# CALIFORNIA COASTAL COMMISSION

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Staff:

**BP-SD** 

Staff Report: Hearing Date: August 20, 2002

September 9 -13, 2002

# AMENDMENT REQUEST STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-90-219-A9

RECORD PACKET COPY

Applicant:

City of Carlsbad/

California Department of

Fish and Game

Agent: C. Raysbrook

Original

Description:

Restoration/enhancement of Batiquitos Lagoon to create tidal marine habitat, including the following specific actions: up to 3.7 million cubic yards of dredging to reconfigure the lagoon to restore tidal flows and aid in maintaining an open lagoon mouth; disposal of suitable dredged materials on Encinas Creek Beach; construction of new inlet jetties at the mouth of the lagoon to create a permanently open lagoon mouth; demolition and reconstruction of southbound lanes of Carlsbad Blvd.; erosion-protection improvements to the Carlsbad Blvd., AT & SF Railway and Interstate Highway 5 bridges; creation of up to five California least tern nesting sites.

Proposed Amendment Remove approximately 95,000 cubic yards of lagoon bottom (sand) from western and central basins of lagoon and place the sand on three existing least tern-nesting sites located in western and eastern basins of the lagoon.

Site:

Batiquitos Lagoon between the ocean and El Camino Real, Carlsbad, San

Diego County.

### Summary of Staff's Preliminary Recommendation:

Staff is recommending approval of the proposed amendment with conditions to allow dredge of up to 95,000 cubic yards of lagoon bottom (sand) within the western and central basins of Batiquitos Lagoon. Sediments are transferred into the lagoon from both upstream development sites and through tidal action, and continually accumulate in the lagoon. As a result of the reduced tidal prism, lagoon resources have become stressed and the proposed dredging is required to assure the continued health of the lagoon.

The applicants are developing a long-term maintenance program to address preservation of the resources that were restored pursuant to this permit. Although the original approval recognized the need for maintenance, no such program was included in the permit. Currently, the resources are being adversely affected by sedimentation coming from various upstream sources out of the coastal zone and beach sands washing in through the lagoon mouth. To date, this has been addressed in annual amendment requests to perform maintenance dredging. The applicants, in conjunction with resource agency representatives

and commission staff, are working on a long-term maintenance plan. The plan will be presented to the Coastal Commission for its review and approval when complete.

Substantive File Documents: City of Carlsbad Certified East Batiquitos Lagoon/Hunt Properties segment; Batiquitos Lagoon Enhancement Project Final EIR/EIS (City of Carlsbad and U.S. Army Corps of Engineers); Batiquitos Lagoon Enhancement Project Draft Preliminary Design Report (February, 1988), Coastal Development Permit 6-90-219 and amendments, CDP 6-01-80.

#### PRELIMINARY STAFF RECOMMENDATION:

I. MOTION:

I move that the Commission approve the proposed amendment to Coastal Development Permit No. 6-90-219 pursuant to the staff recommendation.

#### **STAFF RECOMMENDATION OF APPROVAL:**

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment 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 A PERMIT AMENDMENT:**

The Commission hereby approves the coastal development permit amendment on the ground that the development as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment 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 amended development on the environment, or 2) there are no feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the amended development on the environment.

# II. Special Conditions.

The permit is subject to the following conditions:

- 1. <u>Timing of Dredging</u>. Prior to the issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, final plans which incorporate the following:
  - a. <u>Sensitive Species/Timing</u>. To avoid potential impacts to the California least tern and western snowy plover breeding period, dredging may only occur between September 15 and March 1, of any year. However, if all least terns and snowy plovers have vacated the nesting sites prior to Labor Day, dredging operations may begin immediately after Labor Day.

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

- 2. <u>Post-Dredging Plans</u>. Within 60 days of the dredging of the lagoon, final dredging and deposition plans shall be submitted which indicate:
  - a. The lagoon has been dredged consistent with the "as built" plans, dated 11/18/94 by the City of Carlsbad, that were approved in the Batiquitos Lagoon Enhancement Plan.
  - b. The location and amount of sand dredged and placed on each least tern-nesting site.
- 3. <u>Term of Permit/Amount of Dredging</u>. This coastal development permit authorizes dredging and disposal of up to 95,000 cu.yds. of material as approved herein. Dredging may continue, outside the restricted breeding season, until this volume of material has been removed.
- 4. <u>Prior Conditions of Approval.</u> All other terms and conditions of the original approval of Coastal Development Permit #6-90-219, as amended, not specifically modified herein, including the required monitoring reports, shall remain in full force and effect.
- 5. Other Permits. Prior to the commencement of construction, the applicant shall submit copies of all other required state or federal discretionary permits for the proposed project. Any mitigation measures or other changes for the project required through said permits shall be reported to the Executive Director and shall become part of the project. No changes to the project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.
- 6. <u>Invasive Species.</u> Prior to the commencement of dredging, the applicant shall provide evidence that the proposed dredging of Batiquitos Lagoon shall occur without the risk of spreading the invasive green alga *Caulerpa taxifolia* as follows:
  - a. Not earlier than 90 days before nor later than 30 days prior to commencement or recommencement of any development authorized under this coastal development permit, the applicant shall undertake a survey of the project area (including the dredging area, anchoring areas and any other areas where the bottom could be disturbed by project activities) and a buffer area at least 10 meters beyond the project area to determine the presence of the invasive alga Caulerpa taxifolia. The survey shall include a visual examination of the substrate.
  - b. The survey protocol shall be prepared in consultation with the Regional Water Quality Control Board, the California Department of Fish and Game, and the National Marine Fisheries Service.

- c. Within five (5) business days of completion of the survey, the applicant shall submit the survey:
  - 1. For the review and written approval of the Executive Director; and
  - 2. To the Surveillance Subcommittee of the Southern California Caulerpa Action Team (SCCAT). The SCCAT Surveillance Subcommittee may be contacted through William Paznokas, California Department of Fish & Game (DFG) (858/467-4218) or Robert Hoffman, National Marine Fisheries Service (NMFS) (562/980-4043).
  - 3. If *Caulerpa* is found, then the NMFS and DFG contacts shall be notified within 24 hours of the discovery.
- d. If Caulerpa is found, prior to the commencement of dredging the applicant shall provide evidence to the Executive Director for review and written approval documenting either that the Caulerpa discovered within the project and/or buffer area has been eradicated or that the dredging project has been revised to avoid any contact with Caulerpa. No changes to the dredging project shall occur without a Coastal Commission approved amendment to this coastal development permit unless the Executive Director determines that no amendment is legally required.

# III. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description/Purpose/History. The applicant proposes to dredge approximately 95,000 cubic yards of lagoon bottom (mostly sand) from the western and central basins of Batiquitos Lagoon and place the sand on three existing least tern-nesting sites (titled W-1, E-2 & E-3) located in the western and eastern basins of the lagoon. W-1 is located in the western basin of the lagoon and will receive approximately 12,000 cubic yards of sand. E-2 and E-3 are located in the eastern Basin and can accommodate approximately 52,000 cubic yards and 31,000 cubic yards respectively. While in previous maintenance dredge projects the sand has mostly been placed on local area beaches surrounding the lagoon mouth, the applicant has indicated that it is critical that the nesting sites receive sand with this dredge and that area beaches currently do not have the capacity to receive sand.

The purpose of the project is to maintain the tidal lagoon opening and restore the necessary tidal prism to maintain lagoon health. The applicant proposes to complete the project outside the California least tern/Western snowy plover nesting season as the disposal sites are nesting sites for endangered/threatened avian species as well as other birds. Moreover, the entire lagoon area is used for foraging by these and other sensitive species throughout the nesting season. All staging areas are proposed within the perimeters of the project itself and the dredge methodology is the same as that approved in the last three dredge maintenance projects (CDP #6-90-219-A6, A7 and A8).

In the original permit, the Commission approved the restoration of Batiquitos Lagoon, the basic program being the restoration of a marine habitat regime in the lagoon. In order to create and maintain this marine habitat type, a permanently open lagoon mouth was required. The creation of the open mouth restored continuous tidal action and the former marine ecosystem, without significant adverse impacts to established habitat values within the project limits. In addition, the permanently open lagoon mouth helps to control the sediment load remaining in the lagoon and aids in flood control.

Although the City of Carlsbad has a certified local coastal program, the current maintenance dredging project is being processed as an amendment to the original, Commission-issued coastal development permit. In addition, the proposed project will occur within Batiquitos Lagoon, where the Commission retains jurisdiction. As such, the standard of review is Chapter 3 policies of the Coastal Act.

2. <u>Sensitive Resources</u>. Sections 30230, 30231 and 30233 of the Coastal Act apply to the proposal and state in part:

#### Section 30230

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

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

# **Section 30233**

- (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:
- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.

- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (3) In wetland areas only, entrance channels for new or expanded boating facilities; and in a degraded wetland, identified by the Department of Fish and Game pursuant to subdivision (b) of Section 30411, for boating facilities if, in conjunction with such boating facilities, a substantial portion of the degraded wetland is restored and maintained as a biologically productive wetland. The size of the wetland area used for boating facilities, including berthing space, turning basins, necessary navigation channels, and any necessary support service facilities, shall not exceed 25 percent of the degraded wetland.
- (4) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.
- (5) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (6) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.
  - (7) Restoration purposes.
  - (8) Nature study, aquaculture, or similar resource dependent activities.
- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

Section 30233 requires that dredging of open coastal waters shall only be permitted when there is no feasible less environmentally-damaging alternative, where feasible mitigation measures have been provided to minimize adverse environmental effects, and where such dredging is one of the permitted uses cited. The Commission has previously found in approving the original enhancement plan, that the Batiquitos Lagoon Enhancement Plan represented a restoration project for the lagoon and as such, the permitted use was consistent with Section 30233. Because the proposed maintenance dredging is necessary to assure the

continued success of the restoration of Batiquitos Lagoon, it is a permitted use under Section 30233. It is not possible to maintain adequate tidal flushing through any means than dredging the lagoon. As explained below, the proposed dredging will affect some eelgrass beds. The eelgrass beds that are located in the area that is proposed to be dredged cannot be preserved without adversely affecting tidal flushing, which would limit the effectiveness of the overall restoration project. The proposed dredging is therefore the least environmentally damaging alterative. With respect to the proposed dredging of the lagoon in this amendment, no new impacts will occur to sensitive habitat areas covered by the restoration plan.

Section 30233(b) of the Coastal Act provides that suitable dredged materials should be placed on the beach whenever possible for public access and recreational purposes. While the dredged materials are suitable for beach disposal, none are proposed for beach deposition with this request for two reasons. The applicant indicates that: 1) area beaches do not need the sand at this time because two recent beach deposition projects in the area have placed significant amounts of sand on these beaches (SANDAG Regional Sand Replenishment Project and dredging of Agua Hedionda Lagoon); and 2) it is critical that sand be placed on tern nesting sites. The nesting sites were created as part of the original restoration project and placement of the dredged sand on the sites is necessary to maintain them as viable nesting sites. Typically, the nesting sites are cleared of vegetation as nesting birds desire a sandy substrate. Currently, sites E-2 and E-3 are in a muddy condition resulting from the clearance of vegetation (mostly weeds) and shortage of sand. The added sand would be placed on the sites approximately 2 or 3 feet high over the muddy surface to provide a desirable surface for the birds. The applicant indicates that the nesting sites will not need sand in the near future after this dredge and that sand dredged in subsequent near term dredges will be placed on area beaches. Based on the sand being needed for the benefit of endangered species, the Commission finds that the project is consistent with Section 30233 of the Coastal Act.

As noted, a number of endangered bird species reside and overwinter in the lagoon. According to the applicant, the majority of species which use the staging areas and discharge sites have immediately adjacent sites for loafing and feeding. Because of the timing of the project, no birds are expected to require the sites for nesting during the dredging operation. Mammals are only found on site for foraging purposes and also have adjoining sites for that purpose. Vegetation on the nesting sites is regularly controlled and the habitat for reptiles is outside the area slated for sand placement. Special Condition #1 addresses the timing of construction to assure that impacts to endangered avian species do not occur.

The basins of Batiquitos Lagoon also contain some eelgrass beds, a protected resource under Sections 30230 and 30231 of the Coastal Act; eelgrass provides habitat for many fish and invertebrates. Eelgrass was introduced to Batiquitos Lagoon as one component of the original restoration plan. It was proposed as an experimental pilot program (since there is no indication that eelgrass occurred naturally in Batiquitos Lagoon in the past) and not as part of, or under any requirement for mitigation credits associated with other aspects of the overall restoration plan. The experimental eelgrass transplanting program has flourished in several areas of the lagoon, including some scattered patches within the proposed dredging area. However, the original restoration plan anticipated the need for maintenance dredging to assure maintenance of the tidal prism and overall health of the lagoon resources. Thus, while eelgrass was planted in the lagoon as an experiment, it was not intended that eelgrass, if it

flourished, would impact the need to maintain "as built" depths within the lagoon, nor provide mitigation for such if there were impacts.

Initially, the applicant planned to dredge around the pockets of eelgrass, but such a procedure would not be successful in maintaining the overall health of the entire lagoon ecosystem, including eelgrass resources. It would leave scattered sandbars/hummocks supporting eelgrass within the tidal channel, which cause turbulent flows, poor hydraulics and faster accretion of sediments in a constricted channel. The loss of small portions of existing eelgrass is necessary to assure the long-term health of the remaining eelgrass, along with all the other restored wetland resources. The Commission staff ecologist has reviewed the proposal and agrees with this determination. Thus, eelgrass resources existing within the defined areas of maintenance dredging are not considered significant vegetation, and the removal of same as part of this development proposal does not generate a mitigation requirement.

The applicant is proposing to remove a maximum of 95,000 cu.yds. of deposited sands. This permit will allow dredging to continue until that volume is reached, recognizing that, due to beach and breeding seasonal restrictions, this may take more than one winter season. In the past, correspondence from other concerned agencies has indicated an interest in obtaining a long-term dredging approval. Moreover, documentation provided in this application asserts that significant amounts of sand are deposited annually; this is expected to continue, such that the removal of 95,000 cu.yds. of sand will only be effective as a short-term measure. However, since a long-term permit has not been sought to date and is not under review at this time, Special Condition #3 notifies the applicant that this approval is limited to the removal of no more than 95,000 cu.yds. of sand. The applicants, other resource agencies, and Commission staff are working towards developing a long-term maintenance program to assure continuing success of the restoration which has occurred. Future dredging will require review and approval by the Commission through either a separate coastal development permit or a further amendment to this permit. Also, Special Condition #4 requires that all other terms and conditions of the original approval of Coastal Development Permit #6-90-219 remain applicable. Special Condition #5 requires copies of all other required state or federal discretionary permits for the proposed project and requires an amendment if changes occur from these reviews.

A current concern affecting Agua Hedionda Lagoon in Carlsbad is the eradication of the invasive green alga, *Caulerpa taxifolia* (referred to hereafter as Caulerpa) that has been discovered within inner Agua Hedionda Lagoon. On August 7, 2000 the Executive Director issued an emergency permit (6-00-99-G) regarding the eradication of Caulerpa found in a small area of the inner lagoon. The program included placement of tarps over the treated sectors and capping the areas to preclude regrowth.

Because of the grave risk to native habitats, in 1999 Caulerpa was designated a prohibited species in the United States under the Federal Noxious Weed Act. AB 1334, enacted in 2001 and codified at California Fish and Game Code Section 2300, forbids possession of Caulerpa. In June 2000, Caulerpa 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. Other infestations are likely. Although a tropical species, Caulerpa has been shown to tolerate water temperatures down to at least 50° F. Although warmer southern California

habitats are most vulnerable, until better information if available, it must be assumed that the whole California coast is at risk. All shallow marine habitats could be impacted.

In response to the threat that Caulerpa 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 infestations in Southern California. The group consists of representatives from several state, federal, local and private entities. The goal of SCCAT is to completely eradicate all Caulerpa infestations. If Caulerpa were allowed to reproduce unchecked within area lagoons, sensitive eelgrass beds and the wildlife that depend upon them would be adversely impacted. Therefore, eradication of Caulerpa would be beneficial for native habitat and wildlife. To date, however, Caulerpa was not found in Batiquitos Lagoon. In order to assure that the proposed project does not cause the dispersal of Caulerpa, the Commission requires Special Condition #6. Special Condition #6 requires the applicant, prior to dredging, to survey the project area (which includes the dredged area, anchoring areas, and any other areas where the bottom could be disturbed by project activities) for the presence of Caulerpa. If Caulerpa is found in the project area, then prior to commencement of any dredging, the applicant must provide evidence that the Caulerpa within the project site has been eradicated (the applicant could seek an emergency permit from the Executive Director to authorize the eradication) or that the dredging project has been revised to avoid any disturbance of Caulerpa. If revisions to the project are proposed to avoid contact with Caulerpa, then the applicant shall consult with the local Coastal Commission office to determine if an amendment to this permit is required.

In summary, the Commission finds the project is necessary maintenance dredging to restore tidal prism to Batiquitos Lagoon to assure success of previously approved restoration efforts. The above conditions are proposed to insure that the subject amendment will be consistent with the required restoration plan and the Coastal Act. Conditions address the timing of construction to protect sensitive species nesting. In this particular case, dredged sand is being placed on degraded least tern nesting islands in stead of the beach. Special Condition #1 requires that to avoid potential impacts to the California least tern and western snowy ployer breeding period, dredging can only occur between September 15 and March 1 of any year. Special Condition #2 requires that within 60 days of the dredging of the lagoon, final dredging plans shall be submitted which indicate that the lagoon has been dredged consistent with the final plans that were approved in the Batiquitos Lagoon Enhancement Plan. Special Condition #6 requires a survey for the invasive aquatic plant species caulerpa taxifolia prior to dredging. The condition requires that if any caulerpa is discovered, the caulerpa must either be eradicated or the dredging must be modified to avoid all contact with caulerpa. This is necessary to assure the proposed dredging does not contribute to the dispersal of any caulerpa taxifolia that may be present in the lagoon. The proposed dredging is a permitted use under Section 30233 of the Coastal Act and as conditioned, no adverse impacts to sensitive coastal resources is anticipated. Therefore, the Commission finds the proposed amendment, as conditioned, is consistent with Section 30230, 30231 and 30233 of the Coastal Act.

3. <u>Local Coastal Planning</u>. Section 30604 (a) requires that a coastal development permit shall be issued only if the Commission finds that the permitted development will not prejudice the ability of the local government to prepare a Local Coastal Program (LCP) in

conformity with the provisions of Chapter 3 of the Coastal Act. In this case, such a finding can be made for the proposed development, with the inclusion of the attached conditions.

The Commission approved CDP #6-90-219 for enhancement of Batiquitos Lagoon. A critical key to success of the approved enhancement plan is to maintain an open lagoon mouth and specified tidal prism. Beach sands and sediments have accumulated within the west and central basins which now threaten the enhancement efforts due to the reduction in the tidal prism. Approval of the proposed project to remove these sediments/sands is consistent with previous Commission action on the original project. Therefore, approval of the proposed amendment, as conditioned, is consistent with Chapter 3 policies of the Coastal Act.

4. Consistency with the California Environmental Quality Act (CEQA). Section 13096 of the Commission's administrative regulations requires Commission approval of a coastal development permit or amendment to be supported by a finding showing the permit or permit amendment, 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.

As conditioned, the proposed amendment is consistent with the resource protection of the Coastal Act. Mitigation measures, in the form of seasonal restrictions and a requirement to survey for *caulerpa taxifolia* prior to dredging, will avoid all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed amendment, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act to conform to CEQA.

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# **Batiquitos Lagoon Dredging Areas**

