ALIFORNIA COASTAL COMMISSION

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STAFF REPORT AND RECOMMENDATION

ON CONSISTENCY DETERMINATION

Consistency Determination No. CD-093-9		
Staff:	JRR-SF	
File Date:	8/6/9 8	
45th Day:	9/20/98	
60th Day:	10/5/98	
Commission Meeting:	9/10/98	

FEDERAL AGENCY: CORPS OF ENGINEERS

DEVELOPMENT LOCATION:

Lower Newport Bay and LA-3, an Environmental Protection Agency Interim Ocean Disposal Site (Exhibits 1, 2 and 3)

DEVELOPMENTDESCRIPTION:Maintenance dredging with ocean disposal (Exhibit 4)

SUBSTANTIVE FILE DOCUMENTS:

1. Draft Environmental Assessment, Maintenance Dredging at Lower Newport Bay Harbor, Orange County, California, U.S. Army Corps of Engineers, Los Angeles District, August, 1998

EXECUTIVE SUMMARY

The Corps of Engineers submitted a consistency determination for its proposed maintenance dredging of Lower Newport Bay Harbor. The Corps proposes to dispose of material dredged from the estuary at LA-3, an Environmental Protection Agency (EPA) designated interim ocean disposal site.

Newport Bay Harbor is a heavily used recreational boating facility. Sediment has accumulated in the federal channels and is interfering with this boating activity. The proposed dredging is necessary to protect navigational safety. Therefore, the project is consistent with the recreational boating policies of the California Coastal Management Program (CCMP).

The Corps proposes to dredge 103,190 to 211,026 cubic meters of sediment from the lower portion of the Upper Bay Channel and dispose of that material at LA-3, an EPA approved interim ocean disposal site. However, the Corps has not included the necessary analysis of sediment chemistry, toxicity, and bioaccumulation with its consistency determination for this project. The Corps has collected sediment and initiated the chemical tests with the hope that the data will demonstrate that additional toxicity and bioaccumulation tests are not necessary. The Corps expects to have the complete data by mid-September. However, without any data, the Commission cannot evaluate the project for consistency with the marine resource and water quality policies of the CCMP. Therefore, the Corps' consistency determination lacks sufficient information to determine the project's consistency with the water quality and habitat policies of the CCMP.

The project area supports habitat for the California brown pelican and the California least tern, both federally listed endangered species. The dredging will not occur during the tern nesting season and will not affect this species. However, brown pelicans forage in this area all year long. Since the sediment proposed for dredging could contain contaminants, the project could result in resuspension of these pollutants and their accumulation in the tissue of prey species for the pelican. Thus the dredging could adversely affect this listed species. However, since the Corps has not completed its sediment testing, the Commission cannot fully assess the impact to endangered species. Therefore, the Corps' consistency determination lacks sufficient information to evaluate the project for consistency with the habitat policy of the CCMP.

The proposed project includes disposal of sediment in an area that will not support beach replenishment. The Corps has evaluated the physical characteristics of this sediment and determined that material dredged from the Lower Newport Bay Harbor is too fine to benefit sand resources. Therefore, the project is consistent with the sand supply policy of the CCMP.

STAFF SUMMARY AND RECOMMENDATION:

I. Project Description.

The Corps proposes to dredge a minimum of 103,190 cubic meters to a maximum of 211,026 cubic meters of material within the authorized channel configurations, from

Pacific Coast Highway Bridge to the Main Channel junction (Exhibit 4). The Corps proposes to dispose of this material at the EPA approved LA-3, an interim ocean disposal site (Exhibit 3). Specifically, the proposed project consists of dredging a combined 103,190 cubic meters from areas 1, and 2, and 36,328 cubic meters from area 3 of the Upper channel; and 71,518 cubic meters from the Main Channel junction with the Upper Bay (Exhibit 4). The combined maximum total of proposed dredged material is approximately 211,026 cubic meters.

Dredging and disposal operations are expected to be performed by either cutterhead hydraulic dredge, hopper dredge, or mechanical dredge (barge-mounted cranes with clamshell or bucket). Unless significant environmental concerns are identified for a particular method of dredging or disposal, the type of dredge to be used will be left to the discretion of the contractor. Dredging is scheduled to occur between October 1, 1998, and March 30, 1999.

The proposed project calls for the disposal of 103,190 cubic meters to 211,026 cubic meters at LA-3, an interim ocean dredged material disposal site designated by EPA. The LA-3 site has been historically used for disposal of dredged material from upper Newport Bay and Newport Harbor. The LA-3 ocean disposal site is located approximately 4 miles southwest of the Newport Bay Harbor Entrance (Exhibit 3). This designation was authorized by the EPA under Section 102 of the Marine Protection, Research and Sanctuaries Act (MPRSA) of 1972 (33 USC 1401).

II. Status of Local Coastal Program.

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

III. Federal Agency's Consistency Determination.

The Corps of Engineers has determined the project to be consistent to the maximum extent practicable with the California Coastal Management Program.

IV. Staff Recommendation:

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with the Corps of Engineers' consistency determination.

The staff recommends a NO vote on this motion. Failure to receive a majority vote in the affirmative will result in adoption of the following resolution:

A. Objection

The Commission hereby **objects** to the consistency determination made by the Corps of Engineers for the proposed project, finding the project does not contain enough information to determine if the proposed project is consistent to the maximum extent practicable with the California Coastal Management Program.

V. Federal Agency Responsibility:

Section C(a)(i) of Chapter 11 of the CCMP requires federal agencies to inform the Commission of their response to a Commission objection. This section provides that:

If the Coastal Commission finds that the Federal activity or development project ... is not consistent with the management program, and the federal agency disagrees and decides to go forward with the action, it will be expected to (a) advise the Coastal Commission in writing that the action is consistent, to the maximum extent practicable, with the coastal management program, and (b) set forth in detail the reasons for its decision. In the event the Coastal Commission seriously disagrees with the Federal agency's consistency determination, it may request that the Secretary of Commerce seek to mediate the serious disagreement as provided by Section 307(h) of the CZMA, or it may seek judicial review of the dispute.

VI. Necessary Information:

Section 930.42(b) of the federal consistency regulations (15 CFR Section 930.42(b)) requires that, if the Commission's objection is based on a lack of information, the Commission must identify the information necessary for it to assess the project's consistency with the CCMP. That section states that:

If the State agency's disagreement is based upon a finding that the Federal agency has failed to supply sufficient information (see Section 930.39(a)), the State agency's response must describe the nature of the information requested and the necessity of having such information to determine the consistency of the Federal activity with the management program.

As described fully in the Habitat and Water Quality sections below, the Commission has found this consistency determination to lack the necessary information to determine if the proposed project is consistent with Sections 30230, 30231, 30233, and 32040(a) of the Coastal Act. In order to evaluate the project's consistency with the CCMP, the Commission needs the following information:

- 1. Bulk Chemistry analysis of proposed dredge material; and
- 2. Toxicity and bioaccumulation testing of proposed dredge material conducted in compliance with EPA's requirements as described in the document titled *Ecological Evaluation of Proposed Discharge of Dredged Material into Ocean Waters* (also known as the "Green Book").

VII. Findings and Declarations:

The Commission finds and declares as follows:

A. Recreational Boating. Section 30220 of the Coastal Act provides that:

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

Section 30224 of the Coastal Act provides, in part, that:

Increased recreational boating use of coastal waters shall be encouraged....

Shoaling of Lower Newport Bay Harbor interferes with recreational boating within the bay. The design depth of the Lower Newport Bay Harbor's channels is 6.1 meters below mean lower low water (MLLW). In its consistency determination, the Corps describes the then current situation as follows:

The Federally-authorized channel of the Upper Bay Channel, south of PCH Bridge, has accumulated heavy sediment deposits washed downstream from Upper Newport Bay sediment control basins. Sediment Basins II and III are in-bay sediment control basins located in the Upper Bay, and are part of the County's Upper Newport Bay Sediment Control and Enhancement Project. Of these, Basin III has reached full capacity, and Basin II is over 75% capacity. Overflows of sediment from these basins have shoaled in areas within the Federally-authorized navigation channels directly downstream. This shoaling, in turn, has produced unsafe navigation conditions in and around the project area and, specifically, at the junction of the Main and Upper Bay Channels, where access to the Upper Bay, Harbor Isle, and Linda Isle has become more difficult. It is estimated that dredging a minimum of 103,190 to a maximum of 211, 206 cubic meters (m3) of sediment will be necessary to maintain the Federally-authorized configurations of -6.1 meters, and to ensure necessary depths for sustained safe navigation.

Newport Bay is an important recreational boating area. It attracts visitors from around the state and country to utilize its boating facilities. In its Environmental Assessment, the Corps describes the boating resources as follows:

The area serves as a major vacation destination within Southern California and the Southwest. The Lower Bay, having an open-water area of about 600 acres, offers recreational opportunities to a wide range of boating enthusiasts; from single-person rowboats to large sailing and motor vessels that are capable of trans-ocean navigation. The local beach front communities also support water recreational services, with tourism as one of the most important land use activities in the regional area.

The proposed dredging will improve navigation within the Lower Newport Bay Harbor, and thus supports and protects recreational boating. Therefore, the Commission finds that the proposed project is consistent with the recreational boating policies of the CCMP.

B. <u>Water Quality and Biological Resources</u>. Section 30230 of the Coastal Act provides that:

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 provides 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.

The proposed project includes disposal of dredged material at LA-3, an EPA designated interim ocean disposal site. The technical guidance for determining the suitability of dredged material involves a tiered-testing procedure, which includes four levels of testing. Tiers I and II apply to existing or easily obtained information and require limited chemical testing to predict effects. If these predictions indicate that the dredged material has any potential for significant adverse effects, EPA will elevate the sediment analysis to a higher tier. Tiers III and IV use water column and benthic bioassay and bioaccumulation tests to determine effects on representative marine organisms. Specifically, EPA requires bioassay tests on suspended particulate and solid phases of the material before allowing the disposal (Tier III testing). (40 C.F.R. Section 227.6[c].) These tests allow EPA to evaluate the acute and chronic toxicity of the contaminated material on biological resources. EPA also measures bioaccumulation potential of contaminates. The intent of that test is to determine if organisms are concentrating chemicals in their tissues to levels that might prove harmful to either themselves or their predators. Both the bioassay and the bioaccumulation tests measure the biological effect of contaminated dredge spoils. Although these tests are not precise predictors of environmental effects, they provide quantitative estimators of impacts. The Commission also uses the results from the EPA process to evaluate ocean disposal activities for consistency with the CCMP. These tests allow the Commission to determine if the ocean disposal activity will adversely affect water quality or biological resources of the coastal zone.

In its original submittal, the Corps conducted a Tier I evaluation and concluded that no further testing was required. However, the Commission and EPA raised concerns about evidence of possible contaminants in a nearby marinas and inflows of contaminants from San Diego Creek (largest source of fresh water and sediment to Newport Bay) and the Pacific Coast Highway Bridge. Based on these concerns, EPA and the Commission rejected a Tier I evaluation of the area as adequate to authorize ocean disposal. The Commission staff and EPA have recommended full Tier III testing for the Newport Bay material. However, the Corps proposes to collect bulk chemistry data and use that information to allow authorization of ocean disposal without additional toxicity and bioaccumulation testing. Since, at this point, the consistency determination does not include any chemical, toxicity, or bioaccumulation data, the Commission cannot determine if the material is contaminated, if it is suitable for ocean disposal, or affects water quality resources and habitat resources of the coastal zone. Therefore, the Commission finds that the Corps' consistency determination lacks sufficient information to determine consistency with the water quality policies of the CCMP.

C. Endangered Species. Section 30240 of the Coastal Act provides that:

(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.

The proposed project potentially affects habitat for two federally listed species. These species include California brown pelican (<u>Pelecanus occidentalis californicus</u>) and California least tern (<u>Sterna antillarum browni</u>). Additionally, several species of marine mammals and sea turtles may be transient visitors to the harbor and the LA-3 disposal site, but the project will not affect these species. In its environmental assessment, the Corps describes the habitat needs of the federally listed species as follows:

Brown Pelican

The California brown pelican is a frequent visitor of coastal areas of Southern California; they can be observed throughout the year, but are most conspicuous in the fall and winter following the breeding season on Anacapa and Santa Barbara Islands. They forage for surface fish, particularly anchovies, along the open coast, in the bay and well out to sea, and scavenge for fish remains around commercial fishing boats and piers in the Harbor.

Brown pelicans are extremely tolerant of human activity at daytime roosts; they are often seen roosting and loafing on breakwaters, piers, buoys, harbors and wharves. Birds are far less tolerant of any types of disturbances on night roosts, however, and are known to quickly flush from roosts at the slightest disturbances.

California Least tern

California least terns winter in Mexico and Central America and migrate to south and central California in mid-April to breed. During their stay in California birds forage for fish in the nearshore coastal waters and embayments. Birds typically nest in small colonies; the nest usually occurs in the open expanse of lightly colored sand or dirt or dried mud

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next to lagoons or estuaries, or on open sandy beaches. The nests generally consist of merely a small depression or scrape in the soil or sand, and are lined with pebbles or sea shell fragments. Nesting usually concludes by mid-August, with post-breeding groups still present into mid-September (USFWS 1980).

In the mid-1980's two islands were constructed in the extreme northeast corner of Upper Newport Bay. In the 1990 the estimated tern population was 70 nesting pairs with 85 fledglings. Another nearby nesting colony, Bolsa Chica State Ecological Reserve, had a nesting population of some 2,250 pairs in 1993.

Both of the California least tern and the California brown pelican forage in the Lower Newport Bay Harbor and could be affected by increases in turbidity and resuspension of contaminated sediment. However, the Corps proposes to conduct the dredging between October 1, 1998 and March 30, 1999, which would avoid the least tern nesting season. Additionally, the consistency determination does not provide for contingency dredging to occur during the nesting season. Therefore, the proposed dredging will not affect the least tern.

On the other hand, the brown pelican forages in the area most of the year. The Commission is concerned that the proposed project could affect this species. The primary concern is that the project could result in resuspension of contaminated sediment making the pollutants more available to fish that are preyed upon by the pelican. These chemicals would then accumulate in the tissues of the pelican. However, as described above, the Corps did not provide the Commission with the information necessary to evaluate the water quality effects from the proposed dredging. Without this data, the Commission cannot determine if the project would adversely affect brown pelican. Therefore, the Commission finds that the consistency determination for the proposed project does not contain enough information to evaluate the project's consistency with the environmentally sensitive habitat policies of the CCMP.

D. Dredging. Section 30233(a) of the Coastal Act provides, in part, that:

(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: (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

Section 30233(a) of the Coastal Act imposes a three-part test on dredging and filling projects: (1) an allowable use test; (2) an alternatives test; and (3) a mitigation test. The project complies with the first test because maintenance dredging of existing navigation channels is an allowable use for dredging and filling.

The Commission finds that the consistency determination for the project does not contain enough information to evaluate the project's consistency with the alternatives and mitigation tests of Section 30233(a). As described above, the Corps' consistency determination does not include chemical, toxicity, or bioaccumulation analysis of the sediment. Without this information, the Commission cannot determine the full effects from the proposed dredging, and therefore, the Commission cannot determine if the proposed project is the least damaging feasible alternative or if additional mitigation is necessary to reduce or eliminate environmental effects. Therefore, the Commission finds that the Corps' consistency determination lacks sufficient information to evaluate the project for consistency with the dredge and fill policy of the CCMP.

E. Sand Supply. Section 30233(b) of the Coastal Act provides that:

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.

The Corps proposes to dispose of material dredged from Newport Bay at LA-3. Material disposed of at this site is outside of the littoral system and will not support sand supply. However, the proposed dredge material is too fine for beach replenishment purposes. The Corps conducted grain size analysis on 13 sediment samples from the proposed dredging area. Those analysis indicates that the material proposed for dredging is between 9 percent and 46 percent sand (Exhibit 5). The Commission does not usually consider the use of dredge material for beach replenishment unless the material is greater than 80 percent sand and is compatible with the receiver beach. In this case, the sediment dredged from the Lower Newport Bay Harbor is too fine to use for sand supply purposes. Therefore, the Commission finds that the proposed project is consistent with the sand supply policy of the CCMP.









CORPS GAI SIZE ANALYSIS Newport Bay Harbor Maintenance Dredging Sampling Sampling Date 29 July 1998

Hole Number	(MLW) Elevation (m)		Percent Passing by Weight			Soil	Description
	Тор	Bottom	#4	#60	#200	200 Class.	
PNH98-1	-2.4	-2.5	100	95	91	CL	CLAY:
PNH98-2	-2.3	-2.4	100	96	85	CL	CLAY with sand:
PNH98-3	-2:4	-2.5	100	96	83	CL	CLAY with sand:
PNH98-4	-2.3	2.4	100	98	74	CL	SANDY CLAY:
PNH98-5	-2.0	-2.1	100	94	64	CL	SANDY CLAY:
PNH98-6	-0.8	-0.9	100	99	74	CL	SANDY CLAY:
HCNH98-5	-2.0	-2.1	100	97	62	CL	SANDY CLAY:
HCNH98-6	-0.8	-1.2	100	99	83	CL	CLAY with sand:
HCNH98-7	-1.9	-2.1	100	98	76	CL	SANDY CLAY:
HCNH98-7	-2.1	-2.3	100	98	72	a	SANDY CLAY:
HCNH98-8	-2.0	-2.4	100	98	71	a	SANDY CLAY:
HCNH98-8	-2.4	-2.7	100	97	89	CL	CLAY:
HCNH98-8	-2.0	-2.3	100	97	68	CL	SANDY CLAY:
HCNH98-9	-2.2	-3.1	100	98	88	CL	CLAY:
HCNH98-10	-2,2	-2.8	100	87	54	CL	SANDY CLAY:
HCNH98-10	-2.8	-3.1	100	95	79	CL	CLAY with sand:
HCNH98-11	-1.6	-2.1	100	99	79	CL	CLAY with sand:
HCNH98-12	-2.2	-2.8	100	97	70	CL	SANDY CLAY:
HCNH98-13	-2.2	-3.0	100	100	98	CL	CLAY: EXHIBIT NO. 5

Note: Fine grained fraction of all samples (<#200 sizve) visually classified as clay. Note: Sandy = Silt Note: Over 50% of material passed No. 200 Sizve, material is over 50% Silt and Clay

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