

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585 - 1800

Filed: 10/29/05
49th Day: 12/17/05
180th Day: 4/27/05
Staff: LF-V
Staff Report: 11/23/05
Hearing Date: 12/16/05
Commission Action:



STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-05-160

APPLICANT: City of Carpinteria

PROJECT LOCATION: Carpinteria City Beach, Carpinteria (Santa Barbara County).

PROJECT DESCRIPTION: Annual construction and removal of an approximately 1,500 ft. long, 10-12 ft. high sand berm on Carpinteria City Beach involving approximately 26,000 cu. yds. of grading (13,000 cu. yds. of excavation and 13,000 cu. yds. of fill). The proposed project includes construction of the berm prior to the winter storm season, maintenance of the berm during the winter, and removal of the berm in the spring.

REQUIRED APPROVALS: Army Corps of Engineers, Los Angeles District, Department of the Army Permit No. 915072600-TW dated 11/20/2000 and valid until 1/31/2006; California Regional Water Quality Control Board, Central Coast Region, Standard Letter of Certification dated 10/30/2000 and valid until 1/31/2006.

SUBSTANTIVE FILE DOCUMENTS: Carpinteria Shoreline Feasibility Study Project Management Plan, June 2003; Winter Protection Berm – Feasibility Study by MNS Engineers, Inc. dated 7/26/01; Letter from James Bailard, Ph.D. dated 8/22/00; Initial Study for Carpinteria Beach Winter Protection Berm by City of Carpinteria dated 8/12/94; Letter from Mathew Roberts, Director of City of Carpinteria Parks and Recreation Department dated 9/29/05; Biological Analysis by Vince Semonsen, Consulting Biologist for the City of Carpinteria dated 10/25/00; Biological Monitoring, Coastal Development Permit 4-00-199 (City of Carpinteria), Construction of Winter Sand Berm, Vince Semonsen, Consulting Biologist for the City of Carpinteria, dated 2/28/2001; Biological Monitoring, Coastal Development Permit 4-00-199 (City of Carpinteria), Construction of Winter Sand Berm, Vince Semonsen, Consulting Biologist for the City of Carpinteria, dated 2/05/2002; Beach Survey for Snowy Plovers Prior to Eliminating Sand Berm, Vince Semonsen, Consulting Biologist for the City of Carpinteria, dated 4/10/2003; Beach Survey for Snowy Plovers Prior to Constructing Sand Berm, Vince Semonsen, Consulting Biologist for the City of Carpinteria dated

11/19/2003; Beach Survey for Snowy Plovers in Preparation for Sand Berm Work, Vince Semonsen, Consulting Biologist for the City of Carpinteria dated 4/11/2005; Coastal Development Permit Nos. 4-95-207 (City of Carpinteria); 4-00-199 (City of Carpinteria); 4-01-155 (City of Carpinteria); 4-02-074 (BEACON).

SUMMARY OF STAFF RECOMMENDATION

Staff recommends **approval** of the proposed project with five (5) special conditions regarding project monitoring and responsibilities, timing and duration, feasibility study updates, assumption of risk, and required approvals.

The proposed project is for the construction and maintenance of a protective sand berm at Carpinteria City Beach during the winter storm season. The berm is intended to protect existing beachfront development (including private residential development as well as public parking facilities and restroom facilities) on the project site from damage from wave action during the winter storm season. The berm is to be constructed each year prior to the winter storm season, maintained during the winter, and removed each spring.

The City of Carpinteria seeks approval for the project for an indeterminate time period; however, staff recommends expiration of the term of approval on Memorial Day 2010. This recommendation is based on the expected completion date of an Army Corps of Engineers (ACOE) feasibility study on long-term solutions to erosion at Carpinteria City Beach. The ACOE feasibility study will assist the Commission in determining a long-term solution to erosion at Carpinteria City Beach that is most protective of coastal resources.

The proposed project is located in an area where the Commission has retained coastal development permit jurisdiction, even though the City of Carpinteria has a certified LCP. The standard of review for the proposed project is therefore the Chapter Three policies of the Coastal Act. In addition, the policies of the certified City of Carpinteria Land Use Plan (LUP) serve as guidance. As conditioned, the proposed project is consistent with all applicable Chapter Three policies of the Coastal Act.

I. STAFF RECOMMENDATION

MOTION: *I move that the Commission approve Coastal Development Permit No. 4-05-160 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 and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date. Other provisions affecting the permit term are set forth in **Special Condition Two (2)**.
3. **Interpretation.** Any questions of intent or interpretation of any term or condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. Project Monitoring and Responsibilities

Prior to the issuance of the coastal development permit, the applicant shall retain the services of a qualified biologist or environmental resource specialist with appropriate qualifications acceptable to the Executive Director. The monitor shall require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise. All berm construction, maintenance, and demolition activity shall be carried out consistent with the following:

- (a) No overnight stockpiling or storage of dirt, construction materials, or equipment shall occur on the beach seaward of the proposed berm location;
- (b) Any and all debris that results from the construction period shall be immediately removed from the sandy beach;
- (c) The environmental resource specialist shall conduct a survey of the project site (donor site and receiver site) each day prior to commencement of any berm construction, maintenance, or demolition activity to determine whether any Western Snowy Plover, Grunion, Pismo Clams, or any other sensitive wildlife species are present. In the event that any of the above species or other sensitive wildlife species are present on the project site, the environmental resource specialist shall require the applicant to cease work and immediately notify the Executive Director to determine an appropriate strategy to minimize any potential impacts to wildlife. Work shall not recommence until the Executive Director authorizes further project activity.
- (d) In the event that construction, maintenance, and/or berm removal activity will occur during the seasonally predicted run period and egg incubation period for California grunion as identified by the California Department of Fish and Game, then the environmental resource specialist shall be present on the project site each night from one hour before the beginning of each predicted grunion run until one hour after the end of each run to monitor the presence of any grunion present on the site. If any adult grunion are present on the project site beach, then no berm construction/removal activities shall be allowed within 100 ft. of any area (measured laterally along the beach and extending from the back of the beach to the water's edge) where grunion were observed until after the next predicted grunion run in which no adult grunion have been observed on the project site and it has been determined by the environmental resource specialist that all previously deposited grunion eggs have successfully incubated (allowing juvenile grunion to return to the ocean) or that the previously deposited eggs are no longer viable, or unless otherwise approved by the Executive Director. The environmental resource specialist will immediately notify the Executive Director after each monitored run whether grunion were found to be present.

2. Timing and Duration

This permit is only for the construction and maintenance of the proposed sand berm during the winter storm season, and the removal of the proposed sand berm in the spring. The applicant shall remove the proposed sand berm and restore the beach to its pre-development condition no later than Memorial Day each spring unless additional time is granted by the Executive Director for good cause. This permit shall remain effective until Memorial Day 2010.

3. Feasibility Study Updates

By acceptance of this permit, the applicant agrees to provide the Executive Director with copies of all reports and documents issued by the Army Corps of Engineers as part of their Carpinteria Shoreline Feasibility Study for the City of Carpinteria beach protection program, and by the United States Geologic Survey as part of their Carpinteria Coastal Processes Study. The applicant further agrees to submit these documents within thirty (30) days of their receipt.

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

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

5. Required Approvals

Prior to commencement of construction of the berm for the 2006-2007 winter season, the applicant shall submit, for the review and approval of the Executive Director, evidence of final required approval from the Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB). The ACOE and RWQCB approvals shall be valid through Memorial Day 2010.

IV. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. Project Description

The proposed project is for the annual construction and removal of an approximately 1,500 ft. long, 10-12 ft. high sand berm on Carpinteria City Beach involving approximately 26,000 cu. yds. of grading (13,000 cu. yds. of excavation and 13,000 cu. yds. of fill) (**Exhibits 2 through 4**). The proposed project includes construction of the berm prior to the winter storm season, maintenance of the berm during the winter, and removal of the berm in the spring.

The project site is located at Carpinteria City Beach (**Exhibits 1 and 2**). The sand berm will be constructed on the back portion of the sandy beach immediately seaward of the existing residential development (**Exhibits 2 and 3**). Approximately 13,000 cu. yds. of sand to construct the berm will be excavated (pushed by scraper/bulldozers) from the beach seaward of the proposed berm location. Periodic maintenance of the berm will involve pushing sand from the beach immediately seaward of the berm back onto the berm with bulldozers. In the event that the berm is completely destroyed by wave action during the winter season, then the berm would be reconstructed. The City proposes to remove the berm and restore the beach to its pre-development profile each spring. Berm removal/demolition activity would involve using a bulldozer to evenly redistribute the berm sand immediately seaward of the berm's location (**Exhibit 8**).

The subject beach is backed by numerous private residences located on the seaward side of Sandyland Avenue (**Exhibits 2 and 3**). The City has indicated that in recent years, and most notably during the 1995 winter storm season, wave action during the winter storm season has resulted in damage to the existing private residences and public amenities (including public streets, parking lots, and a restroom facility) located on the back portion of Carpinteria City Beach. The proposed sand berm is intended to protect existing development on the project site from damage from wave action during the winter storm season (**Exhibit 8**).

Carpinteria City Beach is characterized as a moderately wide public beach approximately 1,500 ft. in length backed by both private residential development and public parking facilities at several street ends. Public access and recreation is available along the entire approximately 1,500 ft. length of the beach fronting the project site and the beach is a popular visitor destination within the Santa Barbara County area. The sandy beach on the subject site is most heavily used for public recreational use during the summer season but remains a popular visitor destination throughout the entire year. The City proposes to construct ramps in the sand berm at the ends of public streets to allow pedestrian access over the berm and to the beach (**Exhibit 3**).

Although the project site is heavily utilized for public access and recreation, and is not a designated environmentally sensitive habitat area (ESHA), it does contain important biological resources. The City's biologist has indicated that Carpinteria City Beach provides potential habitat for California grunion, and, below the surf zone, Pismo clams. Critical habitat for the endangered Western Snowy Plover is located downcoast from the project site. In addition, the project site is located immediately onshore from the Carpinteria reef and kelp beds that are designated ESHAs (**Exhibit 5**).

B. Background

The Commission first approved annual construction of the sand berm in 1995. Coastal Development Permit (CDP) 4-95-207 was issued with special conditions regarding limited duration (not to exceed five years), biological monitoring during berm construction and removal activities, and submittal of an annual sand placement monitoring report. In addition, Special Condition Five (5) of CDP 4-95-207 also required that the City submit, as part of any future application for construction of a sand berm (such as this application) a detailed technical report prepared by a qualified engineer to evaluate long-term solutions and alternatives to the sand berm including, but not limited to, dune enhancement, beach nourishment, use of sand from alternative suitable sources, and participation in a regional sand supply mitigation program.

Upon expiration of CDP 4-95-207, the City again applied for a permit for the construction of the winter sand berm. Although the applicant had not submitted an alternatives analysis, City personnel indicated to staff that they had contacted MNS Engineering to prepare the study, but that it could not be completed prior to the winter storm season. In November 2000, the Commission approved CDP 4-00-199 for construction of the berm for the winter 2000/2001 season only. CDP 4-00-199 was issued with special conditions regarding project monitoring and responsibilities, timing and duration, required approvals, and assumption of risk. In addition, Special Condition Four (4) required the applicants to submit a detailed feasibility analysis of alternatives to the proposed berm as part of any subsequent berm construction application.

The City subsequently applied for construction of the berm in 2001 (CDP 4-01-155). In its application for CDP 4-01-155, the applicant submitted a document titled, "Winter Protection Berm – Feasibility Study," prepared by MNS Engineers and dated July 26, 2001. The MNS report concluded that a temporary, seasonal sand berm, such as proposed in this application, is the most feasible means to protect beachfront development from wave action. However, the report did not provide a detailed evaluation of all long-term solutions, and did not evaluate the feasibility of a dune system in conjunction with concurrent beach replenishment, as required by Special Condition Three (3) of CDP 4-00-199. Also in 2001, the City began collaborating with the Army Corps of Engineers (ACOE) on the Carpinteria Shoreline Feasibility Study to address long-term solutions to protecting beachfront development in Carpinteria. CDP 4-01-155 was approved with special conditions regarding project monitoring and responsibilities, timing and duration, and assumption of risk, as well as with a fourth condition that

required submittal of all reports and documents prepared as part of the feasibility study. CDP 4-01-155 expired on Memorial Day 2005.

In August 2004, the City submitted a Project Management Plan (PMP), prepared by the ACOE, outlining the scope, process, work activities, delegation of responsibilities, schedules, costs, and funding sources for the Carpinteria Shoreline Feasibility Study. As outlined in the PMP, the feasibility study will address five alternative means of shoreline protection, including two beach nourishment alternatives that include the construction of vegetated sand dunes; two artificial submerged reef alternatives that also include construction of vegetated sand dunes; and a reinforced concrete seawall. In a letter accompanying the current application, the City notes that, due to federal funding cuts, progress on the feasibility study has fallen behind schedule. The State of California has proposed, with the approval of the ACOE, that the City use the \$380,000 provided for the feasibility study by the State to hire the United States Geologic Survey (USGS) to conduct baseline studies and computer modeling analyses for the study. The USGS has offered \$100,000 in matching funds to complete the study, titled the Carpinteria Coastal Processes Study. Thus, despite federal funding setbacks, work on the Carpinteria Shoreline Feasibility Study is ongoing. The City estimates that the baseline studies will be completed and modeling analyses will commence by Spring 2006. Although no official timeline exists for completion of the feasibility study, it is reasonable to expect that the study will be completed by 2010.

In addition, the City participates in BEACON (Beach Erosion Authority for Clean Oceans and Nourishment), a local task force comprised of representatives from local, state, and federal government agencies whose goal is to develop a regional beach replenishment program. The Commission recently approved CDP No. 4-02-074 (BEACON), for implementation of a five-year opportunistic beach replenishment project at Carpinteria City Beach and four other sites in Santa Barbara and Ventura Counties. The approved project includes annual deposition of up to 50,000 cu. yds. of sand from flood control basins, Carpinteria Marsh, Caltrans landslide material, and miscellaneous construction sites at Carpinteria City Beach. The material may be placed below the Mean High Tide Line (MHTL), as a sand dike on the back beach, or as a level, approximately 175 foot wide berm located seaward of the proposed seasonal sand berm (**Exhibits 6 and 7**). Although the BEACON beach replenishment project will augment sand supply, and therefore lessen the potential for catastrophic erosion and storm damage at the subject site, it will not serve the same protective purpose as the seasonal sand berm proposed in this application. In addition, source material for the BEACON project is obtained on an opportunistic basis, and can include material that contains a higher percentage of fines (up to 25% of the total) than is suitable for a beach berm; the availability of suitable materials for construction of the berm could not be assured under the BEACON program.

B. Hazards and Shoreline Processes

Section **30235** of the Coastal Act states:

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

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

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.***
- (2) Assure stability and structural integrity, and neither create 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 30235 of the Coastal Act allows for the construction of a shoreline protective device when necessary to protect existing development or to protect a coastal dependent use. In addition, Section 30253 of the Coastal Act mandates that new development provide for geologic stability and integrity and minimize risks to life and property.

The proposed project is for the annual construction and removal of an approximately 1,500 ft. long, 10-12 ft. high sand berm on Carpinteria City Beach involving approximately 26,000 cu. yds. of grading (13,000 cu. yds. of excavation and 13,000 cu. yds. of fill). The proposed project includes construction of the berm prior to the winter storm season, maintenance of the berm during the winter, and removal of the berm in the spring. The berm will be constructed on the back portion of the sandy beach immediately seaward of the existing residential development as shown on Exhibit 3. Approximately 13,000 cu. yds. of sand to construct the berm will be excavated (pushed by scraper/bulldozers) from the beach seaward of the proposed berm location. Periodic maintenance of the berm will involve pushing sand from the beach immediately seaward of the berm back onto the berm with bulldozers. In the event that the berm is completely destroyed by wave action during the winter storm season, then the berm would be reconstructed. The City proposes to remove the berm and restore the beach to its pre-development profile each spring. Berm removal/demolition activity would involve using a bulldozer to evenly redistribute the berm sand immediately seaward of the berm's location.

The City Beach is backed by numerous private residences (single family residences, condominiums, and apartments) located on the seaward side of Sandyland Avenue, public parking facilities (located at several street ends), and a public restroom facility. The City has indicated that in recent years, during the winter storm season, wave action has resulted in damage to the existing private residences and public amenities (including public streets, parking lots, and a restroom facility) located on the back

portion of Carpinteria City Beach. The proposed sand berm is intended to protect existing development on the project site from damage from wave action during the winter storm season. In a letter dated September 29, 2005, the City states that:

[I]n 1987 and again in 1995, large wave events caused significant damage in Carpinteria. The 1987 event was characterized by locally generated high frequency storm waves driven by strong onshore wind. The home on 4709 Sandlyland Road was knocked off its foundation by surf. This occurred during the period of one high tide.

...

In early December of 1995, the winter protection berm had not yet been built when a severe wave event occurred. Hurricane force winds off of the southern Oregon and California Coast generated twenty foot surf off of the Carpinteria Beach. This resulted in several hundred thousands of dollars of damage to residential properties and public beach access improvements. This unfortunate event provided us with an example of the potential for damage the City Beach possesses when unprotected. Further damage would have occurred, however, emergency crews went to work to erect the berm.

The Commission has approved construction of a seasonal sand berm (as proposed by this application) on Carpinteria City Beach since 1995 (CDP Nos. 4-95-207, 4-00-199, 4-01-155). Although no detailed wave uprush or engineering studies were provided for the properties in question, the Commission has found that where existing beachfront development is in danger from erosion, soft solutions such as beach berms generally have fewer significant environmental impacts than revetments, seawalls, or other similar structures. In its approval of these permits, the Commission did find that the proposed sand berm was an environmentally preferable alternative to provide for protection of existing development in comparison to the construction of “hard” solutions such as the construction of a rock revetment or seawall. However, the Commission also found that disturbance from construction, maintenance, and demolition of the berm on an annual basis would still result in some potential adverse effects to the habitat resources on site.

In its application for CDP 4-01-155, the City submitted a document titled, “Winter Protection Berm – Feasibility Study,” prepared by MNS Engineers and dated July 26, 2001. The four-page report examines five alternatives, as follows:

- 1) ***A permanent winter berm created from imported sand and vegetated with native plants;***
- 2) ***A seasonal berm constructed with imported sand;***
- 3) ***A permanent berm constructed with native sand and vegetated with native plants;***
- 4) ***A seasonal berm constructed with native sand;***
- 5) ***No protection berm.***

In evaluating these alternatives, the report considers several factors, including monetary cost, environmental cost and impact, public convenience, public acceptance, and overall feasibility.

The report discusses the feasibility of a permanent berm and finds the following:

Placing a permanent berm even if it were only 10-12 feet high, would create such an imposing physical barrier along the beach, that the value of the beachfront properties and the rental income that is generated by some of these homes would likely be diminished...a lower height sand berm...would result in lower than acceptable protection from winter storms.

In addition to the view obstruction, a permanent berm would affect the aesthetic character of the City's beach and reduce its wide open nature, which has become part of its identity for the many tourists coming to the area, as well as local residents. In order to provide adequate public beach access, a permanent sand berm would need to be lowered at each street end and thus compromising its integrity as a protective barrier.

The report further states that

Based on (site) history, the beach area can be expected to experience substantial wave activity capable of eroding a sand berm on average of every three years. With this in mind, any of the benefits anticipated by the planting of a permanent dune would be lost by such winter storm and wave activity. Clearly, plant establishment of less than five years would not provide adequate defense...

The report also discusses the disadvantages of using imported sand to create either a permanent or temporary berm. The report states that

The environmental impact of using imported sand is expressed in the trucking and equipment needed for hauling the material and placing the material. The disturbance to the beach area would be greater than in the case of using the native sand material, along with the increased exhaust emissions that the trucks would put into the air and the environmental impacts to the 'take' site. Extended impacts to the coastline by bringing in non 'beach' sand are also a possibility, but long distances between Carpinteria Beach and the take site would drive project cost (sic) to unacceptable levels.

Cost data included in the report indicated that imported sand would cost from \$82,680 to \$505,700 depending on the amount imported and whether washed sand or sand from Guadalupe Dunes was used.

The report makes the following conclusion:

Taking into consideration all of the different concerns and factors contributing to the construction of any protective sand berm, which include cost, public sentiment, environmental, monetary, budgetary; it is our determination that the construction of a temporary, seasonal sand berm is the most effective and feasible means, at this time, to provide an adequate level of protection from the winter wave action.

As detailed above, the MNS report concludes that a temporary, seasonal sand berm, such as proposed in this application, is the most feasible means to protect beachfront development from wave action. The Commission notes, however, that the MNS report does not provide a detailed evaluation of all long-term solutions, and does not evaluate the feasibility of a dune system in conjunction with concurrent beach replenishment, as

required by Special Condition Three (3) of CDP 4-00-199. The Commission further notes that two documents submitted with the City's application for CDP 4-00-199 (Beach Erosion and Pier Study by Bailard /Jenkins Consultants dated April 1982, and a letter from James Bailard, Ph.D. of BEACON, dated 8/22/00) indicate that a dune system may be feasible in conjunction with a beach nourishment program. As such, the Commission finds that the report submitted by the City regarding potential alternatives to the proposed project is not adequate to determine the feasibility of all long-term alternatives.

The City participates in BEACON (Beach Erosion Authority for Clean Oceans and Nourishment), a local task force comprised of representatives from local, state, and federal government agencies whose goal is to develop a regional beach replenishment program. The Commission recently approved CDP No. 4-02-074 (BEACON), for implementation of a five-year opportunistic beach replenishment project at Carpinteria City Beach and four other sites in Santa Barbara and Ventura Counties. The approved project includes annual deposition of up to 50,000 cu. yds. of sand from flood control basins, Carpinteria Marsh, Caltrans landslide material, and miscellaneous construction sites at Carpinteria City Beach. The material may be placed below the Mean High Tide Line (MHTL), as a sand dike on the back beach, or as a level, approximately 175 foot wide berm located seaward of the proposed seasonal sand berm. Although the BEACON beach replenishment project will augment sand supply, and therefore lessen the potential for catastrophic erosion and storm damage at the subject site, it will not serve the same protective purpose as the seasonal sand berm proposed in this application. In addition, source material for the BEACON project is obtained on an opportunistic basis, and can include material that contains a higher percentage of fines (up to 25% of the total) than is suitable for a beach berm; the availability of suitable materials for construction of the berm could not be assured under the BEACON program.

In addition, the City is actively collaborating with the Army Corps of Engineers (ACOE) on the Carpinteria Shoreline Feasibility Study addressing long-term solutions to protecting beachfront development in Carpinteria. As outlined in the Project Management Plan, prepared by the ACOE, the study will address five alternative means of shoreline protection, including two beach nourishment alternatives that include construction vegetated sand dunes; two artificial submerged reef alternatives that also include construction of vegetated sand dunes; and a reinforced concrete seawall. In their letter accompanying the current application, the City notes that, due to federal funding cuts, progress on the feasibility study has fallen behind schedule. The State of California has proposed, with the approval of the ACOE, that the City use the \$380,000 provided for the feasibility study by the State to hire the United States Geologic Survey (USGS) to conduct baseline studies and computer modeling analyses for the study. The USGS has offered \$100,000 in matching funds to complete the study, titled the Carpinteria Coastal Processes Study. Thus, despite federal funding setbacks, work on the Carpinteria Shoreline Feasibility Study is ongoing. The City estimates that the baseline studies will be completed and modeling analyses will commence by Spring

2006. Although no official timeline exists for completion of the feasibility study, it is reasonable to expect that the study will be completed by 2010.

Given that the MNS report does not provide a conclusive analysis of all feasible alternatives, and given that a detailed study of alternatives is underway and expected to be completed by 2010, **Special Condition Two (2)** requires the final berm approved under this permit to be removed no later than Memorial Day 2010. In addition, **Special Condition Three (3)** requires the City to provide the Executive Director with copies of all reports and documents issued by the ACOE as part of the Carpinteria Shoreline Feasibility Study, and by the USGS as part of the Carpinteria Coastal Processes Study, within thirty (30) days of their receipt. The Commission finds that approving the proposed project for a term beyond the reasonably foreseeable receipt of the completed ACOE study would prevent the Commission from considering all additional information relevant to the its ultimate consideration of the long-term solution to Carpinteria Beach erosion most protective of coastal resources. Therefore, the Commission finds that **Special Conditions Two (2)** and **Three (3)** are necessary to ensure the Commission's ability to receive and consider all relevant information before authorizing permanent annual berm construction.

In addition, the Commission notes that the proposed project will involve approximately 26,000 cu. yds. of grading and the use of construction equipment on the sandy beach. As such, the Commission further notes that the proposed project will result in the potential generation of debris and or presence of equipment and materials that could be subject to tidal action. The presence of construction equipment, building materials, and excavated materials on the subject site could pose hazards to beachgoers or swimmers if construction site materials were discharged into the marine environment or left inappropriately/unsafely exposed on the project site. In addition, such discharge to the marine environment would result in adverse effects to offshore habitat from increased turbidity caused by erosion and siltation of coastal waters. Therefore, in order to ensure that adverse effects to the marine environment are minimized, **Special Condition One (1)** requires the applicant to ensure that no stockpiling or storage of dirt, construction materials, or equipment shall occur on the beach seaward of the proposed berm location and the any and all debris that results from the construction period shall be immediately removed from the sandy beach.

The Commission notes, based on the information submitted by the City of Carpinteria, that the proposed development is located in an area of the Coastal Zone which has been identified as subject to potential hazards from wave action during the winter storm season. As discussed above, the existing private residences and public facilities located along Carpinteria City Beach have previously been subject to substantial damage as the result of storm and flood occurrences--most recently, and perhaps most dramatically, during the 1995 winter storm season. As such, the Commission notes that evidence exists that the project site is subject to potential risks due to storm waves and surges, high surf conditions, erosion, and flooding.

The Commission further notes that although the proposed project will provide some level of protection for the developed portions of the subject site from wave-caused erosion, there remains some inherent risk to development on such sites. The Coastal Act recognizes that certain types of development, such as the proposed project to protect existing structures from storm waves, may involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property. As such, the Commission finds that due to the unforeseen possibility of liquefaction, storm waves, surges, erosion, and flooding, the applicant shall assume these risks as a condition of approval. Therefore, **Special Condition Four (4)** requires the applicant to waive any claim of liability against the Commission for damage to life or property that may occur as a result of the permitted development. The applicant's assumption of risk will show that the applicant is aware of and appreciates the nature of the hazards which exist on the site, and which may adversely affect the stability or safety of the proposed development.

Lastly, the Commission notes that approvals from the Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB) are necessary and serve to further reduce the potential for hazards associated with the project. The City currently has approval from these agencies that extend to January 2006, so approval is in place for this winter season. To ensure that approvals are in place for the construction of the berm in the subsequent years permitted herein, **Special Condition Five (5)** requires the City to submit, prior to commencement of construction of the berm for the 2006-2007 winter season, evidence of final required approval from the Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB). The ACOE and RWQCB approvals shall be valid through Memorial Day 2010.

Therefore, the Commission finds that, for the reasons set forth above, the proposed project, as conditioned, is consistent with Coastal Act Sections 30235 and 30253.

C. Environmentally Sensitive Habitat and Marine Resources

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 Acts 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.***

Section 30231 requires that the biological productivity and quality of coastal waters be maintained. Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. Section 30240 requires that environmentally sensitive habitat areas (ESHAs), as well as areas adjacent to ESHAs and parks and recreation areas, be protected from significant disruption of habitat values.

The proposed sand berm will involve approximately 26,000 cu. yds. of grading on the sandy beach between the backbeach area and the surfzone along Carpinteria City Beach. Although the project site is not a designated environmentally sensitive habitat area (ESHA), it does contain important biological resources. The City's certified Land Use Plan (LUP) classifies "beaches, tidelands, and subtidal reefs" as an important biological resource area and states:

Beaches, tidelands, and subtidal reefs have habitat and recreational value, and are used by both residents and tourists. Human activity in these areas increases stress on the habitats and can inhibit species reproduction and stability.

In addition, Policy OSC-1c of the LUP states:

Establish and support preservation and restoration programs for ESHA, including but not limited to Carpinteria Creek, Carpinteria Bluffs, Carpinteria Salt Marsh, seal rookery, Carpinteria reef, Pismo clam beds and the intertidal zones along the shoreline.

The project site is located immediately onshore from the Carpinteria reef and kelp beds that are designated ESHAs. In addition, the City's biologist has noted that the project site contains habitat for Pismo clams, as discussed below.

In its application for CDP 4-00-199, the City submitted a Biological Analysis by Vince Semonsen, consulting biologist for the City of Carpinteria, dated October 25, 2000. The analysis indicates that the subject beach is known to provide potential habitat for several endangered species and species of concern including: Western Snowy Plover, California grunion, Pismo Clams, and possibly the Globose Dune Beetle. The analysis also indicates that disturbance of the beach habitat from construction, maintenance, and demolition of the proposed berm on an annual basis may result in several potential impacts to biological resources on site and that such impacts may be minimized through proper mitigation measures and monitoring. The report states:

This letter identifies several potential impacts to the fauna known to utilize the Carpinteria City Beach (1,500 lineal feet of beach) during the construction and smoothing of a winter sand berm...Western Snowy Plovers are known to utilize the City Beach. To prevent any possible impacts to the birds a qualified biologist is hired to survey the beach prior to both the winter berm construction and the spring smoothing work...California grunion come on to the City Beach to breed during periods of high tides. This activity is monitored and if a "run" has occurred there is no moving of beach sand for at least a two week period...Pismo clams are found along the beach and appear to be increasing in numbers. During the construction of the sand berm a biologist is onsite watching for any impacts to the clams. The clams generally reside in the surf zone below where the bulldozers will be working and are not expected to be impacted...An evaluation for the presence of the globose dune beetle is recommended and will be conducted just prior to this year's winter work.

The City submitted a second letter from Mr. Semonsen, dated February 28, 2001, reporting the results of biological monitoring before, during, and after the construction of the Winter 2000-2001 berm. The letter states that no Western Snowy Plovers or Pismo Clams were seen, and that construction of the berm avoided grunion runs. The letter also addresses the presence of globose dune beetles:

Prior to the berm work I looked for the endangered globose dune beetle (Coelus globosus), a small, fossorial insect that inhabits coastal dunes of California and Northern Baja California. Several dune beetles were found in the vegetated portions of the beach near the homes and the beach access routes; they were identified as the more common Coelus ciliatus. Dune beetles are found primarily within vegetated dune systems, with the C. ciliatus occupying more disturbed dune systems. The vegetated portions of the City beach were not affected by the berm work.

A letter submitted on February 5, 2002 Mr. Semonsen noted that no Western Snowy Plover were seen prior to construction of the 2001-2002 winter berm, and that

The impacted portion of the City Beach looks to be marginal plover habitat with no back dune area, very little vegetation or beach debris (i.e., driftwood, rock, beach wrack) and lot of human and animal activity. Snowy plovers are not expected to utilize the area and none were seen before the berm construction.

Letters from Mr. Semonsen submitted on April 10, 2003, November 19, 2003, and April 11, 2005 came to similar conclusions regarding Western Snowy Plover. Nonetheless, critical habitat for the Western Snowy Plover is located downcoast from the project site and some potential exists for the plover to be found at the site.

As previously discussed, construction of a seasonal sand berm (as proposed by this application) on Carpinteria City Beach has been approved by the Commission in previous years. In its approval of CDP 4-95-207, CDP 4-00-199, and CDP 4-01-155, the Commission found that the proposed sand berm was an environmentally preferable alternative to provide for protection of existing development in comparison to the construction of “hard” solutions such as the construction of a rock revetment or seawall.

However, the Commission also found that disturbance from construction, maintenance, and demolition of the berm on an annual basis would still result in some potential adverse effects to the habitat resources on site. Prior permits authorizing the sand berm contained special conditions that required the City to evaluate long term solutions and alternatives to the proposed berm as part of any subsequent berm construction application. As described above, **Special Conditions Two and Three (2 and 3)** limit the duration of this permit to no more than five years and require the City to provide information regarding their study of other project alternatives.

The Commission notes that the proposed project has been previously implemented in a manner to minimize adverse effects to the sensitive beach and marine resources on the subject site. However, the Commission also notes that the proposed project may result in potential adverse effects to surrounding habitat due to unintentional disturbance from construction equipment and grading activity. Therefore, to ensure that all recommendations of the environmental consultant are properly implemented, and to ensure that any potential adverse effects to beach and marine environment are minimized, **Special Condition One (1)** requires that a qualified environmental resource specialist shall conduct a survey of the project site (donor site and receiver site) each day prior to commencement of any berm construction, maintenance, or demolition activity to determine whether any Western Snowy Plovers, Grunion, Pismo Clams, or any other sensitive wildlife species are present. In the event that any of the above species or other sensitive wildlife species are present on the project site, the environmental resource specialist shall require the applicant to cease work and immediately notify the Executive Director to determine an appropriate strategy to minimize any potential impacts to wildlife. The monitor shall have the authority to require the applicant to cease work should any breach in permit compliance occur, or if any unforeseen sensitive habitat issues arise.

In addition, the sandy beach on the subject site has been identified as a potential grunion spawning location. Construction of the proposed berm is expected to occur outside the seasonally predicted run period and egg incubation period of the California grunion and will not result in any adverse effects to grunion spawning activities. However, maintenance activities and removal of the berm the following spring may result in potential adverse effects to grunion spawning activities on site. In order to ensure that reconstruction, maintenance, or removal of the proposed sand berm does not adversely affect grunion spawning events, **Special Condition One (1)** also requires that in the event that construction, maintenance, and/or berm removal activity will occur during the seasonally predicted run period and egg incubation period for California

grunion as identified by the California Department of Fish and Game, then the environmental resource specialist shall be present on the project site each night from one hour before the beginning of each predicted grunion run until one hour after the end of each run to monitor the presence of any grunion present on the site. If any adult grunion are present on the project site beach, then no berm construction/removal activities shall be allowed within 100 ft. of any area (measured laterally along the beach and extending from the back of the beach to the water's edge) where grunion were observed until after the next predicted grunion run in which no adult grunion have been observed on the project site and it has been determined by the environmental resource specialist that all previously deposited grunion eggs have successfully incubated (allowing juvenile grunion to return to the ocean) or that the previously deposited eggs are no longer viable, or unless otherwise approved by the Executive Director. The environmental resource specialist will immediately notify the Executive Director after each monitored run whether grunion were found to be present.

In addition, the Commission notes that the proposed project will involve approximately 26,000 cu. yds. of grading and the use of construction equipment on the sandy beach. As such, the Commission further notes that the proposed project will result in the potential generation of debris and or presence of equipment and materials that could be subject to tidal action. The presence of construction equipment, building materials, and excavated materials on the subject site could pose hazards to beachgoers or swimmers if construction site materials were discharged into the marine environment or left inappropriately/unsafely exposed on the project site. In addition, such discharge to the marine environment would result in adverse effects to offshore habitat from increased turbidity caused by erosion and siltation of coastal waters. Therefore, in order to ensure that adverse effects to the marine environment are minimized, **Special Condition One (1)** requires the applicant to ensure that no stockpiling or storage of dirt, construction materials, or equipment shall occur on the beach seaward of the proposed berm location and the any and all debris that results from the construction period shall be immediately removed from the sandy beach.

Lastly, the Commission notes that approvals from the Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB) are necessary and serve to further reduce potential impacts to sensitive habitat and marine resources. The City currently has approval from these agencies that extend to January 2006, so approval is in place for this winter season. To ensure that approvals are in place for the construction of the berm in the subsequent years permitted herein, **Special Condition Five (5)** requires the City to submit, prior to commencement of construction of the berm for the 2006-2007 winter season, evidence of final required approval from the Army Corps of Engineers (ACOE) and the Regional Water Quality Control Board (RWQCB). The ACOE and RWQCB approvals shall be valid through Memorial Day 2010.

As conditioned to monitor the project site for the presence of sensitive species, to cease work or avoid working in areas where sensitive species are identified, to control construction materials and equipment, and to obtain all other required permits, the Commission finds that the proposed project will minimize impacts to the beach and

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

D. Public Access and Visual Resources

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.

In addition, Section **30251** of the Coastal Act states that:

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

Coastal Act sections 30210 and 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. In addition, Coastal Act Section 30251 requires that visual qualities of coastal areas shall be considered and protected, landform alteration shall be minimized, and where feasible, degraded areas shall be enhanced and restored.

The project site is located on the back portion of the City of Carpinteria Beach. Public access is available along the entire approximately 1,500 ft. length of the project area. The proposed project involves the construction of a sand berm immediately seaward of the existing residential development and public street ends located on site. The crest of the proposed berm will not extend above 18 ft. in elevation above mean sea level (approximately 10-12 ft. above the typical ground elevation of the sandy beach).

The proposed berm will result in some limited temporary adverse effects to public access and views. Beachgoers will be required to traverse the sand berm, approximately 10-12 ft. higher than the elevation of the backbeach, in order to access

the beach. However, the Commission notes that access over the proposed berm will not be blocked or result in an impassable barrier for the average beachgoer, and that the berm will not fully occupy the sandy beach. Beach area will be available for pass/repass and recreation, with the possible exception of winter periods when storm wave attack steepens the beach profile and erodes the face of the berm. These conditions would be of a temporary nature only. In addition, the City constructs “ramped” areas to the top of the berm at several of the public street ends and parking lots in order to facilitate public access.

Public views of the beach from public viewing areas located along city streets will be limited by the proposed berm. However, the proposed project is temporary in nature and includes removal of the berm each spring. In order to ensure that any potential adverse effects to public views and access are minimized, **Special Condition Two (2)** has been required to ensure that the berm is removed each year prior to Memorial Day, unless additional time is allowed by the Executive Director for good reason. Removal of the proposed berm involves redistributing sand seaward of the berm and restoring the beach to its pre-development profile.

Therefore, for the reasons set forth above, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30210, 30211, and 30251 of the Coastal Act.

E. CEQA

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

The Commission finds that, the proposed project, as conditioned will not have significant adverse effects on the environment, within the meaning of the California Environmental Quality Act of 1970. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA and the policies of the Coastal Act.