

CALIFORNIA COASTAL COMMISSION

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STAFF RECOMMENDATION

ON CONSISTENCY DETERMINATION

Consistency Determination No.	CD-060-09
Staff:	LS-SF
File Date:	9/24/2009
60 th Day:	11/23/2009
75 th Day:	12/8/2009
Commission Meeting:	11/5/2009

FEDERAL AGENCY: **U.S. Army Corps of Engineers**

PROJECT LOCATION: Crescent City Harbor, Del Norte County (**Exhibits 1-3**)

PROJECT DESCRIPTION: Maintenance dredging of Crescent City Harbor Marina Access Channel and disposal of up to 64,000 cubic yards of dredged material on Whaler Island for beach replenishment.

SUBSTANTIVE FILE DOCUMENTS: See Page 8

EXECUTIVE SUMMARY

The Coastal Commission received a consistency determination from the U.S. Army Corps of Engineers for maintenance dredging approximately 64,000 cubic yards (cu.yds.) of clean sandy sediment from the Crescent City Harbor Marina Access Channel. The purpose of the project is to maintain the authorized depth in the federal channel of -15 feet mean lower low water to allow for safe navigation for recreational and commercial vessels in Crescent City Harbor. The clean, sandy material will be disposed on the adjacent Whaler Island for beach replenishment. Dredging and disposal will occur in late 2009 and early 2010 using a hydraulic dredge and disposal pipeline.

The proposed project is consistent with the allowable use, alternatives, and mitigation policies of the California Coastal Management Program (CCMP)(Coastal Act Section 30233). The project will remove shoaling in the federal Marina Access Channel and improve recreational boating safety at the harbor. While the proposed dredging could interfere with recreational boating during dredge operations, any impacts will be temporary and are insignificant when compared to the benefit from removing the existing shoaling hazards in the channel. The project will generate minor adverse effects on public access and recreation, primarily resulting from temporary beach closures during disposal operations on Whaler Island during the winter season. However, the project will improve recreational opportunities due to the placement of clean and grain-size compatible sand on Whaler Island, which will over time nourish the northern stretch of South Beach. The project is consistent with the public access and recreational boating policies of the CCMP (Coastal Act Sections 30210, 30211, 30213, 30220, 30224, and 30234).

The project involves the dredging of only clean sediments in the Crescent City Harbor Marina Access Channel and these sediments are chemically and physically suitable for beach replenishment. Turbidity effects will be localized and temporary due to the high sand content of the dredged sediments. Fish, plankton, and benthic organisms will recolonize the disturbed dredge and disposal areas soon after project completion. Monitoring of dredged material disposal will ensure that this activity will not adversely affect drainage from the nearby Crescent City Marsh. The project is consistent with the marine resource, water quality, and environmentally sensitive habitat policies of the CCMP (Coastal Act Sections 30230, 30231, and 30240). By using the dredged materials to replenish Whaler Island, these sediments will remain in the north coast long shore littoral system and the project is consistent with the sand supply policy of the CCMP (Coastal Act Section 30233(b)).

STAFF SUMMARY AND RECOMMENDATION

I. PROJECT DESCRIPTION. The U.S. Army Corps of Engineers (Corps) submitted a consistency determination for maintenance dredging approximately 64,000 cubic yards (cu.yds.) of clean sediment from the Crescent City Harbor Marina Access Channel (**Exhibits 1-3**). The purpose of the proposed project is to maintain the authorized federal channel depth to allow for safe navigation for recreational and commercial vessels in this section of Crescent City Harbor.

The clean, sandy material will be disposed on Whaler Island for beach replenishment (**Exhibit 3**). The Marina Access Channel will be dredged to its authorized depth of -15 feet mean lower low water (MLLW). Dredging and disposal will take place in late 2009 and early 2010 using a hydraulic dredge and disposal pipeline. Crescent City Harbor was last dredged in 1999 and 2000 when the Commission concurred with Corps of Engineers consistency determinations CD-080-98 and CD-081-98 for dredging of 90,000 cu.yds. of sediment from the federal channels, disposal of sands at Whaler Island, and disposal of fine-grained sediments at an upland disposal site. However, maintenance dredging has not previously occurred in the Marina Access Channel as it was initially constructed in 2000.

II. FEDERAL AGENCY'S CONSISTENCY DETERMINATION. The U.S. Army Corps of Engineers has determined the project consistent to the maximum extent practicable with the California Coastal Management Program (CCMP).

III. STAFF RECOMMENDATION.

The staff recommends that the Commission adopt the following motion:

Motion: I move that the Commission **concur** with consistency determination CD-060-09 that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).

Staff Recommendation:

The staff recommends a **YES** vote on the motion. Passage of this motion will result in an agreement with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

Resolution to Concur with Consistency Determination:

The Commission hereby **concurs** with the consistency determination by the U.S. Army Corps of Engineers, on the grounds that the project described therein is fully consistent, and thus is consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

IV. FINDINGS AND DECLARATIONS:

The Commission finds and declares as follows:

A. Dredging and Filling. Section 30233 of the Coastal Act provides 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 navigation channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

...

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for such purposes to appropriate beaches or into suitable long shore current systems.

The proposed maintenance dredging and disposal project needs to be examined for consistency with Section 30233 of the Coastal Act. Under this section, dredging and filling of open coastal waters, including disposal of dredged materials, is limited to those cases where the proposed project is an allowable use, is the least damaging feasible alternative, and where mitigation measures are provided to minimize environmental impacts. The dredging and disposal of dredged materials from the maintenance dredging of the Marina Access Channel is an allowable use under Section 30233(a)(2). Without the proposed dredging, vessel navigation in the harbor would become hazardous due to sedimentation. No other dredging alternatives at Crescent City Harbor are feasible or less damaging. As it has determined previously for federal channels at Crescent City Harbor, the Commission finds that the proposed maintenance dredging of the Marine Access Channel to its design depth is the least damaging feasible dredging alternative.

The Corps considered several dredged material disposal alternatives: (1) the proposed Whaler Island site adjacent to the harbor; (2) the HOODS ocean disposal site (66 miles southwest of the harbor); (3) the Chetco (Oregon) ocean disposal site (17 miles north of the harbor); and (4) the Crescent City Harbor District upland disposal site adjacent to the harbor. The two ocean disposal sites are too far away to be economically feasible and in addition would result in the loss from the littoral system of clean, sandy sediments valuable for beach replenishment. The upland disposal site is typically reserved for dredged sediments that are either too fine or are not chemically suitable for ocean disposal or beach replenishment. Given that the proposed dredged materials are suitable for beach replenishment based on grain size and sediment chemistry analysis, use of the upland disposal site is not warranted and placement at Whaler Island for beach replenishment is the least damaging feasible disposal alternative.

As discussed in the following sections of this report, mitigation measures are incorporated into the project where necessary to protect coastal resources. Therefore, the Commission finds that the proposed maintenance dredging project is consistent with the allowable use, alternatives, and

mitigation tests contained in the dredge and fill policy of the California Coastal Management Program (CCMP)(Coastal Act Section 30233).

B. Public Access and Recreation. The Coastal Act provides the following:

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.

30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational; opportunities are preferred. . . .

30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

30224. Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division. . . .

30234. Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

The consistency determination states that Crescent City Harbor is a shallow-draft critical harbor of refuge, supporting a U.S. Coast Guard search and rescue station, commercial and sport fishing, waterfront industry, and recreational boating. The purpose of the proposed project is to restore the authorized channel depth in the Marina Access Channel to allow for continued, safe navigation for recreational and commercial boats in Crescent City Harbor. The proposed maintenance dredging could interfere with recreational boating in the harbor, but any impacts would be temporary and limited to the immediate area of dredging, and are insignificant when compared to the benefit from removing the shoaling hazards in the navigation channel. In addition, scheduling the work during the winter avoids the peak boating season and further minimizes project impacts on boating. The Corps also states that short-term beach closures during sand disposal operations at Whaler Island are considered insignificant impacts. Disposal will occur during the winter when beach use is at its lowest level, beach areas immediately adjacent to the disposal sites will remain open to the public, and beach nourishment will result in

wider beaches and improved recreational opportunities. Prior to the start of dredging and disposal operations, the Corps will inform boaters and beach users through a variety of outreach efforts of the navigation restrictions and temporary beach closures associated with the proposed project. Therefore, the Commission finds that the proposed maintenance dredging and beach nourishment project is consistent with the public access and recreational boating policies of the CCMP (Coastal Act Sections 30210, 30211, 30213, 30220, 30224, and 30234).

C. Marine Resources/Water Quality/Environmentally Sensitive Habitat. The Coastal Act provides the following:

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.

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.

30240.

(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 park 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 consistency determination examined grain size and sediment chemistry compatibility of the dredged sediments. Sediment samples were collected from the Marina Access Channel in May 2009 and the subsequent analytical work documented that the sediments in this location were comprised of more than 80 percent sand, which qualifies these materials for disposal at Whaler Island for beach nourishment. The consistency determination further states that:

The chemistry for the sampling did not show any levels of concern. These sediments were also subjected to Modified Elutriate Test (MET) dissolved metals and MET bioassay analysis. The dissolved metals results did not show any levels of concern, based on

protection of salt water aquatic life criteria. In the MET bioassay analysis the sediments did not exhibit any toxicity.

The consistency determination also states that the proposed maintenance dredging in the Marina Access Channel will cause only temporary and localized increases in turbidity, and that potential impacts on dissolved oxygen, pH, and nutrients will likewise be temporary and not adverse. Staff from the U.S. Environmental Protection Agency and the North Coast Regional Water Quality Control Board (RWQCB) reviewed the Corps' sediment test results and the suitability determination and concurred that the dredged material is suitable for disposal at Whaler Island. The Corps will implement the receiving water limitations and monitoring requirements as specified by North Coast RWQCB Order NO. R1-2000-59 (**Exhibit 4**).

While acknowledging the suitability of the dredged sediments from the Marina Access Channel for disposal at Whaler Island, the Commission staff communicated a concern to the Corps that the proposed disposal could lead to an aggradation of sediments at the northern end of South Beach, which in turn could lead to interference with the operation of a Highway 101 culvert which drains Crescent City Marsh. The Corps responded by including the following monitoring and remediation commitment in the consistency determination:

The placement site at Whaler Island shall be surveyed before the placement begins and again after placement ends. These surveys shall be evaluated to determine if there is any impact to the drainage culvert from the nearby freshwater habitat. During the dredging operation the drainage characteristics of that habitat shall be monitored for any signs of impact. These observations shall be documented in the daily field notes along with the rest of the monitoring activities. If the drainage characteristics seemed to be impacted, a survey shall be conducted to determine if there is any obstruction to flow. Any obstructions caused by the dredging operation shall be removed.

The Commission interprets the Corps' commitment to remove any obstructions to operation of the culvert caused dredging operations to extend through the period of time commencing with dredged material placement on Whaler Island and until such time as the materials have been transported by wave action off the island and down South Beach past the culvert. The Corps will submit to the Commission staff copies of monitoring reports for disposal operations at Whaler Island and for observations of drainage characteristics and culvert operations at Crescent City Marsh.

In conclusion, the proposed dredged materials are physically and chemically suitable for placement on Whaler Island for beach replenishment. Turbidity effects will be localized and temporary due to the high sand content of the dredged sediments. While dredging and disposal may result in minor, short-term impacts to existing marine habitat, fish, plankton, and benthic organisms in Crescent City Harbor and along South Beach, any affected species will recolonize the area after completion of project operations. Monitoring of dredged material disposal will ensure that this activity will not adversely affect drainage from the nearby Crescent City Marsh. The Commission has previously found when concurring with clean dredged material disposal operations that these types of impacts are not significant and do not require additional mitigation

measures. Therefore, the Commission finds that the proposed project is consistent with the marine resources, water quality, and environmentally sensitive habitat policies of the CCMP (Coastal Act Sections 30230, 30231, and 30240).

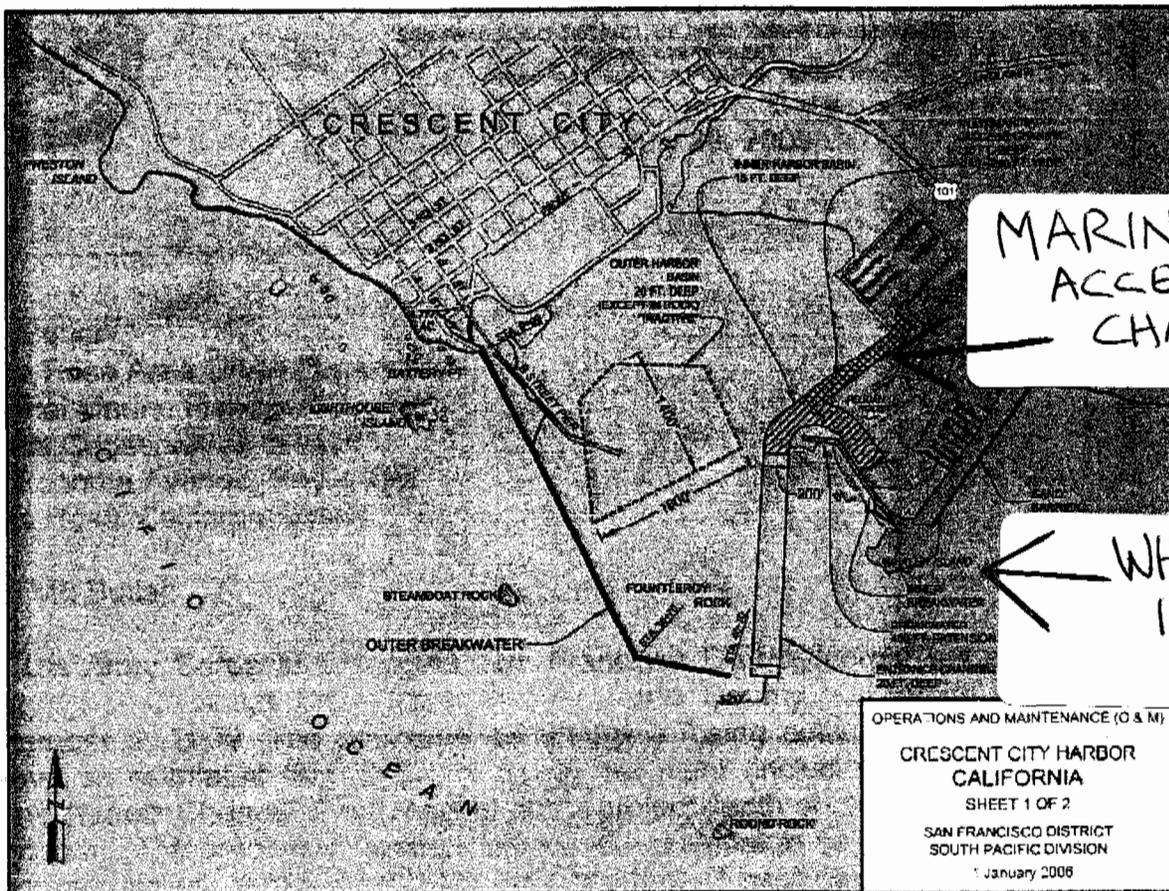
D. Sand Supply. Section 30233(b) of the Coastal Act provides that:

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 approximately 64,000 cu.yds. of clean sandy dredged material from the Crescent City Harbor Marina Access Channel on Whaler Island. The proposed dredged materials are physically compatible for beach nourishment at this location, and as discussed previously do not contain levels of contaminants that preclude their placement on the beach. By placing dredged materials at this location, they will remain in the north coast long shore littoral system. Therefore, the Commission finds that the proposed maintenance dredging project is consistent with the sand supply policy of the CCMP (Coastal Act Section 30233(b)).

SUBSTANTIVE FILE DOCUMENTS:

1. Consistency determinations CD-080-98 and CD-081-98 (Corps of Engineers, Crescent City Harbor Entrance Channel and Inner Harbor Channel maintenance dredging.
2. Environmental Assessment for the Crescent City Harbor Federal Channels FY 2009 Maintenance Dredging, August 2009 (Corps of Engineers.
3. Crescent City Harbor Federal Channels 2009 Maintenance Dredging Sampling and Analysis Report, July 16, 2009, Corps of Engineers.



MARINA ACCESS CHANNEL

← WHALER ISLAND

EXHIBIT NO. 2
APPLICATION NO.
CD-060-09

Figure 1: Sediment Core Locations, Whaler Island Disposal Site, and Crescent City Harbor District's Upland Disposal Site, Crescent City Harbor Federal Channels, 2009



EXHIBIT NO. 3
APPLICATION NO.
CD-060-09

California Regional Water Quality Control Board
North Coast Region

Order No. R1-2000-59
ID No. 1A76119ODN

WASTE DISCHARGE REQUIREMENTS

FOR

CRESCENT CITY HARBOR DISTRICT
MAINTENANCE DREDGING
DISTRICT BERTHING AREAS AND FEDERAL CHANNEL

Del Norte County

The California Regional Water Quality Control Board, North Coast Region, (hereinafter the Regional Water Board) finds that:

1. The Crescent City Harbor District (hereinafter discharger) submitted a Report of Waste Discharge dated December 14, 1999. The report describes maintenance dredging of Crescent City Harbor to maintain navigation within the harbor.
2. The discharger has described two locations for dredge material disposal. The areas are:
 - a. A 15-acre upland disposal site, located northwest of the inner boat basin. During disposal operations, dredge materials are discharged to the pond by a suction cutter dredge and excess water is decanted and discharged back to the harbor. Small quantities of material are sometimes removed by a shore-based clamshell operation from various areas of the harbor, such as the vicinity of the boatlift facility and the launch ramp area, and trucked to the uplands deposition site.
 - b. The beach and near-shore waters just east of the Whaler Island causeway.Utilization of the two disposal sites would be on the following schedule:
 - a. The upland disposal site would be used on a year-round basis, subject to its capacity limitations and dredging needs within the harbor.
 - b. The beach and near-shore waters to the east of the Whaler Island causeway would only be used between August 1 and December 31.
3. Dredging depth will vary throughout the harbor depending on the needs of the vessels using specific areas. The harbor has been divided in to five areas as shown on attachment A of this order and includes the following depths and volumes:

EXHIBIT NO. 4
APPLICATION NO.
CD-060-09

<u>Area</u>	<u>Design Depth</u>	<u>Volume</u>
1	-15 feet MLLW	will not be dredged this cycle
2	-15 feet MLLW	49,739 cubic yards
3	-12 & -15 feet MLLW	99,073 cubic yards
4	-15 feet MLLW	89,647 cubic yards
5	-10 & -15 MLLW	59,621 cubic yards

The total volume of dredging needed in the harbor is 298,080 cubic yards. Typically, areas are over-dredged by 2 feet; which would bring the total to 457,020 cubic yards.

4. The criteria for the evaluation of the disposal sites for dredged material include:
 - a. chemical constituents
 - b. physical characteristics
 - c. bioassay results

All three criteria have been used to determine the suitability of the dredged materials for the proposed disposal areas. The grain-size measurements in Areas 2, 4, and 5 show less than 60 percent sand. In Area 3, the grain-size measurements show that 90 percent of the material is sand and would be suitable for beach replenishment.

No significant chemical constituents were detected in the samples collected throughout the harbor.

Bioassay results show that in Area 3, survival was not statistically different than that of control tests. Areas 2, 4, and 5 showed a lower survival rate than the control tests. Area 2 was statistically lower, which indicates that the materials should not be discharged to the beach area, but are suitable for upland disposal. Areas 4 and 5 were not significantly different from the control test and should be suitable for beach replenishment.

5. The boatlift facility associated with the repair yard is located in Area 4. The area immediately surrounding the boatlift has historically shown elevated levels of copper. Dredged materials from this area are not suitable for beach disposal and all materials dredged from this area, unless shown to be suitable by specific testing, shall be discharged to the upland site.
6. The Regional Water Board's Water Quality Control Plan for the North Coast Region includes water quality objectives and receiving water limitations to protect beneficial uses and to prevent nuisances.
7. Crescent City Harbor is considered a bay pursuant to the Basin Plan. The beneficial uses for Crescent City Harbor include:

- a. navigation
 - b. water contact recreation
 - c. non contact water recreation
 - d. commercial and sport fishing
 - e. wildlife habitat
 - f. marine habitat

 - g. migration of aquatic organisms
 - h. fish spawning, reproduction and/or early development
 - i. shellfish harvesting
8. The discharge is presently governed by Waste Discharge Requirements Order No. 92-103, adopted by the Regional Water Board on August 27, 1992.
 9. Permitting of the proposed dredging is categorically exempt from provisions of the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) under 14 California Code of Regulations Sections 15301 and 15304 as an existing facility and as an activity involving minor alterations to land (specifically, maintenance dredging), respectively.
 10. The Regional Water Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations.
 11. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.
 12. The permitted discharge is consistent with the provisions of State Water Resources Control Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality Waters in California. The impact on existing water quality will be insignificant.

THEREFORE, IT IS HEREBY ORDERED that Waste Discharge Requirements (Order No. 92-103) are rescinded and the discharger, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, shall upon the issuance of this Order comply with the following:

A. EFFLUENT LIMITATIONS:

1. The discharge of decant water from the dredge material settling pond shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>30-day average</u>
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Suspended solids	mg/l	100
Settleable solids	ml/l	1.0

B. DISCHARGE PROHIBITIONS

1. The discharge of any waste not specifically regulated by this Order is prohibited.
2. Creation of a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code, is prohibited.
3. The discharge of waste to land that is not under the control of the discharger is prohibited.
4. The discharge of dredge material from Area 2 to the beach replenishment area is prohibited. (The dredge material from this area may be discharged to the upland site.)
5. The discharge of dredge material from the area adjacent to the boatlift facility to the beach replenishment area is prohibited. (The dredge material from this area may be discharged to the upland site.)
6. The discharge rate of dredge material from Area 1 to the beach replenishment area is prohibited unless it can be shown by appropriate testing that the materials are suitable for beach disposal, per Finding 4. (The dredge material from this area may be discharged to the upland site.)

C. RECEIVING WATER LIMITATIONS:

1. Waters shall not contain substances in concentrations that result in deposition of material that cause nuisance or adversely affect beneficial uses.
2. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause a nuisance or adversely affect beneficial uses.
3. Turbidity shall not be increased more than 20 percent above naturally occurring background levels. Allowable zones of dilution within which higher percentages can be tolerated may be defined for specific discharges upon the issuance of discharge permits or waiver thereof.

D. GENERAL PROVISIONS

1. A copy of this Order shall be maintained at the discharge facility and be available at all times to operating personnel.

2. Severability

Provisions of these waste discharge requirements are severable. If any provision of these requirements is found to be invalid, the remainder of these requirements shall not be affected.

3. Operation and Maintenance

The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements.

4. Change in Discharge

The discharger shall promptly report to the Regional Water Board any material change in the character, location, or volume of the discharge.

5. Change in Ownership

In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the following items by letter, a copy of which shall be forwarded to the Regional Water Board:

- a. existence of this Order, and
- b. the status of the discharger's annual fee account

6. Vested Rights

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from his liability under federal, State, or local laws, nor create a vested right for the discharger to continue the waste discharge.

7. Monitoring

The discharger shall comply with the Contingency Planning and Notification Requirements Order No. 74-151 and the Monitoring and Reporting Program No. R1-2000-59 and any modifications to these documents as specified by the Regional Water Board Executive Officer. Such documents are attached to this Order and incorporated herein. Chemical, bacteriological, and bioassay analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services.

8. Inspections

The discharger shall permit authorized staff of the Regional Water Board:

- a. entry upon premises in which an effluent source is located or in which any required records are kept;
- b. access to copy any records required to be kept under terms and conditions of this Order;
- c. inspection of monitoring equipment or records; and
- d. sampling of any discharge.

9. Noncompliance

In the event the discharger is unable to comply with any of the conditions of this Order due to:

- a. breakdown of waste treatment equipment,
- b. accidents caused by human error or negligence, or
- c. other causes such as acts of nature,

the discharger shall notify the Regional Water Board Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephonic notification. The written notification shall

include pertinent information explaining reasons for the noncompliance and shall indicate the steps taken to correct the problem and the dates thereof, and the steps being taken to prevent the problem from recurring.

10. Revision of Requirements

The Regional Water Board will review this Order periodically and may revise requirements when necessary.

The Regional Water Board requires the discharger to file a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.

Certification

I, Lee A. Michlin, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, North Coast Region, on August 25, 2000.

Lee A. Michlin
Executive Officer

California Regional Water Quality Control Board
North Coast Region

Monitoring and Reporting Program No. R1-2000-59
(Revised December 30, 2004)

for

Crescent City Harbor District
Maintenance Dredging

Del Norte County

The purpose of this monitoring program is to demonstrate that the requirements of Order No. R1-2000-59 are being met. The program calls for routine monitoring at regular intervals during and following dredging operations.

Dredging Records

Dredging activity shall be reported daily as "none" if the dredge is inactive, or "pond" if the dredge is placing spoil in the pond, or "beach" if the dredge is placing spoil at the Whaler Island disposal site.

Effluent Monitoring

Effluent grab samples shall be collected daily when the dredge spoil pond overflows. Samples shall be analyzed for turbidity (as NTU) and settleable solids (as mL/L). "Dry" shall be reported in place of sample results for each day of dredging not producing dredge spoil pond overflow.

Annually, on the first day of dredge spoil pond overflow or dredge discharge to the Whaler Island disposal site during a calendar year, a chronic toxicity bioassay shall be conducted using a sample of the discharge. During the first year, test organisms shall include topsmelt *Atherinops affinis*, red abalone *Haliotis rufescens*, and giant kelp *Macrocystis pyrifera*. The sensitivity of these three test organisms shall be determined during the first year of testing, and subsequent chronic toxicity bioassays shall use only the critical life stage of the most sensitive of the three organisms.

Receiving Water Monitoring

Receiving water samples shall be collected daily, within one hour of high tide, when the dredge spoil pond overflows or the dredge is placing spoil at the Whaler Island disposal site. These samples shall be analyzed for turbidity. One sample shall be taken near the ice house at the end of Citizens Dock Road, and the other shall be taken within 200 feet of the point of entrance of the discharge into the Ocean.

Annual Survey

An annual biological survey of the Whaler Island disposal site shall be conducted during the summer following use of the site for dredge disposal. Observation sites shall be established – one on the seaward side the groin extending southeasterly from Whaler Island, and the other on the opposite side of the groin. For each observation site the marine biologist conducting the survey shall quantify and report the density of colonization for each marine species observed.

A physical survey by a licensed land surveyor shall be made of the beach elevations within the groin during minus tides at approximately the same time as the biological survey. A map of the survey results shall be submitted with the monitoring report for the month of the survey.

Monitoring and Records

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

The discharger shall calibrate and perform maintenance procedures in accordance with manufacturer's specifications on all monitoring instruments and equipment to ensure accurate measurements.

Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. the individuals who performed the sampling or measurements;
3. the date(s) analyses were performed;
4. the individual(s) who performed the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses;
7. the method detection limit; and
8. the practical quantitation level (PQL) or the limit of quantitation (LOQ).

Unless otherwise noted, all sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association.)

All permit applications, reports, or information submitted to the Regional Water Board shall be signed by either a principal executive officer or ranking elected official of Crescent City Harbor District.

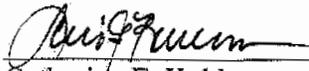
Any person signing a document under this monitoring and reporting program shall make the following certification:

"I certify under penalty of perjury that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Reporting

Monitoring reports shall be submitted to the Regional Water Board for each month on or before the last day of the following month. Reports shall be submitted on a form similar to the attached example.

Ordered by:


Catherine E. Kuhlman
Executive Officer

December 30, 2004

ALW:js/123004_DredgingM&R

EX-4