

YAQUINA BAY AND ESTUARY SECTION

Introduction:

This chapter of the Comprehensive Plan has three parts: The first deals with the Yaquina Bay Estuary; the second summarizes information about the shorelands adjacent to Yaquina Bay; and the third discusses the development of the port and other built-up areas of the bay. Policies governing uses and activities that are specific to a particular area or management unit of the bay are included in the descriptions of the management units. Policies that apply more generally or to more than one management unit are found at the end of this chapter.

Yaquina Bay Estuary:

Wilsey & Ham's Yaquina Bay Resource Inventory¹ provides the primary source for inventory information about the portion of the Yaquina Bay Estuary lying within Newport's urban growth boundary (UGB). That inventory contains specific and general data on the study area, which includes the Yaquina Bay Estuary and the surrounding shorelands.

Important Natural Resources of Yaquina Bay

The estuarine ecosystem of Yaquina Bay includes a rich diversity of habitats, species, and physical features. The Oregon Department of Fish and Wildlife (ODFW), in a study prepared for the Oregon Land Conservation and Development Commission², identified four major subsystems of Yaquina Bay. Those are the marine, bay, slough, and riverine subsystems. Of those four, only the marine and bay occur in the Newport UGB.

"The marine subsystem is a localized area near the estuary mouth. It is a high energy zone subject to frequent or constant wave and tidal surges. Salinities are generally high, although on large river systems values may be lower, particularly at low tide and during heavy winter flows. Sediments are generally coarse, clean sands of marine origin. Rocky substrates are also common, and in larger estuaries [such as Yaquina Bay], rock jetties have been constructed to stabilize the estuary mouth and ensure a navigable entrance. Usually only a small percentage of the marine subsystem is intertidal.

¹ Wilsey & Ham, Yaquina Bay Resource Inventory, 1977.

² State of Oregon Department of Fish & Wildlife, Habitat Classification and Inventory Methods for the Management of Oregon Estuaries, 1979.

"Benthic invertebrates [organisms living on the bottom of the bay] in this zone may include species found along the outer coast, as well as those that require the slightly more protected environment found within the estuary mouth. Turbulent conditions in the marine subsystem often require plants and animals to have specialized adaptations for attaching themselves to hard, wave-battered substrates or for rapid burrowing in shifting sand. Kelp and other large algal species may be found on rocky substrates, but unconsolidated sediments are generally devoid of larger plants. Most fishes utilizing Oregon estuaries are marine species. This subsystem often harbors the most diverse assemblage of fishes in the estuary.

"Due to its proximity to the mouth and its relatively deep conditions compared to locations further up the estuary, the marine subsystem is often a preferred site for boat basins and marinas. Commercial and industrial development is also common where coastal towns are located adjacent to the estuary. Although flushing is usually rapid in this subsystem, crowded marinas, where sewage, fish wastes, and petroleum residues may concentrate, and boat basins with constricted entrances that reduce tidal exchange, potentially threaten water quality. Dredging of boat basins and ship channels commonly alters benthic habitats in the marine subsystems of many Oregon estuaries. The total impacts of these various disturbances are not easily predicted."³

The ODFW study also describes the bay subsystem in this manner: "The bay subsystem is a transition zone between marine and fresh water. In many estuaries it is characterized by a broad embayment between the constricted estuary mouth and narrow, upriver tidewater sectors. In some cases the bay system may be less conspicuous but identifiable by a relatively large percentage of intertidal land. Salinities in this region may be quite variable due to seasonal changes in river flow, although moderate to high salinity ranges are usual. As an intermediate environment, sediment types in the bay subsystem range from coarse marine sands to fine riverine materials. Bay subsystems are best represented by estuaries in the Coast Range province, where soft parent materials have eroded and been deposited to create broad intertidal flats.

"The bay subsystem is a relatively protected environment, isolated from turbulence near the mouth and strong currents during peak flows in the riverine portion of the estuary. The mixture of marine and riverine sediments and a variety of vegetation types provide a diversity of habitats for benthic species. In many Oregon estuaries, major clam and shrimp beds typically occur in productive intertidal flats of the bay environment. Extensive marsh and eelgrass habitats are also common in the larger Coast Range estuaries.

³ ibid., pgs. 19-21.

"Development in the bay subsystem is varied. Periodic dredging in larger estuaries has been necessary to maintain ship channels. In some areas dredged materials have been dumped in the bay, smothering benthic organisms. Marshes and flats have been filled to provide more area for development. As in the marine subsystem, commercial and industrial facilities are common along the bay shoreline of many estuaries and in the past have contributed pollutants from runoff or direct discharge. Because the bay subsystem is usually an area of very high biological productivity, it is also a favorite site for bird watching, clamming, and occasional crabbing and fishing."⁴

A more detailed description of the marine and bay subsystems is available in the ODFW document and in the description of each management unit below.

Both the marine and bay subsystems of the Yaquina estuary ecosystem have features ranging from relatively unaltered natural areas of varying size to the dredged navigation channel. This diversity within the ecosystem can be protected and maintained through limiting development to areas of existing facilities and applying standards to assure that these uses do not violate the integrity of the estuarine ecosystem.

Land and Water Uses on Yaquina Bay

Lincoln County's adopted Estuary Management Plan⁵ discusses the Newport subarea and the Sally's Bend subarea. These two subareas correspond closely to the marine and bay subsystems, respectively. The description of the character, major committed uses, and existing and potential conflicts for these subareas are provided below.

Newport Subarea:

> **Predominant Character.** The Newport subarea is a high intensity use area. It is the hub for commercial fishing, deep water shipping and tourist related commercial activities on Yaquina Bay. Adjacent shorelands are urban in character, and the shoreline is more or less continuously altered all throughout the subarea. As a fully serviced urban area in close proximity to the harbor entrance and with shoreland access to the deep water channel, the Newport subarea represents the most important portion of the estuary for water dependent development.

Important resource values within the subarea include eelgrass and algal beds, shellfish beds, and fish spawning and nursery areas.

⁴ ibid, pgs. 21-22.

⁵ Lincoln County, Estuary Management Plan, adopted June of 1980.

- > Major Committed Uses. The subarea contains a mix of water- dependent, water-related and nonwater-related uses. Industrial uses are concentrated at McLean Point (Northwest Natural Gas LNG tank and deep water terminal facilities) and along the Newport waterfront. A commercial and a recreational marina and a number of nonwater-related tourist oriented commercial uses also occur along the Newport waterfront. Major uses in the South Beach area include the Oregon State University Mark O. Hatfield Marine Science Center, Oregon-Aqua Foods' salmon farming facility, the South Beach Marina recreational complex, and the Oregon Coast Aquarium (expected to open in the spring of 1992). The subarea takes in the entire authorized deep water channel, including the maintained jetties. Recreational use in the subarea, including sport fishing, crabbing, clamming, diving, and other activities, is heavy.

- > Existing and Potential Conflicts. Conflicts have developed between tourist oriented commercial uses and water-dependent marine commercial and industrial uses on the Newport waterfront. These conflicts involve both competition for available space, as well as use conflicts (examples include traffic and parking) between established uses. As demand accelerates for either or both types of uses, conflicts may worsen. In the past, competition between recreational and commercial vessels for moorage has been a problem. Development of some 600 moorage spaces designed to accommodate recreational vessels at the South Beach Marina and redevelopment of the existing commercial moorage areas to handle the newer, larger commercial fishing boats should do much to alleviate this conflict. The demand for major development in aquatic areas poses a potential conflict with the protection of natural resources throughout the subarea.

Sally's Bend Subarea:

- > Predominant Character. The Sally's Bend subarea represents one of the most important natural resource areas of Yaquina Bay. It is essentially undeveloped and includes eelgrass and algal beds, shellfish beds, fish spawning and nursery areas, and wildlife habitats, all of major significance. The area's intertidal flats represent the largest tract in the estuary.

- > Major Committed Uses. The predominant uses of the subarea are hunting, sport fishing, and recreational shellfishing. The subarea also includes a portion of the navigation channel that supports medium draft commercial traffic. Adjacent shoreland uses consist primarily of low density housing and commercial forest management. Industrial uses are adjacent (though they do not extend into the subarea) at McLean Point and South Beach. Portions of the subarea have historically been used for log storage, though no current activities are present.

- > Existing and Potential Conflicts. No major conflicts exist within the subarea, though potential for conflict is present at several locations. Demands for urban level development in the Idaho Point area (which is within the Newport UGB) may be

incompatible with preservation of natural values in the adjacent portion of the estuary. Industrial development at McLean Point and in the Coquille Point area may impact important resource areas at Sally's Bend. If increases in deep water shipping precipitate a demand for expansion of the current channel and turning basins, some loss of natural resource values would result from the required dredging. Owners of intertidal lands within the subarea have identified desires for future use of these areas that may conflict with the preservation of natural resource values.

Estuarine Management Unit Classifications

As is required by Statewide Planning Goal 16, management units have been classified in order to maintain the diverse resources, values, and benefits of the estuary. Natural, conservation, and development management units have been established pursuant to the mandatory language in Goal 16.

Natural management units must include "...all major tracts of salt marsh, tidflats, and seagrass and algae beds."⁶ Conservation management units "...shall include tracts of significant habitat smaller or of less biological importance..." than those in natural management units and recreational or commercial oyster and clam beds not included in the natural management units.⁷ Partially altered areas or estuarine areas adjacent to existing development of moderate intensity, however, shall also be included in this (conservation) classification unless otherwise needed for preservation or development consistent with the overall Oregon Estuary Classification. Development management units "...shall include deep water areas adjacent or in proximity to the shoreline, navigation channels, subtidal areas for in-water disposal of dredged material and areas of minimal biological significance needed for uses requiring alteration of the estuary...."⁸

The full range of activities in Yaquina Bay is covered by these three main types of estuarine management units. While the general purpose and intent of the conservation/development classification is as described above, the application of this classification to specific areas may be adjusted by special policies applicable to individual management units in order to accommodate needs for natural preservation.

Two major tracts of eelgrass and salt marsh within the UGB were identified in the Yaquina Bay Resource Inventory (YBRI) as significant natural areas and are classified as

⁶ State of Oregon Department of Land Conservation and Development, Oregon's Statewide Planning Goals, 1974 (as amended), p. 16.

⁷ Ibid., p. 16.

⁸ Ibid., p. 17.

natural management units. These have been identified as Management Units 9-A and 10-A on the Yaquina Bay Estuary (YBE) Map on page 272.

The conservation management units include small tracts of limited estuarine habitat. Some areas are important, though of insufficient size to be considered as "major tracts." Each of the conservation management units is also a partially altered area and adjacent to development management units. Units 1, 2, 3, 6 and 8 on the YBE Map are the conservation management units.

The development management units include the authorized navigation channel and the port and marina areas on both the north and south sides of the bay. The development management units include units 4, 5 and 7.

The classification of estuarine areas into management units also took into account the four additional factors listed in Goal 16. This is evidenced in how the boundaries of the management units were drawn. Adjacent upland characteristics were used to distinguish Management Unit 1 from 5, 2 from 3, 3 from 7, 5 from 10, 7 from 8, and 8 from 9. Compatibility with adjacent uses was also considered. The consideration of energy costs and the benefits of deep water navigation are reflected in the classification of the authorized channel and port areas as development management units. Commitment of the water surface area of the estuary to different surface uses was limited by classifying most of the estuary in natural and conservation management units. Most of the total area within development management units will also be kept as open water for navigation.

The summaries of management units which follow describe and classify, then set a management objective and special policies for each estuarine management unit within the Newport UGB. The priorities of use and implementation standards are set forth in overall plan policies and the permitted use matrices in the Zoning Ordinance. The maps referred to in each management unit description are: (1) the maps of the Yaquina Bay Resource Inventory; (2) the "Habitat Map of Yaquina Estuary" by the Research and Development Section of the Oregon Department of Fish and Wildlife; (3) the maps in the Lincoln County Estuary Management Plan; and (4) the nautical chart of Yaquina Bay and River.⁹

The management objectives, as well as the special policies for each management unit, are comprehensive plan policies of the City of Newport. Boundaries of management units are shown on the Yaquina Bay Estuary Map on page 272.

The base map for the Yaquina Bay Estuary Map is the nautical chart for the Yaquina Bay and River, which exhibits significant navigational features. The Yaquina Bay Bridge

⁹ National Oceanic and Atmospheric Administration, Yaquina Bay and River, 1977.

and submerged crossing corridors are also shown, as well as new crossings from the sewer and water master plans. A cable crossing area lies on either side of the bridge. The city's sewer and water pipelines cross underneath the bay between the Embarcadero and Ore-Aqua. The Oregon State Division of State Lands has approved a subpipe route from the Northwest Natural Gas LNG tank to Idaho Point.

Management Unit 1:

- > **Description:** Management Unit 1 consists of the area between the navigation channel and the north jetty west of the Yaquina Bay Bridge. Natural resources of importance include shellfish beds, fish spawning and nursery areas, and wildlife habitat. Of special importance are areas used by ling cod for spawning and a major algae bed. Primary uses in the area are medium and shallow draft navigation and recreation (angling, boating, and diving). Alterations include the north jetty, rip-rapped shoreline east of the jetty, and piling dolphins at the base of the bridge footings. (See the YBE Map on page 272 for location of resources and uses.)
- > **Classification:** Conservation. This unit has been classified as "conservation" in order to conserve the natural resources of the unit while allowing minor alterations similar to those now existing in the unit.
- > **Resource Capability:** The major algal bed in this unit is a sensitive habitat area of special value. Other habitats, while important, are less susceptible to disturbance from minor alterations. Low intensity alterations such as piling, dolphins, riprap, and piers have occurred in this area in the past without significant damage to resource values. Similar activities of this nature in conjunction with the existing uses will constitute minor alterations consistent with the resource capabilities of the area.

The Yaquina Bay Bridge will need to be replaced sometime in the future. The new bridge must be built immediately west of the existing one. This will require the placement of new bridge footings and pilings in this unit.

- > **Management Objective:** Management Unit 1 shall be managed to conserve shellfish beds, fish spawning and nursery areas, and other natural resources. Navigation improvements necessary for the maintenance of the harbor entrance and channel shall be provided for, as well as improvements necessary for the replacement of the Yaquina Bay Bridge.
- > **Special Policies:** The algal bed within Management Unit 1 as defined by the Oregon Department of Fish and Wildlife Classification map shall be preserved. It is recognized that navigation improvements (including jetty maintenance) and bridge construction will be required within this unit.

Management Unit 2:

- > **Description:** Management Unit 2 contains the area between the south jetty and the

navigation channel west of the third (westernmost) groin. Natural resources of importance include shellfish beds, algal beds, fish spawning and nursery areas, and waterfowl habitat. Major uses in the unit are shallow draft navigation and recreational activities (fishing, diving, and boating). Alterations in the area include the south jetty, navigation aids, and a submerged crossing. (See the YBE Map on page 272 for location of resources and uses.)

- > **Classification:** Conservation. This unit has been classified as "conservation" in order to conserve the natural resources of the unit while allowing minor alterations similar to those now existing in the unit.
- > **Resource Capability:** Management Unit 2 is a predominantly subtidal area situated in a high energy marine environment. Substrates in this area are primarily coarse marine sands and rocks. Kelp and other algal species cover the rocky areas around the jetty and groins, though the unconsolidated sand areas are generally devoid of larger plants.

Development which threatens water quality or seriously disrupts benthic habitats, especially major dredging or filling, can have definite impacts in marine subsystems. Minor structural alterations such as piling, dolphins, and bank stabilization result in only short term disturbances and may enhance fish habitat by providing cover and substrate for algal species. Such minor alterations are consistent with the resource capability of Management Unit 2.

- > **Management Objective:** Management Unit 2 shall be managed to conserve shellfish beds, algal beds, fish spawning and nursery areas, and other natural resources. Navigation improvements necessary for the maintenance of the harbor entrance and channel shall be provided.
- > **Special Policies:** It is recognized that navigation improvements (including jetty maintenance) will be required within Management Unit 2.

Management Unit 3:

- > **Description:** Management Unit 3 consists of the area between the navigation channel and the south shore from the third jetty groin to the South Beach Marina breakwater. The area has a number of important characteristics including tideflats, eelgrass beds, significant shellfish beds, important fish spawning and nursery areas, and important waterfowl habitat. Major uses within the unit are shallow draft navigation and recreation (clam digging, fishing, and boating). Some minor commercial shellfish harvest takes place in the unit. Alterations include the south

jetty, groins, the South Beach marina breakwater, piling, a pier structure, the bridge crossing, navigation aids, and riprapped shorelines. (See the YBE Map on page 272 for location of resources and uses.)

- > Classification: Conservation. This unit has been classified as "conservation" in order to conserve the natural resources of the unit while allowing minor alterations similar to those now existing in the unit.
- > Resource Capability: Management Unit 3 is similar in character to Management Unit 2, though it has a larger intertidal area and larger and more important shellfish beds. It is also more extensively altered as a result of jetty improvements, the bridge crossing, and construction on the South Beach Marina. These structural alternatives have created diverse fish habitat, as well as substrate for algal species. Further minor structural alterations such as piling, dolphins, recreational piers, or overhead crossing on the bridge would be consistent with the existing character and resource capability of the area.

The Yaquina Bay Bridge will need to be replaced sometime in the future. The new bridge must be built immediately west of the existing one. This will require the placement of new bridge footings and pilings in this unit.

- > Management Objective: Management Unit 3 shall be managed to conserve natural resources of importance. Navigation improvements necessary for the maintenance of the harbor entrance and channel shall be provided, as well as improvements necessary for the Yaquina Bay Bridge replacement.
- > Special Policies: Major clam beds are located within Management Unit 3. These clam beds shall be protected. It is recognized that navigation improvements (including jetty maintenance) and bridge construction will be required in this management unit.

Management Unit 4:

- > Description: Management Unit 4 is the U.S. Army Corps of Engineers authorized deep water channel and includes the turning basin up to the UGB. Natural resources within the unit consist of fish spawning and nursery areas and important shellfish beds. Major uses within the unit include navigation (shallow, medium, and deep draft), recreation (fishing, crabbing, and boating), and commercial harvest. Alterations include piling, submerged crossings, and the bridge crossing. Of special importance is the maintenance dredging of the federally authorized channel and turning basin. (See the YBE Map on page 272 for locations of resources and uses.)
- > Classification: Development. This unit has been classified as "development" because of the dredging required to maintain the deep water channel and turning basin.
- > Resource Capability: Management Unit 4 is an area of diverse marine influenced habitats, including some major shellfish beds. The area is periodically dredged for maintenance of the federally authorized channel, and resources present are subject to this regular disturbance. The shellfish beds south of the port breakwater as

defined by the publication "Subtidal Clam Populations: Distribution, Abundance and Ecology" (OSU Sea Grant, May 1979) are considered a resource of major importance.

- > **Management Objective:** Management Unit 4 shall be managed to protect and maintain the channel and turning basin for deep draft navigation.
- > **Special Policies:*** Adverse impacts of mining, mineral extraction, or other dredging operations within Management Unit 4 on existing commercial clam harvest shall be minimized. Port facilities may extend into the deep water channel subject to approval by the US Army Corps of Engineers, which maintains jurisdiction, in part, to ensure that new development does not impede navigation.

Management Unit 5:

- > **Description:** Management Unit 5 consists of the area along the north shore of the bay from the bridge to McLean Point. It includes the Port of Newport's moorage basins, the dredged water front in the Newport urban area, and the terminal facilities at McLean Point. This portion of the estuary is used intensively for shallow and medium draft navigation, moorage of small and large boats, and recreation.

Other significant uses include a terminal operation, research activities, and a U.S. Coast Guard Station. The shoreline and aquatic areas are significantly altered with riprap, bulkheads, piers and wharves, piling, floating docks, dredging, and other activities. (See the YBE Map on page 272 for location of resources and uses.)

The shellfish beds south of the port breakwater as defined by the publication "Subtidal Clam Populations: Distribution, Abundance and Ecology" (OSU Sea Grant, May 1979) are considered a resource of major importance.

- > **Classification:** Development. This unit is classified as "development" because of the port's development needs and the water-dependent uses along the waterfront.
- > **Resource Capability:** Management Unit 5 is the most extensively altered area in the estuary. Plans for redevelopment of existing facilities in this area call for further alterations, including major dredging, fill, riprap, and construction activities. Given the nature of existing development and resources in this area, continued development for water-dependent uses and overhead crossings on the bridge will be consistent with the capabilities of this unit.
- > **Management Objective:** Management Unit 5 shall be managed to provide for the development of port facilities and other water-dependent uses and water-related and nonwater-related uses in keeping with the scenic, historic, and unique characteristics of the area. Water-related and nonwater-related development shall be

* Amended by Ordinance No. 1995 (1/6/10)

consistent with the purpose of this unit and with adjacent shoreland designated as especially suited for water-dependent uses or designated for waterfront development.

Special Policies: Experimental shellfish beds were introduced in Management Unit 5 in the 1940's and 1950's. It is anticipated that these shellfish beds will be impacted by future development. Adverse impacts shall be minimized as much as possible while meeting these development needs.

Due to the limited water surface area available and the need for direct land to water access, alternatives (such as mooring buoys or dry land storage) to docks and piers for commercial and industrial uses are not feasible in Unit 5. Multiple use facilities common to several users are encouraged where practical.

Nonwater-related uses may be permitted within the estuarine area adjacent to the old waterfront from Bay Street to Pine Street, extending out to the pierhead line as established by the Corps of Engineers. Tourist related activities will be encouraged to locate on the landward side of S.W. Bay Boulevard. The bay side of S.W. Bay Boulevard should accommodate water-dependent and water-related types of uses. Some tourist related uses may locate on the water side but only upon the issuance of a conditional use permit. CH2M HILL's draft port development plan¹⁰ identifies projects to enhance the water-related and tourist industries (see plan). These projects are consistent with the development classification of the unit and may be allowed. Future development that involves dredging and fill for non-water dependent uses will require an exception to Statewide Planning Goal 16.

Management Unit 6:

- > Description: Management Unit 6 consists of the area between the navigation channel and the port breakwater, from the U.S. Highway 101 bridge east to the turning basin. It is a predominantly subtidal area with a number of important resource characteristics. These include eelgrass and shell fish beds, fish spawning and nursery areas, and waterfowl habitat. Major uses in the unit include recreation (fishing, boating, and crabbing), and medium and shallow draft navigation. Alterations within the unit include the port breakwater, pilings, navigation aids, and bridge footings. (See the YBE Map on page 272 for the location of resources and uses.)

- > Classification: Conservation. This unit has been classified as "conservation" in

¹⁰ CH2M HILL, Update of Port Development Element of Comprehensive Plan (draft), 1989.

order to conserve the natural resources of the unit while allowing minor alterations similar to those now existing in the units.

- > **Resource Capability:** Management Unit 6 is a subtidal area at the upper end of the marine subsystem. It supports a variety of resources which could be adversely impacted by major fill, removal, or other aquatic alterations. Important uses in the unit, such as navigation and recreation, require a largely unobstructed surface area. For these reasons, alterations consistent with the resource capability of this unit are limited to minor structural alterations such as pilings, dolphins, and bridge footings and overhead crossings on the bridge. The sewer and water master plans indicate a submerged crossing that will need to traverse this unit. The port development plan also calls for the relocation of the breakwater south into Management Unit 6. Any removal activities should be evaluated on a case-by-case basis.
- > **Management Objective:** Management Unit 6 shall be managed to conserve natural resources consistent with navigation, municipal, and recreation requirements.
- > **Special Policies:** A Goal 16 exception will be required to justify relocation of the breakwater as proposed in the port development plan.

Management Unit 7:

- > **Description:** Management Unit 7 consists of the aquatic area between the navigation channel and the south shore and from the U.S. Highway 101 bridge east to the small boat pier at the OSU Marine Science Center. It includes the South Beach marina and the Marine Science Center facilities. The majority of the unit is subtidal and includes eelgrass and shellfish beds and fish spawning and nursery areas. Major uses in the area are medium and shallow draft navigation, moorage, aquiculture (salmon farming), commercial harvest, and recreation. Alterations include pilings, piers and wharves, breakwaters, floating docks, riprapped shorelines, dredging, and other activities. (See YBE Map on page 272 for location of resources and uses.)
- > **Classification:** Development. This unit has been classified as "development" because of the existing South Beach Marina, Ore-Aqua, and Marine Science Center facilities on and near the shore, as well as the proposed hotel resort, public park, and stern wheeler landing. Future development of this nature may involve dredging and fill for non-water-dependent uses. A Goal 16 exception will be required to justify any dredging or fill for non-water dependent uses.
- > **Resource Capability:** Management Unit 7 includes the developed area along the south shore of the Newport subarea, corresponding to Management Unit 5 on the north shore. Based on the nature of the resources present in this area and the level and intensity of existing development, continued development of water dependent uses and structural alterations such as piling, piers, shoreline stabilization, bridge footings, and submerged crossings, are consistent with the purpose of this area.

Major fill and removal activities should be evaluated on an individual basis.

- > Management Objective: Management Unit 7 shall be managed to provide for development compatible with existing uses and consistent with the resource capabilities of the area.
- > Special Policies: Eelgrass beds, shellfish beds, and fish spawning and nursery areas are located within Management Unit 7. Adverse impacts of future development on these resources shall be minimized consistent with allowed development.

Submerged crossings, bridge footings, pilings, dolphins, and other navigation and marina related development undertaken as part of the approved comprehensive plan shall be permitted, as well as docking and other facilities to serve proposed development.

Development of deep and medium draft port facilities shall be a permitted use only outside of the existing South Beach Marina boat basin.

Due to the limited water surface area available and the need for direct land to water access, alternatives to docks and piers for commercial and industrial uses (such as buoys and dry land storage) are not feasible in Unit 7. Multiple use facilities common to several users are encouraged where practical.

Management Unit 8:

- > Description: Management Unit 8 is a subtidal area between the navigation channel and the intertidal flats of the Idaho Point/King's Slough area. It contains eelgrass and shellfish beds, fish spawning and nursery areas, and waterfowl habitat. Use within the unit consists of medium and shallow draft navigation, commercial harvest, and recreation. Existing alterations are limited to navigation aids. (See YBE Map on page 272 for location of resources and uses.)
- > Classification: Conservation. This unit has been classified as "conservation" in order to conserve the natural resources of the unit while allowing minor alterations similar to those now existing in the unit.
- > Resource Capability: Management Unit 8 is an important resource area. Shallow portions of this subtidal unit support eelgrass beds; major shell fish beds are also located in this area. Alterations in this area are limited to navigation aids (pile supported). Because of the area's proximity to the deep water turning basin, it may be needed as a site for temporary log raft anchorage. The piling and rafts should have no significant adverse impacts on resources in this area so long as they are sited to avoid grounding. This activity, if conducted under conditions to minimize occupation of surface area to minimize conflicts with recreational use and to avoid

grounding, will be within the resource capabilities of the area.

- > **Management Objective:** Management Unit 8 shall be managed to conserve natural resources such as eelgrass and shellfish beds. Navigation improvements found to be necessary for the maintenance of the deep water channel shall be provided.
- > **Special Policies:** Temporary moorage of log rafts in Management Unit 8 shall conform to the following standards:
 - (a) Whenever feasible, individual logs shall be bundled, but they shall always be held in rafts.
 - (b) The number of log rafts moored at any time shall be the lowest practical number for the shortest practical time considering log supply and tidal cycles.
 - (c) Water surface area occupied by temporary moorage shall not at any time exceed seven (7) acres.
 - (d) Dolphins shall be sited and moorage conducted so that log rafts will not ground at low water.
 - (e) As much as practical, shipment and movements of logs shall be timed to minimize conflicts with recreational uses in the area.
 - (f) A cobble/pebble dynamic revetment for shoreline stabilization may be authorized in Management Unit 8 for protection of public facilities (such as the Hatfield Marine Science Center facilities).

Management Unit 9-A¹¹:

- > **Description:** Management Unit 9-A consists of the state-owned tideflats between the Marine Science Center and Idaho Point. The unit contains salt marsh, algae and eelgrass beds, shellfish beds, fish spawning and nursery areas, and waterfowl habitat. All of these resources are considered to be of major importance. Uses within this unit are limited to shallow draft navigation and recreational activities (hunting, fishing, and clamming). This unit is essentially unchanged, with the exception of limited areas of riprapped shorelines and the existing Idaho Point marina and channel. (See the YBE Map on page 272 for location of resources and uses.)

¹¹ Management Unit 9-A includes only that part of Management Unit 9 identified by the Yaquina Bay Task Force that is within the Newport UGB. The existing marina is on the county side of the UGB. The description and special policies set forth above differ from those for Management Unit 9 as a whole only because they apply to a smaller, somewhat less diverse area. This subarea is classified, described, and planned for a manner wholly consistent with the remainder of Management Unit 9.

- > Classification: Natural. This unit has been classified as "natural" in order to preserve the natural resources of the unit.
- > Resource Capability: A sensitive area, Management Unit 9-A has resource values of major importance to the estuary ecosystem. In order to maintain resource values, alterations in this unit should be kept to a minimum. Minor alterations that result in temporary disturbances such as limited dredging for submerged crossings would be consistent with resource values in this area; other more permanent alterations should be reviewed individually for consistency with the resource capabilities of the area and the purposes of the management unit.
- > Management Objective: Management Unit 9-A shall be managed to preserve and protect natural resources and values.
- > Exceptions: The City of Newport is taking two exceptions to Goal 16/"Estuarine Resources." The first is for a seawater outfall line in conjunction with the Oregon Coast Aquarium. The second is for storm water drainage and outfall for the portion of South Beach that naturally drains into Management Unit 9-A.

- A. Seawater Outfall Line: Goal 2 and Oregon Administrative Rules 660-04-020 outline the criteria that must be addressed when considering an exception. This particular project's compliance with the standards follow.

Four Factors To Be Addressed When Taking an Exception:

- 1.) **Reasons justify why the state policy embodied in the applicable goals should not apply.**

The Oregon Coast Aquarium is being constructed on an upland area adjacent to the Yaquina Bay Estuary, which has been designated as a Natural Area (Management Unit 9-A) in accordance with Goal 16/"Estuarine Resources." The site for the aquarium is upland of the natural area and is located on a site designated in the Newport Comprehensive Plan as "Yaquina Bay Shorelands" (zoned W-2/"Water Related").

The aquarium meets the city's definition of a water-dependent use since it must have access to a continuous supply of seawater in order to keep marine animals and plants alive. Seawater will be drawn from the estuary and piped to a reservoir on the aquarium site where it will

be stored until needed. After seawater passes through exhibits, it will be released back into the estuary from which it came.

The state policy embodied in Goal 16 did not anticipate this situation. The removal and return of seawater to the estuary is a rare request and will have a very limited effect, if any, on existing plant and animal communities. If anything, the continuous discharge of seawater at the edge of a natural area may provide improved habitat for certain organisms.

Goal 16 allows certain uses in natural areas when consistent with resource capabilities of the area and purposes of the management area. These conditionally allowed uses include the following:

- * Aquaculture (including incidental dredging and removable in-water structures such as stakes or racks).
- * Communication facilities.
- * Boat ramps for public use.
- * Pipelines, cables, and utility crossings (including incidental dredging necessary for installation).
- * Installation of tide gates in existing functional dikes.
- * Temporary alterations.
- * Bridge crossing support structures (including dredging necessary for their installation).

It is understandable from reading this list that it is not the intent of the state to prohibit all development within a natural area. Rather, it appears that the state adopted a reasonable position that some development is allowed and that the intent is to minimize environmental degradation.

Discharge of seawater back into the estuary where it came from will have less of an impact on the estuary than allowing fish farming or ranching, communication facilities, boat ramps, pipelines, cables, utility crossings, tide gates, and bridges to be constructed.

State policy, as interpreted by the City of Newport, severely limits activities allowed in Management Unit 9-A. Uses mentioned in the unit description are as follows:

- * Shallow draft navigation.

- * Recreational activities (hunting, fishing, clamming).
- * Limited areas of riprap shorelines.
- * Limited dredging for submerged crossings.
- * Other more permanent alteration should be reviewed individually.

The amount of land that will be impacted by this proposal will be limited to less than about 500 square feet located where outfall pipe(s) penetrate the shoreline bank.

The aquarium property abuts Management Unit 9-A. Because of the slope of the land and the propensity of water to seek a lower level, a seawater discharge anywhere on the property (even if not directly into the estuary) will move overland and eventually enter one of the existing drainage ways that discharge into the estuary. It seems appropriate, therefore, to allow the discharge seawater directly back to the estuary.

2.) **Areas that do not require a new exception cannot reasonably accommodate the use.**

There are only five possible areas or locations where seawater from the site can be discharged after use. These areas or locations, and associated implications are discussed below:

- (a) Discharge to the estuary (Management Unit 9-A). This is the proposed approach and has already been discussed.
- (b) Discharge to a City of Newport sanitary sewer. This approach is unacceptable to the city. The introduction of seawater into the sanitary sewer system would cause the destruction of bacteria in the sewage treatment plant and lead to treatment failure.
- (c) Discharge to an on-site holding pond. This approach would work for occasional or intermittent discharges. However, continuous flow of seawater through the aquarium is required. Even a very large pond would eventually overflow and, because of gravity flow, seawater would return to the estuary.

- (d) Discharge near the intake point (Management Unit 7). The Marine Science Center's seawater intake is located on a pier at the northwest corner of the center. The center has allowed the aquarium's intake to be located on the same pier. Because of research projects underway at the center, researchers must have complete control of the water intake area so temperature and salinity can be controlled within tight tolerances. Water is drawn from varying depths to obtain desired temperature and salinity and pumps are started and stopped based on salinity levels and tidal action.

The discharge of seawater from the aquarium in this vicinity could alter temperature and/or salinity levels at the center's intake and could effect on-going research projects. Given that Goal 16 allows research as a permissible use, it seems inappropriate to propose an action that might jeopardize on-going research projects.

- (e) Discharge to the estuary near the Highway 101 bridge (Management Unit 7). This approach, while feasible, is costly both in terms of the initial construction and long term operational costs (maintenance and pumping). In addition, traffic on the access road from the bridge would be impacted during construction.

The added costs of this approach, over the costs of the proposed approach, are estimated as follows:

2700 lf- 10 inch PVC pipe @ \$24.00/lf	\$ 67,500
Pump station (wetwell, pump, piping, electrical supply)	25,000

Construction subtotal	\$ 92,500
Engineering @ 10%	9,000
Contingency @ 20%	18,500

Estimated project construction	\$120,000

Annual pumping costs (1500 gpm, 30 foot head, 15 HP pump, power costs at \$0.04 KWH)	\$ 4,800
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Annual maintenance at 3% of construction	3,600

Estimated annual operation cost	\$ 8,400

The proposed seawater discharge facility, therefore, cannot be reasonably accommodated on non-resource land or on resource land that is already irrevocably committed to non-resource uses.

3.) **The long-term environmental, economic, social and energy consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in other areas requiring a Goal exception.**

Several alternative sites for the aquarium were considered before the selected site was chosen. As mentioned earlier, the aquarium is a water-dependent use and must be located near, if not adjacent to, Yaquina Bay. All sites considered would require discharge of seawater back into the estuary. Long term environmental consequences resulting from discharge at this site, as compared to discharge into a natural area from another site, are equal.

The typical positive and negative environmental consequences of discharging seawater at the proposed site, or any other site discharging into a natural area, are as follows:

> Positive Consequences:

* The continuous discharge of seawater at the edge of a natural area may provide

improved habitat for some plant and animal species.

* During winter storms when much fresh water is running into the estuary, the discharge of seawater may slightly increase salinity levels.

> Negative Consequences:

* Continuous discharge of seawater may lead to the enlargement or modification of discharge channels through the mud flats. (Note: this negative impact can be minimized by

dividing the discharge stream into two parts, thereby reducing hydraulic energy available at a given location.)

* Reduction of salinity level fluctuations near the discharge point may discourage plant and animal species which do better in areas where salinity levels fluctuate more widely.

Long term economic, social, and energy consequences resulting from discharge at this site, as compared to discharge into a natural area from another site, are difficult to evaluate. Sites located farther from the estuary than the selected site would require additional discharge piping, a short term economic detriment (added maintenance) to the aquarium. The selected site will allow discharge by gravity, obviating the need to pump seawater (energy cost avoidance). Sites located farther from the estuary or at lower elevations may require pumping, a long term economic detriment to the aquarium. It is unlikely that there would be any social consequences related to the discharge of seawater from the selected site or from any other site considered.

4.) **The proposed uses are compatible with other adjacent uses, or will be so rendered through measures designed to reduce impacts.**

The aquarium will be located south of the Marine Science Center, north of an industrial area, and east of a mostly vacant parcel that accommodates some mobile homes. The Yaquina Bay Estuary is directly to the east of the site. There will be a highly compatible relationship between the Marine Science Center and the aquarium. The center focuses on marine research and higher education, while the aquarium will focus on environmental education and recreation. The aquarium staff will look to the center staff for technical assistance, and the aquarium will unburden the center from its current heavy load of recreationists.

The aquarium and the industrial area should be reasonably compatible. The aquarium will need some services provided by industrial park tenants (e.g., pump repair, electrical equipment maintenance, and welding). Aquarium visitation will, however, cause some congestion along area roads. As a mitigating action, the City of Newport is improving and realigning Ferry Slip Road, which will improve access to both the aquarium and the industrial area.

Once the aquarium is complete and Ferry Slip Road is improved, the area west of the site is expected to become more valuable and will

likely be redeveloped. This action will have a positive economic effect on the South Beach area of Newport but a negative one on occupants of mobile homes on the property.

The placement of a seawater outfall into the estuary east of the aquarium will have no impact on the Marine Science Center, the industrial area, or residents of nearby mobile homes.

Reasons Necessary to Justify an Exception: The proposed use--seawater discharge into a natural area--is not specifically provided for in subsequent sections of this rule. Subsection (1) of 660-04-022 discusses this situation. The following comments are in response to subsection (1).

(a) There is a demonstrated need for the proposed use.

The aquarium will be built on a site which conforms to the Comprehensive Plan and Zoning Ordinance of the City of Newport. The aquarium is viewed by many as a development that will improve the economy of the central coast by creating jobs and increasing tourism. As of May, 1990, funds already committed included approximately \$3.3 million in federal monies, \$2.5 million in state economic development money, \$2.7 million from charitable foundations, and \$874,356.00 from other sources.

The proposed aquarium will help achieve Goal 9/"Economy of the State" in the following ways:

- * The aquarium will help diversify the economy of the central coast.
- * The aquarium will improve the economy of the central coast by generating jobs and providing services consistent with the long term availability of human and natural resources.
- * The aquarium will help promote tourism both for in-state residents and out-of-state visitors.

(b) A resource upon which the proposed use or activity is dependent can be reasonably obtained only at the proposed exception site and the use or activity requires a location near

the resource.

- (c) The proposed use or activity has special features or qualities that necessitate its location on or near the exception site.

As discussed earlier, the aquarium must be located near a continuous supply of seawater. Once the seawater passes through exhibit areas, it must be discharged. It is essential that a seawater discharge be available to the aquarium, preferably close at hand and capable of operating by gravity.

- B. Storm Water Drainage and Outfall: Goal 2, Oregon Revised Statutes (ORS) Section 197.732, and Oregon Administrative Rules (OAR) Chapter 660, Division 4, provide guidance and establish criteria for taking an exception. The following addresses the applicable standards for the storm drainage outfall in South Beach:

Four Factors To Be Addressed When Taking an Exception:

- 1.) **Reasons justify why the state policy embodied in the applicable goals should not apply.**

The storm drainage system will be constructed and will serve an upland area adjacent to the Yaquina Bay Estuary. The property in the drainage basin to be served by the system is designated on the acknowledged Newport Comprehensive Plan for

residential, commercial, and industrial uses depending on the location. The zoning reflects those Comprehensive Plan designations.

Urban level development requires the provision of urban level services (Goals 11 and 14). The channeling and disposing of storm run-off is one of those services. The existing natural and constructed channels are used now for storm run-off from the upland areas in the drainage basin. The development of the storm drainage system will not alter those existing channels or add new channels.

Goal 16 deals primarily with development or alteration within the estuary. Development outside of the estuary but which affects the estuary is also a concern; however, it is not the primary focus of the goal. Because the issues involved in the development of the storm water drainage system concern those upland areas, the problems that would affect the estuary are controlled by the design and construction of those upland facilities. As Goal 16 does not control the upland development and storm drainage is a normal City service to the extent

Goal 16 can be found applicable to storm water run-off, it should not apply in this instance because it would conflict with the delivery of urban services as required by Goals 11 and 14.

2.) **Areas that do not require a new exception cannot reasonably accommodate the use.**

Storm drainage systems generally rely on existing natural drainage patterns and gravity to function. One option to a gravity system is to collect the storm water and pump it into another drainage basin. The nearest management unit that allows storm drainage is Management Unit 7, approximately 2,600 feet to the north. Another option would be to collect the storm water and release it into the natural management unit at a slow rate. Both would require the construction of detention and pumping facilities.

Any non-gravity collection system would have to be built with the capacity to manage run-off from current and future development in order to properly work. The City of Newport's engineering staff estimate that the current run-off during a 25 year design storm is about 20 cubic feet per second

(cfs). These engineers have also determined that at build-out of the subject drainage basin, a flow of 50 cfs could occur. That number is based on a storm design of a rainfall intensity of one (1) inch of rainfall over a one (1) hour period. That equals 108,000 cubic feet, or 2.5 acre feet of water that must be stored. There would, therefore, have to be some sort of detention system built that could accommodate that much water.

The most likely way to detain water would be a pond or some similar type of impoundment. To store 2.5 acre feet of water, a pond could be one acre in size and at least 3.0 feet deep. It would be preferable to build the pond deeper, at least 5.0 feet, so as not to cause flooding during extreme storms.

For the detention pond to work, it would have to be:

- > In low lying land below surrounding uses;
- > Centrally located so as to be capable of serving a large area; and
- > Easily developable.

The Newport Industrial Park in South Beach is at an elevation of 11 feet. This property is the lowest of the urban land in the area proposed to be affected by improved storm drainage. With that elevation in mind and the above stated depth of the detention facility, the bottom of the pond would be at six feet elevation.

It is not uncommon for high tides to be 8, 9, or 10 feet. If the detention pond were built at the suggested elevation, it would be within lands that are influenced by tidal action. Considering the other two factors of location and availability, the only place the pond could be built is in an area just south of the Newport Industrial Park. This area is partially within Management Unit 9-A and partially within a wetland. No lands are available out of either of these two natural resources. With that scenario, there would be a direct affect on the natural management unit rather than the secondary affect discussed below.

Another way to build the pond would be to construct it so that the bottom was at 12 feet or higher. This would involve large amounts of fill and a pumping system that could pump 25 cfs of future run-off into the pond. It would also have to be sited in an area consistent with the location criteria. Again, this would most likely be in the existing Management Unit 9-A or the abutting wetlands. This massive engineered selection in the management unit or adjacent wetlands is a greater divergence from the Goal 16 requirements than naturally channeled storm run-off.

Once in the pond, the water would either be released gradually into the natural management unit or pumped and released into a non-natural management unit. Either way would involve the construction of a pond and a pump that could dispense with the 50 cfs of water. City engineering staff estimates that the pond would cost about \$225,000. That assessment is based on the excavation of a hole five feet deep and other accessories associated with it, such as impermeable liners.

The engineering staff has also estimated that a variable speed pump of sufficient size and its accessory structures would cost \$262,000. In addition, there would have to be 200 feet of 24 inch pressure pipe at a cost of \$65.00 per foot for a total of \$13,000. The total cost of the ponding and pumping system would therefore total \$500,000. Such a

pump would not only be very expensive to install, but the ongoing operating costs would be a significant continued expense. (Engineering estimates the cost of operating the pumping system at

approximately \$60,000 per year.)

In addition, the pump would stand idle most of the time. The above-described system is based on a design storm that occurs once every 50 years; or, conversely, there is a two percent chance that the storm could occur in any given year. It is not cost effective to have such a system that large operate only occasionally, considering the negligible effect on Management Unit 9-A if the exception is granted.

Finally, sediments from the run-off would settle into a detention pond. This means that the pond would have to be periodically dredged. Again, the maintenance costs for a ponding system that is only occasionally used is prohibitive and not a wise use of public monies considering the impact on Management Unit 9-A.

- 3.) **The long term environmental, economic, social, and energy consequences resulting from the use at the proposed site with measures designed to reduce adverse impacts are not significantly more adverse than would typically result from the same proposal being located in other areas requiring a goal exception.**

Environmental: The state goal is to protect and, where feasible, enhance the natural management units. As mentioned above, the city is not proposing to construct any additional storm drainage facilities into the management unit but merely proposing to increase the amount of discharge through existing, natural channels.

City engineering staff has determined that discharge increase for the 50 year design would be from 20 to 50 cfs. Again, this is calculated for an intense storm. Storm drainage capacities are determined by the formula $q=c*i*a$, where "q" equals run-off in cubic feet per second, "c" equals the coefficient of permeability, "i" equals the intensity of rainfall, and "a" equals the area of the drainage basin in acres.

When the Engineering Department determined the 50 cfs, "i" equaled "1." That is a very intense storm and, again, according to the engineering staff, a more common figure would be .2. This would equal one-fifth of the design storm of 50 cfs. Consequently, a more common storm would generate only ten cfs. Those figures are based upon build out of the upland commercial, industrial, and residential land use.

Two potential adverse affects could result from that six cfs increase. One would be an increased amount of scouring in existing channels, especially below the high tide mark. Second, because of the increase

in the impervious soils in the drainage basin (probably asphalt), there could be an increase in the amount of pollutants such as oil, gas, or antifreeze.

The Engineering Department has examined both impacts. According to the preliminary studies, the existing channel bisecting the bay is of sufficient depth to accommodate the increased run-off without additional scouring.

Also, according to the Engineering Department, the increase in pollutants is mostly offset by an increase in water. This results in a greater amount of mixing and dilution of the pollutants. There would, then, be a measurable but not critical adverse impact on natural Management Unit 9-A.

Economic: As stated in the previous section, the cost of building and maintaining a drainage system that is only used intermittently is very high. By building a drainage system that operates by gravity, the public costs of development and maintenance are considerably less.

The South Beach area has been designated as high density residential, commercial, and industrial elsewhere in this plan. It is estimated herein that the City of Newport will need additional acres of commercial and industrial land to accommodate the anticipated growth. As noted in this plan, areas other than South Beach feasible for commercial development are very limited. The acknowledged Comprehensive Plan stated that the area is needed for the future expansion of the city's economic base. The ability of the city to expand its economic base is necessary for the economic well being of the community and the region. The State of Oregon has recognized this by adopting Goal 9/"Economy of the State" as an important element of mandated comprehensive plans.

Storm drainage facilities must be available for any development, but it is even more critical for commercial and industrial areas. That type of development requires the construction of large parking lots. To be functional, efficient storm drainage is required because lots cannot be developed in accordance with the acknowledged designations if there is the possibility of flooding. This is compounded in the South Beach area because it is relatively flat and low lying.

Social: The South Beach area has a large amount of the future high density residential lands. Other high density areas in the city are either small or are in areas difficult to develop. The South Beach area is, therefore, one of the few areas in town that can accommodate

larger multi-family developments. The lack of a sanitary sewer system in the area has prevented any large projects from locating there, but the extension of

the sewer system into the area is almost complete, and development can now occur.

As with commercial and industrial development, apartments usually involve large amounts of impervious surfaces. This means that storm water must be collected on site and fed into an area-wide storm drainage system. The cost of that system has a direct relationship to the cost of housing because of added development costs. Infrastructure, therefore, must be as cost efficient as possible, yet still provide an adequate service. If the storm drainage system designed for South Beach can take advantage of natural outfall into the bay, the cost of providing that service can be greatly reduced not only in the initial construction but in the long-term maintenance. Conversely, if the cost is high, that added cost will be passed on to the consumer.

The housing element of this plan has identified a need for additional housing, especially for low income persons. The more costs that are required in residential building, the more expensive and less affordable are the homes. This social concern has been identified by the state in Goal 10/"Housing" and the Housing rule as an important goal. Considering the potential great expense of any of the alternatives to the natural gravity system for storm drainage, the availability of cost effective housing for lower income persons could be hampered.

Energy: If the city builds the storm drainage system as proposed, it will work totally on gravity; consequently, once constructed, no energy consumption will be required except for periodic maintenance. If, on the other hand, one of the alternative methods is employed, a considerable amount of energy will be used pumping water. In addition, maintenance demands will increase because of the pump and detention systems. This will also increase the amount of energy consumed.

- 4.) **The proposed uses are compatible with other adjacent uses or will be so rendered through measures designed to reduce adverse impacts.**

The proposal is to drain storm water into a natural management unit via a natural swale. There will be no additional outfall lines or

drainage ditches constructed in Management Unit 9-A.

Natural drainage ways are a common feature for any body of water into which land drains.

Other adjacent uses include salt marshes, algae and eelgrass beds, shellfish beds, fish spawning and nursery areas, and waterfowl habitat. All of these uses have developed at or near the existing drainage way, and no adverse impacts have been identified. Because this proposal does not intend to alter that natural drainage channel but only insignificantly affect the management unit, the proposal is not inconsistent with the above uses.

Other non-natural uses include submerged crossings, navigation improvements, and aquaculture facilities. Submerged crossings and navigation improvements may involve minor alterations, resulting in temporary disturbances (see Goal 16 of the Statewide Planning Goals). It is then evident that some alteration and disturbance is allowed as long as it is temporary. This proposal is to use existing natural drainage with no alterations at all within the management unit.

The storm drainage proposal subject to this exception, consequently, is compatible with other uses that may result in minor, temporary alterations.

5.) **There is a demonstrated need for the proposed use.**

As stated before, the subject drainage is and will continue to be a high density residential, commercial, and industrial area. Storm drainage facilities are needed in urban areas, especially in those on the coast that can receive over 80 inches of rain a year.

In addition to the overall rainfall amount, the coastal areas can experience intense rain storms, with an intensity of one inch an hour not uncommon. Even if the ground is vacant, the soil quickly becomes saturated, so water begins to run off. In urban areas, run-off that is not channeled can result in serious water damage to property and structures. Adequate storm drainage facilities, then, are needed in built up areas. This has also been identified as a needed public service under Goal 11.

6.) **A resource upon which the proposed use or activity is dependent can be reasonably obtained only at the proposed exception site, and the use or activity requires a location near the resource.**

The "resource" upon which the use is dependent is water run-off on the Management Unit 9-A area. No other location is reasonable.

7.) **The proposed use or activity has special features or qualities that necessitate its location on or near the exception site.**

As discussed previously, in order to provide a needed storm water drainage system in the South Beach area in the most timely, orderly, and efficient manner, the existing, natural drainage facilities must be used. This requires flow into a natural management unit.

Special Policies: Management Unit 9-A shall be managed to preserve natural amenities. Active restoration activities are limited to fish and wildlife habitat and water quality and estuarine enhancement. There are two exceptions:

- > The waste seawater outfall for the Oregon Coast Aquarium; and
- > The storm water run-off through a natural, existing drainage system.

Both of these uses are permitted in Management Unit 9. The Idaho Point Marina and the channel that serves it are existing uses within the natural management unit, and they may be maintained as allowed under the existing Corps of Engineers permit. Repair of existing structures and facilities would be considered maintenance, as well. Any new dredging in excess of what is currently allowed under the existing Corps of Engineers permit, or any new development or expansion of existing in-water structures and facilities could require a Goal 16 exception. A cobble/pebble dynamic revetment for shoreline stabilization may be authorized in Management Unit 9-A for protection of public facilities (such as the Hatfield Marine Science Center facilities).

Management Unit 10-A¹²:

> Description: Management Unit 10-A includes part of the Sally's Bend area between Coquille Point and McLean Point. The unit consists of a major tideflat which supports eelgrass, shellfish and algal beds, fish spawning and nursery areas, and wildlife habitat, all of major significance. Uses in the area are limited to shallow and medium draft navigation, recreational use, and some minor commercial harvest. A number of incidental alterations are present, including pilings, dredging, and ripped shorelines. (See map for location of resources and uses.)

¹² Management Unit 10-A includes only that part of Management Unit 10 identified by the Yaquina Bay Task Force that is within the Newport UGB. The description and special policies set forth above differ from those for Management Unit 10 as a whole only because they apply to a smaller area. This subarea is classified, described, and planned for in a manner wholly consistent with the remainder of Management Unit 10.

> Classification: Natural. This unit has been classified as "natural" in order to preserve the natural resources of the unit.

- > Resource Capability: Management Unit 10-A is similar in character and resource values to Management Unit 9-A. Due to the importance and sensitive nature of the resources in this area, permitted alterations should be limited to those which result in only temporary disturbances. (Several submerged crossings have been located in this area.) More permanent alterations should be reviewed for consistency with the resource capabilities of the area.
- > Management Objective: Management Unit 10-A shall be managed to preserve and protect natural resources and values.
- > Special Policies: Active restoration activities necessary to preserve and protect the natural resources and values of the management unit are limited to fish and wildlife habitat and water quality and estuarine enhancement. A portion of Management Unit 10-A has been identified as a potential future development site. Development of this area within the "resource line" shown in the Lincoln County Estuary Plan shall require a clear demonstration of need, evaluation of alternative sites, consideration of long-term consequences, and a finding of compatibility with the adjacent uses in order to justify the needed plan amendment and Goal 16 exception.

Estuary Plan Coordination and Implementation

The Lincoln County Estuary Management Plan will be implemented within the Newport urban growth boundary. Lincoln County has primary responsibility for implementation in those parts of Yaquina Bay outside the city limits, while the City of Newport has primary responsibility for implementation within the city limits. The applicable portions of the Lincoln County Estuary Management Plan, adjusted as needed to produce equivalent results, are incorporated into the Newport Comprehensive Plan and Zoning Ordinance.

Review Procedures

Section 2-2-13 of the city's Zoning Ordinance defines, in terms of a permitted use matrix, the development, conservation, and natural management units and describes appropriate uses, activities, and structures. Any use, structure, or alteration in

any management unit must comply with procedures established in that section of the Zoning Ordinance.

State and Federal Agency Coordination

The Lincoln County Estuary Management Plan and the Newport Comprehensive Plan and Zoning Ordinance are designed to provide for the review of proposed uses and the application of performance standards in conjunction with the Division of State Lands waterway project permit review procedure (which in turn is integrated into the Corps of Engineers Section 10 and Section 404 review procedures).

Through this process, all state and federal resource agencies that participate in the review of waterway permits will be apprised of actions taken and findings made under the provisions of the management plan.

Similarly, each local government will be able to take advantage of the resource agencies' participation in this process for acquiring technical information and assessments relative to the review of waterway projects.

Yaquina Bay Shorelands:

This section summarizes inventory information about the shorelands adjacent to Yaquina Bay. Identification of the shorelands boundary was based upon consideration of several characteristics of the bay and adjacent uplands. Resources shown on the Yaquina Bay Shorelands Map within the bay-related portion of the shorelands boundary include:

- > Areas subject to 100-year floods as identified on the Flood Insurance Rate Map (FIRM).
- > Significant natural areas, adjacent marsh, and riparian vegetation along the shore.
- > Points of public access to the water.
- > Areas especially suited for water-dependent uses.
- > Dredged material disposal sites (for a more detailed discussion of dredged material disposal sites, see the amended Yaquina Bay and River Dredged Material Disposal Plan¹³).

Several of the Goal 17 inventory topics for coastal shorelands do not appear in the legend for the Yaquina Bay Shorelands Map either because they do not occur (coastal headlands) or are not directly associated with it (geologic hazards). However, the report

¹³ Wilsey & Ham, Yaquina Bay and River Dredged Material Disposal Plan, 1977.

and mapping of hazards by RNKR Associates is included in the Newport Comprehensive Plan inventory.¹⁴ The historic and archaeological resources of the Yaquina Bay Shoreland have been identified in the historical section of this document.

The Yaquina Bay Bridge is the major aesthetic landmark on Yaquina Bay. Views associated with the ocean have relegated the river scenes to secondary importance.¹⁵ The Visual Resource Analysis of the Oregon Coastal Zone classified the whole of Yaquina Bay as an area with a "less obvious coastal association" than the ocean beaches or Yaquina Head.¹⁶

Flooding

Areas of 100-year floods along Yaquina Bay (Zone A), as shown on the Flood Insurance Rate Map for the City of Newport (effective April 15, 1980), are included on the Yaquina Bay Shorelands Map. This line represents base flood elevation of 9 or 10 feet, depending upon the location.

The City of Newport has adopted flood plain management regulations that have been approved by the Federal Emergency Management Agency (FEMA). The regulations include provisions that meet the requirements of the National Flood Insurance Program.

Significant Natural Areas

The Oregon Natural Heritage Program identified two significant natural areas on Yaquina Bay within the Newport UGB. These areas are mostly within the boundaries of Estuarine Management Units 9-A and 10-A. However, the shore adjacent to these management units also contains riparian vegetation and marshland.¹⁷ These significant shoreland and wetland habitats and adjacent wetlands, including riparian vegetation, are shown on the Yaquina Bay Shorelands Map on page 272.

Public Access Points

The Yaquina Bay Shorelands Map identifies points of public access to the water for

¹⁴ RNKR Associates, Environmental Hazard Inventory: Coastal Lincoln County, Oregon, 1978.

¹⁵ Wilsey & Ham, Yaquina Bay Resource Inventory, 1977.

¹⁶ Walker, Havens, and Erickson, Visual Resource Analysis of the Oregon Coastal Zone, 1979.

¹⁷ Wilsey & Ham, Yaquina Bay Resource Inventory, 1977.

purposes of boating, clamming, fishing, or simply experiencing the bay environment. In addition to those points, there are several points identified in the Inventory of Coastal Beach Access Sites published by Benkendorf and Associates.¹⁸ That document is hereby

included within this Plan by reference.

Areas Especially Suited for Water-Dependent Uses

There are several shoreland areas in the Newport UGB that are especially suited for water-dependent uses (ESWD). The shoreland areas especially suited for water-dependent recreational uses within the Newport UGB are virtually all on the ocean as described in the Ocean Shorelands Inventory. Suitable sites for water-dependent commercial and industrial uses exist on both the north and south shores of Yaquina Bay. Some of the water-dependent commercial areas, such as the marina sites, also have a recreational aspect. The port development section of this element will discuss the ESWD sites in more detail.

The factors which contribute to special suitability for water-dependent uses on Yaquina Bay Shorelands are:

- > Deep water (22 feet or more) close to shore with supporting land transport facilities suitable for ship and barge facilities;
- > Potential for aquaculture;
- > Potential for recreational utilization of coastal water or riparian resources;
- > Absence of steep slopes or other topographic constraints to commercial and industrial uses next to the water;
- > Access or potential for access to port facilities or the channel from the shorelands unobstructed by streets, roads or other barriers.

The first three factors are stated in Goal 17. Protected areas subject to scour that would require little dredging for use as marinas do not exist in Newport. The last two factors are based upon analysis of the characteristics of Yaquina Bay and its shorelands.

There are three areas within the Yaquina Bay Shorelands that have been identified as ESWD based on the five factors listed above. The degree and nature of the suitability for water-dependent uses varies both within and among these areas; consequently, a

18 Benkendorf and Associates, Inventory of Coastal Beach Access Sites, 1989.

flexible approach to evaluate proposed uses in these areas on a case-by-case basis will be necessary.

The ESWD areas are noted below with applicable factors from the above list in parentheses, beginning with the east end of the original plat of Newport and proceeding clockwise around the bay. (See the Yaquina Bay Shorelands Map on page 272 for locations.)

- 1.) The Port of Newport's commercial boat basin facilities and parking lot/storage area lie between the bayfront on the west and the Embarcadero Marina and parking area on the east. This area lies entirely to the south of Bay Boulevard (factors 3, 4 and 5).

This area is largely developed or committed to port facilities, including docks, port offices, and a parking area. This is the port area devoted to berthing commercial fishing boats. There is development potential for changes in the port's facilities to meet the changing needs of the commercial fishing industry. While the total number of vessels has declined, their size and diversity is increasing. Some vessels in the 70 to 100 foot class routinely fish as far away as the north Alaskan coast. Uses outside or on the fringes of the port area that do not conflict or interfere with commercial fishing needs could be acceptable and appropriate.

- 2.) The other area on the north side of the bay especially suited for water dependent uses is part of the McLean Point fill area, including Sunset Terminals and the LNG tank. Only that land with close proximity to the deep water channel is included. This area is entirely south of the western portion of Yaquina Bay Road (factors 1, 4 and 5).

This area has existing facilities and future development potential for a variety of water-borne transportation, shipping and storage activities in conjunction with fish processing, marine industry, and bulk shipping of limestone, logs, and lumber, liquefied natural gas, or other commodities. A variety of industrial uses would be desirable on the landward side of the terminal facilities.

- 3.) On the south side of the bay, the OSU Marine Science Center's dock facilities, the Ore-Aqua commercial salmon hatchery, and the land immediately adjacent to the South Beach Marina are especially suited for water-dependent uses (factors 2, 3, 4 and 5), and will also serve the needs of workers and visitors to the area.

This area is only partly developed. Additional water-related and nonwater-related developments associated with the existing South Beach Marina, the OSU Marine Science Center, and port development as identified in the port development plan are envisioned for the areas landward of this ESWD area. These facilities further

the public's enjoyment and understanding of the coastal environment, and resources are most desirable.

Port Development Plan:

The City of Newport's Urban Renewal Agency and the Port of Newport contracted with CH2M HILL of Corvallis to prepare an update of the port development element of the city's Comprehensive Plan (already mentioned in this section).

The first part of the port development plan is an executive summary of the entire plan. That section is repeated here.

Executive Summary

Industry Demands: The waterfront property bordering historic and scenic Yaquina Bay is used for a wide variety of activities. This diversity of uses contributes to the vibrancy of the Newport area. However, there is a tension between the various industries using the waterfront property as they compete for space to grow and expand their respective activities. The primary industries vying for use of bay front property are:

- Commercial shipping
- Commercial fishing
- Research and education
- Tourism

Commercial shipping provides the justification for continued federal participation in harbor and navigation channel maintenance activities. The channels not only provide access to the deep draft shipping lanes of the Pacific Ocean but also make Yaquina Bay a favored harbor for a large commercial fishing fleet, which in turn attracts many tourists to the bay front to observe off-loading and processing of the catch. Research and education activities support the commercial fishing industry and also attract visitors to the area. The combined presence of the Hatfield Marine Science Center and the deep draft navigation channel draws large ocean research vessels into the harbor for supplies, repairs, and to provide floating exhibitions open to the public. Thus, these major industries are all linked together.

Two hundred and fifty acres along the estuary are zoned for water-related or water-dependent use, and it is important to balance the needs of all to provide balanced growth in the local economy. The current needs of each of these industries are discussed below.

- > The commercial shipping industry requires additional staging areas and needs to reserve room for future expansion. Additions of a dedicated shipper or a second export commodity, such as wood chips or other forest products, is the type of activity that could generate the need for additional berths.

- > Commercial fishing activities are restricted by lack of moorage, service and work docks, and upland support area for storage and repair work. Competition between ports often leads to marketing support facilities at rates that do not meet debt service in the name of economic development and job creation. This is done to attract commercial fishing vessels to a port because of the financial impact one of these boats can make on the local economy. Each boat is, in essence, an independent business, and the boats are increasingly being operated in a business-like manner.
- > Research and education requirements are fairly straightforward: room for expansion and maintenance of the environmental parameters upon which they depend (e.g., water quality in the vicinity of seawater intake facilities).
- > The tourism industry relies on the continued presence of the fishing fleet and access to the variety of activities that may be enjoyed along the waterfront, in addition to room for expansion.

Potential Development of Bay Front Areas: Parking is in short supply. Retail merchants, tourists, and commercial fisherman alike put this shortage at the forefront of their needs. Access to the bayfront could be enhanced by a multi-level parking structure with a capacity for approximately 400 vehicles. This would not solve all parking shortages nor completely eliminate congestion; however, construction of such a facility would provide the opportunity to establish one-way traffic along the bay and restrict all but commercial and emergency vehicles from the lower reach of Bay Boulevard.

The lower bayfront offers the potential for cold storage facilities, ice making and selling facilities, receiving docks and buying stations, and transient moorage space. If the now vacant Snow Mist site is not used for these activities, then it may be appropriate to allow other short-term uses. This should be permitted only if the short-term use allows easy conversion to the proposed primary use upon demonstrated need and demand for such a facility.

The area from Port Dock 5 to the Embarcadero should be dedicated, primarily, to the needs of the commercial fishing industry. However, some current uses, such as long term storage for crab pots and cod pots, are not appropriate considering the limited amount of upland area along the waterfront. The potential for major redevelopment of this area has been identified. This would enhance public enjoyment of the waterfront in addition to expanding facilities for the commercial fishing fleet.

The project requires filling of public tidelands between Port Docks 3 and 5. This would provide space for a waterfront park area with a good view of the commercial fishing activities at Port Dock 5. Bay Boulevard could also be widened to provide additional street-side parking and one-way traffic lanes along this section. The remaining land would

be converted to more efficient gear staging and short term storage, parking dedicated to the commercial fishermen, and marine retail lease space. A boardwalk running from Port Dock 3 to the Embarcadero would also allow tourists visual access to the activities of the fleet while maintaining the physical separation necessary for public safety.

Other elements of the overall development of this area's potential include relocating the U.S. Army Corps of Engineers' breakwater to expand the commercial fishing moorages. Realignment of the Port docks would also be considered, along with replacing the original Port Dock 3 transient moorage facility.

The benefits of this major redevelopment project will be limited if more moorage and long term gear storage facilities are not developed elsewhere. The Fishermen's Investment Company site offers the necessary land for long term gear storage, service and work docks, permanent and transient moorage for boats up to 300 feet in length, and marine industrial lease facilities. Developing this facility would be strategic for the Port. Then, the Port Dock 7 fill area could be completely redeveloped for more appropriate uses.

The port's International Terminals facility has the capability for minor expansions of cargo staging areas, or possibly for the addition of facilities for barges or commercial fishing vessels. However, available land limits the potential for growth at this location.

McLean Point has the largest parcel of undeveloped property on the lower bay. This property is privately owned, and plans for development have not been announced. It would be well suited for a wide variety of uses such as:

- Boat haulout and marine fabrication
- Gear storage and staging
- Service and work docks
- Fish receiving, buying and processing facilities
- Moorage
- Commercial shipping terminals
- Surimi processing

This undeveloped parcel of land is critical to the overall development of the lower bay. If it is not developed, then the Port of Newport should consider buying or leasing the property with the intent to develop it to meet the needs of the shipping or fishing industries.

The South Beach peninsula serves as the home for many recreational boaters and for the research and education community. Potential developments that are attractive to the long term use of this area include moorages for research vessels, continued expansion of the Marine Science Center, and continued development at the Newport Marina at South Beach complex.

Idaho Point offers limited potential for development. Possibly a small boat haulout facility servicing the smaller commercial fishing boats could be developed. The shallow

channel to the area, its small land area suitable for development, and its isolation from other businesses and support facilities severely limit the potential for developing a major haulout facility.

Development Restrictions: Limited funding and environmental regulations will be the most likely restrictions to developing the identified projects. Projects that should be developed in the next five years are those without major environmental restraints or that are fairly small in scale. Other projects should be developed later, as market conditions dictate or as funds become available. Construction on the waterfront is not inexpensive, and foundation conditions along the north side of Yaquina Bay are complicated by a very dense Nye mudstone formation, locally called "hardpan."

GOALS AND POLICIES **YAQUINA BAY AND ESTUARY**

Goal: To recognize and balance the unique economic, social, and environmental values of the Yaquina Bay Estuary.

Policy 1: Balanced Use of Estuary. The City of Newport shall continue to ensure that the overall management of the

Yaquina Bay Estuary shall provide for the balanced development, conservation, and natural preservation of the Yaquina Bay Estuary as appropriate in various areas.

Policy 2: Cooperative Management. The city will cooperate with Lincoln County, the State of Oregon, and the Federal Government in the management of the Yaquina Bay Estuary.

Policy 3: Use Priorities. The general priorities (from highest to lowest) for management and use of Yaquina Bay Estuary resources as implemented through the management unit designation and permissible use requirements listed below shall be:

- a.) Uses which maintain the integrity of the estuarine ecosystem;
- b.) Water-dependent uses requiring estuarine location, as consistent with the overall Oregon Estuarine Classification;
- c.) Water-related uses which do not degrade or reduce the natural estuarine

resources and values;

- d.) Nondependent, nonrelated uses which do not alter, reduce, or degrade estuarine resources and values.

Policy 4: Riparian Vegetation. Riparian vegetation shall be protected along the Yaquina Bay shoreland where it exists. The only identified riparian vegetation within the UGB is that shoreland vegetation adjacent to Management Unit 9-A. This vegetation shall be protected by requiring a fifty (50) foot setback from the high water line for any development in the area. Adjacent public roads may be maintained as needed.

Policy 5: Dredged Material Disposal Sites. Dredged material disposal sites identified in the Yaquina Bay and River Dredged Material Disposal Plan, which are located within the Newport urban growth boundary, shall be protected. Development that would preclude the future use of these sites for dredged material disposal shall not be allowed unless a demonstration can be made that adequate alternative disposal sites are available.

Policy 6: Protection of Mitigation Sites. The city shall work with Lincoln County, the Port of Newport, and state and federal agencies to assure that potential mitigation or restoration sites are protected from new uses of activities that would prevent their ultimate use for mitigation or restoration. No potential mitigation sites have been identified or designated within Newport's urban growth boundary.

Policy 7: Bayfront Uses. The city shall encourage a mix of uses on the bayfront. Preference shall be given to water-dependent or water-related uses for properties adjacent the bay. Nonwater-dependent or related uses shall be encouraged to locate on upland properties.

Policy 8: Water-Dependent Zoning Districts. Areas especially suited for water-dependent development shall be protected for that development by the application of the W-1/"Water-Dependent" zoning district. Temporary uses that involve minimal capital investment and no permanent structures shall be allowed, and uses in conjunction with and incidental to water-dependent uses may be allowed.

Policy 9: Solutions To Erosion and Flooding. Nonstructural solutions to problems of erosion or flooding shall be preferred to structural solutions. Where flood and erosion control structures are shown to be necessary, they shall be designed to minimize adverse impacts on water currents, erosion, and accretion patterns. Additionally, or cobble/pebble dynamic revetments in MU 8 and 9-A to be allowed, the project must demonstrate a need to protect public facility uses, that land use management practices and nonstructural solutions are inadequate, and the proposal is consistent with the applicable management unit as required by Goal 16.

Policy 10: Impact Assessment. Actions in the estuary which--by their size, duration, or location relative to important natural resources--would potentially alter the estuarine ecosystem shall be preceded by a clear presentation of the impacts of the proposed alteration. Such activities include dredging, fill, in-water structures, riprap, log storage, application of pesticides and herbicides, water intake or withdrawal and effluent discharge, flow-lane disposal of dredged material, and other activities which could affect the estuary's physical processes or biological resources.

The impact assessment need not be lengthy or complex, but it should enable reviewers to gain a clear understanding of the impacts to be expected. It shall include information on:

- a.) The type and extent of alterations expected;
- b.) The type of resource(s) affected;
- c.) The expected extent of impacts of the proposed alteration on:
 - (1) Water quality and other physical characteristics of the estuary,
 - (2) Living resources,
 - (3) Recreation and aesthetic use, and
 - (4) Navigation and other existing and potential uses of the estuary; and
- d.) The methods which could be employed to avoid or minimize adverse impacts.

Policy 11: Dredge and Fill. Dredge and fill activity shall be allowed only:

- a.) If required for navigation or other water-dependent uses that require an estuarine location, or if specifically allowed by the applicable management unit;
- b.) If a need (i.e., a substantial public benefit) is demonstrated and the use or alteration does not unreasonably interfere with public trust rights;
- c.) If no feasible alternative upland locations exist;
- d.) If adverse impacts are minimized; and
- e.) If in intertidal or tidal marsh areas, the effects shall be mitigated by creation, restoration, or enhancement of another area to insure that the integrity of the estuarine ecosystem is maintained.

Policy 12: Alteration of the Estuary. Uses and activities other than dredge and fill activity which could alter the estuary shall be allowed only:

- a.) If the need (i.e., a substantial public benefit) is demonstrated and the use or alteration does not unreasonably interfere with public trust rights;
- b.) If no feasible alternative upland locations exist; and
- c.) If adverse impacts are minimized.

Policy 13: Resource Capability Determinations - Natural Management Units. Within Natural Management Units, a use or activity is consistent with the resource capabilities of the area when either the impacts of the use on estuarine species, habitats, biological productivity, and water quality are not significant or the resources of the area are able to assimilate the use and activity and their effects and continue to function in a manner to protect significant wildlife habitats, natural biological productivity, and values for scientific research and education. In this context, "protect" means to save or shield from loss, destruction, injury, or for future intended use.

Policy 14: Resource Capability Determinations - Conservation Management Units. Within Conservation Management Units, a use or activity is consistent with the resource capabilities of the area when either the impacts of the use on estuarine species, habitats, biologic productivity, and water quality are not significant or the resources of the area are able to assimilate the use and activity and their effects and continue to function in a manner which conserves long term renewable resources, natural biologic productivity, recreational and aesthetic values, and aquaculture. In this context, "conserve" means to manage in a manner which avoids wasteful or destructive uses and provides for future availability.

Policy 15: Temporary Alterations in Natural and Conservation Management Units. A temporary alteration is dredging, filling, or other estuarine alteration occurring over no more than three years which is needed to facilitate a use allowed by the Comprehensive Plan and the Permitted Use Matrices of the Zoning Ordinance. The provision for temporary alterations is intended to allow alterations to areas and resources that would otherwise be required to be preserved or conserved.

Temporary alterations include:

- > Alterations necessary for federally authorized navigation projects (e.g., access to dredged material disposal sites by barge or pipeline and staging areas or dredging for jetty maintenance);

- > Alterations to establish mitigation sites, alterations for bridge construction or repair, and for drilling or other exploratory operations; and
- > Minor structures (such as blinds) necessary for research and educational observation.

Temporary alterations require a resource capability determination to insure that:

- > The short-term damage to resources is consistent with resource capabilities of the area; and
- > The area and affected resources can be restored to their original condition.

Implementation Measure 1: All development within the Yaquina Bay Estuary shall be consistent with the management units contained in Newport's Comprehensive Plan and Zoning Ordinance.

Implementation Measure 2: The city shall continue to maintain the management unit classification system delineated in this plan and the Zoning Ordinance. The permitted use matrices contained in the Zoning Ordinance shall be maintained as is unless sufficient evidence can be presented to warrant change. Any change in the permitted uses matrices shall be considered an exception to Statewide Planning Goal 16 and shall be processed as such.

Implementation Measure 3: The Port of Newport and the city shall cooperate in the implementation of the Port Development Plan (dated July of 1989) or any other plan adopted by the port and consistent with the city's Comprehensive Plan.

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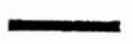
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YAQUINA BAY ESTUARY

(YAQUINA BAY SHORELANDS MAP)

LEGEND

-  ESTUARINE MANAGEMENT UNITS
-  SHORELANDS BOUNDARY
-  CABLE OR PIPELINE CROSSING AREA
-  EXISTING OR PROPOSED PIPELINE

