PORT MASTER PLAN AMENDMENT NO. 19
MAIN CHANNEL DEEPENING PROJECT

BACKGROUND

The Port of Los Angeles Master Plan was certified by the California Coastal Commission on August 20, 1980. The certified Port Master Plan as modified by subsequent amendments provides for channel depths in the Main Channel, West Basin and East Basin areas of the port of -45 feet MLLW (mean lower low water). This depth was included in the Port Master Plan certified by the Coastal Commission in 1980 and the deepening project was completed in 1983.

Container Vessel Navigational Requirements

The Port of Los Angeles is currently the second largest container port in the United States and ninth largest in the world. In calendar year 1997, the port handled over 2.9-million TEUs (twenty-foot equivalent units), a 40 percent increase from 1990. Current cargo projections show continued growth in containerized cargo throughput at the port. Recent trends in container vessel designs include larger vessels with the capability of handling over 6,000 TEUs. The designs of these new container vessels have drafts of up to 46 feet. Currently, five shipping lines calling at San Pedro Bay have container vessels which draft 46 feet. Additionally, a significant portion of new container ships currently being built will have drafts of 46 feet. Currently, the port cannot handle these vessels in the Main Channel or West and East Basins due to the current channel depths of -45 feet.

In order for the Port of Los Angeles to continue to accommodate the projected growth in containerized cargo throughput and the deeper draft vessels which will be carrying the cargo, the existing channel depths must be deepened five feet to -50 feet MLLW. This channel depth is necessary to accommodate the deeper draft container vessels and provide for an adequate under keel clearance for tides and safety purposes.

Purpose of Amendment

The purpose of this amendment is to provide for the deepening of the Main Channel, Inner Harbor Turning Basin, West Basin, East Basin and the East Basin Channel from the current -45 feet MLLW to -50 feet MLLW. In addition, selected berths will also be deepened.

A portion of the Main Channel has already been deepened to -50 feet. On March 14, 1997, the Coastal Commission granted the port a coastal permit (No. 5-96-163) to deepen a portion of the Main Channel between the S.P. Slip north to Berths 84 and 234 and dispose of approximately 400,000 cubic yards at Pier 400. Approximately 200,000 cubic yards of material was dredged in this area in May 1997.
Up to 5 million cubic yards of material will be dredged for this Main Channel deepening project. Several alternatives for the disposal of the material from the deepening project have been identified. Disposal alternatives assessed include placement in Pier 400, a certified landfill under the port master plan; placement in the Cabrillo Shallow Water Habitat extension, certified through port master plan amendment No. 17; upland disposal; ocean disposal, which would require a federal consistency certification and placement in borrow pits. The creation and use of borrow pits in the outer harbor as an allowable water use is also part of this amendment.

COASTAL ACT COMPLIANCE

An amendment to the Port Master Plan must follow the same certification and approval process as a Port Master Plan. The California Coastal Act of 1976, Article 3, Section 30711, paragraph (a) states, "A port master plan that carries out the provisions of this chapter shall be prepared and adopted by each port governing body, and for informational purposes, each city, county, or city and county which has a port within its jurisdiction shall incorporate the certified port master plan in its local coastal program. A port master plan shall include the following:"

1. The proposed uses of land and water areas, where known.

The purpose of this amendment is to provide for the deepening of the Main Channel, Inner Harbor Turning Basin, West Basin, East Basin and the East Basin Channel to a depth of -50 feet as well as selected berths. The channel deepening project will allow the port to accommodate deeper draft container vessels which are being placed into service by various shipping lines. The -50 foot depth will allow the port to accommodate container vessels that have drafts greater than -46 feet and provide for an adequate under keel clearance requirement. Figure 1 identifies the navigation channels and selected berths to be deepened.

Various locations have been assessed for the disposal of up to 5 million cubic yards of material generated from the deepening project. Up to 2 million cubic yards of material is planned to be placed in the Pier 400 fill. The remainder of the material is to be disposed either at an approved upland site, a borrow pit within the port, the Cabrillo Shallow Water Habitat extension or ocean disposal. This amendment will also allow for the creation and filling of borrow pits in the Outer Harbor of the port as an allowable water use. One borrow pit is located in the Main Channel, just inside Angel's Gate and the second site is located southeast of the Pier 400 fill. Figure 2 shows the location of the borrow pits.

Use of the LA-3 ocean disposal site will require a federal consistency certification and disposal in Pier 400 and the Cabrillo permanent shallow water habitat expansion site has already been approved through Port Master Plan amendment No. 17.
Figure 1
Main Channel Deepening Project
2. The projected design and location of port land areas, water areas, berthing, and navigation ways and systems intended to serve commercial traffic within the area of jurisdiction of the port governing body.

The Main Channel is the principal navigation channel within the port. Master planning areas 2 and 3 are immediately west of the Main Channel and planning area 7 is immediately east. The West Basin is in the northwest portion of the port and serves master planning areas 4 and 5. The East Basin and East Basin Channel are in the northern portion of the port and serve master planning areas 5, 6 and 7.

The borrow pits are located in the outer harbor in master planning area 9.

3. An estimate of the effect of development on habitat areas and the marine environment, a review of existing water quality, habitat areas, and quantitative and qualitative biological inventories, and proposals to minimize and mitigate any substantial adverse impact.

In January, 1998, the Port of Los Angeles certified the Environmental Impact Report for the Main Channel Deepening Project. The EIR addressed the potential impacts associated with the deepening project and the disposal options of the dredge material. The EIR identified NOx and SOx emissions during construction as the only significant, unavoidable environmental effect resulting from the proposed project.

Additionally, in September 1997, the U.S. Army Corps of Engineers completed a Final Supplemental Environmental Assessment to the Stage 2 Construction of the Los Angeles Harbor Deepening Project which included the two borrow pits in the outer harbor.

Neither of the above environmental assessments identified any unavoidable adverse impacts to water quality or marine biological resources due to the deepening project or creation and use of the borrow pits. Temporary impacts on water quality and marine biological resources associated with the deepening project could include increased turbidity, decreases in dissolved oxygen, increases in nutrients and increases in suspended contaminants. However, as indicated above, these impacts would be temporary in nature and would generally be confined to the construction phase of the project.

4. Proposed projects listed as appealable in Section 30715 in sufficient detail to be able to determine their consistency with the policies of Chapter 3 (commencing with Section 30200) of this division.

The proposed Main Channel deepening project and borrow pits have been evaluated with regard to the requirements of Section 30715 and found to be a non-appealable development.
5. **Provisions for adequate public hearings and public participation in port planning and development decisions.**

The Notice of Completion and distribution of the draft Port Master Plan Amendment No. 19 was approved by the Los Angeles Board of Harbor Commissioners at a public hearing on December 18, 1997. The Notice of Completion was mailed to interested persons, organizations, governmental agencies, including the California Coastal Commission and all port tenants, including all commercial fishing boat owners who berth in the port.

In addition, a public hearing on the proposed amendment was held during the January 28, 1998 regularly scheduled meeting of the Los Angeles Board of Harbor Commissioners. One comment was received during the public hearing which was related to a different project. No written comments were received.

6. **A port master plan shall contain information in sufficient detail to allow the commission to determine its adequacy and conformity with the applicable policies of this division.**

This amendment has been prepared in full compliance with the policies of the California Coastal Act of 1976, as amended. Coastal Act policies applicable to the proposed amendment are as follows:

**Section 30701**

The legislature finds and declares that:

(a) **The ports of the State of California constitute one of the state's primary economic and coastal resources and are an essential element of the national maritime industry.**

(b) **The location of the commercial port districts within the State of California are well established, and for many years such areas have been devoted to transportation and commercial, industrial, and manufacturing uses consistent with federal, state and local regulations. Coastal planning requires no change in the number or location of the established commercial port districts. Existing ports shall be encouraged to modernize and construct necessary facilities within their boundaries in order to minimize or eliminate the necessity for future dredging and filling to create new ports in new areas of the state.**

This amendment will allow for the deepening of the Main Channel, Inner Harbor Turning Basin, West Basin, East Basin and East Basin Channel and selected container berths from the current depth of -45 feet to -50 feet. The amendment also provides for the creation of borrow pits as a disposal alternative for the dredged material. The deepening of the Main Channel will allow the port to
accommodate the new generation of container vessels which draft greater than -45 feet. As a result, this project will minimize or eliminate the necessity for future dredging in new areas of the state.

Section 30703

The California commercial fishing industry is important to the State of California; therefore, ports shall not eliminate or reduce existing commercial fishing harbor space, unless the demand for commercial fishing facilities no longer exists or adequate alternative space has been provided. Proposed recreational boating facilities within port areas shall, to the extent it is feasible to do so, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

The Main Channel deepening project and creation of the borrow pits to receive dredge material will not eliminate or reduce commercial fishing facilities within the port.

Section 30705

(a) Water areas may be diked, filled, or dredged when consistent with a certified port master plan only for the following:

(1) Such construction, deepening, widening, lengthening, or maintenance of ship channel approaches, ship channels, turning basins, berthing areas, and facilities as are required for the safety and the accommodation of commerce and vessels to be served by port facilities.

(5) Mineral extraction, including sand for restoring beaches, except in biologically sensitive areas.

The deepening of the Main Channel, Inner Harbor Turning Basin, West Basin, East Basin and East Basin Channel as well as selected container berths will allow the port to safely accommodate new generation container vessels that have drafts of greater than -45 feet, the current depth of the port's shipping channels. Currently, five major container shipping lines have brought into service new vessels that have drafts of -46 feet. New buildings of container vessels include another 50 vessels that will have drafts of greater than -45 feet. In order to accommodate the new generation of container vessels and provide for an adequate under keel clearance for safety, the deepening of the Main Channel and basins is necessary.

The creation of the borrow pits in the outer harbor will allow the port to use structurally suitable fill material necessary to complete the Pier 400 landfill. The Stage 1 Pier 400 borrow pit, located at the Angel's Gate breakwater entrance has been dredged to provide approximately 700,000 cubic yards of suitable fill material for Stage 1 of Pier 400. This site was deepened from the permitted -81 feet to -91 feet MLLW, in accordance with Permit No. 88-011-CC, issued by the Corps of Engineers.
The Stage 2 borrow pit, located southeast of Pier 400 and shown in Figure 1, could provide a site for approximately two million cubic yards of dredged material if it is mined for suitable material for placement in Stage 2 of Pier 400. The proposed site would be deepened from the -75 foot channel depth to -92 feet MLLW. These two borrow pits would then be available to accept material from the Main Channel deepening project. Combined, the two borrow pits could accommodate approximately 2.7 million cubic yards of material.

(c) Dredging shall be planned, scheduled, and carried out to minimize disruption to fish and bird breeding and migrations, marine habitats, and water circulation. Bottom sediments or sediment elutriate shall be analyzed for toxicants prior to dredging or mining, and where water quality standards are met, dredge spoils may be deposited in open coastal water sites designated to minimize potential adverse impacts on marine organisms, or in confined coastal waters designated as fill sites by the master plan where such spoil can be isolated and contained, or in fill basins on upland sites. Dredge material shall not be transported from coastal waters into estuarine or fresh water areas for disposal.

Measures will be employed to minimize disruption to fish and bird breeding activities. Unless specifically allowed by the California Department of Fish and Game and the U.S. Fish and Wildlife Service, turbidity from dredge and fill operations will not be allowed to extend into the Cabrillo shallow water habitat during the April to September breeding season of the California least tern.

Material from the dredging activity and borrow pits has been analyzed for toxicants. A Section 10 Permit (Rivers and Harbors Act) and a Section 404 Permit (Clean Water Act) will be obtained from the U.S. Army Corps of Engineers for the project. A Section 401 Certification (Clean Water Act) from the State Water Resources Control Board will also be required. Dredge material testing was conducted under Section 103 of the Marine Protection, Research and Sanctuaries Act using the USEPA/COE "Green Book" criteria for those materials being considered for ocean disposal. For in harbor disposal of the dredge material, appropriate testing was also required. The results of the testing found the material to be suitable for ocean disposal.

(d) For water areas to be diked, filled, or dredged, the commission shall balance and consider socioeconomic and environmental factors.

Neither the EIR for the Main Channel Deepening Project or the U.S. Army Corps of Engineers' Final Supplemental Environmental Assessment to the Stage 2 Construction of the Los Angeles Harbor Deepening Project identified any long term significant adverse environmental impacts associated with the proposed project. The deepening project will allow the port to continue to efficiently handle containerized cargo and generate significant economic impacts to the Los Angeles region and the state. Port cargo activities generate approximately 295,000 jobs in the Los Angeles region and $8.4 billion in wages. Containerized cargo represents a significant portion of these economic impacts.
Section 30706

In addition to the other provisions of this chapter, the policies contained in this section shall govern the filling seaward of the mean high tide line within the jurisdiction of the ports:

(b) The nature, location and extent of any fill, including the disposal of any dredge spoils within an area designated for fill, shall minimize the harmful effects to coastal resources, such as water quality, fish or wildlife resources, recreational resources, or sand transport systems, and shall minimize the reductions of the volume, surface area, or circulation of water.

As stated above, measures will be taken to minimize the harmful effects to water quality and fish and wildlife as a result of the disposal of the dredge material within areas designated for fill. All necessary testing of the dredge material has been completed and will be used to determine the appropriate disposal location. This testing has shown that the effects of dredging and fill activities will be limited to direct physical impacts from these activities.

These activities are not expected to result in any release of contaminants from the sediments during the dredging and fill activities. As such, the activities will have a minimal effect on water quality and fish and wildlife resources. Direct physical impacts include removal of organisms embedded in the dredged sediments and burial of bottom organisms in the disposal areas. These impacts are insignificant due to the ability of adjacent populations to recolonize the impacted areas in a short time period following completion of dredging activities and the short-term nature of the direct impacts. The entire project is scheduled to occur over a time period of approximately one year. Individual areas will begin to recover as soon as dredging is completed in that area. Recovery will be occurring as dredging proceeds.

Section 30708

All port-related developments shall be located, designed, and constructed so as to:

(a) Minimize substantial adverse environmental impacts.

(c) Give highest priority to the use of existing land space within harbors for port purposes, including, but not limited to, navigational facilities, shipping industries, and necessary support and access facilities.

Section 3 of the EIR for the Main Channel Deepening Project identifies mitigation measures to minimize adverse environmental impacts associated with the deepening project and the use of borrow pits. The EIR for the Main Channel Deepening Project identified NOx and SOx emissions
during construction as the only significant, unavoidable impact associated with the deepening project. Water quality impacts associated with the borrow pits (i.e., turbidity) would be temporary, only occurring during creation/filling of the borrow pits. Marine biological impacts associated with the borrow pits are not considered significant as the habitat will remain deep water, soft bottom habitat. Filling of the borrow pit would produce temporary impacts (i.e., smothering of benthic organisms) to marine biological resources. As discussed above, these impacts are insignificant due to the ability of the adjacent populations to recolonize the impacted areas in a short time period following completion of dredging activities and the short-term nature of the direct impacts. The entire project is scheduled to occur over a time period of approximately one year. Individual areas will begin to recover as soon as dredging is completed in that area. Recovery will be occurring as dredging proceeds.

The proposed deepening project enhances navigation and accommodates commercial vessels, which is a priority use of existing harbor space.