

2. SUMMARY

2.1 SIGNIFICANT EFFECTS AND PROPOSED MITIGATION MEASURES

The background and characteristics of the project are described in Sections 1.2 and 1.3. Section 3 of the Draft EIR discusses in detail the existing setting, the environmental impacts which would result if the proposed project were implemented, and mitigation measures to reduce or eliminate all environmental impacts.

Table 2-1 of this Final EIR summarizes adverse impacts of the proposed project and mitigation measures recommended to reduce these impacts to less than significant.

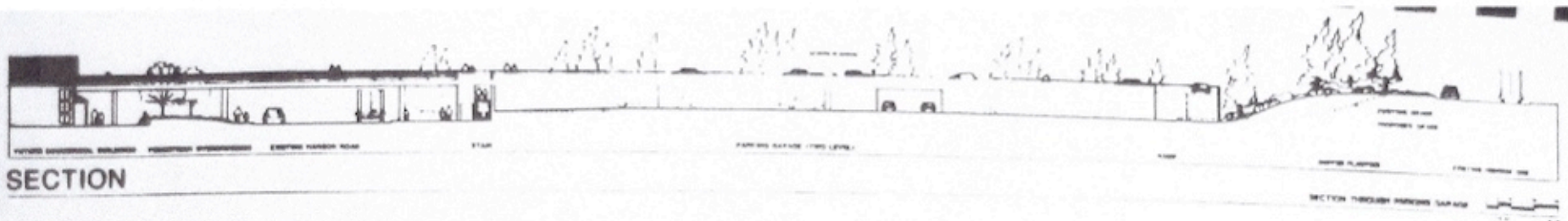
2.2 ALTERNATIVES EVALUATED

The No Project alternative and a project alternative involving the construction of a multi-level parking structure are evaluated in this EIR.

Under the No Project alternative, the components of the East Harbor Master Plan would not be implemented and the Harbor would retain its existing facilities. The Harbor would continue to exhibit inefficiencies related to its commercial and recreational operations. The boat launch ramp would not be constructed and the congestion experienced with current boat launch operations would likely continue. The dry stacked boat storage facility and the 71 additional boat berths would not be constructed. Those boats that would have been stacked or berthed would continue to be trailered in, contributing to the congestion problems. Improved public access to coastal lands including the pedestrian boardwalks and would not occur under the No Project Alternative. The District would not receive implementation funding from the Coastal Conservancy on the Urban Waterfront Restoration Plan.

Under the No Project alternative, temporary construction related impacts such as increased truck traffic, dust from excavation operations, and increased noise levels would not occur and therefore would not impact adjacent areas. The fill of beach and intertidal areas and need for mitigation under the proposed Master Plan would not occur under this alternative. The No Project alternative would not increase the demand on public services provided to the Harbor. However, the vagrant problems currently experienced at the lot at Surfer's Beach would continue to place demand on police services. The potential to disturb significant cultural resources on the project site would not occur under this alternative.

The Parking Structure Alternative involves the construction of a multi-level parking garage on the existing Harbor parking lot at the corner of Capistrano Road and Highway 1. This structure would be constructed in addition to all of the components of the present Master Plan. The structure would provide for an additional 275 automobile parking spaces, and would help relieve potential automobile parking deficiencies identified in Section 3.2 (Traffic and Parking) of the Draft EIR. The structure would not be visually obtrusive to motorists on Highway 1. The top of the structure would be at an elevation lower than the grade of Highway 1 and would be landscaped (see Figure 2.2-1).

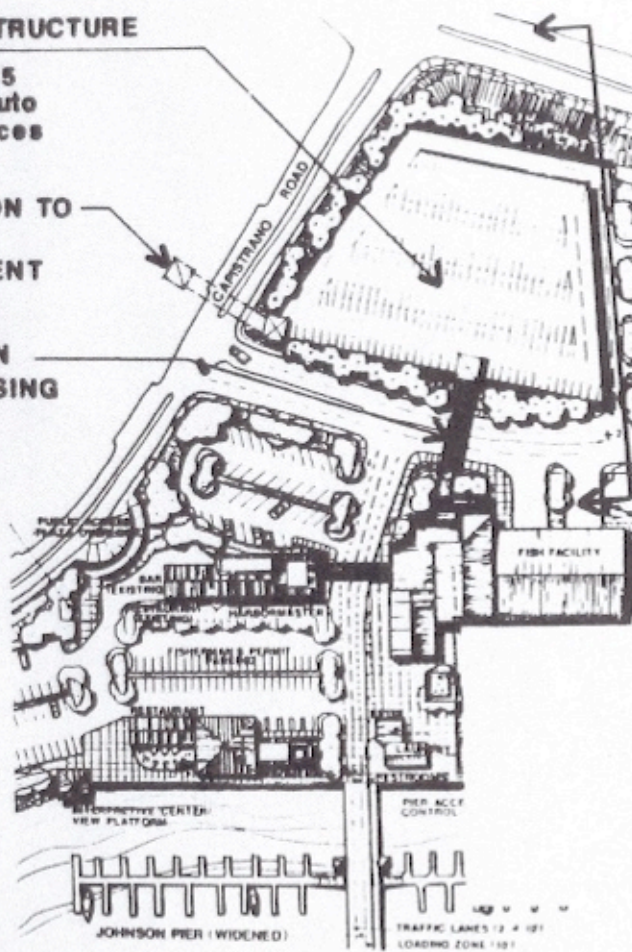


PARKING STRUCTURE

Provides 275 additional auto parking spaces

CONNECTION TO FUTURE DEVELOPMENT

PEDESTRIAN OVERCROSSING



PLAN

2-3

FIGURE 2.2-1
PARKING STRUCTURE PLAN AND CROSS SECTION



earth metrics



TABLE 2-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p><u>3.1 LAND USE AND PLANNING</u></p> <p>The proposed East Harbor Master Plan does not appear to provide a suitable area for inspecting and/or repairing fishing gear or equipment.</p> <p>Implementation of the Master Plan would likely increase the development intensity off-site for visitor serving commercial/recreational uses and industrial uses related to the Harbor facilities.</p>	<p>Provide sufficient area to the extent possible for fishermen to work on their nets, traps and other necessary equipment in the Harbor area.</p> <p>The Harbor District should coordinate with the applicant of Marchant Hotel project to ensure that the public access requirements of the Marchant project do not conflict with the Harbor District's access plans.</p> <p>(Construct the proposed improvement project in phases to allow the provision of necessary public services. The boat launch ramp, access road, and parking improvements should be constructed initially (proposed).</p> <p>(Provide an improved (paved) access from the bluff to the beach at Surfers Beach (proposed).</p> <p>(Provide day-use parking as a shared use at the RV Park site (proposed).</p> <p>Provide an improved (paved) accessway across the dunes area near the outer breakwater for passive recreational purposes. This accessway will be connected to the improved access to Surfers Beach (proposed).</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>Several relevant policies of the Local Coastal Program cannot be assessed at this time due to the program level of the Master Plan.</p>	<p>The Harbor District will require adoption of these policies in specific development plans.</p>
<p>Temporary land use impacts may occur on surrounding areas due to excavation, dredging, and other construction related activities.</p>	<p>See mitigation measures for Section 3.6, Geology, and Section 3.8, Noise, in the Draft EIR.</p>
<p>Long-term visual and traffic impacts may occur as a result of buildout of the East Harbor Master Plan.</p>	<p>See mitigation measures for Section 3.2, Traffic, and Section 3.3, Visual/Aesthetics, in the Draft EIR.</p>
<p><u>3.2 TRAFFIC AND PARKING</u></p>	
<p>Trucks off hauling dirt from the construction area and other heavy construction vehicles may conflict with traffic during the commute hours.</p>	<p>All heavy construction vehicles including trucks containing off haul material should not be allowed to exit onto Highway 1 until after 8:00 A.M. weekdays.</p>
<p>Completion of the proposed project alone (Scenario 1) is forecast to reduce the existing operating characteristics of the right turn lane at the Harbor exit onto Capistrano Road from LOS A to B during the Sunday afternoon peak period.</p>	<p>No mitigation is necessary.</p>
<p>Congestion and conflicts may occur in the westbound turning movement into the Harbor from Capistrano Road.</p>	<p>Lengthen the westbound left turn lane on Capistrano at the harbor entrance to provide a minimum of 200 feet of storage space.</p>
<p>The northbound left turn lane and eastbound left turn lanes at the intersection of the southern end of Capistrano Road and Highway 1</p>	<p>Lengthen the northbound left turn lane and eastbound left turn lanes at this intersection.</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>are too short and may present vehicle conflicts.</p>	
<p>Left turns out of the R.V. park onto Highway 1 and left turns from northbound Highway 1 into the park by large and cumbersome recreational vehicles would create dangerous situations.</p>	<p>Provide an exclusive left turn lane on northbound Highway 1 and a southbound acceleration lane on Highway 1 at the proposed entrance to the R.V. park.</p>
<p>Completion of the proposed project in addition to cumulative development in the vicinity (Scenario 2) is forecast to result in a significant deterioration in intersection operating characteristics during the weekday A.M., weekday P.M., and Sunday P.M. at the following intersections: Route 92/Highway 1, Highway 1/Capistrano, and Capistrano/Harbor entrance.</p>	<p>Install 4-way stop signs at the intersection of the Harbor entrance/Fishing Village entrance with Capistrano Road. Continue monitoring traffic operations at this intersection and the intersection of Capistrano Road with State Route 1. Install traffic signals, coordinated with existing signals at the intersection of Capistrano Road and State Route 1 if peak period traffic volumes on westbound Capistrano Road back up into the intersection of Capistrano Road and State Route 1.</p>
	<p>Improve the intersection of Capistrano and the Harbor entrance to include an exclusive left turn lane eastbound on Capistrano to the Fishing Village site, an exclusive right turn lane westbound on Capistrano to the Fishing Village site, and an exclusive left and through/right turn lane southbound at the Fishing Village exit. Completion of these improvements in conjunction with 4-way stop sign control of the intersection will allow it to operate at an LOS A during the weekday A.M. peak hour, LOS B during the</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
	<p>weekday P.M. peak hour and LOS D during the weekend Sunday peak period. The westbound left turn should be lengthened to provide at least 300 feet of storage space.</p> <p>Improve the intersection of State Route 92/Highway 1 to include dual left turn lane on southbound Highway 1 and westbound Route 92 and an exclusive westbound through lane on Route 92. Completion of these measures is forecast to allow the intersection to operate at an LOS D during the weekday and peak hour, LOS E during the weekday P.M. peak hour and an LOS C during the weekday Sunday peak period.</p> <p>Improve the intersection of Highway 1 and Capistrano south to include dual left turn lanes eastbound on Capistrano and northbound on Highway 1 and provide exclusive right turn lanes on all approaches. Completion of these measures will allow the intersection to operate at an LOS B during the weekday A.M. peak hour, LOS D during the weekday evening peak hour, and LOS C during the Sunday peak period as indicated in Table 3.2-2 in Section 3.2.</p> <p>Widen Capistrano to provide two lanes westbound between Highway 1 and the harbor entrance.</p> <p>Consider signalization of the intersection of Capistrano North/Highway 1. Signalization of the</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
	<p>intersection could direct a significant amount of peak hour traffic away from the intersection of Capistrano South/Highway 1.</p> <p>Lengthen left turn lanes at the intersection of Capistrano Road with the harbor entrance and the southern end of Capistrano Road and Highway 1.</p> <p>CALTRANS should consider widening State Route 1 to four lanes between Half Moon Bay and residential areas to the north of the Half Moon Bay Airport.</p>
<p>Pedestrian and vehicle circulation on the pier may create dangerous conflicts.</p>	<p>Provide a barrier separator between vehicles and pedestrian on the expanded pier if vehicles, particularly trucks, are to be routed onto the pier.</p> <p>Direction signs will be placed in appropriate locations to facilitate efficient vehicle and pedestrian movement throughout Harbor facilities.</p>
<p>Buildout of the East Harbor Master Plan <u>does not provide adequate automobile parking.</u></p>	<p>The Master Plan should provide a phased increase in parking to accommodate the incremental increase in demand. Prior to complete buildout of the Master Plan projects, an <u>additional 127</u> auto parking spaces should be provided. Parking should be located in close proximity to the Harbor facilities to the extent practicable.</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p><u>3.3 VISUAL/AESTHETICS</u></p> <p>Implementation of the Master Plan will alter views of the project site from Highway 1, considered a Scenic Highway.</p> <p>The proposed Master Plan projects would increase the levels of light and glare emanating from the project site.</p>	<p>The policies and recommendations set forth in the Architectural Design Guidelines for the Pillar Point Conceptual Plan (see Appendix A) should be implemented.</p> <p>Landscape vegetation needs to be incorporated onto the Harbor's boundary with Highway 1, in order to decrease visibility of new structures and parking areas. Vegetation should be planted as soon as possible following construction.</p> <p>Exterior lighting should be minimized without compromising security or safety. Lighting that is necessary should be of low profile design, unobtrusive and compatible with the character of the Harbor area.</p>
<p><u>3.4 BIOLOGY</u></p> <p>The earthwork associated with the boat launch ramp and access road will result in the fill of approximately 1.35 acres of beach and intertidal area and creation of approximately .87 acre of new tidal area. The net loss of beach or intertidal area is .48 acre.</p>	<p>In the permit review process as mandated by Section 404 of the Clean Water Act, the Harbor District should coordinate with the affected agencies to further mitigate for the loss of intertidal areas due to construction of the boat ramp and access road. A site in the west end of the Harbor is currently being reviewed as a possible mitigation site for the loss of intertidal area. Further evaluation is necessary by the CDFG to determine if the site is suitable for mitigation. Measures to mitigate potential impacts</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>It is unknown whether the Master Plan components, exclusive of the boat launch ramp and access road, fall under USACE jurisdiction.</p>	<p>encountered during construction of this new tidal habitat are presented in Response to Comment B.1 of this Final EIR (page 4-10). Detailed plans for the mitigation site will need to be submitted for CDFG approval in order for the permitting of the fill required for the boat launch ramp by the USACE.</p> <p>The District should coordinate with the USACE and request a jurisdictional and determination for the remaining Master Plan area. If a permit is required, the review process should resolve any issues regarding habitat value losses and appropriate mitigation measures for impacts caused by the Master Plan in jurisdictional areas.</p> <p>Under Section 10 of the 1890 River and Harbor Act, USACE jurisdiction for structure and work extends up to mean high water. Under Section 404 of the Clean Water Act for any project requiring fill, USACE jurisdiction extends up to the highest recorded tide line, and includes adjacent wetlands and navigable waters.</p>
<p>Filling, dredging, and placing of pier moorings may create turbidity and lower the dissolved oxygen content of the water to the point where marine life may be impacted.</p>	<p>Water based construction activities should not be carried out during periods when the dissolved oxygen content of the water falls below 5.0 mg/liter. These activities should be avoided during the period from April to October</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>Dredging activity may conflict with LCP Policy 12.4 regarding the protection of sensitive habitats, and the discouragement of marina activities involving dredging or filling.</p>	<p>unless monitoring of the dissolved oxygen content indicates that the level will not drop below 5.0 mg/liter.</p> <p>The Harbor District should restrict the disposal of solid and liquid waste in tidelands (the area between mean high water and extreme spring tide low water) in accordance with Policy 12.4b. In addition, the District should submit an annual list of proposed development plans for each fiscal year to the County in accordance with Policy 12.5b.</p> <p>The mitigation measures presented in Section 3.6, Hydrology/Water Quality, of the Draft EIR should be implemented.</p>
<p>During construction of the R.V. park and accessways, the coastal strand dune vegetation may be impacted by the improper placement of construction materials and trampling by workers, and later by recreational users.</p>	<p>Temporary barriers should be erected to inhibit improper placing of construction materials and trampling by people.</p> <p>Accessways should be fenced and signs posted to prevent unauthorized trespassing in sensitive vegetation areas (proposed).</p> <p>Periodic maintenance of the coastal strand community should include the removal of litter and repairing of fences or signs.</p>
<p>Coastal strand vegetation community is sensitive to invasive plants.</p>	<p>Periodic maintenance should include assessment of the vigor of the community and the possible need to remove invasive nonnative plant species, including the</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>The biological richness of the East Harbor may be reduced by increased human activity.</p>	<p>(present stands of undesirable pampas grass along the sea cliffs.</p> <p>Boat speed limits, litter laws, and bird harassment regulations in the harbor should be better enforced. The district should implement dog leash laws, or, preferably, an enforced ban on dogs in the ecologically sensitive northwest corner of the harbor.</p>
<p>Construction of the sedimentation pond may result in the removal of riparian vegetation and reduce wildlife habitat of El Granada Creek.</p>	<p>The Harbor District may be required to obtain a Streambed Alteration Agreement with the Department of Fish and Game. See also Hydrology mitigation.</p>
<p><u>3.6 HYDROLOGY/WATER QUALITY</u></p>	
<p>Excavation and fill associated with construction of the project may increase the sediment load to receiving waters including the Harbor.</p>	<p>Excavation and other critical earthwork operations should be performed, to the extent possible, during the dry weather season. May to October.</p> <p>An erosion control plan should be prepared and implemented in coordination with San Mateo County and other appropriate regulatory agencies.</p> <p>Appropriate erosion control devices should be utilized to retain sediment within the excavation and fill areas.</p> <p>Construction operations should be inspected periodically by a qualified soils engineer to determine effectiveness of erosion control.</p>

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TABLE 2-1 (CONTINUED) SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
	<p>During construction work on Johnson Pier and the bulkhead, the dissolved oxygen content of the Harbor waters should be monitored to ensure the content does not fall below 5 mg/l. If the dissolved oxygen content falls below 5 mg/l, all construction operations on the pier and bulkhead should cease until the dissolved oxygen content returns to an acceptable level. The Harbor District will be responsible for ensuring this measure is monitored for effectiveness. Refer to mitigation measures in Section 3.4, Biology.</p>
<p>Strong winds may create windblown erosion and airborne "fugitive dust" during the construction period when soils are exposed.</p>	<p>A spraying program should be implemented to reduce the amount of airborne dust and construction activities should be halted during gale conditions.</p>
<p>Increased on-site pedestrian, vehicle, and boating activity associated with Master Plan implementation may decrease the water quality of the Harbor.</p>	<p>The storm drainage system should be equipped with sediment and grease traps to ensure significant amounts of these pollutants do not reach Harbor waters.</p> <p>The development should be landscaped, to the extent possible, with vegetation requiring minimum irrigation or application of fertilizers and pesticides.</p> <p>A street and parking lot cleaning program should be implemented in the Harbor area and R.V. park to reduce the potential for litter to enter receiving waters.</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>Construction of the sedimentation pond would alter the natural drainage course of El Granada Creek and may impact riparian vegetation.</p>	<p>The District should ensure that the fueling operation conforms to the latest State and Fire District codes to mitigate potential fuel upsets. The present fueling system safety mechanisms shall be retained.</p> <p>The District may be required to obtain a Streambed Alteration Agreement from the Department of Fish and Game. All recommendations in the Agreement should be adhered to. Refer to response to Comment H.14 in this Final EIR for additional details of the Sedimentation pond. See also <u>Biology mitigation, Section 3.4, of the Draft EIR.</u></p>
<p><u>3.7 GEOLOGY</u></p> <p>Project structures would be susceptible to groundshaking from seismic events.</p>	<p>Building design should comply with seismic requirements of the current Uniform Building Code.</p> <p>Foundation support and retaining walls should be designed to resist the effects of ground shaking.</p> <p>Utilities should be designed to provide sufficient flexibility to withstand the ground motion induced during an earthquake. Additional specific engineering recommendations, as proposed by the District's geotechnical engineers, should be incorporated into the final designs of the proposed development.</p>

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TABLE 2-1 (CONTINUED) SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>Excavation and fill activities may contribute to slope or ground failure.</p>	<p>All structural fill should be keyed into stable natural ground to the extent possible.</p> <p>Cut or fill slopes should not be steeper than 2:1 unless approved by the soil engineer in the field at each location.</p> <p>Detailed results of on-site geotechnical and soils engineering investigations, including any subsurface testing, should be provided to a structural engineer who shall design footings, foundations and on-site drainage to mitigate the potential stability problems of the development site. Consideration should be given to appropriate placement of building in relation to slopes and potentially unstable soils.</p> <p>All fill placement should be inspected by a qualified soils engineer.</p>
<p><u>3.8 PUBLIC SERVICES/UTILITIES</u></p>	
<p><u>Police Services</u></p>	
<p>Implementation of the latter phases of the Master Plan will increase the demand on police services.</p>	<p>The Harbor District should coordinate with the San Mateo County Sheriffs Department and the City of Half Moon Bay Police Department on the Final Plans for Harbor expansion to determine the need for additional equipment and officers.</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<u>Fire Protection Services</u>	
Buildout of the entire Master Plan projects would create a demand for additional fire fighting staff.	The Harbor District should coordinate with the Half Moon Bay Fire Protection District on the final Plans for Master Plan facilities to determine the need for additional equipment, personnel and the proper sprinklering of new facilities based on phasing of the projects.
The adequacy of fire flows in the Harbor area remains uncertain.	Studies are currently being conducted by the Fire District to identify fire flow deficiencies and needs in the Harbor area. Prior to implementation of the secondary phases of the Master Plan (fish processing facility and boat storage building), written verification from the CCWD that there is adequate water pressure to service the components should be provided to the Fire District.
<u>Water Supply</u>	
The proposed project would increase the demand on the provision of water to Harbor facilities.	<p>The Harbor District should investigate the feasibility of using water from the Harbor in restrooms and the fish handling facilities, which would lessen demands upon the Water District.</p> <p>To secure sufficient water for the secondary and latter phases of the Master Plan, the Harbor District should enter into negotiations with Coastside County Water District for a purchase agreement on the necessary permits.</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p data-bbox="422 974 594 1003"><u>3.9 NOISE</u></p> <p data-bbox="422 1041 989 1136">Construction noise may temporarily impact adjacent sensitive receptors.</p>	<p data-bbox="1087 338 1570 485">Drought tolerant, native plant species should be incorporated into the landscaping plans to lessen the demand a water for irrigation.</p> <p data-bbox="1087 520 1640 772">The Harbor District should consider utilizing recycled water in a boat bath at the launch ramp for the cleaning of equipment, thus lessening demand on the water supplies (refer to mitigation measures in Section 3.6, Hydrology, of the DEIR.</p> <p data-bbox="1087 808 1646 968">Water conservation fixtures should be incorporated into the project in such components as the laundry and restroom facilities to lessen demand on water supplies.</p> <p data-bbox="1087 1035 1604 1230">All construction vehicles and equipment should be properly muffled. Applicable California State noise standards should be met for all contractor and delivery vehicles.</p> <p data-bbox="1087 1262 1633 1549">Construction operations and related travel in the vicinity of the project site to and from the construction area should be limited to between the weekday hours of 7:00 A.M. and 8:00 P.M. (May-September) and 7:30 A.M. and 6:00 P.M. (October-April). Construction will not occur on holidays.</p> <p data-bbox="1087 1577 1612 1675">The public should be notified of the proposed construction time-lines to minimize the potential</p>

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TABLE 2-1 (CONTINUED) SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>Increased boating activity associated with implementation of the Master Plan may increase noise levels in the Harbor vicinity.</p>	<p>disturbance to commercial and recreational fisherman, local merchants and commercial establishments, visitors, and local residents.</p> <p>An appropriate speed limit for power boats should be clearly posted within the inner Harbor. (Five mph limit already posted within Harbor).</p> <p>The California Motor Boat Noise Regulations shall be enforced. The regulations require muffling and noise generation standards for motor boats (Harbors and navigation Code, Section 654, and others).</p>
<p>Sound levels adjacent to Highway 1 associated mainly with automobile traffic currently exceed standards. This noise standard is expected to remain exceeded with cumulative development in the Harbor area.</p>	<p>Definition of appropriate mitigation measures to reduce existing and future sound levels to residents adjacent to Highway 1 would require additional acoustical studies. Measures could include the implementation of sound walls and/or berms. These measures, however, are not considered to be project related mitigations.</p>
<p><u>3.10 CULTURAL RESOURCES</u></p>	
<p>Construction of the various components of the Master Plan may disturb previously unknown significant subsurface archaeological resources.</p>	<p>The California Archaeological Inventory recommends an archival and field study of the boat launch ramp and access road area to identify cultural resources which should not be adversely affected (see Appendix D of the Draft EIR).</p>

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TABLE 2-1 (CONTINUED). SUMMARY OF IMPACTS AND MITIGATION MEASURES

IMPACTS	MITIGATION MEASURES
<p>Dredging activity or other excavation near shore may encounter submerged remnants of previous shipwrecks.</p>	<p>In the event that archaeological resources are observed during construction activities, land alteration work in the general vicinity of the find should be halted immediately and a qualified archaeologist should be consulted.</p> <p>Prompt evaluations could then be made regarding the finds and a course of action acceptable to all concerned parties could then be adopted. Local Native American organizations should be consulted, if human remains are encountered.</p> <p>If submerged remnants of previous ship wrecks are found during harbor construction or excavation, the California Maritime Museum and the California State Historic Preservation Officer should be contacted.</p>