

# CALIFORNIA COASTAL COMMISSION

DIEGO COAST AREA CAMINO DEL RIO NORTH, SUITE 200 SAN DIEGO, CA 92108-1725 (619) 521-8036



Filed: 12/18/97 49th Day: 2/5/98 180th Day: 6/16/98 Staff: WNP-SD Staff Report: 1/11/98

Hearing Date: 2/3-7/98

# REGULAR CALENDAR STAFF REPORT AND PRELIMINARY RECOMMENDATION

Application No.: 6-97-83

SDG&E

Agent: Mark Chomyn

Description:

Applicant:

Dredge the inner and outer basins of Agua Hedionda Lagoon in two phases as follows: 1) Dredge approx. 647,000 cubic yards of lagoon bottom (sand) within the inner basin in Spring 1998 and place approx. 341,000 yards of beach quality sand on the Middle Beach, a 3,000-ft. long x 150-ft. wide stretch of Carlsbad State Beach between the lagoon inlet at the ocean and the SDG&E warm water discharge jetty. The remaining 306,000 yards of material would be buried and capped within a "borrow pit" in the inner lagoon; 2) Dredge approximately 150,000 cubic yards from the outer basin in Spring 1999 and place beach quality sand on either the Middle Beach or the South Beach, directly south of the powerplant's warm water discharge jetty and continuing south about 1/2 mile. Also included is deposition of 20,000 cubic yards of material dredged from the Bristol Cove inlet channel in the borrow pit (actual dredging would be authorized under a separate permit or exemption), and dredge an existing recreational beach area on the south shore of the inner lagoon between the -1 and +5 ft. MSL elevation and dispose of the material on adjacent ruderal upland areas.

Site:

Inner basin (east of I-5) and outer basin (east of Hwy.101 and west of railroad) of Agua Hedionda Lagoon, and Carlsbad State Beach, Carlsbad, San Diego County.

Substantive File Documents: Certified Agua Hedionda Land Use Plan; CDP #F 5536 (1977), CDP No. 6-93-193-A and CDP No. 6-93-193-A2, CDP No. 6-97-45, CDP No. 6-97-46

# STAFF NOTES:

# Summary of Staff's Preliminary Recommendation:

Staff is recommending partial approval of the applicant's request with conditions to allow dredge of up to 797,000 cubic yards of lagoon bottom (sand) within the inner and outer basins of Agua Hedionda Lagoon in two

phases. Staff is recommending that approximately 341,000 yards of beach quality sand resulting from the inner lagoon dredging be placed on the Middle Beach and 150,000 cubic yards resulting from the outer lagoon dredging be placed on the North Beach, directly north of the Middle Beaach and continuing to Oak Street, about 1 mile. The remaining 306,000 yards of material would be buried and capped within a "borrow pit" in the inner lagoon.

In light of the differing opinions where the sand should be placed, in CDP #6-97-45 the Commission required the permittee to complete a study to determine the effects of the power plant on sand transport and erosion rates within the vicinity of Aqua Hedionda Lagoon to be used for future decision-making on future dredging projects. The study is to enable the Commission to determine where beach quality material dredged from Aqua Hedionda Lagoon by SDG&E should be placed in the future, in order to replenish those beaches most affected by the operation of the power plant. The study is expected in June, 1998.

The applicant has requested the permit application for dredging of the inner and outer lagoon be scheduled prior to their obtaining the results of the study to keep their dredging operation on schedule and not jeopardize funding, but also to address the Commission's stated concerns regarding the need to increase the tidal prism of the entire lagoon. Absent the findings of this study, staff recommends the Commission approve as before, and for the same reasons, that the dredged spoils from the inner lagoon be placed on the middle beach where it can be easily accommodated.

Additionally, staff is recommending the Commission approve that the dredged spoils from the outer lagoon be placed on the North Beach as SDG&E has the capability to deliver the sand there from the outer lagoon and, if the applicant is not required to place the 150,000 cu.yds. of sand from the outer basin on North Beach in Spring 1999, none of the 800,000 cu.yds. of beach quality sand dredged since 1996 would be required to go to North Beach. Placement on North Beach, which is served by a parking lot and numerous public access points, would provide a clear recreational benefit for coastal visitors.

Staff recommends that the Commission deny the applicant's request to receive a 5 year approval to perform maintenance dredging. Staff recommends that absent the findings of the sand transport study, any subsequent dredge cycles be subject to a separate coastal development permit and involve coordination with the Corps of Engineers, City of Carlsbad and State Parks to determine the appropriate disposal site(s) for the future. The attached conditions of this approval require final deposition plans, address sensitive resources, require final approval by the Corps of Engineers, and the State Department of Parks and Recreation.

#### PRELIMINARY STAFF RECOMMENDATION:

The staff recommends the Commission adopt the following resolution:

I. Approval with Conditions.

The Commission hereby grants a permit for the proposed development, subject to the conditions below, on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, 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 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

#### II. Standard Conditions.

See attached page.

#### III. Special Conditions.

The following conditions apply to both phases of the proposed project, i.e. dredge of the inner basin and dredge of the outer basin. A separate permit will be issued for each phase of the development, and compliance with the conditions must occur prior to the issuance of the permit for each phase.

- 1. <u>Timing of Dredging and Beach Deposition</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 and implementation measures for deposition of the dredged material on Middle Beach and North Beach within the approved disposal limits which incorporates the following:
- a. <u>Pre-and-Post Dredge Requirements</u>. At least thirty days prior to dredging and within 60 days of completion of the proposed dredge cycle, the applicant shall submit to the Executive Director for review and written approval the following:
  - A map of pre-dredge conditions of the lagoon and pre- and postdeposition profiles at the approved beach deposition location; proposed dredge quantities; deposition plan and methodology; and signage plan;
  - 2. Evidence the Corps of Engineers has approved the proposed dredge spoils as suitable for deposition at the approved beach locations, pursuant to ACOE Permit #95-20135.
- b. <u>Public Access/Timing</u>. Placement of sand on area beaches shall occur outside of the summer season (Memorial Day through Labor Day) when beach attendance is at its lowest.
- c. <u>Sensitive Species/Timing</u>. To avoid potential impacts to the California least tern breeding period and the grunion spawning period, dredging can occur between September 15 and April 15 with the option of extending the dredge period to April 30 if approved in writing by the Executive Director in consultation with the Army Corps of Engineers (COE) and California Department of Fish and Game (DFG).

d. <u>Eelgrass Impacts</u>. The existing eel grass beds shall be mapped and recorded prior to the proposed maintenance dredging operation. The mapping shall be submitted to the Executive Director at least 30 days before dredging and shall indicate the length, width, and density of the eel grass beds. Post-dredging mapping shall be submitted thirty days after the completion of dredging and shall be a second base map to identify the remaining eel grass beds in the project area. No anchorage of dredging equipment is permitted outside the limits of the dredging operation. If any eelgrass impacts occur outside the limits of dredging, revegetation must be carried out at a ratio of 1.2 square feet of mitigation area for each square foot of area impacted and shall be completed within four months. The above shall be submitted consistent with the requirements of the Corps of Engineers Permit #95-20135 and shall be subject to review and approval of the Executive Director.

#### 2. Monitoring.

- a. <u>Beach Profiles</u>. Prior to the placement of any material at the Middle Beach or North Beach, the applicant shall prepare two profiles of the beach and off shore area (to closure or wading depth, consistent with the survey requirements of the ACOE permit) showing the pre-disposal conditions. Profiles shall be taken at the same locations after completion of the disposal, one month after disposal, and annually thereafter until the area either returns to its pre-disposal condition or is further modified by additional nourishment. Reports shall be provided to the Executive Director following the one-month after disposal profiles and after each annual survey which provide information on site conditions and an analysis of the long-term changes in sediment supply between the jetties.
- 3. <u>Term of Permit</u>. This coastal development permit authorizes dredging and disposal as required in this permit action to occur at the Middle and North Beachs within the approved disposal limits. No extension of the permit expiration date or additional dredge cycles beyond the 1998-1999 cycle are approved.

# IV. Findings and Declarations.

The Commission finds and declares as follows:

1. Detailed Project Description/Purpose. The applicant proposes to dredge approximately 647,000 cubic yards of lagoon bottom (sand) within the inner basin of Agua Hedionda Lagoon. Approximately 341,000 yards of beach quality sand is proposed to be placed on the Middle Beach, a 3,000-ft. long x 150-ft. wide stretch of Carlsbad State Beach between the lagoon inlet at the ocean and the SDG&E warm water discharge jetty, in Spring 1998. The remaining 306,000 yards of material would be buried and capped within a "borrow pit" in the inner lagoon. Approximately 150,000 cubic yards dredged from the outer basin is proposed to be placed on either the Middle Beach or the South Beach, directly south of the powerplant's warm water discharge jetty and continuing south about 1/2 mile, in Spring 1999.

The applicant proposes to dredge 647,000 cubic yards of material in the inner

lagoon in six phases as follows: Phase 1) dredge 341,000 cubic yards to create a 18.1 acre borrow pit to -17 ft. MSL with 4:1 side slopes in the western inner lagoon, and discharge the material on the Middle Beach: Phase 2 dredge 73,000 cubic yards of silt and clay from the eastern inner lagoon to -9 ft. MSL, and dispose of the material in the borrow pit; Phase 3) dredge 70,000 cubic yards of material from the eastern inner lagoon (east of Bristol Cove) to -8 ft. MSL, and dispose of the material in the borrow pit; Phase 4) dispose 20,000 cubic yards of material dredged from the Bristol Cove inlet channel in the borrow pit (actual dredging would be authorized under a separate permit); <u>Phase 5</u>) dredge 81,000 cubic yards of sand from the western end of the lagoon to -9 ft. MSL and dispose of the material in the borrow pit; and <u>Phase 6</u>) dredge 82,000 cubic yards of sand in the Phase 2 area of the inner lagoon from -9 to -17 ft. MSL, and use the material to cap the borrow pit. Phase 2 and 6 dredging would create a 10.1 acre sand trap. In addition, the applicant proposes to dredge an existing recreational beach area on the south shore of the inner lagoon between the -1 and +5 ft. MSL elevation and dispose of the material on adjacent ruderal upland areas.

The applicant is also requesting approval of a five year permit to include the following: A dredging period of September 15 to April 15 for the life of the permit, with the option of extending the dredge period to April 30, if approved in consultation with the Corps of Engineers, Department of Fish and Game and the National Marine Fisheries Service. Upon completion of the initial phased dredging program, the ability to perform routine maintenance dredging in the inner lagoon for the remaining life of the permit in an amount not to exceed 250,000 yards per year. This would provide for the routine removal of any new sand bar build up and removing sediment from the newly dredged sand trap following the initial dredging.

Agua Hedionda Lagoon is a "man-made" water body that was originally dredged in 1954 to -11 ft. MSL, out of a historic 230 acre salt marsh slough to provide cooling water for the Encina Power Plant. Two settling basins were included in the design: one in the outer lagoon to trap sands carried in from the ocean, and one at the eastern end to trap incoming sedments from Agua Hedionda Creek. The original design of the lagoon was predicated on a tidal prism that could maintain the inlet in an open state with a maximum of three generating units. However, the plant now uses a maximum of five generating units which requires increased diversion of lagoon waters through the plant. This diversion has reduced the tidal prism to levels that barely satisfy maximum plant inflow requirements, and has left no residual safety factor to deal with losses of tidal prism due to lagoon sedimentation. Substantial sedimentation has occurred within the lagoon since its original construction. The outer lagoon has undergone periodic (once overy one to three years) maintenance dredging while no dredging has occurred in the middle to inner lagoons.

The primary purpose of the project is to improve hydraulic efficiency of the lagoon, and thereby provide an adequate supply of cooling water to the Encina Power Plant. A secondary project purpose is to remove an obstacle to navigation and recreation by dredging the sand bar at the western end of the inner lagoon. The purpose of the proposed borrow pit is to provide a place to dispose of the inner lagoon material that is too fine for beach

replenishment. The same approach was used to dispose of the fine material dredged as part of the Batiquitos Lagoon Restoration Project. The purpose of the proposed recreational beach area dredging is to remove soil that has eroded from surrounding uplands into the lagoon which blocks easy access to the beach. No existing eelgrass or salt marsh habitat would be impacted by the proposed dredging of this soil.

The Bristol Cove Property Owners Association intends to apply for a separate coastal development permit or exemption to dredge the 20,000 cubic yards of material from Bristol Cove that is to be disposed of in the proposed borrow pit.

The powerplant is located on the south shore of the outer basin of Agua Hedionda Lagoon, within a few hundred yards of the Pacific Ocean. The applicant states that due to current hydraulic conditions in the Agua Hedionda lagoon system (outer, middle, and inner lagoons), yearly sand influxes into the lagoon are in excess of 150,000 cubic yards per year. The applicant states that most of the sand entering the outer lagoon ocean entrance comes from north-to-south sand movement associated with the Oceanside littoral cell.

In addition, the applicant states the project would have the following benefits: Removing an obstacle to navigation and recreation (sand bar) as identified in a U.S. Army Corps of Engineers report; improve the clarity and quality of the lagoon waters by reducing the residence time of tidal exchange and removing silts and clays from the surface sediments of the lagoon; providing improved tidal exchange and flushing in the lagoon, thereby allowing sand which moves into the lagoon to be more efficiently returned to the littoral cell. The improved sand replenishment of the littoral cell would have a regional benefit to the coastal beaches and potentially increase habitat areas for fish and bird species and benthic organisms within the lagoon.

The Coastal Commission has approved the dredging program and modifications to it over the years. In the latest decisions, there has been a dispute between SDG&E and the City of Carlsbad as to whether or not a portion of the dredged spoils should be placed north of the intake jetty, on the City beach served by the Tamarack parking lot and the improved access facilities associated with the Carlsbad seawall.

2. <u>Permit History</u>. On September 14, 1995, the Commission approved CDP 6-93-193-A-2 to allow a one time dredge of up to 500,000 cubic yards of material to be placed within the dredge disposal limit as SDG&E's 1995-96 dredge cycle. The final dredge report indicated 443,130 cubic yards of sand was dredged from the outer basin and distributed as follows:

Middle Beach--294,312 cu. yds.--Between the jetties (Ocean entrance to Agua Hedionda Lagoon and SDG&E warm water discharge jetty)

North Beach--106,416 cu. yds.--North of Ocean jetty (Tamarack to Oak Street)

South Beach--42,402 cu. yds.--South of Intake Jetty

In that action, the Commission denied the applicant's request for a 5 year permit allowing up to 500,000 cubic yards of dredge disposal in any single event, up to a maximum of 1,250,000 cubic yards in the 5 year period.

At that time the City of Carlsbad proposed to have a portion of the dredged material placed on North Beach, north of the Tamarack parking lot. However, SDG&E indicated they did not intend to amend or renew the Special Use Permit (SUP, 1993) issued by the City because they did not want the sand to be placed north of the ocean entrance as proposed by the City and the Beach Erosion Committee (BEC), a citizen's advisory group. (Between 1993 and 1995 both the City and the BEC had reviewed SDG&E's beach deposition plan and determined if the dredge spoil placement areas were appropriate through the SUP process.) SDG&E stated that sand placed north of the ocean entrance migrated back into the outer basin through the north-to-south littoral drift shoreline process and would have to be dredged again resulting in a waste of time and money to annually dredge the outer basin.

SDG&E cited the California Public Utility Commission's jurisdiction and preemptive authority as the reason the SUP would not be amended or renewed. The City desired to retain the SUP process; however, subsequently the City's requirements for the SUP was declared void by the Superior Court. The decision is currently being appealed by the City to the Appellate Court. Therefore, at this time the City has no legal authority to regulate sand disposal; however, the City is pursuing resolution of the preemption issue currently on appeal.

The City maintains it has a legal right to determine future impacts on its local beaches and has the authority to regulate the placement of dredged material from all future dredging activities within the City's boundaries. The City maintains that until such time as the City's appeal is decided, the City will continue to recommend appropriate disposal locations through the review process of both the Army Corps of Engineers and California Coastal Commission permits. It was both in response to the City's concerns, and the Commission's desire to know the effects the power plant operation has on sand transport so that the beaches most affected can be replenished, that has led to the requirement for a study of sand transport and erosions rates in the vicinity of Agua Hedionda Lagoon.

In August, 1997 in CDP #6-97-45, the Commission approved the dredging of approximately 200,000 cubic yards of sand from the outer basin of Agua Hedionda Lagoon. The Commission approved the dredged spoils to be placed on what is known as the "Middle Beach" which is adjacent to the Encina Power Plant on the seaward side of Old Highway 101 (also known locally as Carlsbad Boulevard). SDG&E had proposed to put the sand on the "South Beach" which is immediately south of the Middle Beach. The Commission found the Middle Beach deposition location would provide a greater recreational benefit to beach users along the Carlsbad shoreline because it is the most heavily attended beach in Carlsbad and has supporting parking facilities, public walkways and lifeguard service, while the South beach provides less beach use and support facilities. The City of Carlsbad proposed that sand should be placed on the

"North Beach" which is immediately north of the Middle Beach and continues to Oak Street.

In the Commission's November 4, 1997 approval of CDP #6-97-46 for the middle lagoon, The Commission approved the one-time dredging of approximately 57,000 cubic yards of lagoon bottom (sand) within the middle basin of Agua Hedionda Lagoon. As in CDP #6-97-45, despite the applicant's desire to place the sand on the South Beach and the City's desire to place it on the North Beach, the Commission found that the sand should be disposed on the Middle Beach because of its greater recreational benefits to coastal visitors. At the hearing, the Commission expressed a desire to see material from future dredging placed north of the power plant intake jetty on the North Beach.

In light of the differing opinions where the sand should be placed, the Commission required the permittee to complete a study to determine the effects of the power plant on sand transport and erosion rates within the vicinity of Aqua Hedionda Lagoon to be used for future decision-making on future dredging projects. The study is to enable the Commission to determine where beach quality material dredged from Aqua Hedionda Lagoon by SDG&E should be placed in the future, in order to replenish those beaches most affected by the operation of the power plant. Since the Commission's August approval, a Request for Proposals for this study has been circulated and a contract has been awarded. Results of this study will be available in June, 1998.

3. <u>Beach Replenishment/Public Access.</u> The subject proposal involves dredging the inner and outer basins of Agua Hedionda lagoon, including placement of dredged spoils on the adjacent Carlsbad State Beach. There are several provisions of the Coastal Act, which are applicable to the proposed project, which encourage use of suitable material to supply the region's littoral zones with sand. Such deposition of beach quality material on the region's shoreline will create and protect coastal recreational areas for use by the general public, consistent with Coastal Act policies as follows:

Coastal Act Section 30233 addresses placement, within the littoral zone, of dredge spoils. Section 30233 (b) states:

(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.

The above language in Section 30233 clearly suggests the benefit of restoring the region's beaches through use of material that would otherwise reach the shoreline, but for man's intervention by development and flood control projects. Therefore, the Commission finds when dredge material is compatible with and suitable for use as beach sand along the region's shoreline, it should be transported to the shoreline for such use, consistent with the public access and recreation policies of the Act.

The San Diego Association of Governments (SANDAG) has adopted the Shoreline

Preservation Strategy (Strategy) for the San Diego region and is currently working on techniques towards its implementation. The shoreline is recognized as a valuable asset to the environment and economy of the San Diego region and the State. It is also considered a resource of national significance. The Strategy identifies that beaches in the San Diego area have been steadily eroding for the past decade, and increasing beach loss and property damage have been projected for the future. The Strategy also emphasizes beach replenishment to preserve and enhance the environmental quality, recreational capacity, and property protection benefits of the region's shoreline. Additional sand on the region's beaches will increase the amount of available recreational area for public use, and decrease the rate of beach erosion, thereby reducing pressure to construct shoreline protective devices, which can adversely affect both the visual quality of scenic coastal areas and shoreline sand supply.

Section 30604(c) of the Act requires that a specific access finding be made in conjunction with any development located between the nearest public road and the sea to assure conformance with the public access recreation policies of the Coastal Act. Many other provisions of the Coastal Act also address public access and recreation, including the following:

#### Section 30210

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.

#### Section 30212.5

Wherever appropriate and feasible, public facilities, including parking areas or facilities, shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area.

Providing as much sandy beach area as possible for use by the public is consistent with the intent of Sections 30210 and 30212.5 which require that public access and recreational opportunities be maximized in order to protect any one natural resource area, i.e. shoreline or park, from overuse. Providing additional recreational area, through placement of sand along a useable shoreline, will result in less crowding and provide an alternative to existing resource areas which are highly utilized by the public due to the availability of sand.

#### Section 30213

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

# Section 30220

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

Providing additional useable beach area is providing a lower cost visitor and public recreational facility. When it is feasible for dredge projects which involve excavation of large volumes of beach suitable material to deposit the dredged material on the region's beaches, such activity is consistent with Section 30213 of the Act. Creation of additional coastal areas, such as beaches, suited for water-oriented recreational activities, is also consistent with Section 30220.

As noted, SDG&E has conducted the dredging of the outer basin since 1954 when the generating station was constructed. SDG&E's dredging and beach replenishment plan has been successfully operated since 1954 to provide sand to Carlsbad beaches and as such is a tremendous public benefit. The beach replenishment plan has been developed in consultation with the City of Carlsbad, COE, the California Department of Fish and Game (DFG), the Regional Water Quality Control Board, and the Environmental Protection Agency and is an example of a proactive effort between public and private interests serving both local and regional recreational needs.

Historically, the City of Carlsbad and the Beach Erosion Committee have requested that the Commission require SDG&E to return trapped sand in the western and middle cells of Agua Hedionda Lagoon to the local reaches of the Carlsbad coastline on a comparable rate to sand losses due to the operational impacts of the Encina Power Plant. They recommend that 1/3 of the total dredged material should be placed northerly of the inlet jetties, and 2/3 of the total dredged material should be placed directly between the inlet and outlet jetty structures. This disagreement between the City and SDG&E has resulted in the Commission requring an independent study be completed by the applicant which will determine the effects of the power plant on sediment transport and erosion rates in the vicinity of Agua Hedionda Lagoon. This information can then be used for future decisions regarding where the dredge spoils should be placed to mitigate for the effects of the power plant.

In CDP #6-97-45, based on conflicting opinions of shoreline experts and the lack of definitive studies that corroborated either the City's or the applicant's position, the Commission found that the sand should be placed where it would provide the most recreational benefit to coastal visitors—the Middle Beach. This area accommodates the greatest beach patronage along the Carlsbad shoreline. According to a city representative, more than a million people yearly visit this beach, making it by far the most heavily—used beach in the City of Carlsbad. As noted, day use parking is provided free of charge along the curb in the Middle Beach area. The Commission found that the public access and recreation policies of the Coastal Act and certified Agua Hedionda LUP seek to maximize public recreation and access opportunities at shoreline locations and the project would further that end. Absent the findings of the

previously mentioned sand transport study, the Commission again found in CDP #6-97-46 that the dredged spoils should be placed on the Middle Beach for the same reasons it cited in CDP #6-97-45. Project studies indicated an additional 57,000 cu.yds. could be easily be accommodated on the Middle Beach.

SDG&E states that the optimum disposal site and quantities or ratios for disposal of material from future SDG&E maintenance dredging will be addressed in the sand transport study being prepared by Coastal Environments. Results of this study will be available in June, 1998. Absent the study, SDG&E continues to recommend the use of the Middle Beach and South Beach as disposal sites for dredged material. However, through a letter dated 1/7/98 (Ex. 5), SDG&E recognizes that if the Commission desires to direct placment of the outer lagoon dredged material on the North Beach, SDG&E would request the Commission to acknowledge the following:

That, in the absence of the sand transport study, any amount of material to be placed north shall not set a precedent for future SDG&E dredging projects.

That all future disposal of dredged material will be based on the quantities or ratios and placement sites identified in the sand transport study.

That any material placed north shall be material dredged from the outer lagoon dredging phase (approximately 150,000 cubic yards, the exact volume to be determined by a pre-dredging survey).

That SDG\$E's compliance with any special conditions requiring sand placement north of Middle Beach, prior to completion of the sand transport study, does not indicate a change in SDG&E's opinion that placing sand north of the lagoon intake jetty has the potential to increase sedimentation rates in the Agua Hedionda Lagoon.

SDG&E also states that if the Coastal Commission considers imposing special conditions on a dredging project directing SDG&E to place sand to the north, the requirement would be more practical if applied to the next dredging of the outer lagoon (fall 1998 to spring 1999). This would allow SDG&E to place dredged material to the north without requiring disruptive mechanical delivery methods or additional pipe and booster pumps.

SDG&E's current dredging program does not propose to place any sandy material north of this jetty. SDG&E has provided an overview of its existing capability for transporting dredged material from the inner lagoon to the Carlsbad State Beach.

SDG&E currently owns 5,800 lineal feet of delivery pipe. Our dredging barge is equipped with an LSA 39, 16 inch x 16 inch delivery pump. Based on the attached hydraulic run for that delivery pump's performance, we have enough horsepower to pump for the entire length of our existing delivery pipe. This would place the most northerly dredge material (sand) delivery point at Tamarack Avenue (see attached map -Ex. 6), approximately 5,800 lineal feet west of the proposed inner lagoon borrow pit dredging site.

Placement of sand north of Tamarack Avenue, without purchase of additional pipe and a booster pump, would require using mechanical means such as self-loading paddle pulls, and additional trucking and bulldozing. These mechanical means are not cost effective, would disrupt beach use to a greater extent than hydraulic (pipe) delivery and would expose the public to a greater risk of injury or accidents. Because SDG&E is currently liquidating all dredging equipment other than the minimum needed for continued maintenance of the outer lagoon, additional pipeline and booster pumps are not in current SDG&E inventory and the purchase of additional pipe or booster pumps is not an option. Given these constraints, SDG&E continues to support the placement of beach quality material (sand) from the inner lagoon dredging on middle beach between the existing Encina Power Plant intake and discharge jetties.

Based on the above, the Commission notes that the applicant does not have the capability to place the dredged spoils from the inner lagoon on the North Beach. Also, based on the preceding discussion, and absent the findings of the study, the Commission finds as it has before, that the dredged spoils resulting from the dredging of the inner lagoon should be placed on the Middle Beach where it has the most recreational benefit. Currently, dredged spoils from the middle basin are being deposited on the Middle Beach. However, based on current beach profiles, the Middle Beach can accept the entirety of the inner lagoon dredging given the amount of shoreline erosion that has occurred and continues to occur as a result of winter storm conditions.

Regarding the future dredged spoils which will occur from the dredging of the outer basin, the Commission finds these spoils should be placed on the North Beach. This is anticipated to be approximately 150,000 cubic yards of material. The North Beach has the support parking facilities at Tamarack parking lot as well as numerous public access points, and previous shoreline studies have suggested that the North Beach area may be more stable and experience less erosion than the downcoast Middle and South beaches. Additionally, if the applicant is not required to place the 150,000 cu.yds. of sand from the outer basin on North Beach in Spring 1999, none of the 800,000 cu.yds. of sand dredged since 1996 would be required to go to North Beach. Thus, it would be of greater recreational benefit to place the outer basin material at this location which has not been replenished by any of the previous dredge cycles. Additionally, SDG&E has the capability to reach the North Beach disposal area from the outer basin.

To address the above concerns of the applicant, the Commission notes that all future disposal of dredged material will be based on the quantities or ratios and placement sites identified in the sand transport study, that, in the absence of the sand transport study, any amount of material to be placed north shall not set a precedent for future SDG&E dredging projects, and that any material placed north shall be material dredged from the outer lagoon dredging phase (approximately 150,000 cubic yards, the exact volume to be determined by a pre-dredging survey). Finally, the Commission acknowledges the applicant's position without endorsing it that placing sand north of the lagoon intake jetty has the potential to increase sedimentation rates in the Agua Hedionda Lagoon.

Special Condition #1 requires that the applicant monitor the shoreline where the dredge material will be placed. The applicant will prepare pre-and-post deposition profiles as part of their permit for the Corps of Engineers. As a condition of this permit, the applicant will survey two profiles of the receiver beach, before and after the material has been placed on the beach. The applicant will also survey these same profiles one month after the material has been deposited to show the adjustments of the deposited material to the existing wave conditions. Annual profiles will be provided thereafter to provide information on the long-term changes to the shoreline. These profiles will be surveyed annually until either the profiles return to their pre-disposal condition or until the beach area is further modified by direct deposition of additional permitted material. This monitoring information should also be incorporated into the required study.

Based on the preceding, the Commission cannot authorize approval for the applicant's request for more than the current dredge cycle. Absent the findings of the study and because of possible changes to local environmental conditions which could affect shoreline processes (El Nino, severe winter storms, beach nourishment on the Carlsbad shoreline from other projects), the Commission finds it is most appropriate to review and approve every individual dredge cycle for a suitable sand deposition site. The Commission notes the study will provide guidance as to the location of future dredge disposals. Therefore, as conditioned, the Commission can find the proposed project consistent with the public access and recreation policies of the Coastal Act.

4. <u>Sensitive Resources</u>. Sections 30233 and 30240 of the Coastal Act provide for the protection, preservation and enhancement of coastal wetlands and species that depend on those wetlands as habitat. With respect to dredging of the outer lagoon, the time of year during which the dredging can occur is restricted by a number of resource agency approvals. These restrictions assure there are no adverse impacts to the California least tern breeding period and the grunion spawning period. The draft COE 404 permit allows dredging between September 15 and April 15 through 1997, outside the sensitive breeding seasons with the option of extending the dredge period to April 30 if approved in consultation with the Army Corps of Engineers (COE) in consultation with the California Department of Fish and Game (DFG) and the National Marine Fisheries Service. On several occasions the COE has allowed dredging to extend until April 30, finding by field inspection that the time extension would not adversely impact either the least tern or grunion breeding seasons.

The inner basin of Agua Hedionda Lagoon also contains extensive eel grass beds, a protected resource under Section 30240 of the Coastal Act. Eel grass provides habitat for many fish and invertebrates. As proposed, the project would impact 8.43 acres of eelgrass in the inner lagoon. The applicant proposes to mitigate eelgrass impacts at a 1.2:1 ratio as required by the Southern California Eelgrass Mitigation Policy. Mitigation consists of replanting two sites totaling 14.6 acres on 25:1 slope banks, created by placing beach quality sand along the north and south shores of the lagoon. The final location of the mitigation area is verified by the National Marine Fisheries in conjunction with the Dept. of Fish and Game. The mitigation area

is not subject to future dredging. Monitoring and maintenance of the revegetation effort is also required through the COE permit. Additionally, the proposed beach recreational area dredging could create an area suitable for eelgrass habitat to establish itself.

There is another potential impact that has been identified by the US Fish and Wildlife Service in coordination with the Army Corps permit that is still being negotiated through a Biological Opinion. The proposed dredging is predicted to cause an increase in upper elevation tidal range of up to 1.4 ft. for the mean higher high water (MHHW) and 1.3 ft. for the higher high water (HHW). The resultant change in effective inundation area (ie., the area between existing pre-project and the predicted post-project tidal elevation) would be approximately 14 acres MHHW and 24 acres HHW, mainly in the eastern end of the inner lagoon. The applicant is currently developing a mitigation plan for this aspect of the project which will be subject to approval by the resource agencies. Basically, the applicant will replace existing saltmarsh habitat growing at the present water's edge with cordgrass which is better suited to rising tidal elevations and is the preferred habitat of least bell's vireo, an endangered avian species, which resides in the uplands of the eastern portion of the lagoon. The staff recommendation and conditions will be revised in an addendum to the staff report to address this potential impact and mitigation.

The proposed inner lagoon dredged material has been tested for grain size, total organic carbon, bulk sediment chemistry and compliance with State water quality standards. Results indicate that all material proposed for beach or borrow pit discharge does not contain any contaminants at levels of concern or that would exceed State water quality standards. Therefore, the Commission finds the proposed project consistent with past Commission precedent regarding this resource and resource protection policies of the Coastal Act.

Special Condition #3 is limiting this authorization to the Spring 1998 and Spring 1999 dredge cycle. Future dredge and beach deposition will require review and approval by the Commission through a separate coastal development permit. Only as conditioned, can the Commission assure future beach replenishment efforts will meet the requirements of Chapter 3 of the Coastal Act.

6. Local Coastal Planning. 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.

The project area is zoned and planned in the certified Carlsbad LCP for Open Space and Recreation Uses. As conditioned, the proposed project is consistent with provisions of these designations and past Commission actions on the site. Therefore, approval of the project as conditioned is consistent with Chapter 3 policies of the Coastal Act and the resource protection policies of the certified Carlsbad LCP.

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)(i) 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 impact which the activity may have on the environment.

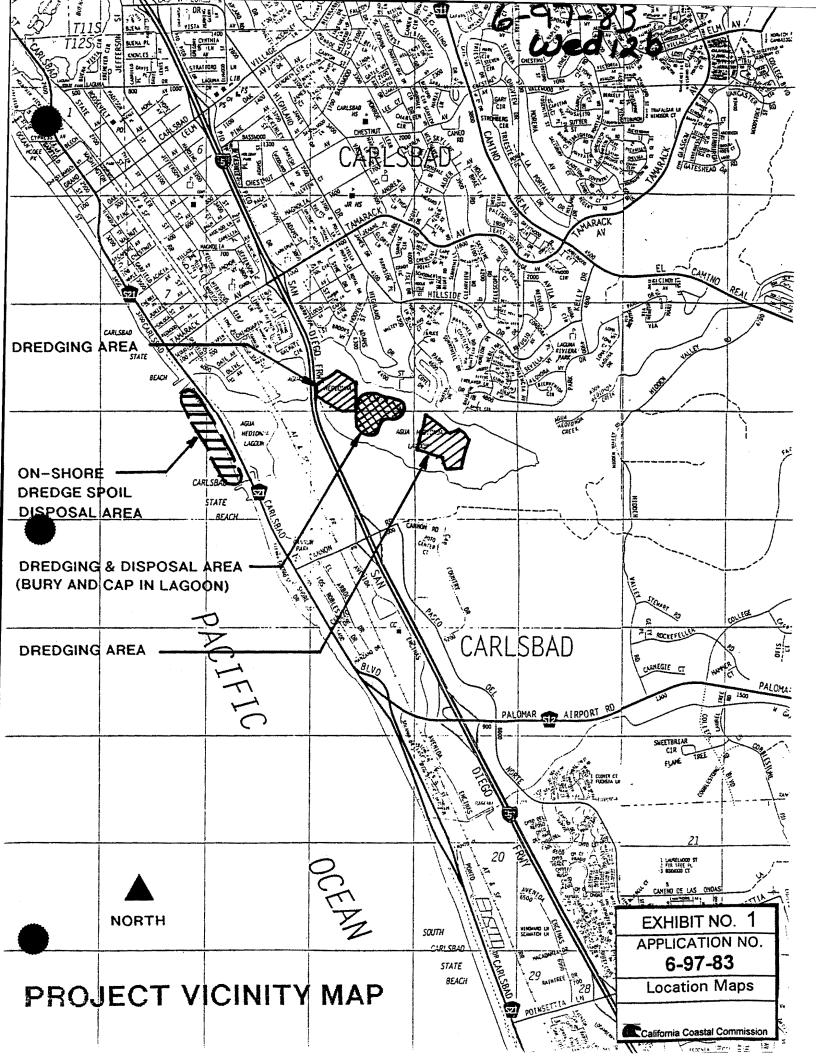
The proposed project has been conditioned to be found consistent with the resource protection and recreation policies of the Coastal Act and the Carlsbad LCP. Mitigation measures will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation 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 project, 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.

### **STANDARD CONDITIONS:**

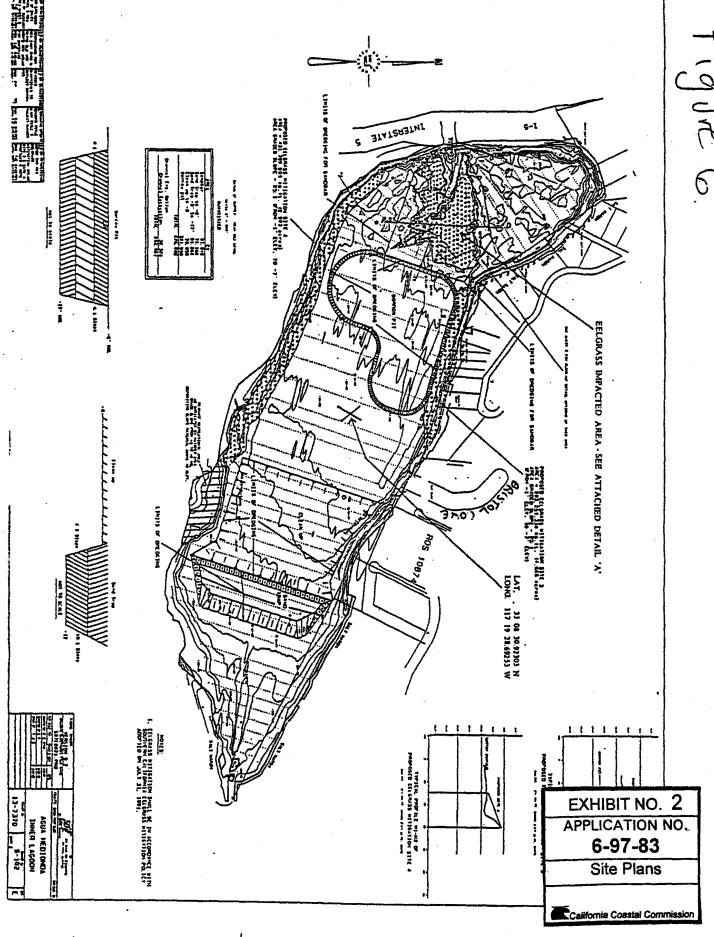
- 1. Notice of Receipt and Acknowledgement. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. Expiration. 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.
- Compliance. All development must occur in strict compliance with the proposal as set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
- 4. <u>Interpretation</u>. Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
- 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.
- 7. Terms and Conditions Run with the Land. These terms and conditions shall

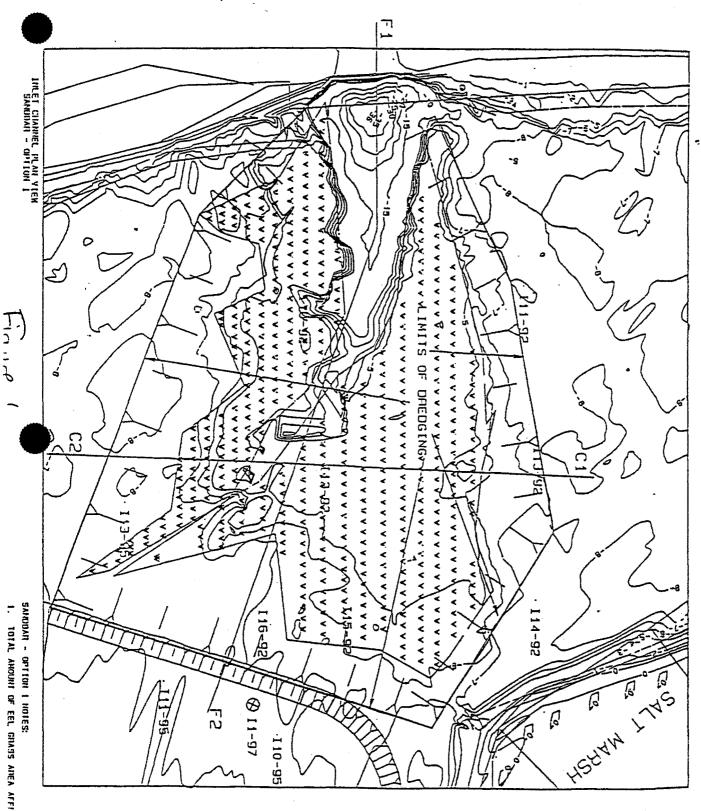
be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

(7083R)



igur 6





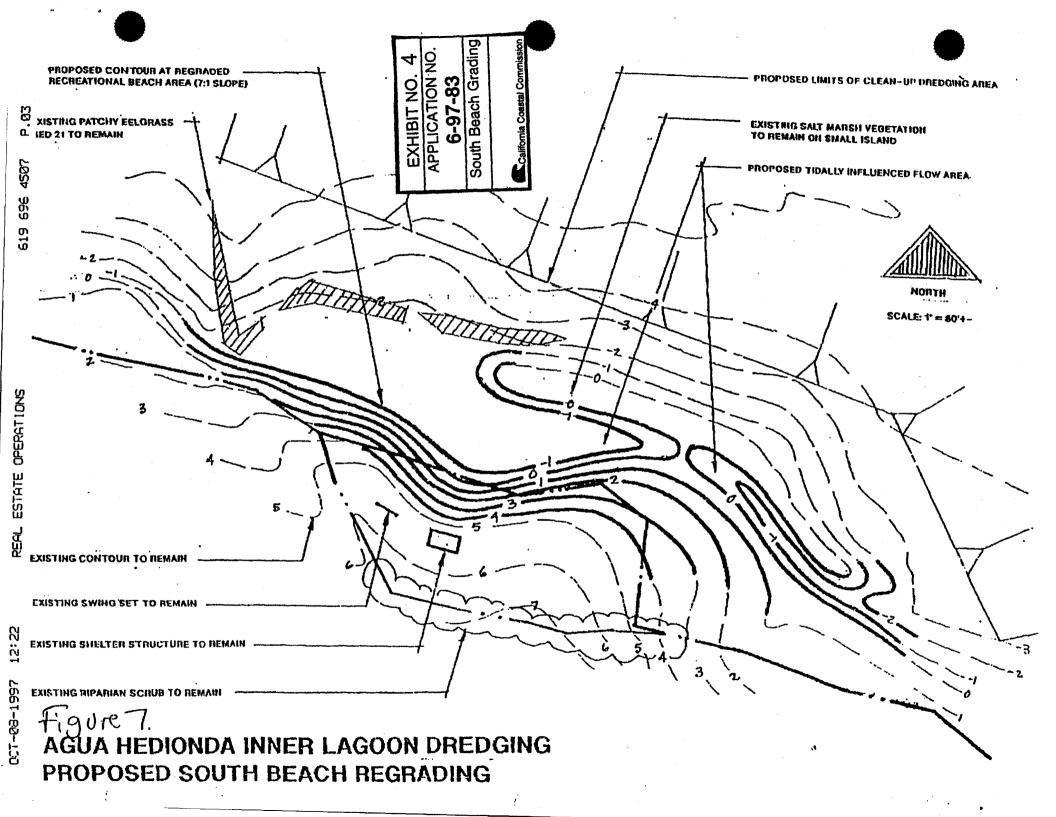
AGUA HEDIONDA INNER LAGOON - EELGRASS IMPACTED AREA - DETAIL 'A'

EXHIBIT NO. 3

APPLICATION NO.
6-97-83

Eelgrass Impacts

California Coastal Commission







CALIFORNIA COASTAL COMMISSION SAN DIEGO COAST DISTRICT

January 7, 1998

FILE NO.

Mr. Bill Ponder California Coastal Commission San Diego Coast Region 3111 Camino Del Rio North San Diego CA 92108

RE: AGUA HEDIONDA INNER LAGOON DREDGING, COASTAL APPLICATION NO. 6-97-83, REQUEST TO ADD OUTER LAGOON DREDGING PHASE

Mr. Ponder:

SDG&E would like to request incorporation of an additional construction phase to our inner lagoon dredging application. We would like to amend our permit application to allow the dredging of the outer lagoon in the spring of 1999. The 1999 dredging of the outer lagoon would be the final phase in the overall restoration of the tidal prism and hydraulic efficiency of the Agua Hedionda Lagoon.

We expect that the volume of material moved in outer lagoon would be approximately 150,000 cubic yards. Adding the outer lagoon dredging phase would increase the total volume of material moved under this permit to approximately 797,000 cubic yards. All material (sand) dredged from the outer lagoon would be placed on the Carlsbad State Beach, increasing the total beach disposal volume to approximately 491,000 cubic yards. The final volume of material would be based on a pre-dredge survey prepared 60 days prior to starting dredging operations. Our current dredging schedule (submitted to staff October 8, 1997) indicates that the outer lagoon dredging would occur from February 1, 1999 to April 14, 1999. However, to assure retention of sand on the beach and avoid winter storm activity, we would like to extend the end of the dredging period to June 1, 1999. SDG&E has a Corps of Engineers permit (No. 87-171-SK) and a Regional Water Quality Control Board permit (General Order 96-32) which would allow dredging of the outer lagoon in 1999.

The optimum disposal site and quantities or ratios for disposal of material from future SDG&E maintenance dredging will be addressed in a sand transport study being prepared by Coastal Environments. Results of this study will be available in June of 1998. Absent this study, SDG&E will continue to recommend the use of the middle beach (between existing power plant jetties) and south beach (south of existing power plant discharge jetty) as disposal sites for dredged material.

EXHIBIT NO. 5

COT 02

Applicant's letter

However, SDG&E is aware of the Coastal Commission's desire to see sand placed north of the power plant intake jetty. If the Commission decides that amending the inner lagoon application to include the outer lagoon dredging phase requires special project conditions directing placement of dredged material on areas north of middle beach (in SDG&E's currently permitted disposal boundaries on the Carlsbad State Beach), we would ask the Commission to acknowledge the following in issuing such special project conditions:

- That, in the absence of the sand transport study, any amount of material to be placed north shall not set a precedent for future SDG&E dredging projects.
- That all future disposal of dredged material will be based on the quantities or ratios and placement sites identified in the sand placement study.
- That any material placed north shall be material dredged from the outer lagoon dredging phase (approximately 150,000 cubic yards, exact volume to be determined by a pre-dredging survey).
- That SDG&E's compliance with any special project conditions requiring sand
  placement north of middle beach, prior to completion of the sand transport study,
  does not indicate a change in SDG&E's opinion that placing sand north of the lagoon
  intake jetty has the potential to increase sedimentation rates in the Agua Hedionda
  Lagoon.

Please call me at (619) 696-2732 if you have any questions.

Sincerely,

Mark Chomyn

Senior Land Planner

cc: Sherilyn Sarb, Coastal Commission Steven Jantz, City of Carlsbad

Bob Richards, Agua Hedionda Lagoon Foundation

David Turner, Bristol Cove Property Owners Association

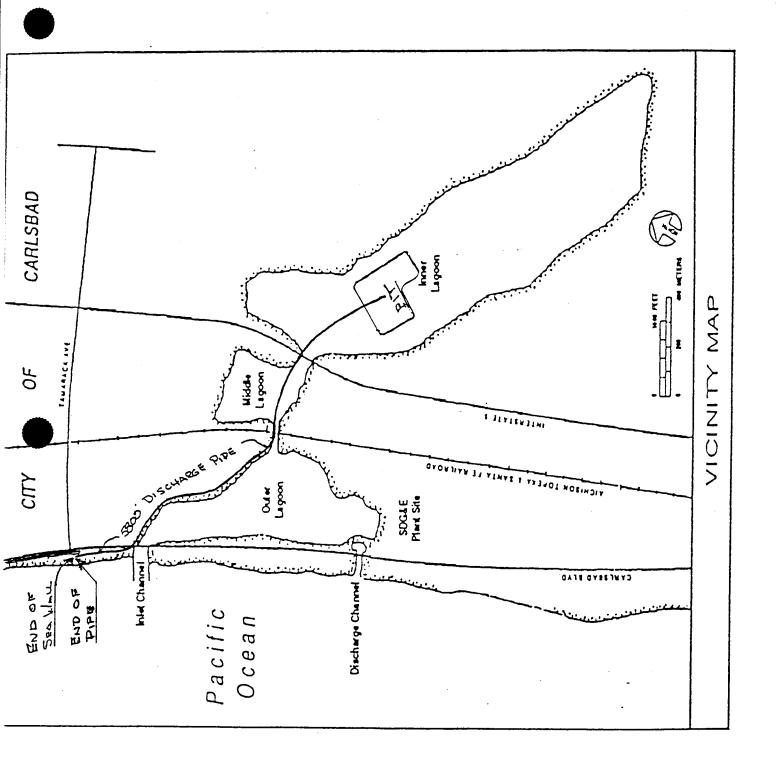


EXHIBIT NO. 6

APPLICATION NO.
6-97-83

Location Map

California Coastal Commission

		٠