CALIFORNIA COASTAL COMMISSION
South Coast Area Office
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Long Beach, CA 90802-4302
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Th 20a & 21a

Click here to go to original staff report

ADDENDUM

December 5, 2014

TO: Coastal Commissioners and Interested Parties

FROM: South Coast District Staff

SUBJECT: **ADDENDUM TO ITEMS TH20A & TH21A, COASTAL COMMISSION PERMIT APPLICATION NO. 5-14-0269 & FEDERAL CONSISTENCY CERTIFICATION NO. CC-0004-14-(CITY OF LONG BEACH) FOR THE COMMISSION MEETING OF THURSDAY, DECEMBER 11, 2014.**

I. CHANGES TO STAFF REPORT

Commission staff recommends modifications to the staff report in the following sections of the staff report dated 11/20/14: the CDP Filed date; the Summary of Staff Recommendation, Section II (Motion and Resolution for Concurrence with Consistency Certification), Section IV (Special Conditions - Coastal Development Permit), and Section V (Findings and Declarations). Language to be added to the findings and conditions is shown in underlined text, and language to be deleted is identified by ~~strike-out~~.

A. Top of Page 1 – Correct "CDP Filed" date:

CDP Filed: ~~6~~3/26/14

B. Pages 1-3 – Modify "Summary of Staff Recommendation", as follows:

SUMMARY OF STAFF RECOMMENDATION

To facilitate Commission review of these items, both the coastal development permit application and the consistency certification will be heard at the same time. Commission staff recommends approval of the coastal development permit application and conditional concurrence with the consistency certification.

…

A coastal development permit is required for the project pursuant to Section 13252(a) (2) because it is in the Commission's original area of jurisdiction and involves more than one hundred thousand (100,000) cubic yards of dredging within a twelve-month period, as well as other development that is not exempt. A consistency certification is required ~~for disposal of dredge materials at the LA-2~~

~~site because it is a federally permitted activity located outside the Coastal Zone that has effects on the Coastal Zone~~ for the proposed issuance of a federal permit for disposal of dredge materials.

…

Commission staff is also recommending that the Commission conditionally concur with consistency certification CC-0004-14 for the disposal of up to 150,000 cubic yards of dredge material at an EPA designated ocean disposal site (LA-2) located approximately 6 miles offshore of San Pedro. Special Condition No. 2 is applicable to the Federal Consistency Certification in that the condition requires that prior to each dredging episode at each individual dredging location, the permittee shall sample the material to be dredged to determine the chemical and physical characteristics of the material using the standards approved by the U.S. Environmental Protection Agency and the Regional Water Quality Control Board that will determine if the material is suitable for offshore disposal at LA-2 (if it is not suitable for beach nourishment). This special condition also requires that the Southern California Dredged Material Management Team (SC-DMMT) review the analysis as well to determine the dredge material is suitable for offshore disposal. Off-shore disposal at LA-2 requires a Federal Consistency Certification.

C. Pages 5 & 6 – Modify the Motion and Resolution for Concurrence with Consistency Certification as follows:

II. MOTION AND RESOLUTION FOR CONDITIONAL CONCURRENCE WITH CONSISTENCY CERTIFICATION

Motion:

> *I move that the Commission conditionally concur with ~~the City of Long Beach's consistency certification~~ CC-0004-14 on the grounds that, if modified in accordance with Special Condition No. 2, the project described therein would be consistent with the enforceable policies of the California Coastal Management Program (CCMP) and would be conducted in a manner consistent with that program.*

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a conditional concurrence, if modified as suggested, in the certification of the proposed project and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

> *The Commission hereby conditionally concurs with ~~the consistency certification by the City of Long Beach in~~ CC-0004-14 on the grounds that, if modified in accordance with Special Condition No. 2, the project described therein would be consistent with the enforceable policies of the CCMP and would be conducted in a manner consistent with that program.*

D. Page 7 – Modify Dates in Special Condition No. 3, as follows:

3. Construction Timing (Biological Resources). To avoid adverse impacts on the Grunion (*Leuresthes tenuis*), California Brown Pelican (*Pelicanus occidentalis*) and the California Least Tern (*Sterna antillarum brownie*), no beach replenishment or sand moving on the East Beach or West Beach shall occur between ~~February 15th~~ March 1st to September ~~15th~~ 1st without a written statement from the Executive Director authorizing said development between those specified dates. To obtain such a written statement, the permittee must submit a declaration from the California Department of Fish and Wildlife (CDF&W) to the Executive Director stating that implementing the development described in this condition on the specific dates proposed will not cause adverse impacts to any protected species or California grunion or their eggs. The declaration must contain an assessment of the spawning of the California grunion found in the area and a statement that the development activity on the specific dates proposed and in the specified locations will not interfere with the spawning of the California grunion.

E. Page 7 – Modify Timing of Special Condition No. 4, as follows:

4. Construction Staging Plans.

A. Prior to ~~Issuance of the coastal development permit~~ each beach nourishment episode at each individual beach nourishment location, the applicant shall submit, for the Executive Director's review and approval, two full size sets of construction staging plans which indicate that the construction staging area(s) and construction corridor(s) will avoid impacts beach areas or to sensitive habitat areas. [… .]

F. Page 9 – Modify Special Condition No. 8, by adding the following:

8. Pre-Construction Eelgrass Survey. A valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). … .

Post-Construction Eelgrass Survey. If any eelgrass is identified in the dredging areas or deposition areas by the survey required by this special condition, within one month after the conclusion of construction, the applicant shall survey the project site to determine if any eelgrass was adversely impacted. The survey shall be prepared in full compliance with the "*Southern California Eelgrass Mitigation Policy*" Revision 8 (SCEMP) (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Wildlife. The applicant shall submit the post-construction eelgrass survey for the review and approval by the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a minimum 1.2:1 ratio on-site, or at another location, in accordance with the SCEMP. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.2:1 (mitigation: impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply. Implementation of mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is legally required. Eelgrass mitigation areas (or credits) previously approved by the Commission may

be used to mitigate loss of eelgrass resulting from dredging activities only if the Executive Director determines that the accounting of such credit is consistent with the Commission's prior actions.

G. Page 11 – Add New Section: Special Conditions for Consistency Certification, as follows:

V. SPECIAL CONDITIONS (CONSISTENCY CERTIFICATION)

Special Condition No.2 listed under "IV. SPECIAL CONDITIONS (COASTAL DEVELOPMENT PERMIT)" also applies as a special condition for Consistency Certification since it deals with the offshore disposal of dredge material at LA-2.

H. Page 12 – Re-number "V. Finding and Declarations" Section, as follows:

~~V~~ VI. FINDINGS AND DECLARATIONS

I. Page 13 – Modify paragraph in "A. BACKGROUND, PROJECT LOCATION AND DESCRIPTION", as follows:

Material suitable for beach nourishment will be pumped, via pipeline, from a hydraulic suction onto the beach and the near shore intertidal areas where the beach has eroded from its former width. The proposed spreading of the dredged matter would fill intertidal and subtidal areas along the City's eroded shoreline between 1st Place and Junipero Avenue (West Beach), and between 54th and 72nd Places (East Beach). The dredged material would be pumped onto the beach for percolation and final mechanical conditioning. That is, the water in the dredged matter percolates downward through the sand column and the saturated sandy material is then aerated and mixed with dry sand. This is done with the City's normal beach maintenance equipment. Based on the production rates of the City's past dredging project, the City states that this procedure is typically done on a daily basis, until the dredging is completed. As the dredging is being conducted, material placed on the beach is spread and distributed as part of the beach nourishment program. In order to reduce potential impacts to grunion, beach nourishment activities from ~~February 15th~~ March 1st to September ~~15th~~ 1st will be prohibited.

J. Page 14 – Delete the last sentence of "B. Status of Local Coastal Program (LCP)", as follows:

B. STATUS OF LOCAL COASTAL PROGRAM (LCP)

The standard of review for federal consistency certifications is the policies of Chapter 3 of the Coastal Act, and not any Local Coastal Program (LCP) of the affected area. If the Commission has certified an LCP and incorporated it into the California Coastal Management Program (CCMP), the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated an LCP into the CCMP, the LCP cannot guide the Commission's decision, but it can provide background information. There is presently a

certified LCP for the City of Long Beach. ~~Therefore, the Commission has incorporated the LCP for the City of Long Beach into the CCMP.~~

K. Page 18 – Modify the following paragraphs to reflect the changes to Special Condition Nos. 3 and 4, as follows:

The proposed deposition sites are beaches where Grunion (*Leuresthes tenuis*) are known to spawn. The waters in the project area are also used as a feeding area by the endangered California Brown Pelican (*Pelicanus occidentalis*) and the endangered California Least Tern (*Sterna antillarum brownie*). Therefore, in order to minimize any adverse impact that the proposed activity may have on these species, the Commission imposes **Special Condition No. 3**, which prohibits beach nourishment activities between ~~February 15th~~ March 1st to September ~~15th~~ 1st, which is the Grunion-spawning season, as well as the California Least Tern nesting season, unless they obtain clearance from the California Department of Fish and Wildlife and the Executive Director of the Commission to proceed based upon an assessment of the spawning of the California grunion found in the area and a statement that the development activity on the specific dates proposed and in the specified locations will not interfere with the spawning of the California grunion. These dates match the recommendation of the California Department of Fish and Wildlife.

The applicant has not identified a staging area for the proposed project. Thus, in order to ensure that no adverse impacts upon sensitive habitats and species occur due to construction staging, the Commission imposes **Special Condition No. 4**, which requires the permittee to submit a construction staging area plan prior to ~~the issuance of the permit~~ each beach nourishment episode at each individual beach nourishment location.

L. Page 22 – Modify the following paragraph to reflect the change to Special Condition No. 3, as follows:

The proposed project includes the placement of sediment at East Beach and West Beach that will partially mitigate beach erosion and provide for the continuing and increased recreational use of the City beaches by the public. The proposed nourishment will increase the size of the beach and will provide a larger area for recreational use. The project will temporarily impact the use of some portions of the beach during the deposition of the dredged material. However, because the permit is conditioned to prohibit replenishment during the California Least Tern nesting season and Grunion spawning season (~~February 15th~~ March 1st to ~~September 15th~~ 1st) public access and recreation will not be impacted during the peak summer season. However, when work does occur on the beach, there is potential to impact public access. In order to minimize impacts to public access during the nourishment activities, the Commission imposes **Special Conditions No. 11,** which requires the permittee to minimize beach area closures by limiting closed beach areas to an area not to exceed 200-feet from the pipeline and deposition area.

II. LETTER RECEIVED

Commission staff received a letter from Heal the Bay on December 3, 2014 in opposition to Coastal Commission Staff's recommendation of Approval for Costal Development Permit No. 5-14-0269 & Consistency Certification No. CC-0004-14, which is on the Regular Calendar (See attached letter). The letter addresses a concern relating to Special Condition No. 2, which requires the applicant prior to each dredging episode at each individual dredging location, to sample the material to be dredged to determine the chemical and physical characteristics of the material using the standards approved by the U.S. Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB). The permittee shall provide a qualified expert (e.g., licensed professional civil engineer) at the dredge sites to determine whether the materials to be dredged will be physically and chemically suitable for beach nourishment and/or offshore disposal at LA-2. The permittee shall also seek concurrence from the Southern California Dredged Material Management Team (SC-DMMT). Heal the Bay is concerned because the staff report and special condition do not identify any chemistry threshold that would determine if dredged material is suitable for beach nourishment or ocean disposal, nor are there any grain size analysis thresholds. The letter also addresses concerns regarding the Commission's lack of toxicity and bioaccumulation testing requirements in all sediment disposal suitability decisions. Thus, Heal the Bay recommends that chemistry and physical sediment characterization thresholds and toxicity and bioaccumulation testing for all sediment suitability decisions are included in the CDP to best determine environmentally appropriate disposal options for the dredged materials. The letter concludes by stating that other upland disposal locations, including the Port of Long Beach (POLB) Middle Harbor Redevelopment Project be used for upland disposal for material not suitable for beach nourishment nor LA-2 disposal.

As required by Special Condition No. 2, SC-DMMT review, which includes Commission staff members as part of the collective, is required and they would review the dredged materials suitability for beach nourishment, nearshore disposal, and ocean disposal. This process has been operating successfully for the past ten years. All dredging and disposal projects in the region go before this team at least twice. First, the team reviews the applicant's proposed sediment analysis plan (SAP) to ensure that the sediment testing plan is appropriate for the dredge location(s) and for the proposed disposal location(s). If the SAP is found lacking, the applicant must redesign it and return to the SC-DMMT at a later date for approval. Second, the applicant returns to the SC-DMMT with the results of the sediment testing and a proposed suitability determination for sediment disposal. The SC-DMMT will either then concur, object, or modify the determination depending on our independent analysis of the test results. Because of the required review of the SC-DMMT, Commission staff did not include any specific thresholds for the review of the dredged material. The SC-DMMT would be the most informed group to determine suitability of the disposal of the dredged material.

The POLB Middle Harbor project has accepted dredged materials found to be unsuitable for beach/nearshore disposal and/or unsuitable for ocean disposal, and the POLB has accepted materials from dredge sites outside the POLB, in coordination with the SC-DMMT. However, while the POLB has made a good effort to accept contaminated materials they have placed limits on the amount of clean, fine-grained materials from outside the port, hence the need for the SC-DMMT to still approve use of the LA-2 and LA-3 ocean disposal sites for clean, fine-grained sediments. This is done only after beneficial reuses are determined to not be available and non-ocean disposal sites are ruled out. In any case, the permit does not prohibit the transfer of materials deemed unsuitable for beach nourishment nor LA-2 disposal to be used as fill in POLB.

Heal the Bay

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December 3, 2014

California Coastal Commission
South Coast Area Office
200 Oceangate, Suite 1000
Long Beach, CA 90802
Submitted via fax to (562) 590-5084

Re: City of Long Beach Dredging Coastal Development Permit and Consistency Certification, Agenda Items Th20a & 21a, Application No. 5-14-0269, Federal Consistency No. CC-0004-14 (Dredging and Beach Placement, Offshore Disposal)

Dear Coastal Commissioners:

On behalf of Heal the Bay, we submit the following comments to the California Coastal Commission on the city of Long Beach's dredging Coastal Development Permit and Consistency Certification (Application No. 5-14-0269) ("CCC Permit"). Heal the Bay is an environmental organization with over 15,000 members dedicated to making Southern California coastal waters and watersheds safe, healthy, and clean for people and aquatic life.

Heal the Bay has long-advocated for the beneficial re-use of sediment when analyses show dredged materials are suitable for re-use. Upon reviewing the CCC Permit, it is unclear how suitability will be determined for beach nourishment and ocean disposal. The CCC Permit repeatedly references that the permittee shall provide a qualified expert at the dredge site to determine whether the materials to be dredged will be physically and chemically suitable for beach nourishment and/or offshore disposal at LA-2 using standards approved by the U.S. Environmental Protection Agency and Regional Water Quality Control Board. However, the CCC Permit does not include or reference any chemistry thresholds that would determine if dredged material is suitable for beach nourishment or ocean disposal. For example, if sediment characterization analyses identify constituent(s) Effects Range-Low and/or Effects Range-Medium exceedance(s), at what point does the California Coastal Commission deem dredged sediment unclean and unsuitable for beach nourishment or ocean disposal? In addition, there are no grain size analysis thresholds to justify beach nourishment decision making (e.g. percentage of dredged material fines, coarse sand, etc.). How similar must dredged and disposal site sediments be to deem beach nourishment an appropriate disposal option? We recommend that chemistry and physical sediment characterization thresholds be included in the CCC Permit to best determine environmentally appropriate disposal options for dredged materials.

The *Los Angeles Regional Contaminated Sediment Task Force: Long-Term Management Strategies* states that multiple lines of evidence (e.g. toxicity, Sediment Quality Guidelines, bioaccumulation) should be considered before making disposal suitability decisions. The CCC Permit states that "[i]n some cases, the sediment chemistry occurs in in a range where it may or may not be suitable for ocean disposal or beach nourishment purposes. In those situations, federal dredging standards require the applicant to conduct bioassay and bioaccumulation tests. Unless the material passes those tests, neither beach nourishment or offshore disposal at LA-2 would be allowed". The CCC Permit only requires bioaccumulation and toxicity testing to be conducted when sediment chemistry indicates sediment falls within a range that questions suitability for ocean disposal or beach nourishment. This is concerning as several emerging contaminants are not required for sediment chemistry analyses, and impacts from commingling of constituents, which

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may cause sediment to be unsuitable for beach nourishment and ocean disposal, are not included in sediment disposal decision making. Toxicity and bioaccumulation testing characterize emerging contaminants and commingling impacts on aquatic life. Without including toxicity and bioaccumulation testing in all sediment disposal suitability decisions, how can the California Coastal Commission be certain that this material is "clean" for beach nourishment and ocean disposal? We strongly urge the California Coastal Commission to require toxicity and bioaccumulation testing be conducted before sediment suitability decisions are made.

The Port of Long Beach is currently redeveloping its Middle Harbor. The CCC Permit does not mention the Middle Harbor Redevelopment Project as a potential disposal option for dredged sediments. Sediments unsuitable for beach nourishment and ocean disposal are commonly used for slip fill projects. Does the City of Long Beach plan on disposing dredged sediment, under this CCC Permit, in the Middle Harbor slip fill? Other disposal options for sediments unsuitable for beach nourishment and ocean disposal, other than upland disposal sites, should be identified in the CCC Permit.

Thank you for this opportunity to provide comments and if you have any questions please contact us at (310) 451-1500.

Sincerely,

Peter Shellenbarger, MESM
Science and Policy Analyst, Water Quality
Heal the Bay

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CDP Filed:	6/26/14
270th Day:	12/21/14
CC Filed:	10/13/14
3 Months (CC)	1/13/15
6 Months (CC)	4/15/15
Staff:	F. Sy-LB
Staff Report:	11/20/14
Hearing Date:	12/11/14

STAFF REPORT: REGULAR CALENDAR
COMBINED COASTAL DEVELOPMENT PERMIT
AND CONSISTENCY CERTIFICATION

Application No.: 5-14-0269

Federal Consistency No.: CC-0004-14

Applicant: City of Long Beach

Agent: Anchor QEA, LLC, Attn: Joshua Burnam

Locations: Dredging and Beach Placement: On the beach, between 1st Place and Junipero Avenue (West Beach), and between 54th and 72nd Places (East Beach), City of Long Beach (Los Angeles County).

Offshore Disposal: EPA approved disposal site known as LA-2, located approximately 6 miles offshore southwest of Point Fermin, San Pedro (Los Angeles County).

Project Description: Coastal Development Permit No. 5-14-0269: Dredging of up to 150,000 cubic yards of material a year (for a 5-year period) from various channels, bays and harbors in Long Beach (including, Los Angeles River Estuary (LARE), Shoreline Marina, Rainbow Harbor, Alamitos Bay, Cerritos Channel, etc.) and placement of dredged material at East Beach and West Beach.

Consistency Certification No. CC-0004-14: Off-shore disposal (LA-2) of up to 150,000 cubic yards of dredge material a year (for a 5-year period) at Environmental Protection Agency (EPA) designated ocean disposal site LA-2.

SUMMARY OF STAFF RECOMMENDATION

To facilitate Commission review of these items, both the coastal development permit application and the consistency certification will be heard at the same time. Commission staff recommends approval of the coastal development permit application and concurrence with the consistency certification.

The City of Long Beach is proposing to continue its now-expired, but previously approved [Coastal Development Permit (CDP) No. 5-08-356/Consistency Certification (CC) No. CC-004-09 approved by the Commission in March 2009] maintenance dredging operation, beach nourishment program, and ocean disposal program. This program was also covered under the City's now expired Regional General Permit 30 (RGP 30) from the U.S. Army Corps of Engineers (USACOE) that expired on April 17, 2014, concurrent with the CDP and CC mentioned above. The City has applied for a new RGP from the USACOE and has concurrently applied to California Coastal Commission for a CDP and CC.

The maintenance dredging will be conducted in various channels, bays and harbors in Long Beach (including, the Los Angeles River Estuary, Shoreline Marina, Rainbow Harbor, Alamitos Bay, Cerritos Channel, etc. (Exhibits #2-3) and is required for the maintenance of existing navigational channels. Dredged matter deemed suitable for disposal will be used for beach nourishment along the City's ocean-fronting beaches at East Beach and West Beach. Dredge material that is unsuitable for beach nourishment will be disposed at LA-2, an existing Environmental Protection Agency (EPA) -authorized ocean disposal site located about 6 miles offshore of the City of San Pedro (Los Angeles County). If the dredge material is determined unsuitable for disposal at LA-2 and does not meet the criteria for beach nourishment, the dredged material will be disposed of in an upland disposal area.

The proposed dredging and disposal program is largely identical to the program previously approved by the Commission pursuant to CDP No. 5-08-356 and CC004-09. Key elements of the current proposal include an annual limit of 150,000 cubic yards of dredging and disposal per year for a 5-year period, individual sediment analysis and characterization for each dredging episode, limits on dredging and beach disposal to ensure that no eelgrass is adversely affected, and *Caulerpa taxifolia* survey requirements. The City's currently proposed dredging and disposal program revises the prior program as follows: 1) it includes a focused expansion of the dredging boundaries to address shoaling in the Los Angeles River Estuary and to ensure navigational access from the South Shore Launch Ramp and Harbor Light Marina to the Federal Channel is preserved; 2) it revises the dredging depths and quantities at specific areas; 3) it includes minor knock down dredging of small shoals or navigational obstructions that entails the use of equipment to redistribute material in a localized area without removing it from the water; and 4) it extends the program's expiration date to 2019 (5 years). The maximum dredge quantity is requested to remain unchanged at 150,000 cubic yards per year, though the City may only dredge a portion of that quantity in any given year.

The City emphasizes that it would only perform dredging activities when absolutely necessary to maintain access in existing navigational channels. The proposed dredging project will help to continue to protect and provide commercial fishing and recreational boating industries in the various channels, bays and harbors in Long Beach by improving navigation and safety within the bay.

A coastal development permit is required for the project pursuant to Section 13252(a) (2) because it is in the Commission's original area of jurisdiction and involves more than one hundred thousand (100,000) cubic yards of dredging within a twelve-month period, as well as other development that is not exempt. A consistency certification is required for disposal of dredge materials at the LA-2 site because it is a federally permitted activity located outside the Coastal Zone that has effects on the Coastal Zone.

The primary issues associated with this development are recreation, water quality and protection of sensitive biological resources. The proposed project, as conditioned, is the least environmentally damaging alternative and will not have significant impacts to recreation or marine resources. Any impacts to recreation, sensitive habitat and species will be temporary.

Therefore, Commission staff is recommending **approval** of coastal development permit application 5-14-0269 with **eleven (11) Special Conditions** relating to: **1)** all suitable dredge material shall be used for beach nourishment; **2)** compatibility of the dredged material with the deposition sites; **3)** timing of construction; **4)** staging area plans; **5)** turbidity control; **6)** conformance with the requirements of resource agencies; **7)** construction responsibilities; **8)** pre- and post-construction eelgrass (*Zostera marina*) surveys; **9)** pre-construction *Caulerpa taxifolia* survey; **10)** post completion report; **11)** minimizing impacts to beach and recreational facilities during nourishment activities.

Commission staff is also recommending that the Commission **concur** with consistency certification CC-0004-14 for the disposal of up to 150,000 cubic yards of dredge material at an EPA designated ocean disposal site (LA-2) located approximately 6 miles offshore of San Pedro.

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I. MOTION AND RESOLUTION FOR APPROVAL OF COASTAL DEVELOPMENT PERMIT

Motion:

I move that the Commission approve Coastal Development Permit No. 5-14-0269 subject to the conditions set forth in the staff recommendation.

Staff recommends a **YES** vote of 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 No. 5-14-0269 for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 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 will substantially lessen any significant adverse impacts of the development on the environment.

II. MOTION AND RESOLUTION FOR CONCURRENCE WITH CONSISTENCY CERTIFICATION

Motion:

I move that the Commission conditionally concur with the City of Long Beach's consistency certification CC-0004-14 that, if modified in accordance with Special Condition No. 2, the project described therein would be consistent with the enforceable policies of the California Coastal Management Program (CCMP) and would be conducted in a manner consistent with that program.

Staff recommends a **YES** vote on the motion. Passage of this motion will result in a conditional concurrence in the certification of the proposed project and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution:

The Commission hereby conditionally concurs with the consistency certification by the City of Long Beach in CC-0004-14 on the grounds that, if modified in accordance with Special Condition No. 2, the project described therein would be consistent with the enforceable policies of the CCMP and would be conducted in a manner consistent with that program.

III. STANDARD CONDITIONS (COASTAL DEVELOPMENT PERMIT)

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.

IV. SPECIAL CONDITIONS (COASTAL DEVELOPMENT PERMIT)

1. **Beach Nourishment.** All dredge materials suitable for beach replenishment will be transported for such purposes to East Beach or West Beach in the City of Long Beach. No dredged material shall be placed on eelgrass (*Zostera marina*) beds.

2. **Suitability of Materials.** Prior to each dredging episode at each individual dredging location, the permittee shall sample the material to be dredged to determine the chemical and physical characteristics of the material using the standards approved by the U.S. Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB). The permittee shall provide a qualified expert (e.g., licensed professional civil engineer) at the dredge sites to determine whether the materials to be dredged will be physically and chemically suitable for beach nourishment and/or offshore disposal at LA-2. The permittee shall also seek concurrence from the Southern California Dredged Material Management Team (SC-DMMT).

Prior to commencement of dredging at a sample site, the results of each sampling episode, sediment characterization, beach nourishment compatibility test, and concurrence from the Southern California Dredged Material Management Team (SC-DMMT) shall be submitted for the review and approval of the Executive Director. Dredged material deemed suitable may be deposited at the approved deposition sites only after the Executive Director has concurred with a City determination that the materials to be dredged have been deemed "suitable" using the criteria contained in the sampling plan. All dredged material deemed "unsuitable" shall be disposed of at an approved location according to all federal, state and local regulations. If the disposal site is located in the Coastal Zone (other than the sites authorized pursuant to this permit and Consistency Certification CC-0004-14) a separate coastal development permit application shall be filed for the disposal of the "unsuitable" material. All contracts involving the subject project shall include this condition of approval.

3. **Construction Timing (Biological Resources).** To avoid adverse impacts on the Grunion (*Leuresthes tenuis*), California Brown Pelican (*Pelicanus occidentalis*) and the California Least Tern (*Sterna antillarum brownie*), no beach replenishment or sand moving on the East Beach or West Beach shall occur between February 15th to September 15th without a written statement from the Executive Director authorizing said development between those specified dates. To obtain such a written statement, the permittee must submit a declaration from the California Department of Fish and Wildlife (CDF&W) to the Executive Director stating that implementing the development described in this condition on the specific dates proposed will not cause adverse impacts to any protected species or California grunion or their eggs. The declaration must contain an assessment of the spawning of the California grunion found in the area and a statement that the development activity on the specific dates proposed and in the specified locations will not interfere with the spawning of the California grunion.

4. **Construction Staging Plans.**
   A. Prior to Issuance of the coastal development permit, the applicant shall submit, for the Executive Director's review and approval, two full size sets of construction staging plans which indicate that the construction staging area(s) and construction corridor(s) will avoid impacts beach areas or to sensitive habitat areas.

      (1) The plan shall demonstrate that:

         a) Construction equipment or activity shall not occur outside the staging area;
         b) Public parking areas are allowed to be used for staging or storage of equipment, but shall be the minimal sized area and shall minimize temporary impacts to public access;
         c) Sandy beach or habitat (vegetated) areas shall not be used as staging areas; and
         d) The staging area for construction of the project shall not obstruct vertical or lateral access to the beach, marina or other recreational facilities

      (2) The plan shall include, at a minimum, site plan that depicts the following components:

         a) limits of the staging area(s);
         b) construction corridor(s);
         c) construction site;

d) location of construction fencing and temporary job trailers with respect to existing beaches.

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

5. Turbidity Control. As required by the Regional Water Quality Control Board (RWQCB), the applicant shall ensure that the project does not result in:

A. Increases of water turbidity by more than twenty percent (20%) of the natural turbidity during non-storm conditions, nor
B. Dissolved oxygen in the receiving waters being depressed below 5.0 mg/l.

6. Conformance with the Requirements of the Resource Agencies. The permittee shall comply with all requirements, requests and mitigation measures from the California Department of Fish and Wildlife (CDF&W), Regional Water Quality Control Board (RWQCB), U.S. Army Corps of Engineers (USACOE), and the U.S. Fish and Wildlife Service (USFWS) with respect to preservation and protection of water quality and marine environment. Any change in the approved project that may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed change shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations. No changes to the approved development shall occur without a Commission amendment to this coastal development permit or a new coastal development permit, unless the Executive Director determines that no amendment or new permit is legally required.

7. Construction Responsibilities. Activities authorized under this CDP shall comply with the following construction-related requirements:

A. No construction materials, debris, waste, oil or liquid chemicals shall be placed or stored where it may be subject to wave erosion and dispersion, stormwater, or where it may contribute to or come into contact with nuisance flow;

B. Silt curtains shall be utilized to minimize and control turbidity to the maximum extent practicable;

C. The discharge of any hazardous materials into the harbor or any receiving waters shall be prohibited;

D. Floating booms will be used to contain debris discharged into coastal waters and any debris discharged will be removed as soon as possible but no later than the end of each day; and

E. Non-buoyant debris discharged into coastal waters will be recovered by divers as soon as possible after loss.

8. **Pre-Construction Eelgrass Survey.** A valid pre-construction eelgrass (*Zostera marina*) survey shall be completed during the period of active growth of eelgrass (typically March through October). The pre-construction survey shall be completed prior to dredging, placement of any sand, or deposition of any dredged material below the mean high tide line (MHTL) and shall be valid until the next period of active growth. If any portion of the project commences in a previously undisturbed area after the last valid eelgrass survey expires, a new survey is required prior to commencement of work in that area. The survey shall be prepared in full compliance with the "*Southern California Eelgrass Mitigation Policy*" Revision 8 (except as modified by this special condition) adopted by the National Marine Fisheries Service (NMFS) and shall be prepared in consultation with the California Department of Fish and Wildlife (CDF&W) to determine whether the proposed activities negatively impacts any eelgrass (*Zostera marina*) beds. The applicant shall submit the eelgrass survey for the review by the Executive Director and the California Department of Fish and Wildlife within five (5) business days of completion of each eelgrass survey and in any event no later than fifteen (15) business days prior to commencement of any dredging, placement of any sand or deposition of any dredged material below the mean high tide line (MHTL). No dredged material shall be placed on eelgrass.

   Post-Construction Eelgrass Survey. If any eelgrass is identified in the dredging areas or deposition areas by the survey required by this special condition, within one month after the conclusion of construction, the applicant shall survey the project site to determine if any eelgrass was adversely impacted. The survey shall be prepared in full compliance with the "*Southern California Eelgrass Mitigation Policy*" Revision 8 (SCEMP) (except as modified by this special condition) adopted by the National Marine Fisheries Service and shall be prepared in consultation with the California Department of Fish and Wildlife. The applicant shall submit the post-construction eelgrass survey for the review and approval by the Executive Director within thirty (30) days after completion of the survey. If any eelgrass has been impacted, the applicant shall replace the impacted eelgrass at a minimum 1.2:1 ratio on-site, or at another location, in accordance with the SCEMP. All impacts to eelgrass habitat shall be mitigated at a minimum ratio of 1.2:1 (mitigation: impact). The exceptions to the required 1.2:1 mitigation ratio found within SCEMP shall not apply. Implementation of mitigation shall require an amendment to this permit or a new coastal development permit unless the Executive Director determines that no amendment or new permit is legally required.

9. **Pre-Construction *Caulerpa taxifolia* Survey.** Not earlier than 90 days nor later than 30 days prior to commencement or re-commencement of any development authorized under this Coastal Development Permit (the "*project*"), the applicant shall undertake a survey of the project areas, the dredging areas and deposition areas and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga *Caulerpa taxifolia*. The survey shall include a visual examination of the substrate. If any portion of the project commences in a previously undisturbed area after the last valid *Caulerpa taxifolia* survey expires, a new survey is required prior to commencement of work in that area.

   The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Wildlife, and the National Marine Fisheries Service. Within five (5) business days of completion of the survey, the applicant shall submit the survey:

1) for the review and approval by the Executive Director; and
2) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Wildlife (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (562/980-4043), or their successors.

If *Caulerpa taxifolia* is found within the project or buffer areas, the applicant shall not proceed with the project until 1) the applicant provides evidence to the Executive Director that all *Caulerpa taxifolia* discovered within the project and buffer area has been eliminated in a manner that complies with all applicable governmental approval requirements, including but not limited to those of the California Coastal Act, or 2) the applicant has revised the project to avoid any contact with *Caulerpa taxifolia*. No revisions to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

10. Post Completion Report. The permittee shall submit a post-dredging completion report to the Executive Director of the Commission within 30 calendar days after completion of each dredging episode (a minimum of one report each calendar year) to document compliance with all special conditions imposed by this permit. The report shall include all information collected by the permittee as required by the special conditions of this permit. The report shall indicate whether all special permit conditions were met. Any violations of the permit shall be explained in detail. The report shall further include the following information:

A. Permit and project number.

B. Start date and completion date of dredging and disposal operations.

C. Location and method of dredging, and total cubic yards dredged.

D. Total cubic yards disposed at each authorized disposal site(s).

E. Mode of transportation, and frequency of disposal and plots of all trips to the authorized disposal site(s).

F. Tug boat or other disposal vessel logs documenting contact with the United States Coast Guard (USCG) before each trip to the authorized ocean disposal site.

G. A certified report from the dredging site inspector indicating all general and special permit conditions were met. Any violations of the permit shall be explained in detail.

F. A Pre-dredging hydrographic survey, and a detailed post-dredging hydrographic survey of the dredging area. The survey shall show areas above the dredging design depth shaded green, areas between the dredging design depth and overdredge depth shaded yellow, areas below overdredged depth that were not dredged or areas that were deeper than the overdredge depth before the project began as indicated on the pre-dredging survey shaded blue, and areas dredged below the overdredge depth or outside the project boundaries shaded red. The methods used to prepare the post-dredging survey shall be the same methods used in the pre-dredging condition survey. The survey shall be signed by the permittee certifying that the data are accurate.

11. Beach and Recreational Facility Closures. Beach area closures shall be minimized and limited to areas immediately adjacent to the project area (within 200 feet deposition area). All beach areas and recreation facilities outside of the 200-foot radius shall remain open and available for public use during the normal operating hours. The beach bicycle path shall remain open and available for public use during normal operating hours.

V. FINDINGS AND DECLARATIONS

A. BACKGROUND, PROJECT LOCATION AND DESCRIPTION

The maintenance dredging will be conducted throughout various channels, bays and harbors in Long Beach (including, the Los Angeles River Estuary, Shoreline Marina, Rainbow Harbor, Alamitos Bay, Cerritos Channel, etc. (Exhibit No. 1) and is required for the maintenance of existing navigational channels. Dredged material determined to be suitable will be used for beach nourishment along the City's ocean-fronting beaches located at East Beach and West Beach (Exhibits No. 2-3). Dredge material that is unsuitable for beach nourishment will be disposed at LA-2, an existing Environmental Protection Agency (EPA) authorized ocean disposal site located about 6 miles offshore of San Pedro. If any dredge material is determined to be unsuitable for disposal at LA-2 and does not meet the criteria for beach nourishment, that material will be disposed of in an upland disposal area. The proposed dredging and disposal activities have an annual limit of 150,000 cubic yards of dredging and disposal per year for a 5-year period. The City's currently proposed dredging and disposal program revises the prior program approved in March 2009 under CDP No. 5-08-356 and CC-004-09 as follows:

1) There will be a focused expansion of the dredging boundaries to address shoaling in the Los Angeles River Estuary and to ensure navigation access from the South Shore Launch Ramp, and Harbor Light Marina to the Federal Channel is preserved.

2) It revises the dredging depths and quantities at specific areas, for example Rainbow Marina, Alamitos Bay-Basin Channel, etc. Changes in estimated quantities reflect sedimentation and shoaling that has occurred since the pervious Regional General Permit 30 was issued.

3) It includes minor knock down dredging of small shoals or navigational obstructions that entails the use of equipment to redistribute material in a localized area without removing it from the water.

The City proposes to utilize the following methods when performing knockdown dredging for maintenance of authorized depths within the dredge area:

Drag Beams: An I-beam, rake, cutting edge, or similar fixed object would be dragged by a vessel (e.g. boat, barge) across a shoal to redistribute the shoaled material from a high area to a low area within the approved project boundary.

Clamshell Bucket or Excavator: A clamshell bucket, excavator, or similar equipment would be used to sweep the bottom to knock down high spots. This method would be used to remove high spots near piles or other wharf structures where the use of a drag beam is not feasible. A clamshell bucket, excavator, or similar equipment could also be used to relocate shoaled material (but not lift it out of the water column) and then place the material on the bottom of a nearby area within the project boundary. Then the material would either be placed in a lower area or on the bottom, and then leveled out or pushed to a low area within the approved project boundary.

4) It extends the program's expiration date to 2019 (5 years).

The maximum dredge quantity is requested to remain unchanged at 150,000 cubic yards per year, though the City may only dredge a portion of that quantity in any given year. The City re-emphasizes that it would only perform dredging activities when absolutely necessary to maintain navigational access.

Prior to each dredging episode, the City will demonstrate that the proposed dredged material is chemically and physically suitable for beach nourishment or disposal in ocean waters. To determine if the dredged materials suitable for deposition on the City's beaches, sediment sampling and analysis will be performed in accordance with standard procedures promulgated by the U.S. Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB). Only dredged material deemed "suitable" by an expert in the field (e.g., licensed professional civil engineer) will be used for beach nourishment. Any material deemed unsuitable for beach nourishment but determined to be clean for offshore disposal will be taken by barge to the EPA-approved disposal site known as LA-2 which is located approximately 6 miles offshore southwest of San Pedro. If there is dredge material determined to be unsuitable for disposal at LA-2 and does not meet the criteria for beach nourishment that dredged material would be disposed of in an upland disposal area. Additionally, prior to dredging, the City will provide the sediment test results (physical and chemical), alternatives analysis, and Southern California Dredged Material Management Team (SC-DMMT) concurrence to CCC staff for review and approval. The SC-DMMT is an interagency team managed by USACE for the coordinated review of dredging projects and dredging policy issues within the Southern California area, specifically the counties of San Diego, Orange, Los Angeles, Ventura, Santa Barbara, and parts of San Luis Obispo County. Coordinated review of dredging projects and policy issues reduces redundancy and unnecessary delays in permit processing (and ultimately in the management of coastal sediments), promotes consistency in dredging project reviews, and facilitates development of consensus recommendations among regulatory staff. The Coastal Commission is a member of the SC-DMMT.

Material suitable for beach nourishment will be pumped, via pipeline, from a hydraulic suction onto the beach and the near shore intertidal areas where the beach has eroded from its former width. The proposed spreading of the dredged matter would fill intertidal and subtidal areas along the City's eroded shoreline between 1st Place and Junipero Avenue (West Beach), and between 54th and 72nd Places (East Beach). The dredged material would be pumped onto the beach for percolation and final mechanical conditioning. That is, the water in the dredged matter percolates downward through the sand column and the saturated sandy material is then aerated and mixed with dry sand. This is done with the City's normal beach maintenance equipment. Based on the production rates of the City's past dredging project, the City states that this procedure is typically done on a daily basis, until the dredging is completed. As the dredging is being conducted, material placed on the beach is spread and distributed as part of the beach nourishment program. In order to reduce potential impacts to grunion, beach nourishment activities from February 15th to September 15th will be prohibited.

Proposed dredging and deposition area will be surveyed for the presence of eelgrass (*Zostera marina*) and *Caulerpa Taxifolia* prior to dredging, and the survey results will be provided to the CCC and the California Department of Fish & Wildlife (CDFW).

The Commission has previously approved beach nourishment projects in Long Beach. In 1994, the Commission approved Coastal Development Permit No. 5-94-103 (City of Long Beach) to permit the use of suitable dredged material for beach nourishment during the 1994-1999 maintenance dredging operation permitted by the extension of U.S. Army Corps of Engineers Permit No. 88-110-KK. In 1999, the Commission approved Coastal Development Permit No. 5-99-228 (City of Long Beach) for a 5-year term that coincided with the maintenance dredging authorized pursuant to U.S. Army Corps of Engineers Permit No. 1999-15256-KW. In 2006, the Commission approved Coastal Development Permit No. 5-05-438 (City of Long Beach) for the City's beach nourishment program, but that permit expired in 2008 before being vested. In 2009, the Commission approved Coastal Development Permit No. 5-08-356 (City of Long Beach) for the City's beach nourishment program, in conjunction with U.S. Army Corps of Engineers Regional General Permit 30 (RGP 30). Federal Consistency Certification (CC) No. CC-004-09 was also approved along with CDP No. 5-08-356. These most recent approvals expired on April 17, 2014.

B. STATUS OF LOCAL COASTAL PROGRAM (LCP)

The standard of review for federal consistency certifications is the policies of Chapter 3 of the Coastal Act, and not any Local Coastal Program (LCP) of the affected area. If the Commission has certified an LCP and incorporated it into the California Coastal Management Program (CCMP), the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances. If the Commission has not incorporated an LCP into the CCMP, the LCP cannot guide the Commission's decision, but it can provide background information. There is presently a certified LCP for the City of Long Beach. Therefore, the Commission has incorporated the LCP for the City of Long Beach into the CCMP.

C. APPLICANT'S CONSISTENCY CERTIFICATION

The City of Long Beach has certified that the proposed project is consistent with the California Coastal Management Program.

D. CHAPTER 3 POLICY ANALYSIS OF COASTAL DEVELOPMENT PERMIT AND CONSISTENCY CERTIFICATON

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:

> *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 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 such purposes to appropriate beaches or into suitable long shore current systems

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 nat*ural resource areas from overuse.

Section 30213 of the Coastal Act states:

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

Section 30221 of the Coastal Act states:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30234 of the Coastal Act states:

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30234.5 of the Coastal Act states:

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

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 30224 of the Coastal Act states:

Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

1. Sensitive Habitats and Resources

In this case, the proposed dredging and off-shore disposal would occur in order to restore previously dredged depths in existing navigational channels Without dredging, channels, bays and harbors would become silted and unusable and use of navigational channels would be impeded, thereby decreasing the usefulness of the site for recreation oriented boating. Accordingly, the no project alternative would have an adverse impact upon boating related uses of coastal waters.

The dredging is only proposed to occur in previously dredged areas to restore previously dredged depths. There are no feasible alternatives to the proposed dredging which would restore the berthing areas at the subject site and be less environmentally damaging.

Section 30230 of the Coastal Act requires that marine resources be protected and that the use of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters. The proposed dredging may impact sensitive habitats and

resources. Therefore, mitigation measures are necessary to protect the biological productivity of coastal waters.

Section 30233 of the Coastal Act allows dredging and filling of coastal waters or wetlands only for the seven uses listed in Section 30233 of the Coastal Act, as stated above, and where such dredging/fill is the least environmentally damaging feasible alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. In this case, the proposed dredging would occur in order to maintain existing and/or restore navigational areas. Fill would result from the placement of dredged sand on East Beach and West Beach that would restore former public beach where erosion has narrowed the width of the beach and from disposal of sediment found not to be suitable for beach nourishment but acceptable to be disposed of at LA-2. This proposed dredging and fill is allowable pursuant to Sections 30233(a)(2), 30233(a)(6) and 30233(b) of the Coastal Act. However, in order to verify that the project implements the least environmentally damaging alternative, mitigation measures are necessary.

In regards to beach replenishment, Section 30233(b) of the Coastal Act requires that suitable dredge materials should be transported to appropriate beaches for such purposes. The proposed use of dredged material for beach nourishment will partially mitigate the ongoing erosion of the City's beaches, helping to protect and encourage recreational use of the beach and help to protect existing structures along the City's shoreline. Any dredge material suitable for beach nourishment should be used for that purpose. In order to ensure that any suitable dredge material is used for beach nourishment at the East Beach or West Beach, the Commission imposes **Special Condition No. 1**, which requires the permittee to use any suitable dredge material for beach nourishment purposes.

The City has stated that prior to each dredging episode, they will demonstrate that the proposed dredged material is chemically and physically suitable for beach nourishment or disposal in ocean waters. To determine the feasibility of the dredged materials for deposition on the City's beaches, sediment sampling and analysis will be performed in accordance with standard procedures promulgated by the U.S. Environmental Protection Agency (EPA) and the Regional Water Quality Control Board (RWQCB). Only dredged material deemed "suitable" by an expert in the field (e.g., licensed professional civil engineer) will be used for beach nourishment. Any material deemed unsuitable for beach nourishment but determined to be clean for offshore disposal will be taken by barge to the U.S. Environmental Protection Agency (EPA) -approved disposal site known as LA-2 which is located approximately 6 miles offshore southwest of San Pedro. If there is dredge material determined to be unsuitable for disposal at LA-2 and does not meet the criteria for beach nourishment that dredged material would be disposed of in an upland disposal area. Additionally, prior to dredging, the City will provide the sediment test results (physical and chemical), alternatives analysis, and Southern California Dredged Material Management Team (SC-DMMT) concurrence to CCC staff for review and approval. The Coastal Commission is a member of the SC-DMMT. In order to ensure sure that the marine environment will be protected, the Commission imposes **Special Condition No. 2**, which requires the permittee to prior to each dredging episode at each individual dredging location to sample the material to be dredged using the sampling methods in accordance with standard procedures promulgated by the EPA

and the RWQCB and the City will provide the sediment test results (physical and chemical), alternatives analysis, and SC-DMMT concurrence to CCC staff for review and approval of these materials to be used for beach nourishment or disposal of at LA-2, or necessary for upland disposal.

The proposed deposition sites are beaches where Grunion (*Leuresthes tenuis*) are known to spawn. The waters in the project area are also used as a feeding area by the endangered California Brown Pelican (*Pelicanus occidentalis*) and the endangered California Least Tern (*Sterna antillarum brownie*). Therefore, in order to minimize any adverse impact that the proposed activity may have on these species, the Commission imposes **Special Condition No. 3**, which prohibits beach nourishment activities between February 15th to September 15th, which is the Grunion-spawning season, as well as the California Least Tern nesting season, unless they obtain clearance from the California Department of Fish and Wildlife and the Executive Director of the Commission to proceed based upon an assessment of the spawning of the California grunion found in the area and a statement that the development activity on the specific dates proposed and in the specified locations will not interfere with the spawning of the California grunion.

The applicant has not identified a staging area for the proposed project. Thus, in order to ensure that no adverse impacts upon sensitive habitats and species occur due to construction staging, the Commission imposes **Special Condition No. 4**, which requires the permittee to submit a construction staging area plan prior to the issuance of the permit.

The increase in suspended sediments caused by dredging could also decrease light penetration, deter small fish from using the protective habitat, and interfere with bird foraging. The increase in turbidity can interfere with this sight-based feeding. However, wildlife foraging for food in the water column would not need to go a significant distance to avoid areas that are affected by turbidity. Furthermore, the RWQCB, as one state agency that regulates discharges into coastal waters, sets turbidity standards. The RWQCB standards for acceptable levels of turbidity include a maximum increase of 20% of naturally occurring turbidity and dissolved oxygen levels of not less than five milligrams per liter. The Commission finds that it is necessary to ensure that these turbidity standards are not exceeded and to assure that acceptable levels of turbidity are maintained, the Commission imposes **Special Condition No. 5**.

The resource agencies may require further mitigation measures to minimize or avoid impacts to marine resources. Therefore, the Commission imposes **Special Condition No. 6**, which requires the permittee to comply with all permit requirements and mitigation measures of the California Department of Fish and Wildlife (CDF&W), Regional Water Quality Control Board (RWQCB), U.S. Army Corps of Engineers (USACOE), and the U.S. Fish and Wildlife Service (USF&WS) with respect to preservation and protection of water quality and marine environment. Any change in the approved project which may be required by the above-stated agencies shall be submitted to the Executive Director in order to determine if the proposed changes shall require a permit amendment pursuant to the requirements of the Coastal Act and the California Code of Regulations.

As conditioned, the proposed project will not impact sensitive resources; however, in order to verify this, the Commission imposes **Special Condition No. 10**, which requires the permittee to document compliance with all general and special conditions defined in this permit to ensure protection of sensitive habitat in proximity to the project area. The Commission finds that the proposed dredging is an allowable use and the least environmentally-damaging feasible alternative (with feasible mitigation measures).

Conclusion

Therefore, as conditioned, the Commission finds the proposed project is consistent with Sections 30230 and 30233 of the Coastal Act. In addition, the Commission finds that with these measures, the proposed project will not adversely affect resources of the Coastal Zone, and therefore, the project is consistent with the policies of the CCMP.

2. Water Quality

The City is proposing to use dredged sediment for beach nourishment purposes where it has the appropriate sand content. The composition of beach replenishment material can affect the environment. Dredged and deposited sediments can be composed of sand as well as fine-grained material such as silt and clay. One concern relating to the amount of fines in beach nourishment sediment is that the nourishment effort can introduce a grain size that is not already part of the receiver beach environment. The Commission has typically used 80% sand content as the lower limit for the use of dredged material for beach nourishment. Only if the material is not suitable for beach nourishment is it appropriate for offshore disposal at LA-2. Further, only if it passes the tests for open aquatic disposal is it appropriate for offshore disposal at LA-2.

The Commission generally relies on the federal standards and guidelines for evaluating the suitability of sediment for aquatic disposal. Contaminants of potential ecological concern include heavy metals, chemical analogues of the pesticide DDT, and polynuclear aromatic hydrocarbons (PAHs) (i.e. chemicals formed during the incomplete burning of coal, oil, gas and other organic substances). In some cases, the sediment chemistry occurs in a range where it may or may not be suitable for ocean disposal or beach nourishment purposes. In those situations, federal dredging standards require the applicant to conduct bioassay and bioaccumulation tests. Unless the material passes those tests, neither beach nourishment or offshore disposal at LA-2 would be allowed.

Pursuant to the requirements of the USACOE and under the direction of the EPA and in accordance with standard procedures promulgated by the EPA and the RWQCB, the City has stated that prior to each dredging episode, they will demonstrate that the proposed dredged material is chemically and physically suitable for beach nourishment or disposal in ocean waters and obtain concurrence from the SC-DMMT. In order to ensure that this occurs, the Commission imposes **Special Condition No. 2**.

In order to further protect water quality, the Commission imposes **Special Condition No. 7**, which requires the permittee to comply with other water quality best management practices for the duration of the dredging period.

Conclusion

Therefore, as conditioned, the Commission finds the proposed project consistent with Section 30231 of the Coastal Act. In addition, the Commission finds that with these measures, the proposed project will not affect water quality resources of the Coastal Zone, and therefore, the project is consistent with the water quality policy of the CCMP.

3. Eelgrass

Eelgrass (*Zostera marina*) is a marine flowering plant that grows in soft sediments within coastal bays and estuaries. Eelgrass canopies consist of shoots and leaves approximately 1 to 3 feet long that typically attract marine invertebrates and fish species. Under normal circumstances, a diverse community of benthic organisms (e.g. clams, crabs, and worms) lives within the soft sediments that cover eelgrass root and rhizome mass systems. Eelgrass beds also function as a nursery for many juvenile fish – including species of commercial and/or sporting value such as California halibut and corbina. Eelgrass beds are also important foraging areas for piscivorous seabirds that pursue fish attracted to eelgrass cover. Eelgrass is also an important ecological contributor to the detrital (decaying organic material) food web of bays and estuaries as the decaying plant material is consumed by many benthic invertebrates and converted to primary nutrients by bacteria.

The proposed dredging and beach nourishment activities could adversely impact eelgrass beds by burying these important resources with sand. In 2009, when the Commission most recently approved a beach nourishment project in Long Beach, the California Department of Fish and Wildlife was concerned that that the beach nourishment activities would adversely impact eelgrass beds and recommended the avoidance of impacts to these resources (Coastal Development Permit No. 5-08-356). The U.S. Army Corps of Engineers Permit requires the City to conduct eelgrass surveys prior to dredging, and limits dredging activities in all areas where eelgrass is found. The deposition of dredge materials on the beach above the mean high tide line (MHTL) would not affect eelgrass beds. No dredged material shall be placed on eelgrass.

Therefore, the Commission imposes **Special Condition No. 8**, which requires the permittee to survey and map the proposed dredging and beach nourishment areas located below the MHTL prior to dredging of placement of any sand or deposition of any dredged material. The surveys shall determine whether any eelgrass (*Zostera marina*) beds exist within the proposed dredging or deposition area. The survey of each proposed dredge and deposition area shall be submitted to the Executive Director and the California Department of Fish and Wildlife to determine whether the proposed deposition would negatively impact any eelgrass (*Zostera marina*). This special condition also requires a post-construction eelgrass survey if eelgrass is identified in the project areas. The condition of approval states that any dredging or placement of any sand or deposition of any dredged material below the MHTL shall be permitted only with a determination by the Executive Director, in consultation with the California Department of Fish and Wildlife.

4. *Caulerpa taxifolia*

In the late 1990s, a non native and invasive aquatic plant species, *Caulerpa taxifolia* was discovered in parts of Huntington Harbor (Emergency Coastal Development Permits

5-00-403-G and 5-00-463-G) which occupies similar habitat. *Caulerpa taxifolia* is a tropical green marine alga that is popular in the aquarium trade because of its attractive appearance and hardy nature. In 1984, this seaweed was introduced into the northern Mediterranean. From an initial infestation of about 1 square yard it grew to cover about 2 acres by 1989, and by 1997 blanketed about 10,000 acres along the coasts of France and Italy. Genetic studies demonstrated that those populations were from the same clone, possibly originating from a single introduction. This seaweed spreads asexually from fragments and creates a dense monoculture displacing native plant and animal species. In the Mediterranean, it grows on sand, mud and rock surfaces from the very shallow subtidal to about 250 ft depth. Because of toxins in its tissues, *Caulerpa taxifolia* is not eaten by herbivores in areas where it has invaded. The infestation in the Mediterranean has had serious negative economic and social consequences because of impacts to tourism, recreational diving, and commercial fishing[1].

Because of the grave risk to native habitats, in 1999 *Caulerpa taxifolia* was designated a prohibited species in the United States under the Federal Noxious Weed Act. In addition, in September 2001 the Governor signed into law AB 1334 which made it illegal in California for any person to sell, possess, import, transport, transfer, release alive in the state, or give away without consideration various Caulerpa species including *Caulerpa taxifolia*.

In August 2000, an infestation of *Caulerpa taxifolia* was discovered in Huntington Harbor in Orange County. Genetic studies show that this is the same clone as that released in the Mediterranean. Other infestations are likely. Although a tropical species, *Caulerpa taxifolia* has been shown to tolerate water temperatures as low as 50ºF. Although warmer southern California habitats are most vulnerable, until better information if available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted. In response to the threat that *Caulerpa taxifolia* poses to California's marine environment, the Southern California Caulerpa Action Team (SCCAT) was established to respond quickly and effectively to the discovery of *Caulerpa taxifolia* infestations in Southern California. The group consists of representatives from several state, federal, local and private entities. The goal of SCCAT is to completely eradicate all *Caulerpa taxifolia* infestations.

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[1] References : Meinesz, A. (Translated by D. Simberloff) 1999. Killer Algae. University of Chicago Press

Chisholm, J.R.M., M. Marchioretti, and J.M. Jaubert. Effect of low water temperature on metabolism and growth of a subtropical strain of Caulerpa taxifolia (Chlorophyta). Marine Ecology Progress Series 201:189-198

Ceccherelli, G. and F. Cinelli. 1999. The role of vegetative fragmentation in dispersal of the invasive alga Caulerpa taxifolia in the Mediterranean. Marine Ecology Progress Series 182:299-303

Smith C.M. and L.J. Walters. 1999. Fragmentation as a strategy for Caulerpa species: Fates of fragments and implications for management of an invasive weed. Marine Ecology 20:307-319.

Jousson, O., J. Pawlowski, L. Zaninetti, A. Meinesz, and C.F. Boudouresque. 1998. Molecular evidence for the aquarium origin of the green alga Caulerpa taxifolia introduced to the Mediterranean Sea. Marine Ecology Progress Series 172:275-280.

Komatsu, T. A. Meinesz, and D. Buckles. 1997. Temperature and light responses of the alga Caulerpa taxifolia introduced into the Mediterranean Sea. Marine Ecology Progress Series 146:145-153.

Gacia, E. C. Rodriquez-Prieto, O. Delgado, and E. Ballesteros. 1996. Seasonal light and temperature responses of Caulerpa taxifolia from the northwestern Mediterranean. Aquatic Botany 53:215-225.

Belsher, T. and A. Meinesz. 1995. Deep-water dispersal of the tropical alga Caulerpa taxifolia introduced into the Mediterranean. Aquatic Botany 51:163-169.

If *Caulerpa taxifolia* is present, any project that disturbs the bay bottom could cause its spread by dispersing viable tissue fragments. The proposed project would disturb the harbor bottom by dredging and *Caulerpa taxifolia* could be distributed to other parts of the bay or to the open ocean through transport of the dredge spoils for ocean disposal. Therefore, the Commission imposes **Special Condition No. 9,** which identifies the *Caulerpa taxifolia* survey procedures necessary to be completed prior to beginning any construction.

Conclusion

Therefore, as conditioned, the Commission finds the proposed project is consistent with Sections 30230 and 30233(b) of the Coastal Act. In addition, the Commission finds that the proposed project will not adversely affect resources of the Coastal Zone, and therefore, the project is consistent with the policies of the CCMP.

5. Recreation and Public Access

The proposed project will allow for continued long-term use of coastal waters for recreational boating. Temporary impacts to the use of the various channels, bays and harbors in Long Beach for recreational opportunities during dredging is expected. Upon completion of dredging activities, temporary impediments to recreation boating will cease.

The proposed project includes the placement of sediment at East Beach and West Beach that will partially mitigate beach erosion and provide for the continuing and increased recreational use of the City beaches by the public. The proposed nourishment will increase the size of the beach and will provide a larger area for recreational use. The project will temporarily impact the use of some portions of the beach during the deposition of the dredged material. However, because the permit is conditioned to prohibit replenishment during the California Least Tern nesting season and Grunion spawning season (February 15th to September 15th), public access and recreation will not be impacted during the peak summer season. However, when work does occur on the beach, there is potential to impact public access. In order to minimize impacts to public access during the nourishment activities, the Commission imposes **Special Conditions No. 11,** which requires the permittee to minimize beach area closures by limiting closed beach areas to an area not to exceed 200-feet from the pipeline and deposition area.

The East and West Beach deposition areas are not popular surfing areas. Even though the beach profiles may potentially be modified, the effect on surfing activities will be insignificant.

Conclusion

Therefore, as conditioned, the Commission finds that the proposed project is consistent with Sections 30210, 30213 and 30221 of the Coastal Act. In addition, the Commission finds that the proposed project will not adversely affect resources of the Coastal Zone, and therefore, the project is consistent with the policies of the CCMP.

6. Commercial Boating/Recreational Boating/Fishing

The project will have no negative effects on commercial or recreational boating or fishing in the area. The dredging and placement of material at LA-2 will aid in helping to continue to protect and provide commercial fishing and recreational boating industries in the various channels, bays and harbors in Long Beach by improving navigation.

Conclusion

Therefore, as conditioned, the Commission finds that the proposed project is consistent with Sections 30234, 30234.5, 30220 and 30224 of the Coastal Act. In addition, the Commission finds that the proposed project will not adversely affect resources of the Coastal Zone, and therefore, the project is consistent with the policies of the CCMP.

E. LOCAL COASTAL PROGRAM (LCP)

Section 30604(a) of the Coastal Act provides for the issuance of coastal development permits directly by the Commission in regions where the local government having jurisdiction does not have a certified local coastal program. The permit may only be used if the Commission finds that the proposed development will not prejudice the ability of the local government to prepare a local coastal program which conforms with the Chapter 3 policies of the Coastal Act.

The proposed development is taking place in the City of Long Beach, which has a certified Local Coastal Program certified by the Commission on July 22, 1980. The certified LCP requires the City to repair beach erosion and develop a sand management plan (LCP, p. 63). The City has prepared a sand management plan which includes the replenishment of beach sand with dredged material. The proposed project complies with the policies of the certified LCP. However, because the project is located seaward of the former mean high tide line (MHTL), in the Commission's area of original jurisdiction, the LCP is advisory in nature and may provide guidance. The standard of review for this project is the Coastal Act. The proposed project, as conditioned, is consistent with the policies of Chapter 3 of the Coastal Act, as required by Section 30604(a).

The standard of review for federal consistency certifications is the policies of Chapter 3 of the Coastal Act. However, since the certified LCP for the City of Long Beach and has been incorporated into the CCMP, the LCP can provide guidance in applying Chapter 3 policies in light of local circumstances.

F. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of Title 14 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The City of Long Beach is the lead agency for purposes of CEQA compliance. A Categorical Exemption (CE-13-103) dated November 6, 2013 was prepared for this project pursuant to the provisions of CEQA.

The proposed project has been conditioned in order to be found consistent with the Chapter 3 policies of the Coastal Act. As conditioned, the proposed project has been found consistent with the public access, water quality, and habitat protection policies of the Coastal Act. Mitigation measures to minimize adverse effects include special conditions related to:**1)** all suitable dredge material shall be used for beach nourishment; **2)** compatibility of the dredged material with the deposition sites; **3)** timing of construction; **4)** staging area plans; **5)** turbidity control; **6)** conformance with the requirements of resource agencies; **7)** construction responsibilities; **8)** pre- and post-construction eelgrass (*Zostera marina*) surveys; **9)** pre-construction *Caulerpa taxifolia* survey; **10)** post completion report; and **11)** minimizing impacts to beach and recreational facilities during nourishment activities.

As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse effect which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified effects, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX 1

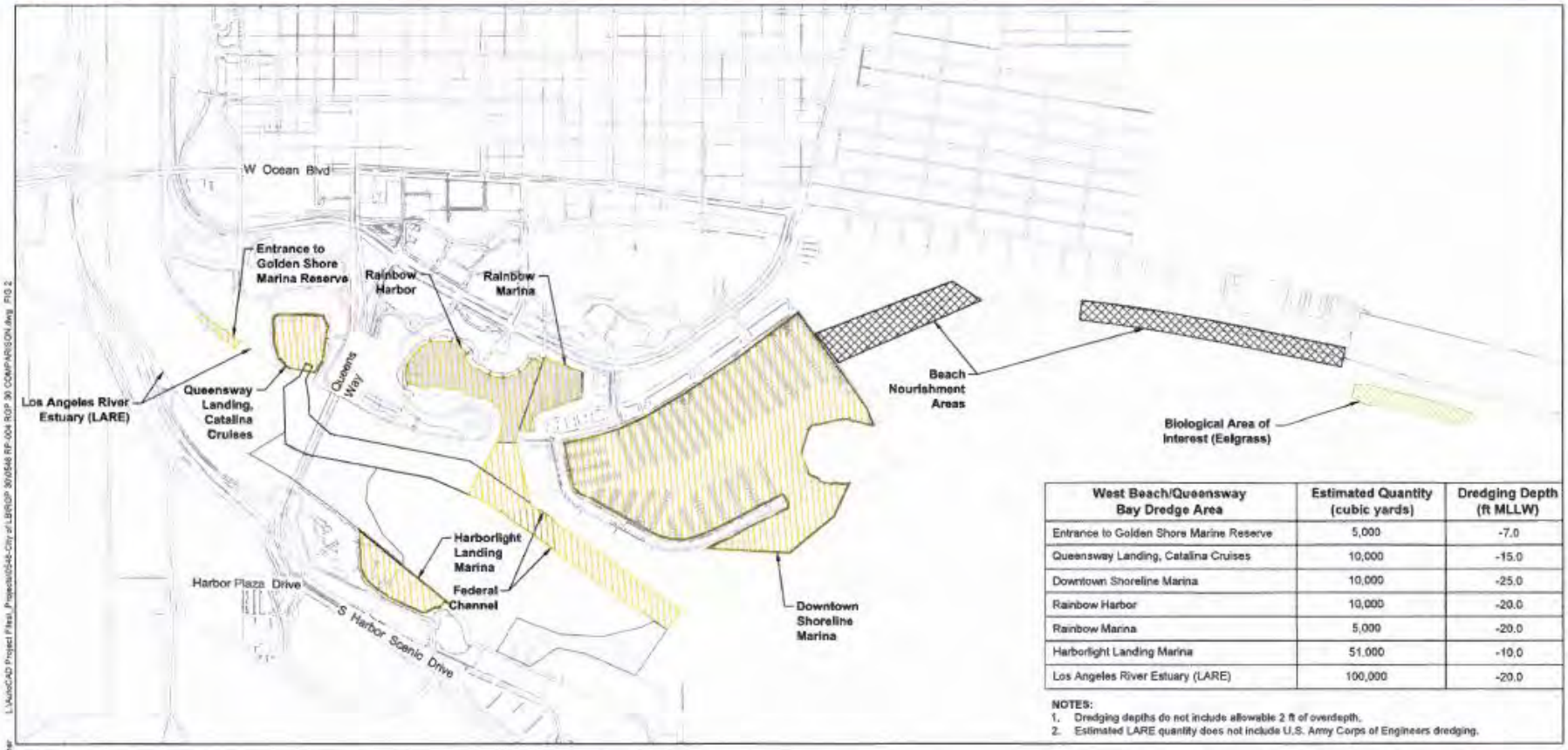
SUBSTANTIVE FILE DOCUMENTS: City of Long Beach certified Local Coastal Program (LCP), July 22, 1980; U.S. Army Corps of Engineers Amended Regional General Permit 30 (RGP 30); Coastal Development Permit (CDP) No. 5-08-356/Consistency Certification (CC) No. CC-004-09, California Environmental Quality Act (CEQA) Categorical Exemption (CE-13-103) prepared by the City of Long Beach dated November 6, 2013; Water Quality Monitoring Plan City of Long Beach Maintenance Dredging prepared by Anchor QEA, LLC dated January 2014; Letter from Anchor QEA, LLC. to Commission staff dated February 6, 2014; Letter from Commission staff to Anchor QEA, LLC. dated March 5, 2014; Letter from Anchor QEA, LLC. to Commission staff dated March 24, 2014; Letter from Anchor QEA, LLC. to Commission staff dated August 25, 2014; Letter from Anchor QEA, LLC. to Commission staff dated October 9, 2014; Letter from Anchor QEA, LLC. to Commission staff dated October 14, 2014; and EPA Consistency Determination CD-114-96 (LA-2 Designation).


Redondo Beach
Torrance
Carson
West Carson
Lakewood
Cerritos
La Palma
Hawaiian Gardens
Cypress
Los Alamitos
Rossmoor
Signal Hill
BIXBY KNOLLS
WEST SIDE
EASTSIDE
Long Beach
Lomita
Palos Verdes Peninsula
HARBOR
Rolling Hills
Rancho Palos Verdes
SAN PEDRO
MARINA
Seal Beach
SUNSET BEACH
405
605
110
103
213
1
19
107
Long Beach
Project Locations

Harbor Channel Maintenance Dredge Area and West Beach

Alamitos Bay Maintenance Dredge Area and East Beach

Harbor Channel Maintenance Dredge Area and West Beach



West Beach/Queensway Bay Dredge Area	Estimated Quantity (cubic yards)	Dredging Depth (ft MLLW)
Entrance to Golden Shore Marine Reserve	5,000	-7.0
Queensway Landing, Catalina Cruises	10,000	-15.0
Downtown Shoreline Marina	10,000	-25.0
Rainbow Harbor	10,000	-20.0
Rainbow Marina	5,000	-20.0
Harborlight Landing Marina	51,000	-10.0
Los Angeles River Estuary (LARE)	100,000	-20.0

NOTES:
1. Dredging depths do not include allowable 2 ft of overdepth.
2. Estimated LARE quantity does not include U.S. Army Corps of Engineers dredging.

SOURCE: Base file from City of Long Beach. Existing dredge areas from Tetra Tech, dated December 2008.
HORIZONTAL DATUM: California State Plane, Zone 5, NAD83, U.S. Feet.
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:
- Proposed RGP 30 Dredge Area
- Existing RGP 30 Dredge Area
- Beach Nourishment Area
- Biological Area of Interest

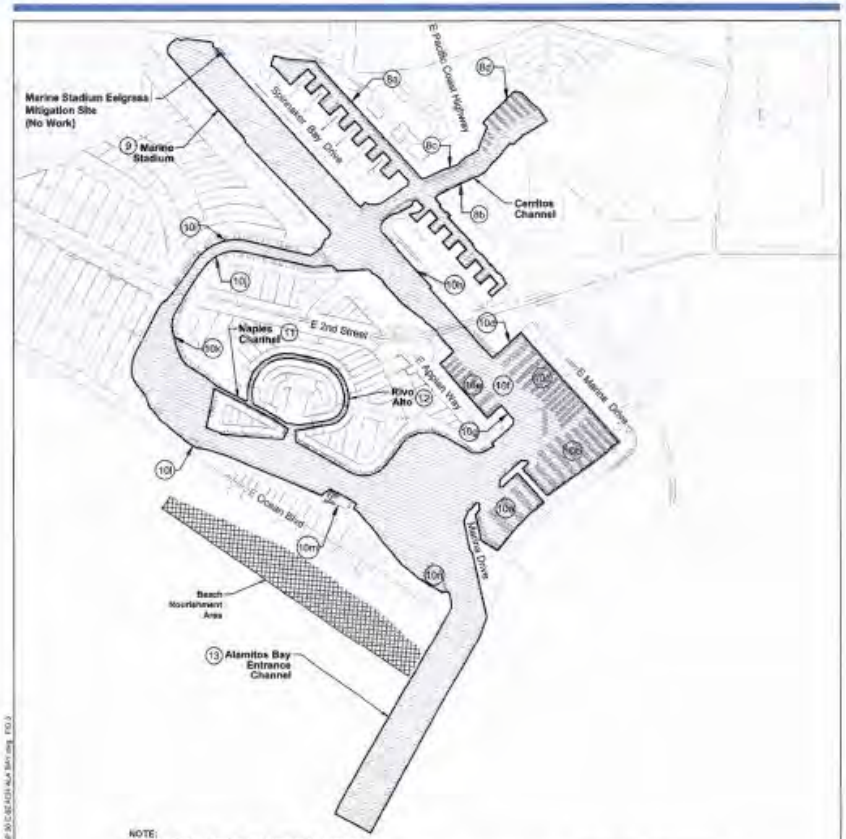
0 800
Scale in Feet

ANCHOR QEA

Figure 2
Harbor Channel Maintenance Dredge Area
Regional General Permit 30

Exhibit No. 2
Page 1 of 1

Alamitos Bay Maintenance Dredge Area and East Beach



NOTE:
Dredging depths do not include allowable 2 ft of overdepth.

East Beach/Alamitos Bay Dredge Area	Estimated Quantity (cubic yards)	Dredging Depth (ft MLLW)	East Beach/Alamitos Bay Dredge Area	Estimated Quantity (cubic yards)	Dredging Depth (ft MLLW)
8.Cerritos Channel	2,000	-10.0	f. Basin Channel	9,000	-15.0
a. Spinnaker Cove	1,300	-10.0	g. Long Beach Yacht Club Dock	2,000	-15.0
b. Basin 5	15,000	-10.0	h. Davies Long Dock	2,000	-15.0
c. Basin 6	500	-10.0	i. Bayshore	15,000	-15.0
d. Cerritos Bahia Marina	6,000	-10.0	j. Sorrento Drive	7,500	-15.0
9. Marine Stadium	5,000	-15.0	k. The Toledo	10,000	-15.0
10. Alamitos Bay	10,000	-15.0	l. Basin 7	15,000	-10.0
a. Basin 1	20,000	-15.0	m. Bayshore Walk	3,000	-15.0
b. Basin 2	15,000	-10.0	n. Basin 8	15,000	-10.0
c. Basin 3	15,000	-10.0	11. Naples Canal	3,000	-8.0
d. Long Beach Marine Shipyard	200	-10.0	12. Rivo Alto	6,000	-8.0
e. Basin 4	15,000	-10.0	13. Alamitos Bay Entrance Channel	55,000	-20.0

SOURCE: Base file from City of Long Beach
HORIZONTAL DATUM: California State Plane, Zone 5, NAD83, U.S. Feet
VERTICAL DATUM: Mean Lower Low Water (MLLW).

LEGEND:
- Maintenance Dredging Area
- Beach Nourishment Area
- Eelgrass Mitigation Site (No Work)

0 1,200
Scale in Feet

ANCHOR QEA

Figure 3
East Beach and Alamitos Bay Maintenance Dredge Area
Regional General Permit 30