

WAHIAKUM COUNTY  
SHORELINE MANAGEMENT MASTER PROGRAM

Revised November, 1980

The revision of this document was completed by the Wahkiakum County Planning Commission as appointed by the Board of County Commissioners, with assistance from:

- a) Materials supplied by the Columbia River Estuary Study Task Force (CREST) through the Wahkiakum County Estuary Advisory Committee.
- b) Partial Funding through grants from the Washington State Department of Ecology (DOE) with funds obtained from the National Oceanic and Atmospheric Administration (NOAA) and appropriated for Sections 305 and 306, respectively, of the Coastal Zone Management Act of 1972, and Partial funding through appropriations of local county monies.
- c) Technical Staff assistance provided through the Cowlitz-Wahkiakum Governmental Conference.

RESOLUTION NO. 09-81

A RESOLUTION ADOPTING CERTAIN REVISIONS  
TO THE SHORELINES MANAGEMENT MASTER  
PROGRAM OF WAHAKIAKUM COUNTY, WASHINGTON

WHEREAS, Pursuant to RCW Chapter 90.58, Wahkiakum County has heretofore adopted a Shorelines Management Master Program, presently in effect and approved by the Department of Ecology of the State of Washington;

WHEREAS, The County is mandated by law to review and up-date its Shorelines Master Program from time to time;

WHEREAS, In 1976 the Board of County Commissioners assigned the task of reviewing the Shorelines Master Program of the County to the County Planning Commission;

WHEREAS, After extensive review, public hearings, revisions of text and in depth study, the Planning Commission has proposed to the Board of County Commissioners certain specific revisions to the Master Program of the County; and,

WHEREAS, The Board of County Commissioners has caused legal notice of a hearing held this date to be given pursuant to law, has conducted a public hearing on the proposed revisions, has listened to and weighed the expressed concerns of the public and the recommendations of the Planning Commission and its several members, and has determined that such revisions are necessary and proper:

NOW, THEREFORE, IT IS HEREBY RESOLVED AND ORDERED:

- First: That the proposed revisions in the Shorelines Master Program of Wahkiakum County, as summarized in the attached three page document and as more specifically set-forth in the revised compiled program, maps, atlas and rules, regulations and guidelines, are hereby approved and adopted as the official revised Shorelines Master Program of Wahkiakum County, Washington.
- Second: That a copy of the revised program be transmitted to the Department of Ecology for its statutory review.
- Third: That upon approval by the Department of Ecology, such revised Shorelines Master Program for Wahkiakum County, Washington, shall be in full force and effect as provided by RCW 90.58.210, .220 and .230.

DULY PASSED AND ADOPTED in regular session this 23rd day of February, 1981.

BOARD OF COUNTY COMMISSIONERS OF  
WAHKIAKUM COUNTY, WASHINGTON, By:

Attest:

Betty E Gregory  
Auditor & Ex-Officio Clerk  
of the Board

Walter Kandoll  
Chairman

Luther Peek  
Commissioner

Approved as to form this  
30th day of January, 1981:

George F. Hanigan  
Prosecuting Attorney

Joseph Florek  
Commissioner

SUMMARY OF THE SHORELINES MANAGEMENT  
MASTER PROGRAM FOR WAHAKIYAKUM COUNTY  
Revised 1980

The Wahkiakum County Planning Commission and Governmental Conference staff are pleased to present for review the revised Shorelines Management Program and accompanying Atlas for Wahkiakum County.

Presentation of these documents concluded more than four years of intensive work(1976 to date) and many public meetings were held at five locations to insure every citizen ample opportunity for input into the update of the document. The locations were the Elochoman Grange Hall, Skamokawa Grange Hall, Grays River Grange Hall, Rosburg Community Hall, and Puget Island Grange Hall.

The Planning Commission held its final public hearing in July, 1979. In September, 1979 the Board of County Commissioners submitted the first draft text (and a generalized map) to the Department of Ecology (DOE) for review and comment. The DOE completed its review and forwarded its findings to the County in January 1980. From January to November, the Planning Commission and staff have worked to incorporate acceptable changes in the text as required by DOE. The changes were mainly for clarification purposes. This step was taken with the objective of reducing the number of possible changes made by the State after local adoption.

Outlined below are the major changes to the shorelines program and the rationale for those changes.

1. Separation of shorelands from aquatic (water) areas in the Use Activity Tables and Standards section (NEW):

Rationale:

Aquatic and shoreland areas, by there varied nature, require different management approaches. The Planning Commission recognizes that aquatic (water) areas serve different development impacts that shorelands, thus the necessity for developing a system which allows for the ability to examine any particular proposal for impacts to the aquatic (water) areas or to the shoreland areas. The Use Activity Tables and Standards employ this system.

2. Changing "Use Activity Regulations" in text to "Use Activity Standards" (NEW):

Rationale:

Use is the end to which a land or water area is ultimately put and Activity is any action taken either in conjunction with a use or to make particular use possible. Activities do not in and of themselves result in specific use.

The change from "Regulations" to "Standards" is desirable because it provides the Planning Commission more flexibility in reviewing shoreline program applications. "Regulations" are viewed as rigid, non-bending statements dealing with various uses and activities, whereas "Standards" deal with the design of a use or activity. They provide for that use or activity to be conducted in a manner that will minimize, so far as practical, any resulting damage to both the ecosystems of the affected aquatic and/or shoreland areas and the public's use of the water. As standards are more flexible, they will allow for greater ease in the administration of the shoreline program.

3. Shoreline Environmental Designation Map - Change to Atlas:

Rationale:

Perhaps the most noticeable change in the overall Shorelines Program is the accompanying Atlas which replaces the 1974 Environmental Designations Map. The Atlas is keyed to the Environmental narrative Section of the text and is drawn at a scale of 1" to 400' on sectional base maps obtained from the County Assessor's Office. Work was closely coordinated with the Assessor during the update of all property lines used in the Atlas. Due to the fact that property ownership changes frequently, ownership names were omitted. However, the Atlas clearly depicts the areas under Shorelines Management jurisdiction in relation to property lines. This will be most helpful in determining whether a particular activity is subject to the Shorelines Management Program. The Atlas, constructed by the CWGC Cartographic Department, was developed during 1980 and financed by a grant from DOE.

4. Water Area Environmental Designation (NEW):

The following environmental designations are illustrated as they apply to the major water areas of the County:

- a. Columbia River Water Areas, designated Conservancy, except for the following areas:
  1. 50 foot rural environment along Little Island from Puget Island Bridge along the north side (Cathlamet Channel) to the confluence of Bernie & Jackson Sloughs;
  2. Bernie Slough - Rural;
  3. From Mean Higher High Water line (MHHW) of Puget Island waterward 50 feet into Jackson Slough - Rural;
  4. From MHHW waterward from Puget Island 50 feet into Net Rack Slough - Rural;
  5. Elochoman Slough to the Elochoman River - Urban;
  6. Waters on the riverside of the eastern half of Price Island to the 40 feet bottom contour line - Conservancy;
  7. From the MHHW line to Price Island waterward to the middle of Steamboat Slough - Urban;
  8. The mouth of Skamokawa Creek and Brooks Slough - Urban;
  9. From the MHHW line waterward to the 40-foot bottom

contour line on the east and west sides of Jim Crow  
Creek - Urban.

Rationale:

With the exception of the Grays Bay area, all environmental designations of waters not in the conservancy status were made to allow for the continuation of existing activities and uses common to those areas.

b. Grays Bay Water Area:

1. A 50-foot "Conservancy" buffer strip waterward from the MHHW line around the entire bay area;
2. All wetlands of Grays Bay area - Natural;
3. All other water areas of Grays Bay - Conservancy.

Rationale:

The Natural and Conservancy environments of the Grays Bay area allow for assumed protection of anadromous fish.

5. Shoreland Environmental Designation: (Changes)

- a. Columbia River Shoreline Area, starting at the corner section of Sections 17, 18, and 20 (Nassa Point Area) downstream to the approximate area of the mouth of the Elochoman Slough - From Conservancy to Urban.

Rationale:

This area consists of a linear bluff from Nassa Point area to Cathlamet and has existing housing units throughout which represents a logical extension of Cathlamet. The change from Conservancy to Urban, therefore, represents a correction of a previous misapplication of an environmental designation.

- b. That area west of Foster Road; north of State Highway 407 (Elochoman River Road); east of State Highway 4 (Ocean Beach Highway) and south of the Elochoman River - added as Urban (new).

Rationale:

This area was not previously incorporated into the shoreline program and its proposed addition under the urban classification allows for review of activities or uses to insure minimal disruption to the waterway of the Elochoman River.

- c. That shoreline area on both banks of the mouth of Jim Crow Creek - from Rural to Urban.

Rationale:

The urban environment will allow for continuation of an existing industrial activity which needs room for expansion and riverfront location for water transport of logs and barge loading. The existing activity consists of rock excavation (mining) for road construction purposes, and a log handling facility.

- d.
1. The shoreline area along the west bank at the mouth of Grays River starting at the NW 1/4 of Section 33 T10N, R8W southwesterly to Millers Point (Sec. 32 T10N, R8W) - from Urban to Conservancy;
  2. That shoreline area between Miller Point and Deep River along the north bank of Grays Bay area - from Urban to Rural;
  3. The shoreline area along the west bank of Deep River starting at State Highway 4 (Ocean Beach Highway) downstream to its mouth at Grays Bay, then southward along the west bank of Grays Bay to the north bank of Sisson Creek - from Urban to Rural;
  4. The shoreline area along the west bank of Grays Bay starting at the south bank of Sisson Creek southward along the area known as Brix Bay to the Pacific/Wahkiakum County Line - from Urban to Conservancy.

Rationale:

Those areas outlined above represent the western half of the Grays Bay area. The previous urban designation indicated an acceptable intensity of uses and activities not truly compatible to this area. The Planning Commission concurred with the Wahkiakum County Estuary Advisory Committee that the carrying capacity of this area is truly limited and that the Conservancy and Rural environments properly indicate the true activity limitations of this area.

The changes outlined above constitute the major deviations to the existing text and represent the latest viewpoint on the shoreline issues by the citizens of this county.

In 1981 the Planning Commission and staff will develop an Administrative Section for the program. This section will list the various county department responsibilities in relation to the shoreline program and explain the procedures for obtaining a Shoreline Development Permit in Wahkiakum County. This section will be presented for amendment into the program at a later date.

The Planning Commission believes that this program text and atlas, along with the upcoming administrative procedures section, will provide the means by which the Commission and Board may administer a fairly complicated law with greater ease.



ACKNOWLEDGMENTS

WAHKIAKUM COUNTY

Board of County Commissioners

Walter Kandoll, Chairman  
Luther "Jack" Peek  
Joe Florek (Commissioner at date of adoption)

Planning Commission

Melvyn Souvenir, Chairman  
Jean Calhoun  
Joe Florek (Chairman in November, 1980)  
Casper Schmand  
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ACKNOWLEDGMENTS (Continued ...)

CREST Technical Advisory Assistance

Federal

Pacific Northwest River Basins Commission

Department of the Army  
- Corps of Engineers

Department of the Interior  
- Bureau of Land Management  
- U.S. Fish and Wildlife Service  
- National Park Service  
- U.S. Geological Survey  
- Heritage Conservation & Recreation Service

Department of Agriculture  
- Soil Conservation Service  
- U.S. Forest Service

Department of Commerce  
- National Marine Fisheries Service  
- Economic Development Administration

Environmental Protection Agency

Pacific Northwest Regional Commission

Washington

Department of Ecology  
Department of Fisheries  
Department of Game  
Department of Parks and Recreation  
Office of Community Development  
Highway Administration  
Department of Natural Resources  
Interagency Committee for Outdoor Recreation

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SEVERANCE CLAUSE

If any provision of this Program, or its application to any person or legal entity or circumstances, is held invalid, the remainder of the Program, or the application of the provision to other persons or legal entities or circumstances, shall not be affected.

UPDATING AND REVIEW PROCESS

The Department of Ecology and Wahkiakum County designated agencies shall periodically, at least once every two years, review this Master Program and make such adjustments thereto as are necessary. Wahkiakum County local government shall submit any proposed adjustments to the Department of Ecology, as soon as they are completed. No such adjustment shall become effective until it has been approved by the Department of Ecology.

Wahkiakum County local government and designated agencies, updating and reviewing this Program, shall administer and adhere to the following:

- (1) A Review Board shall consist of four to nine individuals , the exact size to be left to the discretion of the Wahkiakum County Commissioners.
- (2) The Review Board shall represent a cross-section of equal representation of the county.
- (3) The Review Board shall meet for the sole purpose of updating and reviewing this Program; which shall be updated and reviewed at least once every two years
- (4) The findings of the Review Board shall be forwarded to the Wahkiakum County Commissioners for their consideration.
- (5) The Wahkiakum County Commissioners shall forward any accepted changes or revisions of the Master Program to the Department of Ecology for approval.

In addition to the above, the following review and submission process shall be adhered to:

WAC 173-062 Submittal of revised master program by local government. (1) The local government shall, prior to the submittal of a revised master program to the department, conduct at least one public hearing to consider the proposed changes to the program.

(a) Public notice of the hearing shall be made a minimum of once in each of the three weeks immediately preceding the hearing. The notice shall be published in one or more newspapers of general circulation in the county in which the hearing is to be held. The public notice shall include:

(i) Reference to the authority under which the action is proposed.

(ii) A statement or summary of the proposed changes to the master program.

(iii) The date, time, and location of the hearing, and the manner in which interested persons may present their views thereon.

(b) The local government shall also notify abutting local governments affected by the proposed master program revision and specify any environment designation changes.

(c) The revised master program should be available for public inspection at the local government office and available upon request at least seven days prior to the public hearing.

(2) Attached to the master program revision upon submittal to the department shall be a copy of the resolution or ordinance relating to the revisions submitted by the local government. The submittal letter must bear the signature of the authorized local official. In addition, the following items should also be included in the submittal:

(a) An affidavit showing that the notice has been properly published.

(b) An explanatory statement, staff report, record of the hearing, and/or other materials which document the necessity for the proposed changes to the master program.

(c) The material specified by chapter 43.21C RCW; i.e., an environmental checklist, threshold determination, and environmental impact statement, as required.

## DEVELOPMENT

"Development" means a use consisting of the construction or exterior alteration of structures; dredging; drilling; dumping; filling; removal of any sand, gravel or minerals; bulkheading; driving of piling; placing of obstructions; or any project of a permanent or temporary nature which interferes with the normal public use of the surface of the waters overlying lands subject to this chapter at any state of water level.

## SUBSTANTIAL DEVELOPMENT

"Substantial development" shall mean any development of which the total cost or fair market value exceeds \$2500 dollars, or any development which materially interferes with the normal public use of the water or shorelines of the state; except that the following shall not be considered substantial developments for the purpose of this chapter:

- (a) Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements;
- (b) Construction of the normal protective bulkhead common to single-family residences;
- (c) Emergency construction necessary to protect property from damage by the elements;
- (d) Construction of a barn or similar agricultural structure on wetlands if under 35 feet in height  $\hat{1}$ ;
- (e) Construction or modification of navigational aids such as channel markers and anchor buoys;
- (f) Construction on wetlands by an owner, lessee or contract purchaser of a single-family residence for his own use or for the use of his family, which residence does not exceed a height of thirty-five feet above average grade level and which meets all requirements of the state agency or local government having jurisdiction thereof, other than requirements imposed pursuant to this chapter.

$\hat{1}$ : such structures greater than 35 feet in height above average grade level may be exempt from the Permit Procedures if such structures do not obstruct the view of a substantial number of residences.

- (g) Construction of a dock, designed for pleasure craft only, for the private noncommercial use of the owner, lessee, or contract purchaser of a single-family residence, the cost of which does not exceed two thousand five hundred dollars. (1973 C 203 s 1; 1971 1st ex.s. c 286 s 3.)

DEVELOPMENT AND SUBSTANTIAL DEVELOPMENT FUNCTIONS

The functions of "development" and "substantial development", as defined by the Shoreline Management Act of 1971 (RCW 90.58.140) are:

(a) No development shall be undertaken on the shorelines of the state except those which are consistent with the policy of this chapter and, after adoption or approval, as appropriate, the applicable guidelines, regulations, or master programs.

(b) No substantial development shall be undertaken on shorelines of the state without first obtaining a permit from the government entity having administrative jurisdiction under this chapter.

Neither individual single family homes nor barns are exempt from the Act, they are only exempt from the PERMIT PROCEDURES. The goals, policies, and regulations of this program apply to all development, not to substantial development alone.

While regulations for substantial development are enforced through the shoreline permits, regulations for development are enforced locally through building permits, subdivision regulations, zoning, health standards, and other applicable procedures. The Act also authorizes local governments, "To adopt such rules as are necessary and appropriate to carry out the provisions of this chapter."



SUBSTANTIAL DEVELOPMENT  
CONSTRUCTION AND OPERATIONS REGULATIONS

The following regulations cover the construction practices that must be observed for substantial developments:

1. No construction equipment shall enter any shoreline body of water, except as authorized under the terms of a substantial development permit.
2. Vegetation along the water shall be left in its natural condition unless the substantial development permit allows otherwise.
3. During construction, care will be taken to assure that waste material and foreign matter are not allowed to enter the water.
4. All fuel and chemicals shall be kept, stored, handled and used in a fashion which assures that there will be no opportunity for entry of such fuel and chemicals into the water.
5. Protection from siltation and erosion shall be provided for on all earthworks projects.
6. Land being prepared for development shall leave an adequate drainage system to prevent runoff from entering water bodies.
7. Side casting of excess road building material into streams will not be permitted.
8. All construction debris such as fuel and oil containers and barrels and other miscellaneous litter shall be removed from the shoreline area. No equipment shall be abandoned within the shoreline area.

## SUBSTANTIAL DEVELOPMENT PERMITS

Applicants for Substantial Development Permits shall be required to provide such documentation, illustrations, maps, and accurate engineering data as the administrator may deem necessary to adequately appraise the development proposed, the potential impact on the environment, and ensure compliance with the Shorelines Management Act and Substantial Development Permit.

Within fifteen days of the second publication (of the notice of application) the applicant shall be informed of all such identifiable data required.

The application for and/or issuance of a Substantial Development Permit shall in no way set aside the requirements that may be imposed by any other permit, ordinance, regulation or law.

If conflicts between this master Program and adopted Comprehensive Plans or regulations are identified, the source of conflict may be cause for review and possible adjustment to this Master Program.

All development must conform to the regulations and requirements of federal, state, and local agencies including, but not limited to:

- County and Municipal Codes and Ordinances
- Department of Ecology
- Department of Fisheries
- Department of Game
- Department of Natural Resources
- Department of Social and Health Services
- Regional Air Pollution Control Authorities
- U.S. Army Corps of Engineers

## VARIANCE/CONDITIONAL USE/SYMBOLS

### Variance

WAC 173-14-150 Review criteria for variance permits. The purpose of a variance permit is strictly limited to granting relief to specific bulk dimensional or performance standards set forth in the applicable master program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of the master program would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

- (1) Variance permits should be granted in a circumstance where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In all instances extraordinary circumstances should be shown and the public interest shall suffer no substantial detrimental effect.
- (2) Variance permits for development that will be located landward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030(2)(b), except within those areas designated by the department as marshes, bogs, or swamps pursuant to chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:
  - (a) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes or significantly interferes with a reasonable permitted use of the property.
  - (b) That the hardship described in WAC 173-14-150(2)(a) above is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from deed restrictions or the applicant's own actions.
  - (c) That the design of the project will be compatible with other permitted activities in the area and will not cause adverse effects to adjacent properties or the shoreline environment designation.
  - (d) That the variance authorized does not constitute a grant of special privilege not enjoyed by the other properties in the area, and will be the minimum necessary to afford relief.
  - (e) That the public interest will suffer no substantial detrimental effect.

- (3) Variance permits for development that will be located either waterward of the ordinary high water mark (OHWM), as defined in RCW 90.58.030(2)(b), or within marshes, bogs, or swamps as designated by the department pursuant to chapter 173-22 WAC, may be authorized provided the applicant can demonstrate all of the following:
- (a) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes a reasonable permitted use of the property.
  - (b) That the hardship described in WAC 173-14-150 (3) (a) above is specifically related to the property, and is the result of unique conditions such as irregular lot shape, size, or natural features and the application of the master program, and not, for example, from restrictions or the applicant's own actions.
  - (c) That the design of the project will be compatible with other permitted activities in the area and will not cause adverse effects to adjacent properties or the shoreline environment designation.
  - (d) That the requested variance will not constitute a grant of special privilege not enjoyed by the other properties in the area, and will be the minimum necessary to afford relief.
  - (e) That the public rights of navigation and use of the shorelines will not be adversely affected by the granting of the variance.
  - (f) That the public interest will suffer no substantial detrimental effect.
- (4) In the granting of all variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if variances were granted to other developments in the area where similar circumstances exist the total of the variances should also remain consistent with the policies of RCW 90.58.020 and should not produce substantial adverse effects to the shoreline environment.

## Conditional Use

The purpose of a conditional use permit is to allow greater flexibility in administering the use regulations of the master program in a manner consistent with the policies of RCW 90.5,1.020; PROVIDED, that conditional use permits should also be granted in a circumstance where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In authorizing a conditional use, special conditions may be attached to the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In authorizing a conditional use, special conditions may be attached to the permit by local government or the department to prevent undesirable effects of the proposed use.

1. Uses which are classified or set forth in the applicable master program as conditional uses may be authorized provided the applicant can demonstrate all of the following:
  - a. That the proposed use will be consistent with the policies of RCW 90.58.020 and the policies of the master program.
  - b. That the proposed use will not interfere with the normal public use of public shorelines.
  - c. That the proposed use of the site and design of the project will be compatible with other permitted uses within the area.
  - d. That the proposed use will cause no unreasonable adverse effects to the shoreline environment designation in which it is to be located.
  - e. That the public interest suffers no substantial detrimental effect.
2. Other uses which are not classified or set forth in the applicable master program may be authorized as conditional uses provided the applicant can demonstrate, in addition to the criteria set forth in WAC 173-14-140(a) above, that extraordinary circumstances preclude reasonable use of the property in a manner consistent with the use regulations of the master program.
3. In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses should also remain consistent with the policies of RCW 90.58.020 and should not produce substantial adverse effects to the shoreline environment.

## Symbols

The following symbols shall have the following meaning throughout this master program:

- (P) Permitted Use, no standards apply
- (PS) Permitted with Standards, activities and uses that are permitted subject to standards set forth in this document
- (C) Conditional Use
- (N) Not permitted, a use or activity that is not permitted in the specified environment.

ADMINISTRATION - PART I  
SHORELINE PERMIT OBTAINMENT PROCEDURE

Any person applying for a Shorelines Substantial Development Permit or requesting Substantial Development Permit Exemption Status must comply with the following procedures:

- A. Contact the Wahkiakum County Permit Coordinator for initial determination of shorelines activity and types of environmental designation applied to the area of proposed activity.
- B. Obtain a Shorelines Substantial Development Permit Application Form from the Permit Coordinator. Answer all questions pertaining to the proposed activity, plus any and all additional information as may be required by the Permit Coordinator, and return the form plus any additional information to the Permit Coordinator's office.
- C. The Permit Coordinator shall review the application for completeness and clarity of information and set a date for a public hearing before the Wahkiakum, County Planning Commission. A public notice of this hearing shall be placed by the Planning Commission Secretary in the local newspaper not less than ten (10) days, or two consecutive weeks, prior to the public hearing.
- D. The Wahkiakum County Planning Commission shall review the application for conformance to the Shoreline Management Master Program for Wahkiakum County (SMMP) and other local ordinances prior to submitting its recommendations to the Board of County Commissioners. The recommendations shall be accompanied by a written "Findings of Fact", and a copy of the recommendations and findings shall be forwarded to the applicant.
- E. The Board of Wahkiakum County Commissioners has final local approval or disapproval of all Shoreline Permit applications. The Board shall forward its findings to the Washington State Department of Ecology in accordance with the requirements of Chapter 90.50 of the Revised Code of Washington (C 90.58).
- F. Any person wishing to undertake development on shorelines where such development is deemed by the applicant and/or Administrator to be uncertain regarding qualification for permit exemption shall obtain a statement of exemption from the Administrator.
- G. No landfill, dredging, shoreline stabilization and flood protection work or shore defense work other than emergency work shall commence until a statement of exemption has been obtained.

- H. Upon the effective date of this program, a shoreline Substantial Development Permit or a statement of exemption shall be granted only when the proposed development is consistent with:
1. Policies and regulations of the Wahkiakum County Shoreline Master Program; and
  2. Applicable policies enumerated in RCW 90.58.020 in regard to shorelines of the state and shorelines of statewide significance; and
  3. Regulations adopted by the Department of Ecology pursuant to the Act (WAC 173-14).
- I. Burden of Proof - The burden of proving that the proposed development is consistent with the above shall be on the applicant.

#### ADMINISTRATION - PART II

Administrative procedures outlining County and staff procedures or implementation of this document and shoreline development permit reviews will be included by amendment upon completion of this section.



## INTRODUCTION:

This section of the Shorelines Management Program is regarded as that element that establishes the cornerstone from which this program will build.

The aspirations of the people of Wahkiakum County are not greatly different from those of the people of any other part of the United States.

To project into the future the desires of the public and to maintain the viability of this program, we must first assess our present position and the planning level from which we look to the future.

Within this section, the ultimate quality of life desired by the citizens of this county should be disclosed. The ultimate goal of all persons would be that of a full, rewarding life for themselves and their descendants while preserving a pure or pristine setting in which to enjoy this life.

Obviously, to attain both is impossible in a gregarious and economic society. To strive for a minimal reduction in the potential quality of economic and social growth and to retain and preserve the balance of our ecology as far as possible is more realistic.

Obtaining the aspirations of the total population for the future quality of life is a Herculean task if not impossible. To make this program as reflective of the broad spectrum of interests as possible, a variety of methods to solicit public input were utilized.

In compliance with the Shorelines Management Act of 1971 of the State of Washington (which was ratified by the citizens of Washington in 1972), the people of Wahkiakum County have chosen to develop a local plan for management of the shorelines of Wahkiakum County.

This program's rules and regulations shall apply to any development on shorelines of statewide significance, and also on shorelines of the state whose construction commenced after the adoption of the Act in November 1972.

To insure some degree of control by local voters, now and in the future, all items described in this local plan will be subject to implementation or change only as the duly elected County Commissioners may direct.

The aim of these guidelines is ultimately directed toward the general goal to:

1. Assure healthy, orderly, economic growth.
2. Maintain a high quality environment along the shorelines of Wahkiakum County.
3. Establish criteria for safe, orderly, residential growth along the shorelines of Wahkiakum County.
4. Preserve and protect those fragile natural resources and culturally significant features along the shorelines of Wahkiakum County.
5. Provide safe and reasonable public access to the shorelines of Wahkiakum County.
6. Preserve the rights of private ownership and property uses of the shorelines of Wahkiakum County.

In the spirit and intent of the Shorelines Management Act certain water bodies are recognized as being significant on the Statewide level.

Accordingly, those designated water bodies in Wahkiakum County are considered as deserving of consideration beyond that ascribed to other water bodies.

Since these specified shorelines are major resources from which all people in the state benefit, the master program must:

1. Recognize and protect statewide interest over local interest.
2. Preserve the natural character of the shoreline
3. Address uses which result in long-term over short-term benefit. shorelines.
4. Protect the resources and ecology of the shorelines.
5. Increase public access to publicly-owned areas of the shorelines.
6. Increase recreational opportunities for the public on the shorelines.

Elements that must be considered to attain the previously stated goals and objectives are defined as: Economic Development; Circulation Element; Public Access; Recreation; Shorelines Use; Conservation; Historical/Cultural and Residential Development.

Certain criteria are applicable to almost all of the elements shown above. Specifically, the suitability of a site selection for the use intended must be considered. The disposal of wastes generated must conform to the best practices of the time.

In order to plan and effectively manage shoreline resources, a system of categorizing shoreline areas is required for the preparation of this Master Program.

The particular uses or type of development in each of the following environments must be designed and located so that there are no effects detrimental to achieving the objective of the environmental designations and local development criteria.

Specific performance standards shall be imposed and/or developed for any given use, to make that use compatible with the Natural or Conservancy environments in which that use will locate.

The following page lists the different types of environments, their definition and objectives around which this program was constructed.

ENVIRONMENT AND OBJECTIVES

NATURAL ENVIRONMENT

Definition: Those shoreline areas with unique natural features which would be severely affected by human intrusions.

Objective: To preserve those defined areas which should be relatively free of human impact.

CONSERVANCY ENVIRONMENT

Definition: Those shoreline are as endowed with resources which may be harvested and naturally replenished. Also, those areas which, through flooding, slide prone soils or other natural parameters are not suitable for intensive agriculture or high density human use.

Objective: To maintain those defined areas for a sustained yield philosophy of resource management, establish suitable areas for non-intensive agricultural uses, non-intensive recreational uses and limited intensive public access.

RURAL ENVIRONMENT

Definition: Those shoreline areas with soil and land areas suitable for intensive agriculture, capable of recreational site development, public access and limited residential development.

Objective: To establish open spaces which will satisfy positive human needs for recreation, limit urban sprawl into areas beyond service capabilities and preserve the limited agricultural resource base.

URBAN ENVIRONMENT

Definition: Those shoreline areas suitable for intensive recreational, residential, industrial and commercial development.

Objective: To identify those defined areas which are currently in such use and potentially capable of such use to satisfy the socioeconomic needs of the present and future population of the county.

#### FLOODPLAINS AND LANDSLIDES

Since no designated environment is capable of being identified as an area free of flooding or landslide potential, ordinances and regulations applicable to these natural hazards shall be a part of this Master Program by adoption and applicable to all uses and each environment where pertinent.

Flood hazard studies have been made in the areas of Grays and Deep Rivers, Skamokawa River and Elochoman River.

STATE-COUNTY SHORELINE USAGE COMPATIBILITY

When considering development along, or any use of, Shorelines of Statewide Significance, special attention will be given to insuring that the State and regional interests as well as local needs and desires are reflected in the areas of: Economic Development, Public Access, Circulation, Recreation, Shoreline Use, Conservation, and Historical/Cultural Elements. This will be done to insure compatibility of County-State shoreline usage.

## GOALS AND OBJECTIVES

## CIRCULATION ELEMENT

At this time no transportation study has been undertaken in Wahkiakum County. As indicated in the Comprehensive Plan for Wahkiakum County, the Circulation Element indicates that known future plans were essentially for improvements to the existing network with no new routes proposed from Grays River to Pe Ell, Skamokawa to Pillar Rock, Elochoman to Ryderwood.

With this background from which to project a meaningful address to the circulation element of this program, satisfaction of this facet of the general goal statement may be considered as:

GOAL: WHEN NECESSARY TO DEVELOP FACILITIES FOR ANY OF THE VARIOUS MODES OF TRAVEL ON THE SHORELINES OF WAHAKIYAKUM COUNTY, THESE FEATURES MUST NOT ENDANGER THE LIFE, PROPERTY OR RIGHT OF OTHERS, NOR DEBILITATE THE QUALITY OF LIFE ENJOYED BY PRIVATE CITIZENS (TAXPAYERS, RESIDENTS) AND EXISTING ENTITIES OF A COMMERCIAL NATURE.

Those proposals of circulation or public facilities to be introduced to shorelines must be so regarded as:

### OBJECTIVES:

1. TO INSURE THAT THE SITE SELECTED IS SUITABLE FOR THE USE PROPOSED.
2. TO BE INTRODUCED TO THE AREA WITH A MINIMAL ADVERSE EFFECT UPON THE NATURAL FEATURES, SCENIC QUALITY AND ECOSYSTEMS EXISTENT IN THE SHORELINES.
3. TO FULFILL A NEED WHICH CAN ONLY BE SATISFIED BY SUCH USE ON THE SHORELINES AS OPPOSED TO AN UPLAND USE.
4. TO PROTECT THE LIFE, PROPERTY AND RIGHTS OF OTHERS AND SUSTAIN OR IMPROVE THE QUALITY OF LIFE IN THE AREA.
5. UPON COMPLETION OF A REGIONAL TRAILS SYSTEM PLAN, CIRCULATION ROUTES CONSIDERING ALL FORMS OF PEDESTRIAN AND VEHICULAR MOVEMENT THROUGH DESIGNATED SCENIC CORRIDORS AND ROUTES WILL BE ESTABLISHED.

### CONSERVATION ELEMENT

Since the term "conservation" is frequently misused as synonymous with "preservation", the distinction should be understood.

Conservation is applicable to those managed, replenishable resources utilized for the general good.

Preservation implies a "hands off" attitude which may be necessary to sustain a feature, ecosystem or heritage which may be lost if attempts at yield management are introduced, such as water falls.

Preservation, then, may be a factor in a conservation practice. The conservation element goal may be stated as:

GOAL: TO ENCOURAGE THE BEST MANAGEMENT PRACTICES FOR THE CONTINUED SUSTAINED YIELD OF REPLENISHABLE RESOURCES OF THE SHORELINES AND PRESERVE, PROTECT AND RESTORE THOSE UNIQUE AND NON RENEWABLE RESOURCES.

The specific objectives which will implement the above goal are:

#### OBJECTIVES:

1. PRESERVE THE SCENIC AND AESTHETIC QUALITIES OF SHORELINES AND VISTAS.
2. CONTRIBUTE (AS FAR AS THE STATE OF THE ART ALLOWS) TO A MAXIMUM UTILIZATION OF THE RESOURCES WITHOUT HARMING OTHER NATURAL SYSTEMS OR THE QUALITY OF LIFE.
3. RESTORE DAMAGED FEATURES OR ECOSYSTEMS TO A HIGHER QUALITY THAN MAY CURRENTLY EXIST.
4. PRESERVE UNIQUE AND NON-RENEWABLE RESOURCES.
5. CONSIDER THE TOTAL UPSTREAM AND DOWNSTREAM EFFECT OF PROPOSED DEVELOPMENTS TO ENSURE THAT NO DEGRADATION WILL OCCUR TO THE SHORELINES AREA.



## ECONOMIC DEVELOPMENT

The philosophy which has guided the objectives of the above plans and studies was predicated upon the need for a diversified economy and with the recognition of existing natural impediments to countywide industrialization and commercial development.

Our more recent awareness of the fragility of some of these natural features, such as the shorelines, necessitates a specific concern over the potential of economic development on the shorelines of Wahkiakum County.

Therefore, in order to assure a healthy, orderly, economic growth, the considered goal relative to economic development on shorelines may be stated as:

GOAL: TO ENCOURAGE THE ESTABLISHMENT AND DEVELOPMENT OF INDUSTRY AND COMMERCIAL ACTIVITIES ON WAHAKIACUM COUNTY SHORELINES THAT REQUIRE THE LAND-WATER INTERFACE FOR PRODUCTIVE EFFORTS.

Since economic enterprise may manifest itself in many ways, the proposed Economic Development goal should be attainable through the adherence to objectives related to this element.

### OBJECTIVES:

1. THOSE ECONOMIC DEVELOPMENTS PROPOSED MUST NOT REDUCE THE QUALITY OF LIFE FOR THE RESIDENTS OF WAHAKIACUM COUNTY.
2. THOSE ENTERPRISES PROPOSED ON SHORELINES MUST EFFECTIVELY OPERATE WITHOUT DEBILITATING THE QUALITY OF LIFE OR RESOURCES OF THE SURROUNDING AND ADJACENT AREA SELECTED.

HISTORICAL/CULTURAL ELEMENT

As time passes and the culture, society and general life style of a people changes, those evidences and examples of early ways of life become significant to the subsequent residents of an area.

In order to protect these cultural resources, the goal statement applicable to this element is:

GOAL:            PROTECT, PRESERVE AND RESTORE THOSE HISTORICAL, CULTURAL  
                     EDUCATIONAL AND SCIENTIFIC SITES ON THE SHORELINES OF WAHAKIYAKUM  
                     COUNTY FOR THE GENERAL PUBLIC.

The general history of Wahkiakum County is rich in an Indian past, as a route between fur trading centers and is currently changing with the technology of our time. There are few sites presently identified, especially on the shorelines.

In order that this element goal may be realized, those objectives which should be recognized are:

OBJECTIVES:

1.        SUCH SITES SHOULD BE REGARDED WITH THE SAME CONCERN FOR PROTECTION AS AN ENDANGERED OR FRAGILE SPECIES OR ECOSYSTEM.
2.        SUCH SITES SHOULD BE MADE AVAILABLE TO THE GENERAL PUBLIC; HOWEVER, ACCESS TO SITES MAY BE BY FOOT TRAIL, BOAT OR OTHER MEANS OF LESS CONVENIENCE THAN PAVED ROADS.

PUBLIC ACCESS

Since the water bodies of the State have been defined as a resource available to all citizens, and since those Shorelines of Statewide Significance should incorporate an element of public access, the goal for this element which will attain this satisfaction of the general goal statement is:

GOAL: TO ASSURE SAFE AND REASONABLE ACCESS FOR THE PUBLIC TO PUBLIC PROPERTY ON THE SHORELINES OF WAHAKIYAKUM COUNTY.

To assure this reasonable and safe access, the following objectives may be ascribed to the above goal:

OBJECTIVES:

1. TO RETAIN EXISTING PUBLIC ACCESS AND DEVELOP ADDITIONAL ACCESS WHERE SUCH WILL NOT ENDANGER LIFE OR PROPERTY NOR INTERFERE WITH THE RIGHTS INHERENT IN PRIVATE PROPERTY.
2. SUCH ACCESS SHOULD NOT HAVE AN ADVERSE EFFECT ON UNIQUE OR FRAGILE NATURAL FEATURES NOR ALTER ECOLOGICAL SYSTEMS OF THE AREA.
3. FUTURE ROADS, WHEN BUILT PARALLEL TO SHORELINES, SHALL PROVIDE MULTIPLE POINT ACCESS TO THE SHORELINE WHEREVER POSSIBLE IN ORDER TO EASE CONCENTRATION.

RECREATION ELEMENT

The shorelines in Wahkiakum County are recognized as an extremely important recreational resource. Once shorelines become occupied with permanent urban development, the number and quality of recreational experiences available to the public often become severely limited.

GOAL: TO ASSURE THAT RECREATIONAL OPPORTUNITIES ADEQUATE TO SATISFY THE DIVERSITY OF DEMANDS FROM THE REGION'S POPULATION ARE PROVIDED.

To assure that the supply of recreational opportunities outlined in this goal are maintained, the following objectives will apply:

OBJECTIVES:

1. THOSE RECREATIONAL PURSUITS...SHOULD BE ENCOURAGED IN A MANNER SUCH THAT THE BALANCE OF THE NATURAL SYSTEMS IS NOT ADVERSELY AFFECTED.
2. A VARIETY OF RECREATIONAL USES SHOULD BE ENCOURAGED IN ORDER TO MEET THE DEMANDS OF THE REGION WITHOUT INFRINGING ON THE RIGHTS OF INDIVIDUALS TO PRIVACY AND PROPERTY.
3. RECREATIONAL AND OTHER USES SHOULD BE COMPATIBLE WHEN PROPOSED FOR THE SAME OR AN ADJACENT AREA OF SHORELINE.
4. TO ENCOURAGE PRIVATE ENTERPRISE AND/OR STATE AND LOCAL GOVERNMENT TO ACQUIRE ADDITIONAL SHORELINE PROPERTY FOR PUBLIC RECREATION.

## RESIDENTIAL ELEMENT

The topography and geology of Wahkiakum County in combination have served in the past to limit major growth in the stream valley areas.

Continued population growth is not expected in these areas unless technology can overcome existing hazards such as clay soils and steep slopes.

Not all stream valleys are amenable to development due to flood situations. As may occur in some high density developments, the modification of floodplains and shorelines can increase the intensity of damage to downstream resources and private property.

The overall goal of this program addresses safe, orderly residential growth. To implement this the following goal should be attained:

GOAL: TO ESTABLISH CRITERIA FOR SAFE, ORDERLY RESIDENTIAL GROWTH IN SUITABLE AREAS OF THE SHORELINES OF WAHAKIAKUM COUNTY.

Realization of the following objectives should prevent hap-hazard growth patterns and assure safe habitation of the shorelines for present and future developments.

### OBJECTIVES:

1. TO DETERMINE THE SUITABLE DENSITY OF RESIDENTIAL DEVELOPMENT WITH REGARD TO NATURAL FEATURES, NECESSARY SUPPORTIVE FACILITIES, UTILITIES AND SANITARY REQUIREMENTS.
2. TO ASSURE THAT PROPOSED RESIDENTIAL DEVELOPMENTS ARE COMPATIBLE WITH OR ENHANCE THE AESTHETIC QUALITY OF THE AREA.
3. TO ENSURE THAT SUCH PROPOSED RESIDENTIAL DEVELOPMENTS DO NOT SERVE AS FOCAL POINTS FOR ENVIRONMENTAL DEGRADATION BY WASTES THEY GENERATE OR AS A MAGNET FOR OTHER UNWARRANTED DEVELOPMENT ON THE SHORELINES.
4. TO THE EXTENT POSSIBLE, PLANNED UNIT DEVELOPMENT SHOULD BE ENCOURAGED WITHIN THE SHORELINE AREA.

## SHORELINES USE

From a naturalist point of view perhaps all shorelines should be free of any human impact; however, an increasing population and a healthy economy demand areas for growth. In Wahkiakum County the areas under the purview of the Shorelines Management Act are the general topographic areas which have, and most likely will continue to receive, the most consideration for development.

The general goal of this element (Shorelines Use) of this program then is:

GOAL: DEVELOPMENTS WITHIN THE SHORELINES OF WAHAKIYAKUM COUNTY MUST BE FOR THE BETTERMENT OF THE LIFE STYLE OF THE CITIZENS OF WAHAKIYAKUM COUNTY AND SO LOCATED AND DISTRIBUTED AS TO PREVENT ECOLOGICALLY DEBILITATING CONGLOMERATES FROM OCCURRING.

Various age groups within a general population have a diversity of wants and needs which must be satisfied. To encourage the betterment of a social atmosphere and attain the goal stated above, Shorelines Use must be so considered as:

### OBJECTIVES:

1. TO ENCOURAGE THOSE USES WHICH ARE NECESSARY TO MAINTAIN OR IMPROVE THE HEALTH, SAFETY, AND WELFARE OF THE CITIZENS WHEN SUCH USES MUST OCCUPY SHORELINES.
2. TO LOCATE THOSE NECESSARY USES AND DESIGN FACILITIES ON THE SHORELINES IN SUCH A MANNER AS TO RETAIN OR IMPROVE THE PHYSICAL AND AESTHETIC QUALITY OF THE NATURAL ENVIRONMENT.
3. TO ENCOURAGE MULTIPLICITIES OF USE IN PROPOSED SHORELINE AREA DEVELOPMENTS.
4. TO RETAIN OR IMPROVE THE DEGREE OF PUBLIC ACCESS TO SHORELINES.

USE ACTIVITY POLICY STATEMENTS

#### NONCONFORMING USE AND DEVELOPMENT STANDARDS

A nonconforming development is a structure or use existing prior to the enactment of the Shoreline Management Master Program, but which does not conform to present activity uses or development standards of the program.

- (a) A nonconforming structure or use may be continued provided that it is not enlarged, intensified, increased or altered in anyway which increases its nonconformity.
- (b) If a nonconforming development or use has been discontinued for a period of 12 consecutive months, new alterations to the structure or use shall conform to the policies and standards of the current Shorelines Management Master Program.
- (c) If a nonconforming structure is destroyed and or damaged to an extent not exceeding (75%) of it's fair market value as indicated by the records of the County Assessor, the nonconforming structure may be restored to a state comparable to its original condition and use if restoration is completed within one year of the date of the damage or destruction.
- (d) If a nonconforming use is discontinued for twelve consecutive months, or for twelve months during any two year period, any subsequent use shall conform to the appropriate standards. It is not necessary to show that the property owner intends to abandon the nonconforming use in order for the nonconforming rights to expire.
- (e) A nonconforming use cannot be changed to another nonconforming use, regardless of the conforming status of the structure in which it is located.



#### ARCHEOLOGICAL AREAS AND HISTORIC SITES

Archeological areas, ancient villages, military forts, old settlers homes, ghost towns, and trails were often located on shorelines because of the proximity of food resources and because water provided an important means of transportation.

- (a) Where possible, sites should be permanently preserved for scientific study and public observation. In areas known to contain archeological data, Substantial Development Permits should contain a special condition to a shoreline permit providing for a site inspection and evaluation by an archeologist to ensure that possible archeological data are properly salvaged. Such a condition might also require approval before work can resume on the project following such an examination.
- (b) Shoreline permits, in general, should contain special provisions which require developers to notify local government if any possible archeological data are uncovered during excavations.
- (c) The National Historic Preservation Act of 1966 and Chapter 43.51 RCW provide for the protection, rehabilitation, restoration and reconstruction of districts, sites, buildings, structures and objects significant in American and Washington history, architecture, archeology or culture. The State legislation names the Director of the Washington State Parks and Recreation Commission as the person responsible for this program.

### BULKHEADS

Bulkheads or seawalls are structures erected parallel to and near the high-water mark for the purpose of protecting adjacent uplands from the action of waves or currents.

- (a) Bulkheads and seawalls should be located and constructed in such a manner which will not result in adverse effects on nearby beaches and will minimize alterations of the natural shoreline.
- (b) Bulkheads and seawalls should be constructed in such a way as to minimize damage to fish and shellfish habitats. Open-piling construction is preferable in lieu of the solid type.
- (c) Consider the effect of a proposal bulkhead on public access to publicly owned shorelines.
- (d) Bulkheads and seawalls should be designed to blend in with the surroundings and not to detract from the aesthetic qualities of the shoreline.
- (e) The construction of bulkheads should be permitted only where they provide protection to upland areas or facilities, not for the indirect purpose of creating land by filling behind the bulkhead.
- (f) Bulkheads should be allowed in Bernie and Welcome Sloughs of Puget and Little Islands. Bulkheads, if constructed, should be allowed waterward of the mean higher high water mark and should follow a uniform line.

### BREAKWATERS

Breakwaters are another protective structure usually built offshore to protect beaches, bluffs, dunes or harbor areas from wave action.

- (a) Floating breakwaters are preferred to solid landfill types in order to maintain sand movement and fish habitat.
- (b) Solid breakwaters should be constructed only where design modifications can eliminate potentially detrimental effects on the movement of sand and circulation of water.
- (c) The restriction of the public use of the water surface as a result of breakwater construction must be recognized and must be considered in granting shore permits for their construction.

### COMMERCIAL DEVELOPMENT

Commercial developments are those uses which are involved in wholesale and retail trade or business activities.

- (a) Although many commercial developments benefit by a shoreline location, priority should be given to those commercial developments which are particularly dependent on location and/or use of the shorelines of the state. Other development that will provide opportunities for substantial numbers of people to enjoy the shorelines of the state should be encouraged.
- (b) New commercial developments on shorelines should be encouraged to locate in those areas where current commercial uses exist.
- (c) An assessment should be made of the effect a commercial structure will have on a scenic view significant to a given area or enjoyed by a significant number of people.
- (d) Parking facilities should be placed inland away from the immediate water's edge and recreational beaches.

## DREDGING

Dredging is the removal of earth from the bottom of a stream, river, lake, bay or other water body for the purpose of deepening a navigational channel or to obtain use of the bottom materials for landfill.

- (a) Control dredging to minimize damage to existing ecological systems and natural resources of both the area to be dredged and the area for deposit of dredged materials.
- (b) This master program must include long-range plans for the deposit and use of spoils on land. Spoil deposit sites in water areas should also be identified in cooperation with the State Departments of Natural Resources, Game, and Fisheries. Depositing of dredge material in water areas should be allowed only for habitat improvement or to correct problems of material distribution adversely affecting fish and shellfish resources.
- (c) Dredging of bottom, materials for the single purpose of creating land or extending ones property should be reviewed at the local level.
- (d) Dredged material disposal in shoreland areas should not impair the scenic view of the local residents.
- (e) Dredging activities should not occur in commercial fish drift areas during a fishing season.

## FOREST MANAGEMENT PRACTICES

Forest management practices are those methods used for the protection, production and harvesting of timber.

- (a) Seeding, mulching, matting and replanting should be accomplished where necessary to provide stability on areas of steep slope which have been logged. Replanted vegetation should be of a similar type and concentration as exists in the general vicinity of the logged area.
- (b) Special attention should be directed in logging and thinning operations to prevent the accumulation of slash and other debris in contiguous waterways.
- (c) Shoreline areas having scenic qualities, such as those providing a diversity of views, unique landscape contrasts, or landscape panoramas should be maintained as scenic views in timber harvesting areas. Timber harvesting practices, including road construction and debris removal, should be closely regulated so that the quality of the view and viewpoints in shoreline areas of the state are not degraded.
- (d) Proper road and bridge design, location and construction and maintenance practices should be used to prevent development of roads and structures which would adversely affect shoreline resources.
- (e) Timber harvesting practices in shorelines of the state should be conducted to maintain water quality standards as outlined by the Department of Ecology and the federal government.
- (f) Logging should be avoided on shorelines with slopes of such grade that large sediment runoff will be precipitated, unless adequate restoration and erosion control can be expeditiously accomplished.
- (g) Ensure that timber harvesting on shorelines of statewide significance does not exceed the limitations established in RCW 90.58.150 except as provided in cases where selective logging is rendered ecologically detrimental or is inadequate for preparation of land for other uses.
- (h) Logging within shoreline areas should be conducted to ensure the maintenance of buffer strips of ground vegetation, brush, alder and conifers to prevent temperature increases adverse to fish populations and erosion of stream banks.

## INDUSTRIAL

Ports are centers for water-borne traffic and as such have become gravitational points for industrial/manufacturing firms.

- (a) Water-dependent industries which require frontage on navigable water shall be given priority over other industrial uses.
- (b) Port facilities shall be designed to permit viewing of harbor areas from viewpoints, waterfront restaurants and similar public facilities which would not interfere with port operations or endanger public health and safety.
- (c) Sewage treatment, water reclamation, desalinization and power plants shall be located where they do not interfere with and are compatible with recreational, residential or other public uses of the water and shorelines. Waste treatment ponds for water-related industry shall occupy as little shoreline as possible.
- (d) The cooperative use of docking, parking, cargo handling and storage facilities shall be strongly encouraged in waterfront industrial areas.
- (e) Land transportation and utility corridors serving ports and water-related industry shall follow the guidelines provided under the sections dealing with utilities and road and railroad design and construction. Where feasible, transportation and utility corridors shall be located upland to reduce pressures for the use of waterfront sites.
- (f) Prior to allocating shorelines for port uses, consider statewide needs and coordinate planning with other jurisdictions to avoid wasteful duplication of port services within port-service regions.
- (g) Since industrial docks and piers are often longer and greater in bulk than recreational or residential piers, careful planning must be undertaken to reduce the adverse impact of such facilities on other water dependent uses and shoreline resources. Because heavy industrial activities are associated with industrial piers and docks, the location of these facilities must be considered a major factor determining the environmental compatibility of such facilities.
- (h) Because a large impact cannot be avoided due to ports and port-related uses, preference will be given to development and redevelopment of existing port areas.
- (i) Ports and water-related industries are encouraged to locate in urban environments, but in exceptional cases, may locate in conservancy and rural environments, subject to conditional use and specific performance standards. An exception is log storage and rafting which may be permitted in conservancy, rural, urban environments, and is considered as a conditional use on natural shorelines.

#### JETTIES AND GROINS

Jetties and groins are structures designed to modify or control sand movement.

- (a) Consider sand movement and the effect of proposed jetties or groins on that sand movement. Provisions can be made to compensate for the adverse effects of the structures either by artificially transporting sand to the downdrift side of an inlet with jetties, or by artificially feeding the beaches in case of groins.
- (b) Special attention should be given to the effect these structures will have on wildlife propagation and movement, and to designing these structures so that they will not detract from the aesthetic quality of the shoreline.



#### LANDFILL

Landfill is the creation of dry upland areas by the filling or depositing of sand, soil or gravel in a wetland area.

- (a) Shoreline fills or cuts should be designed and located so that significant damage to existing ecological values or natural resources or alteration of local currents will not occur, creating a hazard to adjacent life, property, and natural resources systems.
- (b) All perimeters of fills should be provided with vegetation, retaining walls, or other mechanisms for erosion prevention.
- (c) Fill materials should be of such quality that they will not adversely affect water quality.
- (d) Priority should be given to landfills for water-dependent uses and for public uses. In evaluating fill projects and in designating areas appropriate for fill, such factors as total water surface reduction, navigation restriction, impediment to water flow and circulation, reduction of water quality and destruction of habitat should be considered.

## LOG STORAGE AND RAFTING

Rafting is where logs are brought in from the woods and dumped into water storage areas and made up into rafts for towing to wood processing mills. These areas are commonly referred to as log dumps. Log rafts are individual or bundled logs which are contained by very long logs known as boom sticks. Logs are deposited into the water by several methods including direct vertical dump, sloped slide and cable hoist.

Log raft storage areas are where pilings have been driven to tie up log rafts for storage prior to shipment and utilization at the mills.

In addition to water storage many mills utilize land storage for logs at mill sites and huge decks of logs are a common sight.

Log debris, bark and wood leachates resulting from log handling operations and storage of logs in water and dry land can adversely affect the environment and water quality.

- (a) Log rafting and storage areas should be located so as not to interfere with the small craft navigation and recreational water uses.
- (b) The free-fall, violent dumping of logs into water should be prohibited since this is the major cause and point source of loose bark and other log debris. Easy let-down devices should be employed for placing logs in the water, thereby reducing bark separation and the generation of other wood debris.
- (c) Positive bark and wood debris controls, collection, and disposal methods should be employed at log dumps, raft building areas, and mill-site handling zones. This would be required for both floating and sinking particles.
- (d) Log dumps should not be located in rapidly flowing water or other water zones where positive bark and debris controls cannot be made effective.
- (e) Accumulations of bark and other debris on the land and docks around dump sites should be kept out of the water.
- (f) Whenever possible, logs should not be dumped, stored, or rafted where grounding will occur.
- (g) The inventory of logs in public waters for any purpose should be kept to the lowest possible number for the shortest possible time.
- (h) To reduce accumulations of bark in log storage areas log rafts should not be stored in public waters for longer than twelve months unless the bark has been peeled from the logs prior to being placed in the water.
- (i) On land storage, where sprinkling systems are used to prevent end checking of logs, drainage systems should be installed to prevent the excess runoff from entering streams and affecting water quality. The excess runoff from sprinkled log decks contains leachates which may be detrimental to water quality.

### MARINAS

Marinas are facilities which provide boat launching, storage, supplies and services for small pleasure craft.

- (a) In locating marinas, special plans should be made to protect the fish and shellfish resources that may be harmed by construction and operation of the facility.
- (b) Marinas should be designed in a manner that will reduce damage to fish and shellfish resources and be aesthetically compatible with adjacent areas.
- (c) Identify locations that are near high-use or potentially high-use areas for proposed marina sites. Local as well as regional "need" data should be considered as input in location selection.
- (d) Special attention should be given to the design and development of operational procedures for fuel handling and storage in order to minimize accidental spillage and provide satisfactory means for handling of those spills that do occur.
- (e) Shallow-water embayments with poor flushing action should not be considered for overnight and long term moorage facilities.
- (f) The Washington State Department of Fisheries has prepared guidelines concerning the construction of marinas. These guidelines should be consulted in planning for marinas.
- (g) State and local health agencies have standards and guidelines for the development of marinas. The Department of Social and Health Services Office of Environment Health Programs has established Environmental Health Guidelines for Marina Development and Operation which shall be consulted prior to any development operations.

## MINING

Mining is the removal of naturally occurring materials from the earth for economic use.

- (a) When rock, sand, gravel and minerals are removed from shoreline areas, adequate protection against sediment and silt production should be provided.
- (b) Excavations for the production of sand, gravel and minerals should be done in conformance with the Washington State Surface Mining Act.
- (c) When removal of sand and gravel is permitted by existing legislation, it should be taken from the least sensitive biophysical areas of the beach.

## Oil and Gas Exploration and Petroleum Products Transport

- (a) Oil and gas exploration in Wahkiakum County shall be encouraged if it can be done in ways that are not detrimental to personal health, fish and wildlife habitats.
- (b) Exploration activities should be closely coordinated in a timely manner with the county.
- (c) Wahkiakum County supports the efforts to locate petroleum "spill" cleanup equipment in the Lower Columbia Estuarine area.

NOTE: No "use regulations" or " use activity regulations" are applicable to this policy.

OUTDOOR ADVERTISING, SIGNS AND BILLBOARDS

Signs are publicly displayed boards whose purpose is to provide information, direction, or advertising.

- (a) Off-premise outdoor advertising signs should be limited to areas of high intensity land use, such as commercial and industrial areas.
- (b) Vistas and viewpoints should not be degraded and visual access to the water from such vistas should not be impaired by the placement of signs.
- (c) Outdoor advertising signs should be located on the upland side of public transportation routes which parallel and are adjacent to rivers and water bodies (unless it can be demonstrated that views will not be substantially obstructed).
- (d) When feasible, signs should be constructed against existing buildings to minimize visual obstructions of the shoreline and water bodies.
- (e) Signs and billboards shall conform to the physical regulations established in the Use Activity Regulations under Outdoor Advertising, Signs and Billboards.

### PIERS

A pier or dock is a structure built over or floating upon the water, used as a landing place for marine transport or for recreational purposes.

- (a) The use of floating docks should be encouraged in those areas where scenic values are high and where conflicts with recreational boaters and fisherman will not be created.
- (b) Open-pile piers should be encouraged where shore trolling is important, where there is significant littoral drift and where scenic values will not be impaired.
- (c) Priority should be given to the use of community piers and docks in all new major waterfront subdivisions. In general, encouragement should be given to the cooperative use of piers and docks.
- (d) Address the problem of the proliferation of single-purpose private piers and establish criteria for their location, spacing, and length.
- (e) In providing for boat docking facilities in the master program, consider the capacity of the shoreline sites to absorb the impact of waste discharges from boats including gas and oil spillage.

## RECREATION

Recreation is the refreshment of body and mind through forms of play, amusement or relaxation.

- (a) Priority will be given to developments, other than single-family residences which are exempt from the permit requirements of the Act, which provide recreational uses and other improvements facilitating public access to shorelines.
- (b) Access to recreational locations such as fishing streams and hunting areas should be a combination of areas and linear access (parking areas and easements, for example) to prevent concentrations of use at a few points.
- (c) Encourage the linking of shoreline parks and public access points through the use of linear access. Many types of connections can be used such as hiking paths, bicycle trails and/or scenic drives.
- (d) Attention should be directed toward the effect the development of a recreational site will have on the environmental quality and natural resources of an area.
- (e) Develop standards for the preservation and enhancement of scenic views and vistas.
- (f) To avoid wasteful use of the limited supply of recreational shorelines, parking areas should be located inland away from the immediate edge of the water and recreational beaches. Access should be provided by walkways or other methods. Automobile traffic on beaches, dunes, and fragile shorelines should be discouraged.
- (g) Recreational developments should be of such variety as to satisfy the diversity of demands from groups in nearby population centers.
- (h) The supply of recreational facilities should be directly proportional to the proximity of population and compatible with the environmental designations.
- (i) Facilities for intensive recreational activities should be provided where sewage disposal and vector control necessary to meet public health standards can be provided without adversely altering the natural features attractive for recreational uses.
- (j) In locating proposed recreational facilities such as playing fields, golf courses and other open areas which use large quantities of fertilizers and pesticides in their turf maintenance programs, provisions must be made to prevent these chemicals from entering water. If this type of facility is approved on a shoreline location, provisions should be made for protection of water areas from drainage and surface runoff.
- (k) State and local health agencies have broad regulations which apply to recreational facilities, recreation watercraft and ocean beaches, and these should be consulted in preparing use regulations and issuing permits.
- (l) Regional as well as local needs shall be considered where recreational development takes place.

#### RESIDENTIAL DEVELOPMENT

The following guidelines shall be recognized during any development along the Shorelines of Statewide Significance.

- (a) Developments shall be designed so as to adequately protect the aesthetic characteristics of the water and shorelines.
- (b) Developers shall be encouraged to provide public, pedestrian access to the shoreline within a subdivision.
- (c) New residential development over water shall not be permitted, with the exception of floating homes which are subject to the issuance of a conditional use permit. No residential development over water should be permitted in environments designated as Natural or Conservancy with the exception of the mouth of Brooks Slough.
- (d) Floating homes are to be located in Rural and Urban Aquatic Environments and in such a way as to minimize adverse impacts of the floating home on aquatic habitat.
- (e) Developments should be designed at a level of density and of occupancy compatible with the physical capabilities of the shoreline and water.
- (f) Residential developers should be required to indicate how they plan to preserve shoreline vegetation and control erosion during construction.
- (g) Sewage disposal facilities, as well as water supply facilities, must be provided in accordance with appropriate state and local health regulations. Storm drainage facilities should be separate and not combined with sewage disposal systems.
- (h) Adequate water supplies shall be available so that the ground water quality will not be endangered by over pumping.



#### SHORELINE PROTECTION

Flood protection and streamway modifications are those activities occurring within the streamway and wetland areas which are designed to reduce overbank flows of high waters and stabilize eroding stream banks.

- (a) Rip-rapping and other bank stabilization measures should be located, designed and constructed so as to avoid the need for channelization and to protect the natural character of the streamway.
- (b) Where flood protection measures such as dikes are planned, they should be placed landward of the streamway, including associated swamps, marshes and other wetlands directly interrelated and interdependent with the stream proper.
- (c) Flood protection measures which result in channelization should be avoided.
- (d) Any activity, structure or vegetation which decreases the integrity of a dike should be strongly discouraged.
- (e) Tide boxes, drainage channels, and dikes should be maintained to allow for continued drainage and flood protection of diked lands.

### SOLID WASTE DISPOSAL

Generally, all solid waste is a source of much nuisance. Rapid, safe and nuisance-free storage, collection, transportation and disposal are of vital concern to all persons and communities.

- (a) Master programs and use regulations must be consistent with the multi-county comprehensive solid waste management plan and regulations of jurisdictional health agencies.
- (b) Sanitary landfills and solid waste handling should be controlled in accordance with regulations of the Department of Ecology. New regulations restricting sanitary landfills within any watercourse and within floodplains of any watercourse have been proposed for adoption by the department.

## TRANSPORTATION

A road is a linear passageway, usually for motor vehicles, and a railroad is a surface linear passageway with tracks for train traffic.

- (a) Whenever feasible, major highways, freeways and railways should be located away from shorelines, except in port and heavy industrial areas, so that shoreline roads may be reserved for slow-moving recreational traffic.
- (b) Roads located in wetland areas should be designed and maintained to prevent erosion and to permit a natural movement of ground water.
- (c) All debris, overburden, and other waste materials from construction should be disposed of in such a way as to prevent their entry into any body of water by erosion from drainage, high water, or other means.
- (d) Road locations should be planned to fit the topography so that minimum alterations of natural conditions will be necessary.
- (e) Scenic corridors with public roadways should have provision for safe pedestrian and other non-motorized travel. Also, provision should be made for sufficient viewpoints, rest areas and picnic areas in public shorelines.
- (f) Extensive loops or spurs of old highways with high aesthetic quality should be kept in service as pleasure bypass routes, especially where main highways, paralleling the old highway, must carry large volumes of traffic at high speeds.
- (g) Since land use and transportation facilities are so highly interrelated, the plans for each should be coordinated. The designation of potential high-use areas in master programs should be done after the environmental impact of the transportation facilities needed to serve those areas have been assessed.

#### UTILITIES

Utilities are services which produce and carry electric power, gas, sewage, communications and oil.

- (a) Upon completion of installation/maintenance projects on shorelines, banks should be restored to pre-project configuration, replanted with native species and maintained until the newly planted vegetation is established.
- (b) Whenever these facilities must be placed in a shoreline area, the location should be chosen so as not to obstruct or destroy scenic views. Whenever feasible, these facilities should be placed underground, or designed to do minimal damage to the aesthetic qualities of the shoreline area.
- (c) To the extent feasible, local government should attempt to incorporate major transmission line rights-of-way on shorelines into their program for public access to and along water bodies.
- (d) Utilities should be located to meet the needs of future populations in areas planned to accommodate this growth.

The Washington State Thermal Power Plant Siting Law (Chapter 80.50 RCW) regulates the location of electrical generating and distribution facilities. Under this law, the state preempts the certification and regulation of thermal power plant sites and thermal power plants.

## WILDLIFE

Hunting and fishing are major recreational activities for residents of Wahkiakum County. Also, a large number of non-residents from other areas of the state and neighboring Oregon visit the county to hunt and fish. The wildlife resources of the county also provide a source of enjoyment for those who desire to observe and photograph wildlife. Since wildlife (which includes the fish in lakes and streams) constitutes a major use of the county's shorelines, the Shoreline Advisory Committee considers it necessary for the Master Program to include wildlife as a shoreline use. Policies should be developed which give consideration to the habitat requirements of wildlife in order to maintain and enhance this valuable natural resource and to discourage any destruction of their natural cycles.

- (a) The impact of proposed development should be considered in areas identified as harboring rare or endangered species.
- (b) Professional expertise should be solicited and seriously regarded in considering the impact developments and uses might have on spawning beds, rearing areas of fish and seasonal need areas of wildlife.
- (c) Seasonal constraints upon proposed uses may be considered as necessary to protect a variety of wildlife resources.
- (d) Prior to the introduction of any new fish stock or wildlife species into the streamways or onto the land of Wahkiakum County, notification of the Board of County Commissioners, as to the anticipation of such action should be made. At least one PUBLIC HEARING should be held in the County Seat prior to any action being taken which may directly or indirectly effect the native fish or wildlife of this area.

NOTE: No "use regulations" or "use activity regulations" are applicable to this policy.

USE ACTIVITY STANDARDS

PERMITTED USE/ACTIVITY TABLE - SHORELANDS

USES IN SHORELAND AREAS                      NATURAL                      CONSERVATIONRURAL                      URBAN

RESIDENTIAL	N	PS	PS	PS
COMMERCIAL	N	C	C	PS
INDUSTRIAL & PORT FACILITIES	N	C	PS	PS
UTILITIES	N	C	C	PS
RECREATION	C	PS	PS	PS
NAVIGATION AIDS	P	P	P	P
DOCKS & MOORAGE	N	C	PS	PS
MARINAS	N	C	PS	PS
LAND TRANSPORTATION	N	C	PS	PS
SIGNS	C	PS	PS	PS
SEWERAGE	N	C	PS	PS
TIMBER PRACTICES	C	PS	PS	PS
LOG STORAGE/SORTINGYARD (land)	N	C	PS	PS
MINING/MINERAL EXTRACTION	N	C	C	C
AGRICULTURE	C	PS	PS	PS
AQUACULTURE	N	PS	PS	PS
ARCHEOLOGY	PS	PS	PS	PS
SCIENTIFIC RESEARCH & EDUCATION	P	P	P	P
SOLID WASTE DISPOSAL	N	N	C	C

ACTIVITIES IN SHORELAND AREAS

SHORELINE STABILIZATION

Vegetative	PS	PS	PS	PS
Rip-rap	C	PS	PS	PS
Bulkheads	N	C	PS	PS

DIKES

New Construction	N	C	PS	PS
Maintenance/Repair	PS	PS	PS	PS
FILL	N	C	PS	PS
DREDGED MATERIAL DISPOSAL	N	C	PS	PS

EXCAVATION

to create new water surface	N	C	PS	PS
BANKLINE OR STREAM ALTERATION	N	C	C	C

PERMITTED USE/ACTIVITY TABLE - AQUATIC AREAS

USES IN AQUATIC AREAS                      NATURAL                      CONSERVATIONRURAL                      URBAN

RESIDENTIAL	N	N	C	C
COMMERCIAL	N	C	C	PS
INDUSTRIAL & PORT FACILITIES	N	N	C	PS
UTILITIES	N	C	C	PS
RECREATION	C	PS	PS	PS
NAVIGATION AIDS	P	P	P	P
DOCKS & MOORAGE	N	C	PS	PS
MARINAS	N	C	PS	PS
NAVIGATIONAL STRUCTURES	N	C	C	C
AQUATIC TRANSPORTATION FACILITIES	N	C	C	PS
SIGNS	C	PS	PS	PS
TIMBER PRACTICES	C	C	C	PS
LOG STORAGE (in-water)	C	PS	PS	PS
LOG DUMP/SORT AREA (in-water)	N	C	C	PS
MINING/MINERAL EXTRACTION	N	C	C	C
AQUACULTURE	C	PS	PS	PS
ARCHEOLOGY	PS	PS	PS	PS
SCIENTIFIC RESEARCH & EDUCATION	P	C	P	P

ACTIVITIES IN AQUATIC AREAS

SHORELINE STABILIZATION

Vegetative (non-structural)	PS	PS	PS	PS
Rip-rap	C	PS	PS	PS
Bulkheads	N	C	PS	PS

DIKES

New Construction	N	C	C	PS
Repair, Maintenance	PS	PS	PS	PS
PILING/DOLPHIN INSTALLATION	N	C	PS	PS
FILL	N	C	C	PS
DREDGED MATERIAL DISPOSAL	N	C	C	PS

DREDGING

New	N	C	PS	PS
Maintenance	N	PS	PS	PS
To obtain fill material	N	C	C	PS
BANKLINE OR STREAM ALTERATION	N	C	C	PS



AGRICULTURE

## AGRICULTURE

DEFINITION: Raising and harvesting of crops or livestock using acceptable farming practices, and structure or facilities relating to these uses.

Agriculture Standard Abbreviation for:

1. Shoreland Environments
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Rural (PS)
  - d. Natural (C)

### Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

1. On NATURAL shorelands only passive agriculture is permitted. Grazing, hay raising and harvesting are considered passive uses.
2. On CONSERVATION shorelands, agricultural uses shall be low intensity in nature, consistent with the objective of maintaining forest resource and recreational values associated with these lands.
3. On URBAN shorelands, agricultural uses shall be undeveloped and low intensity in nature, to help protect and preserve these areas for intensive residential, commercial or industrial use, as appropriate.
4. Tillage and drainage practices should minimize sedimentation and control surface water runoff of animal wastes and excess fertilizers, herbicides and pesticides. Pesticides and herbicides shall be applied so as to minimize the amount that is lost to the aquatic environment.
5. In undiked areas bordering bodies of water, a buffer strip of permanent vegetation shall be maintained between cultivated or pasture areas and the water body, so as to filter surface runoff and retard sedimentation.
6. Feed lots or other confinement lots for livestock shall (1) be located at least 100 feet from streams or other water bodies, (2) be away from hillsides leading directly to streams, (3) be outside the 100-year flood-plain, and (4) be located so as to protect ground water supplies.
7. Dikes, tidegates and drainage systems shall be kept in good working order so as to protect agricultural land values.

ARCHEOLOGY

## ARCHEOLOGICAL, AREAS AND HISTORICAL SITES

### ARCHEOLOGY

DEFINITION: The scientific study of material remains (fossil relics, artifacts and monuments) of past human life and activities - the remains of the culture of a people. Historical sites are those areas or structures which are found by recognized historians to depict a period in the past worthy of saving for future generations.

Archeology Standard Abbreviation for:

1. Shoreland Environments
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (PS)
  
2. Aquatic (water) Environments
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (PS)

### Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

In all developments, whenever an archeological area or a historic site is discovered by new construction of an area, the developer shall notify the Shorelines Administrator and shall allow a reasonable length of time (two weeks) for the appropriate evaluation to determine the significance of the site for possible restoration.

## AQUACULTURE

## AQUACULTURE

### AQUACULTURE

DEFINITION: The raising, feeding, planting and harvesting of fish and shellfish, including associated facilities necessary to engage in the use.

Aquaculture Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (N)
  
2. Aquatic (water) Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)

### Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

1. State and federal water quality standards for both interstate and intrastate waters already are established. These shorelines regulations need only allude to these and other regulations already in effect. Any activities within the shorelines must, as a minimum, meet all these other regulations.
2. The culture of food fish, shellfish, or other aquatic animals by private interests for commercial purpose requires a permit from the Washington State Department of Fisheries (CF 5BI42, Chapter 35, Laws of 1971).
3. Aquaculture operations conducted in NATURAL Aquatic areas shall be low intensity and undeveloped (no structures) and be consistent with protection of natural values.
4. Aquaculture operations in CONSERVATION shoreland areas shall be located so as not to interfere with commercial fisheries, forest management practices or recreational uses.
5. Aquaculture operations in RURAL areas shall be located so as not to interfere with commercial fisheries, agricultural operations or recreational uses.
6. Facilities for any necessary water diversion for aquaculture developments will:
  - (a) be built of lasting materials and so constructed as to prevent their deterioration.
  - (b) will be built in a manner so as to blend in, and not detract from the aesthetics of the area.
  - (c) will be constructed so as to create a minimum barrier to trap debris during high waters and become an eyesore.

7. Water discharged from the facility shall meet all federal and state water quality standards and any conditions attached to a waste discharge permit.
8. Any buildings or other permanent above ground structure which is part of the aquaculture facility will be set back a minimum of 10 feet from the normal high water shoreline.
9. Structures and activities associated with an aquaculture operation shall not unduly interfere with navigation.
10. Water diversion or other shorelines structures shall be located so as not to unduly interfere with public shoreline access. Public access to the facility shall be provided consistent with safety and security considerations.
11. Water diversion structures or manmade spawning channels shall be constructed so as to maintain minimum required stream flows for aquatic life in the adjacent stream.

COMMERCIAL DEVELOPMENT



## COMMERCIAL DEVELOPMENT

### Commercial Uses

DEFINITION: A privately-owned or operated facility or place of business open to the public for sale of goods or services. Examples include restaurants and taverns, hotels, motels, offices, personal services, retail stores, recreational vehicle parks and campgrounds. Public facilities offering similar goods or services should also meet the standards. Outdoor advertising, signs and billboards are also subject to the standards set forth in this program.

Commercial Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)
  
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)

### Natural Environment

1. Commercial developments shall be prohibited in Natural Environments.

### Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Because shorelines suitable for urban uses are a limited resource, emphasis shall be given to development within already developed areas and particularly to water-dependent commercial uses requiring frontage on navigable waters.
2. A permit for commercial development may be granted subject to the following regulations:
  - a. Commercial building of more than 35 feet above average ground grade shall be allowed as a conditional use.
  - b. Any commercial structure or facility except one which requires or is dependent on direct, contiguous access to the water shall be set back from the ordinary high water mark by a minimum of 30 feet.
  - c. Parking facilities shall be placed as far inland as the topography of the area allows.

3. Commercial uses shall be aesthetically compatible with their waterfront location, and relate architecturally to any adjacent historic or scenic structures or areas.
4. Visual access to the water shall not be impaired by the placement of signs. When feasible, signs should be constructed against existing buildings to minimize visual obstruction of the shoreline and water bodies.
5. Off-premise outdoor advertising signs shall not be allowed in Conservancy and Rural environments, or in Aquatic areas.
6. Placement or replacement of riparian vegetation in shoreline areas where it would enhance visual attractiveness or assist in bank stabilization may be required.
7. Commercial uses situated on floating structures shall be located so as not to rest on the bottom at mean high tide and high water.
8. When the proposed use is situated directly on the water front, maximum feasible public access shall be provided, such as waterfront seating, walkways, wharfs, or similar facilities.
9. Commercial recreational developments shall be conducted so as not to substantially change the character of the environment in which they are to locate.

DOCKS AND MOORAGE DEVELOPMENT

## DOCKS AND MOORAGE DEVELOPMENT

### DOCKS AND MOORAGE

DEFINITION: A pier or secured float or floats for boat tie-up or other water uses, often associated with a specific land use on the adjacent shoreland, such as a residence or group of residences. Small, commercial moorages (less than 15 berths; a berth is defined as containing one boat subject to Washington State registration) with minimal shoreside services and no solid breakwater are also included in this category. Boathouses (which are used for boat storage, net drying and similar purposes) and floating residences must also meet these requirements. Floating residences must also meet the requirements for residences.

Docks and Moorage Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)

### Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

1. Only one boat dock shall be permitted for each waterfront residential site or each community waterfront tract serving more than one residence.
2. Boat docks may extend up to 50 feet waterward of the line of ordinary high water, or 35% the distance to the opposite shore, which ever is less.
3. Evidence shall be provided by the applicant that the size of the dock or moorage is the minimum necessary to fulfill the purpose.
4. Open moorages are encouraged over covered or enclosed moorages, except in connection with a commercial or industrial use where such shelter is necessary for repair and maintenance of vessels and associated equipment such as fishing nets, etc.
5. Open pile piers or secured floats shall be used for doc construction.
6. Floats in tidally-influenced areas shall be at least one foot above the bed bottom.
7. Docks and moorages shall be designed so that hydraulic effects on adjacent shorelines are minimized to the degree possible.

8. Boat docks must be set back from adjacent property lines a minimum of 10 feet; except that by mutual agreement of two abutting property owners one dock to serve both properties may be sited adjacent to, or astride of, the mutual property line. In the latter case no other dock will be permitted within the two property boundaries.
9. If electrical service is provided to the dock that service must be installed in such a manner that it complies with the safety requirements as set forth in the Washington State Electrical Code.
10. Docks and moorages shall extend no further out into the water than is needed to effect navigational accesses. Conflicts with other water surface uses, such as commercial fishing, recreational boating and log rafting shall be minimized.

DREDGING AND FILL

DREDGING AND FILL

DREDGING

DEFINITION: The removal of sediment or other material from a stream, river, estuary or other Aquatic area for the purpose of deepening a navigation channel, mooring basin, or other navigational areas or obtaining fill material.

FILL

DEFINITION: Fill is the placement by man of sediment or other material (excluding solid waste) in an aquatic area to create new shorelands or on shorelands to raise the elevation of the land.

Dredging and Fill Standard Abbreviations for:

1. Shoreland Environments:

<u>Dredging</u>	<u>Fill</u>
NONE	a. Urban (PS)
NONE	b. Rural (PS)
NONE	c. Conservancy (C)
NONE	d. Natural (N)

2. Aquatic (water) Environment:

	<u>Dredging</u>	<u>Fill</u>
i. New Projects		
a. Urban	(PS)	a. Urban (PS)
b. Rural	(PS)	b. Rural (C)
c. Conservancy	(C)	c. Conservancy (C)
d. Natural	(N*)	d. Natural (N)
ii. Maintenance Projects		
a. Urban	(PS)	
b. Rural	(PS)	
c. Conservancy	(PS)	
d. Natural	(N)	
iii. For Obtaining Fill		
a. Urban	(PS)	
b. Rural	(C)	
c. Conservancy	(C)	
d. Natural	(N)	

\* See: Natural Environment, No. 1

Natural Environment

1. \*Dredging in or through a natural environment shall only be allowed for the purpose of Flood Control for the protection of human life and property.

Fills shall be prohibited in the natural environments.

Permitted Use Standards for Conservancy, Rural and Urban Environments

Dredging:

1. Dredging in aquatic areas shall be permitted only:
  - a. For navigation or navigational access;
  - b. In conjunction with a permitted or conditionally permitted water-dependent use of waters or adjacent shorelands;
  - c. As part of an approved restoration project;
  - d. As a source of material, as per Standard 3 below, or for mining and/or mineral extraction, as provided in the Mining and Mineral Extraction standards;
  - e. In conjunction with a permitted or conditionally permitted bridge, navigational structure or waste water treatment facility for which there is a public need and where other feasible sites or routes do not exist.
2. When dredging is permitted, the dredging shall be the minimum necessary to accomplish the proposed use.
3. Dredging as a source of material for fill, construction or dike maintenance shall not occur in productive, shallow sub-tidal areas, tidal flats or tidal marshes, as determined by the Hydraulics Permit and Corps of Engineers Permit processes. When dredging as a source of material is necessary, because feasible upland sources of material are absent, dredging shall occur in areas of sandy bottom sediments, where biological productivity is low and unwanted shoaling has occurred.
4. Dredging operations shall conform to the operating standards specified on any federal and state permits required for such operations. Operations not requiring federal or state permits shall have similar standards imposed as conditions of obtaining a permit.

\* See: footnote on page 50



5. Destabilization of fine-textured sediments, erosion and siltation in areas adjacent to the dredging project and other undesirable changes in circulation patterns, such as a substantial reduction of flushing time, shall be avoided.
6. In evaluation of any dredging project during the permit process, the adverse effects of both the initial dredging and subsequent maintenance dredging must be considered.

Fill:

1. All landfills shall be subject to the following standards and regulations:
  - a. The "Criteria Governing the Design of . . . Landfills... for Protection of Fish and Shellfish Resources" adopted by the Washington State Department of Fisheries and Game in 1971, are incorporated herein by reference and are to be adjusted to local tidal levels.
  - b. Landfills shall consist of clean materials with a minimum potential for degrading water quality.
  - c. Landfills shall be protected against erosion with retaining walls or similar structures or by vegetation established during the first growing season following completion of the landfill.
  - d. Filling to provide land for septic tank drainfields shall be prohibited except where alternative treatment methods or location cannot be utilized.
2. Fill in aquatic areas shall be permitted only:
  - a. In conjunction with a permitted or conditionally permitted water-dependent use for which there is a demonstrated public need and for which no feasible upland sites exist;
  - b. In conjunction with a permitted or conditionally permitted bridge or navigational structure for which there is a public need and where no feasible upland sites or routes exist;
  - c. As part of an approved restoration project.
3. Where fills are permitted, the fill shall be the minimum necessary to accomplish the proposed use.
4. Fills shall be permitted only after it is established that adverse impacts on navigation, estuarine habitat, processes and functions, water circulation and sedimentation patterns, water quality and recreational activities will be minimized.
5. Where existing public access is reduced, suitable public access as part of the development project shall be provided.
6. Aquatic areas shall not be used for sanitary landfills or the disposal of solid waste.

DREDGED MATERIAL DISPOSAL

DREDGED MATERIAL DISPOSAL

DEFINITION: The deposition of dredged material in Aquatic Areas or Shorelands. Methods include land disposal, in-water disposal, beach nourishment, flow-lane disposal, ocean disposal.

Land disposal is the deposition of dredged material on land.

In-water disposal is the deposition of dredged material in a body of water.

Flow-lane disposal is the in-water deposition of dredged material in or adjacent to the maintained navigation channel and within the natural channel or the slopes adjacent to the natural channel. The purpose is to avoid permanent deposition and allow the material to continue downstream.

Beach nourishment is the deposition of dredged material in shoreline areas where active erosion is occurring, as a way of preventing further erosion of the bankline. It is not away of creating new land or beaches where beaches have not previously existed.

Ocean disposal is the deposition of dredged material in the ocean.

Dredged Material Disposal Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (N)
  
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)

Natural Environment

1. Dredged Material Disposal in Natural Environments shall be prohibited.

Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Selection of dredged material disposal sites shall be in accord with the Dredged Material Disposal Plan Site Selection and Use Priorities.
2. Dredge material disposal sites shall not impair scenic views and will be completely enclosed by dikes of sufficient capacity to allow for the settling of sediments before entrapped water leaves the diked area. The outside face of the dikes shall be sloped at 1-1/2 to 1 (horizontal to vertical) or flatter and seeded with grass or otherwise protected to prevent erosion. Outlet structures in dikes shall be placed so that water discharged within the dikes will take the longest possible time to reach the outlet and shall be designed so that only the clearest water is allowed to return to the receiving waters.
3. Bottom sediments and pore water in the dredging and disposal areas shall be adequately characterized before the operation begins. This information may include, as appropriate: particle size distribution; organic content; nutrients; sulfides; oxygen and heavy metals; benthic studies or other tests. This requirements may be waived for clean Columbia River sands and gravels.
4. The timing of dredging and disposal shall be coordinated with state and federal resource agencies, local governments and private interests to ensure adequate protection of biological productivity (fish runs, spawning, benthic productivity, wildlife, etc.) and to minimize interference with fishing activities. In general, disposal should occur during periods of adequate river flow to aid flushing of suspended sediments and transporting downstream of dredged materials.
5. Adverse short-term effects of dredging and disposal such as turbidity, release of nutrients, heavy metals, sulfides, organic material or toxic substances, dissolved oxygen depletion, disruption of food chains, loss of benthic productivity, and disturbance of fish runs and important localized biological communities shall be minimized.
6. All relevant state and federal water quality standards shall be met by dredging and dredged material disposal activities.

7. With regard to in-water disposal in the river, estuary and ocean:
  - a. Consideration shall be given to the need for the proposed disposal, the availability and desirability of alternate sites and methods of disposal that might be less damaging to the environment. No site should be used if insufficient sediment type and benthic population data are available to provide a general idea of the biological value of the site.
  - b. The size and chemical characteristics of the dredged material should be compared with those of the disposal site, and consideration should be given to matching the dredged material to the capabilities of the site.
  - c. Erosion, sedimentation, increased flood hazard and other undesirable changes in circulation shall be avoided in dredging and the disposal of dredged material. Tidal marshes, tidal flats and other wetlands should not be adversely affected.
  - d. Dredged material disposal shall not be permitted in the vicinity of a public water supply intake.
8. Flow-lane disposal shall be conducted so that:
  - a. The material is not deposited upstream from the dredging site. Disposal should not occur under fresh-water flow and tidal conditions where the predominant sediment transport at a site is upriver.
  - b. Use of the disposal site does not interfere with fishing activities by causing major changes in the circulation patterns or bottom configuration of the disposal site.
9. Beach nourishment shall be conducted so that:
  - a. Erosion or deposition downstream from the disposal site occurs. Particular care must be taken that erosion of the dredged material does not smother marsh or other shallow productive areas.
  - b. The volume and frequency of dredged material disposal maintains a stable beach profile, as nearly as possible. Dredged material shall be graded at a uniform slope and contoured to reduce cove and peninsula formation and to minimize stranding of juvenile fish.
10. Ocean disposal shall be conducted so that:
  - a. The amount of material deposited at a site is compatible with the benthic populations and other uses of the area.
  - b. Interference with commercial fishing is minimized.
  - c. Disposal is strictly confined to the designated disposal sites.
11. Except for flow-lane disposal and beach nourishment, deposition inside the estuary should be substituted for ocean disposal only when sea or weather conditions are a hazard to safe navigation for the dredging vessel.

12. With regard to land disposal:
  - a. Proper diversion of surface discharge must be provided to maintain the integrity of the natural streams, wetlands and drainage ways. Leaching of disposal runoff water must enter the waterway through an outfall at a location that maximizes circulation and flushing. Underground springs and aquifers must be identified and protected.
  - b. Dikes should be well constructed and large enough to encourage proper "ponding" and to prevent the return of settleable solids into the waterway or estuary. Ponds should be designed to maintain at least one foot of standing water at all times to further encourage proper settling. Weirs should have proper crest heights.
13. Disposal should be compatible with the intended land surface use after disposal. Disposal of dredged materials should usually occur on the smallest possible land area consistent with Standard 8 above, in order to minimize the quantity of land that is disturbed. Clearing of land should occur in stages on an as-needed basis. Reuse of existing disposal sites is preferable to the creation of new sites in order to minimize the total land area covered by disposal material. It may, however, be desirable to clear and fill an entire site at one time, if the site will be used for development immediately after filling.
14. Where appropriate, revegetation of land disposal sites should occur as soon as possible, in order to retard wind erosion and to restore wildlife habitat value of the site. Native species should be used, reference should be made to the interagency seeding manual prepared by the Soil Conservation Service (SCS) and the SCS should be consulted concerning revegetation plans. Efforts should be made to minimize the time necessary to achieve leaching of salts from the soils. Revegetation of areas that will be reused is strongly encouraged, to help prevent erosion before reuse.
15. Height and Slope Requirements: The final height and slope after each use of a land dredged material site should be such that:
  - a. The site does not enlarge itself by sluffing and erosion at the expense of adjacent aquatic areas.
  - b. Loss of material from the site during storms and freshets is minimized.
  - c. Interference with the view from nearby residences, scenic viewpoints and parks is avoided.

EXCAVATION

EXCAVATION - Creation of New Water Surface Area

DEFINITION: Excavation of shorelands that creates a new water surface that is directly connected to other tidal or non-tidal waters. The most common examples are creation of moorage space or fish ponds from dry land. Normal agricultural and timber practices are exempt from these standards. Drainage ditches are subject to these standards only in those cases where tidal or stream waters enter the drainage ditch on a routine basis.

Excavation Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)

Natural Environment

1. Excavation activities shall be prohibited, in Natural Environments.

Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Creation of new water shall be allowed only for navigation, other water-dependent use, or restoration. Adverse impacts on flushing time, erosion of or shoaling in adjacent shores and waters, or dissolved oxygen levels, plankton blooms, water quality or estuarine habitat, processes and functions shall be evaluated and minimized.
2. Interference with existing navigation must be minimized.
3. The new bankline shall be stabilized against erosion in an appropriate manner before the new water body is connected to existing water bodies (see Shoreline Stabilization Standards).
4. Excavation of as much as is practical of the new water body shall be completed before it is connected to existing water bodies.
5. The excavation shall not be permitted if toxic substances or other pollutants will leak into the water as a result of the excavation.
6. Material generated by tire excavation shall be deposited on land in an appropriate manner.
7. Excavation to create a new water area should not destroy valuable shoreland wildlife habitats or result in stream channelization.
8. Increased public access to the water and recreational opportunities as part of the project are encouraged; existing public access shall not be reduced.



INDUSTRIAL DEVELOPMENT

## INDUSTRIAL DEVELOPMENT

### Industrial and Port Facilities

DEFINITION: Public or private use of land or structures for manufacturing, processing, deep water port development, and energy generation facilities. Standards for marinas, docks and piers are provided elsewhere in this document.

Industrial Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (N)
  - d. Natural (N)

### Permitted Use Standards for Rural and Urban Environments

1. Industrial facilities should be designed, if possible, to permit public viewing of the waterfront and/or operations from selected viewpoints which would not interfere with industrial operations. Maximum feasible public access to the shoreline and water, consistent with security and safety, shall be provided.
2. Where feasible, multipurpose and cooperative use of proposed moorage, parking, cargo handling and storage facilities should be undertaken. When new facilities are proposed, the applicant shall show that existing facilities in the area cannot be utilized. New facilities should be designed to provide for cooperative use as feasible.
3. The location of industrial facilities shall take into account the impact on views and vistas from adjacent roads or residential areas. Facilities which have a decidedly negative impact shall provide for buffering, screening or other design features to protect the views or vistas.
4. Parking facilities shall remain outside the shoreline area, except where parking elsewhere is rendered impractical by topography or constitutes a severe economic hardship, in which exceptional case it shall remain as far from the ordinary high water mark as feasible.

5. Facilities to treat and dispose of waste water, to clean up spills and dispose of toxic materials or petroleum shall be available if necessary.
6. Industrial uses on floating structures shall be located so as not to rest on the bottom at high water; such structures shall also be protected against currents and waves.
7. Industrial uses shall meet all applicable state and federal standards for water and air quality, noise and energy facility siting.
8. Energy facilities will be located and constructed according to the standards of the Thermal Power Plant Siting Law (RCW 80.50). The state preempts the regulation and certification of thermal power plants and their siting.
9. Industrial uses shall be designed to minimize the adverse effects on agricultural lands, wildlife and fish passage, feeding, migration and spawning areas.
10. Where proposed industrial uses border Aquatic areas designated for resource protection or conservation, the applicant shall show what measures are to be taken to minimize negative impacts on such adjacent areas.

#### Permitted Use Standards for Conservancy Environments

1. Low intensity water-dependent activities with minimal adverse environmental impacts shall be conditionally permitted in the Conservancy environments.
2. Non-water-dependent and non-water-oriented activities with minimal adverse environmental impacts shall be conditionally permitted in the Conservancy environment, with structures located a minimum of 50 feet landward of the ordinary high water mark as measured on a horizontal line.
3. Uses conditionally permitted are those which need to be in close proximity to raw materials; examples are as follows:
  - a. Mining and mineral slushers;
  - b. Log storage areas (only on shorelines whose waters are to be used for transport of the logs);
  - c. Wood product mills (non-permanent). These include wood pellet processing, chipping plants, etc.
  - d. Berry canneries.
4. Expansion of any activity on a specific site in the Conservancy environment must be landward of the existing structure or facility.

LOG HANDLING

LOG HANDLING (DRY LAND)

LOG STORAGE/SORTING YARD

DEFINITION: An area where logs are gathered from surrounding harvest areas, weighed, sorted for species, size and quality, and stored until ready for transfer to water storage areas or to market.

Log Storage/Sorting Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)

Natural Environment

1. Dry land log storage and sorting yards shall not be located in the Natural Environment.

Permitted Use Standards for Conservancy, Rural and Urban Environments

1. In CONSERVATION shoreland areas, storage and sorting facilities should be located so as not to interfere with existing non-forestry uses of these areas, such as recreation.
2. In RURAL shoreland areas, storage and sorting facilities shall be located so as not to interfere with existing rural residential uses, normal farming operations and recreation.
3. On URBAN shorelands, storage and sorting facilities shall not preclude or unduly conflict with existing, proposed or future water-dependent uses on the site or in the vicinity, unless the dry sort yard is itself an essential part of a water-dependent facility.
4. Storage facilities adjacent to waterways shall be designed, constructed and operated to control leachates and prevent the loss of bark, chips, sawdust and other wood debris into public waters.
5. Unpaved storage areas underlain by permeable soils shall have at least a four-foot separation between ground surface and the winter water table.
6. Dikes, drains, vegetated buffer strips or other means shall be used to ensure that surface runoff is collected and discharged from the storage area at one point, if possible. It shall be demonstrated that state water quality standards or criteria will not be violated by such discharge under any conditions of flow in nearby water courses. If such demonstration is not possible, treatment facilities for runoff meeting state and federal standards shall be provided.

LOG HANDLING (IN-WATER)

LOG STORAGE

DEFINITION: The use of water surface areas to store commercial logs in rafts until ready for market.

Log storage Standard Abbreviation for:

1. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)

Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

1. Logs shall not be stored in water except where no feasible dry-land storage area is available. However, logs may be stored in water on an emergency or short-term basis regardless of the availability of dry land storage areas. Logs shall not be stored so that a complete waterway is blocked for public boating or public access.
2. New log storage areas will be located where logs will not go aground on tidal flats at high water.
3. New log storage areas will not be located in areas of conflict with traditional and active gillnet fishing drifts.
4. Log storage areas will be located where water quality will be degraded as little as possible; good flushing characteristics should exist at the site.
5. Relevant Washington Department of Natural Resources Special Provisions for booming and rafting leases shall apply to state-owned Aquatic areas.

LOG DUMP/SORT AREAS

DEFINITION: The use of an area to transfer logs to or from the land to water, normally associated with log storage/sort yards, log booming areas or processing/shipping facilities where rafts are built or dismantled.

Log Dump/Sort Areas Standard Abbreviations for:

1. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)

Natural and Conservancy Environments

1. Log dumping and sorting areas shall not be located in natural and only conditional conservancy environments.

Permitted Use Standards for Rural and Urban Environments

1. Free-fall log dumps will not be permitted. Easy-let-down facilities will be used to transfer logs from land to water.
2. The best practicable bark and wood debris controls shall be used.
3. Pertinent standards in the Washington Department of Natural Resources Special Provisions for booming and rafting leases shall apply to state-owned Aquatic areas.

MARINA DEVELOPMENT



## MARINA DEVELOPMENT

### MARINAS

DEFINITION: Marinas are facilities which provide moorage, launching, storage, supplies and a variety of services for recreational uses, commercial and charter fishing vessels. They are differentiated from docks/moorages by their larger scale, the provision of significant landside services and/or the use of a solid breakwater (rock, bulkheading, etc.).

Marinas Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)
  
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)

### Natural Environment

1. Marina developments shall be prohibited in the natural environments.

### Permitted Use Standards for Conservancy, Rural and Urban Environments

1. The applicant shall provide evidence to show that existing marina facilities are inadequate to meet the demand and that they cannot feasibly be expanded.
  
2. A permit for marina development, construction, expansion and/or alteration, or any phase thereof, which constitutes a complete project, may be granted subject to the following:
  - a. The latest revision "Criteria Governing the Design of ... Marinas ... for Protection of Fish and Shellfish Resources" adopted by the Washington State Department of Fisheries in 1971, which criteria are incorporated herein by reference and are to be adjusted to local tidal levels.
  
  - b. Parking facilities shall remain outside the shoreline area, except where parking elsewhere is rendered impractical by topography or constitutes a severe economic hardship, in which exceptional case it shall remain as far from the ordinary high water mark as feasible.
  
  - c. Sewage pump-out and treatment facilities shall be installed within two years of the establishment of U.S. Coast Guard regulations on marine sanitation devices or at the beginning of operation of any new marina or of an expansion of any "existing" marina, whichever date is latest.

- d. Development of marinas shall comply with state and local health agency regulations.
  - e. Special attention shall be given to the design and development of operational procedures for fuel handling and storage in order to minimize accidental spills and provide satisfactory means for handling those that do occur.
3. Marina facilities shall be designed and constructed so as to minimize negative impacts on navigation, water and air quality, sedimentation rates and patterns, fish rearing or migration routes, important sediment-dwelling organisms, birds, other wildlife, tidal marshes and other important vegetative habitats. The effects on traffic patterns, parking facilities, noise levels and uses in adjacent Shoreland and Aquatic areas shall be considered.
  4. Flushing and water circulation adequate to maintain ambient water quality shall be provided by design or artificial means. A calculated flushing time shall be presented as evidence that this standard has been met.
  5. The amount of water surface occupied shall be the minimum required to meet the need. In this regard, new facilities shall make maximum feasible use of dry boat moorage on shoreland areas.
  6. Open moorages are encouraged over covered or enclosed moorages, except in connection with a commercial or industrial use where such a shelter is necessary for repair and maintenance of vessels and such associated equipment as fishing nets.
  7. New marina facilities shall be located in areas where there is natural or manmade protection from wind, waves, tidal currents and surge, storms, strong prevailing winds and the wakes of passing ships. Marinas should be located or designed in a manner which will not adversely affect the natural processes of erosion, littoral drift and/or beach accretion.
  8. Marinas in RURAL Aquatic and Shoreland areas shall be designed to minimize interference with agriculture and other rural uses.
  9. Marina facilities shall provide for maximum public access and recreational use, consistent with safety and security considerations. Walkways, seating, fishing areas and similar facilities should be provided, including provisions for the handicapped.

MINING/MINERAL EXTRACTION

MINING/MINERAL, EXTRACTION

MINING/MINERAL EXTRACTION

DEFINITION: The removal for economic use of minerals, petroleum resources, sands, gravels or other naturally occurring materials from the Shorelands and/or the bed beneath an Aquatic area.

Mining/Mineral Extraction Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (C)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)
  
2. Aquatic (Water) Environments:
  - a. Urban (C)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)

Natural Environment

1. Mining/Mineral Extraction shall be prohibited in the natural environment.

Permitted Use Standards for Conservancy, Rural and Urban Environments

Any person proposing to undertake or engage in a mining/mineral extraction operation shall apply for a permit.

A permit for a mining/mineral extraction operation may be granted subject to the following regulations:

1. The operator of a surface mine shall present to the local government one copy each of a surface mining plan and a reclamation plan. The requirements of the Washington State & Federal Surface Mining Acts and the Hydraulics Permit Regulations of the Department of Fisheries shall be met. Relevant state and federal agency standards should be consulted in determining the size and depth of mining operations, dike construction, time of operation, type of equipment and design of stream crossings.
  
2. The impacts on fish feeding, spawning and nursery areas; fish transit and migration; bird and wildlife habitats; riparian vegetation; water quality (dissolved oxygen, turbidity, and other relevant factors); shoaling and erosion of nearby areas; circulation; and other relevant factors shall be evaluated and minimized.

3. Petroleum extraction and drilling operations shall not be allowed in Aquatic areas. Petroleum may, however, be extracted from beneath Aquatic areas using equipment located on adjacent Shorelands or uplands, according to the rules set forth by the Department of Natural Resources. Petroleum exploration (not including exploratory drilling) is permitted in Shorelands and Aquatics areas, subject to state standards.
4. Spoils and stockpiles should be placed beyond the reach of high water and in such a manner that sediment will not enter or return to the waterway. No excavated materials shall be stockpiled or spoiled within Aquatic waters.
5. A surface mining plan or a reclamation plan judged by the county to be insufficient for the protection or restoration of the shoreline environment shall be grounds for denial of a permit.
6. Any gravel removal alongside, upstream or downstream from spawning areas shall be in conformance with the technical provisions of the Hydraulics Project approval by the Washington State Department of Fisheries.
7. Mining operations shall be strictly controlled or prohibited where historical, cultural, educational, or scientific values will be degraded.

## NAVIGATIONAL STRUCTURE DEVELOPMENT

## NAVIGATIONAL STRUCTURE DEVELOPMENT

### NAVIGATIONAL STRUCTURES

**DEFINITION:** Structures such as pile dikes, groins, fills, jetties and breakwaters that are installed to help maintain navigation channels, control erosion or protect marinas and harbors by controlling water flow, wave action and sand movement.

Pile dikes are flow control structures that are used primarily in river systems and are made of closely spaced piling connected by timbers; usually they are perpendicular to the shore. They are constructed to increase scour in the navigation channel and/or control shoreline erosion by interrupting sand transport and encouraging sedimentation in the sheltered lee of the pile dike. A single pile dike is unusual; they are generally constructed in groups.

Groins are analogous to pile dikes, but are constructed from rocks. They can withstand rougher wave action than pile dikes and are often used on beaches, where they exert a strong influence on sand transport. They extend from the backshore seaward across the beach.

Jetties are the largest of all navigational structures; they are made of rock or concrete and are used to stabilize the channel and improve the scour at the mouth of an estuary. They must be able to withstand extreme wave action and may alter longshore sand transport for many miles along the coast.

Breakwaters may be of rock, steel, concrete or piling, or of the floating kind. They are used to protect harbors and marinas against waves and currents.

Fills - Aquatic areas are sometimes filled as a means of controlling flows. Fills are often placed between pile dikes.

Navigational Structures Abbreviations for:

1. Aquatic (Water) Environments:
  - a. Urban (C)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)

### Natural Environment

1. Navigational structures development shall be prohibited in natural environments.

#### Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Navigational structures have a considerable capacity for changing currents, sedimentation, erosion, sediment movement by waves and currents, flushing characteristics and bird movement, and damaging aquatic habitats and fishery resources. The impacts of the above-mentioned factors, aesthetic impact, interference with navigation, occupation of water surfaces and other relevant factors shall be considered in deciding whether to issue a shoreline permit and minimized to the degree possible in design and construction. Effects of long shore drift on beaches and the rivers are extremely important for groins, pile dikes and breakwaters. These factors should be carefully considered.
2. Jetties, groins and rock breakwaters shall be constructed of clean, non-erodible land materials. The size of the material shall be in accord with existing wave, tide and current conditions. In-stream gravels shall not be used. Sound engineering practices shall be followed. State and federal agency standards should be followed in this regard.
3. Pile dikes should be installed in accordance with the U.S. Army Corps of Engineers' standards for piling/dolphin installation.
4. Fills should be installed in accordance with the U.S. Army Corps of Engineers' standards on fills.
5. Floating breakwaters to maintain fish habitats and sand movement are preferred over the solid, rip-rapped or rack type, when feasible. Solid breakwaters should be constructed only where they can be designed to minimize detrimental effects on sand movement and water circulation.



RECREATION DEVELOPMENT

## RECREATION DEVELOPMENT

### RECREATION USES

DEFINITION: Uses which help provide the opportunity for enjoyable active or passive leisure-time activities by people; examples include public parks, waysides, fishing piers, boat launches, foot paths and bike trails, swimming areas and amusement parks.

Recreation Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)
  
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)

### Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

1. Recreational uses of NATURAL Aquatic and Shoreland areas shall be undeveloped and low intensity. Permanent structures, dredging, filling, piling and other alterations are not permitted; temporary structures may be allowed, consistent with maintenance of natural resource and aesthetic values.
2. Recreational uses of CONSERVANCY Shorelands and Aquatic areas shall be of low to moderate intensity and located so as not to interfere with forest management practices or natural resource production and commercial fishing in aquatic areas.
3. Recreational uses of RURAL Aquatic and Shoreland areas shall be located so as not to interfere with agriculture, forest management, natural resource production and commercial fishing in aquatic areas. Public access shall be restricted as necessary to protect flood control structures and prevent trespass on private land.
4. Recreational uses of URBAN Aquatic and Shoreland areas shall be water-dependent and shall be located so as not to unduly interfere with non-recreational uses of these areas.
5. Recreational uses in waterfront areas shall take maximum advantage of proximity to the water by providing for water-access points, water-viewing areas and structure design consistent with the aesthetic qualities of the waterfront location. Parking areas shall be located away from the shoreline.

6. Recreational access to the water along publicly-owned shorelines shall be maintained to the maximum extent possible, consistent with safety and resource conservation needs.
7. Recreational water-access points provided in connection with private commercial development shall be open to public use, except where security and safety considerations are over-riding.
8. Recreational facilities shall not have adverse effects on surface or ground water quality. The adverse effects of storm runoff from parking lots shall be given special attention.

RESIDENTIAL DEVELOPMENT

RESIDENTIAL DEVELOPMENT

RESIDENTIAL USES

DEFINITION: Development of land and structures for human occupancy as living quarters. This category includes single and multifamily dwellings, floating residences, mobile homes and subdivisions, mobile home parks and planned unit developments.

Residential Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (N)
  
2. Aquatic (Water) Environments: (applies to floating homes only)
  - a. Urban (C)
  - b. Rural (C)
  - c. Conservancy (N)
  - d. Natural (N)

Density Standards

1. Shoreland Residential development shall conform to the following environmental density standards:

a. <u>Urban shorelands</u>	<u>With-out Sewers</u>	<u>With Sewers</u>
0-8% Slope	1-4 per acre	1-12 per acre
8-12% Slope	1-4 per acre	1-8 per acre
12% + Slope	1 per acre	1-4 per acre
b. <u>Rural Shorelands</u>	<u>With-out Sewers</u>	<u>With Sewers</u>
0-8% Slope	1-4 per acre	1-5 per acre
8-12% Slope	1-2 per acre	1-4 per acre
12% + Slope	0 per acre	1 per acre

NOTE: PS = permitted with standards  
C = conditional use  
N = not permitted

c. <u>Conservancy Shorelands</u>	<u>With-out Sewers</u>	<u>With Sewers</u>
0-8% Slope	1-2 per acre	1-4 per acre
8-12% Slope	1 per acre	1-2 per acre
12% + Slope	0 per acre	1 per acre

## Natural Shorelands

1. Residential development is prohibited.
2. Floating homes are the only residential development allowed in the aquatic environments, and then, only in Welcome Slough; Birnie Slough; and along the east shore of Deep River adjacent to the urban shoreline designation Section 29, T10N, R8W; and adjacent to the north shore of Brooks Slough to the end of Shorelines of statewide significance. Siting must comply with the siting criteria listed in Standard No. 6 below. The immediately adjacent shoreline must be compatible with the proposed use. No more than 10% of the total individual linear shoreland frontage of Welcome Slough; Birnie Slough; east shore of Deep River where designated Urban Shoreline Environment, Section 29, T10N, R8W; and north shore of Brooks Slough to the end of shorelines of statewide significance may be occupied by floating homes.

The total linear shoreland frontage is measured as the total length of shoreline adjoining Welcome Slough; Birnie Slough; the east shore of Deep River or the north shore of Brooks Slough where designated an Urban Environment. The 10% will be determined by the cumulative total of the lengths of all existing and new floating homes and associated floats which are parallel to the shoreline. The estimated length of the shorelines are:

Welcome Slough is approximately 12,000 feet or 2.25 miles.

Birnie Slough is approximately 24,000 feet or 4.5 miles.

East shore of Deep River (in the urban shoreland environment designation south of SR4, Section 29, T10N, R8W) is approximately 7,220 feet or 1.25 miles.

North shore of Brooks Slough from the mouth to the end of the shorelines of statewide significance is approximately 2,200 feet or .4 mile.

Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Subdivisions, mobile home parks, planned unit developments, and floating homes shall be considered as conditional uses.
2. Single mobile home units shall be regarded as single family residences.
3. Subdivisions, mobile home parks and planned unit developments shall provide for public pedestrian access to the shoreline within the development.
4. Aquatic areas adjacent to the shoreland areas being developed shall not be used to compute lot area or density.
5. Subdivisions, mobile home parks, planned unit developments, and floating homes shall be designed to protect and compliment the aesthetic character of the shorelands and aquatic areas (as viewed from the water or shorelands).
6. New residential development out over water areas is prohibited, with the exception of floating homes. Floating homes are permitted in aquatic areas adjacent to rural and urban shorelands as specified in Density Standard 2 above, subject to review against conditional use criteria, and compliance with the following:
  - a) Design and placement of floating homes should allow thorough flushing of immediate aquatic area and not restrict the movement of aquatic life requiring shallow water;
  - b) Floating homes should preserve the existing bankline and be at least one foot above the bed bottom;
  - c) A navigational corridor must be maintained at all times. No floating homes shall be located, relocated or enlarges so as to create a navigational hazard for vessels typically using the water way;
  - d) Floating homes waste water disposal practices shall meet all local and state health regulations. They shall be connected to an approved sanitary sewer or waste disposal system in compliance with state law;
  - e) Floating homes may exceed no more than 50 feet waterward of the line of ordinary high water, or 35% the distance to the opposite shore, whichever is less;

- f) New floating homes shall not exceed 1200 square feet of water coverage; shall have no more than two stories; and shall not exceed feet in height above the surface of the water.
  - g) Electrical service provided to floating homes must be installed to comply with the safety requirements as set forth in Washington State Electrical Code;
  - h) Floating homes must be setback from adjacent property lines a minimum of 10 feet; except that by mutual agreement of two abutting property owners, one dock to service both floating homes may be sited adjacent to, or astride of, the mutual property line. In the latter case, no other dock will be permitted within the two property boundaries.
7. The basic shoreline setback for residential structures shall be 30 feet as measured from the aquatic-shoreland boundary. If it can be demonstrated that existing structures on adjoining lots infringe on the 30-foot setback, the setback shall be determined by the building line common to the adjacent existing structures. PROVIDED, that in no case shall the structure be set back less than 10 feet without a variance. Furthermore, where erosion or flood hazard exists, the required setback will be determined on a case-by-case basis and appropriate hazard protection required. Parking areas shall be set back a minimum of 50 feet, or as far as topography allows.
8. Buildings exceeding 35 feet in height above average grade level must generally be a minimum of 50 feet from the ordinary high water mark.
9. Residential parking area shall be set back from the ordinary high water mark a minimum of 50 feet or as far as topography allows. In no case will the parking area be set back less than 10 feet from the ordinary high water mark.
10. Residential developers shall be required to indicate how they plan to preserve shore vegetation, particularly trees. Erosion control methods during construction must be filed with the application for a building permit.
11. Storm drainage systems shall be separated from sewage disposal systems. Sewage disposal systems shall be designed so that water quality of adjacent coastal waters will not be impaired. An adequate water supply shall be provided.
12. Uncovered porches, decks or steps may project into the required shoreline setback provided that such porches, decks or steps are no higher than three feet from the average grade level. In no case shall they be closer than ten feet from the ordinary high water mark.



SEWAGE COLLECTION AND TREATMENT

## SEWAGE COLLECTION AND TREATMENT

### SEWAGE COLLECTION AND TREATMENT

DEFINITION: The systematic collection by a community (via sewer lines, etc.) and treatment through chemical means of human waste. Individual sewage treatment involves the utilization of a soil absorption system (drainfield) approved by a public health agency. In rare cases sewage is collected in holding tanks and transported periodically to a sewage treatment center for disposal.

Sewage Collection and Treatment Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)

### Natural Environment

1. Sewage collection and treatment facilities shall not locate in a natural environment.

### Permitted Use Standards for Rural and Urban Environments

1. Sewage disposal facilities for any proposed use shall meet all applicable state and local regulations, including those of the Department of Social and Health Services, Department of Ecology, Wahkiakum Health District and those found in zoning and subdivision ordinances.
2. If a community sewage collection and treatment system is located on a proposed use or is within 1,000 feet and is accessible, connection shall be made to that system and an individual sewage disposal facility shall be prohibited. All subdivisions and developments within one mile of a public sewer require approved dry sewers in anticipation of future sewer hookups.
3. Any use for which a sewage disposal facility using a soil absorption system (drainfield) is proposed shall meet the following minimum standards:
  - a. The lot shall have suitable soils, no high water table, slope less than 15%, and other physical characteristics as required by the Wahkiakum Health District in proposed drainfield areas.
  - b. The lot shall have a area meeting the requirements in (a) above sufficient to allow an alternate soil absorption system to be installed should the first one fail or, if applicable, shall have the minimum area required for residential development, which-ever area is larger.
  - c. The lot shall not be located within a flood hazard area where the drainfield would be within the 50 year floodplain, below seasonal high water mark, or where an approved drainfield cannot be installed closer than 100 feet from river.

4. Soil absorption systems (drainfields) shall be prohibited closer than 100 feet from the ordinary seasonal high water mark. Setbacks greater than 100 feet may be required by the Administrator in order to adequately protect water supplies or water quality.
5. Soil absorption systems (drainfields) shall be prohibited on sites declared unsuitable for that purpose by the Wahkiakum Health District.
6. Filling to provide land for soil absorption systems (drainfields) shall be prohibited except where alternative treatment methods or locations cannot be utilized; the fill will be a cover no deeper than one foot, and the drainfield must be installed in original soil below the fill.

SHORELINES WORKS AND STRUCTURES

## SHORELINES WORKS AND STRUCTURES

### SHORELINES WORKS AND STRUCTURES

DEFINITION: Shorelines Works and Structures are those works along the shorelines (on land and in water) that are associated with the following activities:

1. Shorelines Stabilization through:
  - a. Vegetation (non-structural) coverings
  - b. Rip-rapping
  - c. Bulkheading
2. Bankline or Stream alteration;
3. Diking;
4. Piling/Dolphin installation.

Shoreline Works and Structures Standard Abbreviations for:

1. Shoreland Environments:
  - A. Shoreline Stabilization
    - (1) Vegetation (non-structural) coverings:
      - a. Urban (PS)
      - b. Rural (PS)
      - c. Conservancy (PS)
      - d. Natural (PS)
    - (2) Rip-rapping:
      - a. Urban (PS)
      - b. Rural (PS)
      - c. Conservancy (PS)
      - d. Natural (C)
    - (3) Bulkheads:
      - a. Urban (PS)
      - b. Rural (PS)
      - c. Conservancy (C)
      - d. Natural (N)
  - B. Bankline or Stream Alterations
    - a. Urban (C)
    - b. Rural (C)
    - c. Conservancy (C)
    - d. Natural (N)
  - C. Diking
    - (1) New Projects:
      - a. Urban (PS)
      - b. Rural (PS)
      - c. Conservancy (C)
      - d. Natural (N)
    - (2) Maintenance and Repair:
      - a. Urban (PS)
      - b. Rural (PS)
      - c. Conservancy (PS)
      - d. Natural (PS)

2. Aquatic (Water) Environments:

A. Shoreline Stabilization

- (1) Vegetation (non-structural) coverings:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (PS)
- (2) Rip-rapping:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)
- (3) Bulkheads:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)

B. Bankline or Stream Alterations

- a. Urban (PS)
- b. Rural (C)
- c. Conservancy (C)
- d. Natural (N)

C. Diking

- (1) New Projects:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)
- (2) Maintenance and Repair:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (PS)

D. Piling/Dolphin Installation

- a. Urban (PS)
- b. Rural (PS)
- c. Conservancy (C)
- d. Natural (N)

Natural Environment

1. The following Shorelines Works and Structural Activities shall be prohibited in all Natural Environments:
  - a. Bulkheading - Shoreland and Aquatic Environments
  - b. Bankline or Stream Alterations - Shoreland and Aquatic Environments
  - c. Diking - (1) New Projects: Shoreland and Aquatic Environments
  - d. Piling/Dolphin installation - Aquatic Environments

Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

A. Shoreline Stabilization

Vegetation (Non-Structural) Coverings:

- a. Plant species shall be selected to insure suitable stabilization and value for wildlife. Trees, shrubs and grasses native to the area are preferred. Justification shall be presented for the necessity and feasibility of using of a bank with a slope greater than 2:1(horizontal to vertical). Additional requirements will have to be met for stabilization of the outer face of a dike (see standards for dikes).

B. Rip-rapping

1. Rip-rapping shall be allowed in the natural environment to protect an existing use, areas of historical and/or archeological value, and public facilities; PROVIDED, that non-structural solutions are proven to be inadequate and adverse impacts are minimized.
2. Rip-rapping and other bank stabilization measures shall be located, designed and constructed so as to avoid the need for channelization and to protect the natural character of the streamway.
3. In all environments, the use of non-rock riprap material shall be considered as a conditional use, and the use of abandoned automobiles for Shorelines of Statewide Significance shall be prohibited.
4. Bankline protection is not in itself a way to increase land surface area. Where an avulsion has occurred, fill may be used to restore the previous bankline so long as the corrective action is initiated within one year of the date of the avulsion. An extension of the bankline into traditional aquatic areas shall be subject to the standards for fill. Disruption of tidal marsh, tidal flat and productive sub-tidal areas shall be minimized.
5. Construction of shoreline protection measures shall be coordinated with state and federal agencies and local governments to minimize the effects on aquatic resources and habitats. The Washington State Department of Fisheries' Hydraulic Permits Standards and other relevant state and federal water quality standards shall be met. Stream channelization should be avoided.

C. Bulkheading

1. Bulkheads shall be designed and constructed so as not to have adverse effects on adjacent shoreline areas (such as erosion, shoaling, reflection of wave energy or interference with sand transport). State and federal agency regulations concerning construction in water shall be adhered to.
2. Construction of a normal protective bulkhead common to a single family dwelling is exempted from the requirement for a Shoreline Substantial Development Permit. The conditional use procedure is waived for these bulkheads in all environments. However, its design must meet the standards enumerated above.
3. The "Criteria Governing the Design of Bulkheads, Landfills and Marinas ... for Protection of Fish and Shellfish Resources" adopted by the Washington State Department of Fisheries in 1971, which criteria are incorporated herein by reference, are to be adjusted to local tidal levels.

D. Bankline or Stream Alteration:

1. The builder of any shoreline protection structure shall be responsible for determining in advance the nature and extent of any possible adverse effects of his construction on fish and wildlife or on the property of others and shall propose and take all necessary actions to minimize such effects.
2. An altered water course shall meander and maintain stream surface area as feasible. Alteration of sloughs, oxbows and marshes shall be minimized.
3. In-stream dredging shall be conducted according to dredging standards.
4. Alignments should make maximum use of natural or existing deep water channels, but should not create pockets of stagnant water or other undesirable hydraulic conditions.



E. Diking

1. As part of any new dike construction or when maintaining existing dikes, the dike face shall be suitably protected to prevent erosion. All standards for bank stabilization shall be met, as applicable. However, trees, brush and shrubs should not be planted or allowed to grow on the dike. They should be repaved regularly.
2. Dredging as a source of material shall be allowed only when suitable upland sources of material are absent. When such dredging is allowed, it should occur preferably in areas of sandy bottom materials, where biological productivity is low and unwanted shoaling has occurred. Productive subtidal areas, tidal flats and tidal marshes, as determined through the hydraulics permit process, should be avoided.
3. Good engineering practices shall be followed in dike maintenance, repair and construction. State and federal agency regulations should be consulted in this regard.
4. When new dikes are placed as flood protection, they should be placed on the Shorelands and not in Aquatic areas (including marshes or other wetlands). New diking of Aquatic areas will be subject to the standards for fill of Aquatic areas.
5. New dike alignment and configuration shall be such as to cause no increase in erosion or shoaling in adjacent areas and no appreciable increase in back water elevation. Channelization of the waterway should be avoided.
6. Emergency repair to existing dikes is permitted, consistent with other requirements of these standards, and subject to the rules set forth by the State of Washington, Department of Fish and Game, Hydraulics Permits Regulations and the U.S. Army Corps of Engineers.

F. Piling/Dolphin Installation

1. Piling/dolphin installation in Aquatic areas shall be permitted only in conjunction with an allowed or conditional use for which no feasible upland sites exist.
2. Piling/dolphin installation shall be the minimum necessary to accomplish the proposed use.
3. Piling/dolphin installation shall be permitted only after it is established that adverse impacts on navigation, estuarine habitat, processes and function, water circulation and sedimentation patterns, water quality, and recreational activities will be minimized.
4. The piling or dolphin and its placement shall meet all applicable state and federal engineering standards.

OUTDOOR ADVERTISING, SIGNS AND BILLBOARDS

OUTDOOR ADVERTISING, SIGNS AND BILLBOARDS

ADVERTISING, SIGNS AND BILLBOARDS

DEFINITION: The placement of structures for the purpose of: commercial businesses or products advertising; general public announcements; directions to various geographical locations; highway safety warning devices. Signs and billboards may be either illuminated or non-illuminated.

Outdoor Advertising, Signs and Billboards Standard Abbreviations for:

1. Shoreland Environments
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)
  
2. Aquatic (water) Environments
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)

Permitted Use Standards for Natural, Conservancy, Rural and Urban Environments

1. Signs shall be allowed in a natural environment only when:
  - a. Marking a foot trail or hiking trail;
  - b. Marking a place of historic or cultural value;
  - c. Necessary for public safety.
  
2. Outdoor advertising, signs and billboards shall be allowed in Conservancy and Rural Environments if they are:
  - a. Official in nature (i.e., traffic control);
  - b. A commercial sign advertising commodities for sale, non-illuminating, 32 square feet or less in size and not exceeding 10 feet in height at its highest point from the ground;
  - c. A real estate sign offering for sale, lease, or rent, non-illuminating, 32 square feet or less in size and not exceeding 10 feet at its highest point from the ground.
  - d. Of any nature placed on the side of a building 32 square feet or less in size and non-illuminating;
  - e. Not obstructing or degrading a view or scenic vista;
  - f. Integral in nature marking monuments, historic or cultural places; and
  - g. Does not obstruct sight distance to motorized travelers.
  
3. Signs shall be allowed in Urban Environments as above; illuminating signs may be allowed in urban environments provided they are non-view obstructing and/or do not reflect upon water surfaces.
  
4. Off-premises outdoor illuminated advertising will be limited to areas of high-intensity land use such as commercial and industrial areas.

SOLID WASTE DISPOSAL

## SOLID WASTE DISPOSAL

### SOLID WASTE DISPOSAL

DEFINITION: The deposition of solid waste of municipal or industrial origin on Shorelands.

Solid Waste Disposal Standard Abbreviations for:

1. Shoreland Environments
  - a. Urban (C)
  - b. Rural (C)
  - c. Conservancy (N)
  - d. Natural (N)

### Natural Environment

1. Solid waste disposal sites of all kinds shall be prohibited on natural shorelines.

### Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Solid waste disposal on shorelands shall be allowed only when an upland location is not feasible. Shoreland solid waste disposal shall be allowed only as part of preparation of the site for an allowed or conditionally-allowed shoreland development. Sites shall be consistent with the approved Cowlitz-Wahkiakum Regional solid waste disposal plan.
2. All relevant state and federal air quality, water quality and solid waste disposal regulations shall be adhered to. Leaching of harmful substances into ground and surface waters will be prohibited.
3. Solid waste materials shall not be deposited in marshes, wetlands, or other aquatic areas. Solid waste deposited in a shoreland disposal site must be strictly confined to the site.
4. Solid waste disposal sites, where allowed, shall be designed to minimize adverse visual impacts. Natural or planted vegetation shall completely screen the sites on all sides.
5. Feasible plans shall be presented for subsequent use of any solid waste landfill, including wood waste fills, prior to the granting of a permit.

TIMBER PRACTICES

## TIMBER PRACTICES

### TIMBER PRACTICES

DEFINITION: The planting, growing, thinning, harvesting, etc. of trees for commercial purposes. Logging road construction is also covered by these standards

Timber Practices Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (PS)
  - d. Natural (C)
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (C)

### Natural Environment

1. Harvesting of timber shall be permitted on natural shorelines only where it is necessary to:
  - Prevent an epidemic of insect or disease infestations throughout designated areas and to adjoining areas when no other means of epidemic control will work.
  - Clean-up and restore an area devastated by disaster such as extensive wind throw or fire.
2. In instances where timber harvesting on natural shorelines is permitted, monetary value shall not be used to justify the timber harvesting but only to determine the economic feasibility of such restorative work.

Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Forest practices and road building will be in accord with the rules established by the Washington State Forest Practices Act Administered by the Washington State Forest Practices Act administered by the Department of Natural Resources and Shorelands Management Act. With respect to timber situated within two hundred feet abutting landwards of the ordinary high water mark within shorelines of statewide significance, or in CONSERVANCY and RURAL Aquatic areas (primarily Sitka Spruce swamps), the Department of Ecology and local government shall allow only selective commercial timber cutting, so that no more than thirty percent of the merchantable trees may be harvested in any ten year period: PROVIDED, that other timber harvesting methods may be permitted in those limited instances where the topography, soil conditions or silviaculture practices necessary for regeneration render selective logging ecologically detrimental: PROVIDED, FURTHER, that clear cutting of timber which is solely incidental to the preparation of land for other uses authorized by this chapter may be permitted. In aquatic areas, disruption of drainage patterns, wildlife habitats and aquatic values shall be minimized. Logging roads and heavy equipment shall not be permitted in aquatic areas.
2. Logging and reforestation within shoreline areas shall be conducted so as to ensure the maintenance of buffer strips of riparian vegetation and to protect water quality.



TRANSPORTATION FACILITY DEVELOPMENT

TRANSPORTATION FACILITY DEVELOPMENT

TRANSPORTATION FACILITIES

DEFINITION: Highways, railroads, bridges and associated structures and signs which provide for land transportation of motorized and/or non-motorized vehicles (excluding logging roads).

Transportation Standard Abbreviations for:

1. Shoreland Environments:
  - a. Urban (PS)
  - b. Rural (PS)
  - c. Conservancy (C)
  - d. Natural (N)
  
2. Aquatic (Water) Environments:
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N)

Permitted Use Standards for Conservancy, Rural and Urban Environments

1. New transportation facilities shall be allowed in the Natural and Conservancy Aquatic and Shoreline areas only under the following conditions:
  - a. No other feasible alternative route exists;
  - b. Development will not prohibit public access to the shoreline or aquatic area;
  - c. It can be satisfactorily demonstrated that the wildlife habitats in the area will not be damaged.
  
2. In all environments, highways, railroads and bridges shall be designed and located to take advantage of the natural topography so as to cause minimum disruption of the shoreline area. Causeways across aquatic areas shall not be permitted except where no feasible alternative shoreland or upland route exists.
  
3. The impacts of proposed rail or highway facilities on land use patterns, energy use, air and water quality, other estuarine resources, existing transportation facilities and physical/visual access shall be evaluated. The benefits of the location of new or expanded routes shall be weighed against the costs of high intensity use areas ( such as commercial centers) from the water front.
  
4. Public roadways in scenic areas shall provide for safe pedestrian and non-motorized vehicle travel. Provision shall be made for sufficient view points, rest areas and picnic areas along public shorelines.
  
5. Careful consideration should be given to hydraulic effects of land transportation facilities in Aquatic areas; undesirable changes in shoaling, currents, erosion and flood elevations shall be avoided.
  
6. All private roads must be developed to county standards and follow the same general locational shoreline requirements as apply to public roads.

UTILITY DEVELOPMENT

## UTILITY DEVELOPMENT

### UTILITIES

DEFINITION: Towers, facilities and lines for communication and power transmission; waste water treatment plants; storm water and treated water outfalls (including industrial); and major water, sewer and gas lines.

Utility Standard Abbreviations for:

1. Shoreland Environments
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N\*)
  
2. Aquatic (water) Environments
  - a. Urban (PS)
  - b. Rural (C)
  - c. Conservancy (C)
  - d. Natural (N\*)

### Natural Environment

1. \*Utility Systems shall be prohibited in natural areas, except when it is unavoidably necessary for them to be located in or pass through natural environments.

### Permitted Use Standards for Conservancy, Rural and Urban Environments

1. Electrical or communication transmission lines shall be located underground, unless economically infeasible. Overhead electrical and communication transmission lines shall not unduly interfere with migratory bird flyways and significant habitats or resident water fowl, birds of prey and other birds.
2. Utilities shall not be located on new fill land unless part of an otherwise approved project and no other alternative exists.
3. Above-ground utilities shall be designed to have the least adverse effect on visual and other aesthetic characteristics of the area. Interference with public uses and public access to the estuary shall be minimized.
4. Effluents from point-source discharges shall meet all applicable state and federal water and air quality standards.
5. After installation or maintenance is completed, disturbed stream banks shall be stabilized (see bank stabilization standards).
6. Utilities for single family residence shall be permitted

APPENDIXES

## APPENDIX - A

### DEFINITIONS

#### A

abatement: The method of reducing the degree or intensity of pollution, also the use of such a method.

advanced waste treatment: Waste water treatment beyond the secondary or biological stage that includes removal of nutrients such as phosphorus and nitrogen and a high percentage of suspended solids. Advanced waste treatment, known as tertiary treatment, is the "polishing stage" of waste water treatment and produces a high quality effluent.

agricultural pollution: The liquid and solid wastes from all types of farming, including runoff from pesticides, fertilizers and feedlots; erosion and dust from plowing, animal manure and carcasses and crop residues and debris. It has been estimated that agricultural pollution in the U.S. has amounted to more than 2 1/2 billion tons per year.

anadromous: Type of fish that ascend rivers from the sea to spawn.

aquifer: An underground bed or stratum of earth, gravel or porous stone that contains water.

#### B

benthic region: The bottom of a body of water. This region supports the benthos, a type of life that not only lives upon but contributes to the character of the bottom.

biochemical oxygen demand (BOD): A measure of the amount of oxygen consumed in the biological processes that break down organic matter in water. Large amounts of organic waste use up large amounts of dissolved oxygen, thus the greater the degree of pollution, the greater the BOD.

biota: all the species of plants and animals occurring within a certain area.

bog: Wet, spongy land usually poorly drained, highly acid and rich in plant residue.

boom: A floating device that is used to contain oil on a body of water. Also, a device used for handling of log rafts and logs in water.

broadcast application: With respect to pesticides, the application of a chemical over an entire field, lawn or other area.

## C

cfs: Cubic feet per second, a measure of the amount of water passing a given point.

channelization: The straightening and deepening of streams to permit water to move faster, to reduce flooding or to drain marshy acreage for farming. However, channelization reduces the organic waste assimilation capacity of the stream and may disturb fish breeding and destroy the stream's natural beauty.

chemical oxygen demand (COD): A measure of the amount of oxygen required to oxidize organic and oxidizable inorganic compounds in water. The COD test, like the BOD test, is used to determine the degree of pollution in an effluent.

clarifier: In waste water treatment, a settling tank which mechanically removes settleable solids from wastes.

coliform index: An index of the purity of water based on a count of its coliform bacteria.

combined sewers: A sewage system that carries both sanitary sewage and storm water runoff. During dry weather, combined sewers carry all waste water to the treatment plant. During a storm, only part of the flow is intercepted because of plant over loading; the remainder goes untreated to the receiving stream.

## D

decomposition: Reduction of the net energy level and change in chemical composition of organic matter because of the actions of aerobic or anaerobic micro organisms.

dissolved oxygen (DO): The oxygen dissolved in water or sewage. Adequately dissolved oxygen is necessary for the life of fish and other aquatic organisms and for the concentrations generally are due to discharge of excessive organic solids having high BOD, the result of inadequate waste treatment.

dredging: A method for deepening streams, swamps or coastal waters by scraping and removing solids from the bottom.

dump: A land site where solid waste is disposed of in a manner that does not protect the environment.

## E

- ecological impact: The total effect of an environmental change, either natural or manmade, on the ecology of the area.
- ecology: The interrelationships of living things to one another and to their environment or the study of such interrelationships.
- ecosystem: The interacting system of a biological community and its non-living environment.
- effluent: A discharge of pollutants into the environments, partially or completely treated or in its natural state. Generally used in regard to discharges into waters.
- enrichment: The addition of nitrogen, phosphorus and carbon compounds or other nutrients into a lake or other water way that greatly increases the growth potential for algae and other aquatic plants. Most frequently, enrichment results from inflow sewage effluent or from agriculture runoff.
- environment: The sum of all external conditions and influences affecting the life, development and ultimately the survival of an organism.
- environmental impact statement: A document prepared by any federal, state or local agency or proponent of a project found to significantly affect the quality of human environment. Environmental Impact Statements are used as tools for decision making and may be required for certain projects by federal, state and/or local jurisdictional regulations.
- erosion: The wearing away of the land surface by wind or water. Erosion occurs naturally from weather or runoff but is often intensified by man's land clearing practices.
- eutrophication: The normally slow aging process by which a lake evolves into a bog or marsh and ultimately assumes a completely terrestrial state and disappears. During eutrophication, the lake becomes so rich in nutritive compounds, especially nitrogen and phosphorus, that algae and other microscopic plant life become super abundant, there by "choking" the lake and causing it eventually to dry up. Eutrophication may be accelerated by many human activities.
- eutrophic lakes: Shallow lakes, weed-choked at the edges and very rich in nutrients. The water is characterized by large amounts of algae, low water transparency, low dissolved oxygen and high BOD.



## F

fecal coliform bacteria: a group of organisms common to the intestinal tracts of man and of animals. The presence of fecal coliform bacteria in water is an indicator of pollution and of potentially dangerous bacterial contamination.

feedlot: A relatively small, confined land area for finishing beef cattle, although an economical method of fattening beef, feedlots concentrate a large amount of animal wastes in a small area. This excrement cannot be handled by the soil as it could be if the cattle were scattered on open range. In addition, runoff from feed lots contributes excessive quantities of nitrogen, phosphorus and potassium to nearby waterways, thus contributing to eutrophication.

filling: The process of depositing sands and gravel in marshy areas to create more land. See dredging.

floating home: A structure usually constructed on a float which is usually permanently moored, anchored or otherwise secured in water and is used as a place of residence. A floating home is not equivalent to a duck shack or similar temporary use recreational structure. It is not equivalent to a boat house, designated for storage of boats. A floating home may provide boat storage, but must still comply with the floating home standards.

## G

game fish: Those species of fish sought by sports fisherman; for example, harvest trout, black bass, striped bass, etc. Game fish are usually more sensitive to environmental changes and water quality degradation than "rough" fish.

germicide: A chemical or agent that kills micro organisms such as bacteria and prevents them from causing disease. Such compounds must be registered as pesticides with the EPA.

green belts: Certain areas restricted from being used for buildings and houses; they often serve as separating buffers between pollution sources and concentrations of population.

groundwater: The supply of fresh water under the earth's surface in an aquifer or soil that forms the natural reservoir for man's use.

groundwater runoff: Groundwater that is discharged into a stream channel as spring or seepage water.

## H

habitat: The sum total of environmental conditions of a specific place that is occupied by an organism, a population or a community.

houseboat: A vessel used for living quarters but licensed and designed substantially as a mobile structure by means of detectable utilities or facilities, anchoring, and the presence of adequate self propulsion to operate as a vessel.

hydrology: The science dealing with the properties, distribution and circulation of water and snow.

## I

implementation plan: A document of the steps to be taken to ensure attainment of environmental quality standards within a specified time period. Implementation plans are required by various laws.

impoundment: A body of water, such as a pond, confined by a dam, dike, floodgate or other barrier

infiltration: The flow of a fluid into a substance through pores or small openings. Commonly used in hydrology to denote the flow of water into soil material.

interstate waters: According to law, waters defined as (1) rivers, lakes and other waters that flow across or form a part of State or international boundaries; (2) waters of the Great Lakes; (3) coastal waters -- whose scope has been defined to include ocean waters seaward to the territorial limits and waters along the coast line ( including inland streams ) influenced by the tide.

## JKL

leachate: Liquid that has percolated through soil waste or other mediums and has extracted dissolved or suspended materials from it.

limnology: The study of the physical, chemical, meteorological and biological aspects of fresh waters.

## M

marsh: A low-lying tract of soft, wet land that provides an important ecosystem for a variety of plant and animal life but often is destroyed by dredging and filling.

monitoring: Periodic or continuous determination of the amount of pollutants or radioactive contamination present in the environment.

## N

nonconforming uses: A structure or use permitted at the time of the enactment of this Plan, but which does not conform to present activity use or development standards.

nutrients: Elements or compounds essential as raw materials for organism growth and development; for example, carbon, oxygen, nitrogen, and phosphorus.

## O

oil spill: The accidental discharge of oil into oceans, bays or inland waterways. Methods of oil spill control include chemical dispersion, combustion, mechanical containment and absorption.

organic: Referring to or derived from living organisms. In chemistry, any compound containing carbon.

outfall: The mouth of a sewer, drain or conduit where an effluent is discharged into receiving waters.

oxidation: A chemical reaction in which oxygen unites or combines with other elements. Organic matter is oxidized by the action of aerobic bacteria, thus oxidation is used in waste water treatment to breakdown organic wastes.

P

- peat: Partially decomposed organic material
- percolation: Downward flow or infiltration of water through the pores or spaces of a rock or soil.
- pesticide: An agent used to control pests. This includes insecticides for use against harmful insects; herbicides for weed control; fungicides for control of plant diseases; rodenticide for killing rats, mice, etc.; and germicides used to disinfect products, algaecides, slimicides, etc. Some pesticides can contaminate water, air or soil and accumulate in man, animals and the environment particularly if they are misused. Certain of these chemicals have been shown to interfere with the reproductive processes of predatory birds and possibly other animals.
- pH: A measure of the acidity or alkalinity of a material, liquid or solid. pH is represented on a scale of 0 to 14 with 7 representing a neutral state, 0 representing the most acid and 14 the most alkaline.
- plankton: The floating or weakly swimming plant and animal life in a body of water, often microscopic in size.
- pollutant: Any introduced gas, liquid or solid that makes a resource unfit for a specific purpose.
- pollution: The presence of matter or energy whose nature, location or quantity produces undesired environmental effects.
- potable water: Water suitable for drinking or cooking purposes from both health and aesthetic considerations.
- ppm: Parts per million. The unit commonly used to represent the degree of pollutant concentration where the concentrations are given in percentages. Thus BOD is represented in ppm while suspended solids in water are expressed in percentages. In air, ppm is usually a volume/volume ratio; in water, a weight/volume ratio.
- primary treatment: The first stage in waste water treatment in which substantially all floating or settleable solids are mechanically removed by screening and sedimentation.
- pumping station: A station at which sewage is pumped to a higher level. In most sewer systems pumping is unnecessary; waste water flows by gravity to the treatment plant.

## QR

raw sewage: Untreated domestic or commercial waste water.

receiving waters: Rivers, lakes, oceans or other bodies that receive treated or untreated waste waters.

reservoir: A pond, lake, tank or basin, natural or manmade, used for storage, regulation and control of water.

riparian rights: Right of land owner to the water on or bordering his property, including the right to prevent diversion or misuse of upstream water.

river basin: The total area drained by a river and its tributaries.

rough fish: Those fish species considered to be of poor fighting quality when taken on tackle or of poor eating quality; for example, far, suckers, etc. Most rough fish are more tolerant of widely changing environmental conditions than are game fish.

runoff: The portion of rainfall, melted snow or irrigation water that flows across ground surface and eventually is the air or the land and carry them to receiving waters.

## S

sanitation: The control of all the factors in man's physical environment that exercise or can exercise a deleterious effect on his physical development, health and survival.

sanitary landfilling: An engineered method of solid waste disposal on land in a manner that protects the environment; waste is spread in thin layers, compacted to the smallest practical volume and covered with soil at the end of each working day.

sanitary sewers: Sewers that carry only domestic or commercial sewage. Storm water runoff is carried in a separate system. See sewer.

secondary treatment: Waste water treatment, beyond the primary stage, in which bacteria consume the organic parts of the wastes. This bacteria consume the organic parts of the wastes. This biochemical action is accomplished by use of trickling filters or the activated sludge process. Effective secondary treatment removes virtually all floating and settleable solids and approximately 90 percent of both BOD<sub>5</sub> and suspended solids. Customarily, disinfection by chlorination is the final stage of the secondary treatment process.

seepage: Water that flows through the soil.

septic tank: An underground tank used for the deposition of domestic wastes. Bacteria in the wastes decompose the organic matter, and the sludge settles to the bottom. The effluent flows through drains into the ground. Sludge is pumped out at regular intervals.

sewage: The total of organic waste and waste water generated by residential and commercial establishments.

sewer: Any pipe or conduit used to collect and carry away sewage or storm water runoff from the generating source to treatment plants or receiving streams. A sewer that conveys household and commercial sewage is called a sanitary sewer. If it transports runoff from rain or snow, it is called a storm sewer. Often, storm water runoff and sewage are transported in the same system or combined sewers.

sewerage: The entire system of sewage collection, treatment and disposal. Also applies to all effluent carried by sewers whether it is sanitary sewage, industrial wastes or storm water runoff.

silt: Finely divided particles of soil or rock. Often carried in cloudy suspension in water eventually deposited as sediment.

skimming: The mechanical removal of oil or scum from the surface of water.

solid waste: Useless, unwanted or discarded material with sufficient liquid content to be free flowing. Also see waste. (1) agriculture -- solid waste that results from the raising and slaughtering of animals, and the processing of animal products and orchard and field crops. (2) commercial -- waste generated by stores, offices and other activities that do not actually turn out a product. (3) industrial -- waste that results from industrial processes and manufacturing. (4) institutional -- waste originating from educational, health care and research facilities. (5) municipal -- residential and commercial solid waste generated within a community. (6) pesticide -- the residue from the manufacturing, handling or use of chemicals intended for killing plant and animal pests. (7) residential -- waste that normally originates in a residential environment. Sometimes called domestic solid waste.

solid waste management: The purposeful, systematic control of the generation, storage, collection, transport, separation, processing, recycling, recovery and disposal of solid waste.

spoil: Dirt or rock that has been removed from its original location, specifically materials that have been dredged from the bottoms or waterways.

strip mining: A process in which rock and top soil strata overlying ore or fuel deposits are scraped away by mechanical shovels. Also known as surface mining.

## T

tailings: Second grade or waste material derived when raw material is screened or processed.

tertiary treatment: Waste water treatment beyond the secondary, or biological stage that includes removal of nutrients such as phosphorus and nitrogen, and a high percentage of suspended solids. Tertiary treatment, also known as advance waste treatment, produces a high quality effluent.

thermal pollution: Degradation of water quality by the introduction of heat effluent. Primarily a result of the discharge of cooling waters from industrial processes, particularly from electrical power generation. Even small deviations from normal water temperatures can affect aquatic life. Thermal pollution usually can be controlled by cooling towers.

## U

urban runoff: Storm water from city streets and gutters that usually contains a great deal of litter and organic and bacterial wastes.

## V

variance: Sanction granted by a governing body for delay or exception in the application of a given law, ordinance or regulation.

vessel: A ship, boat, barge or other floating craft which is designed and used for navigation and does not interfere with normal public use of the waterway.

## W

water quality standard: A plan for water quality management containing four major elements: the use (recreation, drinking water, fish and wild life propagation, industrial or agricultural) to be made of the water; criteria to protect those uses; implementation plans (for needed industrial-municipal waste treatment improvements) and enforcement plans, and an anti-degradation statement to protect existing high quality waters.

water shed. The drained by a given stream.

water table: The upper level of ground water.

## XYZ

WETLANDS



## WETLANDS

DEFINITIONS. As used herein, the following words have the following meanings:

1. "Wetlands" or "wetland areas" means those lands extending landward for two hundred feet in all directions as measured on a horizontal plane from the ordinary high water mark; and all marshes, bogs, swamps, floodways, river deltas and floodplains associated with the streams, lakes and tidal water which are subject to the provisions of Chapter 90.58 RCW.
2. "Associated wetlands" means those wetlands which are strongly influenced by and in close proximity to any stream, river, lake, or tidal water, or combination thereof, subject to Chapter 90.58 RCW.

The definitions set forth in Chapter 90.58 RCW shall also apply as used herein.

3. River deltas and floodplains.
  - (a) On river deltas and floodplains where no dikes exist, the wetland area shall be from toe to toe of the valley floor or two hundred feet from the ordinary high-water mark, which ever is greater, except in those limited instances where the designation of such an area would be contrary to the policy of Chapter 90.58 RCW.
  - (b) On river deltas and floodplains where dikes have been placed by governmental agencies for public benefit and reasonably protect against floods, the wetlands will be designated as follows:
    - (i) Where the dike is located within two hundred feet of the ordinary high-water mark, the wetlands shall be that area within two hundred feet of the ordinary high-water mark.
    - (ii) Where the dike is located more than two hundred feet beyond the ordinary high-water mark, the wetlands shall be that area lying between the apex of the dike and the ordinary high-water mark.
4. Marshes, bogs and swamps: If marshes, bogs and swamps which constitute associated wetlands extend more than two hundred feet beyond the ordinary high-water mark of the body of water with which they are associated, their perimeters shall be the outer limit of the wetland designation.

APPENDIX - B

WAHKIAKUM COUNTY SHORELINES  
NARRATIVE OF ENVIRONMENTAL DESIGNATIONS

(Illustrated in "Shoreline Management Master Program  
Environmental Designation Atlas for Wahkiakum County)

All directions EAST and WEST and based from the WILLAMETTE MERIDIAN.

PART - I

I NATURAL ENVIRONMENTS - None

PART - II

II CONSERVANCY ENVIRONMENTS

All other shorelines of streams and rivers, and portions thereof, which are under the regulations of the Shoreline Management Act of 1971, shall be considered as belonging to the Conservancy Environment category.

Alger Creek (portions)  
Beaver Creek (portions)  
Columbia River (portions)  
Crooked Creek (portions)  
Elochoman River (portions)  
Elochoman River (east fork)  
Elochoman River (north fork)  
Elochoman River (west fork)  
Fossil Creek  
Grays River (portions)  
Grays River (west fork)  
Hull Creek (portions)  
Jim Crow Creek (portions)  
McDonald Creek  
Mill Creek  
Nelson Creek  
Otter Creek  
Price Island (portions)  
Skamokawa Creek (portions)  
Skamokawa Creek (left fork; portions)

PART - III

III RURAL ENVIRONMENTS

- A. Both Shorelines of Salmon Creek from north boundary line at Pacific-Wahkiakum Counties (Sec. 5, T10N, R8W) to boundary line between Pacific-Wahkiakum Counties (Sec. 7, T10N, R8W).
- B. Both shorelines of Grays River from section line between Sections 8 and 9, T10N, R8W, down stream to the corners of Sections 22 - 23 and 26 -27, T10N, R7W.
- C. Both shorelines of Hull Creek from section line between Sections 6 and 7, T10N, R8W, to its mouth at the Grays River.
- D. Grays River, looking down stream: the left-hand bank from the line between Sections 33 and 34, T10N, R7W, to its mouth at the Columbia River.
- E. Both shorelines of Crooked Creek from SW 1/4, Section 36, T10N, R7W, down stream to its mouth at Grays Bay.
- F. Both shorelines of Jim Crow Creek from section line between Sections 4 and 9, T9N, R7W, downstream to its mouth at the Columbia River.
- G. Both shorelines of Alger Creek from NW 1/4, Section 15, T9N, R6W, down stream to its mouth at Brooks Slough.
- H. Both shorelines of Elochoman River from approximately the NE 1/4 of Section 21, T9N, R5W, down stream to the NW 1/4 of Section 36, T9N, R6W.
- I. Both shorelines of Beaver Creek from approximately the NE 1/4 of Section 32, T9N, R5W, down stream to its mouth at the Elochoman River.
- J. Both shorelines of Skamokawa Creek from section line between Sections 28 and 29, T10N, R6W, down stream to North 1/2 of Section 8, T9N, R6W.
- K. Both shorelines of Skamokawa Creek (left fork) from section line between Sections 28 and 29, T10N, R6W, down stream to its mouth at Skamokawa Creek.
- L. Both shorelines of Skamokawa Creek (west fork) from the confluence of West Fork Skamokawa Creek and Kelly Creek (Section 36, T10N, R6W), down stream to Skamokawa Creek (Section 8, T9N, R6W).
- M. Both shorelines of West Valley Creek from an approximate point (NE 1/4 of Section 1, T9N, R7W), down stream back to Pacific County line (same section).
- N. Both shorelines of Wilson Creek from section line between Sections 5 and 6, T9N, R5W, down stream to North 1/2 of Section 8, T9N, R6W.
- O. Both shorelines of Naselle River from Pacific County line (Section 6, T10N, R8W), down stream back to Pacific County line ( same section).
- P. Both shorelines of Falk Creek from an approximate point (SE 1/4 of NW 1/4/ of SW 1/4 of Section 33, T10N, R6W), down stream to mouth at Skamokawa Creek ( Section 5, T9N, R6W).

PART - IV

IV URBAN ENVIRONMENTS

- A. Grays River, looking down stream: the right-hand bank from the NE 1/4 of Section 33, T10N, R8W, to its mouth at the Columbia River.
- B. Both shorelines of the Elochoman River from the NW 1/4 of Section 36, T9N, R5W, down stream to State Highway Number 4.
- C. Both shorelines of Skamokawa Creek from the North 1/2 of Section 8, T9N, R6W, down stream to its mouth at the Columbia River.
- D. Deep River, looking down stream, the right-hand bank from the northern edge of the NW 1/4 of the South 1/2 of Section 17, T10N, R8W, down stream to section line between Sections 17 and 20, T10N, R8W, W.M.
- E. Both shorelines of Brooks Slough from section line between Sections 15 and 16, T9N, R6W, down stream to its mouth at Skamokawa Creek.
- F. Both shorelines of Wilson Creek, from the North 1/2 of Section 8, T9N, R6W, down stream to its mouth at Skamokawa Creek.
- G. Both shorelines of Deep River from Section 9, T10N, R8W, down stream to the North 1/2 of Section 17, T10N, R8W. Then both shorelines form section line between Sections 17 and 20, T10N, R8W, downstream to the highway bridge in the West 1/2 of Section 20, T10N, R8W W.M.
- H. Deep River, looking down stream, the left-hand bank from the northern edge of the NW 1/4 of the South 1/2 of Sec 17, T10N, R8W, down stream to section line between Sections 17 and 20, T10N, R8W W.M.

APPENDIX - C

SHORELINES OF STATEWIDE SIGNIFICANCE  
NARRATIVE OF ENVIRONMENTAL DESIGNATIONS

Natural Environments

1. All shorelines of Hunting Island and unnamed island at the mouth of Elochoman Slough.
2. All publicly-owned portions of Ryan Island.
3. Portion of Grays Bay.

Conservancy Environment (Columbia River)

1. Section line between Sections 23 and 24, T8N, R5W; down stream to section line between Sections 21 and 22, T8N, R5W W.M.
2. Section line between Sections 20 and 21, T8N, R5W; down stream to section line between Sections 18,17 and 20 (Corner Junction) T8N, R5W W.M.
3. All shorelines of the Columbia Whitetail Deer Wildlife Refuge.
4. The western 1/2 of Price Island.
5. All waters of Brooks Slough.
6. Skamokawa Creek (both forks) from Ocean Beach Highway upstream to north section lines of Sections 5 and 6, T9N, R6W.
7. The Columbia River shoreline from the western edge of Skamokawa Park, downstream to section line between Sections 15 and 16, T9N, R7W.
8. Jim Crow Creek from mouth upstream to south 1/2 of Section 9, T9N, R7W.
9. Hitchcock Creek from mouth up stream to section line between Sections 9 and 10, T9N, R8W.
10. Crooked Creek from mouth up stream to section line between Sections 13 and 18, T9N, R8W.
11. Grays River from mouth up stream to section line between Sections 13 and 18, T9N, R8W.
12. Grays Bay shoreline from Grays River west to Miller's Point, Section 32, T10N, R8W.
13. Deep River from mouth up stream to south 1/2 of Section 20, T10N, R8W.
14. Grays Bay shoreline from the north side of Brix Bay to the Wahkiakum/Pacific County Line.
15. Portions of the waters in Grays Bay plus 50-foot water-ward strip from the MHHW lines.
16. All water and islands in the Columbia River not otherwise designated.
17. Eastern half of Price Island, plus in water from MHHW lines to forty-foot (40') bottom contour line along eastern half of island.

### Rural Environments

1. Little Island and Columbia River water, waterward fifty feet from MHHW line of Little Island, starting at the Puget Island bridge up stream to the conjunction of Bernie and Jackson Sloughs.
2. Waters of Bernie Slough.
3. Puget Island plus Jackson and Net Rack Sloughs
4. Both shorelines of Dead Slough and Skamokawa Creek
5. Columbia River shorelines starting at Pillar Rock (section line between Sections 17 and 18, T9N, R7W) down stream to Hitchcock Creek.
6. Both shorelines of Hitchcock Creek from mouth to section lines between Sections 9 and 10, T9N, R8W.
7. Grays Bay shoreline from north side of Hitchcock Creek to south bank of Grays River.
8. South bank of Grays River from mouth, up stream to section line between Sections 13 and 18, T10N, R8W.
9. North bank of Grays River from the west 1/4 of this section line between Sections 8 and 33, up stream to section line between Sections 13 and 18, T10N, R8W.
10. Grays Bay shoreline from Miller Point upstream along Deep River's southeast bank to the mid-section line of the section line between Sections 32 and 29, T10N, R8W.
11. East bank of Deep River from section line between Sections 20 and 29, T10N, R8W, up stream to south side of Highway West 4 (mid-section line, Section 20, T10N, R8W).
12. Northwestern side of Deep River from mouth up stream mid-section line of Section 20, T10N, R8W.
13. Grays Bay western shoreline from mouth of Deep River to north edge of Brix Bay.

#### Urban Environment

1. Columbia River shorelines starting at the Cowlitz/Wahkiakum County Line, section line between Sections 18 and 17, T8N, R5W; down stream to section line between Sections 20 and 18, T8N, R5W.
2. Columbia River shorelines from corner sections of Sections 18, 17, and 20, T8N, R5W; down stream to mouth of Elochoman Slough.
3. Columbia River shorelines from corner sections of Sections 18, 17, and 20, T8N, R5W; down stream to mouth of Elochoman Slough.
4. All waters and mainland shoreline of Elochoman Slough down stream to Elochoman River.
5. Elochoman River from junction at Elochoman Slough, up stream to Highway 4 (Ocean Beach Highway).
6. That peninsula formed by the junction of Steamboat Slough and Skamokawa Slough from section line between Sections 17 and 18, down stream to western edge of Skamokawa Park.
7. Columbia River shorelines of Jim Crow Creek from section line between Sections 15 and 16, down stream to section line between Sections 16 and 17, extending into Columbia River to 20-foot bottom contour line; excluding mouth of Jim Crow Creek.
8. Deep River east bank and adjacent area to mid-river, starting at mid-section line between Sections 32 and 29, up stream to section line between Section 20 and 29.