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STAFF REPORT: REGULAR CALENDAR

Application No.: 4-21-0103

Applicant: City of Santa Barbara, Waterfront Department

Project Location: Santa Barbara Harbor and Waterfront Area, City of Santa Barbara, Santa Barbara County.

Project Description: Implementation of a comprehensive sediment management program involving dredging, beach nourishment, beach grooming, installation of lifeguard towers, construction of four seasonal sand berms, and maintenance of storm drain outlets to provide optimal navigation, recreation, operation, economic, and shoreline protection conditions for Santa Barbara Harbor and Waterfront Area including Leadbetter Beach, West Beach, and East Beach. The proposed project includes a one-time fireworks display and two annual fireworks displays on West Beach as well as dredging and disposal operations to be conducted on an as-needed basis to maintain ideal marina and beach configurations with a maximum of 500,000 cu. yds. of material to be dredged annually.

Staff Recommendation: Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

The City of Santa Barbara Waterfront Department (“the City”) proposes a comprehensive sediment management program for the Santa Barbara Harbor and Waterfront Area. The program involves dredging and disposal of sediment on an as-needed basis, where the duration and amount of material moved varies annually, depending on weather and the amount of natural sediment movement. Up to 500,000 cu. yds of material are proposed to be dredged annually. Sand will be added to areas with lower than ideal beach configurations and removed from areas with higher than ideal beach configurations on Leadbetter Beach, East Beach, and West Beach. Equipment that will be used for sediment management activities include a hydraulic dredge, discharge pipes, earthmoving equipment, and other means of hydraulic, pneumatic, and mechanical conveyance. Maintenance of eight storm drain outlets (three on east Beach and five on West Beach) are proposed during the winter season. This would involve removal of sand cover (about 2 feet) from the end of the drains to allow better flow. Each storm drain is proposed to be maintained up to five times a year during the rainy season.

The proposed program also includes beach grooming activities, which has historically occurred on an intermittent basis on Leadbetter Beach, West Beach, and East Beach for both public safety and aesthetic purposes. This is accomplished by a variety of methods dependent on the season, the need for debris removal, and the presence of special status species and required protocols. Beach grooming includes raking, cleaning, and recontouring sand accomplished by mechanical and physical labor. All mechanized equipment is restricted to dry sand areas only and does not operate any closer than ten feet of the dry sand side of the wrack line (the dry sand side of the ordinary high tide line). Mechanical grooming involves Barber Surf Rake operations and tractor-dragged raking. The Barber Surf Rake is a specialized rake that sorts sand and debris. It drops sand back onto the beach and debris into a hopper as it sifts through the sand. Barber Surf Rake operations are proposed during the summer months, and tractor-dragged raking operations are proposed for the months when the Barber Surf Rake is not used.

The proposed program includes the installation of six portable lifeguard towers on the three beaches in May of each year, and removal in October or November, using a front-end loader, as well as the seasonal construction of four sand berms. The Leadbetter Beach Berm, the East Beach Mission Creek Berm, and the Cabrillo Pavilion Beach Berm on East Beach are proposed to be built in the winter to protect existing infrastructure from winter storms. In addition to storm protection, the East Beach Mission Creek Berm also serves to protect the tidewater goby habitat in the Mission Creek estuary. The West Beach Fireworks Berm is proposed to be built as a safety structure for the 150th Anniversary, the Fourth of July, and the Parade of Lights fireworks events. The fireworks for all events will be set off from the center of the berm. Finally, the three fireworks displays are also proposed as part of this program: one one-time event on October 8, 2022 for the 150th Anniversary of Stearns Wharf, one annual

event on July 4th of each year, and one annual event on the second Sunday in December of each year as part of the City's Parade of Lights event. All events are free to the public and will provide public recreation and enjoyment at West Beach and in the Stearns Wharf area.

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

Staff recommends approval of the proposed project with eighteen (18) special conditions regarding (1) Term of Permit and Annual Reporting, (2) Notification of Dredging/Discharge Operations, (3) Limitations on Beach Grooming, (4) Timing and Implementation of Project Operations, (5) Sensitive Species Monitoring, (6) Grunion Monitoring and Avoidance Plan, (7) Archaeological Resource Monitoring, (8) Public Access Program, (9) Water Quality Monitoring, (10) Sediment Analysis, (11) Caulerpa Pre-Construction Surveys, (12) Operations and Maintenance Responsibilities, (13) Required Approvals, (14) Assumption of Risk, (15) Informational/Educational Signage, (16) Limitations on Berm Activities, (17) Clean-up and Restoration of Beach and Adjacent Ocean Waters Following Fireworks Displays, and (18) Pre-Fireworks Displays Monitoring Survey. As conditioned, the proposed project is consistent with all applicable Chapter Three policies of the Coastal Act. Therefore, Commission staff recommends that the Commission **APPROVE** coastal development permit application 4-21-0103, as conditioned. The motion and resolution are on **page 5**.

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EXHIBITS

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I. MOTION AND RESOLUTION

Motion:

I move that the Commission approve Coastal Development Permit No. 4-21-0103 pursuant to the staff recommendation.

Staff Recommendation of Approval:

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

Resolution to Approve the Permit:

The Commission hereby approves a coastal development permit 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. Approval of the permit complies with the California Environmental Quality Act because either (1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or (2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

- 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 applicant 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 applicant to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Term of Permit and Annual Reporting

This coastal development permit is valid only for the term specified and only for the dredging, beach nourishment/discharge, beach grooming, storm drain maintenance, construction of the four sand berms, lifeguard tower installation, one one-time fireworks display, and two annual fireworks displays as described in the project description, as modified by all of the Commission's conditions of this permit. Dredging and beach nourishment operations shall be conducted on an as-needed basis to maintain ideal marina and beach configurations with a maximum of 500,000 cu. yds of material to be dredged onto the beach annually. This permit shall expire five (5) years from the date of the Commission's approval of the permit. Provided however, this coastal development permit may be extended one time for a maximum period of five years from the date of expiration, subject to Executive Director review and approval, if (1) there are no changed circumstances associated with the dredging, disposal, beach grooming, storm drain maintenance, berm construction, installation of lifeguard towers, and fireworks displays that have the potential for significant adverse impacts, either individually or cumulatively, on coastal resources or public access to and along the shoreline, and (2) the terms and conditions of this CDP remain adequate to protect coastal resources and public access to and along the shoreline. For such an extension, the applicant must provide evidence demonstrating that there are no changed circumstances that affect the feasibility or efficacy of this approved CDP's terms and conditions and must request Executive Director approval prior to the expiration of the initial five-year CDP period. If the Executive Director determines that there are changed circumstances and that re-review is warranted, the applicant shall submit a complete CDP application to authorize future project activities.

- A. **Annual Report Summary.** The applicant shall submit on an annual basis, for the review and approval of the Executive Director, a summary of all activities undertaken pursuant to this permit each year, including: results from the biological, sediment sampling, archeological, *Caulerpa*, and water quality surveys; data detailing the annual quantity, source location, and placement of dredged material; and a summary of beach grooming (including frequency of grooming activities, condition of wrack habitat on site, and summary of compliance with all provisions of the **Special Condition 3**, "Limitations on Beach Grooming"), storm drain maintenance, and lifeguard tower installation activities.

2. Notification of Dredging/Discharge Operations

Prior to the commencement of any dredging and discharge operations authorized by this coastal development permit the applicant shall submit, for review and approval of the Executive Director, a letter report that describes the locations, staging areas, methods and timing of operations. In addition, the letter report shall include all relevant monitoring reports required pursuant to this permit for the project site to ensure that the operations are in substantial conformance with the resource protection and public access conditions of this permit.

3. Limitations on Beach Grooming

Regular beach grooming, including raking, cleaning, and recontouring of sand shall be limited to Leadbetter Beach, West Beach, and East Beach and shall be implemented in a manner to avoid the removal or disturbance of wrack. All mechanized beach grooming shall be restricted to dry sand area only and shall not occur any closer than ten feet landward of the wrack line or the ordinary high tide line, whichever is further landward. Wrack shall not be removed from this area during grooming activities with the exception of debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed as needed.

Mechanized beach grooming and removal of wrack shall not occur west (upcoast) of Leadbetter Point (Santa Barbara Point) or east (downcoast) of the Andree Clark Bird Refuge outlet near East Beach unless authorized through an amendment to this permit or new Coastal Development Permit. Sediment management activities that occur west (upcoast) of Santa Barbara Point and east (downcoast) of the bird refuge outlet shall be limited to removal of debris that poses a clear threat to public safety.

4. Timing and Implementation of Project Operations

- A. Dredging and disposal operations shall be prohibited from the Friday prior to Memorial Day in May through Labor Day in September of each year to avoid impacts on public recreational use of the beach and other public amenities in the project vicinity.
- B. Material placement, dredging, disposal, beach grooming, storm drain maintenance, construction of Leadbetter Beach Berm, East Beach Mission Creek Berm, and Cabrillo Pavilion Beach Berm, and installation of lifeguard towers shall be prohibited as follows:
 1. On any part of the beach in those portions of the project area where there are more than 100 individual California grunion (of any life stage, including eggs) per 100-foot segment present during any run periods and corresponding egg incubation periods, as documented by the surveys conducted pursuant to **Special Condition Six (6)**. In the event that sediment needs to be placed below the high tide line from March 1 to August 31, the applicant shall submit evidence, for the review and approval of the Executive Director, that surveys for grunion have been conducted pursuant to **Special Condition Six (6)** at the project site and that no more than 100 individual grunion per 100-foot segment of the beach were found.

2. Within 300 feet of any part of the beach and shoreline in the vicinity of the sandspit, West Beach, or any other location where least terns forage if least terns are present or were identified within the preceding 24 hours, as documented by the surveys conducted pursuant to **Special Condition Five (5)**.
 3. Within 300 feet of any part of the beach and shoreline in the vicinity of the sandspit, Leadbetter Beach, East Beach or any other area where snowy plovers may be, while they are present or were identified within the preceding 24 hours, as documented by the surveys conducted pursuant to **Special Condition Five (5)**.
 4. Within 200 feet of the centerline of the mouth of Mission and Laguna Creeks from when the creek mouth is open and may be host to migrating steelhead trout.
 5. Within any lagoon or estuarine habitat. Mechanical breaching of any lagoons or estuaries in the project area shall be prohibited to avoid impacts on tidewater goby.
- C. The East Beach Mission Creek Berm may be constructed on an annual basis between October 15 and Memorial Day, only on dry sand prior to the opening of the Mission Creek Mouth. No construction or maintenance activities may occur within the estuary. The Leadbetter Beach Berm and the Cabrillo Pavilion Beach Berm may be constructed, and maintained, from October 15 through Memorial Day. The Leadbetter Beach Berm and Cabrillo Pavilion Beach Berm shall be removed prior to Memorial Day to avoid impact on public recreation use of the beach. For the one-time fireworks display for the 150th Anniversary of Stearns Wharf taking place on October 8th, 2022 as well as for the annual fireworks displays for Fourth of July and the Parade of Lights, taking place on July 4th and the second Sunday of December annually, respectively, the West Beach Fireworks Berm may be constructed, and maintained, from three days prior to each fireworks event through the day after each event. The Mission Creek, Leadbetter, Cabrillo Pavilion, and West Beach Fireworks sand berms shall be constructed in accordance with all conditions of this permit, including the provisions specified in **Special Condition Sixteen (16)**.
- D. The fireworks displays are authorized to occur on October 8, 2022, on July 4, 2022, 2023, 2024, 2025, and 2026 and on the second Sunday of December every year 2022-2026. Extensions to these dates may be granted by the Executive Director subject to the requirements of **Special Condition One (1)**.

5. Sensitive Species Monitoring

- A. The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director prior to dredging, deposition, construction of Leadbetter Beach Berm, East Beach Mission Creek Berm, and Cabrillo Pavilion Beach Berm, beach grooming, or storm drain maintenance activities. The environmental resource specialist shall

conduct a survey of the project site to determine the presence and behavior of sensitive species one day prior to commencement of dredging, discharge, beach nourishment, sand berm construction, beach grooming, or storm drain maintenance within 500 feet of the project site(s). In the event that any sensitive wildlife species (including but not limited to California least tern, western snowy plover, California grunion) exhibit reproductive or nesting behavior within 300 feet (500 feet for raptors/owls) of the project site(s), the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. In that event, project activities shall resume only upon written approval of the Executive Director. In the event that any sensitive species are present but do not exhibit reproductive behavior and are not within the estimated breeding/reproductive cycle of the subject species, the environmental resource specialist shall determine if there is a risk of adverse impacts to such species from the approved construction activities and implement resource protection measures that (1) are appropriate to ensure adverse impacts to such resources are avoided and (2) are consistent with the requirements of this permit. The applicant shall also immediately notify the Executive Director of the presence of such species and what measures are being taken. If the presence of any such sensitive species requires review by the United States Fish and Wildlife Service and/or the California Department of Fish and Wildlife, then no development activities shall be allowed or continue until any such review and authorizations to proceed are received from the relevant agency. Furthermore, the biological monitor shall require the applicant to cease work if any breach in permit compliance occurs or if any unforeseen sensitive habitat issues arise during project activities. The biological monitor shall immediately notify the Executive Director if any unforeseen sensitive habitat issues arise or if activities outside of the scope of this coastal development permit (or any other breach of permit compliance) occurs. If significant impacts or damage occur to sensitive wildlife species or sensitive habitat, the applicant shall be required to prepare a revised or supplemental program to adequately mitigate such impacts and to restore the respective habitat if necessary. The applicant shall submit the revised, or supplemental, program to the Commission as a proposed amendment to this coastal development permit.

- B. The applicant shall submit to the Executive Director documentation prepared by the biologist or environmental specialist which indicates the results of each pre-construction survey, including if any sensitive species were observed and associated behaviors or activities. Location of any nests observed shall be mapped. For the purpose of this special condition, "sensitive species" shall be taken to mean any special-status wildlife species. Special-status species are species listed as: Endangered, Threatened, or Rare under the federal or state Endangered Species Acts; Candidate Species, California Fully Protected Species, and, pursuant to CEQA Guidelines Section 15380(d), all other species tracked by the California Natural Diversity Database (CNDDDB), which are considered by the California Department of Fish and Wildlife to be those species of greatest conservation concern; and locally important species including raptors, herons, and songbirds.

6. Grunion Monitoring & Avoidance Plan

PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit to the Executive Director, for review and written approval, a Grunion Monitoring and Avoidance Plan. For purposes of grunion monitoring and avoidance, the applicant shall retain the services of a qualified biologist or environmental resources specialist (hereinafter, "qualified biologist") with appropriate qualifications acceptable to the Executive Director. The applicant shall adhere to the following provisions to avoid impacts to mature grunion and to grunion eggs during a spawning event. The annually published California Department of Fish and Wildlife (CDFW) expected grunion runs shall be used to determine possible grunion spawning periods. The plan shall, at a minimum, include the following:

- A. During the grunion spawning period of March 1 through August 31, beginning at least two (2) weeks prior to commencement of sand disposal activities or other activities on Leadbetter, West, and East Beaches, the sandy beach 100 feet to the north and south of the deposition footprint shall be monitored for grunion.
- B. Grunion monitoring shall be conducted by the qualified biologist for 30 minutes prior to, and two hours following, the predicted start of the second and third night of each spawning event. The magnitude and extent of a spawning event shall be defined in each 100-foot segment of beach using the Walker Scale.
- C. If a grunion run consisting of 0-100 individual fish per segment (Walker Scale of 0 or 1) is reported within two weeks prior to, or during, proposed work, the applicant does not need to take any avoidance action for grunion eggs.
- D. Within two weeks prior to proposed work, if a grunion run consisting of more than 100 individual fish per segment (Walker Scale of 2, 3, 4, or 5) is reported, the applicant shall avoid work on the respective beach segment(s) to ensure that no grunion eggs are buried or disturbed. The applicant shall adapt the work schedule to avoid sand deposition on beach segments with a Walker Scale of 2, 3, 4, or 5.

7. Archaeological Resource Monitoring

By acceptance of this permit, the applicant agrees to have a qualified archaeologist(s) and appropriate Native American consultant(s) present on-site during any onshore project activities within the high and moderate sensitivity zones identified in the Addendum to Mitigated Negative Declaration should earth disturbance of these identified zones be of 3 ft. or greater depth. In the event that any significant archaeological resources are discovered during operations, all work in the area will be halted and an appropriate resource treatment method or mitigation strategy shall be developed, subject to review and approval of the Executive Director, by the applicant's archaeologist and/or Native American consultant consistent with CEQA guidelines.

8. Public Access Program

Prior to issuance of this coastal development permit, the applicant shall submit, for review and approval of the Executive Director, a report which describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around the beach deposition sites and/or staging areas shall be maintained during dredging and discharge operations.

Public access to West Beach may be restricted as shown in [Exhibit 4](#) beginning three days before each fireworks event to allow for pre-fireworks display setup at the launching area and to provide a spectator safety zone during each fireworks event. The beach shall be reopened to public access by 11 a.m. the following day following the removal of the fireworks setup, including the launching and safety equipment, and cleanup.

9. Water Quality Monitoring

The applicant shall conduct a water quality monitoring program which will analyze potential adverse impacts of the near-shore and offshore marine environment resulting from disposal of dredged materials into the intertidal zone. The monitoring program will be conducted each time dredged materials are deposited into or graded near the intertidal zone and will contain the following components:

- (a) The applicant shall retain the services of a qualified biologist(s) or environmental resources specialist(s) with appropriate qualifications acceptable to the Executive Director. The environmental resource specialist shall monitor and document the turbidity of coastal waters during all project construction activities. The extent of turbidity plumes shall be recorded/mapped by the monitor. Monitoring of turbidity shall occur during and immediately after placement of sediment on the beach or in the intertidal zone. If the monitoring of the discharge and beach nourishment projects indicate that turbidity attributed to the replenishment projects are not completely diminished immediately following construction (1-2 days), then the rate of placement of sand will be modified so that large, long lasting turbidity plumes are no longer created. In such cases, construction methods shall be modified to reduce levels, by such means as: use of coarser beach nourishment material, avoidance of periods of high surf/high tides, and monitoring.
- (b) The applicant shall retain the services of a qualified oceanography and geology consultant, with appropriate qualifications acceptable to the Executive Director, to monitor and prepare a report on comparative sediment volumes of sediment quantities deposited during dredging activities with sediment quantities transported during natural storm events.

The applicant shall provide for review of the Executive Director, the water quality monitoring reports described above within one year of issuance of the coastal development permit and each subsequent year that dredging activities occur thereafter for the duration of the proposed project. Should the water quality monitoring program yield results that indicate sediment disposal into the intertidal zone causes a significant

adverse impact on water quality or the marine environment the applicant is required to submit, for review and approval by the Executive Director, a mitigation plan exploring feasible alternatives, mitigation measures, and/or alternative disposal locations for sediment disposal in the intertidal zone prior to any future deposition activities in the intertidal zone. Should the mitigation plan identify mitigation measures and/or project alternatives to minimize water quality impacts which results in a substantial change in the proposed development approved by the Commission, an amendment to this permit or a new coastal permit shall be required.

10. Sediment Analysis

A. At least two (2) weeks prior to beach nourishment activities, an engineer(s) or environmental professional(s), with appropriate qualifications acceptable to the Executive Director, shall: (1) prepare and submit a Sampling and Analysis Plan for the review and approval of the Executive Director and conduct testing at each source and receiver site, and (2) monitor the site(s) during all beach nourishment activities. The Sampling and Analysis Plan shall be consistent with the following:

- (1) Sampling Frequency – Samples shall be collected from both the receiver sites and the source sites. For the receiver site, samples shall be collected along transects that are approximately perpendicular to the shoreline, with one (1) transect per each 0.5 miles of receiver beach length. For the source sites, samples shall be collected throughout the source area, with one (1) sample per 0.5 acres, and a minimum of five (5) samples per source site for contaminant testing and a minimum of three (3) samples per source site for all other sediment testing. For the source site samples, the boring depth shall extend approximately one-foot (1-ft) below the anticipated excavation depth.
- (2) Grain Size -- Physical analysis shall be conducted on representative samples of each source material proposed for placement at the deposition site and on samples from each transect of the receiver beach. The material shall be analyzed for consistency with the U.S. Army Corps of Engineers (ACOE) / Environmental Protection Agency (EPA), State Water Resources Control Board and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Deposition of source material shall occur consistent with the following:
 - i. Source material meeting all applicable federal and state beach nourishment requirements, and for which an average of 75% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200), may be deposited below the mean high tide for the purpose of beach nourishment.
 - ii. Source material meeting all applicable federal and state beach nourishment requirements, and for which an average of 90% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200), may be

deposited above the mean high tide line for the purpose of beach nourishment.

- iii. Source material that does not meet the applicable physical, chemical, color, particle shape, debris, and/or compatibility standards for beach replenishment shall not be used.
- (3) Contaminants -- Based on U.S. EPA Tier I analyses results, Tier II bulk chemical analysis shall be conducted on representative composite samples of each source material proposed for placement on the beach. The material shall be analyzed for consistency with EPA, ACOE, State Water Resources Control Board and RWQCB requirements for beach replenishment. At a minimum, the chemical analysis shall be conducted consistent with the joint EPA/Corps *Inland Testing Manual*. If the ACOE / EPA, State Water Resources Board or RWQCB determine that the sediment exceeds Effects Range Medium (ER-M) contaminant threshold levels according to the NOAA Screening Quick Reference Tables (SQUIRTs), the materials shall not be placed at the site.
 - (4) Debris Content – A visual inspection of the source location shall be conducted to determine the presence and types of debris such as trash, wood, or vegetation. The amount of debris within the material shall be estimated, as a percentage of the total amount of source material. Prior to placement of opportunistic sand at any beach/shoreline receiver site, all such debris material shall be separated from the sand material (by mechanical screening, manual removal or other means) and taken to a proper disposal site authorized to receive such material.
 - (5) Compatibility – Chemical and visual inspections of the source location shall be conducted to determine the presence of elements such as iron oxides which can compact to form a hardpan surface. Source material with compactable material shall be considered for placement below the mean high tide only.
- B. The analysis shall include confirmation by the U.S. Army Corps of Engineers, the EPA, and State Water Resources Control Board/Regional Water Quality Control Board that the material proposed for beach replenishment meets the minimum criteria necessary for placement on the sandy beach.

11. *Caulerpa* Pre-Construction Surveys

- A. Not earlier than 90 days nor later than 30 days prior to commencement of annual dredging activities authorized under this coastal development permit, the applicant shall undertake a survey of the project area and a buffer area at least 35 feet beyond the project area to determine the presence of *Caulerpa* species. The survey shall include a visual examination of the substrate and inspection of dredging equipment.

- B. 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.
- C. Within two (2) weeks of completion of the survey, the applicant shall submit the survey:
 - (1) for the review and approval of the Executive Director; and
 - (2) to the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee includes other resource agencies: the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, Army Corps of Engineers, and NOAA Fisheries.
- D. If Caulerpa species are 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 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. No revisions to the project shall occur without a Coastal Commission-approved amendment to this Coastal Development Permit or a new permit, unless the Executive Director determines that no amendment or new permit is legally required.

12. Operations and Maintenance Responsibilities

It shall be the applicant's responsibility to assure that the following occurs concurrent with, and after completion of, all project operations:

1. At the completion of the annual beach replenishment operation, and prior to Memorial Day in May, the sand deposited on the beach shall be graded and groomed to natural beach contours to restore the shoreline habitat and to facilitate recreational use.
2. The applicant shall monitor for vertical scarping along the shorefront which may occur as waves rework the seaward edge of the replenishment project area. The applicant shall grade the beach to natural beach contours to avoid hazardous drop off conditions, consistent with the timing constraints listed in **Special Condition Four (4)**.
3. Staging areas shall be used only during active construction operations and will not be used to store materials or equipment between operations.
4. The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project.

5. Construction equipment shall not be cleaned on the beach or in the beach parking lots.
6. Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
7. Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
8. The applicant shall be responsible for removing all unsuitable material or debris within the area of placement should the material be found to be unsuitable for any reason, at any time, when unsuitable material/debris can reasonably be associated with the placement material. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
9. Stockpiled materials shall be located as far from stream areas on the designated site(s) as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the top edge of a stream bank.
10. Temporary erosion control measures, such as sand bag barriers, silt fencing; and/or swales, shall be implemented for all stockpiled material. These temporary erosion control measures shall be required at the site(s) prior to or concurrent with the initial grading operations and shall be monitored and maintained until all stockpiled fill has been removed from the project site. Successful implementation of erosion control measures will ensure that the material is completely stabilized and held on site.
11. Wrack shall be separated and retained, to the maximum extent feasible, on beaches during beach nourishment and discharge operations in areas where discharge operations will result in the loss or disturbance of wrack. Wrack shall be moved to the side during sand placement activities and replaced in its original location/configuration, to the maximum extent feasible, at the completion of grading where possible.

13. Required Approvals

Prior to commencement of any sediment management activities authorized by this coastal development permit, the applicant shall provide evidence to the Executive Director of receipt of all necessary Local, State, and Federal authorizations including the U.S. Army Corps of Engineers, the California State Lands Commission, the California Regional Water Quality Control Board, and City of Santa Barbara. Prior to the expiration

of any such approvals, the applicant shall submit evidence of a new authorization that is valid through the expiration of this permit. Any change in the approved project which may be required by another agency 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.

14. Assumption of Risk

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

15. Informational/Educational Signage

The applicant shall install, and maintain for the life of the project, informational and educational signs regarding the importance and biological significance of beach wrack and other environmentally sensitive resources along Leadbetter Beach, West Beach, and East Beach. **Prior to issuance of the Coastal Development Permit**, the applicant shall submit, for the review and approval of the Executive Director, an educational signage plan, that describes the location, number, size, and contents of signs to be placed at waterfront beach and which meets, at a minimum, the following requirements:

1. Signs shall describe the biological significance of wrack, its importance to the intertidal and beach ecosystem, and the ecological benefits of maintaining wrack on beaches;
2. Signs shall be placed at a minimum of every 500 lineal feet along each sandy beach in the project area immediately seaward of the existing bikepath/walkway or landward-most portion of the sandy beach; and
3. Signs shall be maintained in good condition onsite for the duration of the project.

The existing educational and informational signs installed as a previous requirement of Coastal Development Permit 4-10-066 may be utilized to satisfy components of this condition. All signage shall be installed in the manner described in the approved signage plan within 90 days of issuance of the Coastal Development Permit, or within such additional time as the Executive Director may grant for good cause.

16. Limitations on Berm Activities

Berm construction activities, including, but not limited to, excavation and deposition of sand, recontouring of sand, and berm maintenance shall be implemented in a manner that avoids the removal or disturbance of wrack to the maximum extent feasible and shall not involve sand movement below the wrack line or below 10 feet above the ordinary high water mark. Sand excavation and deposition shall never occur in damp or wet sandy areas. However, if berm maintenance activities cannot feasibly avoid removal or disturbance of wrack, wrack located within the maintenance area may be removed for the duration of the maintenance work, but shall be subsequently relocated to the area from which it was removed upon completion of the work. Unless temporarily relocated for the duration of maintenance work, this permit does not allow for the removal of wrack from this area with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed by hand as needed.

17. Clean-up and Restoration of Beach and Adjacent Ocean Waters Following Fireworks Displays.

Following each fireworks event, all fireworks-related debris from the launch site shall be recovered. The applicant shall inspect the immediate upcoast and downcoast, and the adjacent water area for a minimum of two days following the conclusion of each fireworks event for any remaining event debris including, but not limited to, all fireworks detritus. All such debris found shall be properly disposed of and the inspections shall continue for at least 24 hours from the time that any such fireworks debris is located, and indefinitely until such inspections do not identify any more fireworks debris.

18. Pre- Fireworks Displays Monitoring Survey.

The applicant shall retain the services of a qualified biologist or environmental resources specialist with appropriate qualifications acceptable to the Executive Director to conduct a survey of the fireworks displays site one day prior to the construction of the West Beach Fireworks Berm and one day prior to the firework displays with observations to occur for no less than one hour. The survey shall, at a minimum, include:

- i. A qualified biologist or environmental resource specialist shall identify the boundary, and a 300-foot buffer beyond, where fireworks have the potential to adversely impact sensitive species.
- ii. Each survey shall document the number, behavior (e.g. roosting, foraging, breeding, nesting, etc.), and location of any sensitive species including but not limited to California least terns, western snowy plovers, and pinnipeds, within the respective areas identified per A.i above.
- iii. If any sensitive species are observed the day prior to the construction of the West Beach Fireworks Berm or to the fireworks display, the appropriate wildlife agencies shall be notified to determine whether any action should

be undertaken to prevent adverse impacts to the respective sensitive species.

Within 60 days of the conclusion of each event, the applicant shall submit a Pre- Event Monitoring Report, prepared by a qualified biologist, to the Executive Director for review.

IV. FINDINGS AND DECLARATIONS

A. Project Description

The City of Santa Barbara Waterfront Department is proposing a comprehensive sediment management program involving maintenance dredging, sediment disposal, beach nourishment, storm drain outlet maintenance, beach grooming, construction of seasonal sand berms, yearly installation and removal of lifeguard towers, one one-time fireworks display, and two annual fireworks displays at the Santa Barbara Harbor and Waterfront Area including Leadbetter Beach, West Beach, and East Beach ([Exhibits 2-4](#)). The purpose of the program is to maintain the area for safe maritime traffic navigation; minimize risk of hazardous shoaling conditions; protect adjacent public, recreational, and commercial development from wave damage and flooding; maintain an appropriate sand balance to offset erosion; and maintain sandy beaches and area aesthetics. Sediment management activities will occur on an as-needed basis, where duration and amount of material moved varies annually, depending on weather and the amount of natural sediment movement. The same sediment management program has been authorized by the Commission previously, including Coastal Development Permit (CDP) 4-00-167, CDP 4-05-155, and most recently, CDP 4-10-066 issued on March 11, 2011 (and its associated permit amendment 4-10-066-A1 issued in 2014), which provided for a ten-year permit term and expired on March 11, 2021. The subject application requests authorization for substantially the same program as previously authorized, with the exception of two additional components – construction of seasonal sand berms and the fireworks displays (one one-time display and two annual displays) as described more fully below.

There are six major components of the proposed project as described below: 1) sediment management to create ideal beach configurations, 2) storm drain outlet maintenance to ensure proper functioning of storm drains, 3) beach grooming to provide clean and safe beaches for recreation, 4) annual installation/removal of portable lifeguard towers, 5) construction of seasonal sand berms, and 6) fireworks displays.

1. Sediment Management

The City has mapped existing beach configurations and identified ideal beach configurations, which represent optimal conditions for navigation, recreation, operations, and economics that the program will strive to maintain ([Exhibit 3](#)). As proposed, sand will be added to areas with lower than ideal beach configurations and removed from

areas with higher than ideal beach configurations. The ideal configurations were developed based on local operational experience, expressed community goals, consultation with recognized technical authorities, and through the use of the “West Beach Configuration Study” prepared by Moffatt and Nichol Engineers in 1998. The project does not include mechanical opening of any creek mouths to facilitate drainage to the ocean.

The City proposes a maximum of 500,000 cu. yds of material to be dredged annually from the Santa Barbara Harbor. The proposed maximum dredging quantities are expected to accommodate necessary dredging operations, which would cover a potential worst-case scenario where heavy storms cause large amounts of sediment to accumulate in and around the Harbor and Waterfront area. The actual amount to be dredged each year (if any) will be determined by need and established through the U.S. Army Corps of Engineers’ permitting process. Project activities could involve up to five months of work in a given year.

The Santa Barbara Harbor functions as an artificial sink within the natural littoral sand supply/transport system, trapping sand within the harbor mouth that would otherwise be naturally transported downcoast. The sediment accumulated in the Waterfront area consists primarily of clean beach sand that is transported by natural longshore current processes and deposited within protected areas of the Harbor (navigation channel, West Beach, and sandspit) and other Waterfront areas. Additionally, sediment is naturally transported by rainfall runoff via storm drains and deposited in the Waterfront Area. Typically, materials are dredged and placed on (or immediately offshore of) adjacent beaches (particularly East Beach and Leadbetter Beach) to provide sand nourishment and offset erosion effects. Prior to dredging and/or use of any sediment for beach nourishment, the sediment will be tested and determined to be both clean and of suitable grain size (per U.S. EPA approval and U.S. Army Corps of Engineers concurrence). The City has proposed that this testing occur within three years of the proposed dredging activities.

Equipment that will be used for sediment management activities include a hydraulic dredge, discharge pipes, earthmoving equipment, and other means of hydraulic, pneumatic, and mechanical conveyance. Hydraulic dredging typically involves discharge of material through large High-Density Poly Ethylene (HDPE) or similar pipes. The discharge pipes are placed either in the surf zone or on the dry beach depending on the desire to build a beach to achieve the ideal beach configurations. When sediment is discharged into the surf zone, the pipe is placed between the high and low tide areas, allowing the sediment slurry to be carried away from the surf (Exhibit 5). When sediment is discharged on dry sand, grading equipment establishes natural beach contours. In some cases beach nourishment on dry sand may require grading in the intertidal zone to prevent hazardous drop off conditions. In recent years, sediment has been frequently discharged into the upper portion of the surf zone upcoast of the Cabrillo Pavilion where the beach is narrow. No discharging of sediment will occur within Laguna Creek and Mission Creek estuaries or within 200 feet of the creeks when the creeks are flowing.

Prior to dredging activities and/or being used as beach nourishment, the City proposes testing of the sediment to determine whether the sediment is clean and of suitable grain size (per U. S. EPA approval and U.S. army Corps of Engineers concurrence) for beach nourishment or discharge to the intertidal zone within 3 years of the proposed dredging activities.

Construction equipment will be professionally maintained and fitted with standard manufacturers' mufflers and silencing devices. In addition, all equipment will be checked for leaks prior to construction commencement. No leaky equipment will be allowed onto the beach until leaks are repaired. All vehicle maintenance, staging, storage and refueling will occur in area with hard surfaces. Supplies will be available to contain and remove any spills, ensuring that they do not enter water or contaminate soils. In the unlikely event that soils are contaminated, they will be properly disposed of. In addition, the contractor will be required to follow the applicable best management practices outlined in the in the "Procedures for the Control of Runoff into Storm Drains and Watercourses" pamphlet by the City of Santa Barbara's Public Works Department.

The City is seeking Commission approval to conduct a comprehensive dredging and disposal operation as necessary to maintain the identified ideal configurations described below and shown in [Exhibit 3](#):

Leadbetter Beach is located between Santa Barbara Point and the Harbor and is a wide to narrow sandy beach that experiences seasonal erosion and is primarily used for recreation activities. Maintaining Leadbetter Beach involves protection of numerous existing structures, parking lots, storage areas, working yards, and material and equipment areas in the Harbor Commercial Area. The City seasonally constructs a sand berm to prevent problems associated with wave damage and flooding in the Harbor commercial Area. Construction of the Leadbetter sand berm is proposed.

The Marina includes the interior of Santa Barbara Harbor, which provides numerous recreational and commercial uses for the public. The ideal configuration identified for the marina will require a maintenance depth of -18 feet Mean Lower Low Water (MLLW) to provide adequate draft depth for vessels using the Marina.

West Beach is a wide sandy beach located between the Harbor and Stearns Wharf that experiences some seasonal erosion. The beach provides a primary location for recreational use and is equipped with volleyball courts and is used to store canoes and sailboats. The area directly offshore of West Beach has been the traditional site of the Small Boat Sailing Area that provides recreational and instruction opportunity for youth sailing clubs. Ideal beach configurations for West Beach provide for a small boat sailing area outside the main navigation channel, which narrows a portion of the beach and mildly increases wave energy into the harbor. Construction of the West Beach sand berm is proposed to facilitate the proposed fireworks displays (one one-time display and two annual displays).

East Beach is a wide sandy beach located between Stearns Wharf and Clark Estate that experiences seasonal erosion. The beach is popular for sunbathing and other recreational activities, including volleyball. Beach nourishment is critical from Stearns Wharf to Mission Creek because it prevents Mission Creek from depositing sediment and debris around Stearns Wharf and in the main navigation channel, which impedes fireboat and general vessel navigation. This can also allow the Mission Creek and Laguna Channel Lagoons to merge, creating one larger lagoon. The Tidewater Goby Management Plan recommends this configuration to improve the habitat for this sensitive species. The project excludes sediment management within a radius of 200 feet from the centerline of the mouth of Mission Creek when the creek is flowing. Construction of the East Beach Mission Creek sand berm and Cabrillo sand berm are proposed.

2. Storm Drain Outlet Maintenance

Five storm drains from Cabrillo Boulevard pass under the bike path on the Waterfront and end on the upper part of West Beach. In addition, three storm drains end in the middle of East Beach. During the winter months, water tends to pond at the storm drain outlets. The water quality at storm drain outlets can be poor as a result and signs will be placed at each outlet when water is present warning people to stay out of the water. The City proposes to maintain the openings of these storm drains to the beach during beach grooming activities in the winter. This would involve removal of sand cover (about 2 feet) from the end of the drains to allow better flow. Slopes around each storm drain outlet will be graded to slopes of 4:1 or gentler. The slopes will be tapered to conform to the existing beach profile, typically disturbing an area twice the width of the storm drain (approximately 15-20 feet) in front of the outlet. The frequency of maintenance is estimated to be up to five times a year for each storm drain during the rainy season. Because no channels from the drains to the ocean would be made, water from the drains would spread onto the beach and infiltrate into the sand.

3. Beach Grooming

An estimated 200,000 people visit Santa Barbara City beaches from spring to fall. The beaches are used for a variety of passive and active recreational uses. Beach grooming has been done regularly for both public safety and aesthetic purposes. It is accomplished by a variety of methods that are dependent on the season, the need for debris removal, and the presence of special status species and required protocol.

Beach grooming includes raking, cleaning, and recontouring sand accomplished by mechanical and physical labor. All mechanized equipment is restricted to dry sand areas only and does not operate any closer than ten feet from the dry sand side of the wrack line (the dry sand side of the ordinary high tide line). According to the City of Santa Barbara, beach grooming of this nature has been ongoing on Leadbetter Beach, West Beach, and East Beach since the 1950s, and was previously authorized by the Commission as a component of the City's sediment management program in CDP 4-10-066. Below is a description of the type of beach grooming activities currently undertaken

by the City of Santa Barbara at Leadbetter Beach, West Beach, and East Beach that are included in the proposed project.

a. Barber Surf Rake Operation

The “Barber Surf Rake” is a specialized rake that sorts sand and debris and is pulled by a specialized tractor. It uses a conveyor belt with individual rake teeth to sift the sand to a depth of three to four inches and places the sand and debris into a three-cubic foot hopper. The sand is dropped back onto the beach and the debris/trash is released into a hopper. The hopper is emptied into a dump truck and hauled to Marborg for recycling. The Barber Surf Rake is used during the summer months (April through August) four days a week. The beach is divided up into four sections and one section is cleaned per day. The later in the season this activity occurs, the lower the weight of debris removal. Debris removal in weight is approximately 75 tons a month, therefore on an annual (5-month) basis, 375 tons of debris is recycled.

b. Raking Operations

Raking the beach is done to remove litter in high-use areas, such as Leadbetter Beach and East Beach during the time of year when the Barber Surf rake is not used. Raking gives the sand a groomed/clean appearance. A tractor drags a rake attachment and the top four inches of sand are cleaned. No debris is removed in this process. The rake is also used to re-level the volleyball courts, as needed during summer, in order to level out depressions made from normal recreational volleyball activities. Raking is done on an as needed basis generally from September through March, during the months when the Barber Surf Rake is not used.

c. Hand Crew Operations

In addition to mechanical grooming operations, hand crews pick up debris, including trash along the beaches and creek mouths where mechanized equipment is restricted. Hazardous material is separated and distributed to specially designed containers, and the remained of trash collected is loaded into a half-ton 4x4 pick-up truck. The truck accesses the area of the beach at common beach access points. This collected material is generally not recycled and is placed in the trash. Approximately 26 tons of trash is collected annually through hand crews picking up debris two days a week, as needed throughout the year.

d. Storm Events and Emergencies

The City has estimated that approximately once every seven to ten years, a winter storm event delivering substantially higher than normal loads of debris to the beach from fast-flowing debris-laden creeks and high tides. The debris are primarily composed of green waste, but can also include garbage such as old furniture, car parts, broken boat and vessel parts, fiberglass, metal, broken glass, etc. According to the City, this type of garbage can pose a safety hazard for beach users and swimmers and requires removal.

The City proposes to hire a specialized contractor to remove dense debris deposition during extreme storms due to staff time constraints and the lack of equipment readily available. The mechanized equipment used for these activities are tractor, excavators, front end wheel loaders, and dump trucks. The sandy beach areas covered in debris are skimmed by a specially fitted rake attachment on a John Deer dozer to a depth of approximately four to six inches. The dozer pushes debris into centralized piles at various locations on the beach. An excavator picks up debris piles with a multi-fingered claw, shakes the sand loose, and delivers the loads to a 10-wheel dump truck parked at designated beach access points. The loads are hauled to the appropriate recycling facility.

e. Estimate of material removed

Debris material removed from the beach is delivered to Marborg facility for recycling, including green waste, wood, and garbage. The range in weight loads for recyclable material varies from the time of year to the type of storm conditions. The weight can vary from 550 tons for a normal year to 1075 tons during extreme storm years in a worst-case scenario.

4. Lifeguard Tower Deliveries

Every year, six temporary lifeguard towers are deposited at designated locations on the beach (between Leadbetter and East Beach) for public safety purposes during high summer recreational use times. These towers are placed on the sand utilizing a front-end loader. The loader enters the beach at designated beach access points and drives across the sand to unload the tower at locations identified by Parks and Recreation Department Lifeguards. The towers are anchored into hand-dug trenches in the sand approximately four to six inches deep. The towers are installed in May and removed in October or November using the same equipment.

5. Beach Berms

The City has been constructing two sand berms every winter to protect existing infrastructure from flooding - the Leadbetter Beach Berm and the East Beach Mission Creek Berm. In the subject application, the City proposes to construct these berms and two additional beach berms, one to protect infrastructure for the newly refurbished Cabrillo Pavilion in winter and a second temporary berm on West Beach for the City's fireworks displays in October 2022, and in July and December annually from 2022 to 2026.

Leadbetter Beach Berm is approximately 950 feet long, 20 feet wide, 4.26 feet tall, and is located immediately seaward of the Santa Barbara Yacht Club, Harbor Marineworks boatyard, and Waterfront maintenance yard. Approximately 3,000 cubic yards of sand is used to construct the berm. The berm reduces the potential from high wave run-up and overtopping into the Harbor merchants area, where past flooding has caused extensive damage.

East Beach Mission Creek Berm is approximately 725 feet long, 50 feet wide, 4.35 feet tall, and is located on the beach-side of the Mission Creek estuary between the mouth of Mission Creek and Stearn's Wharf. Approximately 5,844 cubic yards of sand is used to construct the berm. The berm functions in two capacities, (1) to protect the Tidewater Goby habitat in the Mission Creek estuary, and (2) to protect Stearns Wharf and the Harbor from storm debris from Mission Creek.

Cabrillo Pavilion Beach Berm is approximately 350 feet long, 30 feet wide, 3.86 feet tall, and is located on East Beach immediately seaward of the City's Cabrillo Pavilion. Approximately 1,500 cubic yards of sand is used to construct the berm. Construction of the winter berm would only occur when the persistent dry beach is reduced to 150 feet or less or if the increased potential for nuisance flooding is projected to occur. The berm would protect the structure from wave run-up vulnerabilities from winter storms and would be lowered in the summer to allow for unimpeded recreational uses of the site.

West Beach Fireworks Berm is approximately 80 feet long, 40 feet wide, 3 feet tall, with a 20-foot opening on the side. It is located immediately seaward of the Santa Barbara Harbor Channel and north of Stearns Wharf. Approximately 640 cubic yards of sand is used to construct the berm. This berm is temporarily built and deconstructed as a safety structure for the 150th Anniversary of Stearns Wharf event taking place on October 8th, 2022, as well as for the Fourth of July and Parade of Light annual fireworks events, taking place on July 4th and the second Sunday of December, respectively. The fireworks for all events will be set off from the center of the berm. It is built and deconstructed within one week.

6. Fireworks Displays

One one-time fireworks display and two annual fireworks displays are proposed on West Beach as part of the subject application. The one-time display for the 150th Anniversary of Stearns Wharf will take place on October 8th, 2022. The two annual displays will take place on July 4th and the second Sunday in December of every year as part of the Fourth of July and the Parade of Lights events, respectively. All are free to the public and will provide public recreation and enjoyment at West Beach and in the Stearns Wharf area. The Fourth of July display is 20 minutes long and the Parade of Lights Display is five minutes long. The fireworks for both events will be set off from the same location from the center of the proposed West Beach Fireworks Berm ([Exhibit 4](#)). As described above, the West Beach Fireworks berm will be built for each event. Public access to the area within an approximately 400 feet radius of the fireworks launch site on West Beach will be restricted with fencing starting two to three days before each display to allow for pre-display setup at the launching area and to provide a spectator safety zone during the fireworks events (see [Exhibit 4](#)). This beach area will be reopened to public access by around 11 am the following day after each fireworks display event after cleanup.

B. Background

The Santa Barbara Harbor is an important small boat harbor serving the south coast of Santa Barbara County, as well as areas further south. The Harbor is the only sheltered harbor along a 127 mile stretch of coast between Port San Luis to the north and the Ventura Marina to the south. The Harbor and Waterfront is the home base of the local commercial fishing fleet and the U.S. Coast Guard and provides a variety of commercial and coastal recreational resources. Common recreational uses of the project area include fishing, boating, jet skiing, bike riding, walking, sunbathing, kayaking, swimming, surfing, photography, and bird watching.

Sediment management activities in the harbor have been ongoing since the 1940s. Longshore ocean currents and Mission and Laguna Creeks transport and deposit sediments within the protected areas of the harbor and adjacent waterfront areas where the sediments accumulate over time. Accumulated sediments consist primarily of clean sand with adequate content to be used for beach nourishment or longshore littoral current replenishment. Thus, dredged materials have historically been placed directly on adjacent waterfront beaches to maintain the beaches and minimize shoreline erosion, or immediately offshore and back into the littoral current just down coast of the Harbor.

The Army Corps of Engineers has dredged the federal channel of the harbor for more than 70 years. Since 1991, the U.S. Army Corps of Engineers has dredged 5,225,200 cu. yds. from the federal navigation channel. On June 18, 2004 the Commission approved Negative Determination ND-035-04 for a 6-year maintenance dredging program for the Army Corps for Santa Barbara Harbor. On April 28, 2010 the Coastal Commission staff concurred with Negative Determination ND-018-10 for a 6-year maintenance dredging program for the Army Corps for Santa Barbara Harbor. On April 28, 2016 the Coastal Commission staff concurred with Negative Determination ND-0028-16 for a 6-year maintenance dredging program for the Army Corps for Santa Barbara Harbor. These negative determinations provided for annual dredging of up to 600,000 cu. yds of sandy material in the federal channel and beach and surf zone disposal at East Beach and between Mission Beach and East Side Channel between the months of September 1 and April 30.

The City has conducted sediment management activities in the harbor and waterfront areas outside of the federal channel since 1972. Since 1990, the City has dredged approximately 497,500 cu. yds. of sediment from marinas, West Beach, and Stearns Wharf. In 1985, the Commission conditionally approved Coastal Development Permit 4-84-035 for an interior maintenance dredging program for the Santa Barbara Harbor. The permit specifically identified five dredging and disposal sites and sediment volume for the conducted operations. The Commission permitted the maintenance dredging program for the Santa Barbara Harbor for an additional five-year term under Coastal Development Permit 4-89-030. In 1995, the Commission approved a first amendment to CDP 4-89-030-A which extended the subject permit for another five-year term and expanded the dredging program to include dredging of 4 additional areas with 2 additional disposal sites in the Harbor and Waterfront area. In 1998, the Commission

approved CDP 4-89-030-A3 which amended the subject permit to further expand the dredging program to include an expansion of the marina permitted pursuant to Coastal Development Permit 4-98-066. These previous coastal permits for dredging of the project site were conditionally approved to limit the duration of the approved project to a five-year term, to specify time operations to ensure that potential changes in the marine environment from the dredging operation over time would be adequately monitored, analyzed, and addressed in future follow-up applications (in order to minimize potential adverse impacts on sensitive wildlife species), to ensure that all required State and Federal approvals had been obtained, and to provide a program for safe public access during operations.

Prior to 2000, all coastal permits issued to the City for the maintenance dredging program identified specific dredging areas and disposal sites, sediment volume, and staging areas for conducting operations. Under this system, the City obtained an amended coastal permit before deviating from the specifically approved dredging and disposal sites or sediment volumes. Amendments were often necessary due to the unpredictable nature of littoral transport and sand accumulation in the project area. The City, therefore, saw the need for a more flexible sediment management program that would provide a more effective and expedient response to planned and unforeseen accretion and erosion of sediment in the waterfront area.

According to City staff, regular beach grooming, maintenance of storm drain outlets, and lifeguard tower installation activities have been ongoing at Leadbetter Beach, East Beach, and West Beach since the 1950's. On November 16, 2000 and April 13, 2006, the Commission approved Coastal Development Permits 4-00-167 and 4-05-155 for the City of Santa Barbara to conduct sequential comprehensive five-year sediment management programs involving maintenance dredging, beach nourishment, and grooming to achieve and maintain ideal configurations for Santa Harbor and the Waterfront Area. The project allowed dredging and disposal operations to be conducted on an as-needed basis to maintain ideal marina and beach configurations with a maximum of 500,000 cu. yds. of material to be dredged annually. The project also included grooming associated with the dredging and disposal operations at an average depth of two feet above the high tide line. Approved methods and equipment for the sediment management activities included hydraulic dredges, earthmoving equipment, other means of hydraulic, pneumatic, and mechanical conveyance, and periodic use of a U.S. Army Corps of Engineers pipeline for disposal of dredged materials on East Beach. The Commission approved CDP 4-00-167 and 4-05-155 with several conditions related to the term of the permit; notification procedures for dredging and discharge operations; timing of dredging and discharge; biological monitoring for grunion, least tern, and snowy plover; avoidance measures for steelhead trout; archeological monitoring in certain areas; a public access program; water quality monitoring; sediment sampling of the Small Boat Sailing Area at West Beach; and acquisition of necessary permits from other state and federal agencies.

On March 9, 2011, the Commission approved Coastal Development Permit 4-10-066 for the continuation of previous sediment management programs permitted under CDP

Nos. 4-00-167 and 4-05-155, with some changes and additions, including regular beach grooming, storm drain outlet maintenance, and lifeguard tower installation, and authorization to implement the program for a 10 year period of time. On October 10, 2014, the Commission approved amendment No. 4-10-066-A1 to CDP 4-10-066, for the seasonal construction of the Leadbetter Beach Berm and the East Beach Mission Creek Berm. The current application proposes the continuation of the sediment management program permitted under CDP 4-10-066 with the additions of the construction of two additional sand berms, Cabrillo Berm and West Beach Fireworks Berm, one one-time fireworks display, and two fireworks displays every year as described in the following sections.

C. Diking, Filling, Dredging Open Coastal Waters

Section 30233 of the Coastal Act states in part:

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

(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.

(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 30233 of the Coastal Act states that diking, filling, and dredging of coastal waters may be permitted for coastal-dependent industries, and for maintaining or restoring previously dredged depths where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects. Section 30233 of the Coastal Act also mandates that dredging and disposal operations shall be carried-out to avoid disruption of marine and wildlife habitats, and that suitable dredge sediments shall be deposited for beach replenishment.

Santa Barbara Harbor is small boat harbor and the home base of the local commercial fishing fleet and the U.S. Coast Guard. The Harbor and Waterfront area, provide a variety of coastal-dependent commercial and recreational resources including boating, fishing, jet skiing, sunbathing, kayaking, swimming, and surfing. Maintenance dredging

of Santa Barbara Harbor has been carried out on an intermittent basis for over 70 years. The Santa Barbara Harbor effectively functions as an artificial sink within the natural littoral sand supply/transport system, trapping sand within the harbor mouth that would otherwise be naturally transported downcoast. Dredging activities are required to maintain the entrance and navigational channels, provide safe navigation for maritime traffic, and minimize risks of hazardous shoaling conditions within the harbor. Dredged materials are used for beach replenishment to maintain waterfront beaches for recreational use, shoreline protection for existing development on the Waterfront, and reintroduction of sediment, which would otherwise remain trapped in the protected harbor, into the littoral current for replenishment of down coast beaches.

Since the construction of the Santa Barbara Harbor, dredging and disposal of sandy material has been an important means of providing supplemental sand supplies to downcoast beaches which have experienced long-term retreat as a result of construction of the Santa Barbara Breakwater in the mid 1920's. An analysis of historical changes at Carpinteria Beach, located approximately 10 miles down coast of the subject site, indicates that beach width has decreased approximately 100 ft. since 1930. Data from the analysis also indicates that the average width of Carpinteria Beach has receded 38 ft. for every 1 million cubic yards of sediment accumulated in Santa Barbara Harbor. The estimated quantity of sediment transport into the harbor annually over the past 50 years is 370,000 cu. yds. Of this quantity an average of 312,000 cu. yds. of sediment is dredged from the harbor annually.

The proposed sediment management program will serve to achieve and maintain identified ideal dredging depths and beach configurations for previously dredged areas, which will accommodate the coastal-dependent uses that the project area provides. As previously discussed, ideal configurations for the Harbor, Leadbetter Beach, West Beach, and East Beach have been identified as those configurations which will provide optimal navigation, recreation, operation, economic, and shoreline protection conditions.

Section 30233(a) of the Coastal Act imposes a three-part test on dredging and filling projects (1) the allowable use test; (2) an alternatives test; and (3) a mitigation test. As the Commission has found in reviewing the dredging cases previously approved in Santa Barbara Harbor, maintenance dredging with beach disposal in the Santa Barbara Waterfront area complies with these tests because (1) maintenance dredging of existing channels is an allowable use under Section 30233(a)(2) of the Coastal Act; (2) when the material is suitable for beach disposal, and when habitat, access, and archeological issues have adequately addressed (as described in Sections D, E, and F), there is no less damaging feasible alternative; and (3) with the avoidance, monitoring, and mitigation measures addressing dredge spoil compatibility, environmentally sensitive habitat and sensitive species, water quality, archaeology, and access (discussed in the following Sections), temporary disruption of the marine environment from dredging and disposal does not trigger the need for additional mitigation.

As demonstrated over the past twenty years, the primary benefit of sediment management has been the removal of accumulated sand within the Santa Barbara

Harbor to improve navigation and increase quiet water areas (West Beach) adjacent to the harbor for small craft. Sand deposition is typically a result of strong southeasterly winds when there is a reversal of the longshore sediment transport patterns (normally west to east) which pushes sand from East Beach or the ocean side of the breakwater back into the harbor. Since these areas are in the normal wave shadow of the harbor, there is no natural process of moving this sediment downcoast.

If sediment management were not conducted, areas in and around the harbor would accumulate enough sediment to restrict and/or eliminate access to parts of the harbor. The most vulnerable areas are at the tip of the Rock Groin, the interior (harbor side) of the entire breakwater, the north side of the harbor adjacent to the sea wall, and West Beach. Impacts to coastal access are as follows:

Rock Groin – If sediment is allowed to accumulate at the tip of the existing harbor breakwater, access to the public launch ramp, Marina 4B east (24 slips), Sea Landing (whale watching, dive and sportfishing charters), Santa Barbara (SB) Sailing Center (sailboat rentals), Marine Mammal Center, and University of California Santa Barbara (UCSB) docks would be severely restricted or eliminated.

Harbor Side of Breakwater – If sediment is allowed to accumulate along the entire length of the breakwater within the harbor, access to the south side of Marina 1 (312 slips) would be severely restricted or eliminated.

North Side of Harbor Adjacent to Seawall – If sediment is allowed to accumulate in this area, access to the side tie berthing along Marinas 2, 3, and 4 (24 slips), and the SB Sailing Center (sailboat rentals) would be severely restricted or eliminated.

West Beach – If sediment is allowed to accumulate on West Beach, the quiet water area within the wave shadow of the harbor will no longer be accessible to a wide variety of small craft such as kayaks, canoes, and sailing dinghies. One of the oldest youth sailing organizations in the county, the Santa Barbara Sea Shells, trains their young sailors off West Beach. The area is used by thousands of small craft every year. These small craft would have to launch directly into the Federal Channel and conducted their boating activities downcoast in less protected waters.

In summary, failure to implement the proposed sediment management activities would inevitably result in the restriction or eventual elimination of access to large parts of the harbor resulting in significant impacts to, and eventual cessation of harbor operations.

Dredge Spoil Compatibility

Annual reports that the City submitted include analyses of the physical and chemical characteristics of the material that was to be dredged as part of the proposed program. Specifically, the analyses of sediment sampling at proposed dredging sites in the marina, on the north side of the breakwater, and in the “Small Boat Sailing Area” offshore of West Beach, as well as sediment disposal locations on the south and east of the breakwater and offshore of East Beach show that sediments from the dredging sites

were predominantly composed of poorly graded sand and poorly graded sand with silt, with relatively minor interbeds of sandy silt, and sandy clay. Based on the grain size test results, the sediments within the planned dredging depths were generally similar in grain size distribution as the sediments at the proposed disposal sites. The results of pesticide, hydrocarbon, and heavy metals analysis also indicated that the planned dredge material was below the action levels of respective State and Federal guidelines.

Since the last submitted sediment testing reports, sediment conditions may have been altered by a number of episodic factors, including heavy rainfall events or spills within the harbor. In addition, as a result of harbor uses and traffic, the Commission finds that chemical and contaminant levels of sediment may potentially change over time. Further, the Commission finds that it is not possible to ensure that chemical and contaminant levels of sediment in the harbor mouth will not change over time as the result of a single chemical spill or contamination event. Therefore, to ensure that all future dredged material is physically and chemically compatible with the proposed deposition sites and suitable for beach nourishment, the Commission finds it necessary to require **Special Condition Ten (10)**, which requires the applicant to test the physical and chemical characteristics of representative samples of the dredging areas consistent with U.S. Army Corps of Engineers (Army Corps), Environmental Protection Agency (EPA), and State Water Resources Control Board and Regional Water Quality Control Board (RWQCB) criteria for beach replenishment and dredging and disposal in intertidal areas prior to the commencement of dredging activities each year. In addition, **Special Condition Ten (10)** ensures that dredged material meets minimum standards for particle sizes and distribution typically allowable for beach nourishment purposes and that the U.S. Army Corps of Engineers, the EPA, and State Water Resources Control Board/Regional Water Quality Control Board confirm that the material proposed for beach replenishment meets the minimum criteria necessary for placement on the sandy beach.

Special Condition Two (2) further requires the applicant to notify the Commission prior to any annual dredging or discharge operations. This notification shall include information as to the sediment testing (including physical and chemical testing) conducted pursuant to the abovementioned special conditions. The sediment analysis should include confirmation by the U.S. Army Corps and RWQCB that the dredged material meets the minimum criteria necessary for placement on the sandy beach or within the intertidal zone. Therefore, **Special Condition Thirteen (13)** requires that the applicant submit evidence to the Executive Director that all State and Federal permits necessary for the proposed project have been obtained.

For the reason set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30233 of the Coastal Act.

D. Recreation and Public Access

Coastal Act Section 30210 states that:

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

Coastal Act Section 30211 states:

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

Coastal Act Section 30212 states:

(a) Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) it is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) adequate access exists nearby, or, (3) agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Coastal Act Section 30213 states:

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

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 use.

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 30224 of the Coastal Act states:

Increased recreational boating uses of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launch 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.

Coastal Act Sections 30210, 30211, and 30212 mandate that maximum public access and recreational opportunities be provided to allow use of dry sand and rocky coastal beaches and that development not interfere with the public's right to access the sea, consistent with the need to protect public safety, private property, and natural resources. Section 30213 specifically mandates that lower cost recreational facilities be protected, encouraged, and provided. Sections 30220, 30221, and 30224 of the Coastal Act mandate that coastal areas suited for water-oriented recreational activities shall be protected and recreational boating uses of coastal waters shall be encouraged. All projects requiring a coastal development permit must be reviewed for compliance with the public access provisions of Chapter 3 of the Coastal Act.

The Santa Barbara Harbor is an important small boat harbor serving the south coast of Santa Barbara County. The Harbor is the home base of the local commercial fishing fleet and the U.S. Coast Guard and provides numerous water-oriented recreational opportunities for the public including boating, fishing, jet skiing, sunbathing, kayaking, swimming, and surfing.

The proposed project involves implementation of a comprehensive sediment management program, which includes dredging, disposal, beach grooming, storm drain maintenance, construction of beach berms, annual placement/removal of lifeguard towers, one one-time fireworks display, and two annual fireworks displays in the Santa Barbara Harbor and Waterfront Area. The project site includes the Santa Barbara Harbor and Waterfront Area including Leadbetter Beach, West Beach, and East Beach, which are primary locations for several public recreational uses. Dredging and disposal are proposed to achieve identified ideal harbor and beach configurations for the project site. The Commission notes that dredging of the harbor is necessary to maintain safe navigation for commercial and recreational boating and therefore, the proposed project will serve to protect boating uses of coastal waters. The proposed project will also protect and maintain adjacent Waterfront beaches for recreational use through beach nourishment, beach grooming, and installation of lifeguard towers, activities that have occurred at these beaches since the 1950's. The Commission finds that the proposed project will serve to maintain and possibly enhance recreational boating use of the Santa Barbara Harbor, and that the proposed project will maintain adjacent beaches for recreational use and access.

Dredging and disposal of dredged sediment and the staging areas for such operations are proposed to be on waterfront beaches that are popular recreation areas as well as important ocean access points for swimming, kayaking, surfing and other uses of coastal waters. The proposed project does not specify the exact maintenance dredging locations because they will be determined each year based on need. Four staging areas are proposed for this project: one in the parking lot immediately upcoast of the Boat Storage area adjacent to Leadbetter Beach, one immediately downcoast of Stearns Wharf on West Beach, one on West Beach immediately downcoast of the harbor, and

one in the parking lot upcoast of the Cabrillo Pavilion adjacent to East Beach ([Exhibit 2](#)). Equipment is proposed to be staged in the parking lot adjacent to Leadbetter Beach for up to five nights when access to Leadbetter Beach is needed for project operations. Equipment is proposed to be staged on the West Beach staging areas for one or two nights when access to West Beach is needed for project operations. Equipment is proposed to be staged in the parking lot adjacent to East Beach for up to two nights when access to East Beach is needed for project operations. The staging areas in the parking lots adjacent to Leadbetter Beach and East Beach are in the City's LCP jurisdiction and not in the Coastal Commission's retained jurisdiction. Therefore, those staging areas in the parking lots will be permitted by the City separately and are not included in the subject permit application.

Generally, any particular area in the project site will require dredging every two to ten years. Sediment management operations will require several weeks to several months of dredging, sediment disposal, and beach grooming work annually. Based on the proposed annual maximum cubic yard limitations, dredging and disposal operations could involve up to five months of work in any given year. Beach disposal is generally localized to approximately 500 linear feet on the beach. Beach disposal will temporarily displace beach area for public use, however, the remainder of beach areas surrounding the discharge and staging locations will be available for public access. Beach grooming will temporarily displace public access in the area where beach grooming is occurring. This impact, though, will be temporary and minimal as beaches are groomed relatively fast.

The Commission notes that scheduling operations outside of peak recreational periods will minimize interference with public access at the project site. Therefore, **Special Condition Four (4)** requires that dredging and disposal operations shall be prohibited from the Friday prior to Memorial Day in May through Labor Day in September to avoid impacts on public recreational use of the beach and other public amenities in the project vicinity. Furthermore, **Special Condition Four (4)** requires that the Leadbetter Berm, East Beach Mission Creek Berm, and Cabrillo Pavilion Beach Berm may be constructed and maintained from October 15 through Memorial Day, and shall be removed prior to Memorial Day to avoid impacts on public recreation use of the beach. Specifically for East Beach Mission Creek Berm, construction may only be done between October 15 and Memorial Day, on dry sand prior to the opening of the Mission Creek Mouth, and no construction or maintenance activities may occur within the estuary.

To ensure the safety of recreational users of the project site, particularly recreational users of adjacent beaches where disposal operations will be occurring, and to reduce potential conflicts between the sediment management operations and recreational use of the areas, the Commission finds it necessary to impose **Special Condition Eight (8)** for the subject permit. **Special Condition Eight (8)** requires the applicant to implement a program of monitoring and safety measures, including installation of signs, fencing, and posting of security guards, by which safe public access to or around beach deposition sites will be maintained.

Fireworks Displays

The proposed fireworks display component of the project consists of a one-time free public event on October 8, 2022, an annual free public event on July 4th, and an annual free public event on the second Sunday in December as part of the Parade of Lights event that will provide public recreation and enjoyment at West Beach and in the Stearns Wharf area. The Fourth of July display is 20 minutes long and the Parade of Lights Display is five minutes long.

All normally accessible areas will remain open and available to the general public throughout the majority of the day of each event. Public access to the area within an approximately 400 feet radius of the fireworks launch site on West Beach will be restricted with fencing starting three days before each display to allow for pre-display setup at the launching area and to provide a spectator safety zone during the fireworks events (see [Exhibit 4](#)). This closure will last for only as long as necessary to set up, perform the display, and clean up the event. A primary purpose of the fireworks events is to encourage public access and recreation near the beach (and each event will also provide a unique visual coastal recreational experience that only occurs twice per year), notwithstanding that execution of the event requires closure of part of the beach for a launching area and spectator safety zone. **Special Condition Eight (8)** requires this beach area to be reopened to public access by around 11 am the following day after each fireworks display event after cleanup. As such, the events should not adversely affect public access for coastal visitors generally, and in fact will provide a free attraction in an urban setting capable of handling such events and potential attendees, consistent with Coastal Act Section 30213.

The main potential public access issue in this case is with respect to the cleanup of any fireworks and/or event debris following the events. It is possible that fireworks debris may make its way onto the beach, and it is possible that event attendees may leave other debris as well. Given that some debris may float, it may be that debris continues to be present even following initial cleanup activities. Remnant debris on the beach and in the water inhibits public use and enjoyment of those areas. The Commission's experience with fireworks events has been that aggressive and focused clean-up following each event is adequate to ensure that beach and offshore waters are returned to their pre-event state in a relatively short period of time. To ensure continued public access, **Special Condition Seventeen (17)** requires the applicant to clean up the area immediately following each event and to inspect and clean up the beach and surrounding waters of any remaining event fireworks detritus and other event debris for at least two days following each event.

Therefore, the Commission finds that the proposed project, as conditioned, will support water-oriented recreational opportunities and recreational boating uses of coastal waters, will not significantly impact recreational opportunities and public access at the project site, and is therefore consistent with Sections 30210, 30211, 30212, 30220 and 30224 of the Coastal Act.

E. Biological Resources and Water Quality

Section 30230 of the Coastal Act states:

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

Section 30231 of the Coastal Act states that:

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 30240 of the Coastal Act states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Sections 30230 and 30231 of the Coastal Act mandate that marine resources and coastal water quality shall be maintained and where feasible restored, protection shall be given to areas and species of special significance, and that uses of the marine environment shall be carried out in a manner that will sustain biological productivity of coastal waters. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected from significant disruption of habitat values and that development within or adjacent to such areas must be limited to uses dependent on those resources and shall be designed to prevent impacts which could degrade those resources.

Santa Barbara Harbor is identified in the certified Harbor Master Plan as a sensitive habitat area. Habitats in the harbor and waterfront area include marine, intertidal, beach, upland, and creeks that enter the ocean across the beach (Sycamore, Mission and Laguna Creeks) and their associated estuaries.

Marine habitats along Leadbetter, West, and East beaches are predominantly shallow sandy bottom habitat, although rocky habitat is present at Santa Barbara Point. Hard substrate habitat from small rock outcrops, debris from vessels, and pipelines are scattered throughout the subtidal and intertidal zones in the project area. These habitats support diverse invertebrate communities. Small amounts of red algae growing on an engine block, a few surfgrass plants, and some giant kelp plants attached to the outfall pipeline by Stearns Wharf exist in the project area. Outside of these limited areas, kelp (*Macrosystis pyrifera*), other macro algae, or eel grass (*Zostera marina*) beds are not known to be present in the project area. Fish in shallow waters along the open coast include queenfish, topsmelt, anchovy, surfperch, killfish, sculpin, halibut, and California grunion (*Leuresthes tenuis*). The Santa Barbara Harbor contains soft bottom, hard substrate, and water column habitats. The frequent dredging in the harbor influences the abundance and species present. Red algae (*Gelidium sp.*) and a variety of invertebrate and algal species colonize the harbor. Fish within the harbor are similar to those mentioned above, although grunion are less common. Several marine mammals are located in the waters offshore of Santa Barbara, including harbor seals (*Phoca vitulina*) and California sea lion (*Zalophus californianus*), among others.

Three creeks flow into the ocean within the project area: Mission Creek, Laguna Channel, and Sycamore Creek. In addition, an outlet from the Andree Clark Bird Sanctuary flows onto the beach. Mission Creek has been extensively modified for flood control as it passes through the City of Santa Barbara and receives polluted runoff from urban developments. Nevertheless, it still supports tidewater goby (*Eucyclogobius newberryi*) and steelhead trout (*Oncorhynchus mykiss*). Laguna Channel has been altered to facilitate drainage of low areas, and water is pumped into a side channel that discharges to the beach. The resulting lagoon formed at the beach supports tidewater goby. These creeks interact with the beach by eroding a channel to the ocean during storm runoff and deposit sediments in the near shore area. In the summer, sand deposition on the beach forms a berm that closes the mouth of the creeks off from the ocean. In some years, the lagoons of Mission Creek and Laguna Channel are connected at the beach.

Upland habitats in the project area include sandy beaches as well as rocky intertidal areas in the harbor and on Santa Barbara Point. The sandy beaches are heavily used by humans and are regularly groomed to remove trash and debris. The California grunion spawns on sandy beaches in the project area during spring and summer. Several invertebrate species and a variety of shorebirds use the beach for resting and foraging. Threatened or endangered birds in the project area include the California brown pelican (*Pelecanus occidentalis californicus*), California least tern (*Sterna antillarum browni*), and western snowy plover (*Charadrius alexandrinus nivosus*) at selected locations in the project area.

The City of Santa Barbara Waterfront Department is proposing a comprehensive sediment management program involving maintenance dredging, sediment disposal, beach nourishment, storm drain outlet maintenance, lifeguard tower installation, construction of sand berms, and beach grooming at the Santa Barbara Harbor and

Waterfront Area including Leadbetter Beach, West Beach, and East Beach. The purposes of the program are to maintain the area for safe maritime traffic navigation; minimize risk of hazardous shoaling conditions; protect adjacent public, recreational, and commercial development from wave damage and flooding; maintain an appropriate sand balance to offset erosion; and maintain sandy beaches and area aesthetics. Sediment management activities will occur on an as-needed basis, where duration and amount of material moved varies annually, depending on weather and amount of natural sediment movement.

The City proposes a maximum of 500,000 cu yds. of material to be dredged annually. These dredged materials will be tested and placed on neighboring beaches (Leadbetter, West Beach, and East Beach) if they meet chemical and physical criteria established by the U.S. Army Corps of Engineers, US EPA, and RWQCB for beach nourishment. Equipment used for dredging and disposal includes a hydraulic dredge, discharge pipes, earthmoving equipment, and other means of hydraulic, pneumatic, and mechanical conveyance. The City has conducted beach nourishment and dredging in the waterfront on an intermittent basis since 1972. The Army Corps of Engineers has also been dredging the federal navigation channel and depositing the sediments at East Beach on an intermittent basis for over 70 years. The City proposes special status species surveys prior to any sediment management activities. Prior to any sediment management/deposition, storm drain outlet, grooming, or lifeguard tower installation activities, the City proposes that all construction sites will be surveyed by a qualified biologist for sensitive species that are likely to occur at that location during that time of year. Surveys for sensitive species will include Western Snowy Plover (October 1st to September 15th); California Least Tern (July 1st through August 30th); and California Grunion (March 14 to August 31). In addition, the City has proposed that no work be conducted in Laguna Creek and Mission Creek Estuaries and that no work occur within 200 feet of the centerline of these creeks when they are flowing to the ocean (generally September 1st through December 1st) to protect steelhead trout and tidewater goby. The proposed project does not include any activities which would occur within the sensitive riparian habitat or lagoon areas associated with the creeks and does not include mechanically breaching of any creeks.

In addition to dredging, disposal, and beach nourishment, the City proposes to include beach grooming as part of this project. According to City staff, beach grooming at Leadbetter Beach, West Beach, and East Beach has been implemented on an intermittent basis since the 1950's. As proposed, and consistent with the City's past practices, regular beach grooming, including raking, cleaning, and recontouring of sand will occur on a year-round basis and up to four days a week. Mechanized equipment and physical labor are used. In order to avoid potential adverse impacts to grunion spawning activities and sensitive habitat, the City is proposing that beach grooming be limited only to areas that are located more than ten (10) feet landward of the wrack line or the ordinary high tide line, whichever is furthest landward. During the winter, the City also proposes to maintain the opening of eight storm drain outlets that flow onto the beach so that ponding does not occur. The City also proposes annual installation of lifeguard towers at the waterfront beaches in the spring and removal in the fall. Finally,

the City proposes the construction of four temporary sand berms on the beaches. Leadbetter Beach Berm, East Beach Mission Creek Berm, and Cabrillo Pavilion Beach Berm will be built in the winter and removed in the summer to protect inland development from winter storms.

Section 30240 of the Coastal Act requires that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas. The Commission notes that the proposed project will serve to achieve and maintain identified ideal dredging depths and beach configurations for previously maintained areas, which will accommodate coastal dependent uses that the project area provides, including fishing, boating, sunbathing, swimming, volleyball, etc. As discussed in Section C dredging of existing channels and beach nourishment are specifically referenced under Section 30233 of the Coastal Act as allowable development for dredging and filling in coastal waters. The following discusses the degree to which the project is consistent with Section 30230, 30231, and 30240, which require protection of environmentally sensitive habitats, biological and water quality properties of coastal waters, and marine resources to the extent feasible.

Several sensitive species are present in the project area seasonally, including the California brown pelican, western snowy plover, California least tern, steelhead trout, tidewater goby, and California grunion. The applicant has submitted the “Biological Assessment – City of Santa Barbara Sediment Management Program,” prepared by Cardno in November 2021 and which describes the biological resources onsite. The applicant submitted beach monitoring reports for western snowy plover and California least tern completed prior to and after the annual dredging activities authorized by CDP 4-10-066. The surveys found no new species of concern and that western snowy plovers and California least terns had not been adversely impacted by the dredging activities.

As previously mentioned, Mission Creek, Laguna Channel, and Sycamore Creek flow into the ocean within the project area when storm events increase run-off and stream flow which breach the seasonally deposited berm at the mouth of the creeks. Tidewater goby have been reported to occur in the lagoon waters of Mission Creek and Laguna Channel and steelhead trout have been documented to use Mission Creek when migrating to and from the ocean. The proposed project does not include any activities which would occur within the sensitive riparian habitat or lagoon areas associated with any of the creeks and the project does not include mechanically breaching of any natural creeks. Further, the applicant has proposed restriction of all sediment management activities within 200 feet of the centerline of any creek when it is open and running to the ocean. As mechanical breaching of any natural lagoons could impact tidewater goby habitat, **Special Condition Four (4)** prohibits the applicant from mechanically breaching any of the natural creeks in the area. It also prohibits sediment management activities within any natural lagoons or riparian habitat onsite. **Special Condition Four (4)** also requires the applicant to enforce the proposed restriction on sediment management activities within 200 feet of the centerline of Mission Creek when

the creek is flowing to the ocean. The East Beach Mission Creek Sand Berm is proposed to be constructed near the mouth of Mission Creek. In addition to protecting Stearns Wharf and the Harbor from storm debris from Mission Creek, the East Beach Mission Creek Sand Berm is also designed to protect the Tidewater Goby habitat in the Mission Creek estuary. Furthermore, **Special Condition Four (4)** requires that the East Beach Mission Creek Sand Berm only be constructed on dry sand prior to the opening of Mission Creek mouth between October 15 and Memorial Day and that no construction activities may occur within the estuary. Therefore, the proposed project as conditioned will not have a direct adverse impact on either tidewater goby or steelhead trout present at the project site.

California brown pelican, California least tern, and snowy plover are threatened or endangered species known to occur at the project site. California brown pelicans are a year-round resident of the harbor area. The Biological Report submitted by the applicant indicates that potential project impacts on brown pelicans are minimal due to the temporary nature of project disturbance and the species' tolerance of human activities. California least tern are known to forage along West Beach, East Beach and the sandspit. In December of 1999, West and East Beach and the sandspit were designated as critical habitat for the western snowy plover. The project's 2021 Biological Assessment indicates that the proposed sediment management activities may potentially impact least tern and snowy plover when the species are present at the site during the months of July and August and year round, respectively.

Dredging and deposition of sediment and beach grooming in areas where least tern and snowy plovers occur could temporarily displace and disturb these sensitive species. Dredging of the sandspit area during fall and winter months is of particular concern as this activity could reduce the size of the designated critical habitat when snowy plovers are present. In the last ten years, snowy plovers were found near the project area in a few of the beach monitoring surveys. Least terns were not found in the surveys. Proper avoidance and mitigation measures were instituted to protect the plovers from impacts associated with the project. Therefore, no impacts to least terns or snowy plovers occurred during past beach grooming activities. The Addendum to Mitigated Negative Declaration submitted for the project indicates that potential adverse impacts to least terns and snowy plover will be minimized by limiting the timing of the proposed sediment management activities to those time periods when these sensitive species do not occur at the project site. Therefore, **Special Condition Five (5)** requires the applicant to retain a qualified biologist or environmental resource specialist to conduct surveys of the project site prior to commencement of all dredging, disposal, beach grooming, beach nourishment, construction of the Leadbetter Beach Berm, the East Beach Mission Creek Berm, and the Cabrillo Pavilion Beach Berm, and storm drain maintenance activities to evaluate whether sensitive species are present on-site or exhibit nesting or reproductive behavior. In the event that any sensitive wildlife species exhibit reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. In that event, project activities shall resume only upon written approval of the Executive Director.

In addition, the sandy beaches in the project area have been identified as grunion spawning locations. Sediment management activities within the intertidal zone may potentially disturb adult grunion during the run period and/or may bury incubating grunion eggs. Therefore, the proposed sediment management activities have the potential to impact California grunion by dredging, depositing, or disturbing sediment within the intertidal zone during the seasonally predicted run period and egg incubation period of March through August. The City proposes that beach grooming, beach nourishment, or intertidal discharge operations be conducted during times when California grunion are not spawning in the intertidal area. In order to further ensure that the proposed project will not have an adverse impact on California grunion, **Special Condition Four (4)** states that no work shall be conducted on the beach and shorefront area where more than 100 individual California grunion are present on a 100-foot segment of the beach. Furthermore, from March 1 through August 31, beginning at least two weeks prior to commencement of sand disposal activities or other project activities on Leadbetter, West, and East Beaches, **Special Condition Six (6)** requires a qualified resource specialist to conduct an appropriate survey for the presence of adult grunion and live grunion eggs within 100 feet to the north and south of the deposition footprint. Furthermore, to ensure that the Executive Director is notified of commencing dredging and discharge operations, and to ensure that all relevant monitoring information has been analyzed for potential impacts on sensitive wildlife species at the site, **Special Condition Two (2)** of the subject permit requires the applicant to submit to the Executive Director a letter report describing the locations, staging areas, methods and timing of proposed operations, and which includes all relevant monitoring reports, prior to commencement of any operations authorized by this coastal permit.

The Commission finds that regular grooming and sand nourishment at beaches can impact the diversity and abundance of invertebrates, plants, and birds present on sandy beaches and intertidal areas. Grooming and beach nourishment can cause removal of kelp washed ashore during high tides and continual removal and disturbance to plants and invertebrates colonizing the sand. A study comparing ungroomed and groomed beaches in Santa Barbara and Ventura counties, showed the abundance and species diversity of coastal strand plants to be approximately 15 times higher at ungroomed beaches than groomed beaches.¹ Regularly groomed beaches also exhibit reduced richness, abundance, and biomass of many species of invertebrates, including crustaceans and insects.² This reduction of invertebrates, in turn, impacts shorebirds, including sandpipers, plover, and sanderlings that feed on crustaceans and insects in the sand.

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

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

Wrack, which is the tangled mass of kelp and sea grass that wash up onto beaches and settle in large clumps along the tide line, are of particular importance for invertebrate, plants, and birds in the intertidal zone of the beach. A diverse macrofauna, including amphipods, isopods, and insects are found in wrack. According to one study at Southern California beaches, wrack associated macrofauna made up an average of greater than 37% of species on ungroomed beaches and comprised 25% or more of the total abundance on half of those beaches.³ The presence and amount of wrack on beaches is, therefore, directly correlated with the abundance and diversity of crustaceans and insects at beaches. The same study also showed reduced presence of western snowy plover and black-bellied plover at beaches in Ventura and Santa Barbara counties where wrack used to be removed regularly as part of beach grooming activities. The presence of wrack on beaches has also been proven to reduce wind driven sand transport at beaches by more than 90%.⁴

The proposed project includes beach nourishment activities involving the placement of dredged sediment on the sandy beach and intertidal area periodically at Leadbetter Beach, East Beach, and West Beach. The project also proposes regular beach grooming at these same beaches. While sand nourishment and grooming has been ongoing at these beaches for many years, continuation of these practices will perpetuate reductions in abundance and diversity of biological species on these beaches. Recognizing the important role of wrack in the intertidal environment, the City proposes limiting beach grooming activities to 10 feet above either the ordinary high tide line or any wrack present on the beach. The Commission notes that the City is not proposing any expansion of nourishment and grooming activities beyond the highly urbanized beaches of the Waterfront that have undergone beach grooming and nourishment in the past.

In order to avoid potential adverse impacts to grunion spawning activities and sensitive habitat, the City is proposing that all beach grooming activities would be limited only to areas that are located more than ten (10) feet landward of the wrack line or the ordinary high tide line, whichever is furthest landward. In order to ensure adequate implementation of the City's proposal, **Special Condition Three (3)** specifically requires that mechanized beach grooming shall be restricted to dry sand area only and shall not occur any closer than ten feet landward of the wrack line or the ordinary high tide line, whichever is further landward. Wrack shall not be removed from the beaches during grooming activities with the exception that debris that is entangled in the wrack, and which poses a clear threat to public safety, may be removed as needed. **Special**

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

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

Condition Three (3) also limits beach grooming activities to Leadbetter Beach, East Beach, and West Beach, prohibits removal or disturbance of wrack at any beaches, and prohibits grooming at the beaches east and west of these areas which historically have not been groomed. Management at the ungroomed beaches shall be limited to only removal of debris that poses a clear threat to public safety. **Special Condition Twelve (12)** also requires the City to retain wrack on the beach to the maximum extent feasible during beach nourishment activities, including stockpiling of wrack during discharge operations and replacement of the wrack in the same location/configuration at the site following any grading activities. Additionally, **Special Condition Sixteen (16)** requires that wrack potentially impacted by sand berm construction or maintenance activities be temporarily removed from the maintenance area and subsequently relocated back to the area from which it was removed upon completion of the construction and/or maintenance activities.

Finally, the Commission finds that although the project, as conditioned, will serve to minimize adverse impacts to sensitive beach wrack habitat, the project likely will still result in some unavoidable impacts to habitat from the placement of beach replenishment material on the beach and in the intertidal zone. In addition, the Commission also finds that the subject beach is a popular tourist destination and experiences a large number of visitors each year. Use of the beach by large numbers of visitors may also result in increased disturbance to the sensitive wrack environment and even the generation of potential complaints to City staff regarding the presence of wrack on the beach. Therefore, in order to offset the unavoidable impacts to sensitive resources on site that will result from the proposed beach replenishment/sediment disposal activities, the Commission finds that educating the public about the ecological importance of wrack is important to the success of wrack protection measures included in the City's Sediment Management Program and would serve to further reduce disturbance to wrack and sensitive habitat areas on site from human disturbance.

Special Condition Fifteen (15), therefore, requires the applicant to install and maintain signs that inform the public as to the importance of wrack in the intertidal environment and the ecological benefits of retaining wrack on Waterfront beaches. The signs shall be placed at a minimum of every 500 lineal feet along each sandy beach in the project area immediately seaward of the existing bikepath/walkway or landward-most portion of the sandy beach. The existing educational and informational signs installed as previous requirements of Coastal Development Permits 4-05-155 and 4-10-066 may be utilized to satisfy components of this condition.

The Commission notes that *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, creates a dense monoculture, and displaces 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, *C. 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.

Because of the grave risk *Caulerpa* poses to native habitats, in 1999 *C. taxifolia* was designated a prohibited species in the United States under the Federal Noxious Weed Act. However, its possession is still legal in California. In June 2000, *C. taxifolia* was discovered in Aqua Hedionda Lagoon in San Diego County, and in August of that year an infestation 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, *C. taxifolia* has been shown to tolerate water temperatures down to at least 50 degrees Fahrenheit. Although warmer southern California habitats are most vulnerable, until better information is 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 *C. taxifolia* infestations. In addition, *Caulerpa Prolifera*, a potentially invasive seaweed, was collected from within Newport Bay recently in April 2021. The genus *Caulerpa* consists of approximately 75 different species of single-celled aquatic organisms that can grow rapidly and have the potential to adversely impact native marine habitat along the west coast.⁵

If *Caulerpa* species are present, any project that disturbs the bottom could cause its spread by dispersing viable tissue fragments. In order to assure that the proposed project does not cause the dispersal of *Caulerpa* species, the Commission requires **Special Condition Eleven (11)**. **Special Condition Eleven (11)** requires that the applicant, prior to placement of any dredged material, undertake a survey of the project area and any associated dredging equipment for the presence of *Caulerpa* species. If *Caulerpa* species is present in the project area, no work may proceed until either (1) the applicant provides evidence to the Executive Director that all *Caulerpa* 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*. If revisions to the project is needed, the applicant shall obtain an amendment to this permit, or a new permit, to address project revisions related to the

⁵ Sources: Aquatic Invasive Species on the West Coast: *Caulerpa Taxifolia* | NOAA Fisheries; *Caulerpa*, Aquatic Invasive Species, Lodi Fish & Wildlife Office (fws.gov)

presence of the Caulerpa, unless the Executive Director determines that no amendment or new permit is required.

In addition, the proposed project involves dredging of open coastal waters and deposition of dredged sediment at adjacent beaches at the project site. Were any of this sediment to be contaminated or composed of high contents of fine material, biological resources and water quality in the marine environment could be negatively impacted. Section C discusses in detail the results of testing conducted of dredging and disposal sites from previous permits with respect to the issue of dredge spoil compatibility, including chemical and physical characteristics, with receiver beach nourishment sites. As discussed in that section, all testing of the proposed dredging areas done under previous permits has shown the sediment to meet chemical and physical criteria established by the U.S. Army Corps of Engineers, U.S. EPA, and the RWQCB for sediment used for beach nourishment or deposition in intertidal areas. One exception was the sediment tested from Marina 2, which contained sediment material with a greater percentage of fines than would be appropriate for beach or intertidal deposition and was, therefore, deposited in a nearby landfill. Testing in the area has also shown high levels of some metals in sediments, although levels have not been higher than Army Corps, EPA, and RWQCB criteria. The Commission notes that, because this project will occur over a multiple-year period and that water and sediment quality in creeks may change over time due to changed conditions resulting from non-point source pollution from creeks or spills in the harbor, continued testing of dredging material is necessary to determine suitability for deposition at beach and intertidal areas. As discussed in Section C, the Commission, therefore, requires **Special Conditions Two (2), Ten (10), and Thirteen (13)** to ensure sediment testing, compliance with Federal and State regulations and criteria for dredging and deposition, and notification of the Commission as to sediment conditions prior to dredging and deposition activities.

Although the above required special conditions will serve to minimize adverse impacts to the marine environment, the placement of source material on the beach or in the intertidal zone is still expected to result in increased turbidity at the deposition site. Temporary increases in turbidity and suspended solids decrease light penetration, causing a decline in primary productivity due to decreased photosynthesis by phytoplankton, and may result in adverse impacts to marine organisms. Specifically, any appreciable turbidity increase may also cause clogging of gills and feeding apparatuses of fish and filter feeders. Turbidity impacts are anticipated to have the maximum concentrations generally restricted to the lower water column and decreasing rapidly with distance due to settling and dilution. However, the impacts of surf zone and beach fill placement activities (i.e., increased turbidity, sedimentation, dissolved oxygen reduction, burial of organisms) are expected to be relatively localized in nature and mobile organisms would likely relocate to an undisturbed area. Following deposition activities, organisms are expected to recolonize previously disturbed areas.

As such, impacts from sediment re-suspension caused by the project are anticipated to be short-term in duration. In addition, the proposed deposition sites are located in an

area that is considered to have naturally high levels of turbidity due to high wave energy and creek outfalls, particularly during the winter season. Additionally, the applicant had previously submitted results of water quality monitoring which show that the amount of sediment deposited during sediment management activities in that time period was less than that delivered to the area during normal storm events in the same time period. Dredging amounts and locations change each year, however, causing varying amounts of turbidity and associated impacts. **Special Condition Nine (9)**, therefore, requires a qualified biologist or resource specialist to monitor turbidity during all project construction activities. If the monitoring indicates that turbidity attributed to the replenishment project is not completely diminished immediately following deposition activities (1-2 days), then the rate of placement of sand will be modified so that large, long lasting turbidity plumes are no longer created. In addition, **Special Condition Nine (9)** requires the applicant to compare deposition volumes with that normally delivered to the project site by winter storms.

In addition, the composition (i.e., grain size) of the deposition material can also affect the marine environment. For instance, material with higher fine-grained material content will contribute to higher rates of turbidity (see above discussion of turbidity impacts) and will have higher likelihood of containing contaminants. In general, the higher the amount of coarse grained sand, the lower the turbidity and associated risks to offshore resources and productivity. As a result, the grain-size of the material is an important design characteristic of the project. Therefore, in order to ensure that only appropriate material is deposited within the surf zone and marine environment, **Special Condition Ten (10)** requires that physical analysis be conducted on representative samples of each source material that shall be used for placement on beaches. The material shall be analyzed for consistency with the U.S. Army Corps of Engineers (ACOE) / Environmental Protection Agency (EPA), State Water Resources Control Board and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment.

The riparian, wetland, and marine environment could also be adversely impacted as a result of the implementation of project activities by unintentionally introducing sediment, debris, or chemicals with hazardous properties. To ensure that construction material, debris, or other waste associated with project activities does not enter the water, the Commission finds **Special Condition Twelve (12)** is necessary to define the applicant's responsibility ensure proper disposal of solid debris and material unsuitable for placement into the marine environment. As provided under **Special Condition Twelve (12)**, it is the applicant's responsibility to ensure that the no construction materials, debris, or other waste is placed or stored where it could be subject to wave erosion and dispersion. Furthermore, **Special Condition Twelve (12)** assigns responsibility to the applicant that any and all construction debris, sediment, or trash shall be properly contained and removed from construction areas within 24 hours. Further, construction equipment shall not be cleaned on the beach or in the beach parking lots.

The Commission finds that the proposed project, as conditioned, will serve to minimize adverse effects to existing habitat and wildlife resources on site while meeting

necessary flood control requirements. However, the Commission also finds that the marine, beach, riparian, and wetland habitats on site are subject to potential changes over time as new species migrate into the area or as potential unidentified impacts from the proposed dredging, disposal, and beach grooming operations may be discovered over time. Thus, the Commission finds that authorization of the proposed project for a single period of time longer than five years in duration would not ensure that such changes are adequately addressed over time. Therefore, in order to ensure that any potential changed circumstances which may be discovered at some future point in time are adequately addressed for any future sediment management activities proposed after the five-year term of this permit, **Special Condition One (1)** specifically limits the duration of all activities approved by this permit (including dredging, sediment disposal, beach grooming, storm drain maintenance, berm construction, a one-time fireworks display, two annual fireworks displays, and lifeguard tower installation) to a period of five (5) years from the date of Commission action, provided that the term of this permit may be extended once for another five (5) year period from the date the permit term expires, subject to Executive Director approval, if there are no changed circumstances. In order to receive approval of the onetime extension, the City must provide evidence that there are no changed circumstances associated with the dredging, disposal, beach grooming, storm drain maintenance, berm construction, installation of lifeguard towers, and fireworks displays activities that have the potential for adverse impacts, either individually or cumulatively, on coastal resources or public access, and that the terms and conditions of this CDP remain adequate to protect coastal resources and public access to and along the shoreline. Any sediment management activities after the expiration of this permit will require the issuance of a new coastal development permit.

Fireworks Displays

The proposed fireworks displays would be launched from the West Beach Fireworks Berm and the displays will take place over West Beach and the waters of the Pacific Ocean ([Exhibit 4](#)). Fireworks displays have historically been conducted in California coastal communities as part of national and local celebrations, and to foster public use and enjoyment of the marine environment. These areas are the preferred venue for such celebrations within California because they optimize public access while avoiding fire hazards that are associated with such displays.

Such fireworks displays have the potential to impact wildlife in the surrounding area. In particular, they can affect sensitive bird species. Wildlife can be impacted by fireworks displays in three ways: light, sound, and debris. The primary causes of disturbance are light flashes and sound effects from exploding fireworks. The impact area is defined as the area where sound, light, and debris will directly impact marine organisms and habitats. It may be that bird species and other wildlife avoid or temporarily depart the impact area during the hours immediately prior to the beginning of the fireworks displays due to increased human recreational activities associated with the overall celebration event (noise, boating, kayaking, fishing, diving, swimming, surfing, picnicking, beach combing, tidepooling, etc.). As a fireworks presentation progresses, most birds generally evacuate the impact area.

In terms of potential bird impacts, the primary listed birds of concern in the project area are California least tern and western snowy plover. Snowy plovers have been observed nesting on the sandspit area and overwintering at East Beach and at Leadbetter Beach, but have not been observed on West Beach, where the fireworks displays are proposed to take place. Although bird species are not likely to be present and impacted by the proposed fireworks displays, the Commission has historically found (in other fireworks cases) that additional measures are necessary to ensure protection of sensitive species, consistent with Coastal Act Sections 30230 and 30231. **Special Condition Eighteen (18)** requires the applicant to retain a qualified biologist or environmental resource specialist to conduct sensitive species surveys on the day before the construction of the West Beach Fireworks berm and the day prior to the fireworks displays in the areas where construction of the West Beach Fireworks berm and the fireworks displays could have potential adverse impacts. If any sensitive species are observed within the respective potential impact areas, the applicant must contact the appropriate wildlife resource agency to determine the appropriate action to undertake.

Event debris from a fireworks program can impair water quality as well as harm wildlife that may ingest and/or become entangled in such debris. Fireworks debris that may enter the ocean include fireworks casings, cardboard cylinders, disks, and shell case fragments; paper strips and wadding; plastic wadding, disks, and tubes; aluminum foil; cotton string; and even whole unexploded shells (i.e. duds or misfires). **Special Condition Seventeen (17)** requires the applicant to inspect the upcoast and downcoast beach areas and the adjacent ocean waters for a minimum of two days following the conclusion of each fireworks event to look for any remaining event debris, including, but not limited to, all fireworks detritus, and also to properly dispose of all debris. The City has also proposed to perform a cleanup of all associated debris, including a detailed cleanup of the beach area the following morning after each event by City staff.

Finally, to ensure semi-regular evaluation of potential impacts to marine species from the annual fireworks event and continued consistency with Coastal Act marine resource protection requirements, **Special Condition One (1)** states that the Commission's approval allows for five years of fireworks displays through the December 2026 fireworks event. **Special Condition One (1)** allows the Executive Director to extend this approval for one additional five-year term under this permit if there are no changed circumstances. In order to receive approval of the onetime extension, the City must provide evidence that there are no changed circumstances associated with the dredging, disposal, beach grooming, storm drain maintenance, berm construction, installation of lifeguard towers, and fireworks displays activities that have the potential for adverse impacts, either individually or cumulatively, on coastal resources or public access, and that the terms and conditions of this CDP remain adequate to protect coastal resources and public access to and along the shoreline. If the Executive Director determines that a one-time extension of the five-year term of this permit is not warranted (for instance, if there was new information regarding the impacts of firework displays on coastal resources or new mitigation measures are identified that are necessary to address such impacts), **Special Condition One (1)** requires the applicant to submit a new CDP application to authorize future fireworks events. As conditioned,

the Commission finds that the proposed fireworks events will not significantly impact marine resources and preserve water quality in the vicinity of West Beach and Stearns Wharf.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, 30240, and 30233 of the Coastal Act.

F. Archaeological Resources

Coastal Act Section 30244 of the Coastal Act states that:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Archaeological resources are significant to an understanding of cultural, environmental, biological, and geological history. The Coastal Act requires the protection of such resources to reduce potential adverse impacts through reasonable mitigation measures. Degradation of archaeological resources can occur if a project is not properly monitored and managed during earth moving activities and construction. Site preparation can disturb and/or obliterate archaeological materials to such an extent that the information that could have been derived would be permanently lost. In the past, numerous archaeological sites have been destroyed or damaged by development. As a result, the remaining sites, although often less rich in materials, have become increasingly valuable as a resource. Further, because archaeological sites, if studied collectively, may provide information on subsistence and settlement patterns, the loss of individual sites can reduce the scientific value of the sites that remain intact.

The applicant has submitted a Negative Declaration which notes that portions of West Beach and East Beach have been identified as sensitive for subsurface archaeological resources. Dredging activities are unlikely to disturb existing archaeological resources since areas directly offshore have historically been submerged and the majority of dredging areas contain recently accumulated sediments and not undisturbed deposits. Although sediment disposal and grooming activities within some portions of the project site could potentially disturb archaeological resources, the project has been designed to avoid all recorded archaeological sites and grooming. Further, since grooming activities are proposed to be limited to only the upper 2 ft. of beach sand, the potential for adverse impacts to occur are considered minimal. Therefore, the Commission finds that the proposed grooming activities are designed to minimize potential impacts of archaeological resources. However, the Commission notes that potential adverse effects to those resources may still occur due to inadvertent disturbance during dredging, disposal, and grading activities. To ensure that all potential adverse impacts to archaeological resources are minimized, **Special Condition Seven (7)** requires the applicant to have a qualified archaeologist(s) and appropriate Native American consultant(s) present on-site during any onshore project activities within the high and

moderate sensitivity zones, as identified by the City of Santa Barbara Master Environmental Assessment, at all times during grading operations when earth disturbance of these identified zones is expected to be of 3 ft. or greater depth. In the event that any significant archaeological resources are discovered during operations, all work in the area will be halted and an appropriate resource treatment method or mitigation strategy shall be developed, subject to review and approval of the Executive Director, by the applicant's archaeologist and/or Native American consultant consistent with CEQA guidelines.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30244 of the Coastal Act.

G. Hazards

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

- (a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard
- (b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.

Section 30253 of the Coastal Act mandates that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard. The proposed development is located in an area subject to tidal action. The tidal environment is dynamic and there are risks associated with development in such areas. For instance, erosion has occurred at the subject beaches where beach nourishment is proposed, and erosion is one form of potential geologic hazard. However, the applicant will not increase erosion hazards by increasing the size of beaches beyond pre-existing conditions, and maintaining the beach size may decrease risks to property. As described above, testing and monitoring the replenishment material will ensure risks to life and health are minimized. Therefore, the proposed project minimizes this hazard consistent with Section 30253.

In addition to beach nourishment and sediment disposal, the project involves hydraulic dredging of the harbor and areas offshore of West Beach. These areas have been dredged since 1972. Nearby creeks and longshore currents transport sediment to these areas, filling in portions of the harbor. Maintenance dredging proposed by this project removes this accumulated sediment to ideal contours. These offshore contours have not changed since the program was last permitted in 2011 (CDP 4-10-066). It is unlikely, therefore, that dredging activities would significantly contribute to erosion, geologic instability, or substantially alter natural landforms along bluffs or cliffs.

Because there remains an inherent risk to development along the shoreline, though, **Special Condition Fourteen (14)** requires the applicant to acknowledge and agree to

indemnify and hold harmless the California Coastal Commission, its officers, agents and employees against any and all claims, demands, damages, costs, expenses of liability arising out of the acquisition, design, construction, operation, maintenance, existence, or failure of the permitted project. In this way, the applicant is notified that the Commission is not liable for damage as a result of approving the permit for development.

For the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Section 30253 of the Coastal Act.

H. Local Coastal Program

The proposed project area lies within City of Santa Barbara, but falls within the Commission's area of retained original permit jurisdiction as shown on the LCP Certification Permit and Appeal Jurisdiction map. The Commission has certified the Local Coastal Program for the City of Santa Barbara (Land Use Plan and Implementation Ordinances), which contains policies for regulating development and protection of coastal resources, including the protection of environmentally sensitive habitats, recreational and visitor serving facilities, coastal hazards, and public access.

I. California Environmental Quality Act

Section 13096 of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified 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 approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to any public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, the proposed project, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures, which will minimize all adverse environmental effects, have been required as special conditions. **Special Conditions One (1) through Eighteen (18)** are required to assure the project's consistency with Section 13096 of Title 14 of the California Code of Regulations. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impacts that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS

Coastal Development Permit Application No. 4-21-0103 and associated file documents.

Coastal Development Permit Nos. 4-10-066, 4-10-066-A1, 4-05-155, 4-04-069, 4-00-067.

Final Mitigated Negative Declaration-ENV MST99-00329 Waterfront Area Sediment Management Program, June 2, 2000.

Addendum to the Final Mitigated Negative Declaration (MST99-00329) approved August 18, 2005.

Final Water Quality Evaluation, Santa Barbara Harbor, 10-Year Harbor Maintenance Dredging Program, Science Applications International Corporation, June 30, 2005.

Biological Assessment – City of Santa Barbara Sediment Management Program, Cardno, November 2021.