Section 6.160 Shoreline Stabilization

1. General Standards.

   A. Preferred Methods: Proper management of existing streamside vegetation is the preferred method of stabilization, followed by planting of vegetation. Where vegetative protection is inappropriate (because of the high erosion rate, the use of the site, or other factors,) structural means, such as rip rap, may be used as a last resort.

      In the placement of stabilization materials, factors to be considered include, but are not limited to: effects on bird and wildlife habitat, uses of lands and waters adjacent to the bank, effects on fishing areas, effects on aquatic habitat, relative effectiveness of the various structures, engineering feasibility, cost and erosion, flooding and sedimentation of adjacent areas.

   B. Emergency repair to shoreline stabilization facilities is permitted, not withstanding the other regulations in these standards, subject to those standards imposed by the State of Oregon, Division of State Lands, and the U.S. Army Corps of Engineers.

   C. Conditional use application for shoreline stabilization shall be based on a demonstration of need and consistency with the intent of the designation of the area and the resource capabilities of the area. Impacts shall be minimized.

2. Standards for Revegetation and Vegetation Management.

   A. Plant species shall be selected to insure that they provide suitable stabilization and value for wildlife. Justification shall be presented as to the necessity and feasibility for use of a bank with a slope greater than 2:1 (horizontal to vertical). Trees, shrubs and grasses native to the area are generally preferred.

   B. The area to be revegetated should be protected from excessive livestock grazing or other activities that would hinder plant growth.

1. Standards for Rip Rap.

   A. Good engineering and construction practices shall be used in the placement of rip rap, with regard to slope, size, composition and quality of material, excavation of the toe trench, placement of gravel fill-blanket, and operation of equipment in the water. State and federal agency regulations should be consulted in this regard.

   B. Rip rapped banks should be vegetated to improve bird and wildlife habitat, where feasible.

   C. Shoreline protection measures shall not restrict existing public access to public shorelines.

   D. Shoreline protection measures should be designed to minimize their impacts on the aesthetic qualities of the shoreline.

   E. Bankline protection is not in itself a way to increase land surface area. Where severe erosion has occurred, fill may be used to obtain the desired bank slope and restore the previous bank line. Any extension of the bank line into traditional aquatic areas shall be subject to the standards for fill. Disruption of tidal marsh, tidal flat and productive sub-tidal areas shall not be permitted.

   F. Construction of shoreline protection measures shall be coordinated with state and federal agencies and local interests to minimize the effects on aquatic resources and habitats. Relevant state and federal water quality standards shall be met. Stream channelization should be avoided.

Section 6.161 Utilities.

1. Overhead electrical or communications transmission lines shall be located so as not to unduly interfere with migratory bird flyways and significant habitat or residential waterfowl, birds of prey and other birds. In cases of serious conflict, utility facilities should be located underground.
2. Applications for a utility facility, including cable crossings, shall provide evidence as to why an aquatic site is needed, the alternative locations considered, and the relative impacts of each. Crossings shall avoid disrupting marsh areas wherever it is engineering feasible.
3. Utility facilities shall not be located on new fill land unless part of an otherwise approved project, and no other alternative exists.
4. Above ground utility facilities shall be designed to have the least adverse effect on visual and other aesthetic characteristics of the area.
5. Effluents from point-source discharges shall meet all applicable state and federal water and air quality standards. Monitoring shall be carried out so as to determine the on-going effects on the estuarine environment.
6. After installation or maintenance is completed, banks shall be replant with native species or otherwise protected against erosion. The pre-project bank line shall be maintained as closely as possible.
7. Storm water shall be directed into existing natural drainages whenever possible, and shall be dispersed into several locations so as to minimize the impact on the estuary. Special precautions shall be taken to ensure that contamination of the marsh by oil, sediment, or other pollutants does not occur. This may be through the use of holding ponds, wiers, dry wells, or other means. Storm water outfalls shall not be permitted in Aquatic Natural Zones.

Section 6.170 Impact Assessment

The purpose of this section is to provide an assessment process for development alterations which could potentially alter the estuarine ecosystem.

1. Impact Assessment Requirement.

   An Impact Assessment, in accordance with the provisions of this section, shall be required for the following uses and activities in Aquatic Natural and Aquatic Conservation zones:

   A. Fill (either fill in excess of 50 cubic yards or fill of less than 50 cubic yards which requires a Section 10 or Section 404 permit from the U.S. Army Corps of Engineers.)

   B. Dredging (either dredging in excess of 50 cubic yards within a 12-month period or dredging of less than 50 cubic yards which requires a Section 10 or Section 404 permit from the U.S. Army Corps of Engineers.)

   C. Proposals for active restoration.

   D. Placement of in-water structures, such as pilings, docks or bridge crossing support structures.

   E. Riprap

   F. Water intake or outfall.

Monitoring of effluent discharge and application of pesticides and herbicides are the responsibility of the Department of Environmental Quality and the Oregon Department of Agriculture.

2. Use of Impact Assessment.

   A. Information contained in impact assessments shall be used in the evaluation of a use or activity during a Conditional Use Permit review procedure. The Impact Assessment shall be used to: (1) identify potential development alterations of significant estuarine fish and wildlife habitats, and disturbances of essential properties of the estuarine resource, (2) determine whether potential impacts can be avoided and minimized, and (3) to provide a factual base of information that will ensure that applicable standards are met.

   B. Where a use requires a resource capability determination, information in the Impact Assessment will be used to determine consistency of proposed uses and activities with the resource capability and purpose of the affected management area or zone. Resource capability analysis shall be based on the requirements of the information to be provided in the Impact Assessment Section.

3. Information to be Provided in the Impact Assessment..

   Information compiled in the Impact Assessment may be drawn from available data and analysis contained in: "Necanicum Estuary Inventory", environmental impact statements, or environmental assessments prepared for previous projects in the vicinity of the present development proposal; or other published environmental and estuarine studies pertaining to the Necanicum River estuary. The Impact Assessment should apply available information to the following general areas of analysis. The City Manager may waive inapplicable items for any particular use or project.

   A. Aquatic life forms and habitat, including information on: habitat type and use (e.g., rearing, spawning, feeding/resting area migration route), species present, seasonable abundance, sediment type and characteristics, vegetation present. Type of alteration, (including information detailing the extent of alteration (e.g., area measurement, depths to which alteration will extend, volumes of materials removed and/or placed as fill), impacted species (including threatened or endangered species), life states and life cycles affected with regard to timing of the proposed alteration, percent of total available habitat type subjected to alteration.

   B. Shoreland life forms and habitat, including information on: habitat type and use, (e.g. feeding, resting, or watering areas, flyways), species present, seasonal abundance, soil types and characteristics, vegetation present. Type of alteration, including information detailing the extent of alteration, (e.g. area measurement, extent of grading and excavation, removal of riparian vegetation), life stages and life cycles affected with regard to timing of the proposed alteration, percent of total available habitat type subjected to alteration.

   C. Water quality, including information on: increases in sedimentation and turbidity, decreases in dissolved oxygen concentration, changes in biological and chemical oxygen demand, contaminated sediments, alteration of salinity regime, disruption of naturally occurring water temperatures, changes due to reduction, diversion or impoundment of water.

   D. Hydraulic characteristics, including information on: changes in water circulation patterns, shoaling patterns, potential for erosion or accretion in adjacent areas, changes in the flood plain, decreases in flushing capacity, or decreases in rate of water flow from reduction or diversion or impoundment of water sources.

   E. Air quality, including information on: quantities of emissions or particulates, expected inorganic and organic airborne pollutants.

F. The impact of the proposed project on navigation and public access to shoreline and aquatic areas.

G. Demonstration that the public need and gain will warrant such modifications or loss.

H. Demonstration that non-water dependent uses will not preempt existing or future water dependent utilization of the area.

I. Determination of the potential cumulative impact of the proposed development, including alteration of adjacent significant estuarine fish and wildlife habitat and disturbance of essential properties of the estuarine resource.

J. Determination of methods for accommodation of the proposed development alteration, based on items (a) through (j) above, in order to minimize preventable adverse impacts. Determination of need for mitigation.

4. Impact Assessment Findings. Resulting from the analysis of the information presented in the Impact Assessment, one of the following findings shall be concluded:

A. The proposed uses and activities are in conformance with all Comprehensive Plan policies and standards and do not represent a potential degradation or reduction of significant fish and wildlife habitats and essential properties of the estuarine resource. Where an impact assessment is required for a resource capability determination, the proposed uses are consistent with the resource capability and purpose of the affected management area or zone

B. The proposed uses and activities are in conformance with all Comprehensive Plan policies and standards, but represent a potential degradation or reduction of significant fish and wildlife habitats and essential properties of the estuarine resource. The Impact Assessment identifies reasonable alternatives to proposed actions that will eliminate, or minimize to an acceptable level, expected adverse environmental impacts. Where an Impact Assessment is required for a resource capability termination, the adverse environmental impacts have been minimized to be consistent with the resource capability of the management area or zone. The proposed uses and activities may be accommodated and found to be consistent with resource capabilities and meet the purposes of the management area or zone.

C. The proposed uses and activities are not in conformance with all Comprehensive Plan policies and standards. The Impact Assessment and analysis indicate that unacceptable loss will result from the proposed development alteration. The proposed uses and activities represent irreversible changes and actions, and unacceptable degradation or reduction of significant estuarine fish and wildlife habitats and essential properties of the estuarine resource will result; or, that the adverse consequences of the proposed uses and activities, while unpredictable and not precisely known, would result in irreversible trends or changes in estuarine resource properties and functions.

Section 6.180 Resource Capability Determination.

1. Purpose. Certain uses and activities in estuarine zones are allowed only if determined to meet the resource capability and purpose of the zone in which the use or activity occurs. The purpose of this section is to establish a procedure for making a resource capability determination.

2. Definition of Resource Capability.

A. Aquatic Natural Zone: A use or activity is consistent with the resource capabilities of the Aquatic Natural Zone when either the impacts of the use on estuarine species, habitats, biological productivity and water quality are not significant, or that 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.

B. Aquatic Conservation Zone A use or activity is consistent with the resource capabilities of the Aquatic Conservation Zone when either the impacts of the use on estuarine species, habitats, biological productivity, and water quality are not significant, or that 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.

3. Resource Capability Procedure. In order to determine whether a use activity is consistent with the resource capability and purpose of the zone for which the use or activity is proposed, the following procedure is required:

A. Identification of the zone and area in which the activity is proposed, and the resources in the area.

B. Identification of adverse impacts and the proposed use or activity of the resources identified in (a) above.

C. Determination of whether the resources can continue to achieve the purpose of the zone in which the use or activity is proposed.

2. Identification of Resources and Impacts. The applicant for a proposed use or activity in which a resource capability determination must be made shall submit the following:

A. Information on resources present in zone in which the use or activity is proposed;

B. Impact assessment as specified in Section 6.170, Impact Assessment Procedure. (Federal Environmental Impact Statements or Impact Assessments may be substituted if available at the time of the permit request.)

If in the course of review, additional information is required to satisfy the provisions of this ordinance; notification shall be made to the applicant outlining the additional information needed and the reason. Although the applicant shall be responsible for providing all necessary information, the City Manager will assist the applicant in identifying inventory sources and information. Sources which can be used to identify resources include:

"Necanicum Estuary Inventory", environmental impact statements for project in same area, or other published studies concerning the Necanicum Estuary. Identification of resources shall include both environmental (e.g. aquatic life and habitat present, benthic populations, migration routes and social and economic factors, navigation channels, public access facilities.

5. Resource Capability Administrative Provisions. A resource capability determination for a use or activity identified in this ordinance as a Conditional Use shall be made in accordance with the conditional use procedure set forth in Article 6.

Public notice of development proposals which require determination of parties. State and Federal resource agencies with mandates and authorities for planning permit issuance and resource decision making, including the following, will be notified: Oregon Department of Fish and Wildlife, Oregon Division of State Lands, Oregon Department of Land Conservation and Development, U.S. Fish and Wildlife Service, National Marine Fisheries Service, Environmental Protection Agency, U.S. Army Corps of Engineers.