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STAFF REPORT: REGULAR CALENDAR

Application No.:	**6-19-0608**
Applicant:	**City of Coronado**
Agent:	Leslea Meyerhoff
Location:	Sandy beach area from Naval Air Station North Island south to the Naval Amphibious Base, Coronado, San Diego County
Project Description:	Implementation of a sand replenishment program to allow for the processing of multiple beach replenishment projects over a five-year period. The proposed project would allow the placement of up to 100,000 cubic yards of opportunistic sand annually, placed on both the North Reach and South Reach of the beach, seaward of Ocean Boulevard.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

The City of Coronado previously applied for the same project in 2010, which was approved by the Commission in April 2010 (CDP No. 6-10-02); however, no sand replenishment projects were ever implemented and the permit term expired in 2015. The City is now proposing another five-year program to capitalize on opportunities to obtain surplus sand from upland construction, development or dredging projects as they arise, and to place the sand along the shoreline through a streamlined process, instead of losing

the material to an inland disposal site. The subject permit is intended to expedite the implementation of beach sand replenishment projects by establishing a set of detailed criteria and parameters under which future projects would be evaluated. If a project meets the criteria and can be found by the Executive Director to be consistent with the subject permit, sand placement will be allowed to proceed without additional approval from the Commission. If a project does not meet the criteria outlined herein, or raises any other potential risks to coastal resources not identified and discussed in this report, a separate coastal development permit or amendment would be required. **Special Condition Nos. 1** and **2** set the proposed approval process for individual projects.

The primary coastal issues involved with the proposed project are potential impacts to public beach access and surfing resources, potential impacts to biological resources, including direct burial of organisms on the beach and in the nearshore environment, potential impacts to grunion and shorebirds, and increased turbidity. The City has proposed a monitoring program that includes sediment sampling, beach profiles, surfing conditions, turbidity, and sensitive biological resources. Monitoring elements would be dictated by project-specific features such as schedule and placement method. **Special Condition No. 4** requires the applicant to adhere to the proposed pre-construction baseline monitoring, construction monitoring, post-construction monitoring, and post-project monitoring as described in the Final Mitigated Negative Declaration for the project.

The Commission's ecologist has reviewed the proposed monitoring plans and recommends revisions to the proposed grunion and avian monitoring plans. Specifically, **Special Condition No. 5** requires that for grunion counts, each 300-foot segment be memorialized through multiple GPS coordinates and be marked with irrigation flags. Additionally, Special Condition 5 requires areas of high concentration of grunion and grunion eggs to be avoided, and clarifies that sand placement activities must halt in these highly concentrated areas unless a 100-foot buffer on either side is marked (no work may occur within the 100-foot buffer); and that every individual fish (males and females) be counted to determine the Walker Scale value. The condition allows work to commence in areas where grunion haven't spawned, while avoiding areas where the fish have spawned. **Special Condition No. 6** requires the applicant to submit an avian monitoring plan that would avoid roosting and nesting areas when sensitive bird species are identified.

Special Condition No. 3 outlines the scope and 5-year term of permit approval. **Special Condition No. 7** requires the applicant provide copies of all other required discretionary permits and **Special Condition No. 8** requires the applicant to assume all risk of developing in a location that is subject to coastal hazards.

Commission staff recommends **approval** of coastal development permit application 6-19-0608 as conditioned.

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EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit Application No. 6-19-0608 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 permit 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 6-19-0608 and adopts the findings set forth below on grounds that the development as 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 or 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

This permit is granted subject to the following special conditions:

1. **Process for Approval of Individual Projects.** Future projects shall be reviewed and approved in accordance with the following:

   (a) Following identification of a beach fill opportunity, an initial screening test of the fill material shall be conducted that includes an assessment of possible pollutants, contaminants, grain size, and color to determine if the material has the potential to meet the criteria for beach replenishment. Specifically, the maximum proportion of fine-grained particles (or fines, defined as silts and clays passing through the number 200 sieve or material that is 0.047 mm in size or smaller) to total volume allowed to be placed on the beach under any circumstances is 10%. The maximum proportion of coarse grained particles (material greater than 2.0 mm in size but smaller than 4.76 mm in size) to total volume allowed to be placed on the beach shall be no more than 10%. The maximum proportion of large grained particles (material greater than 4.76 mm and larger) to total volume allowed to be placed on the beach shall be no more than 1%. The material shall: be free of trash and debris, reasonably match the color of natural beach sand after exposure to the marine environment, consist of less than 10% manufactured sand, and not be reasonably expected to form a hardpan after placement. Any sample not meeting these standards shall be rejected.

   (b) If the sand source meets the required criteria, more stringent testing shall be conducted through development of a Sampling & Analysis Plan (SAP) prepared for and approved by the U.S. Army Corps of Engineers (ACOE). Sand must be free of contaminants and chemical hazards based on Tier I testing protocol as specified by the ACOE and United States Environmental Protection Agency (EPA). Sand shall be chemically inert and not possess characteristics that would adversely affect water quality, including temperature, dissolved oxygen, or pH. The results of these analyses shall be distributed to the ACOE and EPA for review and approval prior to placement activities.

   (c) If the material is found per the SAP testing to meet all the criteria to be placed on the beach, an application shall be submitted to the Coronado Planning Department for a Consistency Determination by the Planning Director. The City shall also

notify the public of the project in local newspapers, the City's website, the City's e-mail list serve, direct mailings, notices in utility bills, or cable TV local announcements. All notices shall include the contact information of the San Diego Coastal Commission office. To approve a Consistency Determination application, the Coronado Planning Director shall make a written finding that the beach fill project is consistent with the approved opportunistic sand program. The Planning Director's decision on the Consistency Determination application shall be appealable to the Planning Commission.

(d) If the City determines the project is consistent with the approved opportunistic sand program, the City shall submit a Project Notification Report (PNR) for the specific project in accordance with Special Condition No. 2 of this permit, for the approval of the Executive Director, as well as for approval of the Regional Water Quality Control Board, the State Lands Commission, and ACOE. The PNR shall include a copy of all written correspondence received by the City regarding the project, and shall include the minutes of all Planning Commission and City Council meeting(s) during which the project is discussed.

(e) The Executive Director shall approve only those projects that meet the specific standards approved by the Commission for CDP No. 6-19-0608. If any particular sand source falls outside the criteria outlined herein, or any other potential risks to coastal resources not identified and discussed in the findings of the approval of CDP No. 6-19-0608 are identified by the Executive Director, a separate coastal development permit or amendment shall be required.

(f) Within 60 days of project completion, the City shall submit the following reports to the Executive Director:

i. The results of the pre-construction, construction, post-construction, and post-project surveys and monitoring identified in Special Condition No. 4.

ii. A Post Discharge Report that includes all preparation testing, the volume of material placed at the site, transportation and construction details, finalized project schedule, and monitoring results.

(g) By January 30 of each year following sand placement, the City shall submit an assessment of the effects (both beneficial and adverse) from all beach fill projects conducted during the year to the Executive Director. This analysis shall serve as the basis for any modifications that can be made to optimize the program and shall be considered in an application to extend the permit at the end of the permit term.

2. **Final Project Notification Report. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT**, the applicant shall submit for review and written approval by the Executive Director, a final revised Project Notification Report in substantial conformance with the preliminary Report (attached as Exhibit No. 2), except that it shall be revised as follows:

(a) In the table on page 1, add the following footnote to "Time Period":

No work shall take place on weekends or holidays from Memorial Day weekend to Labor Day of each year.

(b) In Section 2.5 Debris Management, the following paragraph shall replace the second paragraph:

A qualified on-site debris monitor (geotechnical background or similar) will be present during beach replenishment at the source site at all times during the excavation of material to be used for beach nourishment to monitor for the presence of debris (e.g., trash, woody vegetation, etc.) in the sandy material. The monitor will ensure, to the maximum extent practicable, that material being loaded into the trucks is free of debris. The receiving beach shall be monitored periodically on every day of sand deposition by City staff to ensure the material placed on the beach is free of debris. If any debris or non-sand material is detected on the receiving beach, the specific beach replenishment projects using that sand material shall stop immediately and all debris shall be removed from the beach by the permittee. The project(s) may not continue until a revised Project Notification Report (PNR) with updated information on the composition of the material is submitted and approved by the Executive Director. The project will be restarted once debris is cleared from the beach and a method is formulated to ensure that no further debris is generated from the source site, to the maximum extent practicable, that no further debris is generated from the source site.

(c) In Section 3.1 Site Location and Timing, the following sentence shall be added:

If it becomes necessary to conduct project activities during grunion season, from March 1-August 31, the City shall submit to the Executive Director for review and written approval, a grunion monitoring and avoidance plan according to Special Condition No.5 of this Coastal Development Permit, prior to commencing any nourishment activities.

(d) In Section 3.2 Transportation Method, the following sentence shall be added:

Pedestrian access to Dog Beach shall remain open at all times. At least one lane on Ocean Boulevard shall remain open at all times.

3. **Scope and Term of Permit Approval.** The development authorized by this CDP amendment is limited to beach nourishment that is consistent with the project limits identified in the preliminary Project Notification Report including, but not limited to, the placement sites, maximum quantities of beach nourishment, seasonal limitations

on placement, and methods of delivery. The authorization for continuing development pursuant to this permit amendment shall expire five years from the date of Commission approval of CDP No. 6-19-0608.

4. **Beach Profile, Surf, Pismo Clams, Sediment Characteristic, and Turbidity Monitoring.** The applicant shall conduct monitoring consistent with the Beach Profile, Surf, Pismo Clams, Sediment Characteristic (of the existing beach), and Turbidity Monitoring as identified in the Final Mitigated Negative Declaration for the Opportunistic Beach Fill Program in the Cities of Encinitas, Solana Beach, Coronado, and Imperial Beach adopted by the City in April 2008 (SCH #2008021045), including:
   (a) Beach profile monitoring shall be conducted between one year and 30 days prior to construction, immediately following completion, six months following completion, and one year following completion.
   (b) Surf monitoring shall be conducted 3 times per week beginning 14 days prior to construction and ending one month following completion.
   (c) A survey for Pismo clams shall be conducted a maximum of 30 days prior to construction.
   (d) Sediment characteristic testing of the existing beach shall be conducted prior to the first project to establish a baseline, and in Year 3 of the permit.
   (e) Turbidity monitoring shall be conducted daily during construction.

5. **Grunion Monitoring & Avoidance Plan**. Prior to conducting beach nourishment activities at any time from March 1 –August 31, the applicant shall submit to the Executive Director for review and written approval, a Grunion Monitoring and Avoidance Plan, written by a qualified biologist, that provides for the following:

   (a) Should sand placement activities be necessary at or below the high tide line between March 1 and August 31, the City shall avoid impacts to mature and/or spawning grunion and to grunion eggs. The applicant shall retain the services of a biologist with appropriate qualifications. The annually published California Department of Fish and Wildlife (CDFW) expected grunion runs shall be used to determine possible grunion spawning periods. The plan shall, at a minimum, include:

      i. Sand placement shall be restricted to up to 25,000 cubic yards of sand per month, limited to a maximum period of two weeks, and placement shall occur only over discreet areas of the beach.

      ii. Sand placement sites shall be monitored for grunion runs beginning at least two weeks prior to commencement of sand placement activities, and throughout the period of planned sand placement work from March 1 through August 31. Monitoring is not necessary in areas where there is no sand, such as areas supporting 100% cobble or bluff backed beaches with no sand exposed during high tide.

iii. Grunion monitoring shall be conducted by a qualified biologist for 30 minutes prior to, and two hours following, the predicted start of each daily spawning event. Sufficient qualified biologists shall be employed to ensure that the entire proposed sand placement site is monitored during the predicted grunion run. The magnitude and extent of a spawning event shall be defined in 300-foot segments of beach using the Walker Scale (Exhibit 5). Every individual fish (males and females) shall be counted to determine the Walker Scale value (e.g. 0, 1, 2, 3, 4, or 5) of each 300-foot segment within the proposed work area. Sand placement activities shall be modified according to the following plan:

A. If a grunion run consisting of 0-100 individual fish per 300-foot segment (Walker Scale 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. No mature grunion may be buried or harmed as a result of sand placement.

B. Within two weeks prior to proposed work, if a grunion run consisting of 100 or more individual fish per 300-foot segment (Walker Scale 2, 3, 4, or 5) is reported, the applicant shall avoid work on the respective beach segment(s) and truck route and additionally, shall avoid a 100-foot buffer on either side of the segment(s) and route, for a minimum of two weeks, to ensure that no grunion eggs are buried or disturbed.[1] These areas shall be memorialized through multiple GPS coordinates, and marked with irrigation flags for a minimum of two weeks when the next scheduled grunion run will be monitored. The applicant shall adapt the sand placement schedule to avoid operations on such beach segments and their associated buffers. No mature grunion may be harmed as a result of sand placement.

C. If sand placement has already commenced, and a grunion run consisting of 100 to 500 individual fish, in one or more 300-foot segment (Walker Scale 2) in the work area is reported, the applicant shall avoid impacts to grunion eggs to the greatest extent feasible and then shall minimize impacts to grunion eggs through such measures as alteration of the truck route, sand discharge points, sand spreading areas, and sand placement locations.

D. If sand placement has already commenced, and a grunion run consisting of 500 or more individual fish per segment (Walker Scale 3, 4, or 5) is reported, the applicant shall avoid work on the

[1] During grunion spawning season, grunion spawn once every two weeks, on several nights, during the highest tides that occur during each month (called spring and neap tides). Grunion eggs take approximately 10 days to mature and hatch during the next high tide. Monitoring for grunion runs must happen, per the annual CDFW published grunion spawning schedule, because one cannot predict where grunion will spawn from one event to another.

respective beach segment(s) and truck route and additionally, shall avoid a 100-foot buffer on either side of the segment(s) and route, for a minimum of two weeks, to ensure that no grunion eggs are buried or disturbed. These areas shall be memorialized through multiple GPS coordinates, and marked with irrigation flags for a minimum of two weeks when the next scheduled grunion run will be monitored. The applicant shall adapt the sand placement schedule to avoid operations on such beach segments and their associated buffers. No mature grunion may be harmed as a result of sand placement.

6. **Avian Monitoring & Avoidance Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT AMENDMENT**, the applicant shall submit to the Executive Director for review and written approval an Avian Monitoring and Avoidance Plan that provides for the following:

   (a) Sand placement activities that occur during western snowy plover breeding season (March 1 to August 31) or California least tern breeding season (April 1 to September 15) shall take the following steps to avoid impacts to these species. A designated avian biological monitor with stop-work authority shall conduct a survey within 72 hours before construction and shall conduct surveys during construction as needed within the project area and within 500 feet of the work area to determine the location of any active special status avian roosting and nesting areas. If western snowy plovers or California least terns are observed during any survey, the following measures shall be implemented:

      i. If western snowy plovers or California least terns are observed exhibiting nesting behaviors (scraping, territorial displays or calls, false brooding, etc.) during the breeding season, no project-related activities may occur within 500 feet of these areas, until subsequent monitoring indicates that western snowy plovers or California least terns are no longer present.

      ii. If an active western snowy plover or California least tern nest (nest containing eggs or an empty or partial nest with western snowy plovers or California least terns actively exhibiting breeding behaviors) occurs within 500 feet of the proposed construction area, the following measures shall be implemented:

         A. The biological monitor with stop-work authority shall report the nest to the U.S. Fish and Wildlife Service. After initial identification of the nest, the biological monitor may not approach within 50 feet of an active western snowy plover or California least tern nest. Nest monitoring will occur with binoculars. The biological monitor will use the distance to the project limits and local topography to determine if construction activities are likely to damage a nest or significantly

disturb nesting activities. Signage shall be installed to deter people from entering any area with an active nest.

B. Where damage or disturbance of any western snowy plover or California least tern nest(s) is likely, the designated biological monitor shall implement further measures to avoid the likelihood of nest destruction or disturbance, including: temporarily halting construction activities until the nest fails or until at least 10 days after the young fledge from the nest, with construction activities directed to other areas further than 350 feet from the active nest(s) or where activities will not disturb the active net(s), as directed by the biological monitor.

C. The biological monitor shall monitor nest progress, construction activity, and protective fencing to minimize potential construction-related disturbance and shall submit a weekly nest status report to the U.S. Fish and Wildlife Service. Within six months of project completion, a post-construction report shall be submitted to the U.S. Fish and Wildlife Service summarizing the weekly nest status report and outcomes.

(b) No activities are allowed within 100 feet of active roost areas for the western snowy plover or California least tern unless measures are implemented to minimize the noise and disturbance to those adjacent birds until subsequent monitoring indicates that western snowy plover and California least tern are no longer present. If these conditions cannot be met, the following measures to minimize noise and disturbance shall be implemented:

i. The biological monitor with stop-work authority shall report the roost site to the U.S. Fish and Wildlife Service. After initial identification of the roost, the biological monitor may not approach within 50 feet of roosting western snowy plover or California least terns. Roost monitoring shall occur with binoculars. The biological monitor shall use the distance to the project limits and local topography to determine if construction activities are likely to damage a nest or significantly disturb nesting activities. Signage shall be installed to deter people from entering any area with an active nest.

ii. Where damage or disturbance of any western snowy plover or California least tern roosting is likely, the biological monitor shall implement further measures to avoid the likelihood of roost disturbance, including temporarily halting construction activities until the birds depart for the season, with construction activities directed to other areas that will not disturb the roost, as directed by the designated biological monitor.

iii. A biological monitor shall monitor the roost and construction activity to minimize potential construction-related disturbance and shall submit a weekly nest status report to the U.S. Fish and Wildlife Service. Within six

months of project completion, a post-construction report shall be submitted to the U.S. Fish and Wildlife Service summarizing the weekly nest status report and outcomes.

(c) All participants and contractors for the project shall receive educational training concerning special status species within the project area. The program shall be conducted during all project phases and shall cover the potential presence of listed species; the requirements and boundaries of the project; the importance of complying with avoidance, minimization, and compensation measures; and problem reporting and resolution methods. The designated project biologist or other qualified project proponent shall conduct the training and provide a sign-in sheet for each training activity to ensure all participants and contractors are educated on the environmental conditions and associated constraints.

7. **Other Permits**. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the permittee shall provide to the Executive Director copies of all other required state or federal discretionary permits, including permits issued by U.S. Army Corps of Engineers, California State Lands Commission, and the Regional Water Quality Control Board for the proposed project.

   The applicant shall inform the Executive Director of any changes to the project required by other state or federal agencies. Such changes shall not be incorporated into the project until the applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

8. **Assumption of Risk, Waiver of Liability and Indemnity Agreement.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards, including but not limited to waves, storms, flooding, landslide, bluff retreat, erosion, and earth movement, many of which will worsen with future sea level rise; (ii) to assume the risks to the permittee 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.

IV. FINDINGS AND DECLARATIONS

A. PROJECT DESCRIPTION

The City of Coronado is proposing an opportunistic sand replenishment program to allow for the processing of multiple beach replenishment projects over a five-year period beginning from the date of Commission approval of this permit. The program is designed to capitalize on opportunities to obtain surplus sand from upland construction, development, or dredging projects as they arise, and to place the sand along the shoreline through a streamlined process, instead of losing the material to an inland disposal site due to the sometimes lengthy processing time for necessary permits from the various agencies. The City applied for the same project in 2010, which was approved by the Commission in April 2010 (CDP No. 6-10-02); however, while the City did obtain the permit, no projects were ever implemented and the permit term expired in 2015.

The proposed project would allow the placement of up to a maximum 100,000 cubic yards of opportunistic sand annually, placed on both the North Reach and South Reach of Coronado Beach between Naval Air Station North Island and the Naval Amphibious Base, seaward of Ocean Boulevard (Exhibit No. 1). The largest project likely to occur would be 50,000 cubic yards. Sand could be placed as a berm on the upper beach area, below the mean high tideline, or in the nearshore, from -10 to -25 mean lower low water (MLLW). Only sand with a maximum of 10% fines would be placed.

All potential sand projects would have to undergo several stages of project review at the City. The bulk of the testing and review of potential sand sources would take place at the City prior to the project even being submitted to the Executive Director. When a beach fill opportunity is identified (either a developer notifies the City when excess fill material from a construction project is available, or City staff identifies it as part of reviewing development project submittals), the City would first either review existing data about the material or conduct an initial screening test of the fill material to determine if the fill has the potential to meet the criteria to be placed on the beach. The review includes an assessment of possible pollutants, contaminants, grain size, and color. The maximum proportion of fine-grained particles (or fines, defined as silts and clays passing through the number 200 sieve, or material that is 0.047 mm in size or smaller) to total volume that could be placed on the beach under any circumstances is 10%, with the remainder being 90% larger-grained sand. The material must be free of trash and debris, must reasonably match the color of natural beach sand after exposure to the marine environment, must be less than 10% manufactured sand, and must not be expected to form a hardpan after placement. Any sample not meeting these pre-determined standards would be rejected.

If the sand source meets the required criteria, more stringent testing would be conducted through development of a Sampling & Analysis Plan (SAP) prepared for and approved by the U.S. Army Corps of Engineers (ACOE). Sand must be free of contaminants and chemical hazards based on Tier I testing protocol as specified by the ACOE and US EPA. Sand must be chemically inert and not possess characteristics that would adversely affect water quality, including temperature, dissolved oxygen, or pH. The results of these analyses would be distributed to the ACOE and EPA for review and approval.

If the material is found per the SAP testing to meet all the criteria to be placed on the beach, an application would be submitted to the Coronado Planning Department for a Consistency Determination by the Planning Director. At this stage, the City would evaluate the sand material in the context of the subject permit limits for project size, location, disposal method, timing, etc. To approve a Consistency Determination application, the Coronado Planning Director must make a written finding that the beach fill project is consistent with the approved opportunistic sand program. The Planning Director's decision on the Consistency Determination application may be appealed to the Planning Commission.

If the project is determined to be consistent with all of the project parameters, the City would submit a project notification report (Exhibit No. 2) for a particular sand deposition project for the approval of the Executive Director, as well as the other relevant resource agencies (i.e., the Regional Water Quality Control Board, the State Lands Commission, and the U.S. Army Corps of Engineers). Information submitted would include all of the detailed information involved in performing the above analyses, such that the Executive Director could make a determination of whether the project conforms to the project limits. The City would also be responsible for keeping track of the cumulative beach replenishments that have occurred under the subject permit and providing this information to the Executive Director.

Also included at this stage would be the public notification package associated with the particular sand placement project. Notification would be done through notices in local newspapers, direct mailings, notices in utility bills, or cable TV local announcements. Thus, at the time any particular project was submitted for the Executive Director's approval, there would be site-specific information on the composition, chemistry, and grain size of the sand source material, the receiver beach, the timing and size of the project, the deposition method, a monitoring program, and a public notification program. The Executive Director’s discretion at this point would be highly constrained, as only projects that meet the specific standards for each of these items could be approved under the subject permit. An individual sand replenishment project cannot commence until an affirmative approval from the Executive Director is given. If any particular sand source falls outside the criteria outlined herein, or any other potential risks to coastal resources not identified and discussed in this report were identified by Commission staff, a separate coastal development permit or amendment would be required.

After a project is completed, all of the pre- and post-construction surveys and monitoring are required to be submitted as a final report to the Executive Director, to evaluate the impact of the particular project and to aid in the review of future projects under the subject permit. After a beach fill project is completed, a Post Discharge Report will be prepared and submitted to the Executive Director and other resource agencies, which will include all of the information collected by the City for the project, including all preparation testing, the volume of material placed at the site, transportation and construction details, finalized project schedule, and monitoring results. At the end of each year, an assessment of the effects (both beneficial and adverse) from all beach fill projects conducted during the year will be presented to the permitting agencies. This

analysis will serve as the basis for any modifications that can be made to optimize the program and serve as a consideration to extend the permit at the end of 5 years. **Special Condition No. 1** memorializes this process.

The proposed permit structure is based on very similar opportunistic sand replenishment permits approved for the City of San Clemente (CDP No. 5-02-142), Carlsbad (CDP No. 6-06-48), Encinitas (CDP No. 6-08-110-A3), Solana Beach (CDP No. 6-08-038), and Oceanside (CDP No. 6-07-027), as well as the previous permit approved for the City of Coronado (CDP No. 6-10-02).

Although the maximum annual quantity of sand allowed to be placed is 100,000 cubic yards, the permit contains very specific parameters on how much sand can be placed at various times during the year, in order to avoid potential impacts to biological or recreational resources. The below table outlines in general the quantities of sand that can be placed at various times of the year and locations:

Table 1
Proposed Project Limits

Placement Site	Maximum Annual Quantity (CY)	Maximum Project Length (ft)	Placement Scenarios (1)	Season (2)	Max. Percent Fines Allowed	Proposed Maximum Annual Volume (CY)
North Reach and South Reach (3)	100,000	7,200	a) Beach-berm b) MHT c) Nearshore	Sept 16th – Feb 28th	10%	100,000
				Mar 1st – August 31st	10%	75,000
				Jun 1st – Sept 15th	10%	50,000 (4)

(1) (a) Beach-berm on upper beach; (b) MHT-placement below the mean high tide line; (c) Nearshore placement from -10 to -25 MLLW.
(2) The cumulative maximum quantity of all sand in a calendar year, regardless of season, is 100,000 cy
(3) No work can occur on holidays or weekends from Memorial Day weekend to Labor Day
(4) No placement except for beach-berm at North Beach.

The proposed timing of sand placement on the beach has been designed to replicate nature as closely as possible. Natural sediment delivery to the coast occurs during the wet season (fall and winter); therefore, there are the fewest restrictions on sand placement projects during that time.

In addition to the above limitations, there are a number of restrictions on sand placement built into the permit to ensure impacts to sensitive bird species are avoided. Specifically, between September 16th and March 31st, to avoid impacts to foraging least terns, nearshore and surf zone discharge can only occur with specific and detailed biological monitoring conditions. Similarly, back beach sand discharge may only occur during the snowy plover breeding season (i.e., March 1st to September 1st) with specific monitoring conditions, described below in the Biological Resources and Water Quality findings.

Placement during the period of March 1st and August 31st is restricted to minimize impacts to invertebrate recruitment and grunion spawning. Specifically, up to 25,000

cubic yards of sand may be placed each month within this time period. Placement can only occur over periods of two weeks maximum per month, and placement must occur over discrete areas of the beach rather than over the entire beach area. Furthermore, a different placement site must be used for each event, with a minimum spacing of 150 feet between placement sites, and located such that subsequent placements would not require vehicle disturbance of previously used sites. This measure will minimize impacts to the invertebrate forage base used by shorebirds.

Finally, placement during the period of June 1st to September 14th has also been restricted to minimize impacts to invertebrates, grunion, and foraging birds, including the snowy plover. Specifically, each placement can only occur up high on the back beach area on North Beach. No nearshore or surf zone placement can occur in the intertidal zone during this peak summer period.

Beach Fill Design

The City proposes three beach fill designs consisting of beach berm placement, surf zone placement, and nearshore placement (Exhibit 3). The City anticipates similar placement configurations for each of the designs, however, these configurations are approximate and would be determined based on available source material and site conditions immediately prior to construction. Specifically, the beach berm placement is anticipated to be within a surface layer with a finished surface elevation of 10+ feet MLLW to create a 200-foot berm. This would occur approximately 500-950 feet offshore and generally slope towards the ocean at an approximately 20:1 slope. The maximum dimensions for the surf zone placement would be a 2 to 3-foot-high mound placed near the +2 feet MLLW topographic contour or lower, depending on conditions at the time of placement. It would likely extend along the length of the project site approximately 850-875 feet offshore. Finally, the nearshore placement is proposed to be from -10 to -25 feet MLLW and approximately 825-2,500 feet offshore along the entire length of the footprint (7,900 feet).

Haul Routes, Stockpiling, and Operations

The project would allow the City of Coronado to use available opportunistic sand from the Navy, various construction sites within the city, or even from sites outside city boundaries. However, this permit does not itself authorize any particular construction project; **Special Condition No. 3** notifies the applicant that each construction project is subject to its own individual coastal permitting requirements.

The proposed haul route for trucks from the construction sites to the pilot site would include 4th Street, Ocean Drive, Ocean Boulevard, Orange Avenue, Avenida del Sol, and Avenida Lunar. Beach access points include Ocean Drive, Avenida del Sol, Avenida Lunar, Ocean Place and Ocean Boulevard (bridge and Orange Avenue), and Third Street to Alamenda Boulevard to Ocean Boulevard (Exhibit 4). These entry points will allow trucks to access the beach and deposit their load for disbursement by earthmoving equipment. Trucks would loop back and exit at the point of beach entry. During the

placement of beach sand, the project notification report requires that the City coordinate the proposed haul routes with other projects that may impact the identified haul routes.

Monitoring Program

The required monitoring includes sediment sampling, beach profiles, surfing conditions, turbidity, and sensitive biological resources. Monitoring elements would be dictated by project specific features such as schedule and/or placement method. More details on monitoring conditions are described in the Biological Resources and Water Quality findings.

The City of Coronado has a certified Local Coastal Program, but the proposed beach replenishment site is within the original permit jurisdiction of the Commission. The upland haul routes would be within the City's jurisdiction. Therefore, the Chapter 3 policies of the Coastal Act are the standard of review for the subject permit.

B. PUBLIC ACCESS AND RECREATION

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, in part:

> *(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* […]

Section 30213 of the Coastal Act states, in part:

> *Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred.* […]

Section 30214(a) of the Coastal Act states, in part:

> *The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:*
>
> *(1) Topographic and geologic site characteristics.*
>
> *(2) The capacity of the site to sustain use and at what level of intensity.* […]

Section 30220 of the Coastal Act states:

> *Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.*

Section 30233(b) of the Coastal Act states:

> *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.*

The shoreline and beaches are valuable assets to the environment and economy of the Southern California region and the State, worthy of protection and enhancement. The shoreline is also considered a resource of national significance. Beach erosion has been an increasing problem in the Southern California region, and in many past projects the Commission has identified beach replenishment as a means to preserve and enhance the environmental quality, recreational capacity, and property protection for the region's shoreline. Additional sand on beaches increases the amount of recreational area available for public uses, decreases the rate of beach erosion, and provides a buffer (a wider beach) between waves and adjacent public and private development, thereby reducing pressure to construct shoreline protective devices which can adversely affect the visual quality of scenic coastal areas, shoreline sand supply, public access to the beach, and beach ecology. There is a growing body of evidence that there has been an increase in global temperature and that acceleration in the rate of sea level rise can be expected to accompany this increase in temperature (some shoreline experts have indicated that sea levels could rise by as much as 5.5 feet by the year 2100). On the California coast, the effect of a rise in sea level will be the landward migration of the intersection of the ocean with the shore, leading to a faster loss of the beach, as the beach is squeezed between the landward migrating ocean and the fixed backshore. This will expose the back beach/bluff or the armored shoreline to more frequent wave attack, increasing the rate of erosion of unarmored bluffs and potentially reducing available usable beach area.

The proposed opportunistic sand program has been proposed to allow for and to expedite beach replenishment in the City of Coronado. It is unknown how long any particular fill sand project would remain on the beach, given the possible variations in amount of material and disposal location. However, during the time the sand remains on the beach

the public will have the benefit of wider sandy beaches, and any sand deposited on the beach will become part of the littoral cell system.

Nevertheless, the project is expected to have some temporary adverse impacts on public access and recreation. The deposition site is currently used for various recreational activities including swimming, surfing and sunbathing. During construction, the beach fill site would have to be closed, creating a temporary adverse impact on recreation. The impact will be particularly significant during higher tides or for projects where the entire beach area would be closed to the water line, and people could not get past the work area to the rest of the beach except by traveling inland around the construction area.

As proposed, most sand replenishment is expected to occur during the non-summer months, because placing sand at that time most closely mimics the pattern of natural sand movement. However, the project as proposed would allow fill to occur during the peak summer season between Memorial Day weekend and Labor Day, because summer also tends to be the peak construction period, and not allowing any fill to occur during this time could significantly reduce the amount of sand available to place on the beach.

In this particular case, allowing work to occur during the summer is not expected to have a significant adverse impact on public access or recreation. The only type of placement allowed between June 1st and September 1st is a beach-berm at North Beach, and no more than 50,000 cubic yards total can be placed during this time period. Coronado's beaches are very wide, and even if a portion of the beach at North Beach were to be restricted from public use, there would still be ample sandy beach area available. **Special Condition No. 1** requires that the project notification report specify that pedestrian access to Dog Beach remain available at all times. Work is only proposed to occur during normal work hours of Monday-Friday, with no work occurring on weekends or holidays.

The project could have an adverse impact on public access and recreation if construction vehicles significantly impacted the ability of the public to reach the shoreline. However, again, in this case, no significant impacts are expected. Ocean Boulevard, the street adjacent to the beach, is long (approximately 0.8 miles from the entry to the Naval Air Station to the Hotel del Coronado) with several different access points to beach. Even if one were blocked for a sand project, there would be a number of alternatives available to the public, and no impacts would occur on weekends or holidays.

For each project, a specific traffic control plan will be developed for approval by the City Engineer. However, a typical traffic control plan would involve designating a truck route and having flagmen direct traffic and pedestrians during construction operations to ensure safety. **Special Condition No. 2** requires that Ocean Boulevard not be shut down entirely.

Overall, access corridors and staging areas are required to be located in a manner that has the least impact on public access and traffic flows on coastal access routes. As proposed, public parking spaces alongside Ocean Boulevard could be used for staging or storage of equipment and materials, but only where unavoidable and where the minimum number of

spaces necessary are used. Thus, the project as designed will minimize adverse impacts to the beach-going public. Because of the short-term, temporary nature of the increase in traffic expected to result from any one project, the Mitigated Negative Declaration prepared for the project, determined that public access impacts to traffic will be less than significant. Thus, public access and recreation is not expected to be significantly impacted by construction activities.

As previously described, the proposed project also includes a public notification package to inform the public prior to the initiation of any sand replenishment project, which will help reduce the impact the project will have on the public. Local concerns will be able to be addressed prior to the Executive Director's review. As proposed, all written correspondence received by the City regarding the project and minutes of the Planning Commission/City Council meetings will be included in the Project Notification for the Executive Director's review. To further limit adverse impacts on public access, as proposed, each construction site will be posted with a notice indicating the expected dates of construction and/or beach closures. Thus, the public will have adequate opportunities to be notified of, and provide input on future replenishment projects. **Special Condition No. 1** memorializes this process.

Surfing

Surfing occurs throughout the project area, and surfing could potentially be impacted not only by restriction of access to the water during construction, but through the modification of existing sand bars and reefs by sand placement and deposition, and poor water quality caused either by turbidity generated during and after construction, or contaminants being released into the surf zone by the fill material.

The City must test all potential sand sources to verify that the sand is free of contaminants prior to placement on any beach fill site. They must also perform background research of the potential for the material to possess contaminants based on Tier I testing protocol as specified by the ACOE and the U.S. EPA. Therefore, there should not be any health threats to surfers from contamination.

Placement of sand either on the beach or in the nearshore has the potential to alter the beach profile and could affect surfing conditions. For example, sand deposition could cause waves to close-out over a long period of time (months) rather than peak, or result in a perpetual shore break at the beach rather than a nearshore bar for waves to break over.

However, due to the relatively low amount of sand material expected to be associated with individual projects, long term impacts are not expected. Regardless, the monitoring program includes review of surfing conditions. Beginning 14 days prior to construction, surfing conditions at the site must be recorded by lifeguards between the hours of 8:00 a.m. and 9:00 a.m. at least three times per week. Observation forms will be completed to record date, wave height and direction, tide, wind, water temperature and clarity, number of surfers in the water, and qualitative observations of wave characteristics. Short interviews may be undertaken with local surfers at least weekly to obtain local perspective on the surf conditions. The monitoring occurs for 14 days after construction

is complete. Although no significant recreational impacts are expected, any changes to surfing conditions will be noted, and that information will be able to be used to inform future deposition projects.

Conclusion

In summary, the proposed project will have short-term and temporary impacts on public access and recreation; however, they have been minimized by restrictions and conditions on the amount and location of work than can occur during the summer months. The project overall will have a positive impact on Coronado's beaches as well as to the entire littoral system. The proposed sand monitoring program will provide information regarding the short and long-term effects of beach replenishment, including how long the sand remains on the beach at different sites in different conditions. The surfing and recreational monitoring will provide similarly detailed information. Currently, this type of data is not available for the City, and the proposed project will be extremely useful in planning and designing effective beach replenishment projects in the future. The permit is limited to 5 years in duration, and further evaluation of the impacts will occur should the City wish to extend the program. Therefore, as conditioned, the proposed project can be found consistent with the public access and recreation policies of the Coastal Act.

C. BIOLOGICAL RESOURCES AND WATER QUALITY

Section 30230 of the Coastal Act 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, in part:

> *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* […]

Section 30233 of the Coastal Act states, in part:

> *(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:* […]

(6) Restoration purposes. […]

(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.

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.

While the Commission has viewed beach replenishment as a means to address loss of public access and recreation and to protect property, the Commission is becoming increasingly aware of the potential adverse ecological consequences of this practice. Beach replenishment is often considered the most environmentally sound method of maintaining eroding shorelines and is often even considered habitat creation. However, fill activities may cause intense disturbance and high mortality and have the potential to alter the diversity, abundance, and distribution of intertidal macroinvertebrates for months to years. Ecological recovery following fill activities depends on successful recolonization and recruitment of the entire sandy intertidal community. With this new understanding the Commission is reviewing beach replenishment projects in terms of potential ecological impacts and applying special conditions to limit both physical and biological impacts to the sandy beach ecosystems.

The Coastal Act policies identified above require the Commission to address impacts on marine resources by considering the timing of deposition of the material on the beach, the composition of the material, the location of the receiver beach, and the presence of environmentally sensitive resources. Development in areas adjacent to sensitive marine habitat areas and parks and recreation areas such as beaches must be sited and designed to prevent impacts which would significantly degrade those areas, and must be compatible with the continuance of those habitat and recreation areas. The restoration of beaches is a permitted use in open coastal waters under Section 30233(a)(6); however, the project must be the least environmentally damaging alternative, and any impacts that cannot feasibly be avoided must be mitigated. Deposition of material onto the beach can affect marine life through the direct burial of organisms on the beach and in the nearshore environment, by the secondary movement of beach fill material within the littoral drift zone that could bury reefs and organisms, and by increasing turbidity in adjacent waters, which could adversely affect the growth of kelp and impact the ability of shorebirds to

find food in offshore waters. In addition, a large section of North Beach is designated by the U.S. Fish and Wildlife Service as a snowy plover "critical habitat."

One of the biological resource concerns raised by the project is the potential for direct burial of organisms on the beach and in the nearshore environment by the placement of sand. If persistent over a long temporal scale, these impacts could potentially shift population dynamics of these infaunal communities as well as affect available prey sources for nearshore fish and avian populations. Additionally, significant shifts in grain size conditions could also alter the physical beach environment and result in shifts in ecosystem species composition. As proposed, and identified in the Project Notification Report, parameters for maximum sand placement volumes during the five year permit term, sand grain size, timing of sand placement, and post project monitoring will reduce impacts to beach and nearshore organisms to the greatest extent feasible. In addition, due to the dynamic nature of the intertidal and beach environment, small-scale beach nourishment projects such as those proposed by the City, may result in short term impacts to the sandy beach environment; however, over the long term, impacts are expected to be less than significant.

The City has applied for Section 10 and 404 permits with U.S. Army Corps of Engineers (ACOE), a 401 Water Quality Certification with the California Regional Water Quality Control Board, and a lease with the California State Lands Commission. **Special Condition No. 7** requires the applicant to submit these approvals to the Commission prior to issuance of the CDP.

Grunion Monitoring

Of particular concern with the subject project are potential impacts to the California grunion. California grunion typically spawn on sandy beaches in the San Diego region between March and August and have the potential to be affected by beach fill projects. The California grunion (*Leuresthes tenuis*) is a member of the New World silversides family, Atheriniopsidae, along with jacksmelt and topsmelt. Their usual range extends from Point Conception, California, to Point Abreojos, Baja California. Occasionally, they are found farther north to Tomales Bay, California, and south to San Juanico Bay, Baja California. They inhabit the nearshore waters from the surf to a depth of 60 feet. Tagging studies indicate that they do not migrate.

Grunion leave the water at night to spawn on beaches during the spring and summer months. For four consecutive nights, beginning on the nights of the full and new moons, spawning occurs after high tides and continues for several hours. As waves break on the beach, grunion swim as far up the slope as possible, and the female arches her body and excavates the semi-fluid sand with her tail to create a nest. She then deposits her eggs in the nest. Males curve around the female and release milt. The milt flows down the female's body until it reaches and fertilizes the eggs. As many as eight males may fertilize the eggs in a single nest. After spawning, the males immediately retreat toward the water while the female twists free and returns with the next waves. While spawning may only take 30 seconds, some fish remain stranded on the beach for several minutes.

Spawning occurs from March through August, and occasionally in February and September. Peak spawning is late March to early June. 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 highest tides of the month and incubate in the sand during 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 seawater and agitated by rising surf.

Beach nourishment (i.e., the placement of sand onto existing beaches) can benefit grunion by increasing potential spawning habitat; however, construction activities can potentially bury grunion eggs or change the beach profile such that juvenile grunion are unable to return to the ocean. Monitoring for grunion and implementation of impact minimization measures are required when beach nourishment is scheduled to overlap or follow within two weeks of a grunion spawning event.

In order to monitor grunion runs and spawning events, the Walker Scale[2] was developed. The Walker Scale is used to monitor California grunion runs and spawning events by observing the number of fish and their proximities on a beach. The Walker Scale is provided as Exhibit 5 to this report.

In order to avoid impacts to grunion, the City has proposed a monitoring program to be implemented that includes the following elements: the location of the grunion would be mapped and number present would be estimated (e.g., by Walker Scale) prior to construction, the monitor would communicate monitoring results to the resource agencies the day following the survey and agree upon an action, if the number is substantial then placement would be modified to either adjust the footprint or redirect all sand placement above the spring high tide line. This monitoring program would be put into place if sand placement activities occur between March 1 and August 31st. The proposed monitoring plan and requirements have been reviewed by the Commission's staff ecologist, and recommendations and revisions have been incorporated into the required monitoring plan. **Special Condition No. 5** requires that counts be conducted during the peak of each run when the most fish are on the beach, and that counts must include all fish on the beach, not only spawning females. In addition, each 300-foot segment must be memorialized through multiple GPS coordinates and be marked with irrigation flags. Areas of high concentration of grunion and grunion eggs must be avoided, and sand placement activities must halt in these highly concentrated areas unless a 100-foot buffer on either side of the highly concentrated areas is observed and no work occurs within the 100-foot buffers. The condition also differentiates between a Walker Scale 2 and 3 (W2 and W3), and allows work to commence in areas where grunion haven't spawned, while avoiding areas where the fish have spawned in the case of a W2. Construction must completely halt if a W3, W4, or W5 is observed. As conditioned, monitoring, GPS mapping, and flagging the runs so that construction halts will ensure that impacts to egg masses and areas of high concentrations of grunion and grunion eggs are avoided. The

[2] The Walker Scale is used for monitoring California grunion runs. For more information, visit http://grunion.pepperdine.edu/sighting.asp

City has requested that the monitoring plan only be required if it becomes necessary to place sand during grunion run season. **Special Condition No. 1** requires the City to add language to the PNR to identify that approval of the grunion monitoring and avoidance plan would be required prior to construction of a project between March 1st and August 31st.

California Least Tern and Western Snowy Plover

The California least tern (*Sterna antillarum browni*; tern) was listed as federally endangered in 1970 and a state endangered species in 1971. Although critical habitat has not been designated for the California least tern, it is a fully protected species under California law. At the time of federal listing, only 600 breeding pairs were identified; however, the population has since grown to approximately 7,100 pairs, documented in 2005.[3] California least terns nest on flat sandy beaches that are relatively secluded from disturbance and predation. Near-shore ocean waters and shallow estuaries serve as foraging habitat. Repeated disturbance of breeding sites can have significant effects on California least tern reproductive success and can cause nest failure, re-nesting, and site abandonment. California least tern breeding season extends from April to September.

The western snowy plover *(Charadrius nivosus nivosus)* is federally listed under the Endangered Species Act of 1973 as threatened, and listed as a Bird Species of Special Concern in California. Coronado Beach is located within critical habitat for the western snowy plover. Western snowy plover breeding season extends from March through August.

Since placement activities would extend into the California least tern and western snowy plover breading and nesting season, avian monitoring for these species must be implemented. In order to avoid impacts to western snowy plovers, the City has proposed a monitoring program to be implemented that includes monitoring conducted by a qualified biologist with the authority to halt or redirect activities to avoid impacts to nests or chicks and minimize disturbance to foraging snowy plovers. The proposed monitoring plan requirements have been reviewed by the Commission's staff ecologist, and recommendations and revisions have been incorporated into the required monitoring plan. **Special Condition No. 6** requires that the applicant submit an avian monitoring and avoidance plan that will ensure no project activities take place within 500 feet of California Least Terns or western snowy plovers that exhibit nesting behaviors (scraping, territorial displays or calls, false brooding, etc.) during the breeding season and contains protective measures should an active nest occur within 500 feet of the construction site. In addition, Special Condition No. 6 requires that no activities take place within 100 feet of an active roost areas for the western snowy plover or California least tern unless measures are implemented to minimize the noise and disturbance to the adjacent birds until subsequent monitoring indicates that western snowy plover and California least tern are no longer present. As recommended, the monitoring plan will prevent disruption to the avian species during roosting as well as nesting and breeding season.

[3]Species Information, California Least Tern. Assessed on November 10, 2016. Available at: https://www.fws.gov/sacramento/es_species/Accounts/Birds/ca_least_tern/.

Finally, monitoring will include observations of the extent of turbidity plumes outside the surf zone where water transparency is reduced to less than three feet. While the project may cause a low-level turbidity plume in the water, the effects would be localized and temporary, and would not extend beyond the normal foraging distances for either of these species and should diminish immediately when construction activities are halted. With the proposed monitoring and ample alternative forage areas available to these species during construction at the site, no adverse impacts to these species are anticipated.

Construction Equipment and Water Quality

Construction equipment used for the project has the potential to contaminate the sand from minor spills and leaks from equipment. As proposed, construction material cannot be washed on the beach or in beach parking lots. The applicant proposes that construction debris and sediment shall be properly contained and secured on site with Best Management Practices (BMPs) to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain, or tracking. Any debris resulting from construction activities must be removed from the project site within 24 hours of completion of construction. Public streets used for hauling the material to the project site shall be cleaned via street-sweeper every third day of truck delivery to the project site, and a spill prevention, containment and countermeasures plan must be prepared by the contractor prior to each beach fill project. The plan must include fueling procedures, equipment maintenance procedures, and containment and cleaning measures to be followed in the event of a spill. Thus, the project contains sufficient BMPs to ensure that no impacts to water quality occur.

In addition, as proposed, an on-site debris monitor will be present during beach replenishment. If any debris or non-sand material is detected, the project must be halted, until new information on the composition of the sand material is approved by the Executive Director. However, previously in the City of Encinitas (CDP No. 6-08-008), non-sand debris was collected at the construction site that was not identified until it was placed at the deposition site (borings taken from the site identified the availability of beach quality sand, but samples cannot always identify pockets of trash or debris). The debris was removed from the deposition site, but to avoid a similar situation, **Special Condition No. 1** requires an on-site debris monitor during deposition and excavation to monitor for the presence of debris in the sandy material. Therefore, as conditioned, no significant impacts to water quality are expected.

In conclusion, the Commission finds that the subject project, as conditioned, can be found consistent with the resource protection policies of the Coastal Act.

D. COASTAL HAZARDS

Section 30253 of the Coastal Act states, in part:

> *New development shall do all of the following:*

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard. […]

The proposed development is located in an area subject to tidal and wave action. The coastal shoreline environment is dynamic and there are risks associated with development in such areas. For instance, erosion has occurred at the subject beach where beach nourishment is proposed, and erosion is one form of potential geologic hazard. The fact that the applicant is proposing beach nourishment to restore pre-existing beaches indicates that erosion does occur. However, the applicant will not increase erosion hazards by increasing the size of beaches beyond pre-existing conditions, and increasing the beach size may decrease risks to property. As described above, testing and monitoring the replenishment material will ensure risks to life and health from potential contaminants are minimized. Therefore, the proposed project minimizes this hazard consistent with Section 30253.

Because there remains an inherent risk to development along the shoreline, the applicant has submitted as part of the project notification report, an assumption of risk, waiver of liability and indemnity that indemnifies and holds harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project. In this way, the applicant has made clear that the Commission is not liable for damage as a result of approving the permit for development. **Special Condition No. 8** requires the assumption of risk, waiver of liability, and indemnity.

E. 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.

The City of Coronado has a certified Local Coastal Program, but the proposed beach replenishment site is within the original permit jurisdiction of the Commission. Therefore, the Chapter 3 policies of the Coastal Act are the standard of review for the subject permit, with the certified LCP used as guidance. As conditioned, the proposed development is consistent with the public access, recreation, and environmental protection policies in Chapter 3 of the Coastal Act. Therefore, approval of the proposed development will not prejudice the ability of the City of Coronado to continue to implement its certified Local Coastal Program.

F. 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 City adopted the Final Mitigated Negative Declaration for the Opportunistic Beach Fill Program in the Cities of Encinitas, Solana Beach, Coronado, and Imperial Beach in April 2008 (SCH #2008021045).

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. Mitigation measures, including those addressing monitoring of biological, physical, and recreational impacts, will minimize all adverse environmental impacts. 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 can be found consistent with the requirements of the Coastal Act to conform to CEQA.