CITY OF
MOSES LAKE

SHORELINE MASTER PROGRAM

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Chapter 1
Introduction

Shorelines in Washington are regulated and protected by the Shoreline Management Act. The state of Washington's Shoreline Management Act of 1971 was written in response to a citizens' initiative petition. It was adopted through a citizen referendum by a two to one margin. The intent of the Shoreline Management Act was to benefit the public interest by protecting shorelines, which are a limited resource. The Act recognizes that it requires planning to balance protecting the public interest on one hand and private property rights on the other hand.

The Shoreline Management Act is based on the Public Trust Doctrine, a common law principle which says that the waters of the state are a public resource, owned by and available to all citizens equally for navigation, fishing, recreation, and similar uses, no matter who owns the underlying land. The state must protect individual property rights and the Public Trust, which it does through the Shoreline Management Act.

Local governments are in charge of shoreline planning, under state guidance. Each local jurisdiction with shorelines has adopted a regulatory document, called a Shoreline Master Program, which was reviewed and approved by the Washington State Department of Ecology. The state rules for Shoreline Master Programs are found in WAC 173-26. A major update of these rules was proposed in 2000. Due to a legal challenge, the updated rules were negotiated over the course of more than a year with groups including the Association of Washington Business, Washington Aggregates & Concrete Association, and Washington Environmental Council. The state rule (WAC) that resulted from these negotiations was adopted in 2003. All jurisdictions are required to adopted changes to their SMP to comply with the updated rule by 2014.

Moses Lake has had a Shoreline Master Program (SMP) since 1975. The original SMP was written with the help of a citizen committee. It was intended to be updated every two years, but no significant changes were ever adopted, and the last review was 1988. Since that time, Moses Lake has experienced significant amounts of development, additional shoreline areas were added through annexation, and the state rules on master programs have changed significantly. Scientists' understanding of the functions provided by shoreline areas, and the importance of protecting those areas, has increased during that time as well.

Jurisdiction and Applicability

The Shoreline Management Act regulates uses, activities, and modifications within 200' of the ordinary high water mark (OHWM) of lakes and streams. The 200' jurisdiction is expanded to include the upland boundary of any wetlands that are partially located within 200' of the OHWM.

While the City of Moses Lake only has jurisdiction over areas within the City, this Master Program includes environment designations for the entire Moses Lake Urban Growth Area. However, areas outside the City are regulated by Grant County's Shoreline Master Program until such a time as they are annexed into the City. Environment designations for the Urban Growth Area are required so that jurisdictions don't have to amend their SMPs every time they do an annexation.

Shoreline Master Program Update Process

Since planning works best when you know what you are planning for, one of the state requirements of a shoreline master program update is to develop an inventory of the natural characteristics and land use patterns of the shorelines. The inventory data is used to classify segments of the shoreline into "environment designations", which are similar to zoning designations. Regulations specific to each environment designation are developed, along with policies and regulations for specific shoreline uses and modifications.

The City has learned from past experience that when state funding is offered to help jurisdictions comply with state mandates, there is never enough funding for all jurisdictions. Therefore, when the Department of Ecology offered grant funding in 2004 for updating of shoreline master programs, the City applied for and received a grant. Part of the grant money was used for a shoreline inventory by Geo-Ecology Research Group of Central Washington University. The inventory consisted of compiling, mapping, and analyzing information including zoning, land use, docks, bulkheads, wetlands, soil permeability, etc. The remainder of the grant money was used for Highlands Associates of Okanogan to take the shoreline inventory and analysis, state Shoreline Master Program guidelines, work by Moses Lake's Shoreline Citizen Advisory Committee, and Planning Commission input to create drafts of the regulatory chapters of the SMP update. At the end of that process, the draft SMP was not yet acceptable to either the state or the local citizens and Planning Commission, so staff continued to refine the draft SMP as workload allowed. A number of public meetings were held, with opportunities to comment on and participate in the update process. See Chapter 2 for the specifics of the public participation process that was followed for the update of the SMP.

Relationship to Other Plans and Regulations

In addition to compliance with the provisions of the Shoreline Management Act of 1971 and the state Shoreline Guidelines (WAC), the City of Moses Lake Shoreline Master Program is required to be consistent with local plans and policy documents, specifically the City of Moses Lake Comprehensive Plan and the City's critical area regulations (critical areas are defined by the state as wetlands, fish and wildlife habitat, steep slopes, flood plains, and aquifer recharge areas). The Master Program must be consistent with the regulations developed by the City to implement its plans, such as the zoning code and subdivision code, as well as regulations relating to building construction and safety.

Uses, developments and activities regulated by this Master Program may also be subject to the provisions of the City of Moses Lake Comprehensive Plan, the Washington State Environmental Policy Act (SEPA: RCW 43.21 and WAC 197-11), the City of Moses Lake Municipal Code, and various other provisions of local, state, and federal law, as may be amended. Project proponents shall comply with all applicable laws prior to commencing any use, development, or activity.

In the event a conflict occurs between provisions of this Master Program and the laws, regulations, codes, or rules of any other authority having jurisdiction within the City, the regulations that provide more protection to the shoreline area shall apply, except when constrained by federal or state law, or where specifically provided otherwise in this Master Program.

An applicant applying for a permit from the City is required to be in compliance with all other local, county, state, regional, or federal statutes or regulations, which may also be applicable to such development or use.

At the time of an initial inquiry or when a permit application is submitted, the Shoreline Administrator should inform an applicant of those regulations and statutes that may also be applicable to the proposed project to the best of the Administrator's knowledge, provided, that the final responsibility for determining the applicability and complying with such other statutes and regulations shall rest with the applicant.

Other activities that could occur along the shoreline (disposing or spilling/releasing of regulated or hazardous waste products, use of pesticides, activities within wetlands) may require other permits, review, or approval not identified here.

HOW TO USE THIS SHORELINE MASTER PROGRAM

1. Start with the map of Shoreline Environment Designations. This map functions in a similar way to a zoning map, in that the Environment Designation for a parcel determines allowed uses and development standards.

2. Next, refer to Tables 9.2 and 9.3 in Chapter 9, Environment Designations. These tables give a summary of the uses allowed in each environment designation and an overview of the standards (such as setbacks) that apply. Also in Chapter 9 are management policies for each environment designation.

3. Once you know whether your proposed use is allowed and the basic constraints of the site, flip to the specific sections in Chapter 7, Specific Use Policies and Regulations, and Chapter 8, Modification Policies and Regulations, for your planned uses and modifications. Remember to look at all the sections that apply. Chapter 8 begins with a general section that applies to all shoreline modifications.

4. Chapter 6, General Policies and Regulations, as the name suggests, contains general policies and regulations that could apply to any project, including such topics as critical area regulations, public access requirements, and subdivision provisions. Review this chapter to determine which sections apply to your project. The chapter begins with a general section that applies to all projects.

5. Details about the permit process are found in Chapter 12, Administration.

Chapter 2
Public Participation Process

Citizen Advisory Committee

In 1998, the City formed a Citizen Advisory Committee of volunteers to review draft language for the Shoreline Master Program (SMP) update. The draft language was based on a model SMP developed by the Department of Ecology. The Committee met monthly starting in 1998 through 2001, when it was determined that a shoreline inventory was needed before any more work could be done on the SMP update. Minutes of the Committee meetings and the draft language discussed by the Committee formed a basis for the goals, policies, and regulations in this draft SMP.

Open Houses, Planning Commission, and City Council Involvement

Date	Action
Sept 2004	Open House to introduce the project, present inventory and analysis work done so far, and discuss draft goals and policies
Nov/Dec 2004	The Planning Commission held five study sessions to review draft policies that had been written as part of the SMP update.
June 2005	The Planning Commission held a study session to learn about the consultants' work on the inventory and analysis.
Nov/Dec 2005	The Planning Commission held two study sessions to discuss the shoreline environment designations.
Jan 2006	Open House to present inventory and analysis, draft environment designations, and draft goals, policies, and regulations; and gather public input. Sedimentation issue raised by Moses Lake Irrigation and Rehabilitation District was a major area of discussion.
Feb 2006	Open House as a follow-up to January Open House, to present remaining regulatory chapters of the draft SMP (uses and modifications) and further discuss sedimentation.
Mar/Apr 2006	The Planning Commission held six study sessions to review the regulations that had been drafted in support of the policies previously reviewed.
June 2006	Staff issued a "Response to Comments" document addressing all of the comments made at the open houses and study sessions, and those submitted in writing.
July 2008	The Planning Commission held on-site study sessions, visiting several shoreline sites with Department of Ecology and Department of Fish & Wildlife staff to discuss the effects the updated SMP would have once adopted.
Feb 2010	City staff and Department of Ecology staff presented an overview of the SMP update process to the City Council at Council Retreat.
Jan 2011	Department of Ecology staff had a study session with the Planning Commission to discuss some of the remaining issues for the SMP draft.
Mar 2012 to Dec 2013	Planning Commission intensively reviewed the draft at monthly study sessions (23 total).
Oct 2013	Open House on the SMP draft and the Cumulative Impacts Analysis (CIA) with the CIA consultant. Notice was mailed to every shoreline property owner in the City and UGA. Approximately 150 attended.
Jan 29, 2014	Open House.
Feb 27, 2014	Planning Commission Public Hearing on draft SMP.
Mar 27, 2014	Planning Commission recommended draft SMP to City Council.
Apr 28, 2014	Issued Determination of Non-Significance.
Apr 29, 2014	Opened 60-day public comment period and notified Department of Commerce of intent to adopt updated SMP. Per the official process, Commerce is to notify other agencies. The only comments received were from Department of Ecology and Department of Fish and Wildlife. These comments were addressed in the Response to Comments approved by the City Council August 26, 2014.
May 13, 2014	City Council opened a public hearing on the Planning Commission's recommended draft SMP. To be consistent with the 60-day notice period, the Council continued the hearing to the next three meetings, providing four opportunities for the public to speak in a public

Date	Action
	hearing format (May 13, May 27, June 10, and June 24). No one spoke at any of the hearings.
Sept 23, 2014	First reading of the ordinance adopting the updated SMP and repealing the 1974 SMP.
Oct 14, 2014	Second reading of the ordinance adopting the updated SMP and repealing the 1974 SMP.

Public Information and Outreach

The 2006 open houses were advertised in the Columbia Basin Herald newspaper, and notices were mailed to the mailing list that has been developed for the SMP update. The 2013 and 2014 open houses were advertised on the City's website and Facebook page, flyers were posted, and notices were mailed and emailed to those on the mailing lists. Notice of the October 2013 open house was mailed to every shoreline property owner in the City and UGA.

Public hearing notification included legal notices in the Columbia Basin Herald newspaper, City website and Facebook announcements, and notices emailed to the mailing list.

A Shoreline Information page on the City's website was created in 2006 to provide another method of disseminating SMP update information. The page has included draft SMP chapters, minutes of study sessions, open house announcements, response to public comments on the 2006 SMP draft, shoreline inventory information, notice that the inventory map portfolio is available for viewing at City Hall and as a DVD, contact information for the SMP update and shoreline permits, and a link to Ecology's Shoreline Management page. The page was updated as new information became available.

In 2012, the City launched a much-improved website, with much greater ability to add and customize pages. Staff has used this website to create multiple shoreline pages to keep the SMP update information current, as well as providing links to hot topics like shoreline stabilization and vegetation. The SMP update pages include documents such as current drafts, study session minutes, the inventory and analysis, cumulative impacts assessment, comments received, maps, FAQs, etc. Short news items have been posted on the home page, with links to the SMP update pages. Through the website, the public can sign up for email notifications on topics that interest them, including the SMP update.

Staff gave copies of a DVD with the Shoreline Inventory information to interested parties, in Arc GIS format for those with the software to use it, and with a simplified reader program (ArcReader) for those without. Staff also used a computer at the front counter to show the inventory information to interested parties who lacked the computer hardware to be able to view the DVD.

Agencies Contacted

Washington State Department of Ecology
Washington State Department Fish and Wildlife
Washington State Department Natural Resources
Washington State Department Archaeology and Historic Preservation
Washington State Department Transportation
Washington State Department Commerce, Growth Management Division of
United States Army Corps of Engineers
United States Bureau of Reclamation
East Columbia Basin Irrigation District
Moses Lake Irrigation and Rehabilitation District
Colville Confederated Tribes

Chapter 3
Shoreline Inventory and Characterization

This chapter is not an official part of the Shoreline Master Program.

See City of Moses Lake Shoreline Inventory and Characterization
Final Draft
June 2005
Prepared by Geo-Ecology Research Group
Department of Geography and Land Studies
Central Washington University

Chapter 4
Reserved

This chapter is not used at the current time.

Chapter 5
Shoreline Goals

Shoreline Use Element

Shoreline Use Goal: Provide for reasonable and appropriate use of shoreline and adjacent land areas while recognizing and protecting private property rights consistent with the public interest, protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the state and their aquatic life; minimizing damage to the ecology, environment, and other resources of the shoreline area; and minimizing any interference with the public's use of the water.

Economic Development Element

Economic Development Goal: Provide for economically productive industrial and commercial uses that are particularly dependent on shoreline location or use and that will support the local economy and foster healthy, orderly economic growth.

Public Access Element

Public Access Goal: Provide, protect, and enhance physical and visual public access to shorelines, the waters they encompass, and adjacent shoreline areas, consistent with the natural character, features, and resources of the shoreline, private property rights, and public safety.

Recreation Element

Recreation Goal: Provide for the preservation and enlargement of public and private recreational use of shorelines and the waters they encompass for both active and passive recreation in areas that will be able to accommodate such uses now and in the future without net loss of shoreline functions, and where recreational use is compatible with adjacent uses.

Circulation Element

Transportation Goal: Provide a safe, reasonable, and adequate traffic circulation system, designed to have the least possible adverse effect on shoreline resources, and where feasible that contributes to the functional and visual enhancement of those resources.

Conservation Element

Conservation Goal: Preservation and restoration of natural resources of shorelines and the waters they encompass, and protection of those resources against adverse impacts, including loss of ecological functions necessary to sustain the natural resources.

Historic, Cultural, Scientific, and Educational Element

Historic, Cultural, Scientific, and Educational Goal: Identify and protect important archaeological, historical, and cultural structures, sites, and areas and other resources having historic, cultural, or educational values that are located in the shoreline area for educational, scientific, and enjoyment uses of the general public.

Flood Protection Element

Flood Protection Goal: Minimize flood damage in shoreline areas and associated waters, including damage resulting from actions outside shoreline areas.

Chapter 6
General Policies and Regulations

6-1 Introduction

The General Policies and Regulations apply to all uses and activities within shoreline areas, regardless of the Shoreline Environment Designation. (See Chapter 9 for an explanation of Shoreline Environment Designations.) They are intended to be used in conjunction with the more specific use and activity regulations in Chapters 7 and 8 of the Moses Lake SMP, as well as the Shoreline-Environment specific policies and regulations in Chapter 9. General Policies and Regulations cover the following areas:

- Section 6-10 Overall Development Policies (policies only)
- Section 6-20 Archaeological and Historic Resources
- Section 6-30 Critical Areas
    - Section 6-30-010 General
    - Section 6-30-020 Aquifer recharge areas
    - Section 6-30-030 Fish and wildlife habitat conservation areas
    - Section 6-30-040 Frequently flooded areas
    - Section 6-30-050 Geologically hazardous areas
    - Section 6-30-060 Wetlands
- Section 6-40 Economic Development (policies only)
- Section 6-50 Environmental Impacts and Water Quality
- Section 6-60 Parking
- Section 6-70 Public Access
- Section 6-80 Signage
- Section 6-90 Subdivision and Property Segregation
- Section 6-100 Utilities (Accessory)

General Policies and Regulations

6-10. Overall Development Policies

The following policies apply to all shoreline areas in the City of Moses Lake.

1. Development should be permitted only in those areas that are capable of supporting the proposed use or activity without net loss of shoreline ecological functions. Impacts to shoreline natural character, resources, and ecology should be avoided when possible, minimized when the impacts are unavoidable, and any remaining impacts should be mitigated.
2. Permitted uses and activities should be located, sited, designed, managed, and maintained to be compatible with the shoreline environment and to prevent degradation of shoreline resources, including the following:
    a. Water quality;
    b. Visual, cultural and historic characteristics;
    c. Physical resources (including soils);
    d. Biological resources (including upland, riparian, and aquatic plant communities, wildlife, and aquatic life);
    e. Ecological processes and functions; and
    f. The natural character of the shoreline area.
3. Any use or activity that cannot be mitigated to prevent degradation of shoreline ecological resources and to protect the integrity of the shoreline environment should be prohibited.
4. Development standards, including densities and minimum frontage standards, should be established to ensure that new development results in no net loss of shoreline ecological functions. Criteria considered in establishing those standards should include, but need not be limited to, the following:
    a. Biophysical limitations and ecological functions and values of the shoreline area;
    b. Surrounding development characteristics and land division pattern;

c. Level of infrastructure and services available or planned;

d. Comprehensive Plan designation and zoning.

5. The ecosystem-wide impacts of a large development, including the cumulative impacts of exempt uses and activities within the development over time, should be considered in approving, conditionally approving, or denying shoreline permits for multi-lot subdivisions and other large developments.

6. New uses and activities should be restricted to those that will not require extensive alteration of the land-water interface. Construction of shoreline stabilization works should be minimized. New uses and activities should be designed to preclude the need for such works.

7. Uses and activities should be compatible with existing conforming and planned uses on surrounding sites and in adjacent environments.

8. Public access and public recreation objectives should be implemented whenever feasible when significant adverse impacts can be mitigated. However, preservation of resources should have priority over public access, recreation, and development objectives whenever a conflict exists.

9. Regulations designed to maintain ecological functions over time should be established for uses and activities (including both development and redevelopment) in all Environments. Specifically, those regulations should address vegetation management, critical areas, and water quality; and should include development standards for shoreline modifications.

10. When this SMP requires mitigation, the mitigation provisions of Appendix A, Mitigation, shall apply, along with any additional mitigation provisions of the specific section of the SMP.

6-20. Archaeological and Historic Resources

6-20-010. The following policies and regulations apply to all sites, buildings, structures, districts, and objects within shoreline jurisdiction that are identified in the *Shoreline Inventory and Characterization;* that are recorded at the Washington Department of Archaeology and Historic Preservation (DAHP); and/or within local jurisdictions, including the City of Moses Lake, Grant County, and affected Indian tribes; or that have been inadvertently discovered.

6-20-020. Policies

1. Due to the limited and irreplaceable nature of archaeological and historic resources, all uses and activities (public and private) should be prevented from destroying or damaging any site that has significant historic, cultural, scientific, or educational value as identified by the appropriate authorities, including affected Indian tribes. Where feasible, such sites should be permanently preserved for scientific study and public observation.

2. Since state law requires protection of archaeological and historic resources, sites within the City containing such resources should be identified to avoid damage to the resources and the delay and expense associated with discovery of resources during development.

3. For sites in areas documented to contain archaeological and historic resources, a site inspection and evaluation by a cultural resource management professional should be required before issuance of any permits or exemptions.

6-20-030. Regulations

1. Archaeological sites are subject to the National Historic Preservation Act, as amended (16USC470), RCW 27.44 (Indian Graves and Records), RCW 27.53 (Archaeological Sites and Resources), and WAC 25-48 (Archaeological Excavation and Removal Permit).

2. An evaluation and a report meeting the minimal reporting standards of DAHP, prepared by a cultural resource management professional who meets the qualification standards promulgated by the National Park Service and published in 36 CFR Part 61, shall be required before the start of any ground disturbance work in any area known to contain archaeological or historic resources. The City may require such an evaluation prior to the issuance of any shoreline permit or shoreline exemption. The completed archaeological evaluation shall be submitted to DAHP and the interested Tribe for review prior to issuance of any shoreline permits.

3. All shoreline permits shall contain provisions that require immediate stoppage of work and notification of the City, the DAHP, and the Colville Confederated Tribes if anything of possible archaeological interest is

uncovered during excavation or other development. Before work can resume, all requirements of the DAHP must be met.

4. Archaeological excavations may be permitted subject to the provisions of this master program.

6-30. Critical Areas (within shoreline jurisdiction)

6-30-010. As defined in RCW 36.70A, critical areas include wetlands, aquifer recharge areas, fish and wildlife habitat conservation areas, frequently flooded areas, and geologically hazardous areas. Critical areas are those areas with especially fragile biophysical characteristics and/or with significant environmental resources. Critical areas include both natural resource areas that benefit the public welfare through the functions they provide, and areas that may threaten the health and safety of the public.

This section includes general provisions that apply to all critical areas within shoreline jurisdiction, and provisions specific to each of the five types of critical areas.

6-30-020. General Provisions

6-30-020-A. Policies

1. Critical areas should be managed to protect against adverse effects to public health and safety and against any loss of shoreline ecological function, including adverse effects on the land and its vegetation and wildlife, and the water and its aquatic life.
2. Development standards in shoreline critical areas should be consistent with the City's standards for development in critical areas throughout the city when consistency with said standards is sufficient to ensure no net loss of shoreline ecological functions.
3. Incompatible uses should not be allowed in critical areas. Uses that are incompatible may vary for different types of critical areas.
4. Unique, rare, and fragile natural and man-made features as well as scenic vistas and valuable wildlife habitats should be preserved and protected from degradation or interference.
5. Areas with unique and/or fragile geological or biological characteristics, such as wetlands and dunes, which would be damaged by certain kinds of public access, should be protected from such access.
6. Shorelines that are identified as hazardous for or sensitive to development should not be used for intensive development.
7. Regulations for critical areas should protect existing ecological functions and ecosystem-wide processes and restore degraded ecological functions and ecosystem-wide processes.

6-30-020-B. Regulations

1. All shoreline development shall be designed in accordance with all applicable federal, state, and local regulations, including the Federal Emergency Management Agency (FEMA) flood control management codes and regulations, the State Environmental Policy Act (SEPA), and the Moses Lake Municipal Code (MLMC). MLMC 18.53 addresses flood hazard areas and is adopted by reference. See Appendix B.
2. All shoreline uses and activities shall be located, designed, constructed, managed, and maintained to protect critical areas and the shoreline ecological processes that depend on them.
3. When a development site includes critical areas, those areas shall be left intact and maintained as open space unless alteration of the critical area and its functions is otherwise mitigated. Minimized, mitigated alteration of the critical area may be authorized only if all reasonable use would be otherwise precluded and the mitigation sequence listed below is followed.
    a. Where critical areas are left intact, all development shall be set back from those areas to prevent hazardous conditions and property damage, as well as to protect shoreline ecological functions and other valuable shoreline features.
    b. Projects containing critical areas shall include measures to mitigate environmental impacts not otherwise avoided or mitigated by compliance with applicable regulations. The mitigation sequence in WAC 173-26-201(2)(e) shall be used. Mitigation measures shall be applied in the following sequence of steps listed in order of priority, with (i) of this subsection being top priority.

i. Avoiding the impact altogether by not taking a certain action or parts of an action;

ii. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts;

iii. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

iv. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action;

v. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments in compliance with Chapter 11, Shoreline Protection and Restoration.

vi. Monitoring the impact and taking appropriate corrective measures. Monitoring and contingency actions shall be specified as conditions in the shoreline permit or approved exemption for the project. The proponent shall guarantee the monitoring and contingency actions with a performance bond or other surety acceptable to the City Attorney.

4. Required critical areas reports, including site analyses, hydrogeologic assessments, habitat assessments, habitat management plans, geotechnical reports, geologic hazard plans, but not including wetland analysis reports, and compensatory mitigation reports, shall, at a minimum, include the following. The requirements for wetland analysis reports, and compensatory mitigation reports are listed in the wetlands section below and Appendix A, Mitigation.

a. Applicant's name and contact information; all local, state, federal, and/or tribal critical-areas-related permits required for the project, and description of the proposal;

b. A description of the project, including nature, density, and intensity of the proposed development, and associated grading, structures, roads, easements, stormwater facilities, utilities, etc. in sufficient detail to allow analysis of the proposed land use changes upon the critical area;

c. A copy of the site plan for the development proposal, drawn to scale, including a vicinity map and showing:

i. Identified critical areas and the development proposal with dimensions, including existing and proposed structures, impervious surfaces, utilities, roads, easements, and adjacent land uses;

ii. Limits of any areas to be cleared; and

iii. A description of the proposed stormwater management plan for the development and consideration of impacts to drainage alterations;

d. The names, contact information, and qualifications of the persons preparing the report and documentation of any fieldwork performed on the site;

e. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area;

f. A detailed discussion of surface and subsurface hydrological features both on and adjacent to the site, where determined appropriate by the Community Development Department;

g. A description of the vegetation on the overall project site, within the buffer area, and adjacent to the site;

h. An assessment of the probable cumulative impacts to critical areas and buffers resulting from the proposed development of the site;

i. An analysis of site development alternatives;

j. A description of reasonable efforts made to apply mitigation sequencing to avoid, minimize, and mitigate impacts to critical areas;

k. A mitigation plan, as needed, in accordance with the mitigation requirements of this chapter and Appendix A, including, but not limited to:

i. The impacts of any proposed development within or adjacent to a critical area; and

ii. The impacts of any proposed alteration of a critical area on the development proposal, other properties and the environment;

l. A discussion of the performance standards applicable to the critical areas and proposed activity;

m. Financial guarantees to ensure compliance; and

n. Any additional information required for specific critical areas as listed in subsequent sections of this chapter.

5. In case of differences between the Master Program and other provisions of the Moses Lake Municipal Code, the more restrictive requirements shall apply.

6. Mitigation. Where this Master Program refers to "mitigation" or "compensatory mitigation", the provisions of Appendix A, Mitigation, apply.

6-30-030. Critical Areas: Aquifer Recharge Areas

6-30-030-A. Aquifer Recharge Areas are areas with a critical recharging effect on aquifers used for potable waters. They are highly vulnerable to contamination from intensive land uses.

Note that Aquifer Recharge Areas are a type of Critical Area, so the General Provisions and Regulations for Critical Areas also apply.

6-30-030-B. Policies

1. Development in shoreline aquifer recharge areas should not contribute contaminants or facilitate degradation of aquifers, either within or beyond shoreline areas.

6-30-030-C. Regulations

1. All uses and activities in shoreline areas, including individual single-family residences, shall be subject to the Aquifer Recharge Area provisions of this section.

2. Discharge in to the groundwater of the city shall not contribute contaminants or facilitate degradation of aquifers. Development approvals shall ensure that all best management practices are employed to avoid contributing pollutants to aquifers. Where warranted, based on the findings of a site analysis or hydrogeologic assessment, complete collection and disposal of stormwater may be required. The *Stormwater Management Manual for Eastern Washington* (Washington Department of Ecology Publication 04-10-076, or as revised) shall provide the preferred guidance for stormwater best management practices.

3. A site analysis shall be required when any use or activity is proposed in an area in which, based on the findings of the *Shoreline Inventory and Characterization*, runoff or infiltration is likely to recharge an aquifer. The site analysis shall use scientifically valid methods and studies to establish existing (baseline) water quality and shall be used to develop conditions of approval to ensure that the proposed development will not contribute contaminants or facilitate degradation of recharge areas. The site analysis shall be based on the following items:

   a. Available information about regional groundwater hydrology

   b. Detailed information about:

      i. Hydrogeologic susceptibility to contamination and contaminant loading potential.

      ii. Depth to groundwater.

      iii. Hydraulic conductivity and gradient.

      iv. Soil texture, permeability, and contaminant attenuation potential.

4. A hydrogeologic assessment shall be required for the following land uses:

   a. Hazardous substance processing and handling.

   b. Hazardous waste treatment and storage facility.

   c. Wastewater treatment plant sludge disposal.

   d. Solid waste disposal facility.

5. A required hydrogeologic assessment shall be submitted by a hydrogeologist licensed by the state of Washington. The hydrogeologic assessment shall use scientifically valid methods and studies to establish existing (baseline) water quality and shall be used to develop conditions of approval to ensure that the proposed development will not contribute contaminants or facilitate degradation of recharge areas. In addition to the information required in all critical areas reports, the assessment shall include, at a minimum:

a. Pertinent well log and geologic data.

b. Ambient groundwater quality.

c. Groundwater elevation.

d. Recharge potential of facility site.

e. Current data on wells and any springs located within one thousand feet (1,000') of the facility.

f. Surface water location and potential recharge.

g. Water supply source for the facility.

h. Analysis and discussion of the effects of the proposed project on the groundwater resource.

6. A required hydrogeologic assessment must demonstrate that the proposed use does not present a threat of contamination to the aquifer system. Successful demonstration of those findings warrants approval under this section.

6-30-040. Critical Areas: Fish and Wildlife Habitat Conservation Areas

Note that Fish and Wildlife Habitat Conservation Areas are a type of Critical Area, so the General Provisions and Regulations for Critical Areas also apply.

6-30-040-A. Policies

1. Development in Fish and Wildlife Habitat Conservation Areas should result in no net loss of shoreline ecological functions.

6-30-040-B. Regulations

1. Within shoreline areas, Fish and Wildlife Habitat Conservation Areas include:

   a. All areas identified in the "Biological Synthesis" map of the *Shoreline Inventory and Characterization* as Natural Heritage Sites, Priority Habitat and Species areas, or Wetlands;

   b. All other areas with which any Species of Concern, Priority Species, or federally-listed species has a primary association; and

   c. All other Priority Habitat areas.

   d. Shoreline buffer areas established in Chapter 9, Table 9.3.

2. All uses and activities shall comply with the Vegetation Conservation provisions in Chapter 8 of this SMP and the Wetlands provisions in this chapter.

3. Mitigation Ratios. Mitigation ratios shall be used when impacts to buffers are unavoidable. The onsite mitigation ratio (mitigation amount : disturbed area), shall be at a minimum ratio of 1:1 for development within buffer areas established in Table 9.3.

4. Habitat assessments

   a. A habitat assessment shall be required prior to approval of the following uses and activities:

      Any use or activity requiring a shoreline permit, where the use or activity is proposed closer than the required shoreline buffers in Table 9.3 or within required wetland buffers in Section 6-30-070-C.

   b. When required, a habitat assessment shall be prepared by a professional wildlife biologist. In addition to the information required in all critical areas reports, the habitat assessment shall include, at a minimum, the following:

      i. An analysis and discussion of species or habitats known or suspected to be located on the site or within three hundred feet (300') of the site.

      ii. A site plan that clearly delineates the fish and wildlife habitats found.

      iii. An analysis and discussion of the anticipated effects of the proposed use or activity on fish and wildlife habitat, including the likelihood that any Priority Species, Species of Concern, or federally-listed species will maintain and reproduce over the long term.

   c. Required habitat assessments shall be forwarded for review and comment to agencies with expertise or

jurisdiction related to the proposal, including, but not limited to:

i. The Washington Department of Fish and Wildlife.

ii. The Washington Department of Natural Resources.

iii. The U. S. Fish and Wildlife Service. (only when federally-listed species are thought to be present)

iv. The Washington Department of Ecology.

d. The City shall consider the habitat assessment, any comments received from reviewing agencies within thirty (30) days, and the findings of the *Shoreline Inventory and Characterization*.

i. If the City determines, based upon its review, that the proposed use or activity is not likely to result in loss of fish and wildlife habitat, the development may proceed without any additional requirements under this section.

ii. If the City determines, based upon its review, that a use or activity requiring a shoreline substantial development permit is likely to result in loss of fish and wildlife habitat, a habitat management plan shall be prepared.

iii. If the City determines, based upon its review, that a use or activity that is exempt from the requirement for a shoreline substantial development permit is likely to result in loss of fish and wildlife habitat, the Administrator shall require buffers and setbacks adequate to protect the habitat, based on Best Available Science. Consultation with agencies with expertise or jurisdiction related to the subject species or habitat and, where applicable, The Washington Department of Commerce's *Citations of Recommended Sources of Best Available Science For Designating and Protecting Critical Areas*, as amended, shall be the preferred source of information regarding Best Available Science.

5. Habitat Management Plans

a. A habitat management plan required under this section shall be prepared by a professional wildlife biologist. In addition to the information required in all critical areas reports, the habitat management plan shall include, at a minimum, the following:

i. Analysis and discussion of the project's effects on fish and wildlife habitat.

ii. An assessment and discussion of special management recommendations that have been developed for species or habitat located on the site by any federal or state agency.

iii. Proposed mitigation measures that could minimize or avoid impacts.

iv. Assessment and evaluation of the effectiveness of mitigation measures proposed.

v. A detailed discussion of ongoing management practices which will protect the habitat conservation area after the project has been fully developed, including proposed monitoring, contingency, maintenance, and surety programs as provided for in this Master Program.

b. Required habitat management plans shall be forwarded for review and comment to agencies with expertise or jurisdiction related to the proposal, including, but not limited to:

i. The Washington Department of Fish and Wildlife.

ii. The Washington Department of Natural Resources.

iii. The U. S. Fish and Wildlife Service. (only when federally-listed species are thought to be present)

iv. The Washington Department of Ecology.

c. The City shall consider the habitat management plan, any comments received from reviewing agencies within thirty (30) days, and the findings of the *Shoreline Inventory and Characterization*.

i. If the City determines, based upon its review, that the proposed use or activity will cause no net loss of fish and wildlife habitat, the project may proceed without any additional requirements under this section.

ii. If the City determines, based upon its review, that mitigation will be required to protect fish and wildlife habitat, the Administrator shall require mitigation sufficient to ensure no net loss of ecological function and to protect fish and wildlife habitat as a condition of project approval. Consultation with agencies with expertise or jurisdiction related to the subject species or habitat and, where applicable, The Washington Department of Commerce's *Citations of Recommended Sources of Best Available*

Science For Designating and Protecting Critical Areas shall be the preferred source of information regarding Best Available Science.

iii. If the City determines, based upon its review, that impacts of the proposed use or activity on fish and wildlife habitat cannot be mitigated, approval of the project shall be denied.

6-30-050. Critical Areas: Frequently Flooded Areas

6-30-050-A. Frequently flooded areas are areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for Grant County, Washington and Incorporated Areas" dated February 18, 2009, and any revisions thereto, with accompanying flood insurance maps.

Note that Frequently Flooded Areas are a type of Critical Area, so the General Provisions and Regulations for Critical Areas also apply.

6-30-050-B. Policies

1. All uses in frequently flooded areas should be sited, designed, implemented, operated, and maintained to avoid impacts to shoreline ecological functions and processes.
2. All activities in frequently flooded areas, including shoreline modifications, should be conducted to avoid impacts to shoreline ecological functions and processes.
3. Development standards in frequently-flooded shoreline areas should reflect the findings of the *Shoreline Inventory and Characterization*.

6-30-050-C. Regulations

1. All uses and activities in shoreline areas, including individual single-family residences, shall be subject to the Flood Hazard Area provisions of the Moses Lake Municipal Code, Chapter 18.53, dated 2-10-2009 and found in Appendix B.
2. All uses in frequently flooded areas, including non-structural development (such as recreation trails), shall be sited, designed, implemented, operated, and maintained to avoid impacts to shoreline ecological functions and processes.
3. All activities in frequently flooded areas, including shoreline modifications, shall be conducted to avoid impacts to shoreline ecological functions and processes.

6-30-060. Critical Areas: Geologically Hazardous Areas

6-30-060-A. Geologically hazardous areas are areas susceptible to erosion hazard, landslide hazard, or seismic activity. In general, such areas are not suitable for placing structures or locating intense activities or uses due to the inherent threat to public health and safety.

Note that Geologically Hazardous Areas are a type of Critical Area, so the General Provisions and Regulations for Critical Areas also apply.

6-30-060-B. Policies

1. Development should be prohibited or minimized on unstable or moderately unstable slopes.
2. Development should be permitted only in locations where no slope protection is necessary or where non-structural protection is sufficient for the life of the project. Structures should be designed and constructed in a manner that provides safety for the useful life of the structure and does not require construction of a retaining wall, bulkhead, or other structural shoreline stabilization during that time span.
3. Because vegetation removal during development of adjacent uplands alters surface runoff and ground water infiltration patterns and can lead to decreased slope stability, vegetation removal on or near steep slopes should be avoided. Retention of natural vegetative buffers should be encouraged.
4. Changes in surface runoff and ground water infiltration patterns that could increase erosion or otherwise destabilize steep slopes (including changes above or below the slope) should be avoided. Specifically, discharge of runoff from impermeable surfaces onto slopes should be avoided.
5. All lots should be of sufficient size that development will not cause the need for structural shoreline

stabilization.

6-30-060-C. Regulations

1. All uses and activities in shoreline areas, including individual single-family residences, shall be subject to the Geologically Hazardous Area provisions of the Moses Lake Municipal Code, Chapter 19.03, dated 7-27-2010, and to the provisions of this section.
2. All shoreline areas where, based on the maps developed as part of the *Shoreline Inventory and Characterization*, erosion hazard is "very high" and slope is greater than 15%, are designated as "unstable slopes."
3. All shoreline areas where, based on the maps developed as part of the *Shoreline Inventory and Characterization*, erosion hazard is "moderate" and slope is greater than 15%, are designated as "moderately unstable slopes."
4. Applications for uses and activities in the following areas shall be accompanied by a geotechnical report that has been prepared by an Engineering Geologist or other geotechnical professional licensed by the State of Washington and that includes the information required in all critical areas reports and meets the standards specified in Section 19.03.160.C of the City of Moses Lake Municipal Code. If it is determined within the geotechnical report that development of the site would present a potential threat to public health, safety, or welfare, or to shoreline ecological functions, then the applicant shall prepare a geologic hazard plan that includes the information required in all critical areas reports and meets the standards specified in section 19.03.160.E of the City of Moses Lake's Municipal Code.
    a. On unstable or moderately unstable slopes.
    b. In areas between unstable or moderately unstable slopes and the OHWM (i.e., areas below unstable slopes).
    c. In areas above unstable or moderately unstable slopes that are within shoreline areas or are within 100 feet of the top of the slope (upland areas draining to unstable slopes).
5. No use or activity shall increase or result in slope instability, erosion, sedimentation, or increased runoff from the site.
6. Removal of vegetation from unstable and moderately unstable slopes and from areas between such slopes and the OHWM (areas below unstable slopes) is prohibited, provided that noxious weeds may be removed in accordance with the Vegetation Conservation provisions of this SMP, section 8-35.
7. Removal of vegetation from upland areas draining to unstable slopes shall be limited to the minimum necessary to allow the proposed use, provided that noxious weeds may be removed in accordance with the Vegetation Conservation provisions of this SMP, section 8-35.
8. In all cases in which a geologic hazard plan is required, the City shall review the plan and determine whether the development proposal warrants approval, conditional approval, or denial. The City shall consider the following factors in making its determination:
    a. Onsite and offsite effects on the stability of slopes affected by the proposed use or activity (including effects of vegetation removal) or runoff from the proposed use or activity.
    b. Effects of the proposed use or activity (including the effects of vegetation removal) on sedimentation, and of any increases in sedimentation on waters of the state.
    c. Proposed vegetation removal.
    d. Proposed increase in impermeable surface area.
9. Stabilization structures or measures to protect existing primary residential structures may be allowed if all of the following conditions are met:
    a. The applicant has shown that no alternatives, including relocation or reconstruction of existing structures, are feasible, and less expensive than the proposed stabilization measure.
    b. The proposal will be in strict compliance with WAC 173-26-231 requirements and the Shoreline Stabilization provisions in Chapter 8 of this Shoreline Master Program.
    c. The applicant has shown that no net loss of ecological functions will result.

6-30-070. Critical Areas: Wetlands

6-30-070-A. Applicability: Wetlands are defined by the State in RCW 90.58.030(2)(h) as areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. However, wetlands do include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

Note that Wetlands are a type of Critical Area, so the General Provisions and Regulations for Critical Areas also apply.

6-30-070-B. Policies

1. Wetlands serve many important ecological and environmental functions, and help to protect public health, safety, and welfare by providing flood storage and conveyance, erosion and sediment control, fish production, fish and wildlife habitat, recreation, water quality protection, water supply, and opportunities for education and scientific research. Wetlands should be preserved and protected to protect the valuable functions provided to society.
2. Wetland areas should be identified and classified according to the wetland designation criteria in WAC 173-22-035 as revised, and the *Washington State Wetlands Rating System for Eastern Washington* (Washington Department of Ecology Publication 04-06-15, or as amended), respectively.
3. All wetlands and associated buffers should be protected from alterations that adversely impact them, so that there is no net loss of wetland acreage or functions or of any shoreline ecological functions, including lost time when the wetland does not function. Wetland restoration, creation, and enhancement projects should result in no net loss of wetland acreage and functions or of any shoreline ecological functions. Where feasible, wetland quality should be improved.
4. All uses and activities that potentially affect wetland ecosystems should be controlled within both the wetland and the buffer to prevent adverse impacts.
5. All uses and activities that involve a risk of degradation to Category I wetlands should be controlled within both the wetland and its buffer to prevent loss of wetland functions or values.
6. Requirements for buffer widths and management should take into account the ecological function of the wetland, the characteristics and setting of the buffer, the potential impacts of the adjacent land use, and any other relevant factors.
7. Alterations of wetlands or buffers should not be authorized unless all of the following can be shown: the impact is unavoidable, necessary, minimized, and any remaining impacts are mitigated. Where wetland impacts are mitigated, the type of mitigation that will have the least impact on shoreline ecological functions should be used.
8. Proposals for wetland mitigation should be coordinated with the appropriate resource agencies to ensure adequate design and consistency with other regulatory requirements.
9. Applicants should demonstrate sufficient scientific expertise, supervisory capability, and financial resources to complete and monitor any proposed or required wetland mitigation project.
10. The City does not intend to deny all economic use of any property subject to these policies and regulations, except as the public trust doctrine would limit the use of the property. This policy will be implemented through the appropriate application of methods including but not limited to project design standards, mitigation, and variances.

6-30-070-C. Regulations

1. Designation
    a. All shoreline areas within the City of Moses Lake meeting the criteria in WAC 173-22-035 as revised, regardless of whether those areas have been previously identified or mapped, are hereby designated as critical areas, and are subject to the wetlands provisions of this SMP.

b. All artificial shoreline wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands are hereby designated as critical areas, and are subject to the wetlands provisions of this SMP.

2. Mapping

a. The approximate location and extent of wetlands are shown on the adopted critical area maps. The following critical area maps, along with any related information, is hereby adopted: *Shoreline Inventory and Characterization: Biological Synthesis Map, City of Moses Lake GIS*. Additionally, soil maps produced by the U. S. Department of Agriculture's Natural Resources Conservation Service (NRCS) may be useful in helping to identify potential wetland areas.

b. The aforementioned maps are to be used as a guide for the City, project applicants, and/or property owners to identify potential wetland areas that may be subject to the provisions of this SMP. They shall be consulted when a development application is received to determine whether there is likely to be a wetland on or near the site.

c. It shall be the responsibility of the applicant to notify the city of any known wetlands or potential wetland areas on or near the site of any proposed use or activity. The location of wetlands shall be determined by a wetland analysis report conducted by a professional wetland scientist, as defined below, and meeting the standards found within this chapter.

d. Any site shown on the City data maps as containing wetlands, emergent vegetation, or riparian tree cover, must be evaluated for the presence of wetlands.

3. The following uses and activities are regulated if they occur in a regulated wetland or its buffer, whether or not any land-use permit or license is required:

a. Removal, excavation, grading, or dredging of soil, sand, gravel, minerals, organic matter, or material of any kind;

b. Dumping of, discharging of, or filling with any material, including discharges of storm water and domestic, commercial, or industrial wastewater;

c. Draining, flooding, or any disturbance of the water level or water table;

d. The driving of pilings;

e. The placing of obstructions;

f. The construction, reconstruction, demolition, or expansion of any structure;

g. The destruction or alteration of wetland or buffer vegetation through clearing, mowing, harvesting, shading, intentional burning, or planting of vegetation that would alter the character of a regulated wetland;

h. Activities that result in:

i. A significant change of water temperature;

ii. A significant change of physical or chemical characteristics of the sources of water to the wetland;

iii. A significant change in the quantity, timing, or duration of the water entering the wetland; or

iv. The introduction of pollutants;

i. Activities reducing the functions of buffers; or

j. Other uses or activities that result in a significant ecological impact to the physical, chemical, or biological characteristics of wetlands, or any net loss of shoreline ecological functions.

4. Wetland ratings

a. *Classification.* Wetlands in the City of Moses Lake and its UGA shall be classified into the following categories according to the *Washington State Wetlands Rating System for Eastern Washington* (Washington Department of Ecology Publication #14-06-030, or as amended):

i. Category I

1. Category I wetlands are those that:

a. Represent a unique or rare wetland type;
b. Are sensitive to disturbance;

c. Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or
d. Provide a very high level of functions.

2. Category I wetlands include alkali wetlands, Natural Heritage wetlands, mature and old-growth forested wetlands with slow growing trees, and wetlands that perform many functions well, as measured by the rating system.

Generally, these wetlands are not common and make up a small percentage of the wetlands in Eastern Washington.

ii. Category II wetlands are:

1. Mature forested wetlands containing fast growing trees;
2. Vernal pools present within a mosaic of other wetlands; or
3. Those wetlands with a moderately high level of functions.

These wetlands are difficult, though not impossible, to replace. They provide high levels of some functions. These wetlands occur more commonly than Category I wetlands, but still need a high level of protection.

iii. Category III wetlands are:

1. Vernal pools that are isolated; or
2. Wetlands with a moderate level of functions, as measured by the rating system.

These wetlands have generally been disturbed in some manner, and are often smaller, less diverse and/or more isolated in the landscape that Category II wetlands. They may not require as much protection as Category I and II wetlands.

iv. Category IV wetlands have the lowest levels of functions, as measured by the rating system, and are often heavily disturbed. These are wetlands that should be able to be replaced, and in some cases improved. These wetlands do provide some important functions, and should be afforded some degree of protection.

b. Wetland rating categories shall not change due to illegal modifications after the date of adoption of this SMP.

5. Standards

a. General requirements

i. All uses and activities shall be prohibited in wetlands and wetland buffers, except as provided for in this SMP. No alteration to wetlands or wetland buffers shall result in a net loss of shoreline ecological functions, including wetland area, functions, or values.

ii. New commercial uses shall be prohibited in wetlands, except as provided for in the "Public Agency and Utility Exception" and "Variance" sections of this SMP. Existing commercial uses in wetlands shall be considered nonconforming.

iii. The conversion of wetlands not currently in agricultural use to a new agricultural use is subject to the compensatory mitigation provisions of this chapter and Appendix A, Mitigation. Conversion includes the clearing of wetland vegetation for pasture or preparation for planting of crops.

iv. The conversion of wetlands currently in agricultural uses to non-agricultural uses is subject to the compensatory mitigation provisions of this SMP.

v. All activities and uses shall be prohibited from Category I wetlands, except as provided for in the "Public Agency and Utility Exception" and "Variance" sections of this SMP.

vi. For Category II and III wetlands, the following standards shall apply. Full compensation for the loss of acreage and functions of wetland and buffers shall be provided under the terms established under the heading "Compensatory Mitigation Standards" below.

1. Where wetland fill is proposed, it is presumed that an alternative development location exists; activities and uses shall be prohibited unless the applicant can demonstrate that:

a. The basic project purpose cannot reasonably be accomplished on another site or sites in the general region while still successfully avoiding or resulting in less adverse impact on a wetland; and

b. All on-site alternative designs that would avoid or result in less adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration or density of the project, are not feasible.

2. Wetland fill must comply with the fill standards in Chapter 8 of this SMP.

vii. Category IV wetlands: activities and uses that result in unavoidable impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved wetland analysis report and compensatory mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the loss of acreage and functions of wetland and buffers shall be provided under the terms established under the heading "Compensatory Mitigation Standards" below.

b. Report requirements

i. A wetland analysis report shall be submitted to the Community Development Department for review prior to initiation of any use or activity adjacent to or within an affected wetland or its buffer.

ii. A compensatory mitigation report shall be submitted to the Community Development Department when a proposed use or activity will involve wetland and/or buffer impacts, as shown by a wetland analysis report.

iii. When appropriate, the Community Development Director may also require a wetland report to include an evaluation by the State Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs and to include any recommendations as appropriate.

c. Criteria for wetland analysis reports

i. A wetland analysis report shall be prepared by a qualified professional who is a certified Professional Wetland Scientist or a non-certified professional wetland scientist with a minimum of five (5) years of experience in the field of wetland science, including experience preparing wetland reports.

ii. The written report and the accompanying scaled plan sheets shall contain the following information, at a minimum:

1. Written report:

a. The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the wetland analysis report; a description of the proposal; identification of all the local, state, and/or federal wetland-related permit(s) required for the project; and a vicinity map for the project;

b. A statement specifying the accuracy of the report and all assumptions made and relied upon;

c. Documentation of any fieldwork performed on the site, including field data sheets for delineations, function assessments, baseline hydrologic data, etc.;

d. A description of the methodologies used to conduct the wetland delineations, function assessments, or impact analyses, including references;

e. Identification and characterization of all critical areas, wetlands, water bodies, shorelines, floodplains, and buffers on or adjacent to the proposed project area. For areas off of the project site, estimate conditions within 300 feet of the project boundaries using the best available information;

f. For each wetland identified on-site and within 300 feet of the project site provide: the wetland rating; required buffers; hydrogeomorphic classification; wetland acreage based on a professional survey from the field delineation (acreages for on-site portion and entire wetland area including off-site portions); Cowardin classification of vegetation communities; habitat elements; soil conditions based on site assessment and/or soil survey information; and to the extent possible, hydrologic information such as location and condition of inlet/outlets (if they can be legally accessed), estimated water depths within the wetland, and estimated hydroperiod patterns based on visual cues (e.g., algal mats, drift lines, flood debris, etc.). Provide acreage estimates, classifications, and ratings based on entire wetland complexes, not only the portion present on the proposed project site;

g. A description of the proposed actions including an estimation of acreages of impacts to wetlands and buffers based on the field delineation and survey and an analysis of site development alternatives including a no-development alternative;

h. An assessment of the probable cumulative impacts to the wetlands and buffers resulting from the proposed development;

i. A description of reasonable efforts made to apply mitigation sequencing, as defined in this SMP, to avoid, minimize, and mitigate impacts to critical areas;

j. A discussion of measures, including avoidance, minimization, and compensation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the currently proposed land use activity;

k. A conservation strategy for habitat and native vegetation that addresses methods to protect and enhance on-site habitat and wetland functions, and

l. Evaluation of functions of the wetland and adjacent buffer using a functions assessment method recognized by local or state agency staff and including the reference for the method used and all data sheets. Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system, as set forth in the Washington State Wetland Rating System for Eastern Washington (Ecology Publication #14-06-030, or as amended and approved by Ecology).

2. Scaled plan sheet(s):

a. Maps (to scale) depicting delineated and surveyed wetland and required buffers on-site, including buffers for off-site critical areas that extend onto the project site; the development proposal; other critical areas; grading and clearing limits; areas of proposed impacts to wetlands and/or buffers (include square footage estimates);

b. A depiction of proposed stormwater management facilities and outlets (to scale) for the development, including estimated areas of intrusion into the buffers of any critical areas. The written report shall contain a discussion of the potential impacts to the wetland(s) associated with anticipated hydroperiod alterations from the project.

d. Criteria for compensatory mitigation reports

i. A compensatory mitigation report for wetland or buffer impacts shall be prepared by one or more qualified professionals including someone who is a certified Professional Wetland Scientist or a non-certified professional wetland scientist with a minimum of five (5) years experience designing compensatory mitigation projects. Said compensatory mitigation projects must have been installed and monitored for a minimum of two (2) years, in order to verify success. In addition, the design team may include civil engineers, landscape architects, or landscape designers, depending upon the complexity of the project.

ii. A wetland analysis report, conforming to the standards above, must accompany or be included in the compensatory mitigation report.

iii. The compensatory mitigation report must include a written report and scaled plan sheets containing, at a minimum, the following elements. Full guidance can be found in the *Wetland Mitigation in Washington State: Part 2 - Developing Mitigation Plans, March 2006* (Washington State Department of Ecology, U.S. Army Corps of Engineers Seattle District, and U.S. Environmental Protection Agency Region 10; Ecology Publication #06-06-011b) or as revised or *Selecting Wetland Mitigation Sites Using a Watershed Approach* (Eastern Washington) (Publication #10-06-07, November 2010).

1. Written report:

a. The name and contact information of the applicant; the name, qualifications, and contact information for the primary author(s) of the Compensatory Mitigation Report; a description of the proposal; a summary of the impacts and proposed compensation concept; identification of all the local, state, and/or federal wetland related permit(s) required for the project; and a vicinity map for the project;

b. Description of the existing wetland and buffer areas proposed to be impacted including:

acreages (or square footage) based on professional surveys of the delineations; Cowardin classifications including dominant vegetation community types (for upland and wetland habitats); hydrogeomorphic classification of wetland(s) on and adjacent to the site; the results of a functional assessment for the entire wetland and the portions proposed to be impacted; wetland rating based on the sub-section of this chapter headed “Wetland Ratings”;

c. An assessment of the potential changes in wetland hydroperiod from the proposed project and how the design has been modified to avoid, minimize, or reduce adverse impacts to the wetland hydroperiod;

d. An assessment of existing conditions in the zone of the proposed compensation, including: vegetation community structure and composition, existing hydroperiod, existing soil conditions, existing habitat functions. Estimate future conditions in this location if the compensation actions are NOT undertaken (i.e., how would this site progress through natural succession?);

e. A description of the proposed conceptual actions for compensation of wetland and upland areas affected by the project. Describe future vegetation community types for years 1, 3, 5, 10, and 25 post-installation including the succession of vegetation community types and dominants expected. Describe the successional sequence of expected changes in hydroperiod for the compensation site(s) for the same time periods as vegetation succession. Describe the change in habitat characteristics expected over the same 25-year time period;

f. The field data collected to document existing conditions, and on which future condition assumptions are based for hydroperiod (e.g., existing hydroperiod based on piezometer data, staff/crest gage data, hydrologic modeling, visual observations, etc.) and soils (e.g., soil pit data—hand dug or mechanically trenched; and soil boring data. Do not rely upon soil survey data for establishing existing conditions);

g. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs (for remaining wetlands and compensatory mitigation wetlands);

h. A bond estimate for the entire compensatory mitigation including the following elements: site preparation, plant materials, construction materials, installation oversight, maintenance twice/year for up to five (5) years, annual monitoring field work and reporting, and contingency actions for a period up to the proposed monitoring period;

i. Proof of establishment of Notice on Title for the wetlands and buffers on the project site, including the compensatory mitigation areas;

j. Description of how the project design has been modified to avoid, minimize, or reduce adverse impacts to wetlands.

2. Scaled plan sheets:

a. Surveyed edges of the existing wetland and buffers, proposed areas of wetland and/or buffer impacts, location of proposed wetland and/or buffer compensation actions;

b. Existing topography, ground-proofed, at two-foot contour intervals in the zone of the proposed compensation actions if any grading activity is proposed to create the compensation area(s). Also existing cross-sections of on-site wetland areas to which impacts are proposed, and cross-section(s) (estimated one-foot intervals) for the proposed areas of wetland or buffer compensation;

c. Surface and subsurface hydrologic conditions including an analysis of existing and proposed hydrologic regimes for enhanced, created, or restored compensatory mitigation areas. Also, illustrations of how data for existing hydrologic conditions were used to determine the estimates of future hydrologic conditions;

d. Conditions expected from the proposed on-site actions including future hydrogeomorphic types, vegetation community types by dominant species (wetland and upland), and future hydrologic regimes;

e. Required wetland buffers for existing wetlands and proposed compensation areas. Also, identify any zones where buffer reduction or enlargement beyond the standards identified in this SMP is proposed;

f. A plant schedule for the compensatory area including all species by proposed community type and hydrologic regime, size and type of plant material to be installed, spacing of plants, "typical" clustering patterns, total number of each species by community type, and timing of installation;

g. Performance standards (measurable standards reflective of years post-installation) for upland and wetland communities, monitoring schedule, and maintenance schedule and actions by each biennium.

e. Compensatory mitigation standards

i. Mitigation shall achieve wetland functions equivalent to or greater than those that existed in the wetland prior to mitigation.

ii. When possible, mitigation shall be on-site and sufficient to maintain the functions and values of the wetland and buffer areas. If on-site mitigation is not feasible, then the applicant shall demonstrate that the site is the nearest that can reasonably achieve the goals of mitigation with high likelihood of success.

iii. Applicants shall demonstrate sufficient scientific expertise, supervisory capability, and financial resources to complete and monitor any proposed or required wetland mitigation project.

iv. Mitigation actions that require compensation by restoration of a former wetland, enhancement of a degraded wetland, or creation of new wetlands shall use the Credit/Debit method or shall occur in the following order of preference:

1. Restoring a former wetland or creating a new wetland on the site of the project;
2. Restoring a former wetland or creating a new wetland in the same sub-basin as the project site;
3. Creating wetlands from disturbed upland sites outside of the subbasin;
4. Enhancing degraded wetlands;
5. Preserving high quality wetlands that are under imminent threat.

v. The size of a compensatory mitigation project shall be greater than the size of the affected wetland per Table 6.1.

1. When impacts to wetlands and wetland critical area buffers are proposed they must be mitigated using a 1:1 ratio based on the area of wetland buffer impacted
2. To more fully protect functions and values, and as an alternative to the mitigation ratios in Table 6.1, the Shoreline Administrator may allow mitigation based on the "credit/debit method developed by the Department of Ecology in "Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Eastern Washington; Final Report" (Ecology Publication #11-06-015, August 2012, or as amended)

Table 6.1: Wetland Mitigation Ratios

Category and Type of Wetland	Creation or Re-establishment	Rehabilitation	Enhancement
Category I: Bog, Natural Heritage site	Not considered possible	Case by case	Case by case
Category I: Mature Forested	6:1	12:1	24:1
Category I: Based on functions	4:1	8:1	16:1
Category II	3:1	6:1	12:1
Category III	2:1	4:1	8:1
Category IV	1.5:1	3:1	6:1

From "Wetlands and CAO Updates- Guidance for Small Cities Eastern Washington Version" October 2012 Revision; Ecology publication # 10-06-001.

vi. The mitigation ratio may be increased if the administrator identifies that:

1. Uncertainty exists as to the probable success of the proposed restoration or creation;
2. A significant time period will elapse between impact and replication of wetland functions;
3. Proposed mitigation will result in a lower category of wetland or reduced functions relative to the wetland being impacted; or
4. The impact was due to an unauthorized action.

vii. Required compensatory mitigation reports shall be forwarded for review and comment to agencies with expertise or jurisdiction related to the proposal, including, but not limited to:

1. The Washington Department of Ecology.
2. The Washington Department of Fish and Wildlife.
3. The Washington Department of Natural Resources.
4. The U. S. Army Corps of Engineers.
5. The U. S. Fish and Wildlife Service.

viii. Prior to final plat approval, Certificate of Occupancy, or other final approval on a project, a performance surety agreement acceptable to the City Attorney must be entered into by the property owner and the City. The surety agreement must include the complete costs for the mitigation and monitoring, which may include but is not limited to: the cost of installation, delivery, plant material, soil amendments, permanent irrigation, seed mix, and three monitoring visits and reports by a qualified professional. The Community Development Department must approve the estimate for said improvements. The surety shall be for 150% of the estimated cost.

f. Subdivisions

i. The major or short subdivision of lands that include wetlands is subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided.
2. Land that is located partially within a wetland or its buffer may be subdivided provided that an accessible and contiguous portion of each new lot is located outside of the wetland and its buffer and meets minimum lot size requirements.
3. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the City determines that no other feasible alternative exists and all impacts are mitigated.

ii. The administrator may allow greater density of development outside of wetland areas and associated buffers as an incentive, provided:

1. A high level of protection for on-site resources is provided and demonstrated in an approved wetland analysis report and compensatory mitigation plan.
2. Good and sufficient cause has been shown.
3. The overall density of the project does not exceed what would otherwise be allowed.

g. Signs and fencing of wetlands: During construction, the outer perimeter of the wetland buffer and the clearing limits identified by an approved permit or authorization shall be marked in the field with temporary “clearing limits” fencing in such a way as to ensure that no unauthorized intrusion will occur. The marking is subject to inspection by the Community Development Department prior to commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs and fencing, if required, are in place. As a condition of any permit or authorization pursuant to this chapter, the administrator may require permanent signs and/or fencing along the perimeter of a wetland or buffer in order to protect the functions and values of the wetland, or to minimize future impacts or encroachment upon the wetland or buffer.

h. Wetland buffers

i. Buffer widths: wetland buffers must be maintained in accordance with the following tables:

Table 6.2: Wetland Buffer Widths

Wetland Category	Standard Buffer Width	Additional buffer width if wetland scores 5 habitat points	Additional buffer width if wetland scores 6-7 habitat points	Additional buffer width if wetland scores 8-9 habitat points
Category I or II: Based on total score	75'	Add 15'	Add 45'	Add 75'
Category I or II: Forested	75'	Add 15'	Add 45'	Add 75'
Category I: Natural Heritage Wetlands	190'	NA	NA	NA
Category I or II: Alkali or Vernal Pool	150'	NA	NA	NA
Category III SR, SR-R, & H	25'	Add 10'	Add 50'	Add 75'
Category III SR-S, H-R, W, & N	60'	Add 15'	Add 45'	Add 75'
Category IV (all)	25'	Add 15'	NA	NA

Notes:

1). Additional buffer widths are added to the standard buffer widths. For example, a Category I wetland scoring 32 points for habitat function would require a buffer of 150' (75 + 75).

2). The standard buffer widths assume that the buffer is vegetated with a native plant community appropriate for the ecoregion. If the existing buffer is unvegetated, sparsely vegetated, or vegetated with invasive species that do not perform the needed functions, the buffer shall either be planted to create the appropriate plant community, or the buffer shall be widened to ensure that adequate functions of the buffer are provided.

3). The standard buffers have been reduced by 25%, contingent on implementation of the mitigation measures in Table 6.2. If an applicant chooses not to apply the mitigation measures in Table 6.2, then the width of the buffer must be increased to the original width by dividing by 75%. For example, a 75' buffer with the mitigation measures would be a 100' buffer without them, and a 25' buffer with the mitigation measures would be a 33.3' buffer without them.

Table 6.3: Required Measures to Minimize Impacts to Wetlands
(Measures are required, where applicable to a specific proposal)

Disturbance	Required Measures to Minimize Impacts
Lights	• Lighting shall be minimally invasive to wetland areas
Noise	• Locate activity that generates noise away from wetland • If warranted, enhance existing buffer with native vegetation adjacent to noise source • For activities that generate relatively continuous, potentially disruptive noise, such as certain heavy industry or mining, establish an additional 10' heavily vegetated buffer strip immediately adjacent to the outer wetland buffer
Toxic Runoff	• Route all new, untreated runoff away from the wetland while ensuring wetland is not dewatered • Establish covenants limiting use of pesticides within 150' of wetland • Apply integrated pest management
Stormwater Runoff	• Retrofit stormwater detention and treatment for roads and existing adjacent development • Prevent channelized flow from lawns from directly entering the buffer • Use Low Impact Development techniques (per Puget Sound Action Team LID Technical Guidance Manual)
Changes in Water Regime	• Infiltrate or treat, detain, and disperse into buffer new runoff from impervious surfaces and new lawns
Pets and Human Disturbance	• Use privacy fencing OR plant dense vegetation to delineate buffer edge and to discourage disturbance using vegetation appropriate for the region • Place wetland and its buffer in a separate tract or protect with a conservation easement
Dust	• Use best management practices to control dust
Disruption of corridors or connections	• Maintain connections to offsite areas that are undisturbed • Restore corridors or connections to offsite habitats by replanting

ii. Criteria for increasing, reducing, and averaging: The standard buffer widths shall be applied unless the administrator determines through a scientifically supportable method that a greater or lesser buffer width would serve to protect the functions and values of a particular wetland. The standard buffer widths may not be reduced by more than 25%. Greater buffer widths or rehabilitation of an inadequate plant community may be required where necessary to ensure development does not result in adverse impacts to wetlands.

iii. All buffers shall be measured from the wetland boundary as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category and the proposed land use. The same buffer widths and measurement criteria shall apply to any wetland created, restored, or enhanced as compensation for approved wetland alterations. Buffers shall be clearly marked on the ground and the administrator may require signs and/or fencing along the perimeter of a wetland or buffer in order to protect the functions and values of the wetland, or to minimize future impacts or encroachment upon the wetland or buffer.

iv. Wetland buffer width averaging. The administrator may allow averaging of wetland buffer widths in accordance with an approved critical areas report, provided the following conditions are met:

1. There will be no reduction in wetland functions and values;

2. The buffer at its narrowest point is never less than the greater of either ¾ of the required width or 75' for Category I & II, 50' for Category III, and 25' for Category IV.

3. The total area contained in the buffer area is no less than would otherwise have been applied under a constant buffer width.

4. One of the following is met:

   a. If the averaging is to improve wetland protection, the wetland has significant differences in characteristics that affect its habitat functions, such as a wetland with a forested component adjacent to a degraded emergent component or a "dual-rated" wetland with a Category I area adjacent to a lower-rated area, then the buffer shall be increased adjacent to the higher-functioning area of habitat or more-sensitive portion of the wetland and decreased adjacent to the lower-functioning or less-sensitive portion; OR

   b. If the averaging is to allow reasonable use of a parcel, there are no feasible alternatives to the site design that could be accomplished without buffer averaging

v. Where other critical areas coincide with wetlands, buffers shall be configured so as to protect aggregate functions and values. Particular consideration shall be given to habitat connectivity.

vi. The location of all required buffers shall be clearly and permanently marked on any project site prior to initiation of site work.

vii. Wetland buffer widths are based on the assumption that the buffer is well vegetated with native species appropriate to the area. Wetland buffer zones shall be retained in their natural condition. Where necessary to ensure that development does not result in adverse impacts to wetlands, rehabilitation of degraded buffer zones may be required. Where buffer disturbances are unavoidable during adjacent construction, re-vegetation with native plant materials will be required.

viii. The following activities shall be allowed within wetland buffers, provided appropriate measures are undertaken to ensure no net loss of shoreline ecological functions:

1. Conservation or restoration activities aimed at protecting or enhancing soil, water, vegetation, wildlife, or any shoreline ecological functions.

2. Removal of plants that represent a hazard to safety, security, or shoreline ecological functions (including noxious weeds), provided those plants are replaced under the direction of a qualified professional with appropriate native species. Trees shall be replaced at a ratio of 2:1 for younger trees and 4:1 for mature trees.

3. Passive recreation, including pervious walkways or trails located in the outer 25% of the buffer area, wildlife viewing structures, and fishing access areas, provided these are designed and approved as part of an overall site development plan.

4. Educational and scientific research activities.

5. Normal and routine maintenance and repair of any existing public or private facilities, provided disturbed areas are restored to a natural condition.
6. Repair and maintenance of non-conforming uses or structures, where legally established within the buffer, provided they do not increase the degree of non-conformity.

i. If the site of a proposed use or activity contains or is within a wetland area, the applicant shall submit an affidavit that declares whether the applicant has knowledge of any illegal alteration to any or all wetlands on the proposed site and whether the applicant previously has been found in violation of any local ordinance pertaining to shorelines or critical areas. If the applicant has previously been found in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the City.

j. Storm water management facilities shall be allowed within the outer 25% of a wetland buffer provided there is no other feasible location and that the location of such facilities will not adversely impact the functions and values of the wetland or otherwise cause any loss of shoreline ecological functions. Appropriate vegetation and management activities that will complement buffer function may be required.

6. Unauthorized Alterations and Enforcement

a. When a wetland or its buffer has been altered in violation of this SMP, all ongoing development work shall stop and the critical area shall be restored. The City shall have the authority to issue a “stop-work” order to cease all ongoing development work and order restoration, rehabilitation, or replacement measures at the owner’s or other responsible party’s expense to compensate for violation of provisions of this SMP.

b. All development work shall remain stopped until a restoration plan is submitted by the property owner or authorized agent and approved by the City. Such a plan shall be prepared by a qualified professional using the currently accepted scientific principles and shall describe how the actions proposed meet the minimum requirements described below. The Administrator shall, at the violator’s expense, seek expert advice in determining the adequacy of the plan. Inadequate plans shall be returned to the applicant or violator for revision and resubmittal.

c. The following minimum performance standards shall be met for the restoration of a wetland, provided that if the violator can demonstrate that greater functions and habitat values can be obtained, these standards may be modified:

i. The historic structure, functions, and values of the affected wetland shall be restored, including water quality and habitat functions;

ii. The historic soil types and configuration shall be replicated;

iii. The wetland and buffers shall be replanted with native vegetation that replicates the vegetation historically found on the site in species types, sizes, and densities. The historic functions and values should be replicated at the location of the alteration; and information demonstrating compliance with other applicable provisions of this SMP shall be submitted to the Administrator.

d. Site Investigations. The Administrator is authorized to make site inspections and take such actions as are necessary to enforce this SMP. The Administrator shall present proper credentials and make a reasonable effort to contact any property owner before entering onto private property.

e. Any person, party, firm, corporation, or other legal entity violating any of the requirements of this code is deemed to have committed a civil infraction, subject to enforcement and penalties in accordance with the provisions of the Moses Lake Municipal Code. Each day or portion of a day during which a violation of this SMP is committed or continued shall constitute a separate offense. Any development carried out contrary to the provisions of this SMP shall constitute a public nuisance and may be enjoined as provided by the statutes of the State of Washington. The City may levy civil penalties against any person, party, firm, corporation, or other legal entity for violation of any of the provisions of this SMP. The civil penalty shall be assessed at the same penalty as a zoning violation under Moses Lake Municipal Code 1.20.050.E.

f. If the wetland affected cannot be restored, monies collected as penalties shall be deposited in a dedicated account for the preservation or restoration of landscape processes and functions in the watershed in which the affected wetland is located. The City may coordinate its preservation or restoration activities with other local governments in the watershed to optimize the effectiveness of the restoration action.

6-40. Economic Development

6-40-010. The following policies apply throughout the shoreline area.

6-40-020. Policies

1. Activities and uses in shoreline areas should result in long-term over short-term benefits to the local economy.
2. In making permitting decisions, the City should evaluate the short-term economic gain or convenience of proposed activities and uses relative to long-term and potentially costly impairments to the natural shoreline that could result from such uses.
3. In making permitting decisions, the City should favor preserving resources and values of shorelines for future generations over development that would irretrievably damage shoreline resources.
4. Water-dependent and water-related commercial development should be accommodated where commercial activities and uses can be accomplished with no net loss of shoreline ecological functions and where such development is consistent with the vision, goals, and policies articulated in the City's Comprehensive Plan.

6-50. Environmental Impacts and Water Quality

6-50-010. The Shoreline Management Act is concerned with the environmental impacts that uses and activities may have on water quality and the fragile shorelines of the state. Shoreline areas and water quality are affected in numerous ways by human occupation and development of shoreline areas. Development typically increases the area of impermeable surfaces, which increases runoff, causing higher peak storm water discharge at a higher velocity, which causes scouring and erosion of shorelines. Erosion increases suspended solids and carries heavy metals, household wastes, and excess nutrients into the water, which leads to decreased levels of dissolved oxygen in the water. The degradation of water quality affects wildlife habitat and public health.

6-50-020. Policies

1. The adverse impacts of shoreline uses and activities on ecological processes and functions should be mitigated during all phases of development—including but not limited to design, construction, management, and use—to ensure no net loss of shoreline ecological functions.
2. The City should require reasonable setbacks, buffers, and stormwater management systems to ensure no net loss of water quality or shoreline ecological functions.
3. All runoff treatment measures for the purpose of maintaining and/or enhancing water quality should be conducted on-site and before shoreline development affects waters or shoreline ecological functions off-site.

6-50-030. Regulations

1. Solid and liquid wastes, untreated effluents, oil, chemicals, and other hazardous materials shall not be allowed to enter any body of water or to be discharged onto land. Equipment for the transportation, storage, handling, or application of such materials shall be maintained in a safe and leak-proof condition. If there is evidence of leakage, the further use of such equipment shall be suspended until the deficiency has been satisfactorily corrected.
2. All shoreline uses and activities shall be located, designed, constructed, managed, and maintained in a manner that minimizes adverse impacts to surrounding land and water uses, is aesthetically compatible with the affected area, and ensure no net loss of water quality or shoreline ecological functions.
3. All shoreline uses and activities, both during construction and for the life of the project, shall utilize best management practices to minimize any increase in surface water runoff and to control, treat, and release surface water runoff so that receiving water quality and shoreline ecological functions are not adversely affected. Such measures may include but are not limited to dikes, catch basins, settling ponds, oil/water separators, grassy swales, interceptor drains, and landscaped buffers. All measures shall be adequately maintained to insure proper functioning over time. The *Stormwater Management Manual for Eastern Washington* (Washington Department of Ecology Publication 04-10-076, or as revised) shall provide the preferred guidance for surface water runoff best management practices.
4. All shoreline uses and activities shall utilize effective erosion control methods during project construction and operation.
5. Land clearing, grading, filling, and alteration of natural drainage features and landforms shall be limited to the minimum necessary for development.
6. All shoreline uses and activities shall be located and designed to minimize or prevent the need for shoreline

stabilization measures, flood protection works, filling, or substantial site re-grading.

7. Any dredging or filling activities shall be conducted in such a way as to minimize the effects on water quality from the addition of suspended solids, leaching of contaminants, or disturbances to habitat, and shall be consistent with this master program, including the dredging and filling provisions in Chapter 8, as well as the requirements of applicable regulatory agencies, including but not limited to the Washington Department of Fish and Wildlife, Washington Department of Ecology, and the U. S. Army Corps of Engineers.
8. Herbicides and pesticides shall not be applied or allowed to directly enter water bodies or wetlands unless approved for such use by the appropriate agencies.
9. The City shall give preference to biological or mechanical means rather than herbicides for weed control in shoreline jurisdiction. If the situation requires the use of herbicides, they shall be applied only to noxious weeds, with care taken to prevent chemicals from entering water bodies or damaging beneficial shoreline vegetation. The applicant shall specify the methods that will be used to ensure that the use complies with all provisions of this section "Environmental Impacts and Water Quality", including preventing the chemicals from entering adjacent water bodies or wetlands or damaging beneficial shoreline vegetation.
10. All uses and activities shall adhere to all required setbacks and other development standards, and shall maintain all required buffers, in accordance with the provisions of this SMP.
11. Retaining walls for purposes other than shoreline stabilization shall meet the following minimum standards.
    a. Environment-specific regulations: where allowed, retaining walls for purposes other than shoreline stabilization shall comply with the environment-specific requirements in Chapter 9 of this SMP.
    b. The City may increase the required setbacks shown in Table 9.3 where necessary to protect shoreline ecological functions and ensure compliance with all provisions of this section.
    c. The required setback between the retaining wall and the OHWM shall be considered a buffer zone and shall be planted with native vegetation adequate to prevent entry of pollutants into Moses Lake. A planting plan shall be submitted for review and approval.

6-60. Parking

6-60-010. Parking is the temporary storage of automobiles or other motorized vehicles. The policies that follow apply to all areas where vehicles are parked, including parking incidental to another permitted use.

6-60-020. Policies

1. Parking in shoreline areas should serve a permitted shoreline use.
2. Parking facilities should be located and designed to minimize adverse impacts including those related to stormwater runoff, water quality, aesthetics, public access, and vegetation and habitat maintenance.
3. Parking facilities should be designed and landscaped to minimize adverse impacts upon adjacent properties and the shoreline. Landscaping should consist of vegetation from the recommended list (see chapter 14) or other vegetation approved by the City.
4. Parking should be planned to achieve optimum use of land within the area under shoreline jurisdiction. Where practical, parking should serve more than one use, such as recreational use on weekends and commercial use on weekdays.

6-60-030. Regulations

1. Parking in shoreline areas shall directly serve a permitted shoreline use. Parking as a primary use shall be prohibited within shoreline areas and over water.
2. Parking facilities shall prevent surface water runoff from contaminating water bodies, using best available technology and best management practices, including a maintenance program to assure proper functioning over time of any stormwater facilities required to achieve this. The *Stormwater Management Manual for Eastern Washington* (Washington Department of Ecology Publication 04-10-076, or as revised) shall provide the preferred guidance for stormwater best management practices.
3. Commercial parking facilities in areas under shoreline jurisdiction shall be located landward of the principal building being served, except when the parking facility is within or beneath the structure, where provisions are made to separate and screen the parking from the shoreline, or in cases where an alternative location will

have less environmental impact on the shoreline.

4. Commercial parking facilities shall be adequately screened and landscaped with plants from the recommended list (see Chapter 14) or other vegetation approved by the City.
5. Parking facilities that will serve more than one use, such as recreational use on weekends and commercial use on weekdays, shall be encouraged.

6-70. Public Access

6-70-010. Shoreline public access is the physical ability of the general public to reach and touch the water's edge and/or the ability to have a view of the water and the shoreline from upland locations. Public access can include picnic areas, pathways and trails, floats and docks, viewing towers, bridges, boat launches, street ends, ingress and egress, and parking.

6-70-020. Policies

1. Public access should be provided as close as possible to the water's edge as appropriate.
2. Public access should be designed with provisions for people with disabilities.
3. Public access to the shorelines afforded by street ends, public utilities, and rights-of-way should be preserved, maintained, and enhanced.
4. Public access opportunities should be designed to provide for public safety.
5. Public access opportunities should be designed to minimize potential impacts to private property and individual privacy. To avoid unnecessary user conflict, there should be a physical separation or other means of clearly delineating public and private space.
6. Public access opportunities should result in no net loss of shoreline ecological functions.
7. Public views of the shoreline from upland areas should be enhanced and preserved. Enhancement of views should not be interpreted as authorizing excessive removal of vegetation that partially impairs views.

6-70-030. Regulations

1. Development, uses, and activities shall be designed and operated to avoid blocking, reducing, or interfering with the public's physical or visual access to the water and shorelines.
2. The City shall require and use the following information in its review of shoreline use and activity proposals:
    a. Provisions for public visual and/or physical access to the shoreline;
    b. Location of public access opportunities relative to the OHWM and to any critical areas;
    c. Provisions for physical and/or visual access by people with disabilities;
    d. Provisions for public safety;
    e. Measures for minimizing potential impacts to private property and individual privacy;
    f. Provisions for preserving and enhancing public views of the shoreline from upland areas, including any plans for removing, replacing, or enhancing vegetation.
3. Unless it is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment:
    a. Public access shall be required in Water-Oriented Parks and Public Facilities (“W”) shoreline environments, and shall be encouraged in all other shoreline environments.
    b. Public access shall be required as part of all shoreline development by public entities, including local governments, state agencies, and public utility districts.
    c. Public access shall be required as part of all non-water-dependent commercial development.
    d. Public access shall be required as part of all marina development.
    e. Public access shall be required as part of all primary utility development and, where appropriate, shall be required as part of accessory utility development.
4. In providing visual access to the shoreline, removal of on-site native vegetation shall be limited to the minimum necessary to preserve or enhance views, with the following exceptions:

a. Non-native or invasive species may be replaced with plants from the recommended list (See Chapter 14).

b. Plants that represent a hazard to safety, security, or shoreline ecological functions may be replaced with plants from the recommended list (See Chapter 14).

Topping of trees shall be prohibited in all cases.

5. Development shall be constructed as far landward as possible to avoid interfering with views from surrounding properties to the shoreline and adjoining waters.
6. Public access opportunities shall be designed, constructed, operated, and maintained to result in no net loss of shoreline ecological functions.
7. Public access sites shall be connected directly to the nearest public street and shall include provisions for people with disabilities, where feasible.
8. Public access easements and permit conditions shall be recorded on the deed of title and/or on the face of the plat or short plat as conditions running with the authorized land use. Said recording with the Grant County Auditor's Office shall occur at the time of permit approval. Future actions by the applicant, successors in interest, or other parties shall not diminish the usefulness or value of the public access provided.
9. Public access provisions for residential subdivisions are found in the Residential Uses section of Chapter 7.

6-80. Signage

6-80-010. A sign is defined as a device of any material or medium that is used or intended to be used to attract attention to the subject matter for advertising, identification, or informative purposes. The following provisions apply to any commercial or advertising sign directing attention to a business, professional service, community, site, facility, or entertainment, conducted or sold either on or off premises. Highway, public information, and temporary signs are addressed in the Use Chart in Chapter 9, and must also comply with Section 18.58 of the Moses Lake Municipal Code and any other applicable regulations.

6-80-020. Policies

1. Signs should be designed and placed so that they are compatible with the aesthetic quality of the existing shoreline and adjacent land and water uses.
2. Signs should not block or otherwise interfere with visual access to the water or shorelands.
3. Signs should be of a permanent nature and be linked to the operation of existing permitted uses.
4. Signs attached to buildings are preferred over free-standing signs.

6-80-030. Regulations

1. All signs shall comply with Moses Lake Municipal Code 18.58, Signs.
2. All signs shall be located and designed to minimize interference with vistas and viewpoints, and with visual access to the shoreline.
3. No signs shall be placed on trees or other natural features.
4. Off premises and non-appurtenant signs shall not be permitted.
5. No signs shall have a surface area larger than 36 square feet.

6-90. Subdivision and Property Segregation

6-90-010. Subdivisions and property segregations are legal divisions of land for the purpose of sale, lease, or transfer of ownership.

6-90-020. Policies

1. All lots should be of sufficient size that development will not cause the need for structural shoreline stabilization.
2. All lots should be designed to meet the minimum shoreline buffer of the shoreline environment within which the lot is located.

3. To prevent encroachment on the shoreline buffer, the buffer should be marked with a long-term visual cue, such as a low fence, to alert present and future property owners of the location of the buffer edge. The marker should be substantial enough that there is clearly a change in circumstances from one side of the marker to the other. Curbing and survey markers have been shown in the past to be insufficient for this purpose.

6-90-030. Regulations

1. No lot shall be created that would require structural shoreline stabilization in order to allow development to occur.
2. No lot shall be created that would not accommodate development that meets the minimum building setback for the shoreline environment in which the lot is located.
3. Before the subdivision is recorded, the developer shall install a 3'-tall split-rail fence or similar visual marker to denote the upland edge of the shoreline buffer. Gaps may be left in the fence to allow access to the shoreline.
4. For new development on steep slopes or bluffs or in shoreline environment designations where the minimum buffer is less than 50', the City may require a geotechnical analysis of the site and shoreline characteristics to demonstrate that the lots created will not require shoreline stabilization in order for the reasonably-anticipated development to occur.

6-100. Utilities (Accessory)

6-100-010. Accessory utilities are for small-scale distribution services connected directly to the uses along the shoreline. Electrical, gas, telephone, cable, water and sewer lines are examples of utilities accessory to shoreline uses.

6-100-020. Policies

1. Accessory utilities necessary to serve shoreline uses should be properly installed so as to protect the shoreline and water from contamination and degradation.
2. Accessory utilities and associated rights-of-way should be located outside the shoreline area to the maximum extent feasible. When utility lines require a shoreline location, they should be placed underground.
3. Accessory utilities should be designed and located in a manner that preserves the natural landscape and shoreline ecology and minimizes conflicts with present and planned land uses.
4. Wherever possible, existing utility systems should be improved to enhance shoreline appearance and use.

6-100-030. Regulations

1. Utility development shall, through coordination with government agencies, provide for compatible multiple uses of sites and rights-of-way. Such uses include shoreline access points, trails, and other forms of recreation and transportation systems, provided such uses will not unduly interfere with utility operations or endanger public health or safety.
2. Sites disturbed for utility installation shall be stabilized during and immediately following construction to avoid adverse impacts from erosion.
3. Sites disturbed for utility installation shall be replanted in accordance with the City's landscaping regulations, using native species from the recommended list (see Chapter 14).
4. The placing of utility lines shall not obstruct or hinder physical or visual access to the shoreline or the lake. With the exception of high voltage electrical transmission lines, all utility lines shall be placed underground.

Chapter 7
Specific Shoreline Use Policies and Regulations

7-1. Introduction

The following policies and regulations apply to specific uses within the shoreline areas of the City of Moses Lake. They are intended to be used in conjunction with the general policies and regulations in Chapter 6, the shoreline modification policies and regulations in Chapter 8, and the Shoreline-Environment specific policies and regulations in Chapter 9. All shoreline uses and activities, even those that are exempt from the requirement to obtain a shoreline substantial development permit, must conform to all of the applicable policies and regulations listed in this SMP.

In some cases more than one use may occur on or be proposed for a given site. For example, a residential development project that included docks and roads would need to comply with the policies and regulations related to docks and roads as well as those related to residential development. Specific Use Policies and Regulations cover the following areas:

Section 7-10. Agriculture
Section 7-20. Aquaculture
Section 7-30. Boating Facilities
Section 7-40. Commercial Uses
Section 7-50. Docks
Section 7-60. Industrial Uses
Section 7-70. Mining
Section 7-80. Municipal Offices
Section 7-90. Recreational Uses
Section 7-100. Residential Uses
Section 7-110. Transportation Facilities
Section 7-120. Utilities (Primary)

7-10. Agriculture

7-10-010. Agricultural activities are defined in RCW 90.58.065 as including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation. Agricultural activities are not compatible with urban life and are not favored within city limits by the Growth Management Act or the City of Moses Lake Comprehensive Land Use Plan. Improperly managed agricultural activities can also be detrimental to water quality and to the natural character of the shoreline. For those reasons, agricultural activities are not a preferred use of the shoreline in the City of Moses Lake.

7-10-020. Policies

1. New agricultural uses are inconsistent with Moses Lake's *Comprehensive Plan* and should be prohibited in shoreline areas.
2. A vegetative buffer of native plants should be maintained between agricultural lands and water bodies or wetlands in order to protect water quality and to maintain habitat for fish and wildlife.
3. Animal feeding operations, retention and storage ponds, feed lot waste, and manure storage should be located outside of shoreline areas and constructed to prevent contamination of water bodies and degradation of the shoreline environment.
4. Appropriate farm and soil management techniques should be employed to prevent fertilizers, herbicides, and pesticides from contaminating water bodies and wetlands and having a harmful effect on shoreline functions and processes.
5. Public access to shorelines should be encouraged where it does not conflict with agricultural activities.

7-10-030. Regulations

1. New agricultural uses are prohibited in shoreline areas on non-agricultural lands, for example those lands with no documented agricultural activities as of the date of the adoption of this Master Program, or the date of annexation for areas not within the City at the time of adoption of the Master Program. Land with documented agricultural activities as of the date of adoption of this Master Program, or the date of annexation for areas not within the City at the time of adoption of the Master Program, may continue agricultural activities, including maintenance, repair and replacement of existing facilities, and changing crops.

This section does not apply to uses accessory to residential uses that would not typically be considered agriculture, such as garden plots less than 0.25 acres in size.

7-20. Aquaculture

7-20-010. Aquaculture is the farming or culturing of food fish, shellfish, or other aquatic animals or plants in natural or artificial water bodies. Activities include hatching, cultivating, planting, feeding, raising, and harvesting aquatic plants and animals, and maintenance and construction of necessary equipment, buildings, and growing areas. Aquaculture is dependent on the use of the water area, and when consistent with control of pollution and prevention of damage to the environment, is a preferred shoreline use. Related activities such as sales, processing, and product storage facilities are not considered aquaculture practices.

7-20-020. Policies

1. Since areas suitable for aquaculture are limited by specific biophysical requirements, areas with high potential for aquacultural use should be identified and encouraged for aquacultural use and protected from degradation by other types of land and water uses.
2. Aquaculture methods and structures should be chosen to create the least impact on the visual and environmental qualities of the shorelines. In instances where a choice of aquaculture methods is available, or where two or more incompatible aquaculture projects are proposed in the same area, preference should be given to those forms of aquaculture that involve lesser environmental and visual impacts. In general, projects that require submerged structures or no structures should be preferred over those that involve substantial floating structures. Projects that require few land-based facilities should be preferred over those that require extensive facilities. Projects that involve little or no substrate modification should be preferred over those that involve substantial modification.
3. Aquaculture should not be allowed in the following areas:
    a. Areas that have little natural potential for the type(s) of aquaculture under consideration.
    b. Areas that have water quality problems that make the areas unsuitable for the type(s) of aquaculture under consideration.
    c. Areas devoted to established uses of the aquatic environment with which the proposed aquacultural method(s) would substantially and materially conflict. Such uses include but are not limited to navigation, moorage, fishing, underwater utilities, and active scientific research.
    d. Areas where the design or placement of the facilities would substantially degrade the aesthetic qualities of the shoreline.
    e. Areas where an aquaculture proposal would result in any significant adverse environmental impacts that cannot be eliminated or adequately mitigated through enforceable conditions of approval.
    f. Areas where the proposed activity would adversely affect critical habitat use or value.
4. Aquaculture activities should be given flexibility to experiment with new aquaculture techniques. However, experimental aquaculture projects should be limited in scale, should be approved for a limited and specified period of time, and should be required to develop and implement a monitoring plan to assess the outcomes of the experiment.
5. All permitted aquacultural projects should be protected from new development that would be likely to damage or destroy them. New shoreline proposals in the vicinity of an experimental aquacultural project should be restricted or denied if they might compromise the monitoring and data collection required under the permit for the experimental project.
6. Aquaculture activities should not degrade water quality.

7-20-030. Regulations

1. A shoreline conditional use permit shall be required for any aquacultural use.
2. A monitoring plan shall be required for any experimental aquacultural use.
3. The City shall request technical assistance on aquaculture proposals from agencies with expertise, such as the Washington departments of Ecology and of Fish and Wildlife, and shall make available to those agencies the *Shoreline Inventory and Characterization* and maps developed as part of this SMP. The information obtained from the agencies shall be considered by the Planning Commission when making a decision on whether to approve or deny a permit for an aquacultural use, to establish any conditions that should be required of a project, and to assess the monitoring plan for an experimental aquacultural project.
4. Environment-specific regulations: aquacultural uses shall comply with the environment-specific requirements in Chapter 9 of this SMP.

7-30. Boating Facilities

7-30-010. Boating facilities include marinas, boat launch ramps, boat houses, boat lifts, and similar uses. Docks are addressed separately, below.

7-30-020. Policies

1. Boating facilities should be located, designed, and operated to provide protection and enhancement of aquatic and terrestrial life including animals, fish, birds, plants, and their habitats and migratory routes. When plastics and other non-biodegradable materials are used, precautions should be taken to ensure their containment.
2. Boating facilities should be located and designed so their structures and operations will be aesthetically compatible with the area visually affected, and will not unreasonably impair shoreline views. Use of natural non-reflective materials should be encouraged.
3. Public and community boating facilities are preferred over individual private facilities.
4. Regional as well as local needs should be considered when determining the location of marinas and boat launches. Potential sites should be identified near high-use or potentially high-use areas.
5. Dry boat storage should not be considered a water-oriented use. Boat hoists, boat launch ramps, and access routes associated with a dry boat storage facility should, however, be considered to constitute a water-oriented use.
6. Floating homes, houseboats, and liveaboards should be prohibited.
7. The size of over-water structures should be limited to the minimum necessary to support the structure's intended use.
8. Boating facilities should be located in a way that will not interfere with other boaters' use of the lake.
9. New over-water structures should be limited to those which need to locate over water, those which facilitate public access, and those which support ecological restoration. Watercraft can be stored on dry land; therefore a boat house is not a water-dependent use.

7-30-030. Regulations

1. Boating facilities, including minor accessory buildings and haul-out facilities, shall be designed so their structures and operations will be aesthetically compatible with or will enhance existing shoreline features and uses. Boating facilities shall mitigate for adverse development impacts on-site in compliance with Appendix A: Mitigation. Adverse development impacts to adjacent properties shall not be allowed.
2. Boating facilities, shall be designed in accordance with technical standards found in WAC 220-660-150, Boat Ramps and Launches in Freshwater Areas, and WAC 220-660-160, Marinas and Terminals in Freshwater Areas, as amended and as applicable.

3. Dredging related to boating facilities shall be limited to maintenance dredging, in compliance with the dredging provisions of Chapter 8. Dredging wetlands, shorelines, or shorelands to accommodate new or expanded boating facilities is prohibited.
4. Placing fill in water bodies or wetlands to create usable land for accessory uses, including boating facilities, is prohibited, except minimum required for dock-to-shore attachment site (abutment).
5. Where installation will cause erosion during construction, shoreline embankments of all boating facilities shall be stabilized both landward and waterward of the ordinary high water mark, using methods consistent with the policies and regulations of this SMP and best management practices.
6. A marina shall be allowed only as a conditional use. The City shall request technical assistance from agencies with jurisdiction and/or knowledge, including but not limited to the Washington departments of Ecology, of Fish and Wildlife, of Natural Resources, and of Health, and shall make available to those agencies the *Shoreline Inventory and Characterization* and maps developed as part of this SMP. The Planning Commission shall consider the comments received from commenting agencies before making a decision on whether or not to approve the permit, and any conditions or modifications required.
7. Public access, both physical and visual, shall be an integral part of all marina development and design.
8. New commercial and public boating facilities shall be consistent with the City of Moses Lake's *Comprehensive Plan* and *Parks, Recreation, and Open Space Plan*. When new sites are considered, sufficient evidence must be presented to show that existing public and commercial marinas and boat launches are inadequate and cannot be expanded to meet regional demand.
9. Marinas and launch ramps shall locate on stable shorelines where no or a minimal amount of shoreline stabilization will be necessary and where water depths are adequate to eliminate or minimize the need for maintenance dredging, spoil disposal, filling, beach enhancement, and other maintenance activities, and eliminate the need for offshore or foreshore channel construction dredging.
10. Marina and boat launch design shall minimize interference with geohydraulic processes and disruption of existing shore forms.
11. For commercial and public boating facilities, the perimeter of parking and storage areas shall be landscaped to provide a visual and noise buffer between adjoining dissimilar uses or scenic areas, using primarily native, self-sustaining vegetation. The permit application submittal shall identify the size, location, and species of plants that will be used.
12. Boating facilities, including boat lifts, shall be positioned so as not to be a hazard to boating.
13. Environment-specific regulations: Boating facilities shall comply with the environment-specific requirements in Chapter 9.
14. New over water structures shall be allowed only for water-dependent uses, public access, and ecological restoration. Boat houses, as non-water-dependent structures, are prohibited.
15. Over-water structures shall be no larger than is needed for the structure's intended use.

7-40. Commercial Uses

7-40-010. Commercial development means those uses that are involved in wholesale, retail, service, and business trade. Examples include hotels, motels, shopping centers, restaurants, shops, offices, and private recreation facilities, including marinas. Marinas are also subject to all provisions of this SMP related to boating facilities and to recreational uses.

7-40-020. Policies

1. New commercial development in shoreline areas should be consistent with the City of Moses Lake's *Comprehensive Plan* and should be located to minimize sprawl and inefficient use of shoreline areas and, where applicable, to promote trip reduction.
2. No commercial development should be allowed in wetlands.
3. Because shorelines are a limited resource, preference should be given to water-oriented uses,

especially those uses particularly dependent on a shoreline location or those that will provide the opportunity for substantial numbers of people to enjoy the shoreline.

4. Over-water construction should be prohibited except in limited instances where it is auxiliary to and necessary in support of a water-dependent use.
5. Commercial development should be designed to provide physical or visual shoreline access or other opportunities for the public to enjoy the shoreline location. Public access should include amenities appropriate to the type and scale of the development and the qualities and character of the site, which may include walkways, viewpoints, restrooms, and other recreational facilities. Where possible, commercial facilities should be designed to permit pedestrian waterfront activities.
6. Site plans for commercial developments should incorporate multiple-use concepts that include open space and recreation.
7. Commercial developments should be aesthetically compatible with the surrounding area. Aesthetic considerations should be actively promoted by means such as sign control regulations, appropriate development siting, screening and architectural standards, planned unit developments, and landscaping with native plants, including, where appropriate, enhancement of natural vegetative buffers.
8. Commercial developments should be designed, constructed, operated, and maintained to ensure no net loss of shoreline ecological functions and to protect areas and systems cultural significance.
9. Commercial developments should include landscaping that will visually enhance the shoreline area and contribute to shoreline functions and values.
10. Commercial developments permitted in shoreline areas are, in descending order of preference:
    a. Water-dependent uses;
    b. Water-related uses
    c. Water-enjoyment uses; and
    d. Non-water-oriented uses

7-40-030. Regulations

1. The design, layout and operation of certain commercial uses directly affects their classification with regard to whether or not they qualify as water-related or water-enjoyment uses. The applicant shall include elements in their application that show how the proposed commercial uses may be authorized as water-related or water-enjoyment use. These uses are required to incorporate appropriate design and operational elements so that they meet the definition of water-related or water-enjoyment uses.

   Non-water-oriented uses shall not be allowed unless they meet the following criteria:

   a. The use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration; or
   b. Navigability is severely limited at the proposed site; and the commercial use provides a significant public benefit with respect to the Shoreline Management Act's objectives such as providing public access and ecological restoration; or
   c. The site is physically separated from the shoreline by another property or public right-of-way.
2. The City shall require and use the following information in its review of commercial development proposals:
   a. Specific nature of the commercial activity;
   b. Need for shoreline frontage;
   c. Provisions for public visual and/or physical access to the shoreline;
   d. Provisions to ensure that the development will not result in loss of shoreline functions or reduction in shoreline values;
   e. Measures for enhancing the relationship of the use to the shoreline, including aesthetics and landscaping; and

f. The *Shoreline Inventory and Characterization* and accompanying maps.

3. Commercial development shall be designed and maintained in a neat, orderly, and environmentally-compatible manner, consistent with the character and features of the surrounding area. To that end, the Planning Commission may, following a public hearing, adjust the project dimensions and/or prescribe reasonable use intensity and screening conditions. Need and special considerations for landscaping and buffer areas shall also be subject to review and approval.
4. Over-water construction for non-water-oriented commercial developments is prohibited.
5. Parking as a primary use is prohibited within shoreline jurisdiction. Parking facilities in shorelines are not a preferred use and shall be allowed only as necessary to support an authorized use. While supporting an authorized use, parking facilities shall be located landward of the required setback and landward of the primary use to the greatest extent feasible.
6. All commercial loading and service areas shall be located on the upland (landward) side of the commercial activity or provisions shall be made to separate and screen the loading and service areas from the shoreline.
7. Public access shall be required as part of all non-water-dependent commercial development, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.
8. Commercial developments shall be landscaped to visually enhance the shoreline area and contribute to shoreline functions and values, using primarily native, self-sustaining vegetation. Plants that may compromise shoreline values shall be prohibited. The permit application submittal shall include a landscape plan that identifies the size, location, and species of plants that will be used.
9. Drainage and surface runoff from commercial areas shall be controlled so that pollutants will not be carried into water bodies. See "Environmental Impacts and Water Quality" in Chapter 6.
10. Environment-specific regulations: Commercial uses shall comply with the environment-specific requirements in Chapter 9.

7-50. Docks

7-50-010. A dock is a structure that abuts the shoreline and is used as a landing or moorage place for watercraft. Docks may be built on fixed platforms above the water, or may float upon the water.

7-50-020. Policies

1. Because docks can have a significant impact on lacustrine habitat and mechanics, the impacts of all docks should be reviewed to ensure that the proposed structure is suitably located and designed and that all potential impacts have been recognized and mitigated.
2. New commercial docks should be designed to accommodate public access and enjoyment of the shoreline location.
3. Docks should be designed to cause minimum interference with navigable waters and the public's use of the shoreline.
4. Docks should be sited and designed to minimize possible adverse environmental impacts, including impacts to sediment movement, water circulation and quality, and fish and wildlife habitat.
5. Use of natural-looking non-reflective materials in dock construction should be encouraged. All dock materials should be approved by the Washington Department of Fish & Wildlife.
6. The proposed site of the structure and intensity of use or uses of any dock should be compatible with the surrounding environment and land and water use.
7. Docks not contiguous with the shoreline should be prohibited as a hazard to navigation. Such docks may be allowed by conditional use permit in special situations where the need for such a dock is justified and measures have been taken to reduce the hazard to navigation.
8. The size of over-water structures should be limited to the minimum necessary to support the structure's intended use.
9. Each single family residence should be allowed only one dock.

7-50-030. Regulations

7-50-030-A. General Dock Standards

1. The City shall require and use the following information in its review of proposals for docks:
    a. Description of the proposed structure, including its size, location, design, materials, and any shoreline stabilization or other modifications required by the project.
    b. Proposed location of dock relative to property lines and ordinary high water mark.
    c. Any provisions for public access and enjoyment of the shoreline location. Public access is not required for a dock adjacent to a single family residence or duplex.
2. Docks shall not significantly interfere with the use of navigable waters or with public use of shorelines. The length of any dock shall be limited in constricted water bodies to assure navigability and protect public use. Docks may be prohibited where necessary to protect navigation or public use. Docks shall not extend more than 1/3 the width of the navigable waterway. Private and community docks shall be limited to the minimum length necessary to reach a water depth of 3 feet at the end of the dock, or limited to 25 feet in length, whichever is greater. Longer docks may be allowed by conditional use permit. Docks not contiguous with the shoreline may be allowed in special situations where the need for such a dock is justified and measures have been taken to reduce the hazard to navigation.
3. New commercial docks shall accommodate public access and enjoyment of the shoreline.
4. All docks shall be constructed and maintained in a safe condition. Unsafe docks shall be removed or repaired promptly by the owner. Where any such structure constitutes a hazard to the public, the City may, following notice to the owner, abate the structure if the owner fails to do so within 90 days. The City may impose a lien on the associated shoreline property in an amount equal to the cost of the abatement.
5. Repair of Existing Docks. Maintenance and repair proposals using treated materials must use only chemicals approved by the appropriate State or Federal agencies, and must be cured prior to placement in or over the water. All other materials requirements of this section shall also be met. No over-water field applications of preservative treatment or other chemical compounds shall be permitted. Docks may be painted provided brush application is used and best management practices are followed to prevent paint from coming in contact with the lake.
6. Bulk storage of gasoline, oil, and other petroleum products is prohibited on docks. Bulk storage means non-portable storage in fixed tanks.
7. Replacement of Existing Docks. Proposals involving replacement of the entire existing private dock with a similar dock are allowed, provided there is no net loss of ecological function.
8. Additions to Private Docks. Proposals involving lengthening and/or increasing the area of existing private docks must comply with the following measures:
    a. The applicant must demonstrate that there is a need for the enlargement of an existing dock. Proposals that demonstrate an enlargement is necessary due to safety concerns, inadequate depth of water, or preservation of beneficial emergent vegetation will be considered.
    b. Enlarged portions of docks must comply with the dimensional, design, materials, and mitigation standards for new private docks as described in this SMP. Dock additions that result in the completed structure exceeding the area limits for reasons not specifically allowed above may only be approved through a shoreline variance, except where a new or enlarged joint-use dock is proposed and any remaining individual dock(s) are removed.
9. Mitigation.
    a. Consistent with the mitigation sequencing steps outlined in Appendix A, Mitigation, new or expanded overwater and in-water structures, including docks and watercraft lifts, shall first be designed to avoid and minimize impacts, prior to pursuing mitigation, as required by WAC 173-26-231(3)(b).
    b. Mitigation proposals shall provide mitigation at 1:1 area ratio to impacts along the shoreline. The area mitigated shall include the access path through any required buffer if the path is wider than four feet, and the dock attachment area. Additionally, the mitigation proposals shall provide one unit of mitigation for each unit of lost aquatic function. The proposed mitigation plan shall include

a discussion of how the proposed mitigation adequately compensates for any lost functions. The mitigation provided shall be consistent with Appendix A, Mitigation. The city will consult with other permit agencies, such as Washington Department of Fish & Wildlife, Washington Department of Ecology, and/or US Army Corps of Engineers, for any additional specific mitigation requirements during project review.

c. Appropriate mitigation may include one or more of the following measures, or other measures when consistent with the objective of compensating for ecological function impacts:

   i. Removal of any additional existing over-water and/or in-water structures that are not the subject of the application or otherwise required to be removed.

   ii. For dock additions, partial dock replacements or other modifications, replacement of areas of existing solid over-water cover with grated or translucent material, or use of grated or translucent material on altered portions of the dock if they are not otherwise required to be grated or translucent.

   iii. Planting of native vegetation along the shoreline immediately landward of the OHWM consisting of trees and shrubs native to the Moses Lake area and typically found in undisturbed riparian and shrub steppe areas. When shoreline plantings are the only mitigation option for a given dock proposal, the additional overwater cover shall be compensated for at 1:1 planting area ratio (unless modified as described in Appendix A) with required plantings as described in Appendix A.

   iv. Removal of hardened shoreline, including existing launch ramps and bulkheads, and replacement with native vegetation.

   v. Removal of man-made debris waterward of the OHWM, such as car bodies, oil drums, concrete or asphalt debris, remnant docks, or other material detrimental to ecological functions and ecosystem-wide processes.

   vi. Placement of large woody debris.

   vii. Participation in an approved mitigation banking or in-lieu fee program.

10. Environment-specific regulations:

    Docks shall comply with the environment-specific requirements in Chapter 9.

7-50-030-B. General Design and Construction Standards for Docks

1. Supports must be structurally sound prior to placement in the water.
2. Supports, floats, or other materials in direct contact with the water must be approved by applicable state agencies, including the Washington Department of Fish and Wildlife.
3. Floating docks shall include stops to keep the floats off the bottom of the lake at low water level.
4. Overhead wiring or plumbing is not permitted on docks.
5. Lighting shall be the minimum necessary to locate the dock at night and shall focus downward to minimize glare.
6. Docks with feet or plates that rest on the lakebed are preferred over those requiring excavation and footings.

7-50-030-C. Joint-use community recreational docks

1. All multi-family residences proposing to provide moorage facilities shall be limited to a single, joint-use moorage facility, provided that the City may authorize more than one joint-use dock if, based on conditions specific to the site, a single facility would be inappropriate for reasons of safety, security, or impact to the shoreline environment.
2. If moorage is to be provided or planned as part of a new residential development of two or more waterfront dwelling units or lots, or as part of a subdivision or other division of land occurring after the effective date of this SMP, joint use or community dock facilities shall be required when feasible, rather than allowing individual docks for each residence. A joint use dock shall not be required for:

a. Development of a single residence.

b. Existing single residential units that currently do not have a dock.

c. Replacement of existing single residential docks.

3. In order to evaluate the feasibility of a joint community dock in a new residential development of two or more waterfront dwelling units, the applicant/proponent shall demonstrate the following:

   a. Existing facilities in the vicinity, including marinas and shared moorage, are not adequate or feasible for use; and

   b. The applicant/proponent has contacted abutting property owners and none have indicated a willingness to share an existing dock or develop a shared moorage in conjunction with the applicant/proponent.

4. Joint-use community docks may exceed the allowed area for an individual dock by 50 square feet per residence served.

5. The maximum size of a dock shall be the minimum necessary to accomplish moorage for one boat for each residence served, and the dock shall be configured to cause minimal disturbance to shoreline resources.

6. Proposals for joint-use community docks shall demonstrate and document by contract or covenant that adequate construction and maintenance of the structure and associated upland area will be provided by identified responsible parties.

7-50-030-D. Residential Docks

1. Number

   a. No more than one dock is permitted for each shoreline lot.

2. Size

   a. A dock over 200 square feet or 25 feet in length is allowed only as a shoreline conditional use. Exception: A longer dock may be approved if needed to maintain existing beneficial emergent vegetation such as bulrush. The extra length needed to project past the bulrush shall be limited to 4' in width

   b. Width: For the first 10' waterward of the OHWM, the maximum width of solid dock shall be 4'. Docks wider than 4' are allowed, provided that the extra width shall be made of material such as grating that allows a minimum of 40% light transmission through the decking material, to prevent excessive shading of the area under the dock.

3. Side yard setbacks: Docks shall be set back a minimum of 5 feet from side property lines, except for the following:

   a. Joint use and community docks may be located adjacent to or upon a side property line when mutually agreed to by contract or covenant with the owners of both properties. A copy of the contract or covenant must be recorded with the Grant County Auditor and filed with the application for permit.

   b. Docks may be located closer than 5' to the side property line when the dock location is set as part of the platting of the property and shown on the plat.

7-60. Industrial uses

7-60-010. Industrial uses are facilities for processing, manufacturing, and storage of finished or semi-finished goods.

7-60-020. Policies

1. Historically, there have been no industries within the City of Moses Lake that require a shoreline location. In order to reserve shoreline locations for uses that will benefit from such a location and to protect the shoreline from the potential impacts of industrial development, no industrial development should be allowed to locate within shoreline areas.

7-60-030. Regulations

1. New industrial uses are prohibited in shoreline areas.

7-70. Mining

7-70-010. Mining is the removal and primary processing of naturally occurring materials from the earth for economic use. For purposes of this Master Program, "primary processing" includes screening, crushing, and stockpiling of materials removed from the site. Mining activities also include in-water dredging activities related to mineral extraction. Processing does not include general manufacturing, such as the manufacture of molded or cast concrete or asphalt products, asphalt mixing operations, or concrete batching operations (such uses would be considered Industrial, and are prohibited in the shoreline areas of Moses Lake). Because the removal of sand and gravel from shoreline areas can cause erosion of land and siltation of water, mining activities are strictly regulated.

7-70-020. Policies

1. Mining should be allowed only where the use is dependent on a shoreline location.
2. Mining and associated activities should result in no net loss of shoreline ecological functions, including impacts to unique or fragile areas and impacts to priority habitats or species.
3. All feasible measures should be taken to protect shoreline areas and water bodies from all sources of pollution, including but not limited to sedimentation and siltation, chemicals and petrochemicals (including both use and spillage), and mining wastes and spoils (including both storage and disposal).
4. All feasible measures should be taken to prevent disruption of ecological processes and functions in shoreline areas and water bodies.
5. Mining activities should allow the natural shoreline systems to function with a minimum of disruption during their operations and should return the site to as near a natural condition as possible upon completion.
6. Adverse impacts of mining operations on surrounding shoreline areas, including visual and noise impacts, should be minimized, and shoreline enhancement should be encouraged.
7. Mining activities should be encouraged to locate outside shoreline areas.

7-70-030. Regulations

1. Mining shall be conducted in strict conformance with the Washington State Surface Mining Reclamation Act, Chapter 78.44 RCW.
2. As of the date of this SMP, and in accordance with RCW 36.70A.170, the city does not have mineral lands of long-term commercial significance. Should such lands be designated, mining shall be consistent with said designation.
3. Mining shall be allowed only in shoreline environments designated High Intensity and shall be prohibited in all other shoreline environments.
4. The City shall require and use the following information in its review of mining proposals:
    a. Materials to be mined;
    b. Need for those materials;
    c. Need for shoreline location;
    d. Quantity of materials to be mined, by type;
    e. Quality of materials to be mined, by type. For certain minerals, an evaluation by a geologist licensed under the provisions of RCW 18.220 may be required;
    f. Mining technique and equipment to be used;
    g. Depth of overburden and proposed depth of mining;
    h. Lateral extent and depth of total mineral deposit;
    i. Cross section diagrams indicating present and proposed elevations and/or extraction levels;

j. Existing drainage patterns, seasonal or continuous, and proposed alterations thereof including transport and deposition of sediment and channel changes that may result;

k. Proposed means of controlling surface runoff and preventing or minimizing erosion and sedimentation including impacts to banks on both sides of the excavation;

l. The location and sensitivity of any affected critical areas;

m. Subsurface water resources and aquifer recharge areas, including origin, depth, and extent;

n. Quality analysis of overburden, excavation materials, and tailings, with plans for storage, use, or disposition;

o. Mining plan and scheduling, including seasonal, phasing, and daily operation schedules;

p. Reclamation plan that meets the requirements of this master program and Chapter 78.44 RCW (for surface mining operations only);

q. Screening, earthen berm buffering, and/or fencing plans; and

r. Impacts to aquatic and shoreline habitat.

5. Mining operations shall be sited, designed, conducted, and completed (including reclamation) to ensure no net loss of shoreline ecological functions.

6. Mining operations shall comply with all local, state, and federal water quality standards and pollution control laws. Operations shall use effective techniques to prevent or minimize surface water runoff, erosion and sedimentation; prevent reduction of natural flows; protect all shoreline areas from acidic or toxic materials; and maintain the natural drainage courses of all streams. Surface water runoff shall be impounded as necessary to prevent accelerated runoff and erosion.

7. Overburden, mining debris, and tailings shall not be placed in water bodies or floodways and shall be stored and protected in such a manner as to prevent or minimize erosion or seepage to surface and ground waters.

8. Precautions shall be taken to insure that stagnant or standing water, especially that of a toxic or noxious nature, does not develop.

9. In no case shall mining operations impair lateral support and thereby result in earth movements extending beyond the boundaries of the site.

10. If substantial evidence indicates that mining operations are causing, or continued operation would cause, significant and adverse impacts to water quality, habitat, or any shoreline ecological function, the City shall terminate the shoreline permit for mining or impose further conditions on the mining operation to ensure no net loss of shoreline ecological functions.

11. All mining impacts shall be mitigated, and shoreline enhancement shall be encouraged. Preference shall be given to mining proposals that result in the creation, restoration, or enhancement of habitat for priority species.

12. Environment-specific regulations: Mining uses shall comply with the environment-specific requirements in Chapter 9.

7-90. Recreational Uses

7-90-010. Recreational uses provide opportunities for the refreshment of body and mind through forms of play, sports, relaxation, amusement, or contemplation. They include facilities for passive and low-intensity recreational activities such as hiking, photography, viewing, and fishing. They also include facilities for active or more intensive uses such as parks, campgrounds, golf courses, and other outdoor recreation areas. This section applies to both publicly- and privately-owned shoreline facilities intended for use by the public or a private club, group, association, or individuals.

7-90-020. Policies

1. The location and design of shoreline recreational developments should be consistent with the City of Moses Lake's *Comprehensive Plan*.

2. The location and design of publicly-owned shoreline recreational developments should be consistent with the City of Moses Lake's *Parks, Recreation, and Open Space Plan*.

3. Local, state, and federal recreation planning should be coordinated. Shoreline recreational developments should be consistent with applicable park, recreation, and open space plans of other jurisdictions.
4. A variety of compatible recreational experiences and activities should be encouraged to satisfy diverse recreational needs. However, facilities for recreational activities that do not benefit from a shoreline location should not locate in shoreline areas.
5. Recreational developments should be located, designed, operated, and maintained to cause no net loss of shoreline ecological functions and to be compatible with, and minimize adverse impacts on, valuable cultural and natural features and on nearby land and water uses. The only recreational development proposals that should be approved are those that complement their environment and surrounding land and water uses, and that protect natural areas.
6. Priority should be given to developments that provide recreational uses and other improvements facilitating public access to shoreline areas.
7. Recreational developments should be located and designed to preserve, enhance, or create scenic views and vistas. Removal of native vegetation to enhance views should be discouraged.
8. All recreational developments should make adequate provisions for:
    a. Vehicular and pedestrian access, both on and off site, including, where appropriate, access for people with disabilities.
    b. Proper water supply and solid and sanitary waste disposal.
    c. Security and fire protection for the use and for any use-related impacts to adjacent property.
    d. The prevention of overflow and trespass onto adjacent properties, by methods including but not limited to landscaping, fencing, and posting of the property.
    e. Buffering from adjacent private property or natural areas.
9. Trails and paths on steep slopes should be located, designed, and maintained to protect bank stability and minimize ground disturbance.
10. Recreational developments should protect the natural character, resources and ecology of the shoreline.

7-90-030. Regulations

1. The location and design of publicly-owned shoreline recreational developments shall be consistent with the City of Moses Lake's *Parks, Recreation, and Open Space Plan*.
2. To avoid wasteful use of the limited supply of recreational shorelands, substantial accessory use facilities, such as rest rooms, recreation halls and gymnasiums, commercial services, access roads, and parking areas shall be set back from the ordinary high water mark as specified in the Development Standards Tables (Tables 9.3A and 9.3B), unless it can be shown that such facilities are essentially shoreline dependent. Such facilities may be linked to the shoreline by walkways.
3. Shoreline recreational developments shall maintain, and, when feasible, enhance or restore desirable shoreline features including those that contribute to shoreline ecological functions and processes, scenic vistas, and aesthetic values. Removal of native vegetation to enhance views shall be discouraged. Any unavoidable impacts shall be mitigated as specified in Appendix A: Mitigation.
4. Recreational uses shall be designed to complement their environment and surrounding land and water uses.
5. No recreational buildings or structures shall be built over water, other than water-dependent and/or public access structures such as piers, docks, bridges, boardwalks, or viewing platforms.
6. Each development proposal shall include a landscape plan that uses primarily native, self-sustaining vegetation. Campsites, selected view points, or other permitted structures or facilities shall be located so as to not require damage or destruction of native vegetation. Removal of existing native vegetation shall be the minimum amount necessary to accommodate the permitted use. Refer also to Clearing and Grading and Vegetation Conservation in Chapter 8, and Appendix A: Mitigation.
7. For recreational uses such as golf courses that require the use of fertilizers, pesticides, or other chemicals, the applicant shall specify the methods that will be used to ensure that the use complies

with all provisions of the "Environmental Impacts and Water Quality" provisions of this SMP (see Chapter 6), including preventing the chemicals from entering adjacent water bodies or wetlands. Minimum buffers for recreational uses are listed in Chapter 9. In addition to required buffers, chemical-free buffer strips may be required at the discretion of the City.

8. Recreational uses shall provide facilities for non-motorized access to the shoreline, such as pedestrian and bicycle paths, where those facilities will not result in loss of shoreline ecological functions.
9. Recreational uses shall include adequate provisions for water supply, sewage, garbage disposal, and fire protection.
10. Recreational uses shall include adequate provisions, such as screening, buffer strips, fences, and signs, to buffer adjacent private property and natural areas and protect the value and enjoyment of those sites.
11. Trails and paths on steep slopes shall be located, designed, and maintained to protect bank stability and minimize ground disturbance.
12. Environment-specific regulations:
    a. Recreational uses shall comply with the environment-specific requirements in Chapter 9.
    b. Public access shall be required for recreational uses in shoreline environments designated "W", and shall be encouraged in all other shoreline environments, unless such access is shown to be incompatible due to reasons of safety, security, or impact to the shoreline environment.

7-100. Residential Uses

7-100-010. Residential use means one or more buildings, structures, lots, parcels, or portions thereof which are designed for and used or intended to be used to provide a place of abode for human beings. This includes single family residences, duplexes, multi-family residences, apartments, townhouses, manufactured home parks, group housing, condominiums, other detached or attached dwellings, and major and short subdivisions, along with accessory uses and structures normally associated with residential uses, including but not limited to garages, sheds, swimming pools, parking areas, and fences. Residential uses do not include hotels, motels, or any other type of overnight or transient housing or camping facilities. All residential uses must comply with the Shoreline Management Act and this master program, even if the use is not required to obtain any type of shoreline permit.

7-100-020. Policies

1. Residential development and subdivisions should be located, designed, built, and maintained to protect shoreline environmental functions and processes when possible.
2. Residential development and subdivisions should be designed so as to adequately protect the water and shoreline aesthetic characteristics.
3. Residential uses should be permitted only where there are adequate provisions for utilities (i.e., water, sewer, power, telephone, and cable lines), circulation, and access.
4. The overall density of development and lot coverage should be appropriate to the physical capabilities of the site.
5. Recognizing property owners' rights of shoreline residential use, new residential uses should provide adequate setbacks and natural buffers from the water and ample open space between structures to provide space for outdoor recreation, protect natural features and existing shoreline vegetation, control erosion, protect water quality, preserve views and normal public use of the shoreline and the water, protect aquatic and wildlife habitat, and minimize user conflicts.
6. Residential uses should be encouraged to provide dedicated and improved community or public access to the shoreline in a manner that is appropriate to the site and the nature and size of the development. Any public access provided should be counted toward the dedication of parks and open space required by the Moses Lake Municipal Code for new residential developments.
7. To discourage dock proliferation and the associated loss of shoreline ecological functions, subdivisions should provide joint-use or community docks. Individual docks should be allowed for lots in subdivisions with joint-use or community docks. Other joint use facilities, such as access areas

and boat launches, should also be encouraged.

8. New residential uses should be prohibited over water, in floodways, and in environmentally sensitive areas such as wetlands and geologic hazard areas.
9. Structures and other developments accessory to residential uses should be designed and located to blend into the site as much as possible.
10. The buffers established for residential uses should apply to non-water-dependent accessory structures.
11. Best management practices should be applied in designing and developing surface and stormwater facilities.
12. The front yard zoning setback should be allowed to be reduced to accommodate reasonable development.
13. To prevent encroachment on the shoreline buffer, the buffer should be marked with a long-term visual cue to alert present and future property owners of the location of the buffer edge. The marker should be substantial enough to show that there is clearly a change in circumstances from one side of the marker to the other.

7-100-030. Regulations

1. Residential uses shall not be approved where flood control, shoreline protection measures, or bulkheading will be required to create residential lots or site area. Residential uses shall be designed so that structural shoreline stabilization, including bulkheads, is not likely to be required to protect property and will not be required in the future.
2. New multi-unit residential development (including multiplexes), and the subdivision of land into four or more lots shall make adequate provisions for public access consistent with the regulations set forth in Section 7-90. Recreational Uses, and all provisions of this SMP.
3. Public access shall be located and designed to respect private property rights, be compatible with the shoreline environment, protect ecological functions and processes, protect aesthetic values of shoreline, and provide for public safety (including consistency with Crime Prevention through Environmental Design (CPTED) principles, where applicable).
4. If wetlands, steep slopes, other critical areas, or other unique or fragile features are located on a development site, development shall be located so as to avoid the sensitive areas. Cluster or similar design of residential units may be used in order to achieve this.
5. Vegetation removal shall be in compliance with the Vegetation Conservation and Clearing and Grading provisions of Chapter 8 and shall be limited to the minimum necessary to accommodate permitted uses, with the exception that noxious weed control shall be allowed subject to the vegetation conservation provisions in Chapter 8.
6. During construction, shoreline vegetation shall be preserved and erosion controlled by the following means at a minimum: Clearly marked temporary fencing shall be installed during the entire construction period. The shoreline shall be protected from sedimentation by silt fences, sand bags, or other material as approved by the Building Official. Sedimentation control measures shall be in place before the start of any clearing, grading, or construction. Sedimentation control measures shall be inspected after each runoff event and maintained if necessary.
7. Other than docks, new residential structures and accessory structures, including boathouses, shall be prohibited over water or floating on the water. Floating homes shall be prohibited.
8. The buffers established for residential uses shall apply to non-water-dependent accessory structures.
9. Best management practices shall be applied in designing and developing surface and stormwater facilities. The *Stormwater Management Manual for Eastern Washington* shall provide the preferred guidance for storm water management best practices.
10. Environment-specific regulations:
    a. Residential uses shall comply with the environment-specific requirements in Chapter 9, except as provided in Regulation 11 below.
11. Common Line Setbacks: The residential buffers in Table 9.3 shall not apply in cases where the

majority of existing development in the area does not meet the established buffer standards. In such cases residential structures shall be set back common to the average of setbacks for existing dwelling units within three hundred (300) feet of the proposed residential structure. If there is only one or no dwelling units within three hundred (300) feet of the proposed residential structure, the shoreline buffers of Table 9.3 shall apply. Common line setback allowed in this section is subject to approval by the Shoreline Administrator. Common line setback shall only be allowed where no loss of shoreline ecological functions or interference with shoreline processes will result from said common line setback per the mitigation requirements in this SMP. The Administrator may place conditions on the approval. Any further deviation from setback requirements beyond that allowed in this section shall require approval of a shoreline variance permit.

12. For lots platted before the adoption of this Master Program, if the required shoreline buffer causes there to be less than 60' from the buffer to the front zoning setback line, the front yard zoning setback may be reduced to 10' for a porch, 15' for living space or the side of a garage, and 20' for a garage door. Side yard setbacks may be reduced to 5'. If there is still not 60' from the reduced zoning setback to the shoreline buffer, the shoreline buffer may also be reduced by the minimum amount that will allow 60' of buildable area, provided there will be no net loss of shoreline ecological function per Section 6-30, Critical Areas, and Appendix A, Mitigation, of this SMP and provided that at least a 25' shoreline buffer will be maintained. These reductions in buffer and setbacks do not authorize encroachments into any easements which may be on the property. All proposals to reduce setbacks and buffers shall be submitted to the Administrator for review. The Administrator may place conditions on the approval.
13. Subject to RCW 58.17.140 and RCW 58.17.170, lots in plats with preliminary plat approval before the adoption of this Master Program, and which had wetland or shoreline buffers set during the platting process, the buffer shall be as set during the platting process.
14. Residential Fencing: Fencing meeting Municipal Code standards may extend to the landward edge of the shoreline buffer. Fencing may be installed within the buffer if all of the following are met:
    a. Fence materials shall be natural or natural-looking materials and colors, and restricted to fence types such as post and rail or split rail.
    b. The lowest rail shall be a minimum of 16" from the ground, and the highest rail shall be no greater than 60" from the ground.
    c. New fences established parallel to the shoreline shall be outside of the shoreline and wetland buffers and shall require native vegetative plantings within that buffer if lawn or weeds currently exist within the area. The fence setback may be reduced if the applicant is participating in a shoreline public access plan or it there is intervening ownership (e.g. railroad, conservancy trail, etc.) The applicant shall submit a planting plan along with the fence permit.
    d. Vegetative plantings as fencing within the shoreline buffer are restricted to native plants.
    e. No vehicle parking or equipment storage shall be allowed between the OHWM and a fence parallel to the water, within the shoreline buffer area.
    f. Other than removal of noxious weeds and non-native plants, removal of vegetation within the shoreline buffer shall be restricted to initial digging of posts and vegetation removal necessary for the initial placement of the fence.
    g. Solid plank construction, solid vinyl, razor wire, and chain link fencing shall be prohibited within the shoreline buffer.

    Existing fencing must be brought into compliance with the above standards when there is an expansion of the development or use on the site, when there is a new use or modification of the shoreline or buffer (e.g. dock, boat lift, shoreline stabilization, etc.)

7-110. Transportation Facilities

7-110-010. Transportation facilities are those structures and developments that aid in movement of people, goods, and services. They include roads, highways, bridges, bicycle paths, trails, railroad facilities, and other related facilities.

7-110-020. Policies

1. New roads, railroads, and bridges in shoreline jurisdiction should be minimized.
2. New roads, railroads, and bridges in shoreline jurisdiction should be consistent with the City's *Comprehensive Plan*.
3. Transportation facilities should be located, designed, and constructed so that routes will result in no net loss of shoreline ecological functions and will have the minimum adverse impact on existing or future water-dependent uses.
4. Road and railroad locations should be planned to fit the topography of the shoreline in order to minimize alteration of natural conditions. New transportation facilities should be located and designed to minimize the need for shoreline protection measures, stream and lake crossings, and modification of natural drainage systems.
5. Trails and bicycle paths should be encouraged in shoreline areas where they are compatible with the natural character, resources, and ecology of the shoreline area.
6. Where transportation corridors are required within shoreline jurisdiction, then joint use for roads, utilities, and motorized and non-motorized forms of transportation should be encouraged.
7. Abandoned or unused road or railroad rights-of-way that offer opportunities for public access to the shoreline should be acquired and/or retained for public access. However, where practical, such areas should be allowed to revert to right-of-way if the right-of-way becomes necessary in the future.
8. All debris, overburden, and other waste materials from transportation facility construction should be handled, contained, and disposed of in a manner that prevents entry of said materials into adjacent water bodies.

7-110-030. Regulations

1. Transportation facilities and services shall use existing transportation corridors whenever possible, provided that facility additions and modifications will not adversely impact shoreline resources and are otherwise consistent with this master program and the City's *Comprehensive Plan*. If expansion of the existing corridor will result in net loss of shoreline ecological functions, then a less disruptive alternative shall be used.
2. Transportation and primary utility facilities shall be required to make joint use of rights-of-way and to consolidate crossings of water bodies where loss of shoreline ecological functions can be minimized by doing so.
3. Shoreline transportation facilities shall be sited and designed to avoid geologically hazardous areas and to fit the existing topography in order to minimize cuts and fills.
4. Where practical, shoreline transportation facilities shall be sited and designed to avoid the following areas:
    a. Areas between unstable or moderately unstable slopes and the OHWM (i.e., areas below unstable slopes).
    b. Areas above unstable or moderately unstable slopes that are within shoreline areas or are within 100 feet of the top of the slope (upland areas draining to unstable slopes).
    c. Any area in which proximity to a geologically hazardous area would result in need for shoreline stabilization or loss of shoreline ecological function
5. Cut and fill slopes shall be designed at the normal angle of repose or less.
6. Landfills for transportation facility development are prohibited in water bodies and wetlands except that when all structural and upland alternatives have been proven infeasible and the transportation facilities are necessary to support uses consistent with this master program and the City's *Comprehensive Plan*, such landfill may be permitted as a conditional use.
7. Major highways and railways shall be located outside of shoreline areas except where water crossings are required. Water crossings shall use the shortest route feasible unless such route would cause more damage to the environment.
8. New transportation facilities shall be located and designed to prevent or minimize the need for shoreline stabilization, landfill, or substantial site grading. Transportation facilities allowed to cross

over water bodies and wetlands shall use elevated, open pile or pier structures whenever feasible. All bridges must be built high enough to allow the passage of debris and provide 3 feet of freeboard above the 100 year flood level.

9. Shoreline transportation facilities shall be sited and designed to avoid steep or unstable areas and fit the existing topography in order to minimize cuts and fills.
10. All shoreline areas disturbed by transportation facility construction and maintenance shall be restored to their pre-project condition, using compatible, self-sustaining vegetation, immediately upon completion of the construction or maintenance activity. Plants that may compromise shoreline values shall be prohibited. The permit application submittal shall identify the size, location, and species of plants that will be used. The agency or developer constructing or maintaining the transportation facility shall also be responsible for maintaining the vegetation until it is established.
11. Waterway crossings shall be designed and maintained to cause minimal disturbance to banks.
12. Where permitted, wetland and priority habitat crossings and other crossings of critical, unique, or fragile areas shall be designed and maintained to cause no net loss of shoreline ecological functions.
13. Roads and railroads shall be located to minimize the need for routing surface waters into and through culverts.
14. All transportation facilities shall be designed, constructed, and maintained to contain and control all debris, overburden, runoff, erosion, and sediment generated from the affected areas. Relief culverts and diversion ditches shall not discharge onto erodible soils, fills, or side cast materials. State and local stormwater regulations apply.
15. Bridge abutments and necessary approach fills shall be located landward of wetlands or the ordinary high water mark, except that bridge piers may be permitted in a water body as a conditional use, when in compliance with requirements of other permitting agencies, including but not limited to the U.S. Army Corps of Engineers and the Washington State Department of Fish and Wildlife.
16. Except where a water crossing is necessary, roads, railroads, and other transportation facilities shall be located landward of shoreline wetlands and other Fish and Wildlife Habitat Conservation Areas.
17. Except for water crossings, all roads and railroads shall be adequately set back from the water (see Table 9.3, Development Standards and Specific Shoreline Development Regulations) and shall provide buffer areas of compatible, self-sustaining vegetation. Shoreline scenic drives and viewpoints may provide periodic breaks in the buffer to allow open views of the water, provided that removal of healthy native vegetation is not required to provide such breaks. Removal of healthy native vegetation is discouraged.
18. Overburden, debris, and other waste materials from both construction and maintenance activities, including drainage ditch clearing, shall not be deposited into or sidecast on the shoreline side of the road or in water bodies or wetlands. Such material shall be deposited in stable locations where re-entry and erosion into water bodies or wetlands is prevented.
19. Environment-specific regulations: Transportation facilities shall comply with the environment-specific requirements in Chapter 9.

7-120. Utilities (Primary Facilities)

7-120-010. Utilities are services and facilities that produce, transmit, carry, store, process, or dispose of electrical power, gas, water, sewage, communications, oil, etc. The provisions of this section apply to primary uses, such as sewage treatment plants and outfalls, public high-tension utility lines, power transfer facilities, sewer and water mains, gas distribution lines and storage facilities. See Chapter 6 for policies and regulations related to on-site accessory utilities.

7-120-020. Policies

1. Primary utilities should use existing transportation and utility sites, rights-of-way, and corridors whenever possible, rather than creating new corridors. Joint use of rights-of-way and corridors are encouraged.
2. Primary utilities should be prohibited in wetlands, other critical habitat areas, and other critical, unique and fragile areas unless no feasible alternative exists.

3. New primary utility facilities should be located so that shoreline protection works are not required.
4. Primary utilities facilities and corridors should be located so as to protect scenic views.
5. Primary utilities facilities and rights-of-way should be located and designed to result in no loss of shoreline functions or interference with shoreline processes; preserve the natural landscape; and minimize conflicts with present and planned land uses.
6. Whenever feasible, utilities should be placed underground or affixed to bridges.
7. Solid waste disposal activities and facilities should be prohibited in shoreline areas.
8. Location of utility facilities within existing public, private, and utility rights of way is encouraged.
9. When possible, water crossings should be avoided.

7-120-030. Regulations

1. Primary utility facilities and transmission lines shall be located, designed, constructed, operated, and maintained to cause no net loss of shoreline ecological functions. Utility lines associated with primary utilities shall use existing rights-of-way, corridors, and/or water crossings whenever possible and shall avoid duplication and construction of new or parallel corridors in shoreline areas. Proposals for new corridors or water crossings must fully substantiate the infeasibility of existing routes. Primary utility facilities and lines shall be located outside of shoreline areas where feasible.
2. Transmission and distribution facilities that must cross areas of shoreline jurisdiction shall cross by the shortest, most direct route feasible, unless such route would cause significant environmental damage.
3. Primary utilities shall be located and designed so as to avoid or minimize the use of any structural or artificial shore defense or flood protection works.
4. Where major facilities must be placed in a shoreline area, the location and design shall not destroy or obstruct scenic views.
5. Primary utilities shall meet required shoreline setbacks as specified in the Development Standards Table (Tables 9.3).
6. Utility facilities shall be screened from water bodies and adjacent properties, using primarily native, self-sustaining vegetation. Plants that may compromise shoreline values shall be prohibited. The type and width of screening required shall be as indicated in the table below. The permit application submittal shall identify the size, location, and species of plants that will be used. Substitution of a sight-obscuring fence or wall for the required landscaping shall not be permitted. Landscaped buffers shall be maintained in accordance with the requirements of the City's Municipal Code, Chapter 18.57.

Adjacent site	Type and width of screening
Water body	Type I, 20 feet wide
Residential or recreational use (existing or, in the case of undeveloped land, planned for, based on the City's *Comprehensive Plan*)	Type I, 20 feet wide
Commercial, industrial, or institutional use (existing or, in the case of undeveloped land, planned for, based on the City's *Comprehensive Plan*)	Type II, 10 feet wide

7. All underwater pipelines transporting liquids intrinsically harmful to aquatic life or potentially injurious to water quality are prohibited, unless no other feasible alternative exists. In those limited instances in which underwater pipelines are permitted as a conditional use, automatic shut-off valves shall be provided on both sides of the water body, and the applicant shall use all appropriate technology to detect and prevent leaks and ruptures of the pipelines.
8. Construction of primary utilities under water or in wetlands shall be timed to minimize impacts on fish and wildlife.
9. Landfilling in shoreline areas for primary utility facility or line development purposes is prohibited. Permitted crossings shall use pier or open pile construction.

10. Clearing of vegetation for the installation or maintenance of primary utilities shall be the minimum necessary to accommodate the proposed utility installation.
11. All shoreline areas disturbed by facility construction and maintenance shall be restored to their pre-project condition, using compatible, self-sustaining vegetation, immediately upon completion of the construction or maintenance activity. Plants that may compromise shoreline values shall be prohibited. The permit application submittal shall identify the size, location, and species of plants that will be used. The agency or developer constructing or maintaining the facility shall also be responsible for maintaining the vegetation until it is established.
12. Where feasible, primary utility development shall, through coordination with local government agencies, provide for compatible, multiple use of sites and rights-of-way. Such uses include shoreline access points, trail systems, and other forms of recreation and transportation, provided such uses will not unduly interfere with utility operations, endanger public health or safety, or create a significant and disproportionate liability for the owner.
13. The City shall require and use the following information in its review of proposals for installation of primary utility facilities:
    a. Description of the proposed facilities;
    b. Reasons why the utility facility requires a shoreline location;
    c. Alternative locations considered and reasons for their elimination;
    d. Location of other utility facilities in the vicinity of the proposed project and any plans to include facilities of other types of utilities in the project;
    e. Plans for reclamation of areas disturbed both during construction and following decommissioning and/or completion of the primary utility's useful life;
    f. Plans for control of erosion and turbidity during construction and operation; and
    g. Possibility for locating the proposed facility at an existing utility facility site or within an existing utility right-of-way.
14. Major non-water-oriented utility facilities are prohibited within shoreline jurisdiction, unless it can be shown that no feasible alternatives exist, in which case they will be conditional uses. Examples of non-water-oriented facilities include water system treatment plants, sewage treatment plants, and electrical substations.
15. Environment-specific regulations: Utility facilities shall comply with the environment-specific requirements in Chapter 9.
16. Electrical utility or service lines shall not cross shorelines or surface waters, except in the case of high voltage lines, when no other alternative exists.

Chapter 8
Shoreline Modification Policies and Regulations

8-1 Introduction

At times, shoreline modifications may create adverse impacts on shorelines by altering the natural character, resources, and ecology of the shoreline. Shoreline modifications are generally related to construction of a physical element such as a dike, breakwater, dredged basin, or fill, but they can include other actions such as clearing, grading, application of chemicals, or significant vegetation removal. Shoreline modifications are usually undertaken in support of or in preparation for a shoreline use; for example, dredging (shoreline modification) to allow for a marina (boating facility use). All shoreline uses and activities, even those that are exempt from the requirement to obtain a shoreline substantial development permit, and regardless of the Shoreline Environment in which they are undertaken, must conform to all of the applicable policies and regulations listed in this SMP. For example, a residential development project that included docks and roads would need to comply with the policies and regulations related to docks and roads as well as those related to residential development.

Shoreline Modification Policies and Regulations cover the following areas:

- Section 8-5 General Provisions
- Section 8-10 Clearing and Grading
- Section 8-15 Dredging and Dredge Material Disposal
- Section 8-20 Fill
- Section 8-25 Flood Hazard Management Facilities
- Section 8-30 Shoreline Stabilization
- Section 8-35 Vegetation Conservation

8-5 General Provisions

8-5-010. Applicability: The provisions of this section apply to all shoreline modifications within shoreline areas.

8-5-020 Policies

1. All shoreline modifications should be in support of an allowed shoreline use that is in conformance with the provisions of this master program. Modifications should not be allowed when there is no other use of the lot.
2. Shoreline modifications should cause as few environmental impacts as possible and should be limited in size and number.
3. The type of shoreline and the surrounding environmental conditions should be considered in determining whether a proposed shoreline modification is appropriate.
4. Projects that include shoreline modifications should contribute to enhancement of shoreline ecological functions, when possible.
5. As shoreline modifications are allowed to occur, measures to protect and restore ecological functions should be implemented.
6. Preference shall be given for those types of shoreline modifications that have a lesser impact on ecological functions. For example, planting vegetation that will stabilize the shoreline is preferred rather than a concrete bulkhead.

8-5-030. Regulations

1. All shoreline modification activities not in support of a conforming allowed use are prohibited, unless it can be demonstrated that such activities are necessary and in the public interest for the maintenance or enhancement of shoreline ecological functions.
2. Shoreline modifications shall result in no net loss of shoreline ecological functions.
3. Only shoreline modifications that are appropriate to the specific type of shoreline and environmental conditions shall be allowed. (See Table 9.3, Use-Related Development Standards)

4. Where a shoreline modification is authorized, the method that has the least impact on ecological function while achieving the purpose of the modification shall be used.
5. Shoreline modifications for non-water-dependent uses shall be allowed only if the net effect of the project over the whole site is to improve the ecological condition of the shoreline (i.e. another portion of the shoreline on the project site shall be ecologically enhanced to compensate for the shoreline modification).
6. Ecological impacts of shoreline modifications shall be mitigated to ensure no net loss of shoreline ecological functions. Mitigation measures shall be applied in the following sequence of steps listed in order of priority, with A. of this subsection being top priority:
    A. Avoiding the impact altogether by not taking a certain action or parts of an action;
    B. Minimizing impacts to the greatest extent possible by limiting the degree or magnitude of the action and its implementation by using appropriate technology or by taking affirmative steps to avoid or reduce impacts;
    C. Mitigating the impact by repairing, rehabilitating, or restoring the affected environment;
    D. Reducing or eliminating the impact over time by preservation and maintenance operations;
    E. Compensating for the impact by replacing, enhancing degraded shorelines, or providing substitute resources or environments; and
    F. Monitoring the mitigation actions and taking appropriate corrective measures.

    In determining appropriate mitigation measures, lower priority measures shall be applied only where higher priority measures are determined to be infeasible or inapplicable. Mitigation shall be in compliance with Appendix A, Mitigation, as well as any specific mitigation standards required by the appropriate section of this SMP.
7. All shoreline modification activities must conform to the General Provisions (see Chapter 6) and the provisions for the appropriate Environment Designation (see Chapter 9) in this master program.

8-10. Clearing and Grading

8-10-010. Applicability: Clearing and grading are activities associated with developing property for a particular use. Specifically, "clearing" means the destruction, uprooting, scraping, or removal of vegetative ground cover, shrubs, and trees. "Grading" means the physical manipulation of the earth's surface and/or surface drainage pattern without significantly adding or removing on-site materials. "Fill" means placement of dry fill on existing dry or wet areas and is addressed later in this chapter.

Clearing and grading are regulated because they may increase erosion, siltation, runoff, and flooding, change drainage patterns; reduce flood storage capacity; and damage habitat. All clearing and grading within areas under shoreline jurisdiction, even that which does not require a permit, must be consistent with the Shoreline Management Act, the State rules implementing the Act, and the goals, policies, and regulations of this Master Program. The Vegetation Conservation provisions later in this chapter have direct application to clearing and grading proposals.

8-10-020. Policies

1. Clearing and grading activities should only be allowed in association with an allowed shoreline use.
2. Clearing and grading in shoreline areas should be limited to the minimum necessary to accommodate permitted shoreline development.
3. Clearing and grading should be prohibited in required shoreline buffers, except for a 4'-wide path to provide access to a dock and reasonable access by property owners with disabilities.
4. All clearing and grading activities should be designed and conducted to minimize sedimentation and impacts to shoreline ecological functions, including wildlife habitat functions and water quality. Negative environmental and shoreline impacts of clearing and grading should be avoided or minimized through proper site planning, construction timing and practices, vegetative stabilization or

(where required) soft structural stabilization, use of erosion and drainage control methods, and by adequate maintenance.

5. For all clearing and grading proposals, a plan addressing species removal, re-vegetation, irrigation, erosion and sedimentation control, and other plans for protecting shoreline resources from harm should be required.
6. Cleared and disturbed sites remaining after completion of construction should be promptly re-stabilized, and should be replanted as soon as is practical with primarily native, self-sustaining plantings. Within the buffer, only native plants should be planted. If weather conditions preclude planting immediately after the completion of construction, replanting shall occur no later than the next planting season.
7. Restoration of disturbed areas is difficult in the Moses Lake area, due to the dry climate and abundant weed seeds. Avoiding disturbance is more effective and economical than restoration.

8-10-030. Regulations

1. Since restoration is more difficult than avoiding the impact in the first place, all clearing and grading activities shall be limited to the minimum necessary for the intended development. The Vegetation Management provisions later in this chapter apply to all clearing and grading activities.
2. Clearing and Grading Plan
    a. A clearing and grading plan shall be required for all development within shoreline jurisdiction, whether a shoreline permit is required or the project is exempt from a shoreline substantial development permit.
    b. The clearing and grading plan shall address species removal, replanting, irrigation, erosion and sedimentation control, and plans for protecting shoreline resources from harm.
    c. The plan must be approved by the City before any clearing or grading takes place.
3. No clearing and grading activities shall take place unless associated with an approved shoreline development. Clearing and grading shall be addressed in the permit or exemption for the shoreline use or activity with which it is associated. No clearing or grading shall take place before the permit or exemption is issued.
4. Immediately upon completion of the construction or maintenance activity, remaining cleared areas shall be restored to their pre-project condition, using compatible, self-sustaining vegetation.
    a. If weather conditions at the time of year do not permit immediate restoration, replanting shall be completed during the next planting season.
    b. A planting plan shall be submitted to the City for review and approval. If necessary, a temporary sterile certified weed-free cover crop (e.g., a sterile non-persistent member of the grass family such sterile Triticale, barley, or oats) shall be planted to prevent erosion during the establishment period; said cover crop shall be maintained until the permanent vegetation is sufficiently established to prevent erosion.
    c. Replanted areas shall be maintained in accordance with the City's landscape maintenance requirements (MLMC Chapter 18.57.090). In the case of transportation, utility, or other capital facility construction, the agency or developer constructing or maintaining the facility shall also be responsible for maintaining the vegetation until it is established.
5. All shoreline areas disturbed by transportation, utility, or other facility maintenance shall be restored to their pre-project condition, using compatible vegetation, immediately upon completion of maintenance activity. The permit application submittal shall identify the size, location, and species of plants that will be used. The agency or developer maintaining the facility shall also be responsible for maintaining the vegetation until it is established.
6. Clearing by hand-held equipment of invasive non-native vegetation on the State Noxious Weed List is permitted in shoreline areas provided the disturbed area is promptly replanted with vegetation from the recommended list.

7. All shoreline development and activity shall use effective measures to minimize increases in surface water runoff and sedimentation that may result from clearing and grading activity, in compliance with the Eastern Washington Stormwater Manual. With the required clearing and grading plan submittal, the applicant must include in the proposal the methods that will be used to control, treat, and release runoff so that receiving water quality and shore properties and features shall not be adversely affected. Such measures may include but are not limited to dikes, berms, catch basins or settling ponds, installation and maintenance of oil/water separators, grassy swales, interceptor drains, and landscaped buffers.
8. Soil stabilization associated with clearing and grading shall, whenever feasible, use bioengineering or other soft stabilization techniques.
9. Any significant placement of materials from off of the site, or substantial creation or raising of dry upland, shall be considered filling and shall comply with the fill provisions of Chapter 8, Modification Activities.
10. Before any clearing or grading takes place on a site, sediment control measures such as silt fences, sand bags, or other approved measures shall be in place to protect the lake, shoreline, and any wetlands from sedimentation during construction. Sediment control measures shall be inspected after every runoff event and at least once per month and shall be maintained when necessary to ensure proper functioning.

8-15. Dredging and Dredge Material Disposal

8-15-010. Applicability: Dredging is the removal or displacement of earth or sediments such as gravel, sand, mud, silt, and/or other materials or debris from any water body or associated shoreline or wetland. Dredging is stringently regulated, since uncoordinated, piecemeal dredging in one area of the lake can have serious impacts on other areas. Dredging is normally done for specific purposes such as constructing or maintaining navigation channels, or marinas, for installing pipelines or cable crossings, or for dike or drainage system repair and maintenance. Dredge material disposal is the depositing of dredge materials on land or into water bodies for the purposes of either creating new lands or disposing of the by-products of dredging. Dredge material disposal within shoreline jurisdiction is also subject to the filling provisions found later in this chapter.

8-15-020. Policies

1. New development should be sited and designed to avoid or, if that is not possible, to minimize the need for new and maintenance dredging.
2. Dredging and dredge material disposal should be located and conducted in a manner that minimizes damage to existing ecological functions and processes, including those in the area to be dredged, at the dredge material disposal site, and in other parts of the watershed. Impacts that cannot be avoided should be mitigated in a manner that assures no net loss of shoreline ecological functions.
3. Dredging of bottom materials for the primary purpose of obtaining material for fill or other purposes should be prohibited, except when the material is necessary for the restoration of ecological functions.
4. Dredging operations should be planned and conducted to minimize interference with water and shoreline uses, properties, and values.
5. Dredging for the purpose of establishing, expanding, or relocating or reconfiguring navigation channels and basins should be allowed where necessary for assuring safe and efficient accommodation of existing navigational uses, and then only when significant ecological impacts are minimized and when mitigation is provided.
6. Maintenance dredging of established navigation channels and basins should be restricted to maintaining previously dredged and/or existing authorized location, depth, and width.
7. Dredge material disposal in water bodies should be discouraged, except for habitat improvement or where depositing dredge material on land would be more detrimental to shoreline resources than deposition in water areas.

8. Where dredge material has suitable organic and physical properties, dredging operations should be encouraged to recycle dredged material for beneficial use in enhancement of beaches that provide public access, habitat creation or restoration, aggregate, or clean cover material at a landfill.
9. All sediment management and dredging should be carried out in a coordinated, well-planned manner.
10. Sediment management and dredging should be planned and conducted to optimize ecological function, while accommodating recreational navigation where possible.
11. Dredging should improve fish and wildlife habitat.
12. Dredging should not result in increased shoreline erosion.
13. Dredging should not impact benthic macroinvertebrates, which are important forage for the lake's fish and migrating birds.
14. Dredging should not result in reduction of the area of existing native emergent vegetation, such as bulrush, or area where bulrush should be able to occur but have been removed.

8-15-030. Regulations–Dredging

1. Dredging shall only be permitted as part of the implementation of the Sediment Management element of the Restoration Plan (Chapter 11 of this Shoreline Master Program). The City shall require and use the following information in its review of shoreline dredging and dredge material disposal proposals:
    a. A description of the purpose of the proposed dredging and analysis of compliance with the policies and regulations of this SMP.
    b. A detailed description of the existing physical character, shoreline geomorphology, and biological resources provided by the area proposed to be dredged, including:
        1. A site plan map outlining the perimeter of the proposed dredge area. The map must also include the existing bathymetry (water depths that indicate the topography below the OHWM) and have data points at a minimum of 2' depth increments.
        2. A critical areas report.
        3. A mitigation plan if necessary to address any identified adverse impacts on ecological functions or processes.
        4. Information on stability of areas adjacent to proposed dredging and spoils disposal areas.
    c. A detailed description of the physical, chemical, and biological characteristics of the dredge material to be removed, including:
        1. Physical analysis of material to be dredged (material composition and amount, grain size, organic material present, source of material, etc.
        2. Chemical analysis of material to be dredged (volatile solids, chemical oxygen demand (COD), grease and oil content; mercury, lead, and zinc content, etc.
        3. Biological analysis of material to be dredged.
    d. A description of the method of materials removal, including facilities for settlement and movement.
    e. Dredging procedure, including the length of time it will take to complete dredging, method of dredging, and amount of materials removed.
    f. Frequency and quantity of project maintenance dredging.
    g. Detailed plans for dredge spoil disposal, including specific land disposal sites and relevant information on the disposal site, including but not limited to:
        1. Dredge material disposal area.
        2. Physical characteristics including location, topography, existing drainage patterns, surface and ground water.

3. Size and capacity of disposal site.
4. Means of transportation to the disposal site.
5. Proposed dewatering and stabilization of dredged material.
6. Methods of controlling erosion and sedimentation.
7. Future use of the site and conformance with land use policies and regulations.
8. Total estimated initial dredge volume.
9. Plan for disposal of maintenance spoils for at least a 20-year period, if applicable.
10. Hydraulic modeling studies sufficient to identify existing geohydraulic patterns and probable effects of dredging.

2. In evaluating permit applications for any dredging project, the Planning Commission shall consider the need for and adverse effects of the initial dredging, subsequent maintenance dredging, and dredge disposal. Dredging and dredge material disposal shall only be permitted where it is demonstrated that the proposed actions will not:
   a. Result in significant and/or on-going damage to water quality, fish, or other biological elements;
   b. Adversely alter natural drainage and circulation patterns, or significantly reduce flood storage capacities;
   c. Affect slope stability; or
   d. Otherwise damage shoreline or aquatic resources.
3. Proposals for dredging and dredge disposal shall include all feasible mitigation measures to protect fish and wildlife habitat and minimize adverse impacts such as turbidity; release of nutrients, heavy metals, sulfides, organic materials, or toxic substances; dissolved oxygen depletion; or disruption of food chains.
4. Dredging waterward of the ordinary high water mark shall be permitted only:
   a. For navigation or navigational access;
   b. In conjunction with a water-dependent use of water bodies or adjacent shorelands;
   c. As part of the Sediment Management element in the Restoration Plan (Chapter 11) that has been developed by the City, Moses Lake Irrigation and Rehabilitation District, Washington Department of Fish and Wildlife, and other stakeholders and entities, and has been accepted by the Washington Department of Fish and Wildlife or other agency with jurisdiction;
   d. To improve water quality;
   e. In conjunction with a bridge or a navigational channel or structure for which there is a documented public need and where other feasible sites or routes do not exist; or
   f. To improve water flow and/or manage flooding only when consistent with an approved flood and/or stormwater comprehensive management plan.
5. When dredging is permitted, the dredging shall be the minimum necessary to accommodate the proposed use.
6. Any impacts of dredging that cannot be avoided shall be mitigated in a manner that assures no net loss of shoreline ecological functions.
7. Dredging shall use techniques that cause the minimum dispersal and broadcast of bottom material.
8. Dredging for the primary purpose of obtaining material for fill is prohibited, except when the material is necessary for the restoration of ecological functions. When allowed, the site where the fill is to be placed must be located waterward of the ordinary high-water mark. The project must be associated with a significant habitat enhancement project.
9. Dredging upland of the ordinary high water mark to construct canals or basins for boat moorage or launching, water ski landings, swimming holes, and similar uses is prohibited.

8-15-040. Regulations–Dredge Material Disposal

1. Disposal of dredged materials shall be accomplished at approved contained upland sites.
2. Depositing dredge materials in water areas shall be allowed only by conditional use permit, and only for improving fish and wildlife habitat as part of the sediment management element of the Restoration Plan in Chapter 11 of this Shoreline Master Program.
3. Land disposal sites shall be replanted as soon as feasible, and in no case later than the next planting season, in order to retard wind and water erosion and to restore the wildlife habitat value of the site. Vegetation from the recommended list (see Chapter 14) or other species authorized by the City shall be used. Native plants are preferred. Plants that may compromise shoreline values shall be prohibited. The permit application submittal shall identify the size, location, and species of plants that will be used. The agency or developer responsible for the land disposal shall also be responsible for maintaining the vegetation until it is established.
4. Proposals for disposal in shoreline areas must show that the site will ultimately be suitable for a use permitted by this master program.

8-20. Fill

8-20-010. Applicability: Fill is the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the ordinary high water mark, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land. Fill does not include sanitary landfills for the disposal of solid waste, which are prohibited in shoreline jurisdiction except for temporary trash receptacles at commercial and public park developments.

8-20-020. Policies

1. Fills waterward of the ordinary high water mark should be allowed only when necessary to facilitate water-dependent and/or public access uses that are consistent with this master program.
2. Shoreline fills should be designed and located so that there will be no significant damage to existing ecological systems or natural resources, and no alteration of local currents, surface water drainage, or flood waters that would result in a hazard to adjacent life, property, or natural resource systems.
3. In evaluating fill projects, such factors as potential and current public use of the shoreline and water surface area, navigation, water flow and drainage, water quality, and habitat should be considered and protected to the maximum extent feasible.
4. The perimeter of any fill should be designed to avoid or eliminate erosion and sedimentation impacts, both during initial fill activities and over time. Natural-appearing and self-sustaining control methods are preferred over structural methods.
5. Where permitted, fills should be the minimum necessary to provide for the proposed use and should be permitted only when they are part of a specific development proposal that is permitted by this master program. Placing fill in water bodies or wetlands to create usable land should be prohibited.

8-20-030. Regulations

1. The City shall require and use the following information in its review of fill proposals:
    a. Proposed use of the fill area.
    b. Physical, chemical, and biological characteristics of the fill material.
    c. Source of the fill material.
    d. Method of placement and compaction.
    e. Location of fill relative to existing drainage patterns and wetlands.
    f. Location of the fill perimeter relative to the ordinary high water mark.
    g. Perimeter erosion control or stabilization measures.
    h. Type of surfacing and runoff control devices.

2. Fill waterward of the ordinary high water mark or in wetlands shall only be permitted as a conditional use, and only for one of the following purposes. Fill in wetlands must comply with the wetlands provisions in Chapter 6 of this SMP.
    a. In conjunction with a water-dependent or public use permitted by this master program.
    b. In conjunction with a bridge or navigational structure for which there is a demonstrated public need (based on the City's *Comprehensive Plan*) and where no feasible upland sites, design solutions, or routes exist.
    c. As part of an approved beach restoration project.
    d. For fisheries, aquaculture, or wildlife enhancement projects.
3. Pier or pile support shall be utilized whenever feasible in preference to filling. Fills for approved road development in floodways or wetlands shall be permitted only if pile or pier supports are proven infeasible.
4. Fills are prohibited in floodplains except where it can be clearly demonstrated that the geohydraulic characteristics and floodplain storage capacity will not be altered to cause increased flood hazard or other damage to life or property. Fills are prohibited in floodways, except when approved by conditional use permit and where required in conjunction with a proposed water-dependent or other use, as specified in Regulation 2 above.
5. Fills shall be permitted only when it is demonstrated that the proposed action will not:
    a. Result in significant damage to water quality or fish and wildlife habitat;
    b. Adversely affect natural drainage and circulation patterns or significantly reduce flood water capacities;
    c. Affect slope stability; or
    d. Otherwise damage shoreline or aquatic resources.
6. Fills shall be allowed only as part of a specific proposal for a use or activity that is permitted by this master program.

<u>8-20-040. Regulations–Design and Construction</u>

1. Where fills are permitted, the fills shall be the minimum necessary to accommodate the proposed use.
2. Fills shall be designed, constructed, and maintained to prevent, minimize, and control all material movement, erosion, and sedimentation from the affected area. Perimeters of permitted fill projects shall be designed and constructed with silt curtains, vegetated buffer areas, or other methods, and shall be adequately sloped to prevent erosion and sedimentation both during initial fill activities and afterwards. Such containment practices shall occur during the first growing season following completion of the fill. The design shall incorporate natural-appearing and self-sustaining control methods unless they can be demonstrated to be infeasible due to existing environmental conditions such as currents and weather.
3. Fill materials shall be sand, gravel, rock, soil, or similar materials. Use of polluted dredge spoils, solid waste, and sanitary landfill materials is prohibited.
4. Fills shall be designed to allow surface water penetration into ground water supplies where such conditions existed prior to fill. Fills shall not be permitted in aquifer recharge areas if they would have the effect of preventing percolation of the water.
5. The timing of fill construction shall be regulated to result in no net loss of shoreline ecological functions, including water quality and aquatic life.
6. Fill on dry land shall not result in substantial changes to patterns of surface water drainage from the project site and onto adjacent properties; within shoreline areas; into aquatic areas; or onto steep slopes or other erosion hazard areas.

8-25. Flood Hazard Management

8-25-010. Applicability: Flood hazard management projects are those actions taken with the primary purpose of preventing or minimizing damage caused by flooding.

8-25-020. Policies

1. Construction should not be allowed in flood hazard areas.

8-25-030. Regulations

1. All flood hazard management projects shall comply with Moses Lake Municipal Code 18.53, Flood Hazard Areas and with the General Regulations for Frequently Flooded Areas.
2. Environment-specific regulations: flood hazard management projects shall comply with the environment-specific requirements in Chapter 9.

8-30. Shoreline Stabilization

8-30-010-A. Applicability: Shoreline stabilization includes actions taken primarily to address erosion impacts to upland property and improvements caused by current, wake, or wave action. Those actions include structural, nonstructural, and vegetative methods.

8-30-010-B. Structural stabilization may be "hard" or "soft." "Hard" structural stabilization measures refer to those with solid, hard surfaces, such as concrete bulkheads, which deflect rather than absorb wave energy, while "soft" stabilization, such as biotechnical stabilization, which employs plant materials, rolled erosion control and soil engineering fabrics, and similar structural materials to absorb wave energy and restore the function of a natural shoreline. Generally, the harder the stabilization measure, the greater the impact on shoreline processes, including sediment transport, geomorphology, and biological functions. Hard shoreline stabilization methods also result in vegetation removal and damage to near-shore habitat and shoreline corridors.

8-30-010-C. Human use of the shoreline has typically led to hardening of the shoreline for various reasons, including reduction of erosion, providing useful space at the shore, or providing access to docks. The impacts of hardening any one property may be minimal, but cumulatively the impact of shoreline hardening is significant. Hard structures, especially vertical walls, often create conditions that lead to the failure of the structure. Over time, the substrate of the shoreline coarsens and scours down to bedrock. The footings of the bulkhead are exposed, leading to undermining and failure.

8-30-010-D. The following methods of shoreline stabilization are organized from "biotechnical" to "hard structural". The use of biotechnical stabilization is required, unless this design method has been found technically not feasible by a qualified expert such as a soil bioengineering practitioner.

1. Biotechnical or Soil Bioengineering:

- biotechnical measures as described above

2. "Hard Structural"
    a. riprap
    b. retaining walls (sheet piling, concrete, etc.)
    c. bulkheads (sheet piling, concrete, etc.)

8-30-010-E. Non-structural methods include building setbacks, ground water management, and planning and regulatory measures to avoid the need for structural stabilization.

8-30-010-F. Vegetative methods include re-vegetation and vegetation enhancement. In addition, vegetation is often used as part of structural stabilization methods; it is always part of biotechnical stabilization. For the purposes of this section, vegetative methods are considered to include only re-vegetation and vegetation enhancement.

Note: Additional regulations for bulkheads and riprap are found in a separate section, below. Bulkheads and riprap must meet the provisions of both sections.

8-30-020. Policies

1. Stabilization measures should be designed, located, and constructed primarily to prevent damage to existing development.
2. No structural stabilization measures should be allowed for a vacant lot.
3. New development should be located and designed to eliminate the need for future shoreline stabilization.
4. Shoreline vegetation, both on the bank and in the water, is very effective at stabilizing shorelines. For this reason, property owners are strongly encouraged to protect existing shoreline vegetation and restore it where it has been removed. Preserving and restoring shoreline vegetation should be the preferred method of shoreline stabilization.
5. Structural solutions to shoreline erosion should be allowed only if non-structural and vegetative methods would not be able to reduce existing or ongoing damage. The "softest" structural stabilization that will be effective should be used.
6. Public projects should be models of good shoreline stabilization design and implementation.
7. Shoreline stabilization shall not be allowed for new uses if it would cause a net loss of shoreline ecological functions on the site, within the city, or within the watershed; or if it would cause significant ecological impacts to adjacent properties or shoreline areas. Those impacts include accelerated erosion of adjacent properties caused by the stabilization measures.

8-30-030. Regulations

1. New structural stabilization measures shall not be allowed except to protect or support an existing or approved use, or for the restoration of ecological functions, or for hazardous substance remediation projects pursuant to RCW 70.105D, when non-structural or vegetative methods are not feasible or are not sufficient. New or enlarged "hard" stabilization methods shall not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the primary structure or water dependent use is in danger from shoreline erosion caused by current or waves, and that the proposed "hard" stabilization measure is the least impacting method that will protect the structure. Use of shoreline stabilization measures to create usable land is prohibited.
2. New non-water-dependent uses, including single-family residences, that includes structural shoreline stabilization shall not be allowed unless all of the following conditions apply:
    a. The need to protect the use from destruction due to erosion caused by natural processes, such as currents and waves, is demonstrated through a geotechnical report.
    b. The erosion is not being caused by upland conditions, such as drainage and the loss of vegetation.
    c. Non-structural measures (such as placing the use farther from the shoreline), vegetative methods, or installing on-site drainage improvements, are not feasible or not sufficient.
    d. The stabilization will not cause significant ecological impacts to any species or habitat.
3. Creation of new lots that will require shoreline stabilization in order for development to occur shall not be allowed.
4. New uses in areas above unstable slopes and moderately unstable slopes shall be set back sufficiently to ensure that shoreline stabilization will not be needed during the life of the structure, as demonstrated by a geotechnical analysis.
5. Where structural shoreline stabilization measures are demonstrated to be necessary, the size of the stabilization measures shall be limited to the minimum necessary. Stabilization measures used shall be designed to minimize harm to ecological functions. Lost functions shall be mitigated to ensure no net loss of shoreline ecological functions. Soft approaches shall be used unless demonstrated by a geotechnical report to be insufficient to protect the primary structure or structures.
6. Shoreline stabilization measures shall be designed to restore, as much as possible, the ecological functions of the shoreline.
7. Where stabilization is necessary to alleviate erosion caused by removal of vegetation, vegetative

stabilization measures shall be the only stabilization measures allowed.

8. Publicly financed or subsidized shoreline erosion control measures shall not restrict appropriate public access to the shoreline, except where such access is determined to be infeasible because of incompatible uses, safety, security, or harm to ecological functions. Where feasible, ecological restoration and public access improvements shall be incorporated into the project.
9. All applicable federal, state, and local permits shall be obtained and complied with in the construction of shoreline stabilization measures. All permits must be issued before any stabilization work takes place.
10. Enlarging or replacing an existing stabilization structure shall be evaluated the same as a new stabilization structure.
11. Where geotechnical reports are required that address the need to prevent potential damage to a primary structure, the following apply:
    a. The geotechnical report shall address the necessity for shoreline stabilization by estimating time frames and rates of erosion and report on the urgency associated with the specific situation.
    b. Hard armoring solutions shall not be authorized except when the geotechnical report confirms that there is a significant possibility that the structure will be damaged within three years as a result of shoreline erosion in the absence of such hard armoring measures, or where waiting until the need is that immediate would foreclose the opportunity to use measures that avoid impacts on ecological functions.
    c. Where a geotechnical report confirms a need to prevent potential damage to a primary structure, but the need is not as immediate as three years, the report may still be used to justify more immediate authorization to protect against erosion using soft measures.
    d. The geotechnical report shall be prepared by a qualified professional engineer or geologist who has professional expertise about the regional and local shoreline geology and processes.

8-30-040. Bulkheads and Riprap

8-30-050. Applicability:

1. A bulkhead is a type of hard structural shoreline stabilization measure. Bulkheads are walls, constructed parallel to the shoreline and in contact with the water, whose primary purpose is to contain and prevent the loss of soil caused by erosion or wave action. A bulkhead-like structure used as part of the structure of a cantilevered dock is not regulated as a bulkhead as long as the width is no more than what is required to stabilize the dock.
2. Riprap is a layer, facing, or mound of stone placed on a slope.
3. Exemption: Certain bulkheads are exempt from the requirement to obtain a shoreline substantial development permit. However, all bulkheads must comply with the Shoreline Management Act, the rules implementing the Act, and this Master Program.

8-30-060. Policies

1. A bulkhead or riprap are not preferred methods of stabilizing the shoreline, because bulkheads and riprap significantly degrade fish and wildlife habitat by the removal of shoreline vegetation, increase erosion on neighboring properties, and change the natural sedimentation process.
2. Cumulative impacts of bulkheads and riprap should be considered, since over time and as more shoreline is lost to bulkheading and riprap, the resulting loss of habitat may have long-term impacts on fish populations as well as to the overall ecological value of the lake.
3. Most areas along Moses Lake can be adequately stabilized using softer, more natural means, such as vegetation enhancement, rather than a bulkhead or riprap.
4. If the purpose is not stabilization, a retaining wall, set back from shoreline vegetation, should be used rather than a bulkhead at the water's edge. (Retaining walls for purposes other than shoreline stabilization must comply with the setback and buffering requirements under the heading

"Environmental Impacts and Water Quality" in Chapter 6 of this SMP.)

5. Because a bulkhead or riprap on one property can accelerate erosion on adjacent properties, the impacts of a proposed bulkhead or riprap on adjacent properties should be analyzed and considered before the bulkhead or riprap is approved.
6. A bulkhead should be allowed only for shoreline stabilization, and only if all more ecologically-sound measures are proven infeasible.
7. Property owners are encouraged to remove existing bulkheads and restore the shoreline to a more natural state. As an incentive, such projects should be considered to be watershed restoration projects and therefore processed without a fee charged for the shoreline permit.

8-30-070. Regulations

1. All shoreline stabilization policies and regulations apply.
2. New or enlarged or replacement bulkheads or riprap for an existing principal structure or use, including residences, shall not be allowed unless there is conclusive evidence, documented by a geotechnical analysis, that the principal structure is in danger from shoreline erosion caused by currents or waves. Normal sloughing, or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis shall evaluate on-site drainage issues and address drainage problems away from the shoreline edge before considering structural shoreline stabilization. The project design and analysis shall also evaluate vegetation enhancement and biotechnical stabilization as a means of reducing undesirable erosion. The geotechnical analysis shall demonstrate that the stabilization measure chosen is the softest means that will be sufficient to achieve stabilization. The geotechnical analysis shall evaluate impacts to neighboring properties caused by the proposed stabilization.

8-35. Vegetation Conservation

8-35-010. Applicability:

1. Vegetation conservation includes activities to prevent the loss of plant communities that contribute to the ecological functioning of shoreline areas. The intent of vegetation conservation is to provide habitat, improve water quality, reduce destructive erosion, sedimentation, and flooding; and accomplish other functions performed by plant communities along shorelines. Vegetation conservation deals with the protection of existing diverse plant communities along the shorelines, aquatic weed control, and the restoration of altered shorelines by reestablishing natural plant communities as a dynamic system that stabilizes the land from the effects of erosion.
2. Vegetation conservation provisions are important for several reasons, including water quality, habitat, and shoreline stabilization. Shoreline vegetation improves water quality by removing excess nutrients and toxic compounds, and removing or stabilizing sediments. Habitat functions of shoreline vegetation include shade, recruitment of vegetative debris (fine and woody), refuge, and food production. Shoreline vegetation, especially woody plants with large root systems above the ordinary high water mark and emergent plants such as bulrushes, can be very effective at stabilizing the shoreline and preventing erosion. An additional reason that vegetation conservation provisions are important is that the Shoreline Management Act sets preferences for shorelines of statewide significance, such as Moses Lake. Those preferences include preserving the natural character, resources and ecology of the shoreline.
3. Vegetation conservation provisions apply even to those uses that are exempt from the requirement to obtain any sort of shoreline permit.

8-35-020. Policies

1. Natural plant communities within and bordering shorelines should be protected and maintained to ensure no net loss of shoreline ecological functions.
2. Natural shoreline vegetation should be maintained and enhanced to reduce the hazard of bank failures and accelerated erosion. Vegetation removal that is likely to result in soil erosion severe enough to create the need for structural shoreline stabilization measures should be prohibited.

3. Shoreline vegetation degraded by natural or manmade causes should be restored wherever feasible.
4. Non-structural and "soft" methods of shoreline stabilization, such as vegetation enhancement and soil bioengineering, are preferred to hard structures to arrest the processes of erosion, sedimentation, and flooding.
5. Removal of vegetation should be limited to the minimum necessary to reasonably accommodate the permitted use or activity.
6. The physical and aesthetic qualities of the natural shoreline should be maintained and enhanced.
7. Preference should be given to preserving and enhancing natural vegetation closest to the ordinary high water mark.
8. Aquatic weed management should stress prevention first.

8-35-030. Regulations

1. Development shall be located away from shorelines where the Erosion Hazard has been identified as "Very High" or the Shoreline Exposure Range is shown as greater than ten (10) meters in the *Shoreline Inventory and Characterization*.
2. Restoration of any shoreline that has been disturbed or degraded shall use plant materials from the recommended list (see Chapter 14) or other species approved by the City, with a diversity and type similar to or better than that which originally occurred on the site. Questions about appropriate diversity and type shall be directed to agencies with jurisdiction, such as the departments of Ecology and Fish and Wildlife.
3. Stabilization of erosion-prone surfaces along shorelines shall utilize vegetative, non-structural means wherever possible.
4. Vegetation removal that would be likely to result in significant soil erosion or the need for structural shoreline stabilization measures is prohibited. This does not preclude the removal of noxious weeds, provided the disturbed area is promptly replanted with vegetation from the recommended list or if the site will fully re-vegetate on in its own within three growing seasons.
5. Topping of trees shall be prohibited in all cases.
6. Removal of noxious weeds in environmentally sensitive areas shall be timed and carried out in a manner that minimizes any disruption of wildlife or habitat.
7. Within the required shoreline buffer specified in Chapter 9, Table 2, no disturbance is allowed, with the following exceptions:
    a. Removal of noxious weeds.
    b. With the approval of the Community Development Department, removal of weeds and planting of approved beneficial species. Before any work is done, the landowner shall submit a plan to the Community Development Department.
    c. Creation of a path no wider than 5' which provides access to an approved dock.
    d. Removal of vegetation damaged or destroyed by a natural occurrence.
8. Permits issued for projects in ecologically degraded areas shall include a condition that appropriate shoreline vegetation shall be planted or enhanced, to contribute to the restoration of ecological processes and functions.
9. Emergent plants such as bulrushes absorb wave energy and protect the shoreline from erosion. These plants shall be preserved to the greatest extent possible and shall not be removed, uprooted, trimmed, or burned. Limited removal may be allowed for access, such as immediately adjacent to a dock, subject to local, state, and federal regulations.
10. Significant vegetation removal is a shoreline modification which is regulated and requires a shoreline permit. Significant vegetation removal is defined as the removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant ecological impacts to functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree

topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

Chapter 9
Shoreline Environment Designations

Introduction

Shoreline Environment Designations are intended to encourage uses and activities that will protect or enhance the present or desired character of a shoreline. Like most others in the state, the City of Moses Lake's original Shoreline Master Program (SMP) used a classification system composed of four Shoreline Environment Designations ("Natural", "Conservancy", "Rural" and "Urban") intended to accommodate different levels and types of development. The state's new SMP guidelines recommend a new classification system to better reflect development patterns and to dovetail more readily with the requirements of the Growth Management Act. The City of Moses Lake used the state's new classification system as a starting point and tailored it to suit local conditions, local interests, and growth management planning. The City's new system includes eight Shoreline Environment Designations.

Each segment of shoreline in the City of Moses Lake and its Urban Growth Area (UGA) has been given a Shoreline Environment Designation based on its ecological function and value, existing and planned development patterns, and local interests, as reflected in the public participation process conducted as part of the development of this plan. The assessment of ecological function and value was derived from the Inventory and Analysis prepared by Central Washington University, described in Chapters 3 and 4 of this plan. Development characteristics are a function of three factors:

- Zoning
- Current use
- Comprehensive Plan and *Park, Recreation, and Open Space Plan* designations (which reflect the City's anticipated need for commercial and industrial land and, more specifically, for water-dependent and water-oriented uses)

This chapter includes classification criteria for each Shoreline Environment Designation. A section for each Shoreline Environment Designation lists the policies and regulations specific to that designation, and, for all designations except Aquatic, lists the shoreline segments ("reaches") designated and the rationale for each designation. Allowed uses and development standards follow in tabular form. The policies specific to each designation, along with relevant policies from Chapters 6, 7, and 8, were used in determining the uses and activities allowed in each shoreline environment. The development standards and development criteria specify how and where permitted development can take place within each shoreline environment.

City of Moses Lake Shoreline Environment Designations

This master program establishes eight shoreline environments for the City of Moses Lake and its UGA:

H = High Intensity
H-R = High Intensity—Resource Area
SR = Shoreline Residential
SR-R = Shoreline Residential—Resource Area
SR-S = Shoreline Residential—Special Resource Area
W = Water-Oriented Parks and Public Facilities
N = Natural
A = Aquatic

Resource designations ("High Intensity—Resource Area", "Shoreline Residential—Resource Area", and "Shoreline Residential—Special Resource Area") indicate the need for special consideration to protect ecological functions and values. On lands bearing Resource designations, that consideration shall be reflected in regulations applying to a Resource Zone. Regulations that apply to uses and activities within the Resource Zone are shown in Table 9.3.

The table below describes the designation criteria for each of the eight shoreline environments. Policies for each shoreline environment follow.

TABLE 9.1
SHORELINE ENVIRONMENT CLASSIFICATION CRITERIA

Environment designation	Classification criteria	Comments
High-Intensity	Ecological functions on lands to be designated "High Intensity" are impaired to a degree that renders them suitable for water-oriented uses; they currently support or are planned for high-intensity uses.	*Although they are among the most heavily impaired shoreline lands in Moses Lake, High Intensity lands retain resource value and present opportunities for protection and restoration*
High-Intensity—Resource	Lands to be designated "High Intensity —Resource" demonstrate impairments to ecological function. They retain important ecological functions and have the potential for development that is compatible with ecological protection and restoration. They currently support or are planned for high-intensity uses.	
Shoreline Residential	Ecological functions on lands to be designated "Shoreline Residential" are impaired to a degree that renders them suitable for water-oriented uses; they currently support or are planned for shoreline residential uses. These areas have more than half of the shoreline previously hardened with bulkheads, have many existing docks, have few undeveloped parcels, do not have wetlands, and have little to no existing emergent vegetation.	*Although they are among the most heavily impaired shoreline lands in Moses Lake, Shoreline Residential lands retain resource value and present opportunities for protection and restoration*
Shoreline Residential—Resource	Lands to be designated "Shoreline Residential—Resource" demonstrate impairments to ecological function. They retain important ecological functions and have the potential for development that is compatible with ecological protection and restoration. They currently support or are planned for shoreline residential uses.	
Shoreline Residential—Special Resource	Lands to be designated "Shoreline Residential—Special Resource" demonstrate impairments to ecological function; they also retain important ecological functions and have high potential for ecological protection and restoration because they include relatively large tracts that have not been subdivided or include large wetland areas. They currently support or are planned for shoreline residential uses and are either relatively intact or, if impaired, have not been subdivided and retain extensive natural vegetation.	
Water-Oriented Parks & Public Facilities	Lands to be designated "Water-Oriented Parks & Public Facilities" demonstrate impairments to ecological function. They retain important ecological functions and have the potential for development that is compatible with ecological protection and restoration. Because many of the sites are owned and managed by the City, the potential for combining restoration with water-	

Environment designation	Classification criteria	Comments
	oriented uses is high.	
Natural	Lands to be designated “Natural” have been found to be relatively intact as regards ecological function. They perform important, irreplaceable functions that would be damaged by human activity and could not support new development or uses without significant adverse impacts to ecological functions. All islands are to be designated “Natural”.	
Aquatic	Lands designated “Aquatic” are those waterward of the OHWM, including lakebed aquifer recharge areas.	

All areas within shoreline jurisdiction that are not mapped and/or designated are automatically assigned a “Shoreline Residential—Special Resource” designation until the shoreline can be redesignated through a master program amendment.

High Intensity (H) Environment

Policies

1. Because shorelines are a finite resource and because high-intensity uses tend to preclude other shoreline uses, emphasis should be given to directing new development into areas that are already developed and are consistent with this master program and the City's Comprehensive Plan, and to uses requiring a shoreline location. Full utilization of existing high-intensity areas should be encouraged before further expansion is allowed. Redevelopment of under-used areas should be encouraged.
2. Priority should be given to water-dependent, water-related, and water-enjoyment uses over other uses. Uses that derive no benefit from a water location should be discouraged.
3. Visual and physical public access should be encouraged without violating private property rights.
4. Planning for the acquisition of land for permanent public access to the water in the High Intensity Environment should be encouraged and implemented.
5. In order to make maximum use of the available shoreline resources and to accommodate future water-oriented uses, the redevelopment and renewal of substandard, degraded, or obsolete urban shoreline areas should be encouraged.

Reaches Designated "H"

Most of the reaches designated "H" either support high-intensity uses (in the case of reach 1B) or are planned for such uses. They are zoned Light Industrial (LI), General Commercial & Business (C-2), and Central Business District (C-1); and bear *Comprehensive Plan* designations of Central Business District (CBD) or General Commercial (GC). The remaining reaches are highway segments, streets, or railroad right-of-way, and are not designated in the *Comprehensive Plan*.

Reach	Rationale	Zoning	Comp Plan Designation
1B	Gravel mining	UR-2, UPF	LDR
9A	Highway	unzoned	Undesignated
9C	Railroad	unzoned	Undesignated
9D	Highway	unzoned	Undesignated
12A	Highway	unzoned	Undesignated
12B	Railroad	unzoned	Undesignated
12D	Street/bridge	unzoned	Undesignated
13B	Developed downtown commercial use	C-1, C-2, LI	CBD, GC
15B	Developed commercial use	C-2	GC
16A	Highway and commercial use (lodging)	C-2	GC
18B	Highway	unzoned	Undesignated
20A	Railroad	unzoned	Undesignated
22B	Railroad	unzoned	Undesignated
22G	Highway	unzoned	Undesignated
26C	Highway	unzoned	Undesignated

High Intensity—Resource Area (H-R) Environment

Policies

1. All of the policies listed above for High Intensity shoreline environments also apply in High Intensity—Resource environments.
2. As noted in the general regulations in Chapter 6, enhancement of ecological functions should be required for uses and activities in the High Intensity—Resource environment.

Reaches Designated "H-R"

The reaches designated "H-R" support and are planned for various commercial and high-density residential uses. They are zoned General Commercial & Business (C-2), and Multi-Family Residential (R-3); and bear *Comprehensive Plan* designations of Central Business District (CBD), General Commercial (GC), and High-Density Residential (HDR).

Reach	Rationale	Zoning	Comp Plan Designation
9B	Commercial and residential use; wetlands	C-2	GC
12C	Developed commercial use; wetlands	R-3, C-2,	HDR, GC, CBD
26C	Commercial use (water-oriented, lodging); emergent vegetation	C-2	GC

Shoreline Residential (SR) Environment

Policies

1. Opportunities for public access to shorelines and water bodies should be encouraged for all developments, including subdivisions, short subdivisions, planned unit developments, commercial uses, public services, and recreational uses, provided any adverse impacts can be mitigated.
2. Public and private recreational facilities and uses that are compatible with residential uses should be encouraged, provided that no net loss of shoreline ecological resources will result.

Reaches Designated "SR"

The reaches designated "SR" support and are planned for residential uses of various densities. They are zoned for Single-Family Residential (R-1), Single & Two-Family Residential (R-2), and Multi-Family Residential (R-3) use; and bear *Comprehensive Plan* designations of Low-Density Residential (LDR), Medium-Density Residential (MDR), and High-Density Residential (HDR).

Reach	Rationale	Zoning	Comp Plan Designation
8A	Residential use with extensive docks and bulkheads	R-1	LDR
15A	Residential with extensive bulkheads	R-3	HDR
15C	Residential with extensive docks and bulkheads; minimal riparian tree cover and emergent vegetation	R-3	HDR
19A	Residential use with extensive docks and bulkheads	R-1, R-2	MDR, LDR
28	Residential uses with extensive docks and bulkheads	R-1	LDR

Shoreline Residential—Resource Area (SR-R) Environment

Policies

1. All of the policies listed above for Shoreline Residential shoreline environments also apply in Shoreline Residential—Resource environments.
2. As noted in the general regulations in Chapter 6, maintenance of ecological functions should be required for uses and activities in the Shoreline Residential—Resource environment.

Reaches Designated "SR-R"

Most of the reaches designated "SR-R" support and are planned for residential uses of various densities. Those in the City's Urban Growth Area (UGA) are zoned Urban Residential 2 (UR-2), Urban Residential 3 (UR-3), and Urban Residential (UR-4); those within the City are zoned Single-Family Residential (R-1), Single & Two-Family Residential (R-2), and Multi-Family Residential (R-3). Both within the City and in the City's UGA, those reaches bear *Comprehensive Plan* designations of Low-Density Residential (LDR), Medium-Density Residential (MDR), and High-Density Residential (HDR).

Two reaches, 1A and 4C, include land zoned for Light Industrial (ULI) or Urban Commercial 1 (UC-1) use, but designated for Low-Density Residential (LDR) development in the *Comprehensive Plan.* Similarly, Reach 14B is land zoned for a combination of Multi-Family Residential (R-3) and Light Industrial (LI) use and designated for High-Density Residential (HDR) development in the *Comprehensive Plan.* Three reaches include land zoned and/or designated for commercial use. In all three cases, the SR-R shoreline environment designation appears appropriate due to the nature of the surrounding development.

Reach	Rationale	Zoning	Comp Plan Designation
1A	Zoned residential; riparian tree cover, steep slopes, largely unplatted and undeveloped	ULI	LDR
1C	Zoned residential; riparian tree cover, steep slopes	UR-3	LDR
2A	Residential use; riparian tree cover	UR-3	LDR
2C	Residential use; docks; riparian tree cover; emergent vegetation	UR-3	LDR
3A	Residential use; priority habitat	UR-3	LDR
3C	Residential use; docks; priority habitat; emergent vegetation; riparian tree cover	UR-3	LDR
4A	Residential use; docks; emergent vegetation; riparian tree cover	UR-3	LDR
4B	Planned for residential use, emergent vegetation		
4C	Residential use; docks; emergent vegetation	UR-3, UC-1	LDR
5A	Residential use; priority habitat	UC-1	GC
5C	Residential use; wetland and priority habitat	UR-4	MDR, GC
5E	Residential use	UR-4	MDR
6A	Residential use; priority habitat; riparian tree cover; emergent vegetation	UR-3	MDR, LDR
7	Residential use with docks; emergent vegetation	R-1	LDR
8B	Residential use with docks and bulkheads; riparian tree cover	R-1	LDR
14B	Platted for residential use; emergent vegetation	R-3, LI	HDR, Industrial
16B	Residential use with docks and bulkheads; emergent vegetation	R-1	LDR
17B	Residential and agriculture use; unplatted; emergent vegetation	R-1	LDR
18A	Residential use; emergent vegetation	R-1, R-3	LDR, HDR
19B	Residential use; wetlands and emergent vegetation	R-1, R-3	LDR, HDR
20B	Primarily residential use; priority habitats	R-2, R-3, P	HDR, MDR, PF
21C	Owned by HOA, used for access to adjacent residences; priority habitats	R-1	LDR
21D	Residential use; priority habitats	R-1	LDR
22A	Residential use; priority habitats	R-1	LDR
23	Residential use; priority habitats	UR-2	LDR
24B	Residential use; priority habitats	UR-2	LDR
26A	Residential uses; riparian tree cover; emergent vegetation; priority habitats	R-1, R-2, R-3, C-2	LDR, MDR, HDR, GC
29	Primarily residential use; riparian tree cover	R-1, UR-2	LDR
30	Residential uses; riparian tree cover; wetlands; emergent vegetation; priority habitats	UR-2	LDR
31	Planned for residential use; riparian tree cover	UR-2	LDR
32	Planned for residential use; riparian tree cover	UR-2	LDR

Shoreline Residential—Special Resource Area (SR-S) Environment

Policies

1. All of the policies listed above for Shoreline Residential shoreline environments also apply in Shoreline Residential—Special Resource environments.
2. A conditional use permit should be required for any use or activity requiring a shoreline substantial development permit.
3. The following uses should not be allowed in Shoreline Residential—Special Resource environments: commercial activities, industrial activities, mining, agriculture, golf courses, non-water-oriented recreation, and roads and parking areas that can be located elsewhere.
4. As noted in the general regulations in Chapter 6, maintenance of ecological functions should be required for uses and activities in the Shoreline Residential—Special Resource environment.

Reaches Designated "SR-S"

The reaches designated "SR-S" include either relatively large tracts that have not been subdivided or large wetland areas, and are planned for residential uses of various densities. They are zoned for Single-Family Residential (R-1) and Multi-Family Residential (R-3) use (within the City) or Residential 2 (UR-2), Urban Residential 3 (UR-3), and Urban Residential (UR-4) use (in the City's UGA); and bear *Comprehensive Plan* designations of Low-Density Residential (LDR), Medium-Density Residential (MDR), and High-Density Residential (HDR).

Reach	Rationale	Zoning	Comp Plan Designation
5B	Partially undeveloped; wetland and priority habitat [1]	UR-2, R-2	MDR
5D	Undeveloped and unplatted; priority habitat, wetlands	UR-4	MDR
21B	Relatively undeveloped; wetlands; priority habitats	R-1, R-3	HDR, LDR
10	Undeveloped and unplatted; priority habitat, wetlands	C-2	GC
21B	Largely undeveloped; priority habitat, wetlands	R-3	HDR
22C	Adjacent property has been platted, wetland delineated	R-1	LDR
24C	Undeveloped and unplatted; priority habitat, wetlands	UR-2	LDR
25	Undeveloped dunes; emergent vegetation; wetlands; riparian tree cover	UR-3	LDR

Water-Oriented Parks and Public Facilities (W) Environment

Policies

1. Preferred uses in the Water-Oriented Parks and Public Facilities environment are those that support visual and physical access to the water and shoreline while preserving, to the extent practical, the physical and biological resources of the area.
2. Water-oriented uses should be given priority over non-water-oriented uses.
3. Recreational activities that will not be detrimental to the shoreline character, scenic quality, or natural systems should be encouraged.
4. Agricultural, commercial, industrial, mining, and residential uses should be prohibited.
5. As noted in the general regulations in Chapter 6, maintenance of ecological functions should be required for uses and activities in the Water-Oriented Parks and Public Facilities environment.

[1] 5B has since been platted into residential lots, and the wetland portion protected. See Willowcrest Major Plat. South of Scott Road is now inside city limits.

Reaches Designated "W"

Most of the reaches designated "W" are public parks; all are either zoned for Public use (P) or located in residential neighborhoods. The Comprehensive Plan designations vary. Most are designated as Public Facilities (PF) or Parks/Open Space (P/OS). Two are designated for Low-Density Residential use (LDR). In all cases, the public use is appropriate to its surroundings and reflects the value the community places on public parks, recreation, and open space.

Reach	Rationale	Zoning	Comp Plan Designation
2B	Park	UR-3	LDR
6B	Public park (Cascade Park)	P	P/OS
13A	Public park (Neppel Landing)	P	PF
15B	Public park (Marina Park)	R-3	P/OS
17A	Public park (Lower Peninsula Park & boat launch)	P	P/OS
20C	Public park (McCosh Park)	P	P/OS
22E	Public park (Montlake Park)	P	P/OS
24A	Park (Pelican Point)	UR-2	LDR
27	Public park (Blue Heron Park); riparian tree cover; emergent vegetation	P, R-1	P/OS

Natural (N) Environment

Policies

1. Physical alterations, including shoreline modifications should only be considered when they serve to protect or enhance a significant, unique, or highly valued feature that might otherwise be degraded or destroyed.
2. Limited access should be permitted for scientific, historical, cultural, educational, and low-intensity recreational purposes, provided that any significant adverse impact on the area will be mitigated.
3. A conditional use permit should be required for any use or activity.
4. The following uses should not be allowed in Natural environments: residential uses, commercial activities, industrial activities, mining, agriculture, non-water-oriented recreation, golf courses, utility corridors and roads and parking areas that can be located elsewhere.
5. Pre-existing uses, such as the railroad, that are not compatible with the environment designation, should be converted to a more compatible use, such as a public trail.

Critical Areas

All uses and activities in shoreline environments designated "Natural" must be consistent with all applicable Critical Areas policies in Chapter 6.

Reaches Designated "N"

The reaches designated "N" are all relatively intact as regards ecological function. Most are zoned Residential, although one is zoned Heavy Industrial (HI) and one is zoned Conservation & Reclamation. Comprehensive Plan designations include Low and High Density Residential (LDR, HDR), Parks/Open Space (P/OS), Environmentally Sensitive (ES), and Industrial. In all cases, the reaches have been designated Natural because they perform important, irreplaceable shoreline ecological functions.

Reach	Rationale	Zoning	Comp Plan Designation
11	Undeveloped; unplatted; wetlands; priority habitats	HI	Industrial
14A	Undeveloped; wetlands; emergent vegetation	R-3	HDR, P/OS
21A	Undeveloped; wetlands; priority habitats	R-3	HDR, P/OS, ES
22C	Undeveloped; wetlands; emergent vegetation	R-1	LDR
22F	Undeveloped; wetlands; emergent vegetation	R-1	LDR
22H	Undeveloped island; wetlands; emergent vegetation; priority habitats	C-R	ES

Aquatic (A) Environment

Policies

1. Over-water structures should be allowed only for water-dependent uses, ecological restoration or public access. Structures that are not water-dependent should be prohibited.
2. Developments within the Aquatic Environment should be compatible with the adjoining upland environment.
3. Diverse public access opportunities to the water should be encouraged and developed and should be compatible with the existing shoreline and water uses and environment.
4. Aquaculture should be allowed in those areas most suitable for that use.
5. In appropriate areas, fishing and recreational use of the water should be protected against competing uses that would interfere with recreation.
6. All developments and activities using Moses Lake should be located and designed to minimize interference with surface navigation, to minimize adverse visual impacts, and to allow for the safe unobstructed passage of fish and animals, particularly those whose life cycles are dependent on such migration. Exceptions may be made for projects specifically designed to enhance or protect fish or wildlife or their habitat.
7. Abandoned and neglected structures that cause adverse visual impacts or are a hazard to public health, safety, or welfare should be removed or restored to a usable condition consistent with the provisions of this master program.
8. Activities that substantially degrade priority habitats should not be allowed. Where such activities are necessary to achieve the objectives of the Shoreline Management Act, RCW 90.58.020, their impacts should be mitigated to provide a net gain of critical ecological functions.
9. Shoreline modifications should be considered only when they serve to protect or enhance a significant, unique, or highly valued feature that might otherwise be degraded or destroyed.
10. The size of over-water structures should be limited to the minimum necessary to support the structure's intended use.
11. Multiple use of over-water facilities should be encouraged, to reduce the number of over-water structures required and thereby reduce the impacts of shoreline development and increase effective use of water resources.
12. Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed except where necessary to achieve the objectives of the Shoreline Management Act (RCW 90.58.020), and then only when their impacts are mitigated according to the mitigation sequence as necessary to assure no net loss of ecological function.

City of Moses Lake Shoreline Environment Designation Map

The *Shoreline Environment Designations* map in the City of Moses Lake's Shoreline Map Portfolio shows the areas under the jurisdiction of this Master Program and the boundaries of the City's eight shoreline environment designations. It also shows shoreline areas within the City's Urban Growth Area, which have been pre-designated. It shall be the official map of Shoreline Environment Designations. Any other copies, including copies that may be distributed either as part of this Shoreline Master Program or separately, shall be unofficial.

Shoreline Uses, Activities, and Development Standards

Chapters 7 and 8 of this Master Program establish policies and regulations for specific shoreline uses and activities. For each of those uses and activities, the Shoreline Use and Activity Chart that follows shows whether it is allowed (with a substantial development permit required for all except exempt uses); requires a conditional use permit; or is prohibited, in each of the shoreline environments.

Following the Shoreline Use Chart is a table of Shoreline Environment Requirements, which outlines the Development Standards for different uses and activities in each Shoreline Environment.

TABLE 9.2
SHORELINE ENVIRONMENT USE & ACTIVITY CHART

All uses and activities, including those classified as "Allowed" ("P") in the table below and including those considered exempt, must comply with all provisions of this Shoreline Master Program (SMP), including the General Regulations in Chapter 7. Uses and activities not listed in the Shoreline Environment Use and Activity Chart may be allowed, subject to approval by the Shoreline Administrator, if they comply with the standards in this section and with any special regulations that apply to similar uses.

Legend

H= High Intensity
H-R = High Intensity—Resource Area
SR = Shoreline Residential
SR-R = Shoreline Residential—Resource Area
SR-S = Shoreline Residential—Special Resource Area
W = Water-Oriented Parks and Public Facilities
N = Natural
A = Aquatic

P = Allowed use; Substantial Development Permit required unless use is exempt
CUP = Shoreline Conditional Use Permit required
X = Prohibited use
S = Same as in adjacent environment shoreward of the OHWM
N/A= Not Applicable

	H	H-R	SR	SR-R	SR-S	W	N	A
Agriculture (subject to regulations in Chapter 7)	X	X	X	X	X	X	X	NA
Aquaculture (subject to regulations in Chapter 7)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	CUP
Boating facilities (subject to regulations in Chapter 7)								
rail-type boat launch systems	CUP	CUP	CUP	CUP	X	X	X	S
Boat houses [*prohibited by WAC 173-26-211(5)(c)(ii)A*]	X	X	X	X	X	X	X	X
Boat launch ramps, community and public	CUP	CUP	CUP	CUP	X	CUP	X	S
Boat launch ramps, private	X	X	X	X	X	X	X	S
Boat lifts, private	CUP	CUP	P	P	P	CUP	X	S
Marinas	CUP	CUP	CUP	CUP	X	CUP	X	S
Floating homes, houseboats, and liveaboards	X	X	X	X	X	X	X	X
Commercial uses (subject to regulations in Chapter 7)								
Water dependent	P	CUP	P	CUP	X	X	X	S
Water related & water-enjoyment	CUP	CUP	CUP	CUP	X	X	X	X
Other (not water-oriented)	CUP	CUP	CUP	X	X	X	X	X
Docks[2]								
Joint-use community recreational docks	P	P	P	P	P	P	X	S
Private residential docks	X	X	P	P	P	X	X	S
Commercial docks	P	CUP	CUP	CUP	X	X	X	S

[2] Docks will only be allowed in accordance with all applicable provisions of this SMP, including critical areas provisions and the specific use regulations that apply to docks.

	H	H-R	SR	SR-R	SR-S	W	N	A
Industrial uses	X	X	X	X	X	X	X	X
Mining (subject to regulations in Chapter 7)	CUP	X	X	X	X	X	X	X
Parking—primary (subject to regulations in Chapter 6)	X	X	X	X	X	X	X	X
Parking—serving a permitted use other than a single-family residential use (subject to regulations in Chapter 6)	P	P	P	P	CUP	P	X	X
Parking—serving a single-family residential use (subject to regulations in Chapter 6)	P	P	P	P	P	P	X	X
Public access (subject to regulations in Chapter 6)	P	P	P	P	CUP	P	CUP	S
Recreation (subject to regulations in Chapter 7)								
Water dependent	P	P	P	P	CUP	P	CUP	CUP
Water related	P	CUP	P	CUP	CUP	P	CUP	CUP
Water enjoyment	P	CUP	P	CUP	CUP	P	CUP	CUP
Golf courses	X	X	X	X	X	X	X	X
Other (not water-oriented)	P	CUP	CUP	CUP	X	X	X	X
Residential uses (subject to regulations in Chapter 7)	P	P	P	P	P	X	X	X
Residential subdivision (subject to regulations in Chapter 6)	P	CUP	P	P	P	X	X	X
Retaining walls for purposes other than shoreline stabilization (subject to regulations in Chapter 6)	X	X	P	P	P	X	X	X
Shoreline modifications (subject to regulations in Chapter 8)								
Dredging	CUP	X	CUP	X	X	CUP	X	CUP
Dredge material disposal	CUP	CUP	CUP	CUP	CUP	CUP	CUP	CUP
Filling	P	CUP	P	CUP	CUP	CUP	CUP	CUP
Shoreline stabilization								
Structural stabilization, other than bulkheads[3]	P	CUP	P	CUP	CUP	P	X	X
Bulkheads[4]	CUP	CUP	CUP	CUP	CUP	CUP	CUP	CUP
Vegetative stabilization	P	CUP	P	P	CUP	P	CUP[5]	CUP
Flood protection facilities	X	X	X	X	X	X	X	X
Signs (subject to regulations in Chapter 6)								
Highway and public information	P	P	P	P	P	P	P	P
Off-premises outdoor advertising, and temporary	X	X	X	X	X	X	X	X

[3] Structural shoreline stabilization will only be allowed in accordance with all applicable provisions of this SMP, including, in the case on non-water-dependent uses, the requirement to demonstrate through a geotechnical report the need to protect the use.

[4] Bulkheads may be allowed with a Shoreline Conditional Use Permit where the need has been documented by a geotechnical analysis. See Bulkhead regulations in Chapter 8. While existing single-family residences are exempt from the requirement to obtain a Shoreline Substantial Development Permit in order to construct a normal protective bulkhead, they must comply with all provisions of this SMP.

[5] On sites previously disturbed, when accompanied by a habitat restoration and mitigation management plan.

	H	H-R	SR	SR-R	SR-S	W	N	A
On premises	P	P	P	P	CUP	P	X	X
Solid waste disposal	X	X	X	X	X	X	X	X
Stormwater management facilities (primary)[6]	CUP	CUP	CUP	CUP	CUP	CUP	X	X
Transportation facilities (subject to regulations in Chapter 7)	P	CUP	P	CUP	CUP	CUP	CUP	CUP
Utilities (primary; not associated with a use allowed under the provisions of this SMP) (subject to regulations in Chapter 7)								
Water-oriented	P	CUP	CUP	CUP	X	CUP	X	CUP
Non-water-oriented	CUP	X	CUP	X	X	CUP	X	CUP

[6] See "Environmental Impacts and Water Quality" in Chapter 6 for policies and regulations related to stormwater management.

TABLE 9.3
SHORELINE ENVIRONMENT REQUIREMENTS: DEVELOPMENT STANDARDS AND SPECIFIC SHORELINE DEVELOPMENT REGULATIONS

All uses and activities, including those considered exempt, must comply with all provisions of this Shoreline Master Program (SMP), including the General Regulations in Chapter 7. Uses and activities not listed in the Shoreline Environment Requirements Chart may be allowed, subject to approval by the Shoreline Administrator, if they comply with the standards in this section and with any special regulations that apply to similar uses.

Shoreline buffers are in feet, from the Ordinary High Water Mark (OHWM). All uses with 0' buffer must comply with all provisions of this Shoreline Master Program, including any development standards specific to the use. Other regulations, such as wetland buffers, may require a larger buffer than is noted in this table

Where height limits are different from those specified in the Moses Lake Municipal Code, the more stringent requirement (i.e., the lower height limit) shall apply. Height is measured from the average finished grade around the structure to the highest point of the structure.

Legend

H= High Intensity
H-R = High Intensity—Resource Area
SR = Shoreline Residential
SR-R = Shoreline Residential—Resource Area
SR-S = Shoreline Residential—Special Resource Area
W = Water-Oriented Parks and Public Facilities
N = Natural
A = Aquatic
N/A = Not Applicable

	H	H-R	SR	SR-R	SR-S	W	N	A
Agriculture [7]	NA	NA	NA	NA	NA	NA	NA	NA
Aquaculture								
Water-dependent structure and facility buffer	0'	0'	0'	0'	0'	NA	NA	0'
Water-related structure and facility buffer	25'	50'	25'	50'	150'	NA	NA	NA
Height limit	35'	25'	35'	25'	15'	NA	NA	10'
Boating facilities (boat lifts, boat launch ramps, and marinas [whether commercial, private, or municipal])								
Water-dependent buffer	0'	0'	0'	0'	0'	0'	NA	0'
Height limits								
Over-water structures	NA	NA	NA	NA	NA	NA	NA	15'
0-100 feet from OHWM	35'	25'	25'	25'	NA	15'	NA	NA
>100 feet from OHWM	35'	35'	35'	35'	NA	35'	NA	NA

[7] New agricultural uses are prohibited in areas of shoreline jurisdiction

	H	H-R	SR	SR-R	SR-S	W	N	A
Commercial development—water dependent								
Water-dependent buffer	0’	0’	0’	0’	NA	NA	NA	NA
Water-related and water-enjoyment buffer	50’	50’	50’	50’	NA	NA	NA	NA
Non-water-oriented buffer	50’	150’	75’	150’	NA	NA	NA	NA
Building height limit	35’	35’	35’	35’	NA	NA	NA	NA
Docks: Dimensional standards are found in the Docks section of Ch. 7								
Industrial development (prohibited in shoreline jurisdiction)	NA	NA	NA	NA	NA	NA	NA	NA
Mining and related facilities buffer	100’	NA	NA	NA	NA	NA	NA	NA
Parking—primary (prohibited in shoreline jurisdiction)	NA	NA	NA	NA	NA	NA	NA	NA
Parking—serving a permitted use[8]	50’	75’	75’	100’	125’	150’	150’	NA
Recreation								
Buffers								
Non-water-oriented uses	100’	150’	100’	150’	NA	150’	NA	NA
Water-oriented uses	35’	35’	35’	35’	NA	35’	NA	NA
Water-dependent uses	0’	0’	0’	0’	0’	0’	0’	0’
play fields, and other intensive use areas	100’	150’	100’	150’	NA	100’	NA	NA
Recreational paths and trails (non-motorized)	10’	10’	10’	25’	25’	10’	25’	NA
Height limit	35’	15’	25’	15’	15’	15’	NA	15’
Maximum site coverage (percent)[9]	40	20	40	20	10	20	10	NA
Residential uses[10]								
Buffer—all dwelling units, and non-water-dependent accessory structures	25’	25’	25’	25’ 50’ or 100’[11]	150’	NA	NA	NA
Height limit	35’	35’	35’	35’	25’	NA	NA	NA
Maximum site coverage (percent)[12]	60	50	50	50	25	NA	NA	NA
Maximum density (dwelling units per acre)	15	10	10	6	4	NA	NA	NA
Retaining walls for purposes other than shoreline stabilization—setback (subject to regulations in Chapter 6)	NA	NA	20’	30’	100’	NA	NA	NA

[8] Parking facilities shall be set back landward of the principal building being served a minimum of twenty-five feet or the required building setback, whichever is greater (see Chapter 6, General Policies and Regulations)

[9] Includes all impervious surfaces

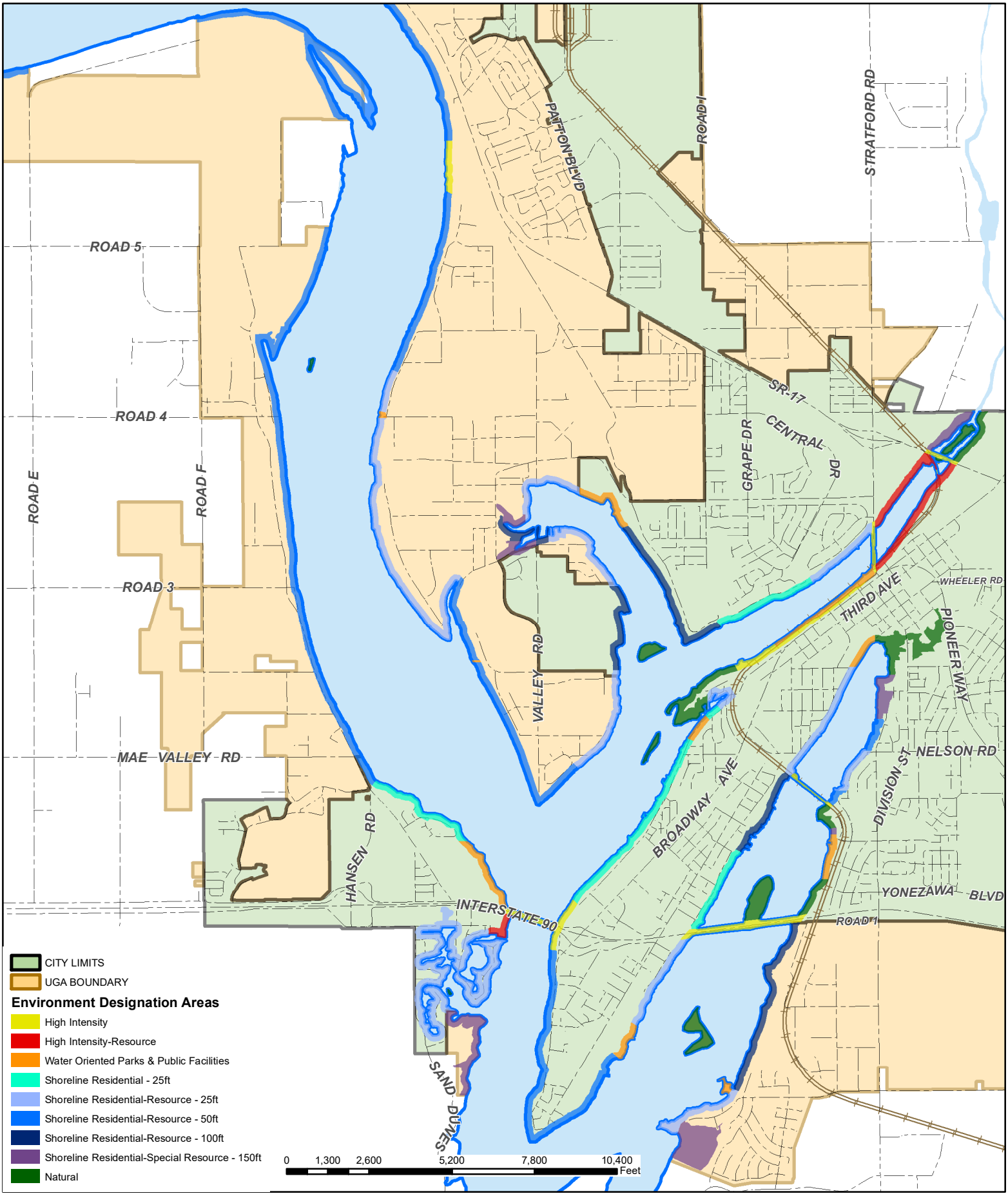
[10] Common line setback may be allowed where the majority of existing development in an area does not meet the established setback standards, as provided in the Residential Use regulations in Chapter 7. Other provisions may also apply; see Chapter 7.

[11] See Environment Designation map for buffer width at the specific location.

[12] Includes all impervious surfaces

	H	H-R	SR	SR-R	SR-S	W	N	A
Signs (on premises)								
Maximum height (in feet)	12	6	12	6	6	6	6	NA
Maximum surface area (in square feet)	36	36	36	36	36	36	36	NA
Setback	20’	50	25	50	150	20’	NA	NA
Solid waste disposal[13]	NA	NA	NA	NA	NA	NA	NA	NA
Transportation facility setbacks								
Arterials, highways, and railroads (excluding water crossings)	100’	125’	100’	125’	150’	150’	150’	NA
Non-arterial, secondary, and access roads	50’	75’	75’	100’	100’	100’	100’	NA
Utilities (primary; not associated with a use allowed under the provisions of this SMP)								
Setbacks for buildings, storage tanks, accessory uses, and distribution lines (excluding water crossings)	50’	100’	50’	100’	NA	100’	NA	NA
Height limits								
Buildings, storage tanks, and accessory uses	35’	25’	35’	15’	NA	15’	NA	NA
Distribution poles	35’	35’	35’	35’	NA	35’	NA	NA

[13] Solid waste disposal is prohibited in areas of shoreline jurisdiction



MOSES LAKE

SHORELINE ENVIRONMENT DESIGNATION

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Date: 1/27/2017

Chapter 10
Cumulative Impacts Analysis

This chapter is not an official part of the Shoreline Master Program.

See Cumulative Impacts Analysis of City of Moses Lake's Shoreline Master Program
October 15, 2013
Prepared by The Watershed Company
Kirkland, WA
Reference #130419

Chapter 11
Shoreline Protection and Restoration

Introduction

The City of Moses Lake's *Comprehensive Plan* includes a Vision Statement that addresses many facets of community life—social, economic, and land use components are all included. Among other things, the vision statement describes Moses Lake as "A progressive city that recognizes how the natural environment enhances the quality of life and the need to preserve and maintain environmentally sensitive areas." This Vision Statement 2015 was created by a Citizen Advisory Committee in 1995 to describe a potential City of Moses Lake in the year 2015. This was done by obtaining citizen input and then translating individual concerns and ideas into a collective vision, interwoven with the underlying common goals of the citizenry.

The Vision Statement 2015 includes a specific vision for the environment which says "Environment is the sum of all external conditions and influences affecting the life, development, and ultimately the survival of an organism; we must protect the environment….In the year 2015…Residents have become dedicated to preserving the environment in its natural state by developing ways for humanity to live harmoniously with nature without further degradation."

The *Comprehensive Plan* goes on to list Environment Goals, including:

- Promote the restoration of Moses Lake to a healthy state that supports natural habitat while providing recreational benefits to the community.
- Acknowledge the integral role of the natural environment to our quality of life.
- Increase public access to the lake.

The plan articulates other goals, as well—in the realms of land use, tourism, economic development, community values and character, and other matters that are important to the citizens of Moses Lake. It is clear that protection of the natural environment and the restoration of Moses Lake are important to the people of the city—and equally important that they must be undertaken in the context of a larger, complex vision.

The vision and goals articulated in the City's *Comprehensive Plan*, along with the findings of the *Shoreline Inventory and Characterization*, served as guidance for the objectives, strategies, actions, prioritization framework, and evaluation criteria in this protection and restoration plan. The City's shoreline restoration objectives are listed in the next section of the plan; the relationship between the objectives and the other parts of the plan is explained later in this section.

Restoration Planning Requirements

Washington State's shoreline master program guidelines[1] require that each local government (city or county) include within its shoreline master program a "real and meaningful" strategy to address restoration of shorelines. The guidelines make "planning for and fostering restoration" an obligation of local government. They say, in part:

> It is intended that local government, through the master program, along with other regulatory and nonregulatory programs, contribute to restoration by planning for and fostering restoration and that such restoration occur through a combination of public and private programs and actions. Local government should identify restoration opportunities through the shoreline inventory process and authorize, coordinate and facilitate appropriate publicly and privately initiated restoration projects within their master programs. The goal of this effort is master programs which include planning elements that, when implemented, serve to improve the overall condition of habitat and resources within the shoreline area of each city and county.[2]

Restoration means re-establishing or upgrading impaired shoreline ecological functions. Shoreline ecological functions are the work done or the role played by the various physical, chemical, and biological components of the shoreline ecosystem, such as filtering sediment and other pollutants and providing habitat for wildlife. Restoration includes a number of mechanisms—both structural ones, such as re-

[1] Chapter 173.26 of the Washington Administrative Code (WAC)
[2] WAC 173.26.201(2)(c)

vegetation and removal of intrusive shoreline structures, and non-structural ones such as development standards that decrease erosion and protect shoreline vegetation.

The restoration planning that must be completed during the process of amending a shoreline master program is not intended to directly mitigate past or future development impacts on the City's shorelines. It is intended to guide restoration that will improve overall environmental conditions as they exist at the time of the shoreline inventory. Restoration does not imply a requirement to return the shoreline area to aboriginal or pre-European settlement conditions.

How this plan is organized

The shoreline master program guidelines include six restoration planning steps. The State's intent is that, by completing the six steps, the City will create a framework for restoring ecological functions that have been impaired as a result of past development of the shoreline. The table below lists the six steps, and will also tell you how and where each one has been addressed.

Table 1—Restoration Planning Steps

Restoration planning steps	How and where each step is addressed
Identify degraded areas, impaired ecological functions, and sites with potential for restoration	Degraded areas and impaired ecological functions are identified in the *Shoreline Inventory and Characterization.* Sites with potential for restoration are identified on the accompanying Restoration Potential map. They are included in the table of Restoration Opportunities below.
Establish overall goals and priorities for restoration of degraded areas and impaired ecological functions	The restoration goal was drawn from the City of Moses Lake's *Comprehensive Plan*. (This restoration plan also includes objectives that are more specific about how the goal is to be achieved. Those objectives were drawn from the *Shoreline Inventory and Characterization*.) Both goal and objectives are detailed in the "Restoration Goal and Objectives" section of this restoration plan. The plan also includes restoration strategies and actions, and prioritization criteria that reflect the City's interests and will give the city a basis for deciding which actions to undertake or to support others in undertaking. The strategies and actions are listed in the "Restoration Opportunities" section of the plan. The criteria are listed in the section of the plan that addresses "The City's Role."
Identify existing and ongoing projects and programs that are currently being implemented, or are reasonably assured of being implemented (based on an evaluation of funding likely in the foreseeable future), which are designed to contribute to local restoration goals	The "Existing and Ongoing Programs" section of this plan includes things the City is already doing that contribute to restoration, or that could be modified so that they would contribute to restoration). It also includes programs like watershed planning and TMDL planning that address ecological functions in Moses Lake. It is based on an inventory of ongoing projects and programs.
Identify additional projects and programs needed to achieve local restoration goals, and implementation strategies including identifying prospective funding sources for those projects and programs	This restoration plan includes new projects and programs that could be initiated to contribute to restoration; existing projects and programs that may be able to contribute to restoration; organizations that may undertake, participate in, or contribute to restoration projects; and sources of funding for restoration. All are listed under the heading "Restoration Resources."
Identify timelines and benchmarks for implementing restoration projects and programs and achieving local restoration goals	The section of this plan headed "Benchmarks and Timelines" includes general timelines for achieving the City's restoration goal over a period of 50-60 years. It also includes benchmarks by which the City can measure progress toward each of its objectives by assessing the number of actions that have been completed and the effects of those actions.
Provide for mechanisms or strategies to ensure that restoration projects and programs will be implemented according to plans and to appropriately review the effectiveness of the projects and programs in meeting the overall restoration goals	The section of this plan on "The City's Role" discusses project evaluation, monitoring, and adaptive management—tools for selecting projects, assessing their effects, and adapting the restoration plan to meet changing needs, conditions, and resources and to respond to new information.

This plan lists restoration objectives, strategies, and actions, and potential restoration sites.

- The goal describes a condition the City wants to achieve
- An objective clarifies the actions needed to achieve the City's goal. This plan includes *protection* and *restoration* objectives
- A strategy is one possible means of achieving an objective
- Actions are specific steps that the City or others can take to implement the strategies in the plan

The objectives, strategies, and actions in this plan are based on the *Shoreline Inventory and Characterization*, which identifies three management issues and a number of measures to protect and restore ecosystem-wide processes. The management issues identified in the *Shoreline Inventory and Characterization* are:

- Alterations to hydrology
- Water quality and sediment
- Riparian and wetland habitat

The six objectives address protection and restoration as they relate to each of those issues. Many of the plan's strategies and actions are drawn from the management measures listed in the *Shoreline Inventory and Characterization*. Others have been added where more detail was needed to specify how the management measures would be put into effect, or as a means of implementing policies in other parts of the SMP.

The map portfolio that is part of the *Shoreline Inventory and Characterization* includes a map of restoration opportunities—sites at which some of the actions in this plan could be taken. Many of those sites are on public land or involve city infrastructure. For instance, several storm sewer outfalls have been identified for retrofitting to reduce pollution of the lake. Other sites are on private land. Generally, actions on private land will be voluntary. In some cases, the City may require restoration as a condition of development. Restoration actions will never be required for development of an individual single-family residence, or on land that has already been developed.

Adaptive Management

This plan is based on the principle of Adaptive Management—that is, adapting strategies and actions in response to analysis of data gathered from ongoing monitoring of restoration projects and activities. The list of restoration opportunities in the plan is not exhaustive, and it can be expected to evolve over time as the City evaluates the results of completed projects and in response to opportunities and resources available.

Restoration Goal and Objectives

The goal of this protection and restoration plan is drawn directly from the City of Moses Lake's *Comprehensive Plan*: "Promote the restoration of Moses Lake to a healthy state that supports natural habitat while providing recreational benefits to the community."

The health of the lake depends in part on the health of the shoreline. Shoreline ecological functions affect water quality, hydrology (the movement of water throughout the watershed), and fish, bird, and wildlife habitat. Each of those things is important to the overall health of the lake, and also affects the community.

- Water quality affects fish and wildlife and their habitat, recreational use of the lake, and human health—water pollution can reach the aquifer, which is a source of drinking water
- Hydrology affects the availability of water for irrigation (landscape and agricultural), drinking, and recreation
- Habitat provides opportunities for recreation, including economic generators like hunting, fishing, and bird watching

By promoting and supporting restoration of shoreline areas, the City will be taking steps toward restoring the health of the lake as a whole.

The table below shows how the six objectives of the plan relate to the management issues identified in the *Shoreline Inventory and Characterization*.

Table 2—Restoration Objectives

Management Issue	Objective
Alterations to hydrology	Protect hydrologic processes from further degradation
	Restore altered hydrologic processes
Water quality and sediment	Protect water quality, native plant communities, and fish and wildlife habitat.
	Restore water quality, native plant communities, and fish and wildlife habitat.
Riparian and wetland habitat	Protect riparian habitat and migration corridors
	Restore riparian habitat and migration corridors

Strategies, actions, and potential restoration sites related to each objective are tabulated in the Restoration Opportunities section that follows.

Restoration Opportunities

The table below lists the City's six restoration objectives and outlines strategies and actions for each one. It also states where each action may be applied, including target reaches, where those have been identified in the *Shoreline Inventory and Characterization*. As noted in the paragraph on Adaptive Management above, the list of strategies and actions can be expected to evolve as projects are completed and their results evaluated, and as new opportunities arise. See Restoration Potential map in *Shoreline Inventory and Characterization* map portfolio

Objective	Strategy	Action	Target reaches*
Protect hydrologic processes from further degradation	Coordinate lake management with other jurisdictions, agencies, and irrigation districts, including the Moses Lake Irrigation and Rehabilitation District	Initial steps will depend on the City's existing relationships; see "Regional Coordination" under the heading "Restoration Resources" below	Ecosystem-wide
Protect water quality	Mitigate effects of upland sources of pollutants	Protect wetlands and riparian vegetation within shoreline areas to mitigate effects of upland sources. • SMP regulations will provide some protection within the City • Use education to influence landowner decisions in the City and the UGA. See "Education Programs" under the heading "Restoration Resources" below • Use development regulations to eliminate or minimize runoff from upland areas, especially in high soil erosion areas with limited vegetation	City-wide (education may also be undertaken within the UGA, if the City chooses)
		Provide education on fertilizer and pesticide impacts for shoreline residents	City-wide (and within the UGA, if the City chooses)
		Slow runoff from construction sites with proper erosion controls • SMP regulations will provide some protection within the City's shoreline areas • Use development regulations to eliminate or minimize runoff from construction sites outside shoreline areas, especially in high soil erosion areas with limited vegetation • Educate landowners and developers about runoff management • Work with Grant County officials to decrease construction runoff in the City's UGA • Continue to implement NPDES Phase II Stormwater Regulations as they are modified	22, 30 City-wide; throughout the UGA; education may also be undertaken within the City and also throughout the UGA, if the City chooses

Objective	Strategy	Action	Target reaches*
Protect water quality (*continued*)	Mitigate effects of upland sources of pollutants (*continued*)	Avoid development on hydric or highly erodible soils (word as an action) • SMP regulations will provide some protection within the City • Use development regulations to protect vulnerable soils outside shoreline areas • Work with the NRCS to educate landowners and developers about soils that are vulnerable to erosion • Work with Grant County officials to protect soils in the City's UGA	City-wide (some steps may also be taken within the UGA, if the City chooses)
	Mitigate stormwater flows	Use development standards to mitigate stormwater flows • Continue to implement the Department of Ecology's *Stormwater Management Manual for Eastern Washington* • Educate landowners and developers about stormwater management and the reasons for the development standards	City-wide; education can also be undertaken within the UGA, if the City chooses
		Shoreline setbacks will provide some protection within the City	City-wide
	Coordinate water quality management with neighboring jurisdictions	Identify neighboring jurisdictions for coordination of water quality management plans; see "Regional Coordination" under the heading "Restoration Resources" below	Ecosystem-wide
	Protect vegetative cover on areas prone to high soil erosion	• Use development regulations to protect vegetative cover on areas prone to high soil erosion outside shoreline areas • Educate landowners and developers about protecting vegetative cover on areas prone to high soil erosion • Work with Grant County officials to protect vegetative cover in the City's UGA	23 Education and working with Grant County have the potential to be effective throughout the City and its UGA
	Maintain the natural value of wetlands to control and filter storm water runoff	• SMP regulations will provide protection in shoreline areas within the City • Strictly enforce the City's CAO and SMP • Educate landowners and developers about wetland functions, values, and protection Work with Grant County officials to protect wetlands and their buffers in the City's UGA	City-wide (some steps may also be taken within the UGA, if the City chooses)

Objective	Strategy	Action	Target reaches*
Protect riparian habitat and migration corridors	Regulate new development to ensure protection of riparian habitat and migration corridors	• SMP regulations, including buffer and setback requirements, will provide protection in shoreline areas within the City • Educate landowners about riparian habitat and migration corridors and their protection to improve protection of already-developed areas. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County officials to protect riparian habitat and migration corridors in the City's UGA	City-wide (some steps may also be taken within the UGA, if the City chooses)
	Protect riparian, emergent, aquatic, and wetland vegetation within SMP jurisdiction to mitigate effects of upland nonpoint pollution sources	Protect shoreline and aquatic vegetation near docks, residential areas, and public access areas • SMP regulations will provide protection in shoreline areas within the City • Educate landowners and the general public (including out-of-town recreational users) about the functions of shoreline and aquatic vegetation and how to protect it; and about aquatic weeds and how to prevent their spread. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County officials to protect shoreline and aquatic vegetation in the City's UGA	2-4, 6, 8, 15-17, 19, 22-24, 26, 27, 29 City-wide and throughout the UGA
		Protect vegetative buffer on residential and agricultural land • SMP regulations will provide protection in shoreline areas within the City • Educate residential landowners about the functions of shoreline vegetation and how to protect it. See "Education Programs" under the heading "Restoration Resources" below for ideas • Educate owners and managers of agricultural land about the functions of shoreline vegetation and how to protect it. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County officials to protect vegetative buffers on developed and developing residential land in the City's UGA • Work with Grant County, NRCS, conservation district to protect vegetative buffers on agricultural land throughout the subbasin • Develop an incentive program to encourage protection of vegetative buffers on agricultural land throughout the subbasin, perhaps in partnership with other organizations	• 1, 2, 3, 15, 21, 26, 29, 30 • Throughout the City, the UGA, and the subbasin

Objective	Strategy	Action	Target reaches*
Protect riparian habitat and migration corridors (*continued*)	Protect riparian, emergent, aquatic, and wetland vegetation within SMP jurisdiction to mitigate effects of upland nonpoint pollution sources (*continued*)	Work with conservation and irrigation districts, including the Moses Lake Irrigation and Rehabilitation District, to implement recognized Best Management Practices along riparian areas throughout the subbasin	Ecosystem-wide
		Protect existing wetlands from encroachment by light industrial development • SMP regulations prohibiting new industrial development will provide protection in shoreline areas within the City • Use education and outreach to prevent encroachment by existing light industrial developments in the City and its UGA • Work with Grant County officials to prevent encroachment on wetlands on developed and developing land in the City's UGA	12, 13 City-wide (some steps may also be taken within the UGA, if the City chooses)
		Protect existing wetlands from encroachment by residential development • SMP regulations will provide some protection in shoreline areas within the City • Educate landowners about wetlands and how to protect them. See "Education Programs" below for ideas • Work with Grant County officials to protect wetlands on developed and developing land in the City's UGA	2, 4-6, 9-11, 14, 21, 22, 24-28, 30 City-wide (some steps may also be taken within the UGA, if the City chooses)
		Protect existing wetlands from encroachment by recreational development • SMP regulations will provide some protection in shoreline areas within the City. • Educate landowners about wetlands and how to protect them. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County officials to protect wetlands on developed and developing land in the City's UGA	30 City-wide (some steps may also be taken within the UGA, if the City chooses)
	Protect important habitat areas	Protect priority habitat identified by WDFW • SMP regulations will provide some protection in shoreline areas within the City • Work in partnership with WDFW & other resource agencies (see restoration resources, below) to educate landowners and developers in the City and the UGA • Communicate with WDFW about new priority habitat areas, priority habitat issues, etc.	1-6, 10, 16, 17, 20-22, 26-29 Throughout the City, the UGA, and the ecosystem

Objective	Strategy	Action	Target reaches*
Protect riparian habitat and migration corridors (*continued*)	Protect important habitat areas	Protect spawning and rearing habitat for fish and wildlife • SMP regulations will provide some protection in shoreline areas within the City • Work in partnership with WDFW & other resource agencies (see restoration resources, below) to educate landowners and developers in the City and the UGA	14
		Protect vegetation and habitat in dune areas • Study dune ecosystem to provide a scientific basis for regulating uses in the dunes area. • Work in partnership with recreation user groups, WDFW, & other resource agencies (see restoration resources, below) to educate landowners and developers in the City and the UGA	25
	Limit hardening of shoreline structures	• SMP regulations will provide protection in shoreline areas within the City • Educate landowners and developers throughout the City and the UGA about shoreline stabilization. See "Education Programs" under the heading "Restoration Resources" below for ideas	City-wide and throughout the UGA
	Limit increase in the number of bulkheads on the shoreline	• SMP regulations will provide protection in shoreline areas within the City • Educate landowners and developers throughout the UGA about shoreline stabilization. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County officials to limit new bulkheads in the City's UGA	1-6, 8, 15, 16, 18, 19, 26, 28-30 Throughout the City and the UGA
	Maintain the biological and physical functions and values of wetlands	Provide for reasonable buffers around wetlands in order to provide a local habitat for wetland plant and animal communities, and to reduce or minimize intrusions from humans and domestic animals • SMP regulations will provide protection in shoreline areas within the City • Educate landowners and developers throughout the City and the UGA about wetland functions and values. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County officials to protect wetlands in the City's UGA	Throughout the City and the UGA

Objective	Strategy	Action	Target reaches*
Protect riparian habitat and migration corridors (*continued*)	Maintain the biological and physical functions and values of wetlands (*continued*)	Provide for reasonable buffers around wetlands in order to provide a local habitat for wetland plant and animal communities, and to reduce or minimize intrusions from humans and domestic animals (*continued*) • Educate owners and managers of agricultural land about wetland functions and values and how to protect them. See "Education Programs" under the heading "Restoration Resources" below for ideas • Work with Grant County, NRCS, conservation district to protect wetland functions and values on agricultural land throughout the subbasin • Develop an incentive program to encourage protection of wetlands on agricultural land throughout the subbasin, perhaps in partnership with other organizations • Encourage good stewardship by all residents and users of shoreline areas	Throughout the City and the UGA
Restore altered hydrologic processes	Work with Bureau of Reclamation and the Moses Lake Irrigation and Rehabilitation District to alter dam and irrigation operations, such as timing drawdown to limit impacts to aquatic vegetation	Initial steps will depend on the City's existing relationships; see "Regional Coordination" under the heading "Restoration Resources" below	Ecosystem-wide
Restore water quality	Reduce impacts of stormwater runoff on water quality throughout the subbasin	• Highlight locations for most effective stormwater retrofitting • Retrofit storm sewer outfalls to limit pollution loading to the lake	8 (2 sites); 9 (1 site); 12 (1 site); 13 (2 sites); 15 (1 site); 16 (4 sites); 19 (5 sites); 20 (3 sites); 21 (3 sites); 26 (6 sites); 28 (1 site)
	Reduce/prevent runoff from parking areas	Develop vegetative buffers around parking areas on public land, as well as direct overland flow away from lake	City-wide

Objective	Strategy	Action	Target reaches*
Restore water quality (*continued*)	Reduce/prevent runoff from parking areas (*continued*)	On public land, move parking areas out of the SMP jurisdiction or set them back from the shoreline or convert to pervious paving	6 (Cascade Park), 17 (Lower Peninsula Boat Launch), 22 (Montlake Park)
		Provide incentives for landowners to develop vegetative buffers around parking areas, as well as direct overland flow away from lake, on sites already developed. Initial steps could include: • Secure funding and program sponsor (unless city is to sponsor/manage the program) • Develop educational materials; communicate with landowners	14, 15, 24
	Reduce impacts of agriculture and development on water quality	Work with conservation districts and irrigation districts, including the Moses Lake Irrigation and Rehabilitation District, to institute BMPs for agriculture, including efficient use of irrigation water and fertilizer, control of animal waste and sediment, as well as livestock fencing along riparian areas	Throughout the City, the UGA, and the subbasin
		Develop public education programs to reduce fertilizer use on residential land near the shoreline	City-wide (and within the UGA, if the City chooses)
		Use education and incentives to encourage restoration of vegetative buffers on developed parcels and in agricultural areas. Initial steps could include: secure funding and program sponsor (unless city is to sponsor/manage the program), develop educational materials; communicate with landowners	1-4, 6, 7, 9, 15, 19-21, 23, 26, 28, 29
		Restore vegetative cover and riparian buffer on areas prone to high soil erosion. Initial steps could include: • Identify target parcels • Develop an incentive program • Work with NRCS, conservation district, WDFW, or other entities to secure funding and program sponsor (unless city is to sponsor/manage the program) • Develop educational materials • Communicate with landowners. Distribute materials; assess willingness to participate	23

Objective	Strategy	Action	Target reaches*
Restore riparian habitat and migration corridors	Restore native terrestrial and emergent vegetation in shoreline areas	Develop a demonstration project on public lands using "soft" structural stabilization, vegetative stabilization, or a combination of an upland retaining wall with vegetation restoration	Is there a site that might work well? None of the sites identified in the inventory and characterization is on public land. Are there any bulkheads on public land?
		Where landowners are interested, replace bulkheads and other shore protection structures with bioengineered (biotechnical or biostructural) stabilization, or upland retaining walls and riparian and emergent vegetation; and restore terrestrial and emergent vegetation. Initial steps could include: develop educational materials; assess landowner willingness—maybe find a champion; secure funding and leadership/sponsorship for project; develop and implement a pilot project	1-8, 15, 16, 18, 19, 26, 28-30
		Restore riparian and emergent vegetation on publicly owned land	Cascade Park (Reach 6)
		On publicly owned land, manage areas of emergent vegetation to support healthy ecological processes and functions	Cascade Park (Reach 6)
		Provide public access at the railroad grade in Neppel Park and restore emergent vegetation and vegetative buffer	Neppel Park (Reach 13)
		Educate landowners about shoreline vegetation restoration	City-wide (and within the UGA, if the City chooses)
		Encourage landowners to restore shoreline vegetation	City-wide (and within the UGA, if the City chooses)
	Enhance wetlands to increase biological and physical functions and values	Educate landowners about wetlands enhancement	City-wide (and within the UGA, if the City chooses)
		Encourage landowners to enhance wetlands	City-wide (and within the UGA, if the City chooses)

Existing and Ongoing Programs

Restoration Resources

Potential mechanisms for actions that are not currently being implemented or for which funding is not anticipated.

Regional Coordination

Some of the City's restoration objectives depend on coordination with other entities. Others can be furthered by coordination, and will achieve much better results than if protection and restoration efforts are limited to shoreline areas within the City. The city can foster shoreline ecological function by building relationships, and exploring opportunities for coordination, with governments and other agencies involved in land and water management, including:

- Moses Lake Conservation District
- Grant Conservation District
- Irrigation Districts, including the Moses Lake Irrigation and Rehabilitation District
- Grant County
- The Washington Department of Fish and Wildlife
- The Washington Department of Ecology
- Washington State University's Grant and Adams Counties Extension
- The Bureau of Reclamation
- The Natural Resource Conservation Service
- The Upper Crab Creek/Wilson Creek Watershed Planning Unit

Where working relationships are not already in place, establishing them as soon as possible will lay the groundwork for joint planning, and is likely to be more effective than seeking to enlist support at the stage of implementation.

Possibilities include:
- Convening a forum to discuss the existing situation and each party's needs and interests
- Meeting individually with representatives of other organizations interested in lake management
- Working through channels that have already been established

Some of the agencies listed above offer technical and funding resources that may be available to supports shoreline protection and restoration. Coordination with those agencies will help City staff understand what resources are available and plan projects to take best advantage of them—including working effectively with funding cycles.

Education Programs

Education programs offer effective means of contacting large numbers of people and encouraging voluntary action, as well as informing members of the public of local, state, and federal regulations and their responsibilities as landowners and resource users. Possibilities include:

- Develop a Good Neighbor Handbook; distribute to all shoreline landowners; work with Real Estate agents, Audubon, Master Gardeners to distribute; mail to all purchasers of shoreline property
- Educate Master Gardeners
- Hold shoreline landscaping classes—to teach landowners how to minimize runoff and delivery of pollutants to the lake, minimize chemical use, use any chemicals correctly, work with existing vegetation, enhance shoreline resources, protect and enhance habitat, watch wildlife without disturbance, etc.
- Develop brochures; distribute as part of the development process and through other channels—garden centers, cooperative extension, etc.

- Use the City's website to link residents to information about shoreline issues such as vegetation conservation
- Place interpretive signs at public access areas
- Develop a display and exhibit it at City Hall, the County Fair, local home shows, and other venues.
- Develop educational materials about shoreline stabilization methods; distribute as part of the development process
- Work with the Conservation District to hold a shoreline stabilization seminar, and perhaps a tour of bulkhead alternatives, for developers and interested landowners.
- Develop educational materials about important fish species, their habitat, and how to protect them; distribute at fishing days, Cast for Kids, bait and tackle dealers, etc.
- Distribute the Department of Ecology's "Lake-Friendly Landscaping" focus sheet, and place a link to it on the City's web site

Parks Management

The City will develop a parks management plan that details strategies and actions for improving the ecological function of shorelines in the City's parks. Choices about design (particularly where people will access the water for boating, swimming, etc.), plant materials, planting methods, and maintenance can all be tailored to support both recreation and shoreline objectives.

Capital Facilities Program

The City can further a number of its objectives by planning and implementing public works projects. Amending the Capital Facilities element of the City's *Comprehensive Plan* will provide a mechanism for prioritizing and funding certain restoration strategies. Actions to consider in amending the element include:

- Retrofit storm sewer outfalls to limit pollution loading to the lake (Municipal Facilities section)
- Develop vegetative buffers around parking areas on public land, as well as direct overland flow away from lake (Municipal Facilities and/or Parks and Recreation Facilities section)
- On public land, move parking areas out of the SMP jurisdiction or set them back from the shoreline (Municipal Facilities and/or Parks and Recreation Facilities section)
- Develop a demonstration project on public lands using "soft" structural stabilization, vegetative stabilization, or a combination of an upland retaining wall with vegetation restoration (Municipal Facilities or Parks and Recreation Facilities section, depending on demonstration project location)
- Restore emergent vegetation on publicly owned land (Municipal Facilities and/or Parks and Recreation Facilities section)
- Provide public access at the railroad grade in Neppel Park and restore emergent vegetation and vegetative buffer (Parks and Recreation Facilities section)

Development Opportunities

The City may have opportunities to work with shoreline developers to complete restoration actions in addition to minimum mitigation requirements. Possibilities include:

- Establishing a Shoreline Restoration Bank—a list of restoration projects that would further the City's restoration objectives and that might not otherwise be completed. Where on-site mitigation opportunities are limited by building site constraints, limited potential ecological gains, or other site-specific factors, and where the proposed development is consistent with the City's Comprehensive Plan and meets an identified need, the requirement for onsite mitigation might be waived in exchange for completion by the developer of a high-priority restoration project on another site. The City would probably want to require that the off-site restoration provide a gain in shoreline ecological functions

(i.e., the off-site project would have to exceed the “no net loss” standard—it would have to go beyond resulting in no net loss and enhance shoreline ecological function).
- Serving as liaison between developers interested in restoration and organizations that can provide technical expertise and funding for projects that will advance the City’s restoration objectives. Regional Coordination, if undertaken, will make the City a valuable clearinghouse for restoration information and a good link between developers and restoration opportunities.

Development Incentives

Development incentives might include waiving some or all development application fees or waiving city-required infrastructure improvement fees for developers, landowners, and agricultural land managers willing to take protection and restoration actions in addition to those required by the SMP.

Tax Relief System

The City may want to consider a tax system to encourage shoreline restoration measures. Possibilities include:

- Working with Grant County to craft a preferential tax incentive through the Public Benefit Rating System administered by the County under the Open Space Taxation Act (RCW 84.34), to encourage private landowners to preserve natural shore-zone features for "open space" tax relief. The Department of Ecology has published a technical guidance document for local governments that wish to improve landowner stewardship of natural resources. More information about the program can be found at http://www.ecy.wa.gov/biblio/99108.html. The guidance document provides "technically based property selection criteria designed to augment existing open space efforts with protection of key natural resource features which directly benefit the watershed. Communities can choose to use any portion, or all, of these criteria when tailoring a Public Benefit Rating System to address the specific watershed issues they are facing."

Fee System

The City may want to consider a fee system to directly fund shoreline restoration measures. Possibilities include:

- Establishing a Shoreline Restoration Fund. A chief limitation to implementing restoration is local funding, which is often required as a match for state and federal grant sources. To foster ecological restoration of the City’s shorelines, the City could establish an account that may serve as a source of local match monies for non-profit organizations implementing restoration of the City’s shorelines. The fund could be administered by the Shorelines Administrator and supported by a levy on new shoreline development proportional to the size or cost of the new development project. Monies drawn from the fund would be used as a local match for restoration grant funds.

Resource Directories

For landowners: A resource directory will help property owners who are interested in restoration to identify sources of technical and financial assistance.

For City staff: a directory will help City staff to identify and coordinate shoreline restoration opportunities. The focus might be somewhat different than in a directory designed for landowners; for instance, the staff directory might include descriptions of shoreline-related programs of different City departments so that staff can more easily coordinate resources and funding within the organization.

Resources for actions that are not currently being implemented or for which funding is not anticipated

Programs and Organizations

Existing programs and organizations offer a wealth of resources to support the City in implementing its protection and restoration plan, and to help local citizens undertake protection and restoration projects—either on their own land or as sponsors of larger projects. They include:

- Central Basin Audubon Society. According to its web site, the local chapter of the Audubon Society works to promote environmental education, including presenting programs on conservation and wildlife protection; and works on wildlife protection projects; assists in creating backyard wildlife habitats; works to identity wildlife habitat around the Columbia Basin, and protect and enhance it; and is working to develop community partnerships.
- Moses Lake Conservation District
- Grant Conservation District. The Conservation District "identifies challenges and guides solutions voluntarily." Its Water on Wheels program offers free workshops on watersheds, soils, groundwater, and resource conservation, for both students and adults.
- Natural Resources Conservation Service. The NRCS's natural resources conservation programs help people reduce soil erosion, enhance water supplies, improve water quality, and increase wildlife habitat. The NRCS offers a wealth of resources, including several of the funding programs listed below, and sponsors the Big Bend Resource Conservation and Development Council. The RC&D works as a "catalyst" to create partnerships that will successfully achieve economic and natural resource development while maintaining an environmental ethic, and has completed a number of projects, including the Coulee Corridor Consortium, the Columbia Basin Water Initiative, a Shrub-Steppe Demonstration Planting, and a Leafy Spurge Management Project.
- The Washington Department of Ecology. Ecology's mission is to protect, preserve and enhance Washington's environment, and promote the wise management of our air, land and water; its goals are to prevent pollution, clean up pollution, and support sustainable communities and natural resources. The agency offers many programs and resources to support local communities in advancing those goals, addressing subjects such as stormwater management, aquatic plant management, lake stewardship, and wetland stewardship that are relevant to Moses Lake's restoration efforts.
- The Washington Department of Fish and Wildlife. The WDFW's mission is to provide sound stewardship of fish and wildlife. The agency offers many programs and resources to support management of fish and wildlife species based on the best available science, including the Backyard Sanctuary Program (a wildlife stewardship program for homeowners), resources for habitat and wildlife stewardship, information about Priority Habitats and Species, technical assistance for habitat protection and restoration, and funding programs (see below).
- The U. S. Fish and Wildlife Service. The mission of the USFWS is "working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people." The service offers a number of programs related to fish and wildlife habitat conservation, including administrating the Migratory Bird Treaty Act of 1916 to conserve migratory bird populations and their habitats and sponsoring National Fishing and Boating Week. The service also administers grant programs, with funding available to individuals, local governments, and conservation groups (see below).
- WSU Grant-Adams Master Gardeners. Master Gardeners promote environmentally-sound gardening by providing public education on topics such as plants, pests, and water conservation, and water quality. The local Master Gardeners researched the issue and created a Power Point presentation and tri-fold brochure about shoreline stabilization for Moses Lake. These were presented at a well-attended public meeting in May, 2009, at Big Bend Community College.
- Moses Lake Irrigation & Rehabilitation District (MLIRD). MLIRD's mission has three parks: Irrigation, recreation, and rehabilitation. The rehabilitation portion deals with improving water quality in the lake, including aquatic weed abatement and sediment removal. The efforts of this agency should be considered when looking at overall lake restoration possibilities.

Sources of funding

Listed below are some potential sources of grant funding for restoration projects in the City's shoreline areas. Funding programs change frequently, and the list will need to be updated at least once a year to stay current. Other grants may be available in addition to the ones listed below. The list here is intended to give a sense of the range of funding sources available and the types of projects that may be fundable.

1. Ducks Unlimited
    a. Matching Aid to Restore States Habitat (MARSH)—matching funds to help states acquire and enhance wetland habitat
2. FishAmerica Foundation
    a. FishAmerica Grant Program—funding for hands-on, action-oriented projects that directly enhance water quality, habitat and/or sport fish populations
3. National Fish and Wildlife Foundation
    a. Bring Back the Natives—funding for on-the-ground efforts to restore native aquatic species to their historic range that initiate partnerships with private landowners, demonstrate successful collaborative efforts, address watershed health issues that would lead to restoring habitats and are key to restoring native aquatic species and their migration corridors, and promote stewardship on private lands
    b. Native Plant Conservation Initiative (with federal agencies) —funding for "on-the-ground" projects that involve local communities and citizen volunteers in the restoration of native plant communities
4. Natural Resource Conservation Service
    a. Environmental Quality Incentive Program (EQIP) —provides technical, financial, and educational assistance to farmers and ranchers to address livestock-related natural resource concerns and other, more general conservation priorities
    b. Wildlife Habitat Improvement Program (WHIP)— technical and cost-share assistance to establish and improve fish and wildlife habitat on private land
5. U.S. Army Corps of Engineers
    a. Basinwide Restoration New Starts General Investigation—cost-share funding for basin restoration projects and research
    b. Section 204: Environmental Restoration Projects in Connection with Dredging—funding for projects to restore, protect, and create aquatic and wetland habitats in connection with construction or maintenance dredging of an authorized project
    c. Section 206: Aquatic Ecosystem Restoration Program funding for projects to restore aquatic ecosystems
6. U.S. Bureau of Reclamation
    a. Planning/Technical Assistance Program—assistance with data collection and analysis related to water supply and water quality, engineering, hydrologic studies, sedimentation, and water resources planning
7. U.S. Environmental Protection Agency
    a. Five-Star Restoration Program—challenge grants, technical support and opportunities for information exchange to enable community-based wetland and stream restoration projects
    b. Wetland Protection, Restoration, and Stewardship Discretionary Funding—support for studies and activities related to implementation of Section 404 of the Clean Water Act for

both wetlands and sediment management. Projects can support regulatory, planning, restoration or outreach issues

8. U.S. Fish & Wildlife Service
    a. North American Wetlands Conservation Act Grants Program— funding assistance to promote conservation of wetlands and associated habitats for migratory birds and other wildlife
    b. Partners for Fish and Wildlife—a voluntary partnership program that helps private landowners restore wetlands and other important fish and wildlife habitats on their own lands
    c. Cooperative Conservation Initiative —grants to restore natural resources and establish or expand wildlife habitat
9. Washington Department of Ecology (with U.S. EPA)
    a. Nonpoint Source Implementation Grant (319) Program—grants to support activities including technical assistance, financial assistance, education, training, technology transfer, demonstration projects, and monitoring to assess the success of specific nonpoint source implementation projects
10. Washington Department of Fish and Wildlife
    a. Landowner Incentive Program (LIP) —a competitive grant program to provide financial assistance to private individual landowners for the protection, enhancement, or restoration of habitat to benefit species-at-risk on privately owned lands
11. Washington Department of Natural Resources
    a. Aquatic Lands Enhancement Account—grant-in-aid support for the purchase, improvement, or protection of aquatic lands for public purposes, and for providing and improving access to such lands

The City's Role

The City of Moses Lake is likely to have a number of different roles in implementing this restoration plan. The City may undertake some activities itself, such as retrofitting storm sewer outlets, modifying park management to support shoreline ecological functions, and educating residents. The City may assist in moving other projects forward by participating in regional coordination. And, in some instances, the City may support a project undertaken by others, or champion a project while seeking an individual or organization to carry it out. For instance, the City might seek an organization to develop a brochure on a specific topic, which the City would then distribute to shoreline landowners. Or, the City might write a letter of support for an organization seeking funding to complete a project that will advance the City's restoration objectives.

The City will also need to evaluate progress toward its restoration goal, and make changes to keep its restoration strategies up to date.

Prioritization

The City will need to make decisions about what projects to undertake, what projects to support, and what projects to promote. When evaluating projects in which it has a role or in which a role is proposed for it, the City will use the following criteria to establish priorities:

- Availability of adequate funding to complete the project on schedule, maintain the completed project, and monitor outcomes
- Feasibility. Components of feasibility include, but are not limited to:
    - Landowner willingness
    - Public support

- Preference should be given to projects that will:
    - Further the goals of this protection and restoration plan. When all other factors are equal, preference should be given to projects that will address more than one objective
    - Employ one or more of the strategies in this protection and restoration plan
    - In the case of restoration projects, address a known degraded condition
    - Address a worsening situation (as opposed to one that is stable)
    - Be consistent with other restoration and management plans
- Preference should be given to projects that will not cause damage to adjacent properties or shoreline areas

This plan includes a list of prioritization criteria, rather than restoration priorities, to give the City flexibility in evaluating projects that are not included in the plan and to allow for adaptive management. First, the plan does not list all possible projects. If projects that are not part of the plan are proposed, the criteria will allow the City to evaluate them.

Monitoring and Adaptive Management

The City will use monitoring and adaptive management to ensure continued progress toward its restoration goal.

- The City will monitor progress toward each of its restoration objectives using metrics appropriate to the objective. The metrics do not need to involve complicated ecological evaluations, although it will be useful to incorporate available data, such as water quality information gathered as part of TMDL work. The City can use simple quantitative measures such as number of storm sewer outfalls retrofitted, number of bulkheads replaced, changes in wetland ratings, changes in water quality, and number of hits on a City shoreline restoration website. It can also use qualitative assessments of its progress on strategies that involve, for instance, regional coordination and landowner education. The information generated will help the City to see which strategies and actions are working well and which may need to be refined (which will inform adaptive management) as well as gauge progress toward the objectives. As more data become available and the City is able to quantify restoration needs, it may choose to use more precise metrics.
- The City will use adaptive management, regularly reviewing its objectives, assessing progress, and updating its strategies and actions in response to its findings. Adaptive management means adapting the restoration plan to meet changing needs, conditions, and resources; and to respond to new information. As restoration work is completed, some approaches may cease to be applicable. Other approaches may prove unpopular or be impractical due to lack of funding or coordination challenges. In addition, new possibilities may present themselves as regional coordination bears fruit or as new data become available. Adaptive management will allow the City to keep the restoration plan fresh and relevant as it makes progress and learns does and doesn't work well under the specific circumstances operating in Moses Lake.

Benchmarks and Timelines

The table below outlines The City's shoreline restoration benchmarks and its timeline for meeting those benchmarks.

A benchmark is a point of reference against which progress toward the City's restoration goal ("Promote the restoration of Moses Lake to a healthy state that supports natural habitat while providing recreational benefits to the community") can be measured. Benchmarks make it easier to assess results, even when those results don't involve physical changes that are easy to see.

Both the benchmarks and the timeline are based on the City's current perception of restoration needs and resources available to meet those needs. They can be expected to evolve over time. As work is completed, the City will have a better sense of what needs to be done and what it can reasonably expect to accomplish given its resources and the constraints on those resources—both of which will be dynamic, always changing as the city grows and the needs of its citizens change. The City will also gain a growing understanding of how each restoration strategy is working and where resources will best be invested to achieve its restoration objectives and meets its goal.

Year	Benchmark
2009	• The City adopted the *Stormwater Management Manual for Eastern Washington*
2012	• First replacement of a failing bulkhead with biotechnical stabilization by a private property owner
2014	• The City has adopted an updated SMP • The City has amended its Critical Areas Ordinance to increase wetland buffer widths outside of shoreline areas and to ensure adequate protection of wetlands and their buffers
2015	• The City is administering its SMP and CAO effectively • The City uses staff contact and educational materials to encourage landowners to restore shoreline vegetation and enhance wetlands • City departments and programs all support healthy shoreline ecological function, through mechanisms such as parks management, code administration, and development regulations • The City has identified target parcels for restoration of vegetative cover and riparian buffers in areas prone to high soil erosion • The City has evaluated its progress toward the goal of shoreline restoration and has instituted a program of regular evaluation and adaptive management to ensure continued progress • The City has developed an incentive program for restoration of vegetative cover and riparian buffers in areas prone to high soil erosion • The City is actively involved in educating landowners, developers, recreationists, and other users of the lake about shoreline ecological functions at ways of protecting and restoring them. (The City's role may be as a coordinator.) • The City uses incentives, as well as staff contact and educational materials, to encourage landowners to restore shoreline vegetation and enhance wetlands
2020	• The City has highlighted locations for most efficient and effective stormwater retrofitting • The City enjoys good working relationships with other local governments and with resource agencies, and works in partnership with them to protect and restore shoreline ecological functions at the ecosystem level • The City has provided public access at the railroad grade in Neppel Park and restored the emergent vegetation and vegetative buffer • On at least one City-owned site, the City has developed vegetative buffers around parking areas and directed overland flow away from the lake • The City has updated its development regulations to manage runoff from upland areas and to protect vulnerable soils outside of shoreline areas • An incentive program to encourage protection of wetlands on agricultural land is in place and available to landowners throughout the subbasin, and the City and its partners are actively promoting participation • An incentive program to encourage protection of vegetative buffers on agricultural land is in place and available to landowners throughout the subbasin, and the City and its partners are

Year	Benchmark
	actively promoting participation • The City enjoys good working relationships with recreation user groups, and works in partnership with them to protect and restore shoreline ecological functions at the ecosystem level • At least 75% of construction sites in the City use proper erosion controls • The City has completed a bulkhead replacement demonstration project • A program for restoration of vegetative cover and riparian buffers in areas prone to high soil erosion is underway, with funding and a project sponsor • A comprehensive outreach and education program ensures that at least 75% of landowners, local lake users, developers, real estate agents, and managers of agricultural lands understand the effects of their decisions on water quality and on riparian habitat and migration corridors; the reasons for development regulations that protect shoreline ecological functions; and, where applicable, the incentive programs available to them • The City actively promotes shoreline incentive programs, including developing and distributing educational materials, communicating with landowners, and working to develop funding (possibly in partnerships with other project sponsors)
2025	• The dune ecosystem is adequately understood to provide a scientific basis for regulating uses in dune areas • The City has retrofitted 10% of the storm sewer outfall identified in the *Shoreline Inventory and Characterization* • The City has assessed landowner willingness to restore vegetative cover and riparian buffers in areas prone to high soil erosion • At least 10% of agricultural uses in the subbasin have taken action to protect vegetative buffers • A comprehensive outreach and education program ensures that at least 50% of out-of-town recreational lake users understand the effects of their decisions on water quality and on riparian habitat and migration corridors • The City provides incentives for landowners to develop vegetative buffers around parking areas and direct overland flow away from the lake on sites that have already been developed
2030	• The City has retrofitted 25% of the storm sewer outfall identified in the *Shoreline Inventory and Characterization* • The City has completed all needed vegetation restoration projects on City-owned land, and has a program in place to maintain shoreline vegetation, including re-planting heavily used areas (e.g., areas around boat launches and fishing and swimming access points) as needed • All remaining agricultural uses in the City and its UGA have taken action to protect wetlands, vegetative buffers, and shoreline ecological functions, including fencing riparian areas to exclude livestock and employing Best Management Practices • The number of bulkheads has been reduced by 10% • Vegetative cover and riparian buffers have been restored on at least 25% of the land prone to high soil erosion in Reach 23
2040	• The City has retrofitted 50% of the storm sewer outfall identified in the *Shoreline Inventory and Characterization* • On 50% of its shoreline sites, the City has developed vegetative buffers around parking areas and directed overland flow away from the lake
2050	• The City has retrofitted all of the storm sewer outfall identified in the *Shoreline Inventory and Characterization*
2060	• On all of its shoreline sites, the City has developed vegetative buffers around parking areas and directed overland flow away from the lake • On 50% of its shoreline sites, the City has moved parking areas out of shoreline jurisdiction or set them back so that they have little or no impact on shoreline ecological functions • The number of bulkheads has been reduced by 25%

Chapter 12
Administration and Compliance

12-10 GENERAL PROVISIONS

12-10-010 As required by WAC 173-26-191(2)(a)(iii)(A): All proposed uses and development occurring within shoreline jurisdiction must conform to chapter 90.58 RCW, the Shoreline Management Act and this Master Program, whether or not a permit is required

12-10-020 "Feasible" is defined in the definitions section of this Master Program. In cases where this Master Program require certain actions unless they are infeasible, the burden of proving infeasibility is on the applicant. In determining an action's infeasibility, the reviewing agency may weigh the action's relative public costs and public benefits, considered in the short- and long-term time frame.

12-10-030 Landscape Plan and Installation

A. Where this Master Program or a condition of a permit or exemption requires a planting plan or a landscape plan, the plan shall contain the following information at a minimum:

1. North arrow and scale (standard engineering scale, 1"=50' or larger)

2. Property lines, ordinary high water mark, existing and proposed structures, paved or graveled areas, streets, sidewalks, and overhead and underground utilities.

3. Proposed location of all trees, shrubs, ground cover, and any proposed or existing physical elements, such as fencing, walls, curbing, or benches, that may affect the overall landscape. Areas with existing vegetation that will be retained should be marked and described.

4. A plant schedule which indicates the scientific and common names, quantities, spacing, and sizes at planting and maturity for all plants in the landscape plan.

5. A legend which shows symbols and types of plants.

6. Location and details of irrigation system. The source of water and type of irrigation system shall be noted.

B. Unless otherwise required or allowed as part of the permit or exemption, the following shall be the standards for all required plantings:

1. The minimum size at planting for shrubs and trees shall be one gallon.

2. The minimum spacing for shrubs shall be 3' on center.

3. Plants shall be installed not later than the next planting season after completion of the project.

4. The proponent shall assess the plantings at least once a year for the first three growing seasons after installation and shall replace all dead or dying plant materials in a timely manner.

C. When deemed appropriate, the decision maker may require third party monitoring of required plantings, with reports submitted to the City yearly during the monitoring period.

12-10-040 Transfer of an Approved Permit or Variance. An approved permit or variance may be transferred from the original applicant to any successors in interest to the applicant for the property for which the permit or variance was approved, provided that all of the conditions and requirements of the approved permit or variance shall continue in effect as long as the use or activity is pursued or the structure exists, unless the terms of the permit are modified in accordance with the applicable provisions of this Master Program.

12-10-050 Appeals. Appeals related to issuance or non-issuance of shoreline permits and exemptions shall be processed the same as any other land use appeals.

12-10-060 Enforcement. Violations of this Master Program shall be enforced in the same manner as zoning violations.

12-10-070 Severability. If any provisions of this Master Program, or its application to any person or legal entity or parcel of land or circumstances, is held invalid, the remainder of the Master Program, or the application of the provisions to other persons or legal entities or parcels of land or circumstances, shall not be affected.

12-10-080 Conflict of Provisions. Should a conflict occur between the provisions of this Master Program or between this Master Program and the laws, regulations, code, or rules promulgated by any other authority having jurisdiction within the City of Moses Lake, the most restrictive requirement shall be applied, except when constrained by federal or state law, or where specifically provided otherwise in the Master Program.

12-20 PERMITS

12-20-010 Permit Processing Procedures. Shoreline substantial development permits, shoreline conditional use permits, and shoreline variances shall be processed the same as other land use permits, using the procedures in Moses Lake Municipal Code Title 20. A public hearing in front of the Planning Commission shall be required for Shoreline Substantial Development Permits, Shoreline Conditional Use Permits, and Shoreline Variances. The Planning Commission shall be the approving authority for Shoreline Substantial Development Permits, Shoreline Conditional Use Permits, and Shoreline Variances.

12-20-020 Application submittal requirements. The following shall be required for a complete application:

A. The name, address, phone number, and signature of the applicant. The applicant should be the owner of the property or the primary proponent of the project and not the representative of the owner or proponent.

B. The name, address, and phone number of the applicant's representative, if any.

C. The name, address, phone number, and signature of the property owner, if other than the applicant.

D. Location of property, including address, legal description, and Assessor Parcel Number.

E. A general description of the proposed project that includes the proposed use or uses and the activities necessary to accomplish the project.

F. A general description of the property as it now exists including its physical characteristics and improvements and structures.

G. A general description of the vicinity of the proposed project including identification of the adjacent uses, structures, and improvements; intensity of development, and physical characteristics.

H. A site development plan consisting of maps and elevation drawings, drawn to an appropriate standard scale to depict clearly all required information, photographs, and text which shall include:

1. The boundary of the parcel(s) of land upon which the development is proposed.

2. The ordinary high water mark (OHWM) of all water bodies located adjacent to or within the boundary of the project. This may be an approximate location provided that for any development where a determination of consistency with the applicable regulations requires a precise location of the OHWM, the mark shall be located precisely and the biological and hydrological basis for the location as indicated on the plans shall be included in the development plan. Where the OHWM is neither adjacent to or within the boundary of the project, the plan shall indicate the distance and direction to the nearest OHWM of a shoreline.

3. Existing and proposed land contours. The contours shall be at intervals sufficient to accurately determine the existing character of the property and the extent of proposed change to the land that is necessary for the development. Areas within the boundary that will not be altered by the development may be indicated as such and contours approximated for that area.

4. A wetland analysis report for any wetlands within 200' of the development, and a compensatory mitigation report for wetland areas that will be altered or used as a part of the development.

5. A general indication of the character of vegetation found on the site.

6. The dimensions and locations of all existing and proposed structures and improvements including but not limited to buildings, paved or graveled areas, roads, utilities, material stockpiles or surcharge, and stormwater management facilities.

I. Where applicable, a landscaping plan for the project.

J. Where applicable, plans for development of areas on or off site as mitigation for impacts associated with the proposed project.

K. Quantity, source, and composition of any fill material that is placed on the site, whether temporary or permanent.

L. Quantity, composition, and destination of any excavated or dredged material.

M. A vicinity map showing the relationship of the property and proposed development or use to roads, utilities, existing developments and uses on adjacent properties.

N. Where applicable, a depiction of the impacts to views from existing residential uses and public areas.

O. For conditional use permits and variances, a written statement addressing the approval criteria listed below.

P. For variances, a plan which clearly indicates where development could occur without approval of a variance, the physical features and circumstances on the property that provide a basis for the variance request, and the location of adjacent structures and uses.

Q. If applicable, critical area reports.

R. Any other information deemed necessary by the Shoreline Administrator.

12-20-030 Review criteria for all development

A. All uses and developments shall be consistent with the policies and provisions of the Shoreline Management Act, the state guidelines implementing the Act, and this Master Program. All permits or statements of exemption issued for development or use within shoreline jurisdiction shall include written findings prepared by the Administrator, including compliance with bulk and dimensional standards, policies, and regulations of this Master Program. At the time of approval of the permit or exemption, the approving authority may attach conditions to the approval of developments and/or uses as necessary to assure consistency of the project with the Shoreline Management Act, guidelines, and Master Program.

B. No permit shall be issued for any new or expanded building or structure with a height of more than 35' above average grade that will obstruct the view of a substantial number of residences on areas adjoining the shorelines except when overriding considerations of the public interest will be served.

12-20-040 Review Criteria for Substantial Development Permits

A. All uses and development shall be consistent with the policies and procedures of the Shoreline Management Act, the state guidelines implementing the Act, and this Master Program.

B. At the time of permit approval, the Planning Commission may attach conditions to the approval of permits as necessary to assure consistency of the project with the Act, the guidelines, and this Master Program.

12-20-050 Shoreline Conditional Use Permits

A. The purpose of a Shoreline Conditional Use Permit is to allow greater flexibility in the application of the use regulations of the Shoreline Master Program in a manner consistent with the policies of RCW 90.58.020. Conditional use 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. Where necessary, special conditions may be required on the development or on the use of land or water.

B. Uses which are classified in this Master Program as conditional uses and uses which are unmentioned uses within the Master Program may be authorized provided the applicant demonstrates all of the following:

1. The proposed use is consistent with the policies of RCW 90.58.020 and this Master Program.

2. The proposed use will not interfere with the normal public use of public shorelines.

3. The proposed use of the site and design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Comprehensive Plan and this Master Program.

4. The proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located.

5. The public interest will suffer no substantial detrimental effect.

C. In granting conditional use permits, the Planning Commission shall consider the cumulative impact of additional requests for like action 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 shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

D. A use which is specifically prohibited in this Master Program may not be authorized as a conditional use.

12-20-060 Variances

A. The purpose of a variance is strictly limited to granting relief from specific bulk, dimensional, or performance standards set forth in this Master Program where there are extraordinary or unique circumstances relating to the property such that the strict implementation of the Master Program will impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020.

B. Variances should be granted in circumstances where denial of the permit would result in a thwarting of the policy enumerated in RCW 90.58.020. In all instances, the applicant must demonstrate that extraordinary circumstances exist and that the public interest shall suffer no substantial detrimental effects.

C. Variances for development and/or uses proposed landward of the ordinary high water mark and/or landward of any wetland may be authorized provided the applicant demonstrates all of the following:

1. The strict application of the bulk, dimensional, or performance standards of this Master Program precludes, or significantly interferes with, reasonable use of the property.

2. The hardship described in (1) 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.

3. The design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Comprehensive Plan and this Master Program.

4. The design of the project will not cause adverse impacts to the shoreline environment.

5. The variance will not constitute a grant of special privilege not enjoyed by other properties in the area.

6. The variance requested is the minimum necessary to afford relief.

7. The public interest will suffer no substantial detrimental effect.

D. Variances for development and/or uses proposed waterward of the ordinary high water mark and/or within any wetland may be authorized provided the applicant demonstrates all of the following:

1. The strict application of the bulk, dimensional, or performance standards of this Master Program precludes all reasonable use of the property.

2. The hardship described in (1) 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.

3. The design of the project is compatible with other authorized uses within the area and with uses planned for the area under the Comprehensive Plan and this Master Program.

4. The design of the project will not cause adverse impacts to the shoreline environment.

5. The variance will not constitute a grant of special privilege not enjoyed by other properties in the area.

6. The variance requested is the minimum necessary to afford relief.

7. The public interest will suffer no substantial detrimental effect.

8. The public rights of navigation and use of the shorelines will not be adversely affected.

E. In granting variances, the Planning Commission shall consider the cumulative impact of additional requests for like action in the area. For example, if variances were granted for other developments and/or uses in the area where similar circumstances exist, the total of the variances shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

F. Variances from the use regulations of this master program are prohibited.

12-30 EXEMPTIONS FROM THE SHORELINE SUBSTANTIAL DEVELOPMENT PERMIT PROCESS

12-30-010 General

A. An exemption from the substantial development permit process is not an exemption from compliance with the Shoreline Management Act or this Master Program, or from any other regulatory requirement. To be authorized, all uses and developments must be consistent with the policies and regulatory provisions of this Master Program and the Shoreline Management Act. A statement of exemption shall be obtained for exempt activities consistent with the provisions of 12-30-020.

B. Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemptions from the substantial development permit process.

C. The burden of proof that a development or use is exempt is on the proponent of the exempt development action.

D. If any part of a proposed development is not eligible for exemption, then a substantial development permit is required for the entire project. Exemptions shall not be issued for a series of inter-dependent actions that in sum would require a permit, i.e., a project cannot be submitted in a piece-meal fashion to avoid the requirement for a substantial development permit.

E. A development or use that is listed as a conditional use pursuant to this Master Program or is an unmentioned use, must obtain a conditional use permit even if the development or use does not require a substantial development permit.

F. When a development or use is proposed that does not comply with the bulk, dimensional and/or performance standards of this Master Program, such development or use shall only be authorized by approval of a shoreline variance even if the development or use does not require a substantial development permit.

G. All statements of exemption issued for development or use within shoreline jurisdiction shall include written findings prepared by the Administrator, including compliance with bulk and dimensional standards, policies, and regulations of this Master Program. The Administrator may attach conditions to the approval of exempt developments and/or uses as necessary to assure consistency of the project with the Shoreline Management Act and the Master Program.

H. Before issuing a Letter of Exemption, the Shoreline Administrator shall review the Master Program to determine if the proposed development requires a Shoreline Conditional Use Permit and/or a Shoreline Variance. It may be necessary for the Shoreline Administrator to conduct a site inspection to ensure that the proposed development meets the exemption criteria. Application information shall include the same items as for a Substantial Development Permit unless otherwise waived by the Administrator.

12-30-020 Exemptions Listed. The following activities shall be considered exempt from the requirement to obtain a shoreline substantial development permit. A Statement of Exemption shall be required for those activities listed in 12-30-020 B and C.

A. Any development of which the total cost or fair market value, whichever is higher, does not exceed $5,000, if such development does not materially interfere with the normal public use of the water or shorelines of the state. For purposes of determining whether or not a permit is required, the total cost or fair market value shall be based on the value of development that is occurring on shorelines of the state. The total cost or fair market value of the development shall include the fair market value of any donated, contributed, or found labor, equipment, or materials. The dollar amount shall be adjusted for inflation every five years, as specified in WAC 173-27-040(2)(a).

B. Normal maintenance or repair of existing structures or developments, including damage by accident, fire, or elements. “Normal maintenance” includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. “Normal repair” means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location, and external appearance, within one year after decay or partial destruction, except when repair causes substantial adverse effects to shoreline resources or environment. Replacement of a structure or development may be authorized as repair when such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location, and external appearance, and the replacement does not cause substantial adverse effects to shoreline resources or environment. Repair or replacement of shoreline stabilization structures shall meet the requirements of section 8-30 of this Master Program.

C. Construction of a biotechnical shoreline stabilization or beach nourishment erosion control projects associated with a single family residence when the project has been approved by the Department of Fish and Wildlife. Per Section 8-30 of this Master Program, construction of a bulkhead or riprap at or near the ordinary high water mark shall require a Shoreline Conditional Use Permit and must demonstrate that the proposed bulkhead or riprap is the most natural protective system that is feasible on the site. Such modifications must be for protecting land from erosion, not for the purpose of creating dry land. See the Shoreline Stabilization section of Chapter 8, Shoreline Modifications, for additional requirements.

D. Emergency construction necessary to protect property from damage by the elements. An “emergency” is an unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with the Shoreline Management Act or this Master Program. Emergency construction does not include development of new permanent protective structures where none previously existed. Where new protective structures are deemed by the Administrator to be the appropriate means to address the emergency situation, upon abatement of the emergency situation the new structure shall be removed or any permit which would have been required, absent an emergency, shall be obtained. All emergency construction shall be consistent with the policies of the Shoreline Management Act and this Master Program. As a general matter, flooding or other seasonal events that can be anticipated and may occur but that are not imminent are not an emergency. A written statement from a qualified expert may be required to verify that an emergency exists.

E. Construction and practices normal or necessary for farming, irrigation, and ranching activities, including agricultural service roads and utilities on shorelands, construction of a barn or similar agricultural structure, and the construction and maintenance of irrigation structures including but not limited to head gates, pumping facilities, and irrigation channels: Provided, That a feedlot of any size, all processing plants, other activities of a commercial nature, alteration of the contour of the shorelands by leveling or filling other than that which results from normal cultivation, shall not be considered normal or necessary farming or ranching activities. A feedlot shall be an enclosure or facility used or capable of being used for feeding livestock hay, grain, silage, or other livestock feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations.

F. Construction by an owner, lessee, or contract purchaser of a single family residence for their own use or for the use of their family, which residence does not exceed a height of 35' above average grade level and which meets all other state and local requirements. “Single family residence” means a detached dwelling designed for and occupied by one family, including those structures and developments within a contiguous ownership which are a normal appurtenance. An appurtenance is necessarily connected to the use and enjoyment of a single family residence and is located landward of the ordinary high water mark and outside the perimeter of any wetland or buffer. Normal appurtenances include a garage, deck, driveway, utilities, fences, and a swimming pool. Grading is addressed under Clearing and Grading, Section 8-10 of Chapter 8.

G. Construction of a dock, including a community dock, designed for pleasure craft only, for the private noncommercial use of the owners, lessee, or contract purchaser of a single family and multi-family residences. A dock is a landing and moorage facility for watercraft and does not include recreational decks, storage facilities, or other appurtenances, but does include a walkway to bridge emergent vegetation. This exemption applies if the fair market value of the dock does not exceed $10,000, but if subsequent construction having a fair market value exceeding $2,500 occurs within five years of completion of the prior construction, the subsequent construction shall be considered substantial development for the purpose of this Master Program.

H. Operation, maintenance, or construction of canals, waterways, drains, reservoirs, or other facilities that now exist or are hereafter created or developed as part of an irrigation system for the primary purpose of making use of system waters, including return flow and artificially stored ground water from the irrigation of lands.

I. The marking of property lines or corners on state-owned lands, when such marking does not significantly interfere with normal public use of the surface of the water.

J. Operation and maintenance of any system of dikes, ditches, drains, or other facilities existing on June 4, 1975, which were created, developed, or utilized primarily as a part of an agricultural drainage or diking system.

K. Any project with a certification from the governor pursuant to Chapter 80.50 RCW in regard to energy facilities to meet state demands.

L. Site exploration and investigation activities that are prerequisite to preparation of an application for development authorization under this Master Program, if all of the following conditions are met:

1. The activity does not interfere with the normal public use of the surface waters.

2. The activity will have no significant adverse impact on the environment including but not limited to fish, wildlife, fish or wildlife habitat, water quality, and aesthetic values.

3. The activity does not involve the installation of any structure, and upon completion of the activity the vegetation and land configuration of the site are restored to conditions existing before the activity.

4. A private entity seeking development authorization under this section first posts a performance bond or provides other evidence of financial responsibility to the City to ensure that the site is restored to pre-existing conditions.

M. The process of removing or controlling aquatic noxious weeds, as defined in RCW 17.26.020, through the use of an herbicide or other treatment methods applicable to weed control that are recommended by a final environmental impact statement published by the Department of Agriculture or the Department of Ecology jointly with other state agencies under Chapter 43.21C RCW.

N. Watershed restoration projects as defined in WAC 173-27-040. The City shall review the projects for consistency with the Master Program in an expeditious manner and shall issue its decision along with any conditions within 45 days of receiving all materials necessary to review the request

for exemption from the applicant. No fee may be changed for accepting and processing requests for exemption for watershed restoration projects as used in this section.

O. A public or private project, the primary purpose of which is to improve fish or wildlife habitat or fish passage, when all of the following apply:

1. The project has been approved in writing by the Department of Fish and Wildlife as necessary for the improvement of the habitat or passage and appropriately designed and sited to accomplish the intended purpose.

2. The project has received hydraulic project approval by the Department of Fish and Wildlife pursuant to Chapter 77.55 RCW.

3. The Shoreline Administrator has determined that the project is consistent with this Master Program. The City shall make such determination in a timely manner and provide it by letter to the project proponent.

12-40 ASSURANCE DEVICE

12-40-010 In appropriate circumstances, the decision maker approving the permit may require a reasonable performance assurance device to assure compliance with the provisions of the Shoreline Management Act, the Master Program, any permit conditions, and the permit application as approved.

A. The assurance device may be a bond, assignment of funds, or other readily-accessible source of funds in a form acceptable to the City Attorney. Interest from any interest-bearing form of assurance device will accrue to the benefit of the depositor.

B. The assurance device shall specify the date and time by which the work which it guarantees shall be completed. The assurance device shall specify the date and time by which the City can negotiate the device to obtain the funds to do the work it guarantees. In all cases, the date and time for negotiation shall be at least 60 days after the deadline for the completion of the work.

C. Amount of Assurance Device. The Shoreline Administrator shall determine the amount of the assurance device as follows:

1. For a performance device the amount will be 150% of the cost of the work or improvements covered by the assurance device based on estimated costs immediately following the expiration of the device together with the City's cost of obtaining funds from the assurance device and administering the project.

2. For a maintenance device the amount will not be less than 20% of the cost of replacing the material covered by the assurance device based on estimated costs on the last day covered by the device together with the City's cost of obtaining funds from the assurance device and administering the project.

3. In each case where the City requires or allows an applicant to establish an assurance device, the owner of the subject property shall give the City a signed notarized irrevocable license to run with the property to allow the employees, agents, or contractors of the City to go on the subject property for the purpose of inspecting and, if necessary, doing the work or making the improvements covered by the assurance device. The applicant shall file this license with the Administrator.

D. Release of Assurance Device

1. After the work or improvements covered by a performance assurance device have been completed to the satisfaction of the City, or at the end of the time covered by a maintenance assurance device, the applicant may request the City to release the device.

2. The City shall release such device as expeditiously as possible after receipt of a request

for release, if the work or maintenance time period is finished.

E. Use of Proceeds - Notice to Applicant. If during the period of time covered by a maintenance assurance device or after the date by which the required work or improvements are to be completed under a performance assurance device, the Administrator determines that the work or improvements have not been complied with, he/she shall notify the applicant. The notice must include the following information:

1. The work that must be done or the improvement that must be made to comply with the requirements and permit assurance device.

2. The amount of time that the applicant has to commence and complete the required work or improvements.

3. That, if the work or improvements are not commenced and completed within the time specified, the City will use the proceeds of the assurance device to have the required work or improvements completed.

F. Use of Proceeds - Work by the City. If the work or improvements covered by the assurance device are not completed within the time specified in the notice given under subsection E above, the City shall obtain the proceeds of the device and do the work or make the improvements covered by the device. The City may either have employees of the City do the work or make the improvements or have a contractor do the work or make the improvements.

G. Use of Proceeds - Refund of Excess, Charge for All Costs. The property owner is responsible for all costs incurred by the City in doing the work and making the improvements covered by the assurance device. The City shall release or refund any proceeds of a performance device after subtracting all costs for doing the work covered by the device and the costs of obtaining the proceeds of the device. The owner of the subject property shall reimburse the City for any amount expended by the City that exceeds the proceeds of the device. The City shall have a lien against the subject property for the amount of any excess.

H. Itemized Statement. In each case where the City uses any of the proceeds of the device, it shall give the owner of the subject property an itemized statement of all proceeds and funds used.

12-50 PERMIT REVOCATION

12-50-010 This section applies to requests or decisions to revoke shoreline substantial development permits, shoreline conditional use permits, and shoreline variances.

12-50-020 The Planning Commission shall have the power to revoke or modify approved shoreline substantial development permits, shoreline conditional use permits, and shoreline variances.

12-50-030 Decision Procedure for Revocation

A. City staff or any other persons who are aggrieved by activities undertaken under a shoreline permit may request in writing that the Planning Commission revoke or modify the permit.

B. The Administrator shall schedule a public hearing for the next Planning Commission meeting where the review can be accommodated and the required notice given.

C. Notice of Public Hearing

1. The administrator shall publish a notice of revocation hearing at least ten days before the hearing date.

2. At least ten days before the hearing date, the Administrator shall mail notice of the hearing to the party to whom the permit was issued, the owner of the property for which the permit was issued, the person or persons who requested revocation of the permit, and any persons who requested notice of the hearing in writing.

3. The notice shall include the following information:

   a. The name of the permit holder and, if applicable, the project name.

   b. The street address of the subject property and a description of the property in terms sufficient to identify the location.

   c. A brief description of the issues.

   d. The date, time, and place of the public hearing.

   e. A statement of the right of any person to participate in the public hearing by providing written statements before or at the hearing, and orally at the hearing.

D. The Planning Commission shall hold a public hearing before deciding whether to revoke or add conditions to the permit or variance. Any person may submit written statements or speak at the hearing. The duration of public comments may be equitably limited. At the hearing, members of the Planning Commission may request such additional information as is reasonably necessary to evaluate whether the permit or variance should be revoked.

E. After the public hearing has concluded, the Planning Commission shall decide whether to revoke, modify, or add conditions to the permit.

1. The verbal decision may be announced at the same public meeting as the public hearing or at another public meeting.

2. The decision shall be based on the decision criteria in subsection 12-50-040, below.

3. If the Planning Commission decides to revoke the permit, they may require restoration or reclamation of the property and may set time limits for the completion of these activities.

4. The Planning Commission shall adopt written findings of fact and conclusions which support the decision and any required conditions.

F. Within seven days of the date of the adoption of the decision, a Notice of Decision and the findings of fact and conclusions shall be mailed by the Administrator to the permit holder, the property owner, the Department of Ecology, and the person who requested revocation of the permit.

G. Effect of Decision

1. The decision of the Planning Commission may be appealed to the City Council as provided for in Chapter 20.11 of the Moses Lake Municipal Code. The decision of the City Council is the final decision of the City.

2. The decision of the City Council to uphold or overturn the Planning Commission's decision on the revocation may be appealed to the Washington State Shorelines Hearing Board as provided in RCW 90.58.180 and WAC 461-08.

3. If the Planning Commission revokes the permit, all activity authorized by the permit shall immediately cease, unless the Planning Commission grants a period of time to complete the activity or reclaim the site, or a court authorizes continued operation during an appeal.

12-50-040 Criteria for Revocation. The Planning Commission may revoke or modify a permit if it finds that one or more of the following criteria are met:

A. The permit approval was obtained by fraud.

B. The permit is being exercised contrary to the terms or conditions of approval or in violation of law.

C. The use or activity for which approval was granted is being exercised so as to be detrimental to the public health, safety, or welfare.

12-60 NON-CONFORMING DEVELOPMENT

12-60-010 Non-conforming development is a shoreline use or structure which was lawfully constructed or established prior to the effective date of the Shoreline Management Act or the applicable local Master Program, or amendments thereto, but which does not conform to present regulations or standards of the Master Program or policies of the Shoreline Management Act. In such cases, the standards of this section shall apply.

12-60-020 Non-conforming uses. Non-conforming uses include shoreline uses which were lawfully established prior to the effective date of the Shoreline Management Act or the Master Program, or amendments thereto, but which would not be approved based on present regulations of the Master Program or policies of the Act. An example is a commercial use within an area designated for residential uses. The continuation of a non-conforming use is subject to the following standards:

A. Non-conforming development may be continued provided that it is not enlarged, intensified, or altered in any way which increases its nonconformity.

B. Change of ownership, tenancy, or management of a non-conforming use shall not affect its non-conforming status under this Master Program, provided that the use does not change or intensify.

C. Additional development of any property on which a non-conforming use exists shall conform to this Master Program.

D. A non-conforming use shall not be changed to another non-conforming use, regardless of the conforming or non-conforming status of the building or structure in which it is housed; unless the new use would be housed in the existing building, the building footprint would not increase, and the new use and any related site changes would not negatively impact shoreline ecological functions.

E. If a non-conforming use is converted to a conforming use, no non-conforming use may be resumed.

E. A non-conforming use or development which is moved any distance must be brought into conformance with this Master Program and the Shoreline Management Act.

F. If a non-conforming use is discontinued for twelve consecutive months or for twelve months during any two-year period, any subsequent use shall be conforming; it shall not be necessary to show that the owner of the property intends to abandon such non-conforming use in order for the non-conforming rights to expire.

G. Non-conforming uses that are destroyed by fire, explosion, flood, or other casualty may be restored or replaced, provided that the following are met:

1. The reconstruction process is commenced within 18 months of the date of the damage and is completed within three years of the issuance of permits.

2. The reconstruction does not expand, enlarge, or otherwise increase the non-conformity

.

3. The development shall conform to this Master Program.

4. This provision does not apply to bulkheads.

H. Non-conforming uses may be maintained, repaired, renovated, or remodeled so long as non-conformance with the standards and regulations of this Master Program is not increased, except that any change, enlargement, repair, or replacement of bulkheads must conform to the Shoreline Stabilization section of Chapter 8, and the use regulations in Table 9.2.

I. Uses that are non-conforming with respect to zoning provisions shall also comply with the non-conforming use provisions of Moses Lake Municipal Code Title 18.

12-60-030 Non-Conforming Structures. Non-conforming structures are those which were lawfully constructed or placed prior to the effective date of the Shoreline Management Act or Master Program, or amendments thereto, and are conforming in regard to use but which do not conform to present bulk, height, dimensional, setback, or density requirements. Non-conforming structures may continue, and may be maintained as follows:

A. A non-conforming structure that is damaged may be restored to those configurations existing immediately prior to the time it was damaged, provided that the following are met:

1. The reconstruction process is commenced within 18 months of the date of the damage.

2. Reconstruction is completed within two years of permit issuance.

3. The reconstruction does not expand, enlarge, or otherwise increase the non-conformity, except as provided in subsection B below.

B. A building or structure, non-conforming as to the bulk, dimensional, or density requirements of this Master Program, may be added to or enlarged if such addition or enlargement conforms to the regulations of the shoreline environment in which it is located. In such cases, such addition or enlargement shall be treated as a separate building or structure in determining conformity to all of the requirements of this Master Program.

C. Non-conforming structures may be maintained, repaired, renovated, or remodeled so long as non-conformance with the standards and regulations of this Master Program is not increased, except that any change, enlargement, repair, or replacement of bulkheads must conform to the Shoreline Stabilization section of Chapter 8, and the use regulations in Table 9.2.

12-60-040 Non-Conforming Lots. An undeveloped single family residential lot, tract, parcel, or site which was legally established prior to the effective date of the Master Program but which cannot be developed with the present buffer standards may be developed so long as such development conforms to all other requirements of the Master Program and Shoreline Management Act. See Section 7-100-030 of this Master Program for regulations regarding buffers for existing lots.

12-60-050 Duration of Permits. The duration of permits shall be consistent with WAC 173-27-090.

12-60-060 Initiation of Development

A. Each permit for a Substantial Development, Shoreline Conditional Use or Shoreline Variance, issued by local government shall contain a provision that construction pursuant to the permit shall not begin and is not authorized until twenty-one (21) days from the date of receipt with Ecology as defined in RCW 90.58.140(6) and WAC 173-27-130, or until all review proceedings initiated within twenty-one (21) from the date of receipt of the decision, except as provided in RCW 90.58.140(5)(a) and (b). The date of receipt for a Substantial Development Permit means that date the applicant receives written notice from Ecology that it has received the decision. With regard to a permit for a Shoreline Variance or a Shoreline Conditional Use, date of receipt means the date a responsible local government or applicant receives the written decision of Ecology.

B. Permits for Substantial Development, Shoreline Conditional use, or Shoreline Variance may be in any form prescribed and used by the City including a combined permit application form. Such forms will be supplied by the City.

C. A permit data sheet shall be submitted to Ecology with each shoreline permit. The permit data sheet form shall be consistent with WAC 173-27-990.

12-60-070 Review Process

A. After the City's approval of a Shoreline Conditional Use or Variance Permit, the City shall submit the permit to the Department of Ecology for approval, approval with conditions, or denial. Ecology shall render and transmit to the City and the applicant its final decision approving, approving with conditions, or disapproving the permit within thirty days of the date of submittal by the City pursuant to WAC 173-27-110.

B. The Department of Ecology shall review the complete file submitted by the City on Shoreline Conditional Use or Variance Permits and any other information submitted or available that is relevant to the application. Ecology shall base its determination to approve, approve with conditions or deny a conditional use permit or variance on consistency with the policy and provisions of the SMA and, except as provided in WAC 173-27-210, the criteria in WAC 173-27-160 and 173-27-170.

C. The City shall provide timely notification of the Department of Ecology's final decision to those interested persons having requested notification from local government pursuant to WAC 173-27-130.

Chapter 13
Definitions

Acronyms

OHWM	Ordinary High Water Mark
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act, RCW 43.21C
SMA	Shoreline Management Act, RCW 90.58
SMP	Shoreline Master Program, the local regulations implementing the SMA
WAC	Washington Administrative Code

Definitions

A

Accessory use–A use that is demonstrably subordinate and incidental to the principal use, and which functionally supports its activity.

Administrator–See Shoreline Administrator, below

Adverse impact–An impact that can be measured or is tangible and has a reasonable likelihood of causing moderate or greater harm to ecological functions or processes or other elements of the shoreline environment.

Agricultural activities–Agricultural uses and practices including, but not limited to: Producing, breeding, or increasing agricultural products; rotating and changing agricultural crops; allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded; allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions; allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement; conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment; maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is no closer to the shoreline than the original facility; and maintaining agricultural lands under production or cultivation. (WAC 173-26-020(3)(a)).

Agriculture–The cultivation of soil, production of crops, or raising of livestock.

Alteration–Any human-induced change in the existing condition of the shoreline, a critical area, or a buffer. Alterations include but are not limited to grading, filling, channelizing, dredging, removing vegetation, construction, compaction, excavation, paving, or any other activity that changes the character of the shoreline, critical area, or buffer.

Archaeological resources–Any material remains of human life or activities which are of archaeological interest. See WAC 25-48-020(10).

Areas with a critical recharging effect on aquifers used for potable water–Areas where an aquifer that is a source of drinking water is vulnerable to contamination that would affect the potability of the water. See WAC 365-190-030(2).

Associated Wetlands–Wetlands in proximity to and that either influence or are influenced by waters of a lake or stream subject to the Shoreline Management Act.

B

Best Available Science–Current scientific information used in the process to designate, protect, or restore critical areas, that is derived from a valid scientific process as defined by WAC 365-195-900 through 925.

Best Management Practices (BMPs) (for wetlands)–Conservation practices of systems of practices and management that:

1. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal wastes, toxics, or sediment;

2. Minimize adverse impacts to surface water and ground water flow and circulation patterns and to the chemical, physical, and biological characteristics of the site;

3. Protect trees, vegetation, and soils designated to be retained during and following site construction, and use native plant species appropriate to the site for revegetation of disturbed areas; and

4. Provide standards for proper use of chemical herbicides within critical areas.

Bioengineering–The practice of using natural vegetative materials to stabilize shorelines and prevent erosion. It is a technology that uses live plant materials as a main structural component. As the plants grow, these systems work with the natural environment to create permanent protection and preservation of land. Both biological and structural elements of the system must function together in an integrated and complementary manner, whether the structural elements are natural or man-made. Vegetation also mitigates the seasonal temperature extremes of water, provides habitat for wildlife, and contributes to the aesthetic quality of the area.

Boat house–A structure over or immediately adjacent to water, used to store watercraft. A boat house is different from a storage building further inland.

Boat lift–An over-water structure designed to lift a boat, personal watercraft, or similar device, so that the boat is stored above but generally not in contact with the water.

Buffer–An area of intact vegetation maintained between human activities and a particular natural feature, such as a wetland or shoreline. The buffer reduces potential negative impacts by providing an area around the feature that is unaffected by the activity.

Bulkhead–A vertical wall in contact with the water. A bulkhead is different from a retaining wall which does not touch the water.

C

Compensatory Mitigation–A project for the purpose of mitigating, at an equivalent or greater level, unavoidable impacts that remain after all appropriate and practical avoidance and minimization measures have been implemented. Compensatory mitigation includes, but is not limited to, wetland creation, restoration, enhancement, and preservation; stream restoration, relocation, and rehabilitation; and buffer enhancement.

Cover–Any feature that provides protective concealment for fish and wildlife. Cover may consist of live or dead vegetation or geomorphic features such as boulders and undercut banks. Cover may be used to escape from predators or weather, or for feeding or resting.

Critical areas–The Growth Management Act (RCW 36.70A) defines critical areas as the following areas and ecosystems:
1. Wetlands
2. Areas with a critical recharging effect on aquifers used for potable water
3. Fish and wildlife habitat conservation areas
4. Frequently flooded areas
5. Geologically hazardous areas.

Cumulative effects–The combined, incremental effects of human activity on ecological functions and values. Cumulative impacts result when the effects of an action are added to or interact with the effects of other actions in a particular place and within a particular time. It is the combination of these effects, and any resulting environmental degradation, that should be the focus of cumulative impact analysis and changes to policies and permitting decisions.

Cumulative impacts–The impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

D

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

Diversity–The variety, distribution, and abundance of different plan and animal communities and species within an area.

E

Ecological functions or **shoreline functions**–the work performed, role played, or services provided by the physical, chemical, and biological processes that contribute to the maintenance of the aquatic and terrestrial environments that constitute the shoreline's natural ecosystem. Ecological functions include ecosystem-wide processes such as those associated with the movement of water, sediment, and organic materials; the presence and movement of fish and wildlife, and the maintenance of water quality. Ecological functions also include individual components and localized processes such as those associated with shoreline vegetation, soils, water movement through the soil and across the land surface, and the composition and configuration of the bed and banks of water bodies.

Shoreline ecological functions of lakes and wetlands include:

1. Hydrologic: Storing water and sediment, attenuating wave energy, removing excess nutrients and toxic compounds, recruitment of large woody debris and other organic matter.

2. Shoreline Vegetation: maintaining temperature, removing excessive nutrients and toxic compounds, attenuating wave energy, sediment removal and stabilization; and providing woody debris and other organic matter.

3. Hyporheic functions: removing excessive nutrients and toxic compounds, water storage, support of vegetation, and sediment storage and maintenance of base flows.

4. Habitat for aquatic and shoreline-dependent birds, invertebrates, mammals, amphibians, and fish: space or conditions for reproduction, resting, hiding and migration; and food production and delivery.

Ecologically intact shorelines–Those which retain the majority of their natural shoreline functions and values, as evidenced by vegetation and shoreline configuration. Generally, but not necessarily, ecologically intact shorelines are free of structural shoreline modifications, structures, and intensive human activities.

Ecological restoration–See Restore, below.

Ecosystem-wide processes–The suite of naturally-occurring physical and geologic processes of erosion, transport, and deposition; and specific chemical processes that shape landforms within a specific shoreline ecosystem and determine both types of habitat and the associated ecological functions. (WAC 173-26-020)

Emergency–An unanticipated and imminent threat to public health, safety, or the environment which requires immediate action within a time too short to allow full compliance with the Master Program. Emergency construction is construed narrowly as to that which is necessary to protect property from the elements (RCW 90.58.030(3eiii) and WAC 173-27-040(2d)).

Enhancement–Alteration of an existing resource to improve or increase its characteristics and processes without degrading other existing functions. Enhancements are to be distinguished from resource creation or restoration projects.

Environmental impacts–The effects or consequences of actions on the natural and built environments. Environmental impacts include effects upon elements of the environment listed in the State Environmental Policy Act (SEPA) (WAC 197-11-600 and 197-11-444).

Environment(s) or **Shoreline environment(s)**–Designations given specific shoreline areas based on the existing development pattern, the biophysical capabilities and limitations, and the goals and aspirations of the local citizenry, as part of a Master Program

F

Feasible–That an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions:

1. The action can be accomplished with technologies and methods that have been used in the past in similar circumstances, or studies or tests have demonstrated in similar circumstances that such approaches are currently available and likely to achieve the intended results;

2. The action provides a reasonable likelihood of achieving its intended purpose; and

3. The action does not physically preclude achieving the project's primary intended legal use.

Flood protection facilities–Any constructed facilities for the purpose of flood protection, such as dikes, levees, and overflow channels.

Floodway– The area, as identified in a master program, that either:

1. Has been established in federal emergency management agency flood insurance rate maps or floodway maps; or

2. Consists of those portions of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition, topography, or other indicators of flooding that occurs with reasonable regularity, although not necessarily annually. Regardless of the method used to identify the floodway, the floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

Frequently flooded areas–Lands in the floodplain subject to a one percent or greater chance of flooding in any given year. These areas include, but are not limited to, streams, rivers, lakes, coastal areas, wetlands, and the like. WAC 365-190-030(7)

Functions and values–The services provided by shorelines and critical areas to society, including but not limited to: improving and maintaining water quality, providing fish and wildlife habitat, supporting terrestrial and aquatic food chains, reducing flooding and erosive flows, wave attenuation, historical or archaeological importance, educational opportunities, and recreation.

G

Geologically hazardous areas–Areas that because of their susceptibility to erosion, sliding, earthquake, or other geological events, are not suited to the siting of commercial, residential, or industrial development consistent with public health or safety concerns. See RCW 36.70A.030(9).

Geotechnical report or **geotechnical analysis**–A scientific study or evaluation conducted by a qualified expert that includes a description of the ground and surface hydrology and geology, the affected land form and its susceptibility to mass wasting, erosion, and other geologic hazards or processes, conclusions and recommendations regarding the effect of the proposed development on geologic conditions, the adequacy of the site to be developed, the impacts of the proposed development, alternative approaches to the proposed development, and measures to mitigate potential site-specific and cumulative geological and hydrological impacts

of the proposed development, including the potential adverse impacts to adjacent and down-current properties. Geotechnical reports shall conform to accepted technical standards and must be prepared by qualified professional engineers or geologists who have professional expertise about the regional and local shoreline geology and processes.

H

Hard engineering–The use of permanent, unnatural structures such as dams, levees, and riprap, and activities such as periodic dredging to fight problems such as flooding and erosion. Often these techniques completely change the natural structure of an area, and require periodic maintenance.

I

Impervious surface–Any alteration to the surface of a soil that prevents or retards the entry of water into it compared to its undisturbed condition, or any reductions in infiltration that cause water to run off the surface in greater quantities or at an increased rate of flow compared to that present prior to development. Common impervious surfaces include, but are not limited to: rooftops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, packed earthen materials, and oiled macadam or other surfaces which similarly impede the natural infiltration of stormwater.

M

Marina–Commercial moorage, which may include a facility that provides launching, storage, supplies, moorage, and other accessory services for 6 or more pleasure and/or commercial water craft.

Mass failure–Movement of aggregates of soil, rock, and vegetation down slope in response to gravity.

Mitigation or **mitigation sequence**–The following sequence of steps listed in order of priority, with 1 being the highest priority:

1. Avoiding the impact altogether by not taking a certain action or parts of an action;

2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation, by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

4. Reducing or eliminating the impact over time by preservation and maintenance operations;

5. Compensating for the impact by replacing, enhancing, or providing substitute resources or environment; and

6. Monitoring the impact and the compensation projects and taking appropriate corrective measures.

Mitigation plan–A detailed plan indicating actions necessary to mitigate adverse impacts to critical areas.

Monitoring–Evaluating the impacts of development proposals over time on the biological, hydrological, and geological elements of ecosystem functions and processes and/or assessing the performance of required mitigation measures through the collection and analysis of data by various methods for the purpose of understanding and documenting changes in natural ecosystems and features compared to baseline or pre-project conditions and/or reference sites.

N

Native Vegetation–Plant species that occur naturally in a particular region or environment and were not introduced by human activities and that reasonably could be expected to occur naturally on the site.

Natural character of the shoreline–The structural components of a given shoreline area that together comprise the societal and ecological functions of the shoreline. Natural character includes, but is not limited to: vegetative

structure, soil composition, underlying geology, presence of wildlife, aesthetics, and utility for human use.

Natural resources–Including but are not limited to scenic vistas and other natural aesthetic resources, fish and wildlife habitat, including shoreline vegetation and wetlands associated with shorelines, and soils.

No net loss–As a public policy goal means the maintenance of the aggregate total of the City's shoreline ecological functions at its current level of environmental resource productivity. As a development and/or mitigation standard, no net loss requires that the impacts of a particular shoreline development and/or use, whether permitted or exempt, be identified and prevented or mitigated, such that it has no resulting adverse impacts on shoreline ecological functions or processes.

Non-conforming use–A shoreline use or structure or portion thereof which was lawfully constructed or established prior to the effective date of the Shoreline Management Act or local shoreline master program provision, or amendments, but no longer conforms to the policies and regulations of this Master Program.

Non-water-oriented–Uses which have little or no relationship to the shoreline and are not considered priority uses under the Shoreline Management Act. Any use which does not meet the definition of water-dependent, water-related, or water-enjoyment is classified as non-water-oriented. Examples of non-water-oriented uses include professional offices, general retail or commercial uses, residential development, and mini-storage facilities.

O

Ordinary High Water Mark (OHWM)–That mark on all lakes and streams that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland. Where the OHWM cannot be found on a lake, it shall be the line of mean high water. Where the OHWM cannot be found on a stream, it shall be the line of mean high water. For braided streams, the OHWM is found on the banks forming the outer limit of the depression within which the braiding occurs. See WAC 173-22-030(11).

P

Person–Any individual, firm, partnership, association, organization, agency, or any non-federal entity however designated.

Planned Unit Development (PUD)–One or a group of specified uses, such as residential, resort, commercial, or industrial, to be planned and constructed as a unit. Zoning and subdivision regulations with respect to lot size, building bulk, etc. may be varied to allow design innovations and special features in exchange for additional and/or superior site amenities or community benefits.

Practical alternative–An alternative that is available and capable of being carried out after taking into consideration short-term and long-term cost, existing technology, options of project scale and phasing, and logistics in light of overall project purposes, and having less impacts to environmentally sensitive areas. It may include using an area not owned by the applicant that can reasonably be obtained, utilized, expanded or managed in order to fulfill the basic purpose of the proposed development.

Priority Habitat–A habitat type with unique or significant value to a diverse assemblage of species. State-recognized priority habitats in Grant County are as follows:

1. Aspen stands
2. Biodiversity areas and corridors
3. Inland dunes
4. Shrub-steppe
5. Riparian
6. Freshwater wetlands and freshwater deepwater
7. Instream
8. Caves
9. Cliffs
10. Snags and logs
11. Talus

A priority habitat may be described by a unique vegetation type (e.g. shrub-steppe) or by a dominant plant species that is of primary importance to fish and wildlife (such as areas dominated by greasewood, which general grows in alkaline/saline soils and stabilizes the soil where other vegetation cannot grow, providing food, shade and cover for various species). A priority habitat may also be described by a successional stage (such as freshwater wetlands where the land is transitional between terrestrial and aquatic systems because the water table is at or near the surface or the land is covered in shallow water). Alternatively, a priority habitat may consist of a specific habitat element (such as caves or snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

Priority species–Species requiring protective measures and/or management guidelines to ensure their persistence at genetically viable population levels. Priority species are those that meet any of the criteria listed below:

1. State-listed or state proposed species. State-listed species are those native fish and wildlife species legally designated as endangered (WAC 232-12-014), threatened (WAC 232-12-011), or sensitive (WAC 232-12-011). State proposed species are those fish and wildlife species that will be reviewed by the Department of Fish and Wildlife for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

2. Vulnerable aggregations. Vulnerable aggregations include those species or groups of animals susceptible to significant population declines, within a specific area or statewide, by virtue of their inclination to congregate. One example is heron colonies.

3. Species of recreational, commercial, and/or tribal importance. Native and nonnative fish, shellfish, and wildlife species of recreational or commercial importance and recognized species used for tribal ceremonial and subsistence purposes that are vulnerable to habitat loss or degradation.

4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

Public Trust Doctrine–Common law principle which says that the waters of the state belong to the people of the state, no matter who owns the underlying land. See Chapter 1, Introduction, for more discussion of the Public Trust Doctrine.

Q

Qualified Professional–A person with experience and training in the pertinent scientific discipline, and who is a qualified scientific expert with expertise appropriate for the relevant area subject in accordance with WAC 365-195-905. A qualified professional must have obtained a B.S. or B.A. or equivalent degree in biology, engineering, environmental studies, fisheries, geomorphology, or related field, and have at least five years of related work experience.

1. A qualified professional for wetlands must be a professional wetland scientist with at least 2 years of full-time work experience as a wetlands professional, including delineating wetlands using the state or federal manuals, preparing wetland reports, conducting function assessments, and developing and implementing mitigation plans.

2. A qualified professional for habitat must have a degree in biology or a related degree and professional experience related to the subject species.

3. A qualified professional for a geologic hazard must be a professional engineer or geologist, licensed in the State of Washington.

4. A qualified professional for critical aquifer recharge areas means a hydrologist, geologist, engineer, or other scientist with experience in preparing hydrogeological assessments.

R

Repair or **Maintenance**–An activity that restores the character, scope, size, and design of a serviceable area, structure, or land use to its previously authorized and undamaged condition. Activities that change the character,

size, or scope of a project beyond the original design and drain, dredge, fill, flood, or otherwise alter critical areas are not included in this definition.

Restore, **restoration**, or **ecological restoration**–The reestablishment or upgrading of impaired ecological shoreline functions or processes. This may be accomplished through measures including but not limited to re-vegetation, removal of intrusive shoreline structures and removal or treatment of toxic materials. Restoration does not imply a requirement for returning the shoreline area to aboriginal or pre-European settlement conditions.

Retaining wall–A vertical wall that is upland of the ordinary high water mark so is not in contact with the water. A retaining wall is not the same as a bulkhead.

Revetment–A sloped shoreline structure built to protect an existing eroding shoreline or newly-placed fill against currents and wave action. Revetments are most commonly built of randomly placed boulders (riprap), but may also be built of sand cement bags, paving, or building blocks, gabions (rock-filled wire baskets), or other systems and materials. The principal features of a revetment, regardless of type, are a heavy armor layer, a filter layer, and toe protection.

Riparian–Pertaining to the area directly adjacent to water that is characterized by moist soils and plants that require moist conditions.

Riparian vegetation–Vegetation that requires the continuous presence of water, or conditions that are more moist than normally found in the area, thus creating a transition zone between aquatic and terrestrial habitats which provides cover, shade, and food sources for aquatic and terrestrial insects for fish species. Riparian vegetation stabilizes shorelines, attenuates high water flows, provides wildlife habitat and travel corridors, and provides a source of limbs and other woody debris to terrestrial and aquatic ecosystems, which, in turn, stabilizes shorelines.

Riparian zone–The area adjacent to a water body (stream, lake, or marine water) that contains vegetation that influences the aquatic ecosystem, nearshore area, and/or fish and wildlife habitat by providing shade, fine or large woody material, nutrients, organic debris, sediment filtration, and terrestrial insects (prey production). Riparian areas include those portions of terrestrial ecosystems that significantly influence exchanges of energy and matter with aquatic ecosystems (i.e., zones of influence). Riparian zones provide important wildlife habitat. They provide sites for foraging, breeding and nesting; cover to escape predators or weather; and corridors that connect different parts of a watershed for dispersal and migration.

Riprap–A layer, facing, or armoring mound of stone placed on shoulders, slopes, or other such places that is intended to protect them from erosion, scour, or sloughing of a structure or embankment; also, the stone that is so used.

S

Sensitive area–Any area that is naturally unsuitable or undesirable for intensive human use or development due to its higher development costs or its value to the region or community in its natural or present condition.

Shall–A mandate; the action must be done.

Shoreline Administrator–The Director of the Community Development Department or the staff member designated by the Director to perform the review functions required in this Master Program.

Shoreline functions–See Ecological functions, above.

Shoreline jurisdiction–The water, along with those lands extending landward for 200' in all directions measured on a horizontal plane from the ordinary high water mark; floodways and contiguous floodplain areas landward 200' from such floodways, and all wetlands associated the streams and lake. See WAC 173-22-030(14).

Shoreline modifications–Those actions that modify the physical configuration or qualities of the shoreline area, usually through the construction of a physical element such as a dike, breakwater, pier, weir, dredged basin, fill, bulkhead, or other shoreline structure. Shoreline modifications can include other actions, such as clearing, grading, or application of chemicals.

Should–A particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and WAC 173-26, against taking the action.

Significant–A reasonable likelihood of more than a moderate adverse impact on environmental quality.

Significant vegetation removal–The removal or alteration of trees, shrubs, and/or ground cover by clearing, grading, cutting, burning, chemical means, or other activity that causes significant impacts to ecological functions provided by such vegetation. The removal of invasive or noxious weeds does not constitute significant vegetation removal. Tree pruning, not including tree topping, where it does not affect ecological functions, does not constitute significant vegetation removal.

Soft engineering–Engineering techniques that use natural processes and materials to alter or restore an area. Soft engineering alters the environment as little as possible, and avoids the long-term need for human intervention.

Substantially degrade–To cause significant ecological impact.

Surface water facilities–Any water management facilities related to the lake, streams, or wetlands. Irrigation pumps would be an example.

U

Unavoidable impacts–Adverse impacts that remain after all appropriate and practical avoidance and minimization measures have been implemented.

V

Vegetation–Plant life of all kinds, including trees, shrubs, grasses, and groundcover plants.

Vegetative stabilization–Planting of vegetation to retain soil and retard erosion, reduce wave action, and retain bottom materials. It also means utilization of temporary structures or netting to enable plants to establish themselves in an unstable area.

W

Water-dependent–A use or portion of a use which cannot exist in a location that is not adjacent to the water and which is dependent on the water by reason of the intrinsic nature of its operations. See WAC 173-26-020(36). Examples include docks, fishing, marinas, aquaculture, float plane facilities, irrigation facilities, and sewer outfalls.

Water-enjoyment–A recreational use, or other use facilitating public access to the shoreline as a primary characteristic of the use; or a use that provides for recreational use or aesthetic enjoyment of the shoreline for a substantial number of people as a general characteristic of the use and which through the location, design, and operation assures the public's ability to enjoy the physical and aesthetic qualities of the shoreline. In order to qualify as a water-enjoyment use, the use must be open to the general public and the shoreline-oriented space within the project must be devoted to the specific aspects of the use that foster shoreline enjoyment. See WAC 173-26-020(37). Water-enjoyment uses may include parks with activities enhanced by proximity to the water, piers and other improvement that facilitate public access to the shoreline, restaurants with water views and public access improvements, museums with an orientation to shoreline topics, aquariums, scientific/ecological reserves, resorts with uses open to the public and public access to the shoreline.

Water-oriented–Any water-dependent, water-related, or water-enjoyment use, or a combination of such uses.

Water-related–A use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent on a waterfront location for one of the following reasons:

1. Because of a functional requirement for a waterfront location such as the arrival or shipment of materials by water or the need for large quantities of water; or

2. Because the use provides a necessary service supportive of the water-dependent uses and the proximity of

the use to its customers makes its services less expensive and/or more convenient.

Examples include professional services primarily serving water-dependent activities, utility lines serving water-dependent activities, and storage of water-transported goods. Uses which obtain an economic advantage from the shoreline due simply to its amenity factor (such as restaurants and hotels) are considered water-enjoyment rather than water-related.

Wetland or wetlands–Areas that are inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from nonwetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands may include those artificial wetlands intentionally created from nonwetland areas created to mitigate conversion of wetlands. See RCW 36.70A.030(21).

Chapter 14
Recommended Plant List

This chapter is not an official part of the Shoreline Master Program.

See the City's website for the most current version
http://cityofml.com

Appendix A
Mitigation

A-1 Introduction

Where this Master Program refers to "mitigation" or "compensatory mitigation", this appendix applies, in addition to any specific requirements from sections of the SMP applicable to the project.

A-10 General Provisions

A-10-010 Compensatory mitigation shall only be allowed when the proposed mitigation replaces the impacted functions identified in the critical area or shoreline report and shall be identified in the mitigation management report in compliance with Section A-10-050, below.

A-10-020 The order of preference for proposed mitigation shall be first, on-site and like-in-kind, second, the mitigation shall be proposed within the shoreline jurisdiction of the City of Moses Lake as found in this SMP's Restoration Plan; and least preferable, the compensatory mitigation may be proposed within the watershed as identified on any finalized watershed plan.

A-10-030 Compensatory mitigation shall be allowed only after mitigation sequencing is applied and higher priority means of mitigation are determined to be infeasible. The requirements for compensatory mitigation must include provisions for:

1. Mitigation replacement ratios or a similar method of addressing the following:

    a. The risk of failure of the compensatory mitigation action;

    b. The length of time it will take the compensatory mitigation action to adequately replace the impacted critical area's functions and values;

    c. The gain or loss of the type, quality, and quantity of the ecological functions of the proposed restoration or enhancement area as compared with the impacted critical area.

2. Establishment of performance standards for evaluating the success of compensatory mitigation actions;

3. Establishment of long-term monitoring and reporting procedures to determine if performance standards are met; and

4. Establishment of long-term protection and management of compensatory mitigation sites.

A-10-040 Performance Standards. The following performance standards shall apply to compensatory mitigation projects:

1. Mitigation planting survival will be 80% for the first year, and 70% for each of the 4 years following.

2. Mitigation must be installed no later than the next growing season after completion of site improvements, unless otherwise approved by the Administrator.

3. Where necessary, a permanent means of irrigation shall be installed for the mitigation plantings that are designed by a person experienced in designing and installing irrigation systems, as approved by the Administrator. The design shall meet the specific needs of riparian and shrub steppe vegetation.

4. Monitoring reports must include verification that the planting areas have less than 20% total non-native/invasive plant cover. Invasive plant species include those on the state noxious weed list, or considered a noxious or problem weed by the Natural Resources Conservation Services or the Grant County Weed Board.

5. Monitoring reports shall be submitted to the Community Development Department one year after mitigation installation; three years after mitigation installation; and five years after mitigation installation. The length of time required for monitoring reports may be increased by the Administrator on a case-by-case basis when longer monitoring time is necessary to establish or re-establish functions and values of the mitigation site. Monitoring reports shall be submitted by a qualified person knowledgeable about plants. The report must verify that the conditions of approval and provisions in the management and mitigation plan have been satisfied.

6. Mitigation sites shall be maintained to ensure that the mitigation and management plan objectives are successful. Maintenance shall include corrective actions to rectify problems, include rigorous, as-needed elimination of undesirable plants; protection of shrubs and small trees from competition from grasses and herbaceous plants; protection of plants from damage by animals such as beavers; and replacement of dead plants.

7. Sequential release of funds associated with the surety agreement shall be reviewed for conformance with the conditions of approval and the mitigation and management plan. Release of funds may occur in increments of 1/3 for substantial conformance with the plan and conditions of approval. Verification of conformance with the provisions of the mitigation and management plan and conditions of approval after one year of mitigation installation shall also allow for the full release of funds associated with irrigation systems, clearing and grubbing, and any soil amendments. If the standards that are not met are only minimally out of compliance and contingency actions are actively being pursued by the property owner to bring the project into compliance, the City may choose to consider a partial release of the scheduled increment. Non-compliance can result in one or more of the following actions: carry over of the surety amount to the next review period, use of funds to remedy the nonconformance, scheduling a hearing with the Planning Commission to review conformance with the conditions of approval and to determine what actions may be appropriate.

8. Prior to site development and/or building permit issuance, a performance surety agreement acceptable to the City Attorney must be entered into by the property owner and the City. The surety agreement must include the complete costs for the mitigation and monitoring, which may include but is not limited to: the cost of installation, delivery, plant material, soil amendments, permanent irrigation, seed mix, and three monitoring visits and reports by a qualified professional. The Community Development Department must approve the estimate for said improvements. The surety shall be for 150% of the estimated cost.

A-10-040 Credits from a certified mitigation bank may be used to compensate for unavoidable impacts.

A-10-050 Mitigation Monitoring Report

1. For projects regulated by the Department of Ecology and/or the U.S. Army Corps of Engineers, monitoring reports must meet the requirements of the regulating agency.

2. For projects not regulated by the Department of Ecology or the U.S. Army Corps of Engineers, monitoring reports shall include the following:

    a. Monitoring Report Details

        i. Project name

        ii. Who prepared the monitoring report (name, address, phone number) and their qualifications

        iii. Who the report was prepared for (name, address, phone number)

        iv. Date of the monitoring report, including the time period for which the monitoring activities occurred

b. Brief Description of the Mitigation Project

   i. Location (address)

   ii. Goals and objectives of the mitigation project

   iii. Dates when phases construction of the mitigation project was completed (excavation, planting, installation of irrigation, etc)

   iv. Area (acres or square feet) and type(s) of wetland or aquatic resources being monitored

   v. Who completed the mitigation activities (name, address, phone number)

c. 8 ½" by 11" Map of the Mitigation Site

d. Summary of Management Actions (Maintenance and Contingency) Taken at the Site

e. Summary of Monitoring Results

   i. List of performance standards for the mitigation project

   ii. Table of monitoring results compared to performance standards for the specified target dates

   iii. Summary of field data taken to determine compliance with performance standards

   iv. Photos from the most recent monitoring visit

   v. Summary of any problems or significant events that occurred that may affect the ultimate success of the mitigation