the sand removed from the inlet moves after it is placed on the beach. As revised the term of the permit will be extended for two instead of five years, to facilitate a “pilot program” to determine what long-term mitigation measures are appropriate for this location. Therefore, as amended, the proposed development will balance the protection of California grunion with the protection of other marine organisms and public safety.

The proposed development is an allowed use pursuant to Section 30233 of the Coastal Act in that the proposed inlet maintenance is considered a restoration project, and the

least environmentally damaging alternative has been implemented. The project is designed to minimize any potential adverse impacts on the environment. Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, 30233, 30240 of the Coastal Act.

### **C. PUBLIC ACCESS**

Section 30210 of the Coastal Act 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.*

Section 30211 of the Coastal Act 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.*

Section 30212 of the Coastal Act states:

*(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where:*

- 1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources,*
- 2) adequate access exists nearby, or, ...*

The project site is the mouth of Los Penasquitos Lagoon, which empties into the Pacific Ocean at the northern end of the City of San Diego, just south of the City of Del Mar. The channel runs across the municipal beach at the northern end of the city, and can be traversed on foot during most tidal regimes. The public beach provides very popular day-use facilities for beach visitors and serves as an important recreational resource of region-wide importance. As the proposed development will occur on the beach and the far-western portions of the lagoon, the potential for adverse impacts on public access and recreational opportunities exists.

As previously discussed, for a short period after the lagoon mouth is opened, bacteria levels in the water exiting the lagoon usually exceed health standards in the mouth and surf zone surrounding the mouth. As a result, County Public Health officials have to post signs on the surrounding beaches warning the public that contact with the water may cause illness. In this case, these signs are posted the day the inlet is re-opened and stay posted until County Public Health officials determine that the levels have reduced to safe

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levels. Although this has been a previous concern, in permitting previous lagoon mouth openings, the Commission has not found this to be a significant impact on public recreational opportunities as the lagoon mouth openings generally occur in the non-summer months and the high bacteria levels only last a few days to a week.

Based on data collected from monitoring previous lagoon mouth openings and as described by the applicant (at several different regional lagoons), it can be anticipated that after an initial opening, bacterial counts will exceed water quality standards and body contact with the water in the general area of the lagoon mouth will be prohibited. However, these reports indicate that within a short period of time, bacterial water quality in the surf zone should meet the recreational standard, as seawater dilution of the lagoon occurs and after contaminated water in the lagoon has flowed out. In addition, because bacteria levels deteriorate quickly once tidal flow is established, the longer the lagoon stays open, the less often the area surrounding the mouth has to be closed. However, if the lagoon does close and is then reopened, resulting in high enough bacterial counts that the beach must be closed, the proposed development could significantly impact public recreational opportunities during high use periods such as weekends or holidays during the summer months.

The Commission finds that every effort should be made to avoid the peak season and any high usage days including weekends, holiday periods, and during the period between Memorial Day and Labor Day (summer). **Special Condition No. 2** restricts work during summer to Monday through Thursday and not on any holiday. In addition, under the revised terms of **Special Condition No. 2** outside the summertime, no dredging may occur 7 days before a holiday or scheduled beach event. Originally Special Condition No. 4 restricted inlet maintenance to 14 days before holiday or beach event. However, as discussed above, water quality has usually recovered and beaches re-opened in days to a week. Thus, 14 days was more than necessary to ensure the beaches will be open during such events. This way, restrictions have been provided that will assure the beach is open during high usage days, but will also increase the applicant's flexibility to perform inlet work outside of grunion spawning events. Additionally, work is prohibited for the two weeks surrounding Easter (the week before and the week after), in order to assure the beach will be open to the public during traditional spring break. **Special Condition No. 2** also requires that no equipment be stored on the beach overnight.

Although the conditions will not assure that the beach is never closed during weekends and holidays, it will help ensure that the highest levels of contaminants which are present immediately after the mouth is opened, have time to dissipate before the weekend and that no equipment will physically block the beach. Therefore, all the previous protections to public access will still be required associated with this amendment and can be found consistent with the public access and recreation policies of the Coastal Act as conditioned.

### D. LOCAL COASTAL PLANNING

Section 30604(a) also requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the

local government to prepare a Local Coastal Program (LCP) in conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made.

As stated, the subject site is located in the City of San Diego, at the mouth of Los Penasquitos Lagoon. The proposed development requires no local permits, but is consistent with the certified LCP. As conditioned, the Commission finds the proposed development consistent with all applicable Chapter 3 policies of the Coastal Act, which will continue to be the standard of review in this area of original jurisdiction. Therefore, the Commission finds the proposed development, as conditioned, should not prejudice the ability of the City of San Diego to continue implementation of their certified LCP for the remainder of the City.

#### **E. CALIFORNIA ENVIRONMENTAL QUALITY ACT**

Section 13096 of the Commission's Code of Regulations requires Commission approval of Coastal Development Permits to be supported by a finding showing the permit, as conditioned, 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 which the activity may have on the environment. The proposed development has received a Categorical Exclusion from CEQA with California Department of Parks and Recreation.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including measuring protecting California grunion spawning activities and grunion eggs, restrictions on timing of the work, and submittal of monitoring reports, have been added or reincorporated as conditions of approval for the subject amendment request. These conditions will minimize all adverse environmental impacts. Therefore, as conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project is the least environmentally-damaging feasible alternative and is consistent with the requirements of the Coastal Act to conform to CEQA.

Appendix A – Conditions of Approval

1. **Term of Permit.** This permit as amended is valid for a period of two years from the date of Commission action. Future lagoon mouth openings beyond this date will require an amendment to this coastal development permit or a new coastal development permit from the California Coastal Commission. Any modification of the Commission-approved project within the two year period, such as changes in channel size or location, timing of work, staging areas, or biological criteria used to determine the need for dredging of the lagoon mouth opening, will require an amendment to this permit unless the Executive Director determines that no amendment is legally required.
  
2. **Timing of Work/Staging Areas.** Lagoon openings shall only occur with the authorization of the California Department of Fish and Wildlife (CDFW) that the dredging, on the date proposed, will not cause adverse impacts on sensitive, threatened, or endangered species or the biological productivity of the area, and shall adhere to the following criteria:
  - a. No dredging may occur within 7 days before a holiday or scheduled beach event such as a marathon, surfing contest, etc.
  
  - b. No equipment shall be stored on the beach overnight.
  
  - c. No work shall occur during the two-week period spanning Easter (i.e., spring break) of any year
  
  - d. Commission staff shall be notified by phone prior to commencement of any dredging.
  
  - e. Staging areas shall not be located in any environmentally sensitive habitat areas located within or beyond the limits of the proposed project. Use of the Torrey Pines State Beach north parking lot for staging of equipment shall be designed to minimize disturbance of public use of the parking lot.

Openings during the summer months shall be avoided if possible; however, if openings are necessary during the summer, the following additional requirement shall be met:

- f. No work shall occur on Fridays, weekends or holidays between Memorial Day weekend and Labor Day.

The permittee shall undertake each development in accordance with its approved staging/storage plan. Any proposed changes to the approved staging/storage plan shall be reported to the Executive Director. No changes to the approved staging/storage plan shall occur without a Coastal Commission-approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

3. **Biological Criteria for Opening.** The proposed channel excavation work shall be performed only:

- a. when the dissolved oxygen levels in the lagoon reach 5 milligrams per liter (mg/L), or
- b. when the water salinity level in the lagoon is below 25 parts per thousand (ppt) and dissolved oxygen levels are determined by a qualified biologist to be likely to drop below 5 ppm within the next two-week sampling interval, or
- c. when the water salinity level in the lagoon is above 33 ppt (hypersaline) or
- d. when correspondence is received by the Los Penasquitos Lagoon Foundation from the County of San Diego Department of Environmental Health indicating concerns over public safety.

The sampling results or biologist's determination which results in a decision to open the lagoon mouth shall be reported in writing, if time permits, or verbally, with written follow-up, to the San Diego Commission office within one business day of any proposed opening, and shall be submitted to the Coastal Commission as part of the annual report required in Special Condition No. 4.

4. **Monitoring Report.** By April 1 of each year, the applicant shall submit a monitoring report for the project for the review and written approval of the Executive Director. The report shall be submitted annually beginning the first year after Commission approval of the permit. The report shall summarize the impacts of the multiple openings, including the project's impacts on public access and recreation, and the biological productivity of the lagoon, any changes in the tidal prism caused by external factors (such as upstream development impacts, extreme storm conditions or unusual tides) which may have contributed to the need for the lagoon mouth openings, and shall include recommendations for any necessary changes or modifications to the project. In addition, the annual report shall include the following information for each of the openings that occurred during the year addressed in the report:

- a. The date of the opening(s) which occurred, along with the date of each subsequent closure.
- b. The specific biological criteria (described in Special Condition #3) which authorized each opening, along with a site map indicating the location where the determining samples were taken.
- c. All grunion monitoring data (as required by Special Condition #5).
- d. All beach sand profiling data (as required by Special Condition #6).

## 5. Grunion Monitoring & Avoidance Plan

- (a) **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director, for review and written approval, a Grunion Monitoring and Avoidance plan that provides for the following:
- i. The applicant shall retain the services of a qualified biologist or environmental resources specialist (hereinafter, “environmental resources specialist”) for all monitoring activities. The annually published California Department of Fish and Wildlife (CDFW) expected grunion runs shall be used to determine possible grunion spawning periods:
  - ii. Construction Related Monitoring:
    - A During the grunion spawning period of March 1 through August 31, beginning at least two weeks prior to commencement of sand placement activities, and throughout the sand placement work, the area of Torrey Pines State Beach approved for sand deposition (ref. [Exhibit #2](#)) shall be monitored for grunion runs.
    - B Grunion monitoring shall be conducted by the environmental resources specialist for each of the predicted runs, for 30 minutes prior to, and two hours following the predicted start of each spawning event. Sufficient personnel shall be utilized to ensure that the entire potential sand replenishment site is monitored during the specified period. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale.
      1. If a grunion run consisting of 0-100 individual fish per segment (Walker Scale of 0 or 1) is reported within two weeks prior to, or during, sand placement work, the applicant does not need to take any avoidance action for grunion eggs.
      2. If a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2, 3, 4, or 5) is reported within two weeks prior to, or during, sand placement work, the applicant shall avoid identified run areas, including a 100-foot buffer on either side of the segment. This area shall be memorialized through multiple GPS coordinates, and then marked with irrigation flags. To the maximum extent possible, all sand deposition activities (including vehicle mobilization and sand deposition) shall be avoided within the identified area. If avoidance of the area (area with walker Scale 2 or above grunion run) is not possible, the applicant must immediately notify CDFW and the Executive Director to let them know work will be going forward under these circumstances. No work shall occur inland of +3 Feet MHWL.
  - iii. Baseline Grunion Monitoring:

- A. Beginning in March of each year, the applicant shall monitor at least one grunion run each month within the area of Torrey Pines State Beach approved for sand deposition (ref. [Exhibit #2](#)).
  - B. Grunion monitoring shall be conducted by the environmental resources specialist for 30 minutes prior to, and two hours following, the predicted start of each spawning event. Sufficient personnel shall be utilized to ensure that the entire potential sand replenishment site is monitored during the specified period. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale.
- iv. A report to the Executive Director of the Coastal Commission annually and by April 1<sup>st</sup> of each year. The report shall compile the results of the above monitoring requirements including dates, location and size of all recorded grunion runs and shall be incorporated into the general annual monitoring report as required by Special Condition No. 4.

The permittee shall undertake the development in accordance with the approved plans. Any proposed changes to the approved plans shall be reported to the Executive Director. No changes to the plans shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

## 6. Shoreline Monitoring Plan

- (a) **PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit to the Executive Director, for review and written approval, a detailed Beach Profile Monitoring Plan for shore and nearshore monitoring at and near the receiver site at Torrey Pines State Beach that provides for the following:
- i. Monitoring at and adjacent to the receiver site shall address the following:
    - A Confirm as-built project plans for location and deposition amounts and document any plan revisions;
    - B Seasonal and inter-annual changes to the receiver sites, in width of dry beach, subaerial and nearshore slope, offshore extent of nourished toe, and overall volume of sand in the profile;
    - C Extent of transport of material up- and down-coast from the receiver sites; and
    - D Time period over which the beach benefits related to the project can be identified as distinct from background conditions.
  - ii. The plan shall be prepared by a qualified engineer with experience in coastal engineering and include, at a minimum, the following:

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- A. Field surveys of the receiver sites and adjacent areas. Unless otherwise indicated, all profiles shall extend from an upland fixed location or monument, across the beach, through the nearshore, to closure depth. Profiles shall be prepared within six months prior to sand placement, promptly upon completion of sand placement (this survey may be terminated offshore at the toe of the project rather than going to closure), and 3 months after completion of sand placement.
  - B. There shall be a minimum of two profiles through the receiver site, and at least one profile up-coast and one profile down-coast of this receiver site. The transect downcoast shall be at least 400 feet from the southern end of the receiver site and no further than 2,000 feet from the southern end of the receiver site.
  - C. A site specific determination of the current location of the Mean High Tide Line (MHTL) shall be conducted at the beach receiver sites prior to beach nourishment, with the consultation and written confirmation of the State Lands Commission.
  - D. Oblique aerial photographs of the receiver sites shall be taken at the time each profile is taken, as determined in subsection (i) of this Special Condition.
- iii. A report to the Executive Director of the Coastal Commission annually and by April 1<sup>st</sup> of each year. The report shall compile the results of the above monitoring requirements and shall be incorporated into the general annual monitoring report as required by Special Condition No. 4
- (b) The permittee shall undertake development in conformance with the approved final plan unless the Commission amends this permit or the Executive Director provides a written determination that no amendment is legally required for any proposed minor deviations.

Appendix B – Substantive File Documents

- Certified Los Penasquitos Lagoon Enhancement Plan;
- Certified City of San Diego North City Land Use Plan and LCP Implementation Ordinances;
- CCC Files Number #6-00-051-G; #6-02-013-G; #6-00-134; 6-07-021; 6-07-021-A1;
- Los Penasquitos Lagoon Mouth Maintenance 2011-2016 Summary Reports