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NORTH BEND SHORELINE MASTER PROGRAM

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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
BFE	base flood elevation
BMPs	best management practices
BSBL	building setback line
CAFO	concentrated animal feeding operation
CARA	Critical aquifer recharge area
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
cfs	cubic feet per second
CMZ	channel migration zone
COD	chemical oxygen demand
CWA	Clean Water Act
DSH	diameter at standard height
Ecology	Washington State Department of Ecology
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
HPA	Hydraulic Project Approval
LWD	large woody debris
MTCA	Model Toxics Control Act
NBMC	North Bend Municipal Code
NFIP	National Flood Insurance Program
NGPE	Native growth protection easement
NRCS	Natural Resources Conservation Service
OHWM	ordinary high water mark
PRD	Planned Residential Development
RCW	Revised Code of Washington
SFHA	Special Flood Hazard Area
SMA	Shoreline Management Act
SMP	Shoreline Master Program
TESC	temporary erosion and sediment control
TMDL	Total Maximum Daily Load
UGA	Urban Growth Area
WAC	Washington Administrative Code
WDFW	Washington Department of Fish and Wildlife
WRIA	Water Resource Inventory Area

Shoreline Element

Introduction

Purpose and Relationship to GMA

Washington State's citizens voted to approve the Shoreline Management Act (SMA) of 1971 in November 1972. The SMA seeks to provide environmental protection for shorelines, preserve and enhance shoreline public access, and encourage appropriate development that supports water-oriented uses, particularly on shorelines of statewide significance, such as the Middle Fork Snoqualmie River, with a flow greater than 1,000 cubic feet per second (cfs).

A Shoreline Master Program (SMP) contains goals, policies, regulations, and a use map that guide the development of shorelines in accordance with the SMA (RCW 90.58), Washington State Department of Ecology (Ecology) SMP Guidelines (WAC 173-26), and Shoreline Management Permit and Enforcement Procedures (WAC 173-27).

The provisions of this element implement the requirements of the SMA. The City's SMP is integrated with the City's land use regulation system. Consistent with RCW 36.70A.480, the goals and policies contained in this SMP shall be considered an element of the City's comprehensive plan required by the Growth Management Act. All other portions of this SMP, including the use regulations, are considered a part of the City's development regulations required by the Growth Management Act.

Profile of the Shoreline Jurisdiction in North Bend

In accordance with state law, the jurisdiction of North Bend's SMP encompasses the South Fork Snoqualmie River and the Middle Fork Snoqualmie River; their floodways; land within 200 feet of the ordinary high water mark (OHWM) of these waterways and associated wetlands within the 100-year floodplain. In addition North Bend has adopted the floodway for plus 200 feet of the floodplain, as mapped by the Federal Emergency Management Agency (FEMA) and shown on the Preliminary FIRM dated November 6, 2010. The North Bend shoreline jurisdiction including the City and its Urban Growth Area (UGA), not including aquatic area, is approximately 647 acres (1.01 square miles) and encompasses approximately 7.96 miles of shoreline. The City is pre-designating shorelines in its unincorporated UGA such that if and when the areas are annexed they would be subject to the City of North Bend's SMP. The Silver Creek area is not considered floodway for shoreline jurisdiction purposes since it was determined to be outside the range of "reasonable regularity" per RCW 90.58.030 (2) (b) floodway definition. A thorough analysis was provided to Ecology and is documented in Appendix A (Assessment of Shoreline Jurisdiction) within the final *Shoreline Analysis Report for the City of North Bend's Shorelines: South Fork and Middle Fork Snoqualmie River.*

Current land uses in the shoreline jurisdiction tend to be public parks/open space, low-density residential, and vacant land. Based upon a review of the North Bend Comprehensive Plan land use designations, most shoreline acres are planned for residential, public, or employment purposes.

Development of Goals and Policies

Goals express broad value statements that reflect the City's vision of its shorelines. Goals also provide a framework upon which the more detailed SMP shoreline use environments, policies, regulations, and administrative procedures are based in subsequent chapters. Policies are more detailed statements reflecting the City's vision for its shorelines. Policies provide detail to the broader goals with which they are associated and act as a bridge between the goals and implementing regulations.

The goals and policies of the SMP described in this element are categorized according the Master Program elements mandated in the SMA. The general goal and policy statements found within each element of the Master Program are intended to provide the policy basis for administration of the City's SMP.

Preserving and maintaining Snoqualmie Valley's aquatic and riparian ecosystem is an important goal, and the spirit behind this Shoreline Master Program. We envision that our SMP will be used as a guide to bring forth this common initiative; and to be successful, both public and private interests must be represented and protected. Thus, when the need arises to adopt or interpret policy, procedure, or best practice models from this instrument, it is vital that a balance can be struck between public interest and the environment, and private property owners. The North Bend SMP provides the groundwork for a cooperative roadmap that leads us towards a collective good – preservation, protection, and a healthy utilization of our unique and treasured landscape- *North Bend Planning Commission 2011.*

Economic Development Element

Goal A. **Support the development of water-oriented commercial services and attractions that serve tourism and support the community's economy and river environment.**

Goal B. **Allow for commercial, industrial and manufacturing uses designed with sensitivity to the environment and aesthetic character that incorporate low impact technologies and provide opportunities for public enjoyment of the shoreline.**

General Economic Policies

Promote the South and Middle Forks of the Snoqualmie River as a community economic asset.

Develop a means of identifying the additional economic benefit gained by shoreline location such as recreational or tourism benefits.

Give preference to economic activities which either leave natural shoreline features such as trees, shrubs, grasses and wildlife habitat unmodified, or which modify them in a way which enhances human awareness and appreciation of the river's beauty and relation to other natural and non-natural surroundings.

Give first preference to water-dependent uses, second preference to water-related or water-enjoyment economic activities, and last preference to non-water-oriented uses in areas where limited commercial or industrial development space along shorelines is in demand for a number of competing uses.

Where possible, developments are encouraged to incorporate low impact development techniques into new and existing projects and integrate architectural and landscape elements that recognize the river environment.

Require non-water-oriented commercial or industrial development to provide for ecological restoration and public access as appropriate.

Assure that commercial and industrial development will not result in a net loss of shoreline ecological functions or have significant adverse impacts on navigation, recreation and public access.

Commercial Development

Promote water-oriented commercial uses in shoreline areas with current or planned commercial uses, such as Downtown North Bend.

Explore ways in which the downtown retail shopping area might be further enhanced and linked to the South Fork Snoqualmie River.

Encourage multi-use commercial projects that include some combination of ecological restoration, public access, open space, and recreation.

Industrial Development

Allow for infill or new industrial development when consistent with shoreline master program guidelines. As mitigation for impacts on shoreline resources and values, ensure industrial development incorporates shoreline restoration or public access where feasible and consistent with security needs.

Avoid designating lands for industrial development that include shoreline areas with severe environmental limitations.

Public Access and Recreation Element

Goal C. **Enhance North Bend's river shore recreation value by creating a natural linked greenway system.**

Goal D. **Implement a public access system in accordance with the City's Parks, Recreation, Wildlife Habitat and Open Space Plan that increases the amount and diversity of public access consistent with private property rights, public safety and the natural shoreline character.**

Public Access

PAR P-1 Recognize shoreline public access opportunities and recommendations contained in the City's adopted Parks, Recreation, Wildlife Habitat and Open Space Plan and the Si View Metropolitan Park District Comprehensive Plan.

PAR P-2 Public access should be located and designed to respect private property rights, maintain privacy of private property, be compatible with the shoreline environment, protect ecological functions and processes, and protect aesthetic values of the shoreline.

PAR P-3 Acquire or obtain access rights, dedications, and easements to riverfront parcels, including levees and dikes, as available. Such rights should be pursued as opportunities and funding becomes available. Partner with other jurisdictions for funding and obtaining easements.

PAR P-4 Where appropriate, promote the development and enhancement of public access to the river to increase fishing, kayaking and other water-related recreational opportunities.

PAR P-5 Develop guidelines for creating contiguous greenways that protect the riparian environment and related wildlife habitats when opportunities arise.

PAR P-6 As a part of the SMP, prepare and implement a Shoreline Restoration Plan that includes identification of key areas for public access, restoration, protection and improvement projects, consistent with the City of North Bend Shoreline Analysis Report.

PAR P-7 Provide public access in the shoreline jurisdiction in association with the following uses: developments with five or more dwellings; commercial development; industrial development; and public agency development. Ensure public access is consistent with the City's adopted Parks, Recreation, Wildlife Habitat and Open Space Plan.

PAR P-8 Ensure developments, uses, and activities on or near the shoreline do not impair or detract from the public's access to the water or the rights of navigation.

PAR P-9 Provide public access as close as possible to the water's edge of the Middle and South Forks of the Snoqualmie River without causing significant ecological impacts and consistent with appropriate trail standards.

PAR P-10 Identify opportunities for public access on publicly owned shorelines. Preserve, maintain and enhance public access afforded by shoreline street ends, public utilities and rights-of-way.

PAR P-11 Design public access to provide for public safety and comfort and to minimize potential impacts on private property and individual privacy.

PAR P-12 Provide public access and interpretive displays as part of publicly funded restoration projects where significant ecological impacts are addressed.

PAR P-13 Maintain and enhance City parks, trails and public access facilities adjacent to shorelines in accordance with City and County plans.

PAR P-14 Encourage waterfront development to provide a means for visual and pedestrian access to the shoreline area wherever feasible.

PAR P-15 Encourage the acquisition of suitable upland shoreline properties to provide access to publicly owned shorelands. Encourage public access to the South Fork Snoqualmie and Middle Fork Snoqualmie on shoreline street ends, public utilities and rights of way.

Recreational Development

PAR P-16 Allow for passive and active shoreline recreation that emphasizes location along shorelines in association with the City's Parks, Recreation, Wildlife Habitat and Open Space Plan and Si View Metropolitan Park District Comprehensive Plan.

PAR P-17 Give priority to shoreline recreational development in order to provide access, use, and enjoyment of North Bend's shorelines.

PAR P-18 Encourage the coordination of local, state, and federal recreation planning to satisfy recreational needs.

PAR P-19 Promote recreational developments and plans that conserve the shoreline's natural character, ecological functions, and processes.

PAR P-20 Encourage a variety of compatible recreational experiences and activities to satisfy diverse recreational needs.

PAR P-21 Give water-dependent recreation priority over water-enjoyment recreation uses. Give water-enjoyment recreational uses priority over non-water-oriented recreational uses.

PAR P-22 Integrate and link recreation facilities with linear systems, such as hiking paths, bicycle paths, easements, and scenic drives.

PAR P-23 Pursue opportunities to expand the public's ability to enjoy the shoreline in public parks or public open spaces through dining or other water-enjoyment activities.

PAR P-24 Promote non-intensive recreational uses which avoid adverse effects to the natural hydrology of aquatic systems, do not contribute to flood hazards, and avoid damage to the shoreline environment through modifications such as structural shoreline stabilization or native vegetation removal.

Circulation Element

Goal E. Implement multi-modal transportation improvements that provide for mobility and access and that minimize adverse impacts on the shoreline environment.

C P-1 Allow for maintenance and improvements to existing roads and parking areas. Allow for necessary new roads and parking areas where other locations outside of shoreline jurisdiction are not feasible.

C P-2 Plan and develop a circulation network which is compatible with the shoreline environment, and respects and protects ecological and aesthetic values in the shoreline of the state as well as private property rights.

C P-3 Include in circulation system planning systems for pedestrian, bicycle, and public transportation where appropriate. Circulation planning and projects should support existing and proposed shoreline uses that are consistent with the SMP.

C P-4 Where possible, locate new roads, railroads, and parking as far from the shoreline as feasible to reduce interference with natural shoreline resources or appropriate shoreline uses.

C P-5 Ensure, when existing transportation corridors are abandoned, they are reused for water-dependent uses or public access.

C P-6 Encourage relocation or improvement of those circulation elements that are functionally or aesthetically disruptive to the shoreline, public waterfront access, and ecological functions.

C P-7 Plan parking to achieve optimum use. Where possible, parking should serve more than one use (e.g. serving recreational use on weekends, commercial uses on weekdays).

C P-8 Where feasible, provide parking outside shoreline jurisdiction.

C P-9 Encourage low-impact parking facilities, such as those with permeable pavements and bio-swales.

C P-10 Encourage trail and bicycle paths along shorelines in a manner compatible with the natural character, resources, and ecology of the shoreline.

C P-11 Establish a pedestrian and bicycle network connected to a greenway system which links commercial areas, employment centers, neighborhoods, public facilities, parks, recreation and open space properties, and regional and state-wide trails.

A. Adopt and implement the Trail Plan in the City's Parks, Recreation, Wildlife Habitat and Open Space Plan. As funding and opportunities permit, protect critical trail linkages and design, construct and/or enhance trail segments identified in the Trail Plan.

B. Develop links between off-road and on-road pedestrian and bicycle facilities to provide an interconnecting system of trails.

C. Design portions of the trail system to accommodate a variety of non-motorized users, including pedestrians, road and mountain bicyclists, equestrians, skaters, wheelchair users, and others, recognizing that not all trails will accommodate all users.

D. Create and implement development regulations that require that all new development provide connections, or payment in lieu, to the City's bicycle/walkway trails system.

E. Create and implement development regulations that require that new residential development provide for construction of new trails as identified in the Trail Plan Map as part of the development's recreational and common space requirements.

F. Pursue obtaining trail easements from owners of existing developed lots located within trail corridors identified on the Trail Plan Map for construction of missing trail linkages.

G. Promote separated walkways and bikeways within new residential developments that can be linked to existing or proposed trails or walkways.

Shoreline Uses and Modifications Element

Goal F. Encourage shoreline development that recognizes North Bend's natural and cultural values and its unique aesthetic qualities offered by its riverine environment.

Shoreline Environment Designations

SUM P-1 Provide a comprehensive shoreline environment designation system to categorize North Bend shorelines into environments based upon the primary characteristics of shoreline areas to guide the use and management of these areas.

SUM P-2 Designate properties as Natural in order to protect and restore those shoreline areas that are relatively free of human influence or that include intact or minimally degraded

shoreline functions that are sensitive to potential impacts from human use. Natural areas should be managed consistent with the following policies:

A. Any use or development activity that would potentially degrade the ecological functions or significantly alter the natural character of the shoreline area should be severely limited or prohibited.

B. Development activity in the Natural environment should only be permitted when no suitable alternative site is available on the subject property outside of shoreline jurisdiction.

C. The improvement or alterations of existing roads or creations of new roads to meet public safety needs are allowed when no other location is feasible.

D. Development, when feasible, should be designed and located to preclude the need for shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications.

E. Development activity or significant vegetation removal that would reduce the capability of vegetation to perform relevant ecological functions should be prohibited.

F. Limited access may be permitted for scientific, historical, cultural, educational and low-intensity water-oriented recreational purposes, provided there are no significant adverse ecological impacts.

SUM P-3 Designate properties as Urban Conservancy to protect and restore ecological functions of open space, parks, floodplains and floodways, other critical areas, and other undeveloped areas with low levels of alteration, while allowing a variety of compatible uses. This designation is appropriate for lands such as parks, open space, public property or high-functioning areas of private property, and low-density residential areas, provided specific management policies to guide development and use of these areas are created. The Urban Conservancy environment contains two sub-environments - Urban Conservancy-Residential for areas with moderate to high levels of ecological function that can or do appropriately accommodate shoreline priority residential uses, or Urban Conservancy-Recreation/Open Space for areas that are highly valued for recreation and public access, contain critical areas such as wetlands or floodplains, and/or have low levels of alteration corresponding to moderate to high ecological function. All Urban Conservancy environments should be managed consistent with the following policies:

A. Allowed uses should be those that preserve the natural character of the area and/or promote preservation and restoration within critical areas, public and private open spaces, and other moderate- to high-functioning areas, either directly or over the long term.

B. Restoration of shoreline ecological functions should be a priority.

C. Development, when feasible, should be designed to ensure that any necessary shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications do not result in a net loss of shoreline ecological function or further degrade other shoreline values.

D. Public access and public recreation objectives should be implemented whenever feasible and significant ecological impacts can be mitigated.

E. Water-oriented uses should be given priority over non-water-oriented uses.

F. Recognize that single-family residential development is a preferred use.

G. Commercial and industrial uses, other than limited commercial activities conducted accessory to a public park, should be limited.

SUM P-4 Designate properties as Shoreline Residential to accommodate higher-density residential development and recognize existing and proposed land uses. This designation is appropriate for residential uses on lands with zoning classifications for detached and attached residential. The following management policies should guide development within these areas:

A. Standards for buffers, lot coverage limitations, shoreline stabilization, vegetation conservation, critical area protection, and water quality should mitigate adverse impacts on maintain shoreline ecological functions.

B. Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.

C. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Within attached residential developments, continuous public access along the shoreline should be provided, preserved or enhanced.

D. Water-dependent recreational uses should be permitted.

E. Limited water-oriented commercial uses which depend on or benefit from a shoreline location should also be permitted provided the underlying zoning classifications permit such uses.

SUM P-5 Designate properties as Commercial Conservancy to accommodate intensive land uses, such as commercial, office, retail, transportation, warehouse, manufacturing, and mixed-use developments. The following management policies should guide development within these areas:

A. Manage development so that it enhances and maintains the shorelines for a variety of urban uses, with priority given to water-dependent, water-related and water-enjoyment uses. Non-water-oriented uses should not be allowed except as part of an existing development, unless such uses would not conflict with or limit opportunities for water-oriented uses or on sites where there is no direct access to the shoreline.

B. Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced when feasible.

C. Aesthetic objectives should be implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers.

SUM P-6 Designate properties as Aquatic to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM. The following management policies should guide development within these areas:

A. Provisions for the management of the Aquatic environment should be directed towards maintaining and restoring shoreline ecological functions.

B. Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

C. All developments and uses should be located and designed to protect public recreational uses of the water; to minimize adverse visual impacts; and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

D. New overwater structures for public access and public infrastructure are permitted provided they are the minimum size necessary to support the structure's intended use and will not preclude attainment of ecological restoration.

E. Underwater pipelines and cables should not be permitted unless demonstrated that there is no feasible alternative location based on an analysis of technology and system efficiency, and that the adverse environmental impacts are not significant or can be shown to be less than the impact of upland alternatives.

Agriculture

SUM P-7 Allow existing agricultural activities as part of the community's heritage.

SUM P-8 Design new agricultural uses and expansions of existing uses consistent with the SMP to minimize impacts on shoreline environments.

SUM P-9 Prohibit the creation of agricultural land by diking, draining, or filling wetlands or channel migration zones.

SUM P-10 Maintain a vegetative buffer between agricultural lands and waterbodies or wetlands in order to reduce harmful bank erosion and resulting sedimentation, enhance water quality, reduce flood hazard, and maintain habitat for fish and wildlife.

SUM P-11 Use appropriate farm management techniques to prevent contamination of nearby waterbodies and adverse effects on valuable plant, fish, and animal life from fertilizer and pesticide use and application.

SUM P-12 Encourage agricultural-recreation activities on the Tollgate and Meadowbrook Farms.

Aquaculture

SUM P-13 Give preference to aquaculture operations that minimize environmental impacts through use of fewer visible structures or less extensive substrate and vegetation modifications.

SUM P-14 Do not allow aquaculture in areas where it would degrade water quality, result in a loss of shoreline ecological function, impair navigation, or conflict with other water-dependent uses.

SUM P-15 Design aquaculture facilities to minimize nuisance odors and noise, as well as visual impacts on surrounding shoreline development.

Boating Facilities (Boat Launches)

SUM P-16 Limit new boating facilities to public or community launches for canoes, kayaks or other hand-powered vessels.

SUM P-17 Locate new boating facilities and allow expansion of existing facilities at sites with suitable environmental conditions, shoreline configuration, access, and neighboring upland and aquatic uses.

SUM P-18 Require restoration activities when substantial improvements or repair to existing boating facilities is planned.

SUM P-19 Boating facilities that minimize the amount of shoreline modification are preferred.

SUM P-20 Over-water boating facilities are prohibited.

SUM P-21 Boat moorage is prohibited.

Breakwaters, Jetties, Groins and Weirs

SUM P-22 To the extent feasible, limit the use of breakwaters, jetties, groins, weirs or other similar structures to those projects providing ecological restoration or other public benefits.

Dredging and Dredge Material Disposal

SUM P-23 Dredging and dredge material disposal should avoid and minimize significant ecological impacts. Impacts which cannot be avoided should be mitigated.

SUM P-24 Design and locate new shoreline development to avoid the need for dredging.

SUM P-25 Limit dredging and dredge material disposal to the minimum necessary to allow for shoreline restoration, flood hazard reduction, and maintenance of existing legal moorage and navigation. Dredging to provide for new navigation uses is prohibited.

SUM P-26 Allow dredging for the primary purposes of flood hazard reduction only as part of a long-term management strategy consistent with an approved flood hazard management plan.

Fill

SUM P-27 Limit fill waterward of the OHWM to support ecological restoration or to facilitate water-dependent or public access uses.

SUM P-28 Allow fill consistent with floodplain regulations upland of the OHWM provided it is located, designed and constructed to protect shoreline ecological functions and ecosystem-wide processes, including channel migration, and is the minimum necessary to implement an approved project.

Forest Practices

SUM P-29 Ensure compliance with the State's Forest Practices Act for all forest management activities including Class IV, general forest practices, where shorelines are being converted or are expected to be converted to non-forest uses.

SUM P-30 Conduct forest practices within shoreline areas to ensure water quality and the maintenance of vegetative buffer strips to protect fish populations and avoid erosion of stream banks.

SUM P-31 When forest lands are converted to another use, assure no net loss of shoreline ecological functions or significant adverse impacts on other shoreline uses, resources and values such as navigation, recreation and public access.

In-Stream Structures

SUM P-32 Locate, plan and permit in-stream structures only when consistent with the full range of public interests, ecological functions and processes, and environmental concerns, with special emphasis on protecting and restoring priority habitats and species.

Mining

SUM P-33 Locate mining facilities outside shoreline jurisdiction whenever feasible.

SUM P-34 Do not allow mining in any location waterward of the OHWM.

SUM P-35 Design and locate mining facilities and associated activities to prevent loss of ecological function. Give preference to mining uses that result in the creation, restoration, or enhancement of habitat for priority species.

Residential Development

SUM P-36 Consider single-family residential development as a priority use only when developed in a manner consistent with the control of pollution and prevention of damage to the natural environment.

SUM P-37 Locate and construct residential development in a manner that assures no net loss of shoreline ecological functions.

SUM P-38 Ensure the overall density of development, lot coverage, and height of structures is appropriate to the physical capabilities of the site and consistent with the comprehensive plan.

SUM P-39 Ensure new residential development provides adequate buffers or open space from the water to protect or restore ecological functions and ecosystem-wide processes, to preserve views, to preserve shoreline aesthetic characteristics, to protect the privacy of nearby residences, and to minimize use conflicts.

SUM P-40 Make adequate provisions for services and infrastructure necessary to support residential development.

SUM P-41 Design and locate new residences so that shoreline stabilization will not be necessary to protect the structure. The creation of new residential lots should not be allowed unless it is demonstrated the lots can be developed without:

A. Constructing shoreline stabilization structures (such as bulkheads).

B. Causing significant erosion or slope instability.

C. Removing existing native vegetation within shoreline buffers.

Shoreline Habitat and Natural Systems Enhancement Projects

SUM P-42 Include provisions for shoreline vegetation restoration, fish and wildlife habitat enhancement, and low impact development techniques in projects located within shoreline jurisdiction, where feasible.

SUM P-43 Encourage and facilitate implementation of projects and programs included in the Shoreline Master Program Shoreline Restoration Plan.

Goal 1. Protect and restore the natural hydraulic, hydrologic, and habitat functions, scenic as well as recreation values of North Bend's shorelines.

Objective A. Protect shoreline processes and ecological functions through regulatory and non-regulatory means that may include acquisition of key properties, conservation easements, regulation of development within shoreline jurisdiction, and incentives to private property owners to encourage ecologically sound design.

Objective B. Work with other jurisdictional agencies in the region and with the private sector to deal effectively with regional and watershed-wide natural environment issues and the protection, preservation, and enhancement of all shorelines as fish and wildlife habitat.

Objective C. Enhance and restore areas which are biologically and aesthetically degraded to the greatest extent feasible while maintaining appropriate use of, and public access to, the shoreline.

Objective D. Conserve and protect critical areas within shoreline jurisdiction from loss or degradation.

Objective E. Protect and restore critical freshwater habitat and other areas that provide habitat for endangered, threatened or sensitive fish and wildlife species.

Objective F. Protect and restore vegetation to maintain and enhance habitat, aesthetic and recreational values. Retention and planting of conifers is particularly desired as a source of future large woody debris recruitment.

Objective G. Protect and preserve water quality in the South Fork and Middle Fork Snoqualmie Rivers.

Objective H. Preserve and enhance public access opportunities to and along the shoreline consistent with protecting shoreline processes and ecological functions.

Shoreline Stabilization

SUM P-44 Locate and design new development, including subdivisions, to eliminate the need for new shoreline modification or stabilization.

SUM P-45 Design, locate, size and construct new or replacement structural shoreline stabilization measures to minimize and mitigate the impact of these modifications on the City's shorelines.

SUM P-46 Give preference to non-structural shoreline stabilization measures over structural shoreline stabilization, and give preference to soft structural shoreline stabilization over hard structural shoreline stabilization.

SUM P-47 Encourage fish-friendly shoreline design during new construction and redevelopment by offering incentives and regulatory flexibility.

Utilities

SUM P-48 Allow for utility maintenance and extension with criteria for location and vegetation restoration as appropriate.

SUM P-49 Plan, design, and locate utility facilities to minimize harm to shoreline functions, preserve the natural landscape, and minimize conflicts with present and future planned land and shoreline uses while meeting the needs of future populations in areas planned to accommodate growth.

SUM P-50 Do not permit new primary utility production and processing facilities, or parts of those facilities, such as power plants, solid waste storage or disposal facilities that are non-water-oriented within shoreline jurisdiction unless no other options are feasible. Primary utility facilities, such as wastewater treatment plants and including expansion of existing facilities, should be located in shoreline jurisdiction only if no practical upland alternative or location exists. Such facilities and expansions should be designed and located to minimize impacts on shoreline ecological functions, including riparian and aquatic areas, and to the natural landscape and aesthetics. Public health and safety should be the highest priority for the planning, development and operation of primary utility facilities.

SUM P-51 Locate utility transmission facilities for the conveyance of services, such as power lines, cables, and pipelines, outside of shoreline jurisdiction where feasible. Where permitted within shoreline jurisdiction, such facilities should be located within existing or approved road crossings or in such a way as to minimize potential adverse impacts on shoreline areas.

SUM P-52 Locate new utility facilities so as not to require extensive shoreline protection works.

SUM P-53 Locate utility facilities and corridors to protect scenic views from public parks and trails. Whenever possible, such facilities should be placed underground, or alongside or under bridges.

SUM P-54 Design utility facilities and rights-of-way to preserve the natural landscape and to minimize conflicts with present and planned land uses.

Existing Uses

SUM P-55 Allow nonconforming existing legal uses and structures to continue in accordance with this SMP. Residential structures and appurtenant structures that were legally established and are used for a conforming use, but that do not meet standards for the following should be considered a conforming structure: setbacks, buffers, or yards; area; bulk; height; or density.

SUM P-56 Allow alterations of nonconforming structures, uses, and lots in consideration of historic development patterns, when occupied by preferred uses, and when consistent with public safety and other public purposes.

SUM P-57 Encourage transitions from nonconforming uses to conforming uses.

SUM P-58 Allow for nonconforming structures to expand when they do not increase the nonconformity according to SMP requirements.

SUM P-59 Allow for existing roads, driveways and utility lines to continue and expand when they do not increase the nonconformity according to SMP requirements.

SUM P-60 Consider the no-net-loss of ecological function objective to guide review of proposed expansions or other changes to nonconforming uses and new development on nonconforming vacant lots. This objective may be addressed in an areawide manner consistent with the SMP cumulative impacts analysis.

Conservation Element

Goal G. Protect the natural hydraulic, hydrologic and habitat functions, scenic as well as recreational values of North Bend's shorelines.

Environmental Protection

Con P-1 Protect shoreline processes and ecological functions through regulatory and non-regulatory means that may include acquisition of key properties, conservation easements, regulation of development within shoreline jurisdiction, and incentives to private property owners to encourage ecologically sound design.

Con P-2 Work with other jurisdictional agencies in the region and with the private sector to deal effectively with regional and watershed-wide natural environment issues and the protection, preservation, and enhancement of all shorelines as fish and wildlife habitat.

Con P-3 Enhance and restore areas which are biologically and aesthetically degraded to the greatest extent feasible while maintaining appropriate use of the shoreline.

Critical Areas

Con P-4 Conserve and protect critical areas within shoreline jurisdiction from loss or degradation.

Con P-5 Locate and design public access within and adjacent to critical areas to ensure that ecological functions are not adversely impacted.

Wetlands

Con P-6 Protect and manage shoreline-associated wetlands, including maintenance of sufficient volumes of surface and subsurface drainage into wetlands, to sustain existing vegetation and wildlife habitat.

Streams and Fish and Wildlife Habitat Conservation Areas

Con P-7 Protect critical freshwater habitat, including channel migration zones, and other areas that provide habitat for endangered, threatened or sensitive fish and wildlife species.

Geologically Hazardous Areas

Con P-8 Manage development in geologically hazardous areas, including channel migration zones, to avoid risk and damage to property and loss of life from geological conditions.

Floodplain Management

Con P-9 Regulate development within the 100-year floodplain to avoid risk and damage to property and loss of life.

Shoreline Vegetation Conservation

Con P-10 Protect and restore vegetation to maintain and enhance habitat, aesthetic and recreational values. Retention and planting of conifers is particularly desired as a source of future large woody debris recruitment.

Con P-11 Plan and design new development or substantial redevelopment to retain or provide shoreline vegetation.

Con P-12 Prohibit the introduction of invasive plant species along shorelines, and encourage the removal of noxious and invasive weeds.

Con P-13 Protect, enhance, and maintain healthy trees and vegetation consistent with the value North Bend places on trees and other vegetation as integral to community character and quality of life. Minimize tree clearing and thinning activities in shoreline jurisdiction and require mitigation for trees that are removed. Selective pruning of trees for safety and view protection may be allowed.

Con P-14 Recognize the most recent inter-agency guidance on levee vegetation management to maintain levee safety and address aquatic habitat needs.

Water Quality, Stormwater Management, and Nonpoint Pollution

Con P-15 Protect and preserve water quality in the South Fork and Middle Fork Snoqualmie Rivers.

Con P-16 Manage stormwater quantity to ensure protection of natural hydrology patterns and avoid or minimize impacts on streams.

Con P-17 Encourage use of low impact development techniques in all new development and redevelopment proposals.

Con P-18 Support public education efforts to protect and improve water quality.

Historic, Cultural, Scientific, and Educational Resources Element

Goal H. Recognize cultural and historical resources as an essential part of North Bend's identity and heritage.

Goal I. Encourage educational and scientific projects and programs that foster a greater appreciation of the importance of shoreline management, river-oriented activities, environmental conservation and local historic connections with North Bend's rivers.

HCSE P-1 Due to the limited and irreplaceable nature of the resource, prevent public or private uses, activities, and development from destroying or damaging any site having historic, cultural, scientific or educational value as identified by the appropriate authorities and deemed worthy of protection and preservation.

HCSE P-2 Protect, preserve, or restore buildings, sites, and areas of shoreline having scientific or educational values or significance.

Flood Hazard Management Element

Goal J. Protect public safety within river floodways and floodplains and protect natural systems by preserving the flood storage function of floodplains.

FH P-1 Manage development proposed within floodplains, floodways and channel migration zones consistent with the Shoreline Management Act, the Federal Emergency Management Agency (FEMA) standards, and this SMP, including the Critical Areas Regulations for frequently flooded areas and geologically hazardous areas.

FH P-2 Work with other cities, King County, and state and federal agencies to deal effectively with regional flooding issues.

FH P-3 Control stormwater runoff in a manner consistent with low impact development practices which utilize natural detention, retention and recharge techniques to the maximum extent possible.

FH P-4 Prohibit any development within the floodplain which would individually or cumulatively cause any increase in the base flood elevation. Encourage purchase of properties that have experienced repetitive loss.

Shoreline Regulations

Chapter 14.20 - Shoreline Regulations

Article I – Authority and Purpose

14.20.110 Authority

The Shoreline Management Act (SMA) of 1971, Chapter 90.58 RCW, is the authority for the enactment and administration of this Shoreline Master Program (SMP).

14.20.120 Applicability

All proposed uses, activities, or development occurring within shoreline jurisdiction must conform to the intent and requirements of Chapter 90.58 RCW, the SMA, and this SMP whether or not a permit or other form of authorization is required. See NBMC 14.20.200 for the shoreline jurisdiction description and NBMC 14.20.190 for the definition of uses, activities, and development.

The SMP applies to shoreline jurisdiction in city limits and predesignates shoreline jurisdiction in the Urban Growth Area (UGA); this SMP will apply to shorelines in the UGA upon annexation.

Pursuant to WAC 173-27-060, direct federal agency activities affecting shoreline jurisdiction must be consistent with the SMA, SMP Guidelines, and this SMP.

As recognized by RCW 90.58.350, the provisions of this SMP shall not affect treaty rights of Indian Nations or tribes.

14.20.130 Findings

The SMP is based on the SMA, SMP Guidelines, a Shoreline Analysis Report,[1] and a public visioning process[2]. Key findings are identified below.

[pending – from future staff report, to include acknowledgment of levees, jurisdiction decisions, and other key findings]

14.20.140 Purpose

The purposes of this SMP are:

A. To promote the public health, safety, and general welfare of the city by providing comprehensive policies and effective, reasonable regulations for development, use and protection of jurisdictional shorelines; and

B. To further assume and carry out the local government responsibilities established by the SMA in RCW 90.58.050 including planning and administering the regulatory program consistent with the policy and provisions of the SMA in RCW 90.58.020; and

C. To provide a high quality shoreline environment where:

   1) Recreational opportunities are abundant;

   2) The public enjoys access to and views of shoreline areas;

   3) Natural systems are preserved, restored or enhanced;

   4) Ecological functions of the shoreline are maintained and improved over time;

   5) Water-oriented uses are promoted consistent with the shoreline character and environmental functions; and

D. To apply special conditions to those uses which are not consistent with the control of pollution and prevention of damage to the natural environment or are not unique to or dependent upon use of the state's shoreline; and

E. To assure no net loss of ecological functions associated with the shoreline.

14.20.150 Relationship to Other Codes, Ordinances and Plans

A. All applicable federal, state, and local laws shall apply to properties in the shoreline jurisdiction.

B. In the event provisions of this SMP conflict with provisions of federal, state, county or city regulations, the provision that is most protective of shoreline resources shall prevail. It is understood that the provisions of this chapter may not allow development to occur at what otherwise might be the property's full zoning potential.

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[1]The Watershed Company and ICF International. January 2011. Final Shoreline Analysis Report for the City of North Bend: South Fork and Middle Fork Snoqualmie River. Prepared for the City of North Bend Community and Economic Development Department, North Bend, WA

[2] ICF International in association with The Watershed Company. 2010. *Shoreline Visioning Summary*. November. (ICF 00780.09.) Seattle, WA. Prepared for City of North Bend, North Bend, WA.

C. The policies in the SMP, contained in the Shoreline Master Program Element, state the underlying objectives the regulations are intended to accomplish. The policies guide the interpretation and enforcement of the SMP regulations contained in NBMC 14.20.110-.750. The policies are not regulations in themselves and, therefore, do not impose requirements beyond those set forth in the regulations.

D. This Shoreline Master Program contains in Article V (NBMC 14.20.510-.580) critical area regulations applicable only in shoreline jurisdiction that provide a level of protection to critical areas assuring no net loss of shoreline ecological functions necessary to sustain shoreline natural resources. (RCW 36.70A.480) The city's critical areas regulations found in Title 14 of the North Bend Municipal Code do not apply within shoreline jurisdiction.

14.20.160 Liberal Construction

As provided for in RCW 90.58.900, the SMA is exempted from the rule of strict construction. The city shall therefore interpret the SMP not only on the basis of actual words and phrases used in it, but by also taking purposes, goals, and policies into account.

14.20.170 Severability

Should any section or provision of this SMP be declared invalid, such decision shall not affect the validity of this SMP as a whole.

14.20.180 Effective Date

This Shoreline Master Program of the City of North Bend took effect 14 days after the date of the Department of Ecology's final action approving the City's Shoreline Master Program.

14.20.190 Definitions

1. "Act" means the Washington State Shoreline Management Act, chapter 90.58 RCW.
2. "Active fault" means a fault that is considered likely to undergo renewed movement within a period of concern to humans. Faults are commonly considered to be active if the fault has moved one or more times in the last 10,000 years.
3. "Additions" means improvements to an existing building or structure, the cost of which does not exceed 50 percent of the assessed value of the total structure or result in an increase greater than 25 percent of the building footprint (up to a maximum of 500 square feet) before the addition is started. Additions must share a common wall (one full side) with the original structure.
4. "Adjacent," for purposes of applying Article V – Critical Areas, means immediately adjoining (in contact with the boundary of the influence area) or within a distance less than that needed to separate activities from critical areas to ensure protection of the functions and values of the critical areas. Adjacent shall mean any activity or development located:
    a. On-site immediately adjoining a critical area; or
    b. A distance equal to or less than the required critical area buffer width and building setback.

5. "Adoption by rule" means an official action by the department to make a local government shoreline master program effective through rule consistent with the requirements of the Administrative Procedure Act, chapter 34.05 RCW, thereby incorporating the adopted shoreline master program or amendment into the state master program.

6. "Agricultural activities" means 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.

7. "Agricultural products" includes but is not limited to horticultural, viticultural, floricultural, vegetable, fruit, berry, grain, hops, hay, straw, turf, sod, seed, and apiary products; feed or forage for livestock; Christmas trees; hybrid cottonwood and similar hardwood trees grown as crops and harvested within twenty years of planting; and livestock including both the animals themselves and animal products including but not limited to meat, upland finfish, poultry and poultry products, and dairy products.

8. "Agricultural equipment" includes, but is not limited to:

    a. The following used in agricultural operations: Equipment; machinery; constructed shelters, buildings, and ponds; fences; upland finfish rearing facilities; water diversion, withdrawal, conveyance, and use equipment and facilities including but not limited to pumps, pipes, tapes, canals, ditches, and drains;

    b. corridors and facilities for transporting personnel, livestock, and equipment to, from, and within agricultural lands;

    c. farm residences and associated equipment, lands, and facilities; and

    d. roadside stands and on-farm markets for marketing fruit or vegetables.

9. Agricultural facilities. See “Agricultural equipment.”

10. “Agricultural land" means those specific land areas on which agriculture activities are conducted as of the date of adoption of a local master program pursuant to these guidelines as evidenced by aerial photography or other documentation. After the effective date of the master program land converted to agricultural use is subject to compliance with the requirements of the master program.

11. “Alteration,” for purposes of applying Article V – Critical Areas, means any human-induced change in an existing condition of a critical area or its buffer. Alterations include, but are not limited to: grading, filling, dredging, channelizing, clearing (vegetation), applying pesticides, discharging waste, construction, compaction, excavation, modifying for stormwater management, relocating, or other activities that change the existing landform, vegetation, hydrology, wildlife, or habitat value, of critical areas.

12. "Amendment" means a revision, update, addition, deletion, and/or reenactment to an existing shoreline master program.

13. “Applicant” means a person who files an application for a permit under this SMP and who is either the owner of the land on which that proposed activity would be located, a contract purchaser, or the authorized agent of such a person.

14. "Approval" means an official action by a local government legislative body agreeing to submit a proposed shoreline master program or amendments to the Department of Ecology for review and official action pursuant to this chapter; or an official action by the Department of Ecology to make a local government shoreline master program effective, thereby incorporating the approved shoreline master program or amendment into the state master program.

15. “Aquaculture” means the culture or farming of fish, shellfish, or other aquatic plants and animals.

16. “Aquifer recharge area” means an area that, due to the presence of certain soils, geology, and surface water, acts to recharge ground water by percolation.

17. “Area of shallow flooding” means a designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and velocity flow may be evident.

18. “Area of special flood hazard” means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

19. “Assessed value” means assessed valuation shall be as established by the King County assessor’s office, unless otherwise provided by a market appraisal institute (MAI) appraisal.

20. “Associated wetlands” are those wetlands which are in proximity to, and either influence or are influenced by, a stream subject to the Act.

21. "Average grade level" means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property which will be directly under the proposed building or structure: In the case of structures to be built over water, average grade level shall be the elevation of the ordinary high water mark. Calculation of the average grade level shall be made by averaging the ground elevations at the midpoint of all exterior walls of the proposed building or structure.

22. “Base flood” means a flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “100-year flood.” Designated on flood insurance rate maps with the letters A or V.

23. “Base flood elevation” means the water surface elevation of the base flood. It shall be referenced to the North American Vertical Datum of 1988 (NAVD).

24. “Basement” means any area of a building having its floor subgrade (below ground level) on all sides.

25. “Best management practices” (BMPs) means conservation practices or systems of practice and management measures that:

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

    b. Minimize adverse impacts on surface water and ground water flow, circulation patterns, and the chemical, physical, and biological characteristics of wetlands;

c. Protect trees and vegetation designated to be retained during and following site construction; and

d. Provides standards for proper use of chemical herbicides within critical areas.

26. "Boating facilities" allowed in the City of North Bend includes boat launches and upland boat storage. Prohibited boating facilities in the city include marinas and other boat moorage structures or uses.

27. "Breakwater" means an offshore structure whose primary purpose is to protect harbors, moorages and navigation activity from wave and wind action by creating stillwater areas along shore. A secondary purpose is to protect shorelines from wave caused erosion. Breakwaters are generally built parallel to shore, and may or may not be connected to land, and may be floating or stationary.

28. "Buffer" means the zone contiguous with a critical area that is required for the continued maintenance, function, and structural stability of the critical area.

29. "Building setback line (BSBL)" means a line beyond which the foundation of a structure shall not extend.

30. "Caliper" means the American Association of Nurserymen standard for trunk measurement of nursery stock. Caliper of the trunk shall be the trunk diameter measured six inches above the ground for up to and including four-inch caliper size and 12 inches above the ground for larger sizes

31. "Channel migration zone (CMZ)" means the area along a river within which the channel(s) can be reasonably predicted to migrate over time as a result of natural and normally occurring hydrological and related processes when considered with the characteristics of the river and its surroundings. [See SMP XXX for map of the channel migration zone regulated under this SMP].

32. "City" means the city of North Bend.

33. "Clearing" means the cutting, killing, grubbing, or removing of vegetation or other organic material by physical, mechanical, chemical, or any other similar means.

34. "Cluster" means a group of three or more significant trees with overlapping or touching crowns.

35. "Crown" means the area of a tree containing leaf- or needle-bearing branches.

36. "Community access" means a shoreline access available to a group or community (e.g. home owners association) which may not be accessible to general public.

37. "Compensation project" means actions specifically designed to replace project-induced critical area and buffer losses. Compensation project design elements may include, but are not limited to, land acquisition, planning, construction plans, monitoring, and contingency actions.

38. "Compensatory mitigation" means types of mitigation used to replace project-induced critical area and buffer losses or impacts.

39. "Concentrated animal feeding operation (CAFO)" means a Department of Ecology-regulated and permitted area where animals (other than aquatic animals) have been, are, or will be stabled or confined and fed or maintained for a total of 45 days or more in any 12-month period. The CAFO permit does not automatically kick in until a facility has a certain number of non-aquatic animals (i.e., 1,000 cattle or 700 dairy cows). Smaller facilities may also be regulated if they are discharging to a waterbody.

40. “Critical aquifer recharge area (CARA)” means areas designated by WAC 365-190-080(2) that are determined to have critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2).

41. “Critical facility” means a facility for which even a slight chance of flooding, inundation, or impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency installations, and installations that produce, use, or store hazardous materials or hazardous waste.

42. “Crown” means the area of a tree containing leaf- or needle-bearing branches.

43. “Designated floodway” means the regulatory floodway that has been delineated on the city’s flood insurance rate map (FIRM).

44. “Developable area” means a site or portion of a site that may be utilized as the location of development, in accordance with the rules of this SMP.

45. “Development” any man-made alteration of unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, storage of equipment and materials and subdivision of land. For properties within the floodplain, development also includes the removal of more than 5% of the native vegetation on the property, or alteration of natural site characteristics.

46. “Development permit” means any permit issued by the city of North Bend, or other authorized agency, for construction, land use, or the alteration of land.

47. “DSH” means the diameter at standard height; the diameter of the trunk measured 54 inches (4.5 feet) above grade.

48. "Ecological functions" or "shoreline functions" means the work performed or role played 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.

49. "Ecosystem-wide processes" means 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 the types of habitat and the associated ecological functions.

50. “Erosion” means the process by which soil particles are mobilized and transported by natural agents such as wind, rain, frost action, or stream flow.

51. “Erosion hazard area” means those areas that, because of natural characteristics including vegetative cover, soil texture, slope gradient, and rainfall patterns, or human-induced changes to such characteristics, are vulnerable to erosion.

52. "Feasible" means, for the purpose of this chapter, that an action, such as a development project, mitigation, or preservation requirement, meets all of the following conditions: (a) 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; (b) The action provides a reasonable likelihood of achieving its intended purpose; and (c) The action does not physically preclude achieving the project's primary intended legal use. In cases where these guidelines 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 frames.

53. "FEMA – Federal Emergency Management Agency" means the agency that oversees the administration of the National Flood Insurance Program (44 CFR).

54. "Fill" means the addition of soil, sand, rock, gravel, sediment, earth retaining structure, or other material to an area waterward of the OHWM, in wetlands, or on shorelands in a manner that raises the elevation or creates dry land.

55. "Fish and wildlife habitat conservation areas" means areas necessary for maintaining species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created as designated by WAC 365-190-080(5). These areas include:

    a. Areas with which state or federally designated endangered, threatened, and critical species have a primary association;

    b. Habitats of local importance, including, but not limited to, areas designated as priority habitat by the Department of Fish and Wildlife;

    c. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat;

    d. Waters of the state, including lakes, rivers, ponds, streams (and their associated wetlands), inland waters, underground waters, salt waters and all other surface water and watercourses within the jurisdiction of the state of Washington;

    e. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

    f. State natural area preserves and natural resource conservation areas; and

    g. Land essential for preserving connections between habitat blocks and open spaces.

56. "Flood" or "flooding" mean a general and temporary condition of partial or complete inundation of normally dry land areas from the overflow of inland waters and/or the unusual and rapid accumulation of runoff or surface waters from any source.

57. "Flood hazard area" means any area subject to inundation by the base flood or risk from channel migration including, but not limited to, an aquatic area, wetland, or closed depression.

58. "Flood insurance rate map (FIRM)" means the official map on which the Federal Insurance and Mitigation Administration has delineated both the areas of special flood hazard and the risk premium zones (44 CFR Part 59).

59. "Flood insurance study" means the official report provided by the Federal Insurance and Mitigation Administration that includes the flood profiles, the FIRM, and the water surface elevation of the base flood (44 CFR Part 59).

60. "Flood protection elevation" means an elevation that is one foot or more above the base flood elevation.

61. "Flood plain" is synonymous with one hundred-year floodplain and means that land area susceptible to inundation with a one percent chance of being equaled or exceeded in any given year. The limit of this area shall be determined by reference to the Flood Insurance Rate Maps prepared by the Federal Emergency Management Agency (FEMA).

62. “Floodproofing” means adaptations that ensure a structure is substantially resistant to the passage of water below the flood protection elevation and resists hydrostatic and hydrodynamic loads and effects of buoyancy.

63. “Floodway” means the area that has been established in federal emergency management agency flood insurance rate maps preliminary FIRM dated November 6, 2012.

64. “Floodway dependent structure,” for purposes of applying Article V – Critical Areas, means structures such as, but not limited to, dams, levees and pump stations, stream bank stabilization, boat launches and related recreational structures, bridge piers and abutments, and fisheries enhancement or stream restoration projects.

65. “Formation” means an assemblage of earth materials grouped together into a unit that is convenient for description or mapping.

66. “Formation, confining” means the relatively impermeable formation immediately overlaying a confined aquifer.

67. “Frequently flooded areas” means lands in the floodplain subject to a one percent or greater chance of flooding in any given year and those lands that provide important flood storage, conveyance, and attenuation functions, as determined by the Shoreline Administrator, in accordance with WAC 365-190-080(3). Classifications of frequently flooded areas include, at a minimum, the 100-year floodplain designations of the Federal Emergency Management Agency (FEMA) and National Flood Insurance Protection (NFIP).

68. “Functions” and “values,” for purposes of applying Article V – Critical Areas, mean the beneficial roles served by critical areas, including, but not limited to, water quality protection and enhancement, fish and wildlife habitat, food chain support, flood storage, conveyance and attenuation, ground water recharge and discharge, erosion control, and recreation. “Functions” and “values” may be considered independently, with functions being measured indicators such as water quality, hydrologic functions, and habitat functions and values being nonmeasured indicators such as local importance, potential qualities, or recreational benefits.

69. “Geologically hazardous areas” means areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible commercial, residential, or industrial development is sited in areas of significant hazard.

70. "Geotechnical report" or "geotechnical analysis" means 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 on 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.

71. “Grading" means the movement or redistribution of the soil, sand, rock, gravel, sediment, or other material on a site in a manner that alters the natural contour of the land.

72. “Groin” means a barrier type of structure extending from the stream bank into a waterbody for the purpose of the protection of a shoreline and adjacent uplands by influencing the movement of water or deposition of materials.

73. “Ground cover” means all types of vegetation other than trees.

74. "Guidelines" means those standards adopted by the department to implement the policy of chapter 90.58 RCW for regulation of use of the shorelines of the state prior to adoption of master programs. Such standards shall also provide criteria for local governments and the department in developing and amending master programs.

75. “Hazard areas” means areas designated as frequently flooded or geologically hazardous areas due to potential for erosion, landslide, seismic activity, mine collapse, or other geologically hazardous conditions, including steep slopes.

76. “Hazard tree” means any tree with any significant structural defect, disease, extreme size or combinations of these which make it subject to failure, as determined by the Shoreline Administrator or her/his designee.

77. “Hazardous substance(s)” means:

    a. A hazardous substance as defined by Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any substance designated pursuant to Section 311(b)(2)(A) of the Clean Water Act (CWA); any hazardous waste having the characteristics identified under or listed pursuant to Section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress); any toxic pollutant listed under Section 307(a) of the CWA; or any imminently hazardous chemical substance or mixture with respect to which the United States Environmental Protection Agency has taken action pursuant to Section 7 of the Toxic Substances Control Act;

    b. Hazardous substances that include any liquid, solid, gas, or sludge, including any material, substance, product, commodity, or waste, regardless of quantity, that exhibits any of the physical, chemical, or biological properties described in WAC 173-303-090, 173-303-102, or 173-303-103.

78. “High-intensity land use” means land uses consisting of commercial, urban, industrial, institutional, retail, residential with more than one unit per acre, agricultural (dairies, nurseries, raising and harvesting crops, requiring annual tilling, raising and maintaining animals), high-intensity recreation (golf courses, ball fields), and hobby farms.

79. “Heavy equipment” means such construction machinery as backhoes, treaded tractors, dump trucks, and front-end loaders.

80. “Hydraulic project approval (HPA)” means a permit issued by the state of Washington’s Department of Fish and Wildlife for modification to waters of the state in accordance with Chapter 75.20 RCW.

81. “Impervious surface area” means any non-vertical surface artificially covered or hardened so as to prevent or impede the percolation of water into the soil mantle including, but not limited to, roof tops, swimming pools, paved or graveled roads and walkways or parking areas, and excluding landscaping and surface water retention/detention facilities.

82. “In-stream structures” function for the impoundment, diversion, or use of water for hydroelectric generation and transmission (including both public and private facilities), flood control, irrigation, water supply (both domestic and industrial), recreation, or fisheries enhancement

83. “Isolated wetland” means those wetlands and their buffers that are outside of the following critical areas and their buffers, where applicable: 100-year floodplain, lake, river, stream, or wetland. Isolated wetlands have no contiguous hydric soil or hydrophytic vegetation between the wetland and any surface water.

84. “Landslide” means episodic down slope movement of a mass of soil or rock that includes, but is not limited to, rock falls, slumps, mudflows, and earth flows.

85. “Landslide hazard areas” means areas that are potentially subject to risk of mass movement due to a combination of geologic, topographic, and hydrologic factors.

86. “Low-intensity land use” includes, but is not limited to, forestry and open space (such as passive recreation and natural resources preservation).

87. “Lowest floor” means the lowest enclosed area (including basement) of a structure. An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building’s lowest floor; provided, that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirements of these critical areas regulations found in NBMC 14.20.580 (i.e., provided there are adequate flood ventilation openings).

88. “Manufactured home” means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle.”

89. “Manufactured home park or subdivision” means a parcel (or contiguous parcels) of land divided into two or more parcels intended for the sale or rent of manufactured homes. A manufactured home park or subdivision shall include the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

90. "May" means the action is acceptable, provided it conforms to the provisions of this chapter.

91. “Minor utility project” means the placement of a utility pole, street sign, anchor, vault, or other small component of a utility facility, where the disturbance of an area is less than 75 square feet.

92. “Mitigation sequencing” means the process of avoiding, reducing, or compensating for the adverse environmental impact(s) of a proposal, including the following actions, listed in the order of preference, a. being the most preferred:

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

    b. 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;

    c. rectifying the impact by repairing, rehabilitating, or restoring the affected environment;

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

e. compensating for the impact by replacing, enhancing, or providing substitute resources or environments; and

f. monitoring the impact and the compensation projects and taking appropriate corrective measures.

93. “Mobile home” means a structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. A mobile home is also included within the definition of manufactured homes; however, the standards relating to mobile homes shall take precedence over the standards relating to manufactured homes where such standards are more stringent.

94. “Moderate-intensity land use” includes, but is not limited to, residential at a density of one unit per acre or less, moderate intensity open space (parks), agriculture (moderate intensity land uses such as orchards and hay fields).

95. “Monitoring” means the collection of data by various methods for the purpose of understanding natural systems and features, evaluating the impact of development proposals on such systems, and/or assessing the performance of mitigation measures imposed as conditions of development.

96. "Must" means a mandate; the action is required.

97. “Native growth protection easement (NGPE)” means an easement granted to the city of North Bend for the protection of native vegetation within a critical area or its associated buffer.

98. “Native vegetation” means plant species that are indigenous to the region.

99. “New construction” means structures for which the start of construction commenced on or after the effective date of the ordinance codified in this SMP.

100. "Non-water-oriented uses" means those uses that are not water-dependent, water-related, or water-enjoyment.

101. “Normal maintenance” means those usual acts that are necessary to prevent a property’s decline, lapse, or cessation from a lawfully established condition.

102. “Normal repair” means to restore a structure or development to a state comparable to its original condition including, but not limited to, its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse impacts on shoreline resources or environment. Replacement of a structure or development may be authorized as repair where 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 impacts on shoreline resources or environment.

103. "Ordinary high water mark (OHWM)" means that mark 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, in respect to vegetation as that condition exists on June 1, 1971, as it

may naturally change thereafter, or as it may change thereafter in accordance with permits issued by a local government or the department. Where the OHWM cannot be found, it shall be the line of mean high water. For braided streams, the OHWM is found on the banks forming the outer limits of the depression within which the braiding occurs.

104. “Practical alternative” means an alternative that is available and capable of being carried out after taking into consideration cost, existing technology, and logistics in light of overall project purposes, and having less impact on critical areas.

105. “Primitive trail” means unimproved, unpaved but physically defined pathway for non-motorized movement.

106. "Priority habitat" means a habitat type with unique or significant value to one or more species. An area classified and mapped as priority habitat must have one or more of the following attributes: • Comparatively high fish or wildlife density; • Comparatively high fish or wildlife species diversity; • Fish spawning habitat; • Important wildlife habitat; • Important fish or wildlife seasonal range; • Important fish or wildlife movement corridor; • Rearing and foraging habitat; • Refugia habitat; • Limited availability; • High vulnerability to habitat alteration; • Unique or dependent species; or. A priority habitat may be described by a unique vegetation type or by a dominant plant species that is of primary importance to fish and wildlife. A priority habitat may also be described by a successional stage (such as, old growth and mature forests). Alternatively, a priority habitat may consist of a specific habitat element (such as caves, snags) of key value to fish and wildlife. A priority habitat may contain priority and/or non-priority fish and wildlife.

107. "Priority species" means 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.

    a. Criterion 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 (POL-M-6001) for possible listing as endangered, threatened, or sensitive according to the process and criteria defined in WAC 232-12-297.

    b. Criterion 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.

    c. Criterion 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.

    d. Criterion 4. Species listed under the federal Endangered Species Act as either proposed, threatened, or endangered.

108. "Provisions" means policies, regulations, standards, guideline criteria or environment designations.

109. "Public Access" means both physical and visual access. Examples are listed below. Desired locations for North Bend's visual and physical access are along the South and Middle Fork Snoqualmie Rivers.

    a. Visual Access. Visual public access may consist of view corridors, viewpoints, or other means of visual approach to public waters.

    b. Physical Access. Physical public access may consist of a dedication of land or easement and a physical improvement in the form of a walkway, trail, bikeway, park, boat or canoe and kayak launching ramp, dock area, view platform, or other area serving as a means of physical approach to public waters.

110. "Public agency" means every city, county, state, or federal office, every officer, every institution, whether educational, correctional, or other, and every department, division, board, and commission that provides services or recommendations to the public or other such agencies.

111. "Public utility" means a public service corporation performing some public service subject to special governmental regulations, or a governmental agency performing similar public services, either of which are paid for directly by the recipients thereof. Such services shall include, but are not limited to, water supply, electric power, gas, and transportation for persons and freight.

112. "Qualified professional" means a person with experience and training in the pertinent discipline, and who is a qualified expert with expertise appropriate for the relevant critical area or shoreline subject. A qualified professional must have obtained a B.S., B.A. or equivalent degree or certification in biology, engineering, environmental studies, fisheries, geomorphology, landscape architecture, forestry or related field, and two years of related work experience.

    a. A qualified professional for wildlife, habitats or wetlands must have a degree in biology, zoology, ecology, fisheries, or related field, and professional experience in Washington State.

    b. A qualified professional for a geological hazard must be a professional engineer or geologist, licensed in the state of Washington.

    c. A qualified professional for critical aquifer recharge areas means a hydrogeologist, geologist, engineer, or other scientist with experience in preparing hydrogeologic assessments.

    d. A qualified professional with flood and CMZ expertise must be a hydrologist or fluvial geomorphologist.

    e. A qualified professional for vegetation management must be a registered landscape architect, certified arborist, biologist, or professional forester with a corresponding degree or certification.

113. "Recreational development" means commercial and public facilities designed and used to provide recreational opportunities to the public. Commercial recreational development should be consistent with commercial development defined herein.

114. "Recreational vehicle" a vehicle that is built on s ingle chassis; and 400 square feet or less when measured at the largest horizontal projection; and designed to be self-propelled or permanently towable by an automobile or light duty truck; and designated primarily for use as temporary living quarters for recreational, camping, travel, or seasonal use, not as a permanent dwelling.

115. "Residential development" entails one or more buildings, structures, lots, parcels or portions thereof that are designed, used or intended to be used as a place of abode for human beings. These include single-family residences, residential subdivisions, short residential subdivisions,

attached dwellings, and all accessory uses or structures normally associated with residential uses. Accessory residential uses include, but are not limited to, garages, sheds, tennis courts, swimming pools, parking areas, fences, cabanas, saunas and guest cottages. Hotels, motels, dormitories or any other type of overnight or transient housing are excluded from the residential category and must be considered commercial uses depending on project characteristics.

116. "Restore", "Restoration" or "ecological restoration" means the reestablishment or upgrading of impaired ecological shoreline processes or functions. 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.

117. “Riparian habitat” means areas adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems that mutually influence each other.

118. “Salmonid” means a member of the fish family Salmonidae. In King County, Chinook, coho, chum, sockeye, and pink salmon; cutthroat, brook, brown, rainbow, and steelhead trout; kokanee; and native char (bull trout and Dolly Varden).

119. “Section 404 Permit” means a permit issued by the Army Corp of Engineers for the placement of dredge or fill material waterward of the OHWM or clearing in waters of the United States, including wetlands, in accordance with 33 United States Code (USC) Section 1344.

120. “Seismic hazard areas” means areas that are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, or soil liquefaction.

121. "Shall" means a mandate; the action must be done.

122. "Shoreline areas" and "shoreline jurisdiction" means all "shorelines of the state" and "shorelands" as defined in RCW 90.58.030.

123. "Shoreline master program" or "master program" means the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals, and standards developed in accordance with the policies enunciated in RCW 90.58.020. As provided in RCW 36.70A.480, the goals and policies of a shoreline master program for a county or city approved under chapter 90.58 RCW shall be considered an element of the county or city's comprehensive plan. All other portions of the shoreline master program for a county or city adopted under chapter 90.58 RCW, including use regulations, shall be considered a part of the county or city's development regulations.

124. "Shoreline modifications" means 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. They can include other actions, such as clearing, grading, or application of chemicals.

125. “Shoreline stabilization” means actions taken to address erosion impacts to property and dwellings, businesses, or structures caused by natural processes, such as current, flood, tides, wind, or wave action. These actions include structural and nonstructural methods. Nonstructural methods include building setbacks, relocation of the structure to be

protected, ground water management, planning and regulatory measures to avoid the need for structural stabilization.

126. "Should" means that the particular action is required unless there is a demonstrated, compelling reason, based on policy of the Shoreline Management Act and this chapter, against taking the action.

127. “Significant tree” means any evergreen tree, other than holly, of at least 15 inches DSH and any deciduous tree, other than poplar trees, at least 12 inches DSH. Poplar trees, holly, and other invasive trees of any size are not considered significant trees.

128. "Significant vegetation removal" means 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 on 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.

129. “Snag” means the remaining trunk of a dying, diseased, or dangerous tree that is reduced in height and stripped of all live branches

130. “Special flood hazard area (SFHA)” means an area subject to a base or 100-year flood; areas of special flood hazard are shown on a flood hazard boundary map or flood insurance rate map as Zone A, AO, A1-30, AE, A99, AH.

131. “Species and habitats of local importance” means those species that may not be endangered, threatened, or critical from a state-wide perspective, but are of local concern due to their population status, sensitivity to habitat manipulation, or other educational, cultural, or historic attributes. These species may be priority habits, priority species, and those habitats and species identified in the critical areas code as having local importance (e.g., elk).

132. “Species, threatened and endangered” means those native species that are listed by the State Department of Fish and Wildlife pursuant to RCW 77.12.070 as threatened (WAC 232-12-011) or endangered (WAC 232-12-014), or that are listed as threatened or endangered under the federal Endangered Species Act (16 U.S.C. 1533).

133. “Start of construction” means and includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit issuance date. For cumulative tracking, the permit may extend beyond the specified time frame to the time of permit completion. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

134. “Steep slopes” means those slopes (excluding city-approved geotechnical engineered slopes) 40 percent or steeper within a vertical elevation change of at least 10 feet. A slope is defined by establishing its toe and top and is measured by averaging the inclination over at least 10 feet of vertical relief.

135. “Stream” means any portion of a channel, bed, bank, or bottom waterward of the ordinary high water line of waters of the state, including areas in which fish may spawn, reside, or pass, and tributary waters with defined bed or banks, which influence the quality of fish habitat downstream. This includes watercourses which flow on an intermittent basis or which fluctuate in level during the year and applies to the entire bed of such watercourse whether or not the water is at peak level. This definition does not include irrigation ditches, canals, storm water run-off devices, or other entirely artificial watercourses, except where they exist in a natural watercourse that has been altered by humans.

136. "Structure" means a permanent or temporary edifice or building, or any piece of work artificially built or composed of parts joined together in some definite manner, whether installed on, above, or below the surface of the ground or water.

137. “Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the assessed value of the structure before the damage occurred.

138. “Substantial improvement” means any repair, reconstruction, rehabilitation, addition, or improvement of a building or structure, the cost of which exceeds 50 percent of the assessed value of the structure before the improvement or repair is started. This term includes structures that have incurred “substantial damage,” regardless of the actual repair work performed. The term can exclude:

    a. Any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement or building official and are the minimum necessary to assure safe living conditions; or

    b. Any alteration of a historic structure; provided, that the alteration will not preclude the structure’s continued designation as a historic structure.

139. "Substantially degrade" means to cause significant ecological impact.

140. “Thinning” means the evenly spaced noncommercial removal of up to 40 percent of trees and woody shrubs.

141. “Topping” means the severing of main trunks or stems of vegetation at any place above 25 percent of the vegetation height.

142. “Transportation facilities” are those structures and developments that provide for the movement of people, goods and services. These include roads and highways, railroad facilities, bridges, parking facilities, bicycle paths, trails and other related facilities.

143. “Tree removal” means the removal of a tree, through either direct or indirect actions, including but not limited to: (a) clearing, damaging or poisoning resulting in an unhealthy or dead tree; (b) removal of at least half of the live crown; or (c) damage to roots or trunk that is likely to destroy the tree’s structural integrity.

144. “Trees” means any living woody plant characterized by one main stem or trunk and many branches and having a diameter of four inches or more measured 24 inches above ground level

145. “Unavoidable” means adverse impacts that remain after all appropriate and practicable avoidance and minimization have been achieved.

146. “Understory” means the vegetation layer of a forest that includes shrubs, herbs, grasses, and grass-like plants, but excludes trees.

147. “Utility” means a service and/or facility that produces, transmits, carries, stores, processes, or disposes of electrical power, gas, potable water, stormwater, communications (including, but not limited to, telephone and cable), sewage, oil, and the like.

148. “Vegetation” means plant life growing below, at, and above the soil surface.

149. “Vegetation alteration” means any clearing, grading, cutting, topping, limbing, or pruning of vegetation.

150. "Water-dependent use" means 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.

151. "Water-enjoyment use" means a recreational use or other use that facilitates 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 location, design, and operation ensures 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 fosters shoreline enjoyment.

152. "Water-oriented use" means a use that is water-dependent, water-related, or water-enjoyment, or a combination of such uses.

153. "Water quality" means the physical characteristics of water within shoreline jurisdiction, including water quantity, hydrological, physical, chemical, aesthetic, recreation-related, and biological characteristics. Where used in this chapter, the term "water quantity" refers only to development and uses regulated under this chapter and affecting water quantity, such as impermeable surfaces and storm water handling practices. Water quantity, for purposes of this chapter, does not mean the withdrawal of ground water or diversion of surface water pursuant to RCW 90.03.250 through 90.03.340.

154. "Water-related use" means a use or portion of a use which is not intrinsically dependent on a waterfront location but whose economic viability is dependent upon a waterfront location because:

    a. The use has 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

    b. 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.

155. "Water resources inventory area (WRIA)" means one of 62 watersheds in the state of Washington, each composed of the drainage areas of a stream or streams, as established in Chapter 173-500 WAC as it existed on January 1, 1997.

156. "Weir" means a structure generally built perpendicular to the shoreline for the purpose of diverting water or trapping sediment or other moving objects transported by water.

157. "Wetlands" are areas that are inundated or saturated by surface 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 to mitigate the conversion of wetlands.

14.20.200 Shoreline Jurisdiction

A. As defined by the Shoreline Management Act of 1971, shorelines include certain waters of the state plus their associated "shorelands." The city of North Bend's shoreline jurisdiction includes the following:

   1) shoreline waterbody
   2) OHWM plus upland 200 feet,
   3) floodways,
   4) up to 200 feet of floodplain contiguous with floodways, and
   5) associated wetlands.

B. The city's regulated shorelines include:

   1) The Middle Fork Snoqualmie River throughout the city limits; and
   2) The South Fork Snoqualmie River throughout the city limits.

C. The city has pre-designated the portion of the South Fork Snoqualmie River in the UGA outside the city limits, which is effective upon annexation.

Article II – Shoreline Environment Designations

14.20.210 Natural

A. Purpose: The purpose of the "Natural" environment is to protect those shoreline areas that are relatively free of human influence or that include intact or minimally degraded shoreline functions intolerant of human use. These systems require that only very low-intensity uses be allowed in order to maintain the ecological functions and ecosystem-wide processes.

B. Designation Criteria: Natural environment designation should be assigned to shoreline areas if any of the following characteristics apply:

1) The shoreline is ecologically intact and therefore currently performing an important, irreplaceable function or ecosystem-wide process that would be damaged by human activity;

2) The shoreline is considered to represent ecosystems and geologic types that are of particular scientific and educational interest; or

3) The shoreline is unable to support new development or uses without significant adverse impacts on ecological functions or risk to human safety.

C. Management Policies:

1) Any use or development activity that would degrade the ecological functions or adversely alter the natural character of the shoreline area should be severely limited or prohibited.

2) Development activity in the Natural environment should only be permitted when no suitable alternative site is available on the subject property outside of shoreline jurisdiction.

3) The following new uses should not be allowed in the Natural environment:

a. Commercial uses.

b. Industrial uses.

c. Non-water-oriented recreation.

d. Roads, utility corridors, and parking areas that can be located outside of Natural-designated shorelines.

4) Single-family residential development may be allowed as a conditional use within the Natural environment if the density and intensity of such use is limited as necessary to protect ecological functions and be consistent with the purpose of the environment.

5) Commercial forestry may be allowed as a conditional use provided it meets the conditions of the State Forest Practices Act and its implementing rules, and is conducted in a manner consistent with the purpose of this environment designation.

6) Development, when feasible, should be designed and located to preclude the need for shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications.

a. Development activity or land surface modification that would reduce the capability of vegetation to perform normal ecological functions should be prohibited.

b. Subdivision of property in a configuration that, to achieve its intended purpose, will require significant vegetation removal or shoreline modification that adversely impacts ecological functions should not be allowed. Each new parcel must be able to support its intended development

without significant adverse ecological impacts on the shoreline ecological functions.

7) Limited access may be permitted for scientific, historical, cultural, educational and low-intensity water-oriented recreational purposes, provided there are no significant adverse ecological impacts.

14.20.220 Urban Conservancy

A. Purpose: The purpose of the "Urban Conservancy" environment is to protect and restore ecological functions of open space, parks, floodplains and floodways, other critical areas, and other undeveloped areas with low levels of alteration, while allowing a variety of compatible uses. The Urban Conservancy environment contains two sub-environments - Urban Conservancy-Residential for areas with moderate to high levels of ecological function that can or do appropriately accommodate shoreline priority residential uses, or Urban Conservancy-Recreation/Open Space for areas that are highly valued for recreation and public access, contain critical areas such as wetlands or floodplains, and/or have low levels of alteration corresponding to moderate to high ecological function.

B. Urban Conservancy – Residential Designation Criteria: This designation is appropriate for lands containing or planned for low-density single-family uses, which:

1) have potential for ecological restoration;
2) Retain important ecological functions, even though partially developed; and/or
3) Have potential for development that is compatible with ecological restoration.

C. Urban Conservancy-Recreation/Open Space Designation Criteria: This designation is appropriate for lands:

1) Containing or suitable for parks and recreation facilities or other water-enjoyment uses;
2) Suitable for water-related uses;
3) Designated as open space, floodplain or other sensitive areas that should not be more intensively developed;
4) Having potential for ecological restoration;
5) Retaining important ecological functions, even though partially developed; or
6) Having potential for development that is compatible with ecological restoration.

D. Management Policies: All Urban Conservancy environments should be managed consistent with the following policies:

1) Allowed uses should be those that preserve the natural character of the area and/or promote preservation and restoration within critical areas and public open spaces either directly or over the long term.
2) Uses that result in restoration of ecological functions should be allowed if the use is otherwise compatible with the purpose of the environment and the setting.
3) Restoration of shoreline ecological functions should be a priority.

4) Development, when feasible, should be designed to ensure that any necessary shoreline stabilization, flood control measures, native vegetation removal, or other shoreline modifications do not result in a net loss of shoreline ecological function or further degrade other shoreline values.

5) Public access and public recreation objectives should be implemented, except on existing single-family lots, whenever feasible and significant adverse ecological impacts can be mitigated.

6) Recognize that single-family residential development is a preferred use, and is a priority use when developed in a manner consistent with control of pollution and prevention of damage to the natural environment.

7) Water-oriented uses should be given priority over non-water-oriented uses.

8) Commercial and industrial uses, other than limited commercial activities conducted accessory to a public park, should be prohibited.

14.20.230 Commercial Conservancy

A. Purpose: The purpose of the "Commercial Conservancy" environment is to accommodate commercial and employment park land uses, such as office, retail, transportation, warehouse, manufacturing, and mixed-use developments, together with appropriate accessory uses, while protecting the existing ecological functions of floodways, floodplains and other critical areas.

B. Designation Criteria: Assign a Commercial Conservancy environment designation to shoreline areas within city limits and urban growth areas if they currently support commercial, employment park, or mixed-use developments, are suitable and planned for such uses, or are located near the core of Downtown North Bend. This environment designation recognizes that in North Bend's shoreline jurisdiction, undeveloped lands planned for such uses are typically constrained by critical areas and the governing regulations located in Article V – Critical Areas.

C. Management Policies:

1) Allowed urban uses should be sited outside of critical areas and their buffers and should be preferentially located to minimize alteration of other vegetated areas consistent with the Commercial Conservancy development standards and the Shoreline Vegetation Conservation regulations.

2) Give first priority to water-dependent uses, and second to water-related and water-enjoyment uses.

3) Non-water-oriented uses may be allowed as part of an existing or mixed-use development, where they do not conflict with or limit opportunities for water-oriented uses, on sites where there is no direct access to the shoreline, or when associated with public access or ecological restoration.

4) Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced consistent with the Public Access regulations in NBMC 14.20.320.

5) Aesthetic objectives should be implemented by means such as sign control regulations, appropriate development siting, screening and architectural standards, and maintenance of natural vegetative buffers where they exist.

6) Full utilization of existing urban areas should be achieved before further expansion of the Commercial Conservancy designation is allowed.

7) No net loss of shoreline ecological functions as a result of new development should be assured by application of SMP policies and regulations.

8) Where applicable, new development shall include environmental cleanup and restoration of the shoreline to comply in accordance with any relevant state and federal law.

14.20.240 Shoreline Residential

A. Purpose: The purpose of the Shoreline Residential environment is to accommodate current and planned higher-density residential development and appurtenant structures, as well as appropriate public access and recreational uses, in areas suited for urban densities.

B. Designation Criteria: Assign a Shoreline Residential environment designation to properties in the city limits or urban growth areas with predominantly single-family or multifamily residential development or that are planned and platted for residential development.

C. Management Policies:

1) Standards for buffers, lot coverage limitations, shoreline stabilization, vegetation conservation, critical area protection, and water quality should mitigate adverse impacts on maintain shoreline ecological functions.

2) Access, utilities, and public services should be available and adequate to serve existing needs and/or planned future development.

3) Visual and physical access should be implemented whenever feasible and adverse ecological impacts can be avoided. Continuous public access along the shoreline should be provided, preserved or enhanced.

4) Water-dependent recreational uses should be permitted.

5) Limited water-oriented uses which depend on or benefit from a shoreline location should also be permitted provided the underlying zoning classifications permit such uses.

14.20.250 Aquatic

A. Purpose: The purpose of the "Aquatic" environment is to protect, restore, and manage the unique characteristics and resources of the areas waterward of the OHWM.

B. Designation Criteria: Assign an Aquatic environment designation to lands waterward of the OHWM.

C. Management Policies:

1) Provisions for the management of the Aquatic environment should be directed towards maintaining and restoring shoreline ecological functions.

2) Shoreline uses and modifications should be designed and managed to prevent degradation of water quality and alteration of natural hydrographic conditions.

3) All developments and uses should be located and designed to protect public recreational uses of the water; to minimize adverse visual impacts; and to allow for the safe, unobstructed passage of fish and wildlife, particularly those species dependent on migration.

4) New overwater structures for public access and public infrastructure are permitted, provided they are the minimum size necessary to support the structure's intended use and will not preclude attainment of ecological restoration.

5) Underwater pipelines and cables should not be permitted unless demonstrated that there is no feasible alternative location based on an analysis of technology and system efficiency, and that the adverse environmental impacts are not significant or can be shown to be less than the impact of upland alternatives.

6) Uses that adversely impact the ecological functions of critical freshwater habitats should not be allowed except where necessary to achieve the objectives of RCW 90.58.020, and then only when their impacts are mitigated according to NBMC 14.20.290.B as necessary to assure no net loss of ecological functions.

14.20.260 Use Environment Interpretation

A. Any areas within shoreline jurisdiction that are not mapped and/or designated due to minor mapping inaccuracies in the lateral extent of shoreline jurisdiction from the shoreline waterbody related to site-specific surveys of OHWM are automatically assigned the category of the contiguous waterward shoreline environment designation provided the error does not extend onto a new parcel.

B. All other areas that were not mapped in shoreline jurisdiction, but which do meet criteria in NBMC 14.20.200, Shoreline Jurisdiction, shall be assigned an Urban Conservancy – Recreation/Open Space designation until the shoreline can be redesignated through a SMP Amendment.

C. Property shown in shoreline jurisdiction that does not meet the applicability criteria in NBMC 14.20.200, Shoreline Jurisdiction, shall not be subject to the requirements of this SMP. The actual location of the OHWM must be determined at the time a development is proposed.

D. In the event of an environment designation mapping error, the Shoreline Administrator shall use the environment designation criteria contained in NBMC 14.20.210 through 14.20.250 to establish the appropriate shoreline environment designation. Appeals of such interpretations may be filed pursuant to SMP Article VII, Administration and Enforcement.

14.20.270 Shoreline Use and Modification Matrix

A. Table 14.20.270 indicates which shoreline activities, uses, developments and modifications may be allowed or are prohibited in shoreline jurisdiction within each shoreline environment designation. Activities, uses, developments, and modifications are classified as follows:

1) "Permitted Uses" require a Shoreline Substantial Development Permit or a Shoreline Exemption.
2) "Conditional Uses" require a Shoreline Conditional Use Permit per NBMC 14.20.680.
3) "Prohibited" activities, uses, developments, and modifications are not allowed.

Article III – General Regulations and Article IV – Use-Specific and Modification Regulations shall be consulted for additional limitations.

B. Accessory uses shall be subject to the same shoreline permit process as their primary use.

C. Where there is a conflict between the chart and the written provisions in this SMP, the written provisions shall control.

D. Authorized uses and modifications shall be allowed only in shoreline jurisdiction where the underlying zoning allows for it and are subject to the policies and regulations of this SMP.

E. A use is considered unclassified when it is not listed in Table 14.20.270, Article III – General Regulations, or Article IV – Use-Specific and Modification Regulations. Any proposed unclassified use shall be classified by the Shoreline Administrator as permitted, conditional, or prohibited, based on the listed use to which the proposed use is most similar. If the Shoreline Administrator determines that the proposed use is not similar to any use in this SMP, the proposed use shall be considered prohibited.

F. If any part of a proposed activity, use, modification or development is not eligible for exemption per NBMC 14.20.660, then a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit shall be required for the entire proposed development project.

G. When a specific use or modification extends into the Aquatic environment and an abutting upland environment without clear separation (e.g., private moorage facility, shoreline stabilization), the most restrictive permit process shall apply to that use or modification.

H. Shoreline and critical areas buffers found in Article V of this SMP apply to all uses and modifications unless stated otherwise in the regulations.

I. None of the allowed uses could be conducted in the floodway in any environment designation, except as allowed by 14.20.580, Floodplain Management.

Table 14.20.270. Shoreline Use and Modification Matrix

Use/Modification	Urban Conservancy - Residential	Urban Conservancy – Recreation/Open Space	Shoreline Residential	Natural	Commercial Conservancy	Aquatic
Resource Uses						
Agriculture	P	P	P	X[1]	X	X

Use/Modification	Urban Conservancy - Residential	Urban Conservancy – Recreation/Open Space	Shoreline Residential	Natural	Commercial Conservancy	Aquatic
Aquaculture, Non-Commercial	X	C	X	X	P	P
Forest Practices	X	C	X	X	C	NA
Mining	X	C	X	X	X	X
Boating Facilities						
Boat launch (motorized boats)	X	X	X	X	X	X
Boat launch (non-motorized boat - canoe / kayak)	P	P	P	X	P	P
Marina	X	X	X	X	X	X
Community dock	X	X	X	X	X	X
Commercial Development[2]						
Automotive/vehicular	X	X	X	X	X	X
Bed & breakfast	P	P	P	X	P	X
Concession stand	X	P[3]	X	X	P	X
Dry land boat storage	X	X	X	X	X	X
Entertainment or cultural facility	P	P	P	X	P	X
Hotel/motel	X	X	X	X	P	X
Mixed Use Commercial and Residential	X	X	C	X	P	X
Mixed-Use Water-Dependent and Non-water-oriented	X	C	P	X	P	X
Office Use	X	X	X	X	P	X
Repair and service of boat and boat motors	X	X	X	X	X	X
Restaurant	X	P[4]	X	X	P	X
Retail establishment	X	C[4]	X	X	P	X
Retail sale of new or used non-motorized boats including electric motor boats (sales or rental)	X	P	X	X	P	X
Dredging Activities						
Dredging	NA	NA	NA	NA	NA	P
Dredge Material Disposal	X	C[12]	C[12]	X	C[12]	C[12]
Fill						

Use/Modification	Urban Conservancy - Residential	Urban Conservancy – Recreation/Open Space	Shoreline Residential	Natural	Commercial Conservancy	Aquatic
Waterward of OHWM and in floodways	C	C	C	C	C	C[4]
Between upland edge of floodway and upland edge of floodplain	C[5]	C[5]	C[5]	C[5]	P	NA
Other upland fill	P	P	P	C[5]	P	NA
Industry						
Water-oriented						
Manufacturing, distribution, storage, and warehousing	X	X	X	X	P	C
Non-water-oriented						
Manufacturing, distribution, storage, and warehousing	X	X	X	X	C	X
In-water Modifications						
Breakwaters	X	X	X	X	X	X
Groins and weirs	C[5]	C[5]	C[5]	C[5]	C[5]	C[5]
In-Stream Structures	NA	NA	NA	NA	NA	C[5]
Private Moorage Facilities	X	X	X	X	X	X
Recreational Development						
Water-oriented						
Public parks / recreation and accessory uses	P	P	P	P[9]	P	P
Private parks / recreation and accessory uses	P	P	P	P[9]	P	P
Non-water-oriented						
Public parks / recreation and accessory uses	X	C[6]	P	C[6]	P	X
Private parks / recreation and accessory uses	X	C	C	X	C	X
Residential Development	P	C	P	C	P	X
Shoreline Habitat and Natural Systems Enhancement Projects	P	P	P	P	P	P

Use/Modification	Urban Conservancy - Residential	Urban Conservancy – Recreation/Open Space	Shoreline Residential	Natural	Commercial Conservancy	Aquatic
Flood Control and Shoreline Stabilization						
Flood Control						
Modification of existing levees and flood control facilities, including replacement landward of existing location	P	P	P	P	P	P
New levees and flood control facilities	P	C	P	C[10]	P	C
Shoreline Stabilization						
New						
Hard	C	C	C	X	C	C
Soft	P	P	P	C	P	P
Replacement: hard replaced with hard	C	C	P	C	P	C
Replacement: hard replaced with soft	P	P	P	P	P	P
Transportation						
New bridges	C	P	P	X	P	P
New railroads	C	C	C	X	C	NA
New roads	P	C[13]	P	X	P	NA
New trails	P	P	P	P[11]	P	P
New parking, accessory	Takes permit type of primary use					
New parking, primary	X	X	X	X	X	X
Existing bridges, trails, roads, and parking facilities: maintenance, improvement or expansion[8]	P	P	P	P	P	P
Utilities	P/C[7]	P/C[7]	P	C	P	P

Notes for Table 14.20.270:

1. Permitted in those areas east of the Snoqualmie Valley Trail for Meadowbrook Farm and established areas of Tollgate Farm, consistent with the Tollgate and Meadowbrook Farm Master Plans.

2. Non-water-oriented commercial uses are allowed consistent with shoreline buffer requirements and NBMC 14.20.380.A if such use provides significant public benefit and implements objectives of the Shoreline Management Act.

3. Only when accessory or associated use within a public park or private recreation facility.

4. Conditional Use Permit if not accessory to a public park, public recreation facility, or private

Use/Modification	Urban Conservancy - Residential	Urban Conservancy – Recreation/Open Space	Shoreline Residential	Natural	Commercial Conservancy	Aquatic

recreation facility open to the public

5. Structures or modifications installed to protect or restore ecological functions may be permitted with a Shoreline Substantial Development Permit or Exemption.

6. For projects in Tollgate Farm, Meadowbrook Farm, and other publicly owned parks or landward of a public roadway, these uses shall be allowed with a Substantial Development Permit or Shoreline Exemption provided projects comply with mitigation sequencing, critical areas and vegetation conservation regulations of this SMP.

7. Permitted if accessory; Shoreline Conditional Use Permit if primary use.

8. Expansion to support existing and proposed shoreline uses allowed, provided the expansion is located to have the least possible adverse effect on ecological function. When feasible, expansions should be located on the landward side of the existing corridor or outside of critical areas, consistent with the SMP. Other expansions shall be permitted as new facilities.

9. In the Natural environment, only passive water-oriented recreation is allowed. Sites with fragile and unique shoreline conditions, such as high-quality wetlands and wildlife habitats, shall be used only for non-intensive recreation activities, such as trails, viewpoints, interpretive signage, and similar passive and low-impact facilities that result in no net loss of shoreline ecological function, and do not require the construction and placement of permanent structures.

10. Permitted as a conditional use only when the Shoreline Conditional Use Permit review criteria are met and when no other alternative locations are feasible.

11. New trails in the Natural environment limited to primitive trails a maximum of 5 feet wide with the use of permeable surfaces as approved by the Shoreline Administrator.

12. Disposal of dredge material on shorelands or wetlands within a river's channel migration zone shall require a Shoreline Conditional Use Permit in those limited instances when it is allowed. This provision is not intended to address discharge of dredge material into the flowing current of the river or in deep water within the channel where it does not substantially affect the geohydrologic character of the channel migration zone.

13. New roads may be permitted in the outer 10 percent in the Urban Conservancy – Recreation/Open Space environment if no other alternative locations are feasible.

14.20.280 Development Standards

A. To preserve the existing and planned character of the shoreline consistent with the purposes of the shoreline environment designations, development standards are provided in Table 14.20.280. These standards apply to all use and modification unless indicated otherwise. In addition, shoreline developments shall comply with all other dimensional requirements of the North Bend Municipal Code.

B. When a development or use is proposed that does not comply with the dimensional performance standards of this SMP not otherwise allowed by administrative reduction or administrative modification, such development or use can only be authorized by approval of a Shoreline Variance.

Table 14.20.280. Development Standards Matrix

Standard	Urban Conservancy - Residential	Urban Conservancy – Recreation/ Open Space	Shoreline Residential	Natural	Commercial Conservancy	Aquatic
Lot width, minimum feet – residential	60	80	40	150	40	NA
Side yard setbacks	10	10	5	30	5	NA
Building Height: maximum in feet	35	35	35	35	35 ft 45 ft[1] (for buildings or structures in DC) 55 ft[2] (for hotels in IMU zone)	NA
Impervious Surface Cover	>.5-acre parcel 35% <.5-acre parcel 50%	15	55%	5	Middle Fork: 65% South Fork: 60%[3]	NA
Density	See NBMC 18.10.040 for density in underlying zoning classifications.					
Shoreline buffers	See NBMC 14.20.550(C) Shoreline buffers apply to all new or expanded uses, activities and modifications, unless otherwise indicated in the regulations.					

Notes for Table 14.20.280:

1. According to NBMC 18.10.040 table and footnote (13)c "Building Height":

Building height within 25 feet of a district having a lower height limit shall not exceed the median difference of the allowable height limits of the two districts.

DC Zone. Maximum building height from Sydney Avenue North to Downing Avenue North, south of West Second Street (excluding the historic district) shall be 45 feet. Maximum building height, all other areas, shall be 35 feet

And also per RCW 90.58.320 building or structure of more than thirty-five feet above average grade level need to document that it will not obstruct the view of a substantial number of adjoining residences.

2. According to NBMC 18.10.050, 2.17, "Hotel and Motel": Commercial building height, in the IMU zone, may be increased to 55 feet for a hotel subject to strict compliance with the performance standards in the NBMC and the commercial/mixed use/industrial design standards and guidelines set forth in NBMC 18.34.050

And also per RCW 90.58.320 building or structure of more than thirty-five feet above average grade level need to document that it will not obstruct the view of a substantial number of adjoining residences.

3. The presence of floodways and other critical areas governed by Article V – Critical Areas of this SMP shall further restrict impervious surface.

Article III – General Regulations

14.20.290 Environmental Protection

A. All project proposals, including those for which a Shoreline Substantial Development Permit is not required, shall comply with Chapter 43.21C RCW, the Washington State Environmental Policy Act.

B. Applicants shall apply the following sequence of steps in order of priority to avoid or minimize significant adverse effects and significant ecological impacts, with1) being top priority:

1) Avoiding the adverse impact altogether by not taking a certain action or parts of an action;

2) Minimizing adverse 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;

3) Rectifying the adverse impact by repairing, rehabilitating, or restoring the affected environment to the conditions existing at the time of the initiation of the project;

4) Reducing or eliminating the adverse impact over time by preservation and maintenance operations;

5) Compensating for the adverse impact by replacing, enhancing, or providing substitute resources or environments; and

6) Monitoring the adverse impact and the compensation projects and taking appropriate corrective measures.

C. Projects that cause significant adverse ecological impacts, as defined in NBMC 14.20.190, Definitions, are not allowed unless mitigated according to B., above, to avoid reduction or damage to ecosystem-wide processes and ecological functions. As part of this analysis, the applicant shall evaluate whether the project may adversely affect existing hydrologic connections between streams and wetlands, and either modify the project or mitigate any impacts as needed.

D. The city shall require mitigation measures and/or permit conditions based on the provisions of this SMP in order to mitigate adverse impacts. In order to determine acceptable mitigation or permit conditions, the Shoreline Administrator may require the applicant to provide the necessary environmental information and analysis, including a description of existing conditions/ecological functions and anticipated shoreline impacts, along with a mitigation plan outlining how proposed mitigation measures would result in no net loss of shoreline ecological functions.

E. When compensatory measures are appropriate pursuant to the mitigation priority sequence above, preferential consideration shall be given to measures that replace the adversely impacted functions directly and in the immediate vicinity of the adverse impact. However, alternative compensatory mitigation within the watershed that addresses limiting factors or identified critical needs for shoreline resource conservation based on watershed or comprehensive resource management plans, including the Shoreline Restoration Plan,

applicable to the area of adverse impact may be authorized. Authorization of compensatory mitigation measures may require appropriate safeguards, terms or conditions as necessary to ensure no net loss of ecological functions.

F. In addition to any requirements for specific critical areas found in Article V, below, mitigation plans for any adverse impacts on ecological functions resulting from use, activity or development in shoreline jurisdiction, both inside and outside of critical areas, shall address the following:

1) Inventory existing shoreline environment including the physical, chemical and biological elements and provide an assessment of their condition;

2) A discussion of the project's compliance with mitigation sequencing requirements and remaining unavoidable adverse impacts on the ecological functions;

3) A discussion of any federal, state, or local special management recommendations which have been developed for critical areas or other species or habitats located on the site;

4) A discussion of measures to preserve existing habitats and opportunities to restore habitats that were degraded prior to the proposed land use activity;

5) A discussion of proposed measures which mitigate the adverse impacts of the project to ensure no net loss of shoreline ecological functions;

6) Scaled drawings of existing and proposed conditions, materials specifications, and a five-year maintenance and monitoring plan, including performance standards;

7) A discussion of proposed management practices which will protect fish and wildlife habitat both during construction, and after the project site has been fully developed;

8) Contingency plan if the mitigation fails to meet established success criteria; and

9) Any additional information necessary to determine the adverse impacts of a proposal and mitigation of the impacts.

14.20.300 Shoreline Vegetation Conservation

A. Vegetation conservation standards shall not apply retroactively to existing uses and developments. Vegetation associated with existing structures, uses and developments may be maintained within shoreline jurisdiction as stipulated in the approval documents for the development.

B. Regulations specifying establishment and management of shoreline buffers are located in NBMC 14.20.550, Streams. Vegetation within shoreline buffers, other stream buffers, and wetlands and wetland buffers shall be managed consistent with Article V, NBMC 14.20.520, -530, -550 and -560.

C. Vegetation outside of shoreline buffers, other stream buffers, and wetlands and wetland buffers and within shoreline jurisdiction shall be managed according to this Section, NBMC 14.20.290, Environmental Protection, and any other regulations specific to vegetation management contained in other chapters of this SMP.

D. Vegetation clearing outside of wetlands and wetland and stream buffers shall be limited to the minimum necessary to accommodate approved shoreline development that is consistent with all other provisions of this SMP. Mitigation sequencing shall be applied so that the design and location of the structure or development minimizes native vegetation removal. Development or uses that require vegetation clearing shall be designed to avoid the following in the order indicated below, with 1) being the most desirable vegetation to retain:

1) Native significant trees.
2) Non-native significant trees.
3) Native and non-native non-significant trees.
4) Other native vegetation.

E. Significant tree removal requirements.

1) Significant trees shall be retained, except where removal or limbing is required for utilities. Significant trees may be removed consistent with NBMC 14.20.300(F) and (G) if the location of the tree(s) prevents the site design or development proposals from accomplishing the development potential allowed under North Bend Municipal Code, provided the applicant has fully evaluated design options that include and incorporate tree preservation, including tree relocation on the property.

2) In addition to the application requirements for the appropriate shoreline permit listed in NBMC 14.20.650, the application shall include the following information:

a. Accurate location of significant trees and their driplines measured relative to visible site features and structures (surveyed locations may be required if the subject tree(s) are near property boundaries);

b. Diameter (DSH) and type or species of trees;

c. Qualified professional report. The general health of the tree(s) shall be determined by a qualified professional. The planning official may waive the requirement to include a qualified professional if the health of the tree is obviously compromised or presents a likely potential to structural damage of existing building(s). The report shall include a description of each tree's health and viability that are proposed for removal;

d. A replacement tree planting plan identifying the number of replacement trees, species and accurate location of replanting consistent with the replacement ratio and planting plan requirements of NBMC 14.20.300(F); and

e. Applicant shall pay all city costs incurred as established by ordinance of the city council and as outlined in Chapter 20.09 NBMC.

3) Alternative Compliance. All significant tree provisions contained in this chapter shall be met, unless the applicant demonstrates that alternate measures or procedures will be equal or superior to the significant tree provisions. Requests to use alternative measures and procedures shall be reviewed by the planning official, who may approve, approve with conditions, or deny the request. Examples include but are not limited to retention of specimen or significant trees or low impact

development techniques, including such programs as Green Building Design or Leadership in Energy and Environmental Design that demonstrate a significant reduction to stormwater runoff from the site and preservation of vegetated open space areas.

F. Significant tree inventory and retention requirements.

1) A significant tree inventory shall be prepared by a qualified professional, under the direction of the Shoreline Administrator, for the removal of eight significant trees and/or more or when a new development is proposed. The inventory shall identify all significant trees on the property excluding those areas located in critical areas and their buffers.

2) Salvage. When a property is developed, the city encourages the use of plant salvage program. Native plants are removed from sites which are scheduled for construction and later replanted at locations around the city. The city works with developers and other agencies to locate potential salvage replant sites, organize volunteers to remove plants just prior to construction, and replants the salvaged plants within the city. The city may reduce a portion of the costs associated with the applicable clearing and grading permit. The reduced amount shall be determined by the Shoreline Administrator upon review of the applicant's proposed salvage program.

3) Tree Retention Requirements for Proposed Development Projects.

a. Tree Retention Requirements. Significant trees on lots proposed for development or redevelopment shall be retained pursuant to Table 14.20.300:

Table 14.20.300. Tree Retention Requirements for Proposed Project Development

Zoning Designation	Retention Required
Single-family, duplex, short plats, or subdivision development	30% of all significant trees in developable site area. (20% per NBMC 14.20.300(F)(4)(a))
Cottage and multifamily development	20% of all significant trees in developable site area. (10% per NBMC 14.20.300(F)(4)(a))
Commercial	15% of all significant trees in developable site area. (5% per NBMC 14.20.300 (F)(4)(a))

b. Priority of Tree Retention Requirements. Significant trees shall be retained in the following priority order:

i. Priority One.

a) Significant trees which form a continuous canopy;

b) Significant trees on slopes greater than 20 percent;

c) Significant trees adjacent to critical areas and their associated buffers;

d) Significant trees over 60 feet in height or greater than 18-inch DSH.

ii. Priority Two.

a) Healthy tree groupings whose associated undergrowth can be preserved;

b) Other significant native evergreen or deciduous trees; and

c) Other significant nonnative trees.

4) Modification to Tree Retention Requirements. A modification to retention requirements may be granted at the discretion of the Shoreline Administrator based on the applicant's ability to demonstrate that strict compliance with the tree retention requirements may jeopardize the reasonable use of the property by one or more of these special circumstances:

a. Up to a 10 percent reduction to the tree retention requirements, based on land use, may be permitted by the Shoreline Administrator, subject to a site-specific analysis and subject to the tree replacement ratio and planting plan as required in NBMC 14.20.300(G). The applicant shall pay all costs associated with the replacement of said trees and as outlined in Chapter 20.09 NBMC;

b. The size, shape, topography, or location of the subject property would prohibit required tree retention and reasonable alternatives do not exist;

c. The required ingress/egress, existing and proposed utility locations, trails, storm drainage improvements or similar constraints exist that would prohibit the required retention of some or all of the trees and reasonable alternatives do not exist;

d. Tree removal is necessary to provide solar access to a building that incorporates active solar devices. Windows are solar devices only when they are south-facing and include special storage elements to distribute heat energy;

e. The modification will fulfill the intent and purpose of this chapter and incorporates into the design of the site:

i. The retention of 50 percent of the significant trees required for retention by preserving a tree grouping of equivalent diameter inches and the naturally occurring undergrowth to what would otherwise be required; and

ii. The retention of other natural vegetation in consolidated locations which promotes the natural vegetated character of the site and adjacent properties.

5) Additional Tree Protection. The Shoreline Administrator may approve an administrative adjustment of standards for bulk and dimensional relief without a Shoreline Variance in order to retain existing healthy significant tree(s), if the following criteria are met:

a. The adjustment is consistent with city land use policies, including but not limited to those in this SMP and the city's comprehensive plan.

b. The adjustment might provide flexibility for a site with natural or physical features, such as significant trees, vegetation, flood courses, or other features, that might be adversely affected, or have adverse effects, if standards are inflexible.

6) Cluster Preservation. If a cluster of significant trees is identified, the applicant shall provide prior to final approval (i.e., final plat, final BSP) the legal instrument acceptable to the city to ensure preservation of the cluster and associated vegetation in perpetuity, except that the agreement may be extinguished if the Shoreline Administrator determines that preservation is no longer appropriate.

G. Significant tree replacement ratio and planting plan. Any significant tree removed shall be replaced at the expense of the applicant. The applicant shall replace significant tree(s) as follows:

1) On-Site Replacement. The applicant shall replant as many trees on-site as feasible and must replace the tree according to the following ratio, at the applicant's choice:

a. Replace at a 2:1 ratio with trees not less than four feet in height.

b. Replace at a 3:1 ratio with native and/or drought-tolerant potted trees in one-gallon size pots.

2) Off-Site Replacement. Off-site replacement at a 2:1 ratio may be allowed when approved by the Shoreline Administrator. The applicant shall pay costs associated with the replacement of said trees as outlined in Chapter 20.09 NBMC. Off-site replacement locations must be located within shoreline jurisdiction, preferably in shoreline buffers or within other critical areas and their buffers, on either public land or on other private land owned by the applicant.

3) If a modification to the tree retention requirements is granted pursuant to NBMC 14.20.300(F)(4), the applicant shall replace said trees at a 3:1 ratio with trees no less than four feet in height. Off-site replacement of said trees is allowed, subject to city approval.

4) Replacement trees shall be native drought-tolerant species, 75 percent of which shall be an evergreen species, unless otherwise approved by the Shoreline Administrator.

5) A replanting plan shall be provided and approved by the city prior to removal of any significant trees.

H. Revegetation option. Based upon recommendations in a report by the Shoreline Administrator, removal of areas of vegetation that might normally be saved may be permitted if extensive revegetation is accomplished. Such alternative may be desirable for sites with significant physical limitations such as topography or soil type, or where limitations of existing trees such as particular species or deteriorated health of a particular tree stand may make such options desirable. On a site with documented special circumstances, an alternative allowing removal of vegetation normally saved may be approved with a comprehensive revegetation plan prepared by an arborist and reviewed and approved by the Shoreline Administrator or her/his designee. At a minimum, the plan shall include:

1) Information required under NBMC 14.20.650, and any additional requirements found in NBMC 19.10.050 through 19.10.070;
2) Consideration of the standards provided in NBMC 14.20.300(E) through (G);
3) An evaluation of what circumstances are present in specific areas of the site to make incorporation of topography and existing vegetation undesirable and recommendations on what areas if any can be designed to accommodate existing vegetation;
4) Consideration of overstory and understory vegetative species to provide wildlife habitat and meet specific purposes important to the neighborhood environment and project design such as buffers, green belts, open spaces, street trees, urban beautification, solar access and other functions and purposes deemed desirable and appropriate to the anticipated use;
5) A comprehensive map showing location, number, types of species and size of planned vegetative improvements;
6) A time line for completion of improvements;
7) An estimate of the value of vegetation that would normally be saved but that is being removed under this option. Said estimate must be accomplished pursuant to the most recent guidelines established by the International Society of Arboriculture in its "Guide to the Professional Evaluation of Landscape Trees, Specimen Shrubs and Evergreens";
8) Said plan shall provide for a commensurate value of vegetation to be installed as is to be taken out under this option. Said amount shall be 150 percent of what is normally required for landscaping in the projects not utilizing this option. The calculated value of the vegetation shall include only vegetative material and shall not include the applicant's administrative or labor costs, or the costs of the city's arborist;
9) A maintenance plan which includes provision for a grass, shrub and tree maintenance program and provides for adequate water supply until the plantings are established;
10) If any existing vegetation is to be saved, a plan shall be provided for the protection of said vegetation during construction activity, including fencing and other protective measures deemed necessary by the Shoreline Administrator; and
11) The performance and maintenance bond requirements of the city landscape code shall apply to revegetation plans.

I. Where adverse impacts on shoreline vegetation are permitted after mitigation sequencing has been applied as outlined in NBMC 14.20.290(B) above, new developments or site alterations shall be required to develop and implement a mitigation plan. Mitigation plans shall be prepared by a qualified professional and shall contain information required in NBMC 14.20.290(F). Mitigation measures shall be maintained over the life of the use and/or development.

J. Where native shoreline vegetation must be removed to accommodate a temporary staging area necessary to implement an allowed use, the area must be immediately stabilized and restored with native vegetation once construction is complete.

K. Selective pruning of trees for safety or view protection is allowed. Where trees pose a significant safety hazard as indicated in a written report by a certified arborist or other qualified professional, they may be removed or converted to wildlife snags if the hazard cannot be eliminated by pruning, crown thinning or other technique that maintains some habitat function.

L. Vegetation removal conducted without city authorization requires the submittal and approval of a restoration plan prepared by a qualified professional as defined in NBMC 14.20.190. The mitigation plan must utilize only native vegetation, and should be designed to compensate for temporal loss of function and address the specific functions adversely impacted by the unauthorized vegetation removal.

M. With the exception of hand removal or spot-spraying of invasive or noxious weeds on shorelands, the determination of whether non-native vegetation removal may be allowed in shoreline jurisdiction must be evaluated in conformance with this Section, Environmental Protection (NBMC 14.20.290), and Critical Areas (Article V, NBMC 14.20.510-580). Such removal of noxious weeds and/or invasive species shall be incorporated in mitigation plans, as necessary, to prevent erosion and facilitate establishment of a stable community of native plants.

N. Aquatic weed control shall only be permitted where the presence of aquatic weeds will adversely affect native plant communities, fish and wildlife habitats, or an existing water-dependent recreational use. Aquatic weed control efforts shall comply with all applicable laws and standards. Removal using mechanical methods is preferred over chemical methods.

14.20.310 Water Quality, Stormwater, and Nonpoint Pollution

A. All shoreline development, both during and after construction, shall avoid or minimize significant adverse ecological impacts, including any increase in surface runoff, through control, treatment, and release of surface water runoff so that water quality and quantity are not adversely affected. Control measures include, but are not limited to, low impact development techniques, levees, catch basins or settling ponds, oil interceptor drains, grassy swales, planted buffers, and fugitive dust controls

B. New development shall provide stormwater management facilities designed, constructed, and maintained in accordance with the latest version of the King County Surface Water Design Manual as adopted by the city, including the use of BMPs. Additionally, new development shall implement low impact development techniques where feasible and necessary to fully implement the core elements of the Surface Water Design Manual.

C. BMPs for control of erosion and sedimentation shall be implemented for all development in shoreline jurisdiction through a city-approved temporary erosion and sediment control (TESC) plan, in accordance with the latest version of the King County Surface Water Design Manual as adopted by the city.

D. For development activities with the potential for adverse impacts on water quality or quantity in a stream or fish and wildlife habitat conservation area, a critical area report as prescribed by NBMC 14.20.510, -540, and/or -550 shall be prepared. Such reports should discuss the project's potential to exacerbate water quality parameters which are impaired and for which Total Maximum Daily Loads (TMDLs) for that pollutant have been established, and prescribe any necessary mitigation and monitoring.

E. All materials that may come in contact with water shall be constructed of materials, such as untreated wood, concrete, approved plastic composites or steel, that will not adversely affect water quality or aquatic plants or animals. Materials used for decking or other structural components shall be approved by applicable state agencies for contact with water to avoid discharge of pollutants from wave or boat wake splash, rain, or runoff. Wood treated with creosote, copper chromium arsenic, or pentachlorophenol is prohibited in shoreline waterbodies.

14.20.320 Public Access

A. Applicants required to provide shoreline public access shall provide physical or visual access, consistent with the city's Parks, Recreation, Wildlife Habitat and Open Space Plan when applicable, unless specifically exempted in this section. Examples of physical and visual access are listed below.

1) Visual Access. Visual public access may consist of view corridors, viewpoints, or other means of visual approach to public waters.

2) Physical Access. Physical public access may consist of a dedication of land or easement and a physical improvement in the form of a walkway, trail, bikeway, park, boat or canoe and kayak launching ramp, dock area, view platform, or other area serving as a means of physical approach to public waters.

B. Except as provided in NBMC 14.20.320.C below, shoreline substantial developments and shoreline conditional uses shall provide for safe and convenient public access to and along the shoreline where any of the following conditions are present:

1) The development is proposed by a public entity or on public lands;

2) The nature of the proposed use, activity, or development will likely result in an increased demand for public access to the shoreline;

3) The proposed use, activity, or development is not a water-oriented or other preferred shoreline use, activity or development under the Act, such as a non-water-oriented commercial or industrial use;

4) The proposed use, activity, or development may block or discourage the use of customary and established public access paths, walkways, trails, or corridors;

5) The proposed use, activity, or development will interfere with the public use, activity and enjoyment of shoreline areas or waterbodies subject to the public trust doctrine; or

6) The proposed use, activity, or development includes key areas for public access recommended in the North Bend Shoreline Restoration Plan.

C. An applicant shall not be required to provide public access where one or more of the following conditions apply, provided such exceptions shall not be used to prevent implementing the access and trail provisions mentioned in the city's Parks, Recreation, Wildlife Habitat and Open Space Plan:

1) Proposed use, activity, or development only involves the construction of four or fewer single-family or multifamily dwellings;

2) The nature of the use, activity, or development or the characteristics of the site make public access requirements inappropriate due to health, safety, or environmental hazards; the proponent shall carry the burden of demonstrating by substantial evidence the existence of unavoidable or unmitigable threats or hazards to public health, safety, or the environment that would be created or exacerbated by public access upon the site;

3) An existing, new or expanded road or utility crossing through shoreline jurisdiction are not required to create the need for public access if the development being accessed or served by the road or utility is located outside of shoreline jurisdiction;

4) The proposed use, activity, or development has security requirements that are not feasible to address through the application of alternative design features for public access such as offsite improvements, viewing platforms, and separation of uses through site planning and design;

5) The economic cost of providing for public access upon the site is unreasonably disproportionate to the total long-term economic value of the proposed use, activity, or development;

6) Safe and convenient perpendicular connections to the existing levee and trail system accessible to the public exist within approximately a quarter mile of the site, and the city's Parks, Recreation, Wildlife Habitat and Open Space Plan shows no gap in public access at the property;

7) Public access has reasonable potential to threaten or harm the natural functions and native characteristics of the shoreline and/or is deemed detrimental to threatened or endangered species under the Endangered Species Act; or

8) The site is within or part of an overall development, a binding site plan, or a planned unit development which has previously provided public access through other application processes.

D. Public access shall be located and designed to respect private property rights, be compatible with the shoreline environment, protect ecological functions and processes, and protect aesthetic values of shoreline.

E. Community access may be allowed if there is no existing or planned public access along the shoreline identified in the Parks, Recreation, Wildlife Habitat and Open Space Plan. Where provided, community access shall be subject to all applicable development standards of this section. Community access is not required when any of the conditions under 14.20.320.C applies and when the Parks, Recreation, Wildlife Habitat and Open Space Plan does not indicate any planned public access in a particular location.

F. General Performance Standards

1) Uses, activities and developments shall not interfere with the regular and established public use of the South and Middle Forks of the Snoqualmie River shorelines.

2) Shoreline substantial development or conditional uses shall minimize the impact on views of shoreline waterbodies from public land or substantial numbers of residences.

3) Proponents shall include within their shoreline applications an evaluation of a proposed use, activity, or development's likely adverse impact on current public access and future demands for access to the site. Such evaluation shall consider potential alternatives and mitigation measures to further the policies of this SMP and the provisions of this section.

4) Public access easements, trails, walkways, corridors, and other facilities may encroach upon any buffers or setbacks required in Article V, Critical Areas, or under other provisions of this SMP, provided that such encroachment does not conflict with other polices and regulations of this SMP, and that no net loss of ecological function can be achieved.

5) Public access facilities shall accommodate persons with disabilities unless determined infeasible by the Shoreline Administrator.

G. Trails and Levees

1) Existing equestrian and primitive trails shall be maintained and enhanced in the urban conservancy recreational open space and natural environment designation areas.

2) Shoreline along the South Fork of the Snoqualmie River includes levees that are in private ownership. Such levees shall provide:

   a. easement for maintenance access; and

   b. physical or visual public access when feasible and when part of the access and trail plan is mentioned in the Parks, Recreation, Wildlife Habitat and Open Space Plan.

3) Where public access is to be provided by dedication of public access easements along the OHWM, the minimum width of such easements shall be as follows:

   a. Regional Trails: 12 feet total width with 10 feet of asphalt and 2 feet of shoulders. The standards may be adjusted by the Shoreline Administrator to avoid critical area impacts.

   b. City Trails: 12 feet total width clear zone accommodating 8 feet of travel way, or as otherwise approved by the Shoreline Administrator to match existing connecting trails.

   c. The public easements required pursuant to this section, for the purpose of providing access across or through the site to the OHWM, shall be improved and maintained by the property owner to provide for reasonable and safe public access to the OHWM.

H. Rights-of-Way, Easements, and Streets for Public Access

1) The city shall retain public rights of ways or easements as a means of retaining public access on the South and Middle Fork Snoqualmie River. Proposed use, activity or developments shall maintain public access provided by public street ends, public utilities, and rights-of-way.

2) The city shall obtain access rights dedication and easement to riverfront parcels, including levees and dikes whenever such opportunities and funding become available.

I. Where public access routes terminates, connections shall be made with the nearest public street unless determined by the Shoreline Administrator to be infeasible. Public access facilities required for an approved or permitted use, activity, or development shall be completed prior to occupancy and use of the site or operation of the activity. Public access shall make adequate provisions, such as screening, buffer strips according to NBMC Type 3 visual buffer, fences and signs, to prevent trespass upon adjacent properties and to protect the value and enjoyment of adjacent or nearby private properties and natural areas.

J. Off-site public access may be permitted by the city where it results in an equal or greater public benefit than on-site public access, or when on-site limitations of security, environment, compatibility or feasibility are present. Off-site public access may include, but is not limited to, enhancing a city-designated public property (e.g. existing public recreation site; existing public access; road, street or alley abutting a body of water; or similar) in accordance with city standards.

K. Signage

1) Signage to be approved by the Administrator shall be conspicuously installed along public access easements, trails, walkways, corridors, and other facilities to indicate the public's right of use and the hours of operation. The proponent shall bear the responsibility for establishing and maintaining such signs.

2) The Administrator may require the proponent to post signage restricting or controlling the public's access to specific shoreline areas. The proponent shall bear the responsibility for establishing and maintaining such signage.

14.20.330 Flood Hazard Reduction

A. Development in floodplains shall avoid significantly or cumulatively increasing flood hazards. Development shall be consistent with this SMP, as well as applicable guidelines of the Federal Emergency Management Agency and an approved flood hazard management plan.

B. The channel migration zone (CMZ) is considered to be that area of a stream channel which may erode as a result of normal and naturally occurring processes and has been mapped consistent with WAC 173-26-221(3)(b) [See Figure X of this SMP]. Applicants for shoreline development or modification may submit a site-specific channel migration zone study if they believe these conditions do not exist on the subject property and the map is in error. The CMZ study must be prepared consistent with WAC 173-26-221(3)(b), and may include, but is not limited to, historic aerial photographs, topographic mapping, flooding records, and field verification. The CMZ must be prepared by a licensed geologist or engineer with at

least five years of applied experience in assessing fluvial geomorphic processes and channel response.

C. The following uses and activities may be authorized within the CMZ or floodway:

1) New development or redevelopment landward of existing legal structures, such as levees, that prevent active channel movement and flooding.

2) Development of new or expansion or redevelopment of existing bridges, utility lines, public stormwater facilities and outfalls, and other public utility and transportation structures where no other feasible alternative exists or the alternative would result in unreasonable and disproportionate costs. The evaluation of cost differences between options within the CMZ or floodway and outside of the CMZ or floodway shall include the cost of design, permitting, construction and long-term maintenance or repair. Where such structures are allowed, mitigation shall address adversely impacted functions and processes in the affected shoreline.

3) New or redeveloped measures to reduce shoreline erosion, provided that it is demonstrated that the erosion rate exceeds that which would normally occur in a natural condition, that the measures do not interfere with fluvial hydrological and geo-morphological processes normally acting in natural conditions, and that the measures include appropriate mitigation of adverse impacts on ecological functions associated with the river or stream.

4) Actions that protect or restore the ecosystem-wide processes or ecological functions or development with a primary purpose of protecting or restoring ecological functions and ecosystem-wide processes.

5) Modifications or additions to an existing nonagricultural legal use, provided that channel migration is not further limited and that the modified or expanded development includes appropriate protection of ecological functions.

6) Repair and maintenance of existing legally established use and developments, provided that channel migration is not further limited, flood hazards to other uses are not increased, and significant adverse ecological impacts are avoided.

7) Existing and ongoing agricultural activities provided that no new restrictions to channel movement are proposed.

8)

D. Existing structural flood hazard reduction measures, such as levees, may be repaired and maintained as necessary to protect legal uses on the landward side of such structures. Increases in height of an existing levee, with any associated increase in width, that may be needed to prevent a reduction in the authorized level of protection of existing legal structures and uses shall be considered an element of repair and maintenance. Vegetation management on levees should take into account the most recent inter-agency guidance.

E. Flood hazard reduction measures shall not result in channelization of normal stream flows, interfere with natural hydraulic processes such as channel migration, or undermine existing structures or downstream banks.

F. New development in shoreline jurisdiction, including the subdivision of land, shall not be permitted if it is reasonably foreseeable that the development or use would require

structural flood hazard reduction measures within the channel migration zone or floodway. New buildable lots shall contain 5,000 square feet or more of buildable land outside the channel migration zone and floodway.

G. New public and private structural flood hazard reduction measures

1) shall be approved when a scientific and engineering analysis demonstrates the following:

a. that they are necessary to protect existing development;

b. that nonstructural measures, such as setbacks, land use controls, wetland restoration, dike removal, use or structure removal or relocation, biotechnical measures, and stormwater management programs are not feasible; and

c. that adverse impacts on ecological functions and priority species and habitats can be successfully mitigated so as to assure no net loss.

2) shall be consistent with an approved comprehensive flood hazard management plan.

3) shall be placed landward of associated wetlands and designated shoreline buffers, except for actions that increase ecological functions, such as wetland restoration, or when no other alternative location to reduce flood hazard to existing development is feasible as determined by the Shoreline Administrator.

H. New public structural flood hazard reduction measures, such as levees, shall dedicate and improve public access pathways unless public access improvements would cause unavoidable health or safety hazards to the public, inherent and unavoidable security problems, unacceptable and unmitigable significant adverse ecological impacts, unavoidable conflict with the proposed use, or a cost that is disproportionate and unreasonable to the total long-term cost of the development.

I. In those instances where management of vegetation as required by this SMP conflicts with vegetation provisions included in state, federal or other flood hazard agency documents governing city-authorized, legal flood hazard reduction measures, the vegetation requirements of this SMP will not apply. However, the applicant shall submit documentation of these conflicting provisions with any shoreline permit applications, and shall comply with all other provisions of this section and this SMP that are not strictly prohibited by the approving flood hazard agency.

J. The removal of gravel or other riverbed material for flood management purposes shall be consistent with NBMC 14.20.390, Dredging and Dredge Material Disposal and be allowed only after a biological and geo-morphological study shows that extraction has a long-term benefit to flood hazard reduction, does not result in a net loss of ecological functions, and is part of a comprehensive flood management solution.

K. Roads shall be located outside the floodway, except necessary crossings which shall be placed perpendicular to the waterbody as much as is physically feasible. New transportation facilities shall be designed so that the effective base flood storage volume of the floodplain is not reduced. The applicant shall provide all necessary studies, reports and engineering analysis which shall be subject to review and modification by the city of North Bend. If

proposed transportation facilities effectively provide flood control, they shall comply with policies and regulations of this section.

Article IV – Use-Specific and Modification Regulations

14.20.340 Agriculture

A. Existing agricultural uses and future agriculture-recreation activities on the Tollgate and Meadowbrook Farms shall be allowed.

B. For shorelands used for agricultural practices, new or additional uses, activities, and development that are not existing and ongoing agriculture shall be subject to the following requirements:

1) Such uses, activities, and development shall be allowed or permitted in a manner to ensure maintenance of ecological functions.

2) Vegetation enhancement shall be required where the shoreline has been ecologically degraded.

3) If the new use, activity, or development is more intensive than the existing and ongoing agriculture, no significant vegetation removal, development, or grading shall occur in the shoreline buffer except as necessary to accommodate low-intensity water-dependent uses and public access that sustains ecological functions.

4) New agricultural lands created by diking, draining, or filling wetlands or channel migration zones shall not be allowed.

C. A Substantial Development Permit shall be required for all agricultural development not specifically exempted by the provisions of RCW 90.58.030(3)(e)(iv).

D. SMP provisions shall apply in the following cases:

1) new agricultural activities on land not meeting the definition of agricultural land;

2) expansion of agricultural activities on non-agricultural lands;

3) conversion of agricultural lands to other uses;

4) other development on agricultural land that does not meet the definition of agricultural activities; and

5) agricultural development and uses not specifically exempted by the Act.

E. New non-agricultural activities proposed on agricultural lands shall be consistent with the environment designation and the Shoreline Use and Modification Matrix (NBMC 14.20.270) table, as well as other applicable shoreline use standards, for example Commercial or Industrial.

F. Agricultural uses and development in support of agricultural uses shall be located and designed to assure no net loss of ecological functions and no significant adverse impact on other shoreline resources and values.

G. Agricultural uses and activities shall prevent and control erosion of soils and bank materials within shoreline areas. They shall minimize siltation, turbidity, pollution and other environmental degradation of watercourses and wetlands.

H. Agricultural chemicals, such as fertilizers and pesticides, shall be applied in a manner that prevents their direct runoff into waterbodies, wetlands or aquifer recharge areas, and that prevents the degradation of water quality, and in accordance with state Department of Fish and Wildlife management recommendations and the regulations of the state Department of Agriculture and the U.S. Environmental Protection Agency.

I. New or redeveloped agricultural activities shall provide a buffer of permanent native vegetation between all cropland or pasture areas and adjacent waters or wetlands pursuant to the critical areas provisions of Article V of this SMP.

J. Agricultural development shall conform to applicable state and federal policies and regulations.

14.20.350 Aquaculture

A. Non-commercial aquaculture undertaken for conservation or native species recovery purposes is a preferred use within North Bend's shorelines. Allowed fisheries enhancement uses shall include hatcheries, rearing ponds, spawning channels, water diversion structures, and groundwater wells, provided that their construction does not result in a net loss of ecological function.

B. Aquaculture for non-native species or for commercial or other purposes is prohibited in shoreline jurisdiction.

C. Proponents of an aquaculture use or activity shall supply, at a minimum, the following information in their application for shoreline permit(s):

1) species to be reared;

2) aquaculture method(s);

3) anticipated use of any feeds, pesticides, herbicides, antibiotics, vaccines, growth stimulants, anti-fouling agents or other chemicals, and their predicted adverse impacts;

4) harvest and processing method and timing;

5) method of waste management and disposal;

6) best available background information and probable adverse impacts on water quality, biota, and any existing shoreline or water uses.

7) method(s) of predator control;

8) a description of the proposed use of lights and noise-generating equipment, and an assessment of adverse impacts upon surrounding uses; and

9) other pertinent information as required by the city.

D. Aquacultural activities shall meet all applicable federal, state and county standards and regulations.

E. No garbage, wastes or debris shall be allowed to accumulate upon the site of any aquaculture use or activity, nor discharged to any waterbody regulated by this SMP.

F. No pesticides, herbicides, antibiotics, vaccines, growth stimulants, anti-fouling agents or other chemicals shall be used until approved by all appropriate state and federal agencies. Those agencies shall include, but shall not be limited to, the Washington State Departments of Fish and Wildlife, Agriculture, and Ecology, and the U.S. Food and Drug Administration. Evidence of such approval shall be submitted to the city.

G. Aquaculture structures and equipment that come in contact with the water shall contain no substances that are toxic to aquatic life, and aquaculture activities that would degrade water quality shall be prohibited.

H. Aquaculture activities shall be subject to conditioning and requirements for mitigation to ensure that it does not result in a net loss of ecological function.

I. Aquaculture projects shall be located in areas that do not impact navigation, public access, or normal public use of the water.

14.20.360 Boating Facilities

A. General

1) Over-water structures, such as fixed-pile piers or floating docks, are prohibited.

2) Boat moorage is prohibited.

3) The only boating facilities allowed on city of North Bend shorelines are public, commercial or community boat launches for non-motorized vessels, such as kayaks and canoes.

4) Boating facilities shall be located and designed with the minimum necessary shoreline stabilization to adequately protect facilities.

B. Location Standards

1) New boating facilities shall not be permitted:

a. within channel migration zones,

b. where a flood hazard will be created or expanded, or

c. where adverse impacts on shoreline ecological functions and processes cannot be mitigated.

2) Boating facilities shall be located at least 50 feet from the mouth of any fish-bearing tributary entering the Middle or South Fork Snoqualmie Rivers.

3) Boating facilities constructed or expanded after [effective date of SMP] within wetlands or wetland buffers are prohibited.

4) Boating facilities constructed or expanded after [effective date of SMP] shall be located only where adequate utility services and vehicular or pedestrian access are or can be made available.

C. Design Standards

1) Boat launches shall comply with the critical area regulations of Article V – Critical Areas, NBMC 14.20.510-580.

2) Boat launches shall be constructed on existing grade and shall limit fill or dredging to the minimum necessary to accommodate the launch. Excavation or fill of less than 10 cubic yards of materials to accommodate launch placement may be allowed if the grading would enable use of a launch ramp design that is more preferred as outlined in 7) below than the method that would be used without the grading.

3) Boat launches shall extend into the waterway the minimum amount necessary to launch the non-motorized vessels. In no case shall they protrude more than 10 feet waterward of the OHWM or 3 feet beneath the water surface as measured at the OHWM.

4) Boat launches must be as narrow as feasible to launch the intended watercraft.

5) Boat launches shall not obstruct existing or proposed public access to and along the shoreline.

6) Boat launches shall retain native vegetation on either side of the launch. The Shoreline Administrator shall have the authority to identify modifications in the site plan to achieve vegetation preservation.

7) Preferred launch ramp designs, in order of priority, are:

    a. Gravel and cobble materials, or other natural surfacing.

    b. Open grid designs with minimum coverage of substrate.

    c. Pre-cast concrete planks with segmented pads and flexible connections that leave space for natural substrate and can adapt to changes in substrate profile. In all cases, such segmented pads shall be used waterward of the OHWM.

    d. Concrete is preferred over asphalt.

D. Site Design and Operation

1) BMPs shall be utilized to prevent pollutants associated with upland boat-related service activities, such as boat maintenance and repair, from reaching the water. Boat maintenance and repair activities conducted while a boat is in the water are prohibited.

2) Accessory uses at boat launches shall be limited to water-oriented uses or accessory uses that support the boat launch operation. Accessory uses include, but are not limited to, parking, boat storage, non-hazardous waste storage and treatment, stormwater management facilities, and utilities where these are necessary to support the water-oriented use. Parking, dry moorage, and other storage areas shall be located landward of other launch ramp uses, except for short-term loading areas which shall be located at or near launch ramps. The perimeters of these areas shall be landscaped to provide visual and noise buffering between adjacent dissimilar uses or scenic areas. To the maximum extent possible, public launch ramps and accessory uses shall share parking facilities, with parking for launch ramp usage given preference.

3) Commercial long-term boat storage located landward of the OHWM is allowed and regulated as a water-oriented commercial use if the development is equipped with a boat launch. Commercial upland boat storage without an on-site facility for launching boats is regulated as a non-water-oriented commercial use under NBMC 14.20.380, Commercial Development of this SMP.

4) During development or expansion of boat launches, the city may condition boating facility developments to provide landscaping, screening, signage specifications, and other features to assure compatibility with adjacent shoreline development, where such measures do not interfere with the boat launch use or operation.

E. Waste Disposal

1) Discharge of solid waste or sewage into a waterbody is prohibited. Garbage or litter receptacles shall be provided and maintained by the boat launch operator in at least one location convenient to users.

2) Disposal or discarding of fish-cleaning wastes, scrap fish, viscera, or unused bait into water or in other than designated garbage receptacles is prohibited.

F. Submittal Requirements. Applicants for new or expanded boating facilities shall provide habitat surveys, critical area studies, and mitigation plans as required by NBMC 14.20.290, Environmental Protection and Article V – Critical Areas, NBMC 12.20.510-580, as applicable. The mitigation plan shall discuss how the proposed project avoids and minimizes adverse impacts consistent with the facility's sizing needs, which are to be based on the results of any habitat survey/critical area study. A slope bathymetry map may be required when deemed beneficial by the Shoreline Administrator for the review of the project proposal.

14.20.370 Groins and Weirs

A. Breakwaters shall be prohibited.

B. New, expanded or replacement groins and weirs shall only be permitted if the applicant demonstrates that the proposed groin or weir will not result in a net loss of shoreline ecological functions, and the structure is necessary to water-dependent uses, public access, shoreline stabilization, or other specific public purpose.

C. Groins and weirs shall require a Conditional Use Permit, except when such structures are installed to protect or restore ecological functions, such as placement of woody debris in streams with the dual purpose of habitat and directing flows to prevent the need for shoreline stabilization or installation of groins that may eliminate or minimize the need for hard shoreline stabilization.

D. Groins and weirs shall be located, designed, constructed and operated consistent with mitigation sequencing principles, including avoiding critical areas, limiting structure size to the minimum necessary, restoring temporarily disturbed areas after construction is complete, and mitigating any long-term adverse impacts.

14.20.380 Commercial Development

A. Water-dependent commercial development shall be given priority over non-water-dependent commercial uses within shoreline environments. Secondarily, water-related and water-oriented uses shall be given priority over non-water-oriented commercial uses.

B. Non-water-oriented commercial uses shall be allowed if they can demonstrate at least one of the following:

1) The commercial use is part of a mixed-use project that includes water-dependent uses and provides a significant public benefit with respect to the objectives of the Act.

2) Navigability is severely limited at the proposed site, including opportunities for kayaking or other water-oriented uses.

3)

4) The commercial use is physically separated from the shoreline by another property, public right-of-way or levee.

5) The commercial use is farther upland than 200 feet from the OHWM; therefore, a water-oriented use is not a viable option.

C. Non-water-oriented uses, including but not limited to residential uses, may be located with water-oriented commercial uses provided:

1) The mixed-use project includes one or more water-dependent uses.

2) Water-dependent commercial uses as well as other water-oriented commercial uses have preferential locations along the shoreline.

3) The underlying zoning district permits residential uses together with commercial uses.

4) Public access is provided for a significant number of persons in accordance with the city's Parks, Recreation, Wildlife Habitat and Open Space Plan and/or ecological restoration is provided as a public benefit.

D. Review Criteria: The city shall utilize the following information in its review of all commercial development applications:

1) Whether there is a water-oriented aspect of the proposed commercial use or activity when it is located within 200 feet of the OHWM;

2) Whether the proposed commercial use is consistent with the Shoreline Use and Modification Matrix of NBMC 14.20.270;

3) Whether the application has the ability to enhance compatibility with the shoreline environment and adjacent uses;

4) Whether adequate provisions are made for public and private visual and physical shoreline access;

5) Whether the application makes adequate provisions to prevent adverse environmental impacts and provide for shoreline ecological or critical area mitigation, where appropriate.

E. Commercial development shall be designed and maintained in a manner compatible with the character and features of surrounding areas. The city may prescribe and modify project dimensions, screening standards, setbacks, or operation intensities to achieve this purpose.

F. Eating and drinking facilities and lodging facilities shall be oriented to provide views to the waterfront when such view is available from the site. When such facilities are farther upland than 200 feet of the OHWM and have no shoreline view available, public access shall be provided according to NBMC 14.20.320.

G. Commercial uses in downtown retail shopping area shall establish linkage with the South Fork Snoqualmie River whenever feasible by providing public access opportunities.

H. Commercial uses shall provide for public access as a condition of approval, unless such public access is demonstrated by the proponent to be infeasible or inappropriate for the shoreline pursuant to NBMC 14.20.320, Public Access.

I. Commercial uses shall provide for suitable measures to rehabilitate and enhance the shoreline ecology as a condition of approval.

J. Non-water-oriented commercial uses shall not be allowed over water in any shoreline environment.

K. All commercial loading and service areas shall be located upland or away from the shoreline. Provisions shall be made to screen such areas with walls, fences and landscaping and to minimize aesthetic impacts.

L. The storage of potentially hazardous or dangerous substances or wastes is prohibited in the floodway or within 200 feet of the OHWM, whichever boundary extends farthest landward.

M. Development shall be located, designed, and constructed in a manner that assures no net loss of shoreline ecological functions and without significant adverse impacts on other preferred land uses and public access features.

14.20.390 Dredging and Dredge Material Disposal

A. General

1) New development shall be designed and located to avoid or, if infeasible, to minimize the need for new and maintenance dredging and to minimize adverse effects on ecological functions.

2) Dredging shall be allowed only for the following purposes:

   a. For shoreline restoration projects benefiting water quality and/or fish and wildlife habitat.

   b. For flood hazard reduction, when performed as part of an approved flood hazard management plan.

3) Dredging allowed under A.2) above that incidentally results in removal of marketable material may be commercially sold. Such use shall not be considered "mining" as regulated in this SMP, which is strictly prohibited in shoreline jurisdiction as a primary use.

4) Dredging to provide for new navigation uses is prohibited.

5) Developments which propose dredging for the primary purpose of obtaining fill material are prohibited, except when the material is necessary for the restoration of ecological functions and is placed waterward of the OHWM. Such an application shall be associated with a Model Toxics Control Act (MTCA) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) habitat restoration project or, if approved through a Shoreline Conditional Use Permit, another significant habitat enhancement project.

6) Dredging and dredge material disposal shall be permitted after application of mitigation sequencing, and only where it is demonstrated that the proposed dredging or deposition shall not:

    a. Result in significant or ongoing damage to water quality, fish, and shoreline wildlife habitat;

    b. Alter natural drainage and water circulation patterns, river flows, and channel migration processes or significantly reduce flood water capacities; or

    c. Cause other significant adverse ecological impacts that cannot be mitigated.

7) Proposals for dredging and dredge material disposal shall, when impacts cannot be avoided, minimize and mitigate adverse impacts (such as turbidity; release of nutrients, heavy metals, sulfides, organic material or toxic substances; dissolved oxygen depletion; disruption of food chains; loss of benthic productivity; and disturbance of fish runs and important localized biological communities) to assure no net loss of shoreline ecological functions. Mitigation plans shall be prepared by a qualified professional.

8) Dredging and dredge material disposal shall be carefully scheduled to protect biological productivity (e.g. fish runs, spawning, benthic productivity).

9) When dredging is permitted, the dredging shall be the minimum necessary to accomplish its intended purpose.

10) Dredging shall utilize techniques which cause minimum dispersal and broadcast of bottom material.

11) Vegetation disturbed by dredging activities shall be restored to its original condition, equal alternative, or an improved condition. All replacement vegetation shall be native species.

12) Dredging and dredge material disposal shall be prohibited on or in archaeological sites that are listed on the Washington State Register of Historic Places until such time that they have been released by the State Archaeologist.

B. Dredge Material Disposal

1) Upland dredge material disposal within shoreline jurisdiction is permitted under the following conditions:

    a. Shoreline ecological functions and processes will be preserved, restored or enhanced, including protection of surface and groundwater; and

b. Erosion, sedimentation, floodwaters or runoff will not increase adverse impacts on shoreline ecological functions and processes or property; and

c. The site will ultimately be suitable for a use allowed by this SMP.

2) Dredge material disposal shall not occur in wetlands nor within a stream's channel migration zone, except as authorized by Conditional Use Permit as part of a shoreline restoration project.

3) Dredge material disposal within areas assigned an Aquatic environment designation may be approved only when authorized by applicable agencies, which may include the U.S. Army Corps of Engineers pursuant to Section 404 (Clean Water Act) permits, Washington State Department of Fish and Wildlife Hydraulic Project Approval (HPA), and/or the Dredged Material Management Program of the Washington Department of Natural Resources; and when one of the following conditions apply:

a. Land disposal is infeasible, less consistent with this SMP, or prohibited by law; or

b. Disposal as part of a program to restore or enhance shoreline ecological functions and processes is not feasible.

4) Dredge materials approved for disposal within areas assigned an Aquatic environment designation shall comply with the following conditions:

a. Aquatic habitat will be protected, restored, or enhanced;

b. Adverse effects on water quality or biologic resources from contaminated materials will be mitigated;

c. Shifting and dispersal of dredge material will be minimal; and

d. Water quality will not be adversely affected.

5) When required by the city's Shoreline Administrator, revegetation of land disposal sites shall occur as soon as feasible in order to retard wind and water erosion and to restore the wildlife habitat value of the site. Native species shall be used in the revegetation.

6) Dredge material disposal operating periods and hours shall be limited to those stipulated by the Washington Department of Fish and Wildlife and hours to 7:00 AM to 5:00 PM Monday through Friday, except in time of emergency as authorized by the Shoreline Administrator. Provisions for buffers at land disposal or transfer sites in order to protect public safety and other lawful interests and to avoid adverse impacts shall be required.

C. Submittal Requirements: The following information shall be required for all dredging applications:

1) A description of the purpose of the proposed dredging and analysis of compliance with the policies and regulations of this SMP.

2) A detailed description of the existing physical character, shoreline geomorphology, and biological resources provided by the area proposed to be dredged, including:

a. 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 of areas below the OHWM) and have data points at a minimum of 2-foot depth increments.

b. A critical areas report.

c. A mitigation plan if necessary to address any identified adverse impacts on ecological functions or processes.

d. Information on stability of areas adjacent to proposed dredging and spoils disposal areas.

3) A detailed description of the physical, chemical and biological characteristics of the dredge materials to be removed, including:

a. Physical analysis of material to be dredged (material composition and amount, grain size, organic materials present, source of material, etc.).

b. Chemical analysis of material to be dredged (volatile solids, chemical oxygen demand (COD), grease and oil content, mercury, lead and zinc content, etc.).

c. Biological analysis of material to be dredged.

4) A description of the method of materials removal, including facilities for settlement and movement.

5) Dredging procedure, including the length of time it will take to complete dredging, method of dredging, and amount of materials removed.

6) Frequency and quantity of project maintenance dredging.

7) Detailed plans for dredge spoil disposal, including specific land disposal sites and relevant information on the disposal site, including, but not limited to:

a. Dredge material disposal area;

b. Physical characteristics including location, topography, existing drainage patterns, surface and ground water;

c. Size and capacity of disposal site;

d. Means of transportation to the disposal site;

e. Proposed dewatering and stabilization of dredged material;

f. Methods of controlling erosion and sedimentation; and

g. Future use of the site and conformance with land use policies and regulations.

h. Total estimated initial dredge volume.

i. Plan for disposal of maintenance spoils for at least a 20-year period, if applicable.

j. Hydraulic modeling studies sufficient to identify existing geohydraulic patterns and probable effects of dredging.

14.20.400 Fill

A. Fill waterward of the OHWM, except fill to support ecological restoration, requires a Conditional Use Permit and may be permitted only when:

1) In conjunction with water-dependent or public access uses allowed by this SMP;
2) In conjunction with a bridge or transportation facility of statewide significance for which there is a demonstrated public need and where no feasible upland sites, design solutions, or routes exist;
3) In conjunction with implementation of an interagency environmental clean-up plan to clean up and dispose of contaminated sediments;
4) disposal of dredged material considered suitable under, and conducted in accordance with, the Dredged Material Management Program of the Washington Department of Natural Resources; or
5) In conjunction with any other environmental restoration or enhancement project.

B. Waterward of the OHWM, pile or pier supports shall be utilized whenever feasible in preference to fills. Fills for approved road development in floodways or wetlands shall be permitted only if pile or pier supports are proven not feasible.

C. Fill upland and waterward of the OHWM, including in non-watered side channels, shall be permitted only where it is demonstrated that the proposed action will not:

1) Result in significant ecological damage to water quality, fish, and/or wildlife habitat;
2) Adversely alter natural drainage and circulation patterns, currents, river flows or significantly reduce flood water capacities;
3) Alter channel migration, geomorphic, or hydrologic processes; and
4) Significantly reduce public access to the shoreline or significantly interfere with shoreline recreational uses.

D. Fills are prohibited in the floodway, except when approved by Conditional Use Permit and where required in conjunction with uses allowed by this SMP.

E. Fills are allowed in floodplains outside of the floodway only where they would not alter the hydrologic characteristics, flood storage capacity, or inhibit channel migration that would, in turn, increase flood hazard or other damage to life or property and are consistent with FEMA standards and NBMC 14.20.570, Floodplain Management.

F. Fill shall be of the minimum amount and extent necessary to accomplish the purpose of the fill.

14.20.410 Forest Practices

A. Forest practice applications shall meet all local, state and federal regulations regarding forest practices and land clearing, especially the State's Forest Practices Act for all forest management activities including Class IV, general forest practices, where shorelines are being converted or are expected to be converted to non-forest uses

B. Conversion of forest lands to another use shall ensure no net loss of ecological function or no significant adverse impacts on other shoreline uses, resources and values such as navigation, recreation and public access.

C. Uses that have minimal impact in terms of vegetation removal shall be given priority. For example, parks and recreational facilities will be given preference over residential or commercial use.

D. Within 200 feet landward of the OHWM within Shorelines of Statewide Significance, only selective commercial timber cutting is allowed, such that no more than 30 percent of the merchantable trees may be harvested in any 10-year period of time: provided, that other timber harvesting methods may be permitted in those limited instances where the topography, soil conditions or silviculture practices necessary for regeneration render selective logging ecologically detrimental: provided further, that clear cutting of timber which is solely incidental to the preparation of land for other uses authorized by this SMP may be permitted.

E. Proponents of a forest practice or activity shall supply the following information in their application for shoreline permit:

1) documentation describing how the activity will protect water quality and meet any applicable standards;

2) plan for maintaining vegetative buffer strips to protect fish populations and other aquatic life; and

3) description of other measures to prevent erosion of stream bank.

14.20.420 Industry

A. Review Criteria: The city shall utilize the following information provided by the applicant in its review of all industrial development applications:

1) Whether the proposal includes water-dependent, water-related, or water-oriented aspects or components of the use or activity;

2) Whether the proposed industrial use is consistent with the use matrix of 14.20.270;

3) Whether the proposed industrial use makes adequate provisions for public and private visual and physical shoreline access;

4) Whether the application makes adequate provisions to prevent or mitigate adverse environmental impacts; and

5) Whether the application makes adequate provisions to provide for shoreline ecological or critical area mitigation, where appropriate.

B. Water-dependent, and then water-related industrial uses shall have priority over non-water-oriented industrial uses, developments, and activities.

C. Applications for new industrial development on the South and Middle Forks of the Snoqualmie River shall demonstrate that the proposed use would not impede navigability of the river by recreational users.

D. Land shall not be designated for industrial use in shoreline areas with severe environmental limitations.

E. Non-water-oriented industrial uses shall be prohibited, unless the proponent provides for public access and shoreline ecological enhancement, and at least one of the following criteria is met:

1) The industrial use is part of a mixed-use project that includes water-dependent uses.

2) Navigability by recreational users is severely limited at the proposed site.

3) The use provides a significant public benefit with respect to the objectives of the Act.

4) The industrial use is physically separated from the shoreline by another property, public right-of-way, or levee.

F. The Administrator shall condition operational intensities, screening requirements, setbacks or buffers, and other project elements as necessary to preserve the character of the city's shorelines.

G. All loading and service areas shall be located upland of the activity. Loading and service areas shall be screened from adjacent uses to protect the aesthetics of the shoreline.

H. The proponent shall demonstrate by use of the most current, available scientific and technical information that appropriate practices and methods will be utilized in connection with industrial uses and activities to prevent the contamination of nearby waterbodies and any potential adverse impacts on plant, fish and animal life.

I. Industrial development and redevelopment shall be encouraged to locate where environmental cleanup and restoration of the shoreline area can be incorporated.

J. Development shall be located, designed, and constructed in a manner that assures no net loss of shoreline ecological functions and without significant adverse impacts on other preferred land uses and public access features.

14.20.430 In-Stream Structures

In-stream structures are those structures placed by humans within a stream or river waterward of the OHWM that either cause or have the potential to cause water impoundment or the diversion, obstruction, or modification of water flow. In-stream structures may include those for hydroelectric generation, irrigation, water supply, flood control, transportation, utility service transmission, fish habitat enhancement, or other purpose. Docks, floats and marinas are not regulated as "in-stream structures" under this section of the SMP. See Section 14.20.550.D for regulations governing road and utility crossings of streams.

A. General

1) The location, planning and design of in-stream structures shall be compatible with the following:

a. the full range of public interests, including demand for public access to shoreline waters, desire for protection from floods, and need for preservation of historical and cultural resources;

b. protection and preservation of ecosystem-wide processes and ecological functions, including, but not limited to, fish and wildlife, with special emphasis on protecting and restoring priority habitats and species, and water resources and hydro geological processes.

2) Structures shall be designed, located, and constructed consistent with mitigation sequencing principles in NBMC 14.20.290(B) and as otherwise limited by floodplain regulations found in NBMC 14.20.580, Floodplain Management.

3) Structures shall be designed and located to minimize removal of riparian vegetation and, if applicable, to return flow to the stream in as short a distance as possible.

4) In-stream structures shall provide for adequate upstream and downstream migration of resident fish, and shall not adversely affect salmonid fish species or adversely modify salmonid fish habitat.

5) Utilities and transmission lines shall be located so as to minimize obstruction or degradation of views, and comply with applicable provisions of NBMC 14.20.500, Utilities.

6) Mitigation shall be required of the proponent for the loss of ecological functions and processes pursuant to NBMC 14.20.290, and consistent with provisions found in applicable sections of Article V – Critical Areas, NBMC 14.20.510-580. No net loss in function, value, or acreage shall occur from such development.

7) In-stream structures may be required to provide public access, provided public access improvements do not create significant ecological impacts or other adverse environmental impacts on and along the affected shoreline, nor create a safety hazard to the public. Public access provisions shall include, but not be limited to, any combination of trails, vistas, parking, and any necessary sanitation facilities. Required public access sites shall be dedicated for public use through fee acquisition or recorded easement or any action that permanently dedicates the sites as public access.

B. Submittal Requirements: In addition to the standard requirements listed in NBMC 14.20.650, Application Requirements, all permit applications for in-stream structures shall contain, at a minimum, the following additional information:

1) A site suitability analysis, which provides sufficient justification for the proposed site. The analysis must fully address alternative sites for the proposed development.

2) Proposed location and design of primary and accessory structures, transmission equipment, utility corridors, and access/service roads.

3) Provision for public access to and along the affected shoreline and proposed recreational features at the site, where applicable.

4) A plan that describes the extent and location of vegetation which is proposed to be removed to accommodate the proposed facility, and any site revegetation plan required by this SMP.

5) A hydraulic analysis prepared by a licensed professional engineer that sufficiently describes the project's effects on stream way hydraulics, including potential

increases in base flood elevation, changes in stream velocity, and the potential for redirection of the normal flow of the affected stream.

6) A hydrologic analysis that analyzes the project's effects on ecological processes, including delivery and rate of water and sediment, geomorphology, and recruitment of large woody debris.

7) Biological resource inventory and analysis that sufficiently describes the project's effects on fish and wildlife resources, prepared by a qualified professional as defined in NBMC 14.20.190.

8) Provision for erosion control, protection of water quality, and protection of fish and wildlife resources during construction.

9) Long-term management plans that describe, in sufficient detail, provisions for protection of in-stream resources during construction and operation. The plan shall include means for monitoring its success.

14.20.440 Mining

A. Mining shall be prohibited waterward of the OHWM.

B. Mining facilities shall be located within shoreline jurisdiction only when no feasible sites are available outside shoreline jurisdiction, and only after the applicant has demonstrated compliance with the mitigation sequencing requirements of NBMC 14.20.290.B.

C. Mining in shoreline jurisdiction shall only be approved when the material proposed to be extracted is only available in a shoreline location. This determination shall be based on an evaluation of geologic factors such as the distribution and availability of mineral resources for that jurisdiction; the need for such mineral resources; and economic, transportation, and land use factors. This demonstration may rely on analysis or studies prepared for purposes of comprehensive plan designations, and may be integrated with any relevant environmental review conducted under SEPA (Chapter 43.21C RCW), or otherwise be shown in a manner consistent with RCW 90.58.100(1) and WAC 173-26-201(2)(a), as amended.

D. Mining facilities and associated activities shall be designed and located to prevent loss of ecological function. Application for permits for mining operations shall be accompanied by operation plans, reclamation plans and analysis of environmental impacts sufficient to make a determination as to whether the project will result in net loss of shoreline ecological functions and processes during the course of mining and after reclamation. Creation, restoration, or enhancement of habitat for priority species and the future productivity of the site may be considered in determining no net loss of ecological functions.

E. Preference shall be given to mining uses that result in the creation, restoration, or enhancement of habitat for priority species.

F. Mining proposals must be coordinated and compliant with state Surface Mining Reclamation Act requirements (Chapter 78.44 RCW, Chapter 332-18 WAC).

14.20.450 Recreational Development

A. General Preferences

1) Recreational uses and facilities shall include features that relate to access, enjoyment, and use of the water and North Bend's shorelines.

2) Both passive and active shoreline recreation are allowed that are consistent with the city's Parks, Recreation, Wildlife Habitat and Open Space Plan and Si View Metropolitan Park District Comprehensive Plan.

3) Water-oriented recreational uses and activities are preferred in shoreline jurisdiction. Water-dependent recreational uses shall be preferred as a first priority and water-related and water-enjoyment recreational uses as a second priority.

4) Existing passive recreational opportunities, including nature appreciation, non-motorized trails, environmental interpretation and native habitat protection, shall be maintained.

5) Preference shall be given to the development and enhancement of public access to the rivers to increase fishing, kayaking and other water-related recreational opportunities.

B. General Performance Standards

1) The potential adverse impacts of all recreational uses shall be mitigated and adequate provisions for shoreline rehabilitation shall be made part of any proposed recreational use or development to ensure no net loss of shoreline ecological function.

2) Sites with fragile and unique shoreline conditions, such as high-quality wetlands and wildlife habitats, shall be used only for non-intensive recreation activities, such as trails, viewpoints, interpretive signage, and similar passive and low-impact facilities that result in no net loss of shoreline ecological function, and do not require the construction and placement of permanent structures.

3) For recreation developments that require the use of fertilizers, pesticides, or other toxic chemicals, the proponent shall submit plans demonstrating the BMPs to be used to prevent these applications and resultant leachate from entering adjacent waters. The proponent also shall not apply such chemicals closer than 100 feet to delineated wetlands or the OHWM of the South and Middle Forks of the Snoqualmie River.

4) Recreational developments shall be located and designed to preserve, enhance or create scenic views and vistas.

5) In approving shoreline recreational developments, the city shall ensure that the development will maintain, enhance, or restore desirable shoreline features including unique and fragile areas, scenic views, and aesthetic values. The city may, therefore, adjust or prescribe project dimensions, on-site location of project components, intensity of use, screening, lighting, parking, and setback requirements.

C. Signs indicating the public's right to access shoreline areas shall be installed and maintained in conspicuous locations at all points of access.

D. Recreational developments shall provide facilities for non-motorized access to the shoreline such as pedestrian and bicycle paths. Provision of new motorized vehicular access shall be prohibited except when necessary to assist maintenance activities.

E. Proposals for recreational developments shall include a landscape plan that utilizes primarily native, self-sustaining vegetation. Other vegetation types are allowed upon review by the Shoreline Administrator when such facilities are not in a floodplain or within 200 ft of OHWM. The removal of on-site native vegetation shall be limited to the minimum necessary for the development of permitted structures or facilities, and shall be consistent with provisions of NBMC 14.20.300 and Article V – Critical Areas.

F. Accessory uses and support facilities such as maintenance facilities, utilities, and other non-water-oriented uses shall be consolidated and located in upland areas outside shoreline, wetland, and riparian buffers unless such facilities, utilities, and uses are allowed in shoreline buffers based on the regulations of this SMP.

G. The placement of picnic tables, a playground apparatus, and other similar minor components within the floodways shall be permitted, provided such structures are located and installed in such a manner as to prevent them from being swept away during a flood event.

H. Recreational facilities shall make adequate provisions, such as screening, landscaping buffer strips, fences and signs, to prevent trespass upon adjacent properties and to protect the value and enjoyment of adjacent or nearby private properties and natural areas.

I. No recreational buildings or structures shall be built over any natural body of water.

J. All recreational developments shall make adequate provisions for:

1) both on-site and off-site pedestrian, bicycle and, where appropriate, equestrian access;

2) appropriate water supply and waste disposal methods; and

3) security and fire protection.

K. Structures associated with recreational development shall not exceed 35 feet in height, except for structures in DC, IC or IMU zones according to NBMC 14.20.280, Development Standards when such structures document that the height beyond 35 feet will not obstruct the view of a substantial number of adjoining residences.

L. Recreational development shall minimize effective impervious surfaces in shoreline jurisdiction and incorporate low-impact development techniques.

14.20.460 Residential Development

A. Single-family residential development is a preferred use when it is developed in a manner consistent with pollution control and preventing damage to the natural environment.

B. Residential development shall be located and constructed to result in no net loss of shoreline ecological function. No net loss of shoreline ecological functions shall be assured through application of shoreline buffers specified in NBMC 14.200.550, Streams to avoid

future stabilization and other provisions of this SMP related to shoreline stabilization, vegetation management, and on-site sewage disposal.

C. Lots for residential use shall have a maximum density consistent with the North Bend Land Use Code.

D. Accessory uses and structures shall be located landward of the principal residence, unless the structure is or supports a water-dependent use.

E. All residential development shall be located or designed in such a manner as to prevent measurable degradation of water quality from stormwater runoff. Adequate mitigation measures shall be required and implemented where there is the reasonable potential for such adverse effect on water quality.

F. Applications for new shoreline residences shall ensure that shoreline stabilization and flood control structures are not necessary to protect proposed residences.

G. New floating residences and over-water residential structures shall be prohibited in shoreline jurisdiction.

H. New multi-unit residential development, including duplexes, fourplexes, and the subdivision of land into ten or more lots shall make adequate provisions for public access consistent with the regulations set forth in SMP Article III, 14.20.320.

I. All new residential development shall connect with the sewer system.

J. All new residential development shall be required to meet the vegetation management provisions contained in Article III. 14.20.300 Shoreline Vegetation Conservation and Article V. 14.20.560 Fish and Wildlife Habitat Conservation Areas.

K. Residential development clustering may be required by the Shoreline Administrator where appropriate to minimize ecological and visual impacts on shorelines, including minimization of impacts on shoreline vegetation consistent with NBMC 14.20.300.

14.20.470 Shoreline Habitat and Natural Systems Enhancement Projects

A. Shoreline restoration and ecological enhancement projects shall be permitted in all shoreline environment designations, provided the project's purpose is the restoration of the natural character and ecological functions of the shoreline. Preferred projects include those identified in *Snoqualmie 2015: Building for Salmon Recovery and Watershed Health* (Snoqualmie Watershed Forum 2006, or as amended) or the city's Shoreline Restoration Plan (2011, or as amended), and any projects that facilitate removal of artificial restrictions to natural channel migration, restoration of off channel hydrological connections and return of river processes to a more natural state where feasible and appropriate.

B. Shoreline restoration and enhancement may be allowed if the project applicant demonstrates that no significant change to sediment transport will result and that the enhancement will not adversely affect ecological function, ecosystem-wide processes, properties, or habitat. Restoration activities that damage fish and wildlife resources, degrade recreation and aesthetic resources, result in a net loss of ecological functions, or result in high flood stages and velocities are prohibited.

C. All shoreline restoration and enhancement projects shall protect the integrity of adjacent natural resources, including aquatic habitats and water quality.

D. Restoration and enhancement projects shall be designed using the most current, accurate and complete scientific and technical information available, and implemented using BMPs. Applicants should consult manuals produced by the Washington Department of Fish and Wildlife, including but not limited to the *Stream Habitat Restoration Guidelines Final Draft* (2004, as amended) and *Integrated Streambank Protection Guidelines* (2002, as amended).

E. Restoration and enhancement shall be carried out in accordance with an approved shoreline restoration plan prepared by a qualified professional (see NBMC 14.20.190 for complete definition) with experience and education or training in the pertinent discipline and containing the following plan details:

1) Inventory of existing shoreline environment, including the physical, chemical and biological elements and an assessment of their condition;

2) A discussion of any federal, state, or local special management recommendations for species or habitats located on the site that will be incorporated into the plan;

3) A discussion of proposed measures to minimize any temporary adverse impacts of the project to ensure no net loss of shoreline ecological functions;

4) Scaled drawings of existing and proposed conditions, materials specifications, construction sequence, and a five-year maintenance and monitoring plan, including relevant performance standards applicable to all restoration plan components, such as vegetation, large woody debris, or substrate;

5) Contingency plan if the restoration plan fails to meet performance standards included in the restoration plan; and

6) Any additional information necessary to determine the impacts of a proposal and mitigation of the adverse impacts.

14.20.480 Shoreline Stabilization

A. General

1) These shoreline stabilization regulations apply to the South Fork Snoqualmie River, Middle Fork Snoqualmie River, and all tributaries to those shoreline waterbodies located in shoreline jurisdiction.

2) All shoreline stabilization projects shall comply with mitigation sequencing requirements in NBMC 14.20.290.B.

3) The feasibility of non-structural or soft structural shoreline stabilization measures shall be evaluated when new, enlarged or replacement hard structural shoreline stabilization measures are being considered. The appropriate documentation per H below shall be submitted to demonstrate that non-structural and soft structural alternatives have been thoroughly evaluated, and only the softest technique that will accomplish the necessary stabilization shall be approved.

4) When any structural shoreline stabilization measures are demonstrated to be necessary, the size of stabilization measures shall be limited to the minimum necessary.

5) Shoreline stabilization shall be designed so that net loss of ecological functions does not occur and such that stabilization will not degrade instream, upstream, downstream, or cross stream channel stability.

6) 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.

B. New or Enlarged Shoreline Stabilization Structures

1) New development shall be located and designed to avoid the need for new or enlarged shoreline stabilization.

2) New shoreline stabilization which causes significant adverse impacts on adjacent, upstream, down-stream or cross-stream properties and shoreline areas shall not be allowed.

3) Lots shall not be created by the subdivision process if such lots require shoreline stabilization in order to accommodate development.

4) New or enlarged structural stabilization measures shall be allowed in the following circumstances:

a. to protect an existing primary structure, including residences, when conclusive evidence, documented by a geotechnical analysis, is provided that the structure is in danger from erosion caused by shoreline forces. Normal sloughing or shoreline erosion itself, without a scientific or geotechnical analysis, is not demonstration of need. The geotechnical analysis should evaluate on-site drainage issues and address drainage problems before considering shoreline stabilization.

b. in support of new non-water-dependent development, including single-family residences, when all of the conditions below apply:

i. The erosion is not being caused by upland conditions, such as drainage or the loss of vegetation.

ii. Nonstructural measures, such as placing the development farther from the shoreline, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address adverse erosion impacts.

iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report. The damage must be caused by conditions beyond the control of the applicant, such as natural processes.

c. in support of water-dependent development when all of the conditions below apply:

i. The erosion is not being caused by upland conditions, such as drainage, the presence of upstream development, or the loss of vegetation.

ii. Nonstructural measures, such as planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or adverse impacts.

iii. The need to protect primary structures from damage due to erosion is demonstrated through a geotechnical report.

d. to protect projects for the restoration of ecological functions or for hazardous substance remediation projects pursuant to Chapter 70.105D RCW when nonstructural measures, planting vegetation, or installing on-site drainage improvements, are not feasible or not sufficient to adequately address erosion causes or adverse impacts.

C. Replacement of Existing Shoreline Stabilization Structures

1) For purposes of this section, "replacement" means the construction of new shoreline stabilization to perform the shoreline stabilization function of an existing structure which can no longer adequately serve its purpose due to age, deterioration, or increased flood flow rates and volumes. Replacements that include additions to or increases in size of existing shoreline stabilization measures shall be considered new structures.

2) An existing structural stabilization structure may be replaced subject to the following provisions:

a. There is a demonstrated need to protect principal uses or structures from erosion caused by shoreline forces.

b. Replacement hard structural shoreline stabilization measures protecting existing residences shall not encroach waterward of the OHWM or waterward of the existing shoreline stabilization measure unless the residence was occupied prior to January 1, 1992, and there is overriding safety or environmental concerns. In such cases, the replacement structure shall abut the existing shoreline stabilization structure. All other replacement hard structural shoreline stabilization measures shall be located at or landward of the existing shoreline stabilization structure.

c. Hard shoreline stabilization measures may allow some accessory fill (gravel, cobble or smaller material only) waterward of the OHWM to provide enhancement of shoreline ecological functions through improvements in substrate condition or gradient.

d. Soft shoreline stabilization measures that provide restoration of shoreline ecological functions may be permitted waterward of the OHWM.

3) When replacement is allowed pursuant to the provisions of C.2) above, an existing structural stabilization structure shall be replaced with the softest stabilization measure that will provide the necessary level of stabilization consistent with the findings of the required submittal documents outlined in H below.

D. Repair of Existing Shoreline Stabilization Structures

1) For purposes of this section, "repair" means modifications or improvements to an existing shoreline stabilization structure that are designed to ensure the continued function of the structure by preventing failure of any part.

2) "Repair" shall not include:

    a. Additions to or increases in size of existing shoreline stabilization structures. Such additions or increases shall be considered new or enlarged structures.

    b. The placement of a new shoreline stabilization structure landward of a failing shoreline stabilization structure. Such placement shall be considered a new structure.

    c. Replacement of greater than 50 percent of the linear length of existing shoreline stabilization structure when an existing structure, including its footing or bottom course of rock, is removed prior to placement of new shoreline stabilization materials (repairs that involve only removal of material above the footing or bottom course of rock are not considered replacement). Such activity must be designed and reviewed as a replacement structure.

E. General Design and Construction Standards

1) Areas of temporary disturbance within the shoreline buffer shall be stabilized within seven days of project completion, and revegetated within 30 days using plant species that will return the area to its pre-project condition or better.

2) Soft shoreline stabilization structures shall be used to the maximum extent practicable for new, enlarged, and replacement of legally established shoreline stabilization structures, limiting hard shoreline stabilization structures to the portion or portions of those sites determined necessary to protect or support existing shoreline structures or trees, or where necessary to connect to existing hard structural shoreline stabilization structures on adjacent properties. Hard structural shoreline stabilization transition areas between the applicant's otherwise soft shoreline structure and the adjacent hardened shoreline, when needed on the subject property to prevent destabilization of adjacent hardened shorelines, shall be minimized and extend into the subject property from the property line no more than 10 feet.

3) For enlarged or replacement shoreline stabilization structures, the following location and design standards are preferred in descending order:

    a. Conduct excavation and fill activities associated with the structural shoreline stabilization landward of the existing OHWM except as authorized above.

    b. Where "a", above, is not practicable because of overriding safety or environmental concerns, conduct necessary excavation and fill activities waterward of the existing OHWM as needed to implement a soft structural shoreline stabilization technique or to mitigate the adverse impacts of adjacent hard structural shoreline stabilization.

4) All shoreline stabilization activities shall minimize and mitigate any adverse impacts on ecological functions resulting from short-term construction. Impact minimization techniques may include compliance with appropriate timing restrictions, use of BMPs to prevent adverse water-quality impacts related to upland or in-water work, and stabilization of exposed soils following construction.

5) New and enlarged shoreline stabilization structures shall mitigate any adverse impacts on ecological functions by incorporating the following measures, at a minimum, if appropriate for local conditions:

    a. Restoration of appropriate substrate conditions waterward of the OHWM, including substrate composition and gradient. The material should be sized and placed to remain stable during a two-year flood event.

    b. Plant native riparian vegetation, as necessary, along at least 75 percent of the shoreline frontage affected by the new or enlarged stabilization. The vegetated portion of the shoreline buffer shall average 10 feet in depth from the OHWM, but may be a minimum of 10 feet wide to allow for variation in landscape bed shape and plant placement. Restoration of native vegetation shall consist of a mixture of trees, shrubs, and groundcover and be designed to improve habitat functions. At least six trees per 100 linear feet of shoreline must be included in the plan. Plant materials must be native to King County. An alternative planting plan or mitigation measure in lieu of meeting these requirements may be allowed if approved by other state and federal agencies.

6) The shoreline stabilization structure shall not interfere with normal surface and/or subsurface drainage into the waterbody.

7) Shoreline stabilization structures shall not extend waterward of the OHWM, except for shoreline stabilization which enhances shoreline ecological functions or is allowed under C.2)b. above.

8) When repair or replacement shoreline stabilization structures intended to improve ecological functions shift the OHWM landward of the pre-modification location, any buffers from the OHWM or lot area for the purposes of calculating lot coverage shall be measured from the pre-modification location. The pre-modification OHWM shall be noted in a record of survey approved by the city of North Bend and recorded at the King County Recorder's Office.

9) Repair or replacement shoreline stabilization measures which re-locate the OHWM landward of the pre-modification location, and result in an expansion of the shoreline jurisdiction on any property other than the subject property, shall not be approved until the applicant submits a copy of a statement signed by the legal owners of all affected properties, on a form approved by the city of North Bend and recorded at the King County Recorder's Office, consenting to the shoreline jurisdiction creation and/or increase on such property.

10) The use of car bodies, scrap building materials, or any other form of solid waste for shoreline stabilization is prohibited. Organic materials normally used for habitat enhancement or bioengineering methods shall not be considered solid waste under this provision.

11) Proponents shall mitigate for any adverse impacts on ecological functions, and shall restore all fish or wildlife habitat damaged or degraded as a result of their project. Where applicants demonstrate that restoration is not feasible, adverse impacts shall be mitigated with the creation of in-kind habitat near the project.

12) All soft structure shoreline stabilization projects and mitigation for hard structural shoreline stabilization projects shall use an appropriately diverse variety of self-sustaining native plant materials including trees, shrubs and grasses, unless demonstrated to be impractical for the particular site.

13) All cleared areas shall be replanted following construction and vegetation shall be fully reestablished within three years. Cleared areas shall continue to be replanted until such time as vegetation is adequately reestablished.

14) Shoreline stabilization projects shall be periodically monitored and maintained as necessary. Damaged areas shall be promptly repaired.

15) All construction and planting activities shall be scheduled to minimize impacts on water quality and fish and wildlife aquatic and upland habitat and to optimize survival of new vegetation.

F. Design and Construction Standards for Soft Shoreline Stabilization Structures

1) The soft structural shoreline stabilization design shall provide sufficient protection of adjacent properties by tying in with the existing contours of the adjoining properties to prevent erosion at the property line. Projects that include necessary use of hard structural shoreline stabilization measures only near property lines in order to tie in with adjacent properties shall be permitted as soft shoreline stabilization measures. The length of hard structural shoreline stabilization transition area to adjacent properties should be minimized to the maximum extent practicable, and extend into the subject property from adjacent properties no more than 10 feet. The hard structural shoreline stabilization transition area shall not extend waterward of the OHWM, except as necessary to make the connection to the adjoining stabilization, and shall not extend onto the adjacent property.

2) The soft shoreline stabilization design shall size and arrange any gravels, cobbles, logs, and boulders so that the project remains stable during a two-year flood event.

3) The sizing and placement of all materials shall be selected to accomplish the following objectives:

a. Protect the primary structures from erosion and other damage over the long term and accommodate the normal amount of alteration from shoreline forces; and

b. Allow safe passage and migration of fish and wildlife.

G. Design and Construction Standards for Hard Structural Shoreline Stabilization Structures

1) All new, enlarged, or replacement hard structural shoreline stabilization structures should minimize any long-term adverse impacts on ecological functions by incorporating the following measures into the design:

a. Limiting the size of hard shoreline stabilization structures to the minimum necessary to protect existing upland development, including length, height, depth, and mass.

b. Shifting the hard shoreline stabilization structures landward and/or sloping the hard shoreline stabilization structures landward to provide some dissipation of energy and increase the quality or quantity of habitat.

2) When hard structural shoreline stabilization is approved on a site where hard structural shoreline stabilization is not located on adjacent properties, the construction of hard structural shoreline stabilization shall tie in with the existing contours of the adjoining properties, as feasible, such that the proposed stabilization would not cause erosion of the adjoining properties.

3) The following provisions apply when hard structural shoreline stabilization is approved on a site where hard structural shoreline stabilization is located on adjacent properties:

a. the proposed stabilization may tie in flush with existing stabilization measures on adjoining properties, provided that:

i. the new stabilization does not extend waterward of the OHWM, except as necessary to make the connection to the adjoining stabilization, and

ii. the new stabilization does not extend onto the adjacent property.

b. Where a portion of stabilization extends waterward of the OHWM per 3)a.i. above, the remaining portion of the stabilization shall be placed landward of the existing OHWM such that no net intrusion into the waterbody occurs nor does net creation of uplands occur.

c. The length of hard structural shoreline stabilization transition area to adjacent properties should be minimized to the maximum extent practicable, and extend into the subject property from adjacent properties no more than 10 feet.

4) Backfill behind hard structural shoreline stabilization intended to protect single-family residences shall be limited to one cubic yard per running foot of stabilization. Any filling in excess of this amount shall be considered a regulated activity subject to the regulations in this SMP pertaining to fill activities and the requirement for obtaining a Shoreline Substantial Development Permit or Shoreline Conditional Use Permit.

H. Submittal Requirements

1) For all new, enlarged, or replacement structural shoreline stabilization structures, (including soft shoreline stabilization structures), detailed construction plans, including, but not limited to, the following:

a. Plan and cross-section views of the existing and proposed shoreline configuration, showing accurate existing and proposed topography and OHWMs.

b. Detailed construction sequence and specifications for all materials, including gravels, cobbles, boulders, logs, and vegetation.

c. For projects that include native vegetation, a detailed five-year vegetation maintenance and monitoring program to include the following:

i. Goals and objectives of the shoreline stabilization plan;

ii. Success criteria by which the implemented plan will be assessed;

iii. Requirement for at least one site visit per year by a qualified professional; and

iv. Annual progress reports submitted to the Shoreline Administrator and all other agencies with jurisdiction;

d. A contingency plan in case of failure.

2) For new or enlarged hard or soft shoreline stabilization structures, a geotechnical report prepared by a qualified professional with an engineering license. The report shall include the following:

a. An assessment of the necessity for structural shoreline stabilization by estimating time frames and rates of erosion and reporting on the urgency associated with the specific situation. New hard shoreline stabilization structures shall not be authorized, except when a report confirms that that there is a significant possibility that an existing structure will be damaged within three years as a result of shoreline erosion in the absence of such hard shoreline stabilization structures, or where waiting until the need is immediate results in the loss of opportunity to use measures that would avoid adverse impacts on ecological functions. Where the 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 structures.

b. An assessment of the cause of erosion, looking at processes occurring both waterward and landward of the ordinary high water line.

c. An assessment of alternative measures to shoreline stabilization, including:

i. Placing the development farther from the OHWM.

ii. Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion.

d. Where structural shoreline stabilization is determined to be necessary, the assessment must evaluate the feasibility of using soft shoreline stabilization structures in lieu of hard structural shoreline stabilization structures. Soft shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.

e. Design recommendations for minimum sizing of hard or soft structural shoreline stabilization materials, including gravel and cobble beach substrates necessary to dissipate wave energy, eliminate scour, and provide long-term shoreline stability.

3) For replacements of existing hard shoreline stabilization structures with a similar hard structure, the applicant shall submit a written narrative providing a demonstration of need. The narrative must be prepared by a qualified professional and shall consist of the following:

   a. An assessment of the necessity for continued structural shoreline stabilization, considering site-specific conditions such as water depth, orientation of the shoreline, flow velocities, and location of the nearest primary structure.

   b. An assessment of erosion potential resulting from natural processes operating at or waterward of the OHWM in the absence of the hard structural shoreline stabilization.

   c. An assessment of alternative measures to shoreline stabilization, including:

      i. Relocating the development farther from the OHWM.

      ii. Correcting any on-site groundwater or drainage issues that may be causing shoreline erosion.

   d. An assessment of the feasibility of using soft shoreline stabilization measures in lieu of hard structural shoreline stabilization measures. Soft structural shoreline stabilization may include the use of gravels, cobbles, boulders, and logs, as well as vegetation.

   e. Design recommendations for minimizing adverse impacts of any necessary hard structural shoreline stabilization.

   f. A demonstration of need may be waived when an existing hard shoreline stabilization structure is proposed to be repaired or replaced using soft shoreline stabilization structure that would result in significant restoration of shoreline ecological functions or processes.

14.20.490 Transportation: Trails, Roads, and Parking

A. New or expanded motor vehicle and rail transportation facilities shall not be located within shoreline jurisdiction, unless:

   1) The proponent demonstrates that no feasible upland alternatives exist;

   2) The project represents the minimum development necessary to serve another specific, localized, and permitted shoreline use; or

   3) In the case of a water crossing, the proponent demonstrates that the project is necessary to further a substantial public interest.

B. When new roads or road expansions are unavoidable in shoreline jurisdiction, proposed transportation facilities shall be planned, located, and designed to achieve the following:

   1) Meet mitigation sequencing provisions of NBMC 14.20.290;

   2) Avoid adverse impacts on existing or planned water-oriented uses;

   3) Set back from the OHWM to allow for a usable shoreline area for vegetation conservation and any preferred shoreline uses unless infeasible;

4) Minimize grading, vegetation clearing, and alterations of the natural topography; and

5) Use BMPs for preventing erosion and degradation of surface water quality.

C. Improvements to existing motor vehicle and rail transportation facilities shall not interfere with pedestrian and bicycle access, and shall whenever possible, provide for expansion and enhancement of pedestrian and bicycle transportation facilities.

D. Transportation facilities and services for motor vehicles and rail shall utilize existing transportation corridors whenever possible.

E. The development, improvement, and expansion of pedestrian and bicycle transportation facilities are allowed within all environments. Such transportation facilities are a preferred use wherever they are compatible with the natural character, resources, and ecology of the shoreline, and are consistent with the North Bend's Parks, Recreation, Wildlife Habitat and Open Space Plan, and the Transportation Plan.

F. Pedestrian and bicycle transportation facilities shall be designed, located, and constructed consistent with the policies and regulations for public access as provided in NBMC 14.20.320 of this SMP.

G. Parking facilities are not a water-dependent use and shall only be permitted in the shoreline jurisdiction to support an authorized use where it can be demonstrated to the satisfaction of the Shoreline Administrator that there are no feasible alternative locations away from the shoreline. Parking as a permanent and primary use shall not be allowed in any shoreline jurisdiction. Accessory parking facilities shall be subject to the same permit type as the primary use.

H. Accessory parking facilities shall be planned to avoid or minimize adverse effects on unique or fragile shoreline features and shall not result in a net loss of shoreline ecological functions or adversely affect existing or planned water-dependent uses. Parking facilities shall be located upland of the principal structure, building, or development they serve, and preferably outside of shoreline jurisdiction, except:

1) Where the proponent demonstrates that an alternate location would reduce adverse impacts on the shoreline and adjacent uses;

2) Where another location is not feasible; and/or

3) Except when Americans with Disability Act (ADA) standards require otherwise.

In such cases, the applicant shall demonstrate use of measures to reduce adverse impacts of parking facilities in shoreline jurisdiction, such as low impact development techniques, buffering, or other measures approved by the Shoreline Administrator.

I. Parking facilities shall be landscaped in a manner to minimize adverse visual and aesthetic impacts on adjacent shoreline and abutting properties. .

J. All forms of transportation facilities shall, wherever feasible, consolidate water crossings and make joint use of rights-of-way with existing or planned future primary utility facilities and other transportation facility modalities.

K. Improvements to all existing transportation facilities shall provide for the reestablishment and enhancement of natural vegetation along the shoreline when appropriate.

L. If located in the side yard or waterward side of a structure, loading areas shall be screened from view of pedestrians on either side of the waterway. The visual screen shall be composed of a fence or wall with trees and shrubs consistent with city landscape standards.

M. Shoreline crossings and culverts shall be designed to minimize adverse impacts on riparian and aquatic habitat and shall allow for fish passage. See Section 14.20.550.D for regulations governing crossings of non-shoreline streams located in shoreline jurisdiction.

N. Trails shall be designed consistent with public access requirements in NBMC 14.20.320, Public Access.

14.20.500 Utilities

A. Utility production and processing facilities and transmission that are non-water-oriented shall not be allowed in shoreline unless it can be demonstrated that no other practical upland alternative or location exists.

B. The principal use permitted by this section is the North Bend Wastewater Treatment Plant, including sewage collection, holding, transfer and treatment pipelines, tanks, structures, containment facilities, buildings, etc. The following accessory facilities are also permitted:

1) Plant monitoring and control facilities and on-site administrative offices;

2) Plant access and logistical facilities such as storage areas, material handling ramps and facilities, etc, and including utility delivery (electrical, communication, etc.) facilities;

3) Plant security and safety features such as fences, signage, etc.; and

4) Other accessory or auxiliary uses or features, necessary to of the effective and efficient operation of the plant and which cannot feasibly be located outside the shoreline jurisdiction.

C. Expansion of existing primary utility facilities within shoreline jurisdiction must demonstrate:

1) The expansion is designed to protect adjacent shorelands from erosion, pollution, or other environmentally detrimental factors during and after construction.

2) The project is planned to fit existing natural topography as much as practical and avoid alteration of the existing natural environment.

3) Debris, overburden, and other construction waste materials shall be disposed of so as to prevent erosion or pollution of a waterbody.

D. Primary utility facilities and expansions shall include provisions to control the quantity and quality of surface water runoff to natural waterbodies, using BMPs to retain natural flow rates. A maintenance program to ensure continued proper functioning of such facilities shall be required.

E. Applications for installation of utility facilities shall include the following (at a minimum):

1) Reason why the utility facility must be in shoreline jurisdiction;
2) Alternative locations considered and reasons for their elimination;
3) Location of the same, similar, or other utility facilities in the vicinity of the proposed project;
4) Proposed method(s) of construction;
5) Plans for reclamation of areas to be disturbed during construction;
6) Landscape plans;
7) Methods to achieve no net loss of ecological function and minimize clearing of native vegetation; and
8) Consistency with city or County comprehensive plans for utilities, where such plans exist.

F. Where feasible, utilities shall be consolidated within a single easement and utilize existing rights-of-way. Any utility located within property owned by the utility provider which must of necessity cross shoreline jurisdiction shall be designed and operated to reserve the option of general public recreational usage of the right-of-way in the future. This option shall be exercised by the public only where:

1) The public will not be exposed to dangers from the utility equipment; and
2) The utility itself will not be subjected to unusual risks of damage by the public.

G. In areas where utilities must cross shoreline jurisdiction, they shall do so by the most direct route feasible, unless such a route would negatively affect an environmentally critical area, obstruct public access to the shoreline, or interfere with the navigability of a waterbody regulated by this SMP. See Section 14.20.550.D for regulations governing crossings of non-shoreline streams located in shoreline jurisdiction.

H. Utility facilities shall be designed and located in a manner that protects scenic views and minimizes adverse aesthetic impacts. They must be landscaped to enhance the appearance from surrounding areas in accordance with landscape standards applicable to the underlying zone.

I. New utilities which must be constructed across shoreline jurisdiction must submit a mitigation plan demonstrating the restoration of the shoreline to at least its existing condition. Upon completion of utility installation or maintenance, any disturbed areas shall be regraded to be compatible with the natural terrain of the area and revegetated with appropriate native plants to prevent erosion.

J. All underwater pipelines or those paralleling the waterway transporting liquids potentially injurious to aquatic life or water quality shall be prohibited, unless no other alternative exists to serve a public interest. In those limited instances where permitted, shut-off valves shall be provided at both sides of the waterbody except for public sanitary sewers of a gravity or siphon nature. In all cases, no net loss of ecological functions shall be maintained.

K. Where utilities cannot cross a shoreline waterbody via a bridge or other existing water crossing, the utilities shall be bored beneath the waterbody such that the substrate is not disturbed. In channel migration areas, migration processes and depth of erosion must be

analyzed. Underground utilities must be placed lower than potential scour and erosion depth. Construction of pipelines placed under aquatic areas shall be placed in a sleeve to avoid the need for excavation in the event of a failure in the future.

L. Minor trenching to allow the installation of necessary underground pipes or cables is allowed if no alternative, including boring, is feasible, and if:

1) Impacts on fish and wildlife habitat are avoided to the maximum extent possible.

2) The utility installation shall not increase or decrease the natural rate, extent, or opportunity of channel migration.

3) Appropriate BMPs are employed to prevent water quality impacts or other environmental degradation.

M. Utility installation and maintenance operations shall be conducted in a manner that does not negatively affect surface water quality or quantity.

1) Applications for new utility projects in shoreline jurisdiction shall include a list of BMPs to protect water quality.

2) Outfalls shall be designed and installed so that during periods of heavy rainfall the velocity and quantity of runoff will not be detrimental to important aquatic life in the receiving waters, and so that it does not flood adjacent land. The Shoreline Administrator may condition the proposed outfall location and design to assure aesthetic compatibility and to reduce adverse environmental impacts.

3) Storm drain lines for any substantial development shall be designed so that they can be economically connected to a common collector system when the level of development makes that feasible. A common collection system and outfall will be preferred to a large number of outfalls from individual parcels of land.

N. New utility lines shall be located underground, except when:

1) The presence of critical areas, groundwater, a flood threat, bedrock ,or other obstructions make such placement infeasible;

2) Underground placement would create greater adverse environmental impacts than above-ground transmission; or

3) Underground placement is not feasible as the term is defined in this SMP.

Article V – Critical Areas

14.20.510 Administrative Provisions

A. Jurisdiction.

1) The city shall regulate in the city's shoreline jurisdiction all uses, activities, and development within, adjacent to, or likely to affect one or more critical areas, consistent with the provisions of Article V – Critical Areas, NBMC 14.20.510 to NBMC 14.20.580.

2) Critical areas regulated include:

a. Wetland areas;

b. Critical aquifer recharge areas;

c. Rivers and streams;

d. Fish and wildlife habitat conservation areas;

e. Geologically hazardous areas;

f. Frequently flooded areas;

3) All areas within the city meeting the definition of one or more critical areas are subject to the provisions of the critical area regulations.

B. Designation of critical areas.

1) The city has designated critical areas by defining their characteristics. The applicant shall determine and the city shall verify, on a case-by-case basis, in accordance with the definitions in NBMC 14.20.190, whether a critical area exists and is regulated under this chapter, or whether a critical area is on or in close proximity to the subject property that requires a setback or buffer, as required in the applicable critical area buffer.

2) The city has prepared a series of critical area maps, which show approximate boundaries for the following critical areas within the city limits: special flood hazard area map, river channel migration hazard map, critical aquifer recharge area map, wetland area map, erosion/debris flow, rivers and streams, and fish and wildlife habitat areas. Critical areas have been determined by local studies, King County published GIS data, and information provided by other federal or state agencies. These maps provide only approximate boundaries of known features and are not adequate substitutes for more detailed maps and/or studies that could identify alternative locations of known features or additional critical area features not illustrated on the map. Copies of the maps are available for viewing at the North Bend community services department, and the most current maps are available on the city's website.

3) The city maps and data indicate where some critical areas may exist or do exist based on previous studies completed. These resources may not identify all critical areas and should only be used as a guide. Actual field observations shall supersede information in these resources.

C. Applicability.

1) No person, company, agency, or applicant shall alter a critical area or buffer except as consistent with the purpose and requirements of this Article.

2) The city of North Bend shall not approve any development permit or otherwise issue any authorization to alter the condition of any land, water, or vegetation, or to construct or alter any structure or improvement in, over, or on a critical area or associated buffer, without first assuring compliance with the requirements of this Article.

D. Preapplication conference. When an applicant knows or suspects that critical areas are located on or near the subject property, the applicant is encouraged and may be required as

set forth in NBMC 20.02.001 to contact the city prior to finalizing development plans and applying for development permits. Early disclosure of critical areas will reduce delays during the permit review process.

E. Submittal requirements. In addition to the information required for a shoreline permit under NBMC 14.20.650, any entity undertaking development activity that is subject to the provisions of the critical area regulations, may be required to submit a critical area report as described under NBMC 14.20.530(H), Critical area reports/studies.

F. Bonds or performance security.

1) Prior to issuance of any shoreline permit or approval, including a Shoreline Exemption, that authorizes site disturbance under the provisions of this Article, the city shall require a performance security to assure that all work or actions required by this Article are satisfactorily completed in accordance with the approved plans, specifications, permit or approval conditions, and applicable regulations, and to assure that all work or actions not satisfactorily completed will be corrected to comply with approved plans, specifications, requirements, and regulations to eliminate hazardous conditions, to restore environmental damage or degradation, and to protect the health, safety, and general welfare of the public. Projects outside wetlands, streams, steep slope or erosion soil area and their buffers shall be exempt from a bond or performance security under this Article.

2) The city shall require the applicant to post a performance bond or other security, in a form and amount acceptable to the city, for completion of any work required to comply with this code at the time of construction. If the development proposal is subject to mitigation, the applicant shall post a performance bond or other security in a form and amount deemed acceptable by the city to cover long-term monitoring, maintenance, and performance for mitigation projects, to ensure mitigation is fully functional for the duration of the monitoring period.

3) The performance security shall be in the amount of 125 percent of the estimated cost of the completed action or the estimated cost of restoring the functions and values of the critical area at risk, whichever is greater.

4) The performance security shall be in the form of a security bond, performance bond, assignment of savings account, or an irrevocable letter of credit guaranteed by an acceptable financial institution with terms and conditions acceptable to the city.

5) Bonds or other security authorized for mitigation by this section shall remain in effect until the city determines, in writing, that the bonded standards have been met. Performance bonds or other security for required mitigation projects shall be held by the city for a minimum of five years to ensure that the mitigation project has been fully implemented and demonstrated to function. Two years after completion of 100 percent of the bonded performance measures, the performance bond may be reduced to the amount of 65 percent of the original amount secured under subsection 3) of this section, less remaining maintenance and monitoring costs, if the city determines in writing that the bonded standards, less remaining maintenance and monitoring, have been met. For structural projects (e.g., compensatory storage) outside of a wetland or stream buffer, security shall be released upon completion and city acceptance of the work. The bond may be held

for longer periods upon written finding by the city that it is necessary to continue to hold the bond to ensure the mitigation project has met all elements of the approved mitigation plan.

6) Depletion, failure, or collection of bond funds shall not discharge the obligation of an applicant or violator to complete required mitigation, maintenance, monitoring, or restoration.

7) Any failure to satisfy critical area requirements established by law or condition including, but not limited to, the failure to provide a monitoring report within 30 days after it is due or to comply with other provisions of an approved mitigation plan shall constitute a default, and the city may demand payment of any financial guarantees or initiate code compliance per NBMC 14.20.750, Enforcement.

8) Any funds recovered pursuant to this section shall be used to complete the required mitigation.

G. Notice on title.

1) To inform subsequent purchasers of real property of the existence of critical areas excluding soil liquefaction, Category II critical aquifer recharge areas, and floodplain outside of the floodway or channel migration zone. The owner of any real property containing a critical area or buffer on which a development proposal is submitted and approved shall file a notice on title with the records division of King County.

   a. The notice shall run with the property and state the following:

      i. The presence of the critical area or buffer on the property;

      ii. That the use of this property is subject to the provisions of this chapter, or subsequent provisions related thereto; and

      iii. That limitations on actions in or adjacent to the critical area and buffer may exist.

   b. Exceptions to notice on title:

      i. Where the work on existing structures or uses is not a substantial improvement to the existing structure or use and does not increase the area of impact on the critical area or its buffer, the notice on title will not be required;

      ii. Activities within a recorded easement or right-of-way; or

      iii. Where it has been or will be placed in a critical area tract.

2) This notice on title shall not be required for a development proposal by a public agency or public or private utility:

   a. Within a recorded easement or right-of-way;

   b. Where the agency or utility has been adjudicated the right to an easement or right-of-way; or

   c. Where it has been or will be placed in a critical area tract.

3) The applicant shall submit proof that the notice has been filed for public record prior to issuance of a permit as specified in Chapter 18.38 NBMC. The applicant shall submit proof that the notice will be filed for public record as part of the final plat in the case of subdivisions or lot line adjustments.

H. Inspection and right of entry. The Shoreline Administrator may inspect any development activity to enforce the provisions of this Article. The applicant consents to entry upon the site by the Shoreline Administrator during regular business hours for the purposes of making reasonable inspections to verify information provided by the applicant and to verify that work is being performed in accordance with the approved plans and permits and requirements of this Article.

I. Enforcement. The provisions of NBMC 14.20.750 shall regulate the enforcement of these critical area regulations.

J. Fees.

1) The applicant is responsible for the initiation, preparation, submission, and expense of all required reports, assessment(s), studies, plans, reconnaissance(s), peer review by qualified professionals, and other work prepared in support of, or necessary for, the city of North Bend's critical areas review processing.

2) The applicant shall also be responsible for the performance, including monitoring and maintenance, of critical areas that may be required as a condition of permit approval. Performance bonds may be withheld until all work is satisfactorily completed, including post-construction mitigation activity.

3) The applicant shall also be responsible for the city review or peer review of performance as constructed and monitoring and maintenance reports.

4) The fees, costs, expenses and deposits as may be required for submittals under subsections 1), 2) and 3) of this section shall be as set forth in the city's taxes, rates and fees schedule, as may be amended from time to time.

K. Appeals. Appeals of administrative decisions shall be governed by NBMC 14.20.730.

L. Allowed activities. The following development, activities, and associated uses are allowed as provided below, provided they are consistent with the provisions of other local, state, and federal laws and requirements:

1) Vegetation management, including landscaping and gardening revisions, that is part of ongoing maintenance of buildings and facilities and their associated yard areas in existence prior to the effective date of this SMP. Vegetation management is also permitted on public rights-of-way or utility easements, provided the vegetation management activity does not expand farther into the critical area or its buffer. Properties within the floodplain, critical aquifer recharge area or seismic liquefaction area and located outside of other critical areas are exempted from the maintenance area expansion restriction of this provision. Vegetation management can take place in native growth protection easements (NGPE) or tracts, wetlands, and wetland and stream buffer; provided only state-listed invasive and noxious weeds and additional aggressive nonnative species (Japanese knotweed, scotch broom, English ivy, Himalayan blackberry, and evergreen blackberry) shall be

removed or cut, hand removal is the only method utilized, no mechanical or chemical activities are employed, and existing overstory provides shade to 50 percent or more of the site. Removed vegetation shall be replaced with native plantings that will preserve or enhance the functions and values of the critical area and/or its buffer.

2) Passive recreation, including, but not limited to, hiking, fishing, river rafting, and wildlife viewing that does not involve the construction of trails.

3) Development or developments that have identified the presence of wetland and stream critical areas, their buffers and habitats associated with these areas, and that have been approved for mitigation of the impact on these critical areas, shall not be subject to additional wetland and stream critical area regulations; provided, that no new development shall occur in the buffers or critical areas established at the time of approval.

M. Nonconforming uses and structures.

1) Purpose. This section establishes the terms and conditions for continuing nonconforming uses, structures and lots near or in critical areas, which are lawfully established prior to the effective date of the ordinance codified in this Article. For those shoreline jurisdictional areas outside critical areas, Article VI of Chapter 14.20 NBMC applies.

2) Establishing Status.

a. A legally established nonconforming lot, use, or structure may be continued, transferred or conveyed and/or used as if conforming.

b. The burden of establishing that any nonconforming lot, use, or structure lawfully existed as of the effective date of the ordinance codified in this Article shall, in all cases, rest with the owner and not with the city.

c. A nonconforming lot, use, or structure may be deemed legally nonconforming by providing documentation that the use in question occurred prior to the effective date of this SMP, from one of the following:

i. Local agency permit;

ii. Orthophoto, aerial photo or planimetric mapping recognized as legitimate by the agency; or

iii. Tax record.

3) Maintenance and Repair of Nonconforming Structures. Normal maintenance and incidental repair of legal nonconforming structures shall be permitted; provided, that:

a. The maintenance shall not increase the degree of nonconformity; and

b. The cumulative cost of such maintenance or repair within any 180-day period shall not exceed 50 percent of the assessed valuation of such building, structure, or land (as applicable) at the time such maintenance is completed.

4) Reconstruction or Replacement. Reconstruction, restoration, or repair (and remodeling) of a legal nonconforming structure damaged by fire, flood, earthquake, falling trees or limbs, or other disasters, shall be permitted except where prohibited or conditioned in NBMC 14.20.580(B), Performance standards – Flood hazard areas; provided, that such reconstruction shall not result in the expansion of the nonconforming structure into or towards the critical area or its buffer, or in a manner that increases the potential impact on the critical area or risk of harm to public safety. Legal nonconforming status will be lost if a building permit is not secured within one year of the date damage is incurred. See applicable critical area performance standards, such as NBMC 14.20.580(B), for structures in a floodway.

5) Expansion of Nonconforming Use or Structure. Within a critical area or its buffer, no legal nonconforming use or structure may be expanded, enlarged, extended, or intensified in any way (including extension of hours of operation) unless such modification is in full compliance with this Article or the terms and conditions of approved permits pursuant to this Article, or is allowed as provided below. Approved expansions must be consistent with standards of the zoning code in which such building, structure, or land use lies and with limitations set forth in NBMC 14.20.580(B). In no case shall any prohibited uses as designated under NBMC 14.20.580(D) be permitted to enlarge or expand. The following legal nonconforming expansions or uses are allowed:

    a. Vegetation management, including landscaping or gardening revisions on lawfully established and maintained portions of a critical area or its buffer.

    b. Fences, decks, and accessory structures that are exempt from a building permit can be established or expanded on lawfully established and maintained portions of a critical area or its buffer without demonstrating full compliance with this Article.

    c. Building modification or additions that are not considered substantial improvements.

    d. Roadway expansion or maintenance to support existing and proposed shoreline uses is allowed, provided the expansion is located to have the least possible adverse effect on ecological function. When feasible, expansions should be located on the landward side of the existing corridor or outside of critical areas, consistent with the SMP.

    e. Single-family residential building permits are exempt from the requirements of the critical area regulations when the development proposal involves any of the above activities and:

        i. Structural modifications to or replacement of an existing single-family residential structure with a new residential structure where construction and associated disturbance does not increase the footprint of any existing structure; and

        ii. The structure is not located closer to the critical area; and

        iii. The existing impervious surface within the critical area or buffer is not expanded.

6) Discontinuance of Nonconforming Use or Structure. All legal nonconforming uses shall be encouraged to convert to a conforming use whenever possible. Conformance shall be required when:

   a. A change of use is proposed;

   b. The use is terminated or discontinued for more than one year, or the structure(s) that houses the use is vacated for more than one year; or

   c. The structure(s) or activity that occurs on the land in which the use is conducted is proposed for relocation.

N. Administrative rules. The CED shall have the authority to adopt administrative rules not inconsistent with this SMP and this Article as necessary to implement the provisions of this Article.

14.20.520 General Provisions

The city of North Bend will use the following general methods and mechanisms to accomplish the purposes of the critical area regulations. This section shall be applied to all approved development applications and alterations when action is taken to implement the proposed action.

A. Mitigation sequencing. Protection of critical areas shall observe the following sequence, unless part of a restoration plan for a significantly degraded wetland or stream buffer, which is described below:

   1) Avoid the impact by refraining from certain actions or parts of an action;

   2) Where impact on critical areas or their buffers will not be avoided, the applicant shall demonstrate that the impact meets the criteria for granting a Shoreline Variance or other administratively approved alteration;

   3) Minimize the impacts by limiting the degree or magnitude of the action, by using affirmative steps to avoid or reduce impacts, or by using appropriate technology;

   4) Rectify the impact by repairing, rehabilitating, or restoring the affected environment;

   5) Reduce or eliminate the impact over time by preservation and maintenance operations;

   6) Compensate for the impacts by creating, replacing, enhancing, or providing substitute resources or environments.

B. Buffers.

   1) Measurement of Buffers. All buffers shall be measured from the critical area boundary as surveyed in the field. The width of the buffer shall be determined according to the category of the critical area and the proposed land use.

   2) Standard Buffers. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the critical area functions and values at the time of the proposed activity. If a critical area report determines the vegetation or protection area is inadequate, the city may require an increase in the buffer width or additional native plantings within the

standard buffer width. Provisions to reduce or average buffer widths to obtain optimal habitat value are provided under the development standards for each critical area.

3) Allowed Uses in Stream and Wetland Buffers. Stream and wetland buffers may be modified to accommodate preferred uses when consistent with the Shoreline Management Act and this SMP, and when conducted so that no net loss of critical areas or shoreline ecological functions occurs.

    a. Water-dependent uses and developments, including accessories, may be allowed in shoreline buffers as follows, provided the project is designed to result in no net loss of ecological functions, and all adverse impacts shall be mitigated:

        i. Consistent with the use allowances for each environment designation, water-dependent uses and activities may be located at the water's edge, or as prescribed by conditions stipulated within a permit.

        ii. Water-oriented accessory uses and developments associated with a water-dependent use that locate in a shoreline buffer should be located to avoid significant vegetation removal and shall minimize impervious areas.

        iii. Other water-oriented accessory uses, developments and activities may be located in the shoreline buffer if a location in the buffer is necessary for operation of the water-dependent use or activity (e.g., a road to a boat launch) or no other location is feasible (e.g., the water-dependent use or activity is located on a parcel entirely or substantially encumbered by the required buffer).

    b. Water-related and water-enjoyment public access and public recreation facilities and their accessory uses and developments may be located in stream and wetland buffers consistent with the use allowances for each environment designation and the following standards:

        i. uses and facilities shall be located to avoid or minimize significant vegetation removal;

        ii. uses and facilities shall minimize impervious areas;

        iii. uses and facilities shall be designed to result in no net loss of ecological functions; and

        iv. any adverse impacts shall be mitigated.

4) Significantly Degraded Streams, Wetlands, and Associated Buffers. In areas where the functions of the stream or wetland and stream or wetland buffer are already significantly degraded, restoration may be more beneficial than preservation of degraded areas. Certain expanded uses, including those listed in subsection 3) above, shall be allowed at the discretion of the Shoreline Administrator where the applicant demonstrates through a critical area report that greater habitat functions can be obtained in the affected subdrainage basin as a result of mitigation.

5) Averaging Buffers. The director will consider the allowance of wetland or stream buffer averaging only when the buffer area width after averaging will not adversely impact the critical area and/or buffer functions and values. At a minimum, any proposed buffer averaging shall meet the following criteria:

    a. The buffer area after averaging is no less than that which would be contained within the standard buffer;

    b. The buffer width shall not be reduced by more than 25 percent at any one point as a result of the buffer averaging;

    c. The additional buffer area shall be enhanced if necessary, to achieve no net loss of the critical areas functions and values;

    d. The additional buffer is contiguous with the standard buffer;

    e. Encroachment into the buffer does not occur waterward of the top of an associated steep slope or into a channel migration zone;

    f. Encroachment does not occur into the buffer of an associated wetland except as otherwise allowed by this SMP in NBMC 14.20.520.B.3.

6) Additional Buffers. The director may require increased buffer sizes when a critical area report shows that it is necessary to protect the function and value of the critical areas when either the critical area is particularly critical to disturbance or the development poses unusual impacts. Examples of circumstances that may require buffers beyond minimum requirements include, but are not limited to:

    a. Unclassified uses;

    b. The critical area is a fish and wildlife habitat area for spawning or rearing as determined by the Washington State Department of Fish and Wildlife;

    c. Land located within the development proposal that is adjacent to the critical area and its associated buffer is classified as an erosion hazard area; or

    d. A trail or utility corridor in excess of 10 percent of the buffer width is proposed for inclusion in the buffer.

7) Reducing Buffers. The director may reduce up to 25 percent of the critical area buffer requirement only if sufficient information is available showing the following in a critical area study:

    a. The applicant has demonstrated that mitigation sequencing efforts have been appropriately utilized: first avoid, second minimize, and lastly mitigate;

    b. The proposed buffer reduction shall be accompanied by a mitigation plan per NBMC 14.20.520(L) that includes enhancement of the reduced buffer area as necessary to maintain function and value;

    c. The reduction will not adversely affect water quality;

    d. The reduction will not destroy, damage, or disrupt a significant habitat area; and

e. The reduction is necessary for reasonable development of the subject property.

f. Where an existing legally established roadway transects the buffer, the minimum buffer width may be reduced without a Shoreline Variance to the prism of the roadway improvement if the part of the buffer sought to be reduced:

i. In the case of geologically hazardous areas, does not provide additional protection to the proposed development; and

ii. Provides insignificant biological, geological or hydrological buffer functions relating to the inner portion of the buffer adjacent to the critical area.

C. Building setback line (BSBL). A BSBL is established to reduce conflict with hazardous trees and vegetation buffers, to enhance wildfire safety, and to prevent construction intrusions into certain buffer areas as follows. A minimum BSBL of 15 feet is required from the edge of any fish and wildlife buffer, stream or wetland buffer, or erosion and landslide buffer. The setback shall be identified on the site plan, which is filed as an attachment to the notice on title required by NBMC 14.20.510(G).

D. Land segregation. Subdivisions, short subdivisions, boundary line adjustments, and planned residential developments of land in critical areas and associated buffers are subject to the following:

1) Land that is wholly within a wetland or stream critical area or associated buffer may not be subdivided.

2) Land that is partially within a wetland or stream critical area or associated buffer area may be subdivided or the boundary line adjusted; provided, that an accessible and contiguous portion of each new or adjusted lot is:

a. Located outside the critical area and buffer; and

b. Large enough to accommodate the intended use.

3) Accessory roads and utilities serving the proposed subdivision may be permitted within the wetland or stream critical area and associated buffer only if the city determines that no other feasible alternative exists.

E. Native growth protection easements.

1) As part of the implementation of approved development applications and alterations, critical areas and their buffers (except soil liquefaction seismic hazard areas, floodplains including floodways, and Category II critical aquifer recharge areas) shall remain undeveloped and shall be designated as native growth protection easements (NGPE).

2) The NGPE is an easement granted to the city for the protection of a critical area and/or its associated buffer. NGPEs shall be required as specified in these rules and shall be recorded on final development permits and all documents of title and with the county recorder at the applicant's expense. The required language is as follows:

Dedication of a Native Growth Protection Easement (NGPE) conveys to the public a beneficial interest in the land within the easement. This interest includes the preservation of existing vegetation for all purposes that benefit the public health, safety, and welfare, including control of surface water and erosion, maintenance of slope stability, visual and aural buffering, and protection of plant and animal habitat. The NGPE imposes upon all present and future owners and occupiers of land subject to the easement the obligation, enforceable on behalf of the public of the city of North Bend, to leave undisturbed all trees and other vegetation within the easement. The vegetation in the easement may not be cut, pruned, covered by fill, removed, or damaged without express written permission from the city of North Bend.

3) When the subject development is a formal subdivision, short subdivision (short plat), binding site plan, contract rezone, master site plan, site plan/design review, or planned residential development (PRD), the critical area and its buffers shall be placed in a critical area tract and designated as an NGPE, as described below.

4) Establishment of an NGPE does not prohibit or make non-conforming any existing legal development or alterations in shoreline buffers nor preclude future allowed developments or alterations in shoreline buffers that are specified in NBMC 14.20.520.B.3).

F. Critical area tracts. Critical area tracts are legally created nonbuilding land areas containing critical areas and their buffers that shall remain undeveloped pursuant to the critical area regulations. Separate critical area tracts are not an integral part of the lot in which they are created; are not intended for sale, lease or transfer; and shall be incorporated in the area of the parent lot for purposes of subdivision and method of allocation and minimum lot size. The following development proposals shall identify such areas as separate tracts:

1) Subdivisions;

2) Short subdivisions;

3) Planned residential developments;

4) Contract rezones;

5) Binding site improvement plans;

6) Master site plans.

Responsibility for maintaining tracts shall be held by a homeowners association, adjacent lot owners (in an undivided interest), the permit applicant or designee, or other appropriate entity as approved by the city of North Bend.

The following note shall appear on the face of all plats, PRDs, binding site improvement plans, master site plans, site plan/design review, or contract rezones and shall be recorded on the title for all affected lots:

NOTE: All lots adjoining separate tracts identified as native growth protection easements are jointly and severally responsible for the maintenance and protection of the tracts. Maintenance includes ensuring that no alteration occurs within the separate tract and that vegetation remains undisturbed unless the express written permission of the city of North Bend has been received.

G. Marking and/or fencing.

1) Temporary Markers. The outer perimeter of a wetland, stream, fish and wildlife conservation area, steep slope and its associated buffer, and the limits of these areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in a manner approved by the city so no unauthorized intrusion will occur. Markers or fencing are subject to inspection by the director or his designee prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until directed by the Shoreline Administrator, or until permanent signs and/or fencing, if required, are in place.

2) Permanent Markers. Following the implementation of an approved development plan or alteration, the outer perimeter of the critical area or buffer that is not disturbed shall be permanently identified. This identification shall include permanent wood or metal signs on treated wood or metal posts. Signs shall be worded as follows:

CRITICAL AREA BOUNDARY

Protection of this natural area is in your care. Alteration or disturbance is prohibited. Please call the city of North Bend for more information. Removal of this sign is prohibited.

The Shoreline Administrator shall approve sign locations during review of the development proposal. Along residential boundaries, the signs shall be at least four inches by six inches in size and spaced one per centerline of lot or every 75 feet for lots whose boundaries exceed 150 feet. At road endings, crossings, and other areas where public access to the critical area is allowed, the sign shall be a minimum of 18 inches by 24 inches in size and spaced one every 75 feet.

3) Permanent Fencing. The Shoreline Administrator shall require permanent fencing where the development proposal creates a substantial likelihood of intrusion into the critical area. The Shoreline Administrator shall also require such fencing when, subsequent to approval of the development proposal; intrusions threaten conservation of critical areas. The Shoreline Administrator may use any appropriate enforcement actions including, but not limited, to fines, abatement, or permit denial to ensure compliance.

H. Critical Area Reports/Studies.

1) Timing of Studies. When an applicant submits an application for any development proposal, it shall indicate whether any critical area or buffers are located on or could be adjacent to the site. The presence of critical areas may require additional studies and time for review. However, disclosure of critical areas early will reduce delays during the permit review process. If the applicant should disclose that there are no known critical areas, further studies may be required for verification.

2) Studies Required.

a. When sufficient information to evaluate a proposal is not available, the Shoreline Administrator shall notify the applicant that a critical area study and report is required.

b. If a critical area report is required, the Shoreline Administrator may retain independent qualified professionals, at the applicant's expense, to assist in review of studies that are outside the range of staff expertise.

c. A qualified professional, as defined in NBMC 14.20.190, shall prepare critical area reports. A critical area report shall include all information required pursuant to subsection 3 of this section. A monitoring and maintenance program shall be required to evaluate the effectiveness of mitigating measures.

d. Studies generated as part of an expanded SEPA environmental checklist or an environmental impact statement may qualify as a critical area report if the project is developed in enough detail to have provided an evaluation of site-specific impacts and mitigation measures.

3) General Critical Area Report Requirements.

a. A critical area report shall have three components: (a) a site analysis, (b) an impact analysis, and (c) proposed mitigation measures. More or less detail may be required for each component depending on the size of the project, severity, and potential impacts. The director may waive the requirement of any component when adequate information is otherwise available.

b. In addition to the specific requirements specified under each critical area, all studies shall contain the following information unless it is already available in the permit application:

i. Site map of the project area at a readable scale appropriate for the proposed development as requested by the city, including:

a) Reference streets and property lines;

b) Existing and proposed easements, rights-of-way, trail corridors, and structures;

c) Contour intervals (two feet); steep slope areas to be highlighted;

d) The edge of the 100-year floodplain, and edge of the floodway if appropriate;

e) Channel migration zone boundaries if appropriate;

f) Shoreline master program environment designation;

g) Hydrology: Show surface water features both on and adjacent to the site; show any water movement into, through, and off the project area; show stream and wetlands classifications, show seeps, springs, and saturated soil zones;

h) Identification of all site preparation, grading activities, and dimensioned location of proposed structures, roads, stormwater facilities, impervious surfaces, and landscaping proposed in or near critical area(s);

i) All drainage plans for discharge of stormwater runoff from developed areas;

j) Location of buffer and building setback lines (if required or proposed);

k) Location of critical area tract and/or easement.

4) Written report detailing:

a) How, when, and by whom the report was performed (including methodology and techniques);

b) Weather conditions during and prior to any field studies if relevant to conclusions and recommendations;

c) Description of the project site and its existing condition, including degraded critical areas;

d) Description of existing critical area and buffer functions and values;

e) Description of habitat features present and determination of actual use of the critical area by any endangered, threatened, rare, sensitive, or unique species of plants or wildlife as listed by the federal government or state of Washington;

f) The total acreage of the site in each type of critical area(s) and associated buffers;

g) The proposed action; including, but not limited to, description of filling, dredging, modification for stormwater detention or discharge, clearing, grading, restoring, enhancing, grazing, or other physical activities that change the existing vegetation, hydrology, soils or habitat;

h) When alteration to a critical area or its buffer is proposed, an explanation why the impact is unavoidable and how it meets the criteria for a defined exception;

i) Description of potential environmental impact of the proposed project to the critical area(s), demonstration of mitigation sequencing approach, and description of any proposed mitigation measures;

j) Habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and critical area functions;

k) The mitigation measures proposed to avoid or lessen the project impacts (during construction and permanently);

l) When alteration to the critical area or its buffer is proposed, a mitigation plan as specified;

m) A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring and maintenance programs; and

n) Description of local, state, and federal regulations and permit requirements.

I. Mitigation timing. Mitigation shall be completed immediately following disturbances and prior to use or occupancy of the activity or development, or when seasonally appropriate. Construction of mitigation projects shall be timed to reduce impacts on existing fisheries, wildlife, and water quality.

J. General mitigation requirements. This section provides general mitigation requirements applicable to alteration of critical areas. Additional specific mitigation requirements are found under the sections for the particular type of critical area.

1) Restoration/rehabilitation is required when a critical area or its buffers have been altered on a site in violation of city regulations prior to development approval, and as a consequence its functions and values have been degraded. Restoration is also required when the alteration occurs in violation of city regulations during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.

2) Restoration/rehabilitation is required when the critical area or its buffers will be temporarily altered during the construction of an approved development proposal. At a minimum, all impacted areas shall be restored to their previous condition pursuant to an approved mitigation plan.

3) Compensation. The goal of compensation is no net loss of critical area and/or buffer functions on a development site. Compensation includes replacement or enhancement of the critical area or its buffer depending on the scope of the approved alteration and what is needed to maintain or improve the critical area and/or buffer functions. Compensation for approved critical area or buffer alterations shall meet the following minimum performance standards and shall occur pursuant to an approved mitigation plan:

a. The buffer for a created, restored, or enhanced critical area proposed as compensation for approved alterations shall be the same as the buffer required for the existing critical area. For the purposes of restoration, creation, or enhancement, buffers shall be fully vegetated and shall not include lawns, walkways, driveways, and other mowed or paved areas.

b. On-Site and In-Kind. Except as noted below or otherwise approved, all critical area impacts shall be compensated for through restoration or creation of replacement areas that are in-kind, on-site, and of similar or better critical area category. The preferred mitigation for impacts on Class IV wetlands and Type Ns streams shall be off-site and in-kind. Mitigation shall be timed prior to or concurrent with the approved alteration and shall have a high probability of success.

c. Off-Site and In-Kind. The Shoreline Administrator may consider and approve off-site compensation where the applicant demonstrates that greater biological and hydrological functions and values will be achieved. The preferred location for off-site mitigation is areas within or adjoining designated fish and wildlife habitat corridors. The compensation may

include restoration, creation, or enhancement of critical areas. The compensation ratios specified under the "on-site" compensation section for each critical area shall apply for off-site compensation as well. The Shoreline Administrator may request contractual linkage to the off-site parcel to ensure its availability and landowner willingness.

d. Increased Replacement Ratios. The Shoreline Administrator may increase the ratios under the following circumstances:

   i. Uncertainty exists as to the probable success of the proposed restoration or creation due to an unproven methodology or proponent; or

   ii. A significant period will elapse between impact and replication of critical area functions; or

   iii. The impact was unauthorized.

e. Decreased Replacement Ratios. The Shoreline Administrator may decrease the ratios required in the "on-site" ratios specified under the compensation section of each critical area when all the following criteria are met:

   i. A minimum replacement ratio of 1:1 will be maintained;

   ii. Documentation by a qualified professional demonstrates that the proposed mitigation actions have a very high rate of success;

   iii. Documentation by a qualified professional demonstrates that the proposed mitigation actions will provide functions and values that are significantly greater than the critical area being impacted; and

   iv. The proposed mitigation actions are conducted in advance of the impact and have been shown to be successful.

4) Critical Area Enhancement as Mitigation.

   a. Impacts on wetland and stream functions may be mitigated by enhancement of existing significantly degraded areas. Applicants proposing to use enhancement must produce a critical area report that identifies how enhancement will increase the functions of the degraded resource and how this increase will adequately mitigate for the loss of critical area and its function at the impact site. An enhancement proposal must also show whether existing critical area functions will be reduced by the enhancement actions.

   b. Off-site enhancement as mitigation shall be preferred in Class IV wetlands and Type Ns streams.

5) Mitigation shall be completed immediately following disturbances and prior to use or occupancy of the activity or development, or as soon as seasonally appropriate. Construction of mitigation projects shall be timed to reduce impacts on existing fisheries, wildlife, water quality, and vegetation.

K. Most current, available scientific and technical information. Any approval of mitigation to compensate for impacts on a critical area or its buffer shall be supported by the most current, available scientific and technical information.

L. Mitigation plans.

1) Mitigation or alterations to critical areas shall achieve equivalent or greater biological functions and shall include mitigation for adverse impacts upstream and downstream of the development proposal site. Mitigation sites for wetlands, streams, and fish and wildlife habitat conservation areas shall be located to achieve contiguous habitat corridors in accordance with a mitigation plan that is part of an approved critical area report to minimize the isolating effects of development on habitat areas. Mitigation of aquatic habitat shall be located within the same aquatic ecosystem as the area disturbed. Mitigation for floodplain impacts shall be located in the same drainage subbasin as the area disturbed. Mitigation shall address each function affected by the alteration to achieve functional equivalency or improvement on a per function basis.

2) The scope and content of a mitigation plan shall be decided on a case-by-case basis; as the impacts on the critical area increase, the mitigation measures to offset these impacts will increase in number and complexity. The city of North Bend shall determine during the review of the requested studies which of the components listed in subsection 3 of this section shall be required as part of the mitigation plan. Key factors in this determination shall be the size and nature of the development proposal, the nature of the impacted critical areas, and the degree of cumulative impacts on the critical area from other development proposals.

3) At a minimum, the following components shall be included in a complete mitigation plan:

a. Baseline Information. Provide existing conditions information for both the impacted critical areas and the proposed mitigation site as described in NBMC 14.20.520(H)(3), General Critical Area Report Requirements, and additional report requirements for each critical area (NBMC 14.20.530(F), 14.20.550(H), 14.20.560(H), 14.20.570(H), and 14.20.580(G)).

b. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

i. A description of the anticipated impacts on the critical areas, the mitigating actions proposed, and the purposes of the compensation measures, including the site selection criteria, identification of compensation goals, identification of resource functions, and dates for beginning and completing site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area; and

ii. A review of the most current, available scientific and technical information supporting the proposed mitigation.

c. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this Article have been met. They may include water quality standards, species richness and diversity targets, habitat diversity indices, or other ecological, geological, or hydrological criteria.

d. Detailed Construction Plan. These are the written specifications and descriptions of mitigation technique. This plan should include the proposed construction sequencing, grading and excavation details, erosion and sedimentation control features, a native planting plan, detailed site diagrams, and any other drawings appropriate to show construction techniques or anticipated final outcome.

e. Monitoring and/or Evaluation Program. The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project, as detailed under NBMC 14.20.520(M).

f. Contingency Plan. This section identifies potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates projected performance standards have not been met.

M. Monitoring.

1) The city requires long-term monitoring of development proposals, unless otherwise accepted in NBMC 14.20.510(F)(5), where alteration of critical areas or their buffers are approved. Such monitoring shall be an element of the required mitigation plan and shall document and track impacts of development on the functions and values of critical areas, and the success and failure of mitigation requirements. Monitoring may include, but is not limited to:

a. Establishing vegetation transects or plots to track changes in plant species composition over time;

b. Using aerial or other photography to evaluate vegetation community response;

c. Sampling surface and ground waters to determine pollutant loading;

d. Measuring base flow rates and stormwater runoff to model and evaluate water quantity predictions;

e. Measuring sedimentation rates;

f. Sampling fish and wildlife populations to determine habitat utilization, species abundance, and diversity; and

g. Sampling of water temperatures for wetlands and streams.

2) The city may require that a qualified professional, at the direction of the city and at the applicant's expense, monitor the development proposal site during construction and for a sufficient period of time after construction to ensure satisfactory mitigation of impacts on the critical area. The qualified professional shall monitor per the provisions outlined in the approved mitigation plan based on the conditions

or restrictions imposed by the city and such administrative rules as the planning official shall prescribe.

3) Performance Bond. Prior to issuance of any permit or approval that authorizes site disturbance, the Shoreline Administrator shall require performance security as specified in NBMC 14.20.510(F), Bonds or performance security.

N. Contingencies/adaptive management. When monitoring reveals a significant deviation from predicted impacts or a failure of mitigation measures, the applicant shall be responsible for appropriate corrective action. Contingency plans developed as part of the original mitigation plan shall apply, but may be modified to address a specific deviation or failure. Contingency plan measures shall be subject to the monitoring requirement to the same extent as the original mitigation measures.

O. Habitat management plans.

1) A habitat management plan may be required by the Shoreline Administrator when the critical area review of a development proposal determines that the proposed activity will have an adverse impact on a fish and wildlife habitat conservation area.

2) A habitat management plan, prepared by a qualified biologist in consultation with the Washington State Department of Fish and Wildlife (WDFW), shall address the following mitigation measures:

a. Reduction or limitation of development activities within the critical area and buffers;

b. Use of low impact development techniques or clustering of development on the subject property to locate structures in a manner that preserves and minimizes the adverse effects to habitat areas;

c. Seasonal restrictions on construction activities on the subject property;

d. Preservation and retention of habitat and vegetation on the subject property in contiguous blocks or with connection to other habitats that have a primary association with a listed species;

e. Establishment of expanded buffers around the critical area;

f. Limitation of access to the critical area and buffer; and

g. The creation or restoration of habitat area for listed species.

P. Limited density transfer (on-site).

1) Density Credit of Critical Areas.

a. An owner of property containing a critical area may be permitted to transfer the unusable density in the critical area to another portion of the same site or property that does not contain a critical area, subject to the limitations of this section.

b. Up to 25 percent of the density that could be achieved on the critical area and buffer portion of the site can be transferred to a portion of the site not containing a critical area, subject to the following:

i. The density limitation of the underlying zoning classification;

ii. The minimum lot size of the underlying zoning classification may be reduced approximately 25 percent in order to accommodate the transfer in densities;

iii. Applicable bulk and dimensional standards established in Table 18.10.040 of the North Bend Municipal Code, except as further modified by Table 14.20.280, shall be reviewed by the Shoreline Administrator and may be modified and subject to approval of an administrative adjustment to standards (AATs) per Table 18.10.040(1). Any modifications to applicable bulk and dimensional standards found in this SMP must be approved through a Shoreline Variance per NBMC 14.20.690; and

iv. The area to which density is transferred shall not be constrained by other critical areas regulation.

Q. Transfer of development rights (off-site). North Bend has created a transfer of development rights voluntary program (Chapter 18.36 NBMC) to aid in the preservation of lots with critical areas. Development rights may be transferred off-site so that the applicant may realize property rights from critical areas.

14.20.530 Wetlands

A. Purpose. The purpose of the wetland critical areas provisions is to protect existing wetlands and maintain no net loss of their functions and values.

B. Designation. Wetland areas identified by the city of North Bend and King County are shown on Figure 1, Wetland Area Map, the most current version of which is posted on the city's website. The map may be periodically revised by the city to add or remove areas based on additional information. Determination of wetland ratings will be based on the entire extent of wetlands, unrelated to property lines or ownership patterns. For the purpose of categorization, wetlands shall be designated according to the Washington State Wetland Rating System for Western Washington (Ecology Publication No. 04-06-025) or as revised. Wetlands shall be designated as follows:

1) Category I are those wetlands that meet any of the following criteria:

a. Wetlands that score 70 or more points (out of 100) in the Washington State Wetland Ratings System for Western Washington; or

b. Bogs larger than one-half acre; or

c. Mature and old-growth forested wetlands larger than one acre.

2) Category II are those wetlands that meet any of the following criteria:

a. Wetlands that score between 51 and 69 points in the Washington State Wetland Ratings System for Western Washington; or

b. A wetland identified by the State Department of Natural Resources as containing "sensitive" plant species; or

c. A bog between one-quarter and one-half acre in size.

3) Category III are those wetlands that score between 30 and 50 points in the Washington State Wetland Ratings System for Western Washington.

4) Category IV are those wetlands that score less than 30 points in the Washington State Wetland Ratings System for Western Washington.

C. Buffers. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate, then the buffer width shall be increased or the buffer should be enhanced by planting or other means to maintain the standard functions and values for the required width.

1) Required standard wetland buffers, based on wetland category and habitat points determined during the wetland rating process, are as follows:

Table 14.20.530-1. Wetland Buffers

Wetland Category	Standard Buffer Width	Additional buffer width if wetland scores 21-25 habitat points	Additional buffer width if wetland scores 26-29 habitat points	Additional buffer width if wetland scores 30-36 habitat points
Category I: Based on total score	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category I: Bogs	190 ft	NA	NA	Add 35 ft
Category I: Natural Heritage Wetlands	190 ft	N/A	NA	Add 35 ft
Category I: Forested	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category II	75 ft	Add 30 ft	Add 90 ft	Add 150 ft
Category III	60 ft	Add 45 ft	Add 105 ft	NA
Category IV	40 ft	NA	NA	NA

2) Any wetland created as compensation for an approved wetland alteration shall have the standard buffer required for the new classification of the created wetland. Wetlands to be created shall be located such that the new associated wetland buffer does not cross onto adjacent property, unless the same property owner owns the adjacent property or secures an NGPE for the buffer on the adjoining property.

3) Wetlands shall be assigned a rating based on the wetland report and field verification, and the appropriate buffer shall apply.

D. General performance standards. The requirements provided in this section supplement those identified in NBMC 14.20.510-520. Activities and uses shall be prohibited from wetlands and wetland buffers, except as provided by this chapter.

E. Permitted alterations. The following activities may only be permitted in a wetland or wetland buffer if the applicant can demonstrate that the activity will not degrade the functions and values of the wetland and other critical areas. The Shoreline Administrator

may require the preparation of a critical area report to confirm compliance with the requirements of this chapter.

1) Conservation or preservation activities that improve the function of the existing wetland.

2) Modifications to existing structures where no further alteration or increase in footprint will occur.

3) Trails. Public and private trails may be allowed within wetland buffers where it can be demonstrated in a critical area report that the wetland and wetland buffer functions and values will not be degraded by trail construction or use. Trail planning, construction, and maintenance shall adhere to the following criteria:

    a. Permeable surface trail alignment shall be located only in the outer 25 percent of a wetland buffer width, except as needed to access viewing platforms or to cross the wetland. Private trails shall be a maximum of 5 feet wide, but public trails may be as wide as 7 feet if they are part of a regional trail network. Trails may be placed on existing levees, railroad grades, or road grades where those features exist in any part of a wetland buffer and may occupy the full width of the levee, railroad grade or road grade;

    b. Trails and associated viewing platforms shall be constructed of pervious materials, unless impervious surfaces are necessary for conformance to the Americans with Disabilities Act. The trail surface shall meet all other requirements, including water quality standards set forth in the King County Surface Water Design Manual, 2009, or as revised;

    c. Trail alignment shall avoid trees in excess of six inches in diameter of any tree trunk at a height of four and one-half feet above the ground on the upslope side of the tree, where feasible;

    d. Trail construction and maintenance shall follow the U.S. Forest Service Trails Management Handbook (FSH 2309.18, April 1993) and Standard Specifications for Construction and Maintenance of Trails (EM-7720-103, September 1996, or as revised);

    e. Access trails to viewing platforms within the wetland may be provided. Trail access and platforms shall be aligned and constructed to minimize disturbance to valuable functions of the wetland or its buffer and other habitat elements, and still provide enjoyment of the resource; and

    f. Buffer widths shall be increased, where possible, equal to the width of the trail corridor, including disturbed areas.

4) Stormwater Management Facilities. Stormwater management facilities are limited to stormwater dispersion outfalls and bioswales. They may be allowed within the outer twenty-five percent (25%) of the buffer of Category III or IV wetlands only, provided that:

    a. No other location is feasible; and

    b. The location of such facilities will not degrade the functions or values of the wetland.

Stormwater management facilities are not allowed in buffers of Category I or II wetlands.

5) Public Roads and Utilities. New or expanded public roads and utilities may occur to maintain locally established levels of service, and to provide for and protect public safety when no lesser impacting option is feasible, and the width of the corridor is minimized to the maximum extent possible. Public and private utility corridors may be allowed within wetland buffers for Category II, III, and IV wetlands when no lesser impacting alternative alignment is feasible, and wetland buffer functions and values will not be degraded. Utilities, whenever possible, shall be constructed in existing, improved roads, drivable surface or shoulder, subject to compliance with road maintenance BMPs, or within an existing utility corridor. Otherwise, corridor alignment, construction, restoration, and maintenance shall adhere to the following criteria:

    a. Corridor alignment shall follow a path beyond a distance from the wetland edge equal to 75 percent of the buffer width, except when crossing a Category IV wetland and its buffer;

    b. Corridor construction and maintenance shall maintain and protect the hydrologic and hydraulic functions of the wetland and the buffer;

    c. Corridors shall be fully revegetated with appropriate native vegetation upon completion of construction; and

    d. Utilities requiring maintenance roads shall be prohibited in wetland buffers unless the following criteria are met:

        i. There are no lesser impacting alternatives;

        ii. Any required maintenance roads shall be no greater than 15 feet wide. Roads shall closely approximate the location of the utility to minimize disturbances; and

        iii. The maintenance road shall be constructed of pervious materials and designed to maintain and protect the hydrologic functions of the wetland and its buffer.

6) Category IV Wetlands. Allowable uses and activities shall include all uses and activities identified in subsections A through E of this section. In addition, activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved critical area report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objective.

F. Critical area report/study. Wetland delineation/classification survey teams shall include qualified wildlife professionals when the area in question is identified by the city of North Bend as being a potential or known fish and wildlife habitat area. Such wildlife surveys shall be undertaken during suitable times of the year for the documentation of seasonal wildlife occurrences and critical life history stages. In addition to the general requirements for critical area reports provided under NBMC 14.20.520(H), wetland critical area reports shall include the following:

1) On the site map:

    a. The edge of the wetland as flagged and surveyed in the field using the approved federal wetland delineation manual and applicable regional supplements as specified by WAC 173-22-035;

    b. The location of any proposed wetland area(s) to be created through mitigation measures; and

    c. The location of any proposed wetland alteration or fill.

2) In the report:

    a. Description of the wetland by classification per the Washington State Wetland Rating System for Western Washington (Ecology Publication No. 04-06-025 or as revised);

    b. General condition of wetland;

    c. Description of vegetation species and community types present in the wetland and surrounding buffer;

    d. List of priority species and habitats within the vicinity of the wetland in question;

    e. Description of soil types within the wetland and the surrounding buffer using the USDA Soil Conservation Service soil classification system; and

    f. Description of hydrologic regime and findings.

G. Wetland mitigation requirements. No net loss of wetland functions and values shall occur as a result of the overall project. In addition to the requirements in NBMC 14.20.520, including use of mitigation sequencing, the following mitigation measures to minimize and reduce wetland impacts shall be required:

1) Compensatory mitigation for alterations to wetlands shall be used only for impacts that cannot be avoided or minimized and shall achieve equivalent or greater biological functions. Compensatory mitigation plans shall be consistent with *Wetland Mitigation in Washington State - Part 2: Developing Mitigation Plans*, 2006, or as revised. Mitigation requirements may also be determined using the credit/debit tool described in "*Calculating Credits and Debits for Compensatory Mitigation in Wetlands of Western Washington: Operational Draft*" (Ecology Publication #10-06-011, February 2011, or as revised).

2) If Category IV wetlands are not in or adjoining a designated wildlife habitat area, greater biological functions and values may be achieved by mitigating impacts off-site. See Table 14.20.530 for enhancement as mitigation options.

3) Preference of Mitigation Actions. Mitigation actions that require compensation shall occur in the following order of preference:

    a. Restoring wetlands on upland sites that were formerly wetlands, except that the preferred location for mitigation of Category IV wetland or Category III wetlands smaller than 1,000 square feet shall be off-site in or adjoining a designated wildlife habitat area. The off-site mitigation ratio for Category IV

wetlands shall be 1:1 when applicants choose to mitigate in or adjacent to fish and wildlife habitat areas.

b. Creating wetlands on disturbed upland sites such as those with vegetation cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is designed.

c. Enhancing significantly degraded wetlands.

4) On-Site and Off-Site Mitigation. Unless otherwise approved, all wetland impacts shall be compensated for through restoration or creation of replacement wetlands that are in-kind, on-site or off-site, and of similar or better wetland category. Mitigation shall be timed prior to or concurrent with the approved alteration and shall have a high probability of success. The following ratios shall apply to wetland mitigation:

Table 14.20.530-2. Wetland Mitigation Ratios

Category and Type of Wetland Impacts	Re-establishment or Creation	Rehabilitation Only[1]	Re-establishment or Creation (R/C) and Rehabilitation (RH)[1]	Re-establishment or Creation (R/C) and Enhancement (E)[1]	Enhancement Only[1]
All Category IV	1.5:1	3:1	1:1 R/C and 1:1RH	1:1 R/C and 2:1 E	6:1
All Category III	2:1	4:1	1:1 R/C and 2:1 RH	1:1 R/C and 4:1 E	8:1
Category II	3:1	6:1	1:1 R/C and 4:1 RH	1:1 R/C and 8:1 E	Not allowed
Category I Forested	6:1	12:1	1:1 R/C and 10:1 RH	1:1 R/C and 20:1 E	Not allowed
Category I - based on score for functions	4:1	8:1	1:1 R/C and 6:1 RH	1:1 R/C and 12:1 E	Not allowed
Category I Natural Heritage site	Not allowed	6:1 Rehabilitation of a Natural Heritage site	Not allowed	Not allowed	Not allowed
Category I Bog	Not allowed	6:1 Rehabilitation of a bog	Not allowed	Not allowed	Not allowed

[1] These ratios are based on the assumption that the rehabilitation or enhancement actions implemented represent the average degree of improvement possible for the site. Proposals to implement more effective rehabilitation or enhancement actions may result in a lower ratio, while less effective actions may result in a higher ratio. The distinction between rehabilitation and enhancement is not clear-cut. Instead, rehabilitation

and enhancement actions span a continuum. Proposals that fall within the gray area between rehabilitation and enhancement will result in a ratio that lies between the ratios for rehabilitation and the ratios for enhancement.

5) Mitigation monitoring shall be required for a period necessary to establish that performance standards have been met, but not for a period less than five years. The project mitigation plan shall include monitoring elements that ensure certainty of success for the project's natural resource values and functions. If the mitigation goals are not obtained within the initial five-year period, the applicant remains responsible for restoration of the natural resource values and functions until the mitigation goals agreed to in the mitigation plan are achieved. If a scrub-shrub or forested vegetation community is proposed, additional monitoring may be extended until approved performance standards have been met.

H. Fee-in-lieu mitigation. For Category IV wetlands of 4,356 square feet or less, mitigation may be accomplished by compensating for wetland loss through a fee-in-lieu based on the mitigation ratios specified in Table 14.20.530. In addition to critical areas approval for fill of these wetlands, the applicant must demonstrate compliance with this SMP, the Department of Ecology, and where applicable, the Corps of Engineers (Corps). The applicant must show proof of permit approval, if applicable. Fee-in-lieu shall be based on the cost to implement the wetland mitigation using the method and corresponding mitigation ratios specified in Table 14.20.530 above at an off-site location in or adjoining a designated wildlife habitat area, including land costs, mitigation plan implementation, and monitoring. If the enhancement-only ratios are used, the applicant must compensate for any lost water storage functions by incorporating that cost into the fee-in-lieu or separately providing that lost function on-site.

I. Wetland mitigation bank. The city of North Bend encourages the pursuit of wetland mitigation banking in the Snoqualmie watershed. Wetland banking options should not include non-wetland areas of the central meadow open spaces of Meadowbrook and Tollgate Farms, unless otherwise approved by the city council. Feasibility studies should first identify successful sites where wetlands currently exist or could be enhanced through off-site mitigation requirements.

14.20.540 Critical Aquifer Recharge Areas

A. Purpose. To protect groundwater quality and quantity for public water supply and to maintain hydrologic functions of aquatic areas. Critical aquifer recharge areas contribute significantly to the replenishment of groundwater and due to their prevailing geologic conditions associated with infiltration rates, have a high potential for contamination of ground water resources.

B. Designation. Critical aquifer recharge areas (CARAs) are those areas with a critical recharging effect on aquifers used for potable water as defined by WAC 365-190-030(2). Figure 2, Critical Aquifer Recharge Area and Wellhead Protection Area Map designates CARAs in North Bend according to King County's analysis. The map may be periodically revised by the city to add or remove areas based on additional information.

1) Critical aquifer recharge areas are categorized as follows:

a. Category I critical aquifer recharge areas include those areas designated on the critical aquifer recharge area map as highly susceptible to groundwater contamination and that are located within a sole source aquifer or wellhead protection area.

b. Category II critical aquifer recharge areas include those mapped areas designated that:

i. Have a medium susceptibility to groundwater contamination and are located in a sole source aquifer or wellhead protection area; or

ii. Are highly susceptible to groundwater contamination and are not located in a sole source aquifer or wellhead protection area.

2) An applicant can request that the city declassify a specific area included in the map. The application must be supported by a critical area report that includes a hydrogeologic assessment demonstrating that the designation is not warranted based on the physical character of the aquifer. The application to declassify an area shall be reviewed by the city and a determination made to amend the map as appropriate.

C. Prohibited uses and activities.

1) The following new uses or activities are not allowed in Category I critical aquifer recharge areas:

a. Hazardous liquid transmission pipelines;

b. Sand, gravel, and hard rock mining on land that is not zoned for mining as of the effective date of the ordinance codified in this chapter;

c. Mining of any type below the groundwater table;

d. Processing, storage, and disposal of radioactive wastes;

e. Hydrocarbon extraction (unless part of an approved decommissioning plan);

f. Commercial wood treatment facilities on permeable surfaces;

g. Wrecking yards;

h. Concentrated animal feeding operations; and

i. Landfills for hazardous waste, municipal solid waste, or special waste, except Class A biosolids when applied pursuant to WSDOE standards.

2) The following new uses and activities are not allowed in a Category II critical aquifer recharge area:

a. Mining of any type below the water table;

b. Processing, storage, and disposal of radioactive substances;

c. Hydrocarbon extraction (unless part of an approved decommissioning plan);

d. Commercial wood treatment facilities on permeable surfaces;

e. Wrecking yards;

f. Concentrated animal feeding operations; and

g. Landfills for hazardous waste, municipal solid waste, or special waste, except Class A biosolids when applied pursuant to WSDOE standards.

3) The activities listed below may be conditioned or allowed pending further evaluation to determine if measurable degradation in the quality of groundwater (in a critical aquifer recharge area) will occur. Development proposals or alterations involving the following types of uses or land activities shall prepare and submit, as part of their critical area study, a hydrogeologic assessment of the proposed site to determine if the development proposal or alteration will cause contaminants to enter a critical aquifer recharge area:

a. Golf courses;

b. Cemeteries;

c. Asphalt and concrete facilities; and

d. Any other similar activity that the planning official, in his or her discretion, determines does not have the potential to threaten the quality of groundwater in a critical aquifer recharge area.

D. Performance standards. For all other development proposals, the Shoreline Administrator may require preparation of a critical area report as specified in NBMC 14.20.520(H). In addition the following standards will apply:

1) Containment. Every development proposal involving hazardous substance processing or handling that is located in or adjacent to a critical recharge area shall provide on-site containment devices adequate in size to contain any unauthorized release of hazardous substances from any area where these substances are either stored, handled, treated, used, or produced. Containment devices shall prevent such substances from penetrating into the ground. This provision also applies to releases that may mix with storm runoff.

2) Hazardous Substances Management Plan. Every development proposal involving hazardous substance processing or handling that is located in or adjacent to a critical recharge area shall prepare a spill plan containing procedures to be followed to prevent, control, collect, and dispose of any unauthorized release of a hazardous substance. Individual hazardous substance waste and typical retail waste will typically not require a spill plan. A spill plan may be required for businesses holding or disposing of either bulk chemicals such as oil, anti-freeze, etc., or truly hazardous chemicals such as acids or other corrosive substances. The plan must ensure the development can maintain spill clean-up of materials in a quantity sufficient to capture the largest container if spilled.

3) Hazardous Substance Storage Tanks.

a. All hazardous substance storage tanks containing hazardous substances proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the 2003 International Fire Code requirements for secondary containment.

b. Underground Tanks. No new underground storage tanks with hazardous substances shall be allowed in Category I CARAs. All new underground hazardous substance tanks located in a Category II CARA or adjacent to a critical recharge area shall be designed and constructed so as to:

i. Prevent releases due to corrosion or structural failure for the operational life of the tank;

ii. Be protected against corrosion, constructed of noncorrosive material, steel clad with a noncorrosive material, or designed to include a secondary containment system to prevent the release or threatened release of any stored substance; and

iii. Use material in the construction or lining of the tank that is compatible with the substance to be stored.

c. Aboveground Tanks. No new aboveground storage tank for hazardous substances located in or adjacent to a critical recharge area shall be installed, used or maintained in any manner that may allow the release of a hazardous substance to the ground, ground waters, or surface water.

4) Agriculture. Agricultural activities in or adjacent to a critical recharge area shall use Natural Resources Conservation Service (NRCS) BMPs to prevent ground quality degradation from livestock waste.

5) Sewage Disposal. All lots of residential, commercial, or industrial development proposals located in or adjacent to a critical recharge area and within 200 feet of a public sewer system shall be connected to the sewer system.

6) Golf Courses. Golf course operations proposed in or adjacent to a critical recharge area shall be subject to a golf course maintenance plan using BMPs to protect ground water quality. The plan shall detail the proposed use of fertilizers, herbicides, pesticides, fungicides, or other maintenance agents, with projected application methods and schedules and measures to prevent pollution of ground water.

7) Commercial Vehicle Repair and Servicing. Commercial vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur. Proper capture and treatment of runoff per the latest version of the King County Surface Water Design Manual as adopted by the city should occur prior to discharge either off-site or into infiltration systems.

8) The uses listed in the table below shall be conditioned in accordance with the applicable state and federal regulations as necessary to protect critical aquifer recharge areas:

Table 14.20.540. Statutes, Regulations, and Guidance Pertaining to Groundwater Affecting Activities

Activity	Statute – Regulation – Guidance
Aboveground Storage Tanks	WAC 173-303-640
Animal Feedlots	Chapter 173-216 WAC, Chapter 173-220 WAC
Automobile Washers	Chapter 173-216 WAC, Best Management Practices for Vehicle and Equipment Discharges (WDOE WQ-R-95-56)
Chemical Treatment Storage and Disposal Facilities	WAC 173-303-182
Hazardous Waste Generator (Boat Repair Shops, Biological Research Facility, Dry Cleaners, Furniture Stripping, Motor Vehicle Service Garages, Photographic Processing, Printing and Publishing Shops, etc.)	Chapter 173-303 WAC
Injection Wells	Federal 40 CFR Parts 144 and 146, Chapter 173-218 WAC
Junk Yards and Salvage Yards	Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicles Recycler Facilities (WDOE 94-146)
Oil and Gas Drilling	WAC 332-12-450, Chapter 173-218 WAC
On-Site Sewage Systems (Large Scale)	Chapter 173-240 WAC
On-Site Sewage Systems (< 14,500 gal/day)	Chapter 246-272 WAC, Local Health Ordinances
Pesticide Storage and Use	Chapter 15.54 RCW, Chapter 17.21 RCW
Sawmills	Chapter 173-303 WAC, Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Log Yards (WDOE 95-53)
Solid Waste Handling and Recycling Facilities	Chapter 173-304 WAC
Surface Mining	WAC 332-18-015
Underground Storage Tanks	Chapter 173-360 WAC
Waste Water Application to Land Surface	Chapter 173-216 WAC, Chapter 173-200 WAC, WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture
Class A Biosolids	Ecology Publication Number 05-07-008, February 2005

14.20.550 Streams

A. Purpose. The purpose of the stream conservation areas is to preserve and protect those areas with which salmonid fish, threatened and endangered species, and salmonid species of local importance have a primary association.

B. Classification. As defined in WAC 222-16-030, streams will be typed according to the following water typing system:

1) Type "S" (Shorelines): All waters, within their bankfull width, as inventoried as "Shorelines of the State" (rivers over 20 cfs, marine shorelines and lakes over 20 acres) under Chapter 90.58 RCW and the rules promulgated pursuant to Chapter 90.58 RCW, including periodically inundated areas of their associated wetlands. Bankfull width is the measurement of the lateral extent of the water surface elevation perpendicular to the channel at bankfull depth. For purposes of management and regulation, the shoreline waterbodies and their associated buffers shall be considered critical areas.

2) Type "F" (Fish): Segments of natural waters other than Type S Waters that are within the bankfull widths of defined channels and periodically inundated areas of their associated wetlands, or within lakes, ponds, or impoundments having a surface area of one-half acre or greater at seasonal low water that in any case contain fish habitat or are described by one of the four categories in WAC 222-16-030(2).

3) Type "Np" (Non-fish perennial): All segments of natural waters within the bankfull width of defined channels that are perennial non-fish habitat streams. Perennial streams are waters that do not go dry at any time during a year of normal rainfall. However, for the purpose of water typing, Type Np waters include the intermittent dry portions of the perennial channel below the uppermost point of perennial flow.

4) Type "Ns" (Non-fish seasonal): All segments of natural waters within the bankfull width of the defined channels that are not Type S, F, or Np waters. These are seasonal, non-fish habitat streams in which surface flow is not present for at least some portion of a year of normal rainfall and are not located downstream from any stream reach that is a Type Np water. Ns waters must be physically connected by an aboveground channel system to Type S, F, or Np waters.

5) Type "C" (conveyance): As defined by the city of North Bend, Type C waters are those natural open drainages for flood and storm conveyance capacity.

Figure 3, River and Stream Map identifies rivers and streams in the North Bend vicinity. Those streams that have not been classified will be typed according to the system summarized above. The map may be periodically revised by the city to add or remove areas based on additional information.

C. Buffers. The following buffers are the minimum requirements for streams. All buffers shall be measured horizontally from the OHWM, and may be modified as identified in NBMC 14.20.550.D below and NBMC 14.20.520.B above.

1) Type S streams shall have the following buffers:

a. Natural environment designation: 150 feet (regulated entirely as "inner buffer").

b. Urban Conservancy – Recreational/Open Space environment designation: 150 feet, divided between the waterward 100 feet ("inner buffer") and the landward 50 feet ("outer buffer").

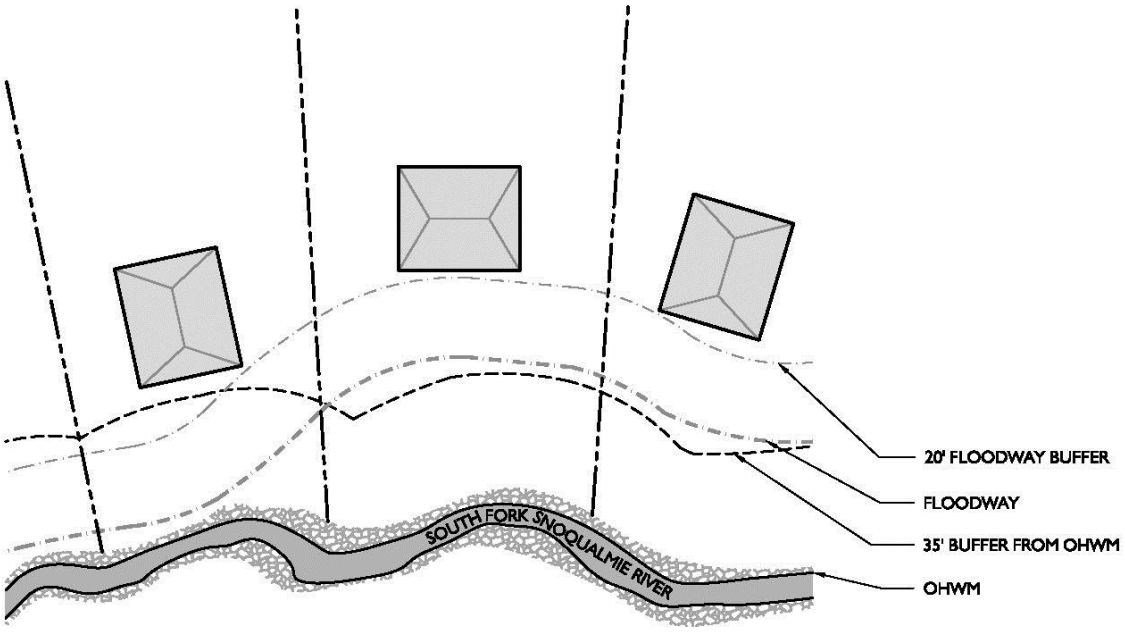
c. Urban Conservancy – Residential environment designation: 100 feet or 20 feet from the edge of the floodway, whichever is greater, divided between the waterward 75 feet ("inner buffer") and the remainder of the buffer ("outer buffer").

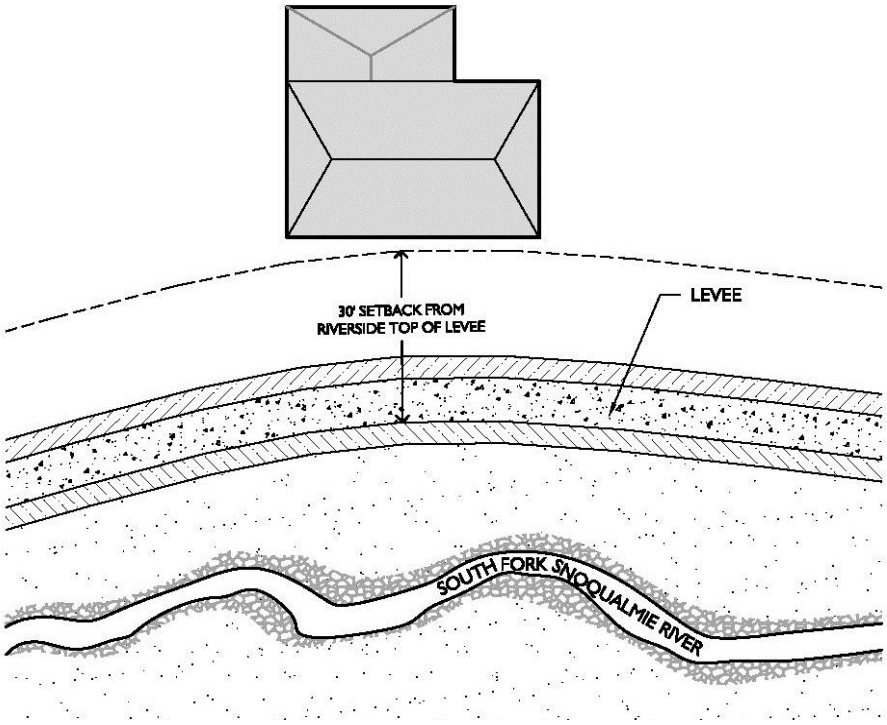
d. Shoreline Residential environment designation:

i. Middle Fork Snoqualmie River: 85 feet, divided between the waterward 50 feet ("inner buffer") and the landward 35 feet ("outer buffer").

ii. South Fork Snoqualmie River: 35 feet from the OHWM or 20 feet from the edge of the floodway, whichever is greater; except that development landward of a levee shall have a buffer measured 30 feet from the riverside top of the levee. The waterward 25 feet measured from OHWM

shall be regulated as "inner buffer" and the remainder of the buffer shall be regulated as "outer buffer"). (see diagrams below)





e. Commercial Conservancy environment designation:

   i. Middle Fork Snoqualmie River: 75 feet from the OHWM or 20 feet from the edge of the floodway, whichever is greater, divided between the waterward 50 feet ("inner buffer") and the remainder of the buffer ("outer buffer").

ii. South Fork Snoqualmie River: 100 feet from the OHWM or 20 feet from the edge of the floodway, whichever is greater, divided between the waterward 75 feet ("inner buffer") and the remainder of the buffer ("outer buffer").

f. When environment designations are parallel, the buffer of the waterward environment extends only to the upland edge of that environment. The buffer for the landward environment, if it extends onto the upland environment as measured from the OHWM, would apply to uses and modifications in that upland environment.

2) Type F streams: 100 feet, divided between the waterward 75 feet ("inner buffer") and the landward 25 feet ("outer buffer").

3) Type Np streams shall have a 50-foot buffer on each side of the channel.

4) Type Ns streams shall have a 25-foot buffer on each side of the channel.

5) Type C waters shall have no buffer.

D. Development provisions. The requirements provided in this section supplement those identified in NBMC 14.20.510 and -520. Activities may only be permitted in a stream or stream buffer if the applicant can show that the proposed activity will not degrade the functions and values of the stream, stream buffer, or other critical area.

1) Inner Buffer Development Provisions – Type S and F Streams. Activities and uses shall be prohibited in inner buffers of Type S and F streams except as provided for in NBMC 14.20.520, General Provisions, and those within the range of the allowable activities and uses listed below.

a. Stream Crossings. Stream crossings shall be minimized, but when necessary they shall conform to the following standards as well as other applicable provisions of this SMP and other laws (see the State Department of Fish and Wildlife, or the State Department of Ecology).

i. The stream crossing is the only reasonable alternative that has the least impact;

ii. It has been shown in the critical area report that the proposed crossing will not decrease the stream and associated buffer functions and values;

iii. The stream crossing shall use bridges instead of pipe or box culverts unless it can be demonstrated that a pipe or box culvert would result in equal or less ecological impacts;

iv. All stream crossings using pipe culverts shall use super span or oversized culverts with appropriate fish enhancement measures. Culverts shall not obstruct fish passage;

v. Existing stream crossings are encouraged to continue and expand if doing so eliminates the need for an additional stream crossing,

vi. Stream crossings shall be designed according to the Washington Department of Fish and Wildlife Design of Road Culverts for Fish Passage, 2003, as amended, and the National Marine Fisheries Service

Guidelines for Salmonid Passage at Stream Crossings, 2001, as amended;

vii. All stream crossings shall be constructed during the summer low flow period between June 15th and September 15th or as specified by the State Department of Fish and Wildlife in the Hydraulic Project Approval;

viii. Stream crossings shall not occur through salmonid spawning areas unless no other feasible crossing site exists;

ix. Bridge piers or abutments shall not be placed in either the floodway or between the OHWMs unless no other feasible alternative placement exists;

x. The natural drainage pattern and discharges of the upstream drainage basin, up to the runoff event having an exceedance probability of 0.01, shall not be altered or diminished by a stream crossing;

xi. Stream crossings shall minimize interruption of downstream movement of wood and gravel;

xii. Stream crossings shall be designed to facilitate routine maintenance of culverts and bridges; and

xiii. Stream crossings shall be minimized by serving multiple properties when-ever possible.

b. Trails. The criteria for alignment, construction, and maintenance of trails within wetlands and their buffers, located in NBMC 14.20.530(E)(3) above, shall apply to trails within stream buffers.

c. Utilities. The criteria for alignment, construction, and maintenance within the wetland buffers, as found in NBMC 14.20.530(E)(5), and NBMC 14.20.500, Utilities shall apply to utility corridors within stream buffers. In addition, corridors shall not be aligned parallel with any stream channel unless the corridor is outside the buffer, and crossings shall be minimized. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the waterbody where feasible. Crossings shall be contained within the existing footprint of an existing or new road or utility crossing where possible. Otherwise, crossings shall be at an angle greater than 60 degrees to the centerline of the channel. The criteria for stream crossings shall also apply.

d. Stormwater conveyance facilities. Stormwater conveyance facilities may be permitted; provided, that they are only located in the buffer when no practicable alternative exists outside the buffer. Stormwater facilities shall be planted with native plantings where feasible to provide habitat, and/or less intrusive facilities should be used.

e. Floodway-Dependent Structures. Floodway-dependent structures or installations may be permitted within streams or their buffers if allowed or approved by other ordinances or other agencies with jurisdiction. See NBMC 14.20.580, Floodplain Management, for more information on allowed uses and activities within flood hazard areas.

2) Outer Buffer Development Provisions – Type S and F Streams. Activities and uses shall be prohibited in outer buffers of Type S and F streams except as provided for in NBMC 14.20.520, General Provisions, and those within the range of the allowable activities and uses listed below.

   a. Trails. The criteria for alignment, construction, and maintenance of trails within wetlands and their buffers, located in NBMC 14.20.530(E)(3) above, shall apply to trails within stream buffers. Outer buffer trails may not exceed 10 feet in width and may be constructed with impermeable surface materials if on-site infiltration is utilized.

   b. Utilities. The criteria for alignment, construction, and maintenance within the wetland buffers, as found in NBMC 14.20.530(E)(5), and NBMC 14.20.500, Utilities shall apply to utility corridors within stream buffers. In addition, corridors shall not be aligned parallel with any stream channel unless the corridor is outside the buffer, and crossings shall be minimized. Installation shall be accomplished by boring beneath the scour depth and hyporheic zone of the waterbody where feasible. Crossings shall be contained within the existing footprint of an existing or new road or utility crossing where possible. Otherwise, crossings shall be at an angle greater than 60 degrees to the centerline of the channel. The criteria for stream crossings shall also apply.

   c. Stormwater Conveyance Facilities. Detention/retention ponds shall not be located in the buffer unless they are designed to retain water at all seasons of the year.

   d. Native vegetation landscaping schemes that do not require application of herbicides, pesticides, or fertilizer to maintain robust growth.

   e. No net effective impervious surfaces may be created in the outer buffer area, beyond what is otherwise permitted.

   f. No structures or related improvements including buildings or decks, shall be permitted within the stream buffer except as otherwise allowed in NBMC 14.20.520, General Provisions or in this SMP.

3) Type Np and Ns Streams. Activities and uses that result in unavoidable and necessary impacts may be permitted in Type Np and Ns streams and buffers in accordance with an approved critical area report and mitigation plan, and only if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives.

4) Type C Waters. Type C waters shall not be regulated except to maintain stormwater conveyance capacity. The channel and buffer, if applicable, is maintained as a vegetated open swale without altering the channel dimensions or alignment and are recorded in a drainage easement for the city of North Bend that requires that the channel remain open and vegetated for water quality and hydrologic purposes.

E. Stream mitigation. No net loss of stream functions and values shall occur as a result of the overall project. The mitigation requirements for stream alterations, in addition to the requirements in NBMC 14.20.520, General Provisions or in this SMP, shall meet the

following minimum performance standards and shall occur pursuant to an approved mitigation plan:

1) Achieve equivalent or greater functions, including, but not limited to habitat functions and hydrologic functions.
2) Maintain or improve stream channel dimensions, including depth, length, and gradient.
3) Restore disturbed stream buffer areas with native vegetation.
4) Create an equivalent or improved channel bed.
5) Create equivalent or improved biofiltration.
6) Replace disturbed stream and stream buffer habitat features and areas.
7) Unless it is demonstrated that a higher level of stream function would result from an alternate mitigation approach, compensatory mitigation should be either in-kind and on-site, or in-kind and within the same stream reach or drainage subbasin of the stream. Mitigation actions should be conducted on-site and within the drainage subbasin of the affected stream, except when:
    a. There are no reasonable on-site or drainage subbasin opportunities in the affected stream with a high likelihood of success;
    b. Off-site mitigation has a greater likelihood of providing equal or improved functions; and
    c. Established watershed goals for water quality, flood, conveyance, habitat, or other functions, including priorities and recommendations outlined in the WRIA 7 Salmon Conservation Plan or the city's Shoreline Restoration Plan, justify location of mitigation at another site.
8) Temporary alterations to a stream buffer must be repaired, rehabilitated, or restored on-site at a 1:1 ratio of area of mitigation to area of alteration.
9) Permanent buffer alterations, including illegal alterations, must be compensated through restoration or enhancement using the following ratios of area of mitigation to area of alteration:
    a. For mitigation on-site:
        i. Two-to-one ratio for a Type S or F stream buffer; and
        ii. One-and-one-half to one ratio for a Type N stream buffer.
    b. For mitigation off-site:
        i. Three-to-one ratio for a Type S or F stream buffer; and
        ii. Two-to-one ratio for a Type N stream buffer.
10) "On-site mitigation" means within the same drainage subbasin of the stream as the alteration site and within one-half mile upstream or downstream.
11) "Off-site mitigation" means within the same drainage subbasin of the stream as the proposed alteration site and beyond one-half mile upstream or downstream. The

preferred location for off-site mitigation shall be in or adjacent to a designated fish and wildlife habitat area and shall be limited to Type Ns streams.

12) The requirements in this section may be modified at the Shoreline Administrator's direction if the applicant demonstrates that, with respect to each stream area function, greater functions can be obtained in the affected drainage subbasin through alterative mitigation.

F. Mitigation plans for alteration to streams and stream buffers. The scope and content of a mitigation plan to alter stream and stream buffers shall be decided on a case-by-case basis. As the impacts on the critical area increase, the mitigation measures to offset these impacts will increase in number and complexity. Refer to provisions in NBMC 14.20.520.

14.20.560 Fish and Wildlife Habitat Conservation Areas

A. Purpose. The purpose of the fish and wildlife habitat conservation areas is to preserve and protect those areas with which salmonid fish, threatened and endangered species, and species of local importance have a primary association.

B. Designation.

1) For purposes of these regulations, fish and wildlife conservation areas are those habitat areas that meet any of the following criteria:

a. Areas with which state or federally designated endangered, threatened, priority, or critical species have a primary association;

b. Habitats of local importance, limited to areas designated as priority habitat by the Department of Fish and Wildlife;

c. Naturally occurring ponds under 20 acres and their submerged aquatic beds that provide fish and wildlife habitat;

d. Waters of the state, including lakes, rivers, ponds, streams (and their associated wetlands), inland waters, underground waters, and all other surface water and watercourses within the jurisdiction of the state of Washington;

e. Lakes, ponds, streams, and rivers planted with game fish by a governmental or tribal entity;

f. State natural area preserves and natural resources conservation areas; and

g. Land essential for preserving connections between habitat blocks and open spaces.

2) All areas within the city meeting one or more of the above criteria, regardless of any formal identification, are designated critical areas and are subject to the provisions of this chapter. The approximate location and extent of known fish and wildlife habitat conservation areas are shown on Figure 4, Fish and Wildlife Habitat Conservation Areas. These mapped areas are comprised of Type S and F streams and their buffers, and associated wetlands. Associated wetlands may be partially or fully within a neighboring wetland, stream, and their buffers, or adjacent to

designated fish and wildlife habitat areas. The map may be periodically revised by the city to add or remove areas based on additional information.

C. Buffers.

1) Riparian Habitat. The buffers identified in NBMC 14.20.550(C) are the minimum requirements for streams. Where associated wetlands exist, the buffer may extend to wetland standard buffers, as provided under NBMC 14.20.530(C). Stream buffers shall be measured from the OHWM as provided in NBMC 14.20.550(C).

2) Wildlife and other habitat. Buffer widths and setbacks for the protection of listed species outside of streams and stream buffers will be determined on a site-specific basis through the approval of a critical area report.

D. General performance standards. The requirements provided in this section supplement those identified in NBMC 14.20.510-520 and NBMC 14.20.530(F), Critical area report/study. Fish and wildlife habitat conservation areas may be altered only if the proposed alteration of the habitat or the mitigation proposed does not degrade the qualitative functions and values of the habitat. All new structures and land alterations shall be prohibited from habitat conservation areas, except in accordance with this chapter. Additional standards follow:

1) No development shall be allowed within a habitat conservation area or any associated buffer with which state or federally endangered, threatened, priority, or critical species have a primary association.

2) Whenever development is proposed adjacent to a fish and wildlife habitat conservation area with which state or federally endangered, threatened, or critical species have a primary association, such areas shall be protected through the application of protection measures in accordance with a critical area report prepared by a qualified professional and approved by the Shoreline Administrator.

3) Habitat Study. Development proposals or alterations in or adjacent to a fish and wildlife habitat conservation area shall prepare and submit, as part of its critical areas study, a habitat study that identifies which, if any, listed species are using that fish and wildlife habitat conservation area. If one or more listed species are using the fish and wildlife habitat conservation area, the following additional requirements shall apply:

a. The applicant shall include in its critical area study a habitat management plan that identifies the qualities that are essential to maintain feeding, breeding, and nesting of listed species using the fish and wildlife habitat conservation area and that identifies measures to minimize the impact on these ecological processes from proposed activities. The applicant shall be guided by the document Management Recommendations for Washington's Priority Habitats and Species, issued by the Washington State Department of Wildlife, May 1991, and as may be amended, and by any recovery and management plans prepared by the Washington State Department of Fish and Wildlife for the listed species pursuant to WAC 232-12-297(11).

b. Conditions shall be imposed, as necessary, based on the measures identified in the habitat management plan.

c. Approval of alteration of land in habitat conservation areas, buffers, or any associated setback zones shall not occur prior to consultation with the State Department of Fish and Wildlife and the appropriate federal agency, if applicable.

d. No plant, wildlife, or fish species not indigenous to the region shall be introduced into a habitat conservation area unless authorized by a state or federal permit or approval.

e. Alteration of natural watercourses shall be avoided, if feasible. If unavoidable, the following provisions shall apply to the alteration:

i. Watercourse alteration projects shall not result in blockage of side channels. Known fish barriers into side channels shall be removed as part of an approved watercourse alteration project.

ii. Removal of large woody debris (LWD) and vegetation, including salvage logging, shall be avoided or minimized unless it is demonstrated that the LWD poses an imminent safety hazard to the public, property, or structures, or when it is part of a larger restoration project. Any removal that is unavoidable shall be mitigated by replanting with native vegetation and by augmenting lost LWD where LWD can be anchored in such a way to provide fisheries, riparian, or shoreline erosion benefits, and to avoid safety hazards where recreational boating and swimming are expected.

iii. The applicant shall maintain the altered or relocated portion of the watercourse to ensure that the flood carrying capacity is not diminished. Maintenance shall be bonded for a period of five years and be in accordance with an approved maintenance program.

4) The Shoreline Administrator shall condition approval of activities allowed within a fish and wildlife habitat conservation area or its buffer, as necessary, per the approved critical area report and habitat management plan to minimize or mitigate any potential adverse impacts. Conditions may include:

a. Establishment of buffer zones outside of the required stream and wetland buffers, on a case-by-case basis, as may be necessary to retain adequate natural habitat for listed species;

b. Preservation of critical, important vegetation and/or habitat features (e.g., snags);

c. Limitation of access to the habitat area, including fencing (on a case-by-case basis) to deter unauthorized access (note: fencing shall not create a barrier to habitat function);

d. Seasonal restrictions of construction activities;

e. Establishment of a duration and timetable for periodic review of mitigation activities; and

f. Requirement of a performance bond, when necessary, to ensure successful completion.

E. Special provisions – Salmonid.

1) Activities, uses, and alterations proposed to be located in waterbodies used by salmonids or in areas that affect such waterbodies shall give special consideration to the preservation and enhancement of salmonid habitat, including, but not limited to, the following:

a. Activities shall be timed to occur only during the allowable work window as designated by the State Department of Fish and Wildlife;

b. An alternative alignment or location for the activity is not feasible;

c. The activity is designed so that it will minimize the degradation of the functions or values of the fish habitat or other critical areas; and

d. Any impact on the functions and values of the habitat conservation area are mitigated in accordance with an approved critical area report.

2) Structures that prevent the migration of salmonids shall not be allowed in the portion of waterbodies currently or historically used by salmonids. Fish bypass facilities shall be provided that allow the upstream migration of adult fish and shall prevent juveniles migrating downstream from being trapped or harmed.

3) Fills waterward of the OHWM, when authorized, shall minimize the adverse impacts on salmonids and their habitat, shall mitigate any unavoidable impacts, and shall only be allowed for water-dependent uses or for uses that enable public access or recreation for significant numbers of the public.

F. Special provisions – Wildlife. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292).

G. Native growth protection easement/critical area tract.

1) As part of the implementation of approved development applications and alterations, fish and wildlife conservation areas and any associated buffers that remain undeveloped pursuant to the critical area regulations shall be designated as NGPEs. In addition to the requirements specified in NBMC 14.20.520(E), the following shall apply:

a. An NGPE shall be designated for Type S, F and N streams, unless the Shoreline Administrator has waived the NGPE requirements for Type N streams (see below). Where a stream or its buffer has been altered on the site prior to approval of the development proposal, as a result of the development proposal, the area altered shall be restored using native plants and materials. The restoration work shall be done pursuant to an approved mitigation plan. This provision does not apply to existing allowed development or alterations in shoreline buffers nor preclude future allowed developments or alterations in shoreline buffers that are specified in NBMC 14.20.520.B.3).

b. Public and private trails may be allowed within all critical area buffers where it can be demonstrated in a critical area report that the buffer functions and values will not be degraded by trail construction or use. Trail

planning, construction, and maintenance shall adhere to the criteria outlined in NBMC 14.20.530(E).

2) The Shoreline Administrator may waive the NGPE requirements on Type N streams, when located beyond one-quarter mile of a stream with salmonids, if all of the following criteria are met:

   a. All buffer, building setback line, and floodplain distances are identified on the appropriate documents of title;

   b. The stream channel and buffer are maintained as a vegetated open swale without altering the channel dimensions or alignment and are recorded in a drainage easement to the city of North Bend that requires that the channel remain open and vegetated for water quality and hydrologic purposes;

   c. All clearing proposed within the stream and its buffer shall occur between April 1st and September 1st, or as further restricted by timing limits established by the State Department of Fish and Wildlife, and shall meet all erosion and sedimentation requirements of the city;

   d. There are no downstream flooding or erosion problems within one-half mile of the site;

   e. The stream is not within an erosion hazard area; and

   f. No existing water wells are within or adjacent to the stream buffers.

3) When the subject development is a formal subdivision, short subdivision (short plat), binding site plan, master site plan, contract rezone, site plan/design review, or planned residential development (PRD), the fish and wildlife habitat conservation areas shall be placed in a critical area tract and designated as an NGPE, as described in NBMC 14.20.520(E).

H. Critical area report.

1) A critical area report for fish and wildlife habitat conservation areas shall be prepared by a qualified biologist with experience analyzing aquatic and/or wildlife habitat and who has experience preparing reports for the relevant type of critical area.

2) In addition to the requirements of NBMC 14.20.520(H), critical area reports for wildlife habitat areas shall include the following additional information:

   a. An assessment of habitats including the following site and proposal related information;

   b. Identification of any species of local importance, priority species, or endangered, threatened, critical, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts on the use of the site by the species; and

   c. A discussion of any federal, state, or local species management recommendations, including the State Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitat located on or adjacent to the project area.

3) A critical area report for streams shall include the following information:
    a. On the site map:
        i. The location of the OHWM;
        ii. The toe of any slope 25 percent or greater within 25 feet of the OHWM; and
        iii. The location of any proposed or existing stream crossing.
    b. In the report:
        i. Characterization of riparian (streamside) vegetation species, composition, and habitat function;
        ii. Description of the soil types adjacent to and underlying the stream, using the Soil Conservation Service soil classification system;
        iii. Determination of the presence or absence of fish, and reference sources; and
        iv. When stream alteration is proposed, include stream width and flow, stability of the channel including erosion or aggradation potential, type of substratum, discussions of infiltration capacity and biofiltration as compared to the stream prior to alteration, presence of hydrologically linked wetlands, analysis of fish and wildlife habitat, and proposed floodplain limits.

14.20.570 Geologically Hazardous Areas

A. Purpose. To prevent incompatible development activity from being conducted in or near geologically hazardous areas in order to reduce the risk to public health and safety.

B. Designation. Geologically hazardous areas include areas susceptible to erosion, sliding, earthquake, or other geological events. They pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but may also increase the hazard to surrounding development and uses. Areas susceptible to one or more of the following types of hazards shall be designated as geologically hazardous areas:

1) Erosion hazard;
2) Landslide hazard (including steep slopes);
3) Seismic hazard; and
4) Other geological events including mass wasting, debris flows, rock falls, and differential settlement.

Figure 6, Seismic Hazards depicts areas subject to soil liquefaction in an earthquake and Figure 7, Erosion and Debris Flow identifies geologically hazardous areas in the North Bend area. These maps may be periodically revised by the city to add or remove areas based on additional information.

C. Designation of specific geologic hazard areas.

1) The adopted critical areas maps include:

    a. U.S. Geological Survey (USGS) landslide hazard, seismic hazard, and volcanic hazard maps;

    b. Washington State Department of Natural Resources (WDNR) seismic hazard maps of Western Washington, as they are available;

    c. WDNR slope stability maps, as they are available; and

    d. Local geologic hazard maps, as adopted.

    These maps are to be used as a guide for the city of North Bend, project applicants, and/or property owners, and may be continuously updated as new critical areas are identified. They are a reference and do not provide a final critical area designation.

2) Other geologically hazardous areas regulated by this chapter include:

    a. Erosion Hazard Areas. Erosion hazard areas are at least those areas identified by the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) as having "severe" or "very severe" rill and inter-rill erosion hazard.

    b. Landslide Hazard Areas. Landslide hazard areas are areas potentially subject to landslides based on a combination of geologic, topographic, and hydrologic factors. They include areas susceptible because of any combination of bedrock, soil, slope (gradient), slope aspect, structure, hydrology, or other factors. Examples of these may include, but are not limited to, the following:

        i. Areas of historic failure, such as:

            a) Those areas delineated by the NRCS as having a "severe" limitation for building site development; or

            b) Areas designated as quaternary slumps, earth flows, mudflows, debris flow, or landslides on maps published by the USGS, WDNR, or the city of North Bend;

        ii. Areas with all three of the following characteristics:

            a) Slopes steeper than 15 percent; and

            b) Hillsides intersecting geologic contacts with a relatively permeable sediment overlaying a relatively impermeable sediment or bedrock; and

            c) Springs or groundwater seepage;

        iii. Areas that have shown movement during the Holocene epoch (from 10,000 years ago to the present) or that are underlain or covered by mass wastage debris of that epoch;

        iv. Slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems, and faults) in subsurface materials;

v. Slopes having a gradient steeper than 80 percent subject to rock fall during seismic shaking;

vi. Areas potentially unstable because of rapid stream incision, stream bank erosion, and undercutting by water action, including channel migration zones;

vii. Areas located in a canyon or on an active alluvial fan, presently or potentially subject to inundation by debris flows or catastrophic flooding; and

viii. Any area with a slope of 40 percent or steeper and with a vertical relief of 10 or more feet except areas composed of consolidated rock. A slope delineated by establishing its toe and top and measured by averaging the inclination over at least 10 feet of vertical relief.

c. Seismic Hazard Areas. Seismic hazard areas are subject to severe risk of damage as a result of earthquake-induced ground shaking, slope failure, settlement, soil liquefaction, lateral spreading, or surface failure. The strength of ground shaking is primarily affected by:

i. The magnitude of an earthquake;

ii. The distance from the source of an earthquake;

iii. The type and thickness of geologic materials at the surface; and

iv. The type of subsurface geological structure.

D. Performance standards.

1) All projects shall be evaluated to determine whether the project is proposed to be located in a geologically hazardous area, the project's potential impact on the geologically hazardous area, and the potential impact of the proposed project. The Shoreline Administrator may require the preparation of a critical area report to determine the project's ability to meet the performance standards.

2) Alterations to erosion or landslide hazardous areas or associated buffers may only occur for activities that:

a. Will not increase the threat of the geological hazard to adjacent properties beyond predevelopment conditions;

b. Will not adversely impact other critical areas;

c. Are designed so that the hazard to the project is eliminated or mitigated to a level equal to or less than predevelopment conditions; and

d. Are certified as safe as designed and under anticipated conditions by a qualified geotechnical engineer or geologist, licensed in the state of Washington.

3) Vegetation in erosion or landslide hazardous areas shall be retained unless it can be shown that the removal will not increase the geologic hazards and a vegetation management plan is submitted with the request.

4) Approved clearing and grading in erosion and landslide hazardous areas shall only be allowed from May 1st to October 1st of each year; provided, that the city may extend or shorten the dry season on a case-by-case basis depending on the actual weather conditions, except that timber harvest, not including brush clearing or stump removal, may be allowed pursuant to an approved forest practices permit issued by WDNR.

5) Access roads and utilities may be permitted within the erosion or landslide hazard area and associated buffers if the city determines that no other feasible alternative exists.

6) Utility lines and pipes shall be permitted in the erosion or landslide hazard areas only when the applicant demonstrates that no other practical alternative is available. The line or pipe shall be located above ground and be properly anchored and/or designed so that it will continue to function in the event of an underlying slide. Stormwater conveyance shall be allowed only through a high-density poly-ethylene pipe with fuse-welded joints, or similar product that is technically equal or superior.

7) Sheet flow discharges from impervious surfaces and point discharges from surface water facilities and roof drains onto or upstream from an erosion or landslide hazard area shall be prohibited except that conveyance is allowed via continuous storm pipe downslope to a point where there are no erosion hazard areas downstream from the discharge.

8) The division of land in erosion or landslide hazard areas and associated buffers is subject to provisions established for all critical areas in NBMC 14.20.520.

E. Special provisions – Erosion and landslide areas. Activities on sites containing erosion or landslide hazards shall meet the following requirements:

1) Buffers Required. A buffer shall be established for all edges of erosion or landslide hazard areas. The size of the buffer shall be determined by the Shoreline Administrator, based on the recommendations of the critical areas study, to eliminate or minimize the risk of property damage, death, or injury resulting from erosion and landslides caused in whole or in part by the development, based upon review of and concurrence with a critical area report prepared by a qualified professional.

2) Minimum Buffers. The typical buffer for landslide hazard areas is the height of the slope or 50 feet, whichever is greater. The buffer may be reduced or enlarged depending upon site-specific conditions and the nature of the hazard, as analyzed by a qualified geologist in a geotechnical analysis report. There is no minimum buffer for erosion areas. Erosion protection shall be based on site-specific analysis to achieve no net loss or impact on the erosion area. Best management practices (BMPs), mitigation, monitoring, and where necessary an erosion and control plan.

3) Buffer Reduction. The buffer may be reduced to zero when a qualified professional demonstrates to the Shoreline Administrator's satisfaction that the reduction will adequately protect the proposed development, adjacent developments and uses, and the subject critical area.

4) Increased Buffer. The buffer may be increased when the Shoreline Administrator determines a larger buffer is necessary to prevent risk of damage to proposed and existing development.

5) Alterations. Alterations of an erosion or landslide hazard area and/or buffer may only occur for activities for which a geotechnical analysis is submitted and certifies that:

   a. The development will not increase the surface water discharge rate or sedimentation to adjacent properties beyond the predevelopment condition;

   b. The development will not decrease slope stability on adjacent properties; and

   c. Such alteration will not adversely impact other critical areas.

F. Design standards – Erosion and landslide hazard areas. Development within an erosion or landslide hazard area and/or buffer shall be designed to meet the following basic requirements unless it can be demonstrated that an alternative design that deviates from one or more of these standards provides greater long-term slope stability while meeting all other provisions of this chapter. The requirements for long-term slope stability shall exclude designs that require regular and periodic maintenance to maintain their level of function. The basic development design standards are:

1) Structures and improvements shall be clustered to avoid geologically hazardous areas and other critical areas;

2) Structures and improvements shall minimize alterations to the natural contours of the slope and foundations shall be tiered where possible to conform to existing topography;

3) Structures and improvements shall be located to preserve the most critical portion of the site and its natural landforms and vegetation;

4) The proposed development shall not result in greater risk or a need for increased buffers on neighboring properties;

5) New development that would require structural shoreline stabilization over the life of the development is prohibited except when the applicant can demonstrate that stabilization is necessary to protect allowed uses where no alternative locations are available and no net loss of ecological functions will result;

6) The use of a retaining wall that allows the maintenance of existing natural slopes are preferred over graded artificial slopes;

7) Development shall be designed to minimize impervious lot coverage; and

8) New development or the creation of new lots that would cause foreseeable risk from geological conditions to people or improvements during the life of the development is prohibited.

G. Native growth protection easement/critical area tract.

1) As part of the implementation of approved development applications and alterations, geologically hazardous areas and any associated buffers that remain

undeveloped pursuant to the critical area regulations, in accordance with NBMC 14.20.520, shall be designated as NGPE.

2) When the subject development is a formal subdivision, short subdivision (short plat), binding site plan, master site plan, contract rezone, site plan/design review, or planned residential development (PRD), the geologically hazardous area(s) and any buffers shall be placed in a critical area tract and designated as an NGPE, as described in NBMC 14.20.520.

H. Critical area report.

1) When required, a critical area report for a geologically hazardous area shall be prepared by an engineer or geologist, licensed in the state of Washington, with experience analyzing geologic, hydrogeologic, and ground water flow systems, and who has experience preparing reports for the relevant type of hazard.

2) In addition to the requirements of NBMC 14.20.520, critical area reports are required for geologically hazardous areas and shall include the following additional information:

a. On the site map:

i. All geologically hazardous areas within or adjacent to the project area or that have potential to be affected by the proposal;

ii. The top and toe of slope (note: these should be located and flagged in the field subject to city staff review).

b. In the report:

i. A geological description of the site;

ii. A discussion of any evidence of existing or historic instability, significant erosion or seepage on the slope;

iii. A discussion of the depth of weathered or loosened soil on the site and the nature of the weathered and underlying basement soils;

iv. An estimate of load capacity, including surface and ground water conditions, public and private sewage disposal system, fill and excavations, and all structural development;

v. Recommendations for building limitations, structural foundations, and an estimate of foundation settlement;

vi. A complete discussion of the potential impacts of seismic activity on the site;

vii. Recommendations for management of stormwater for any development above the top of slope;

viii. A description of the nature and extent of any colluviums or slope debris near the toe of the slope in the vicinity of any proposed development; and

ix. Recommendations for appropriate building setbacks, grading restrictions, and vegetation management and erosion control for any

proposed development in the vicinity of the geologically hazardous areas.

14.20.580 Floodplain Management

A. Applicability. This chapter shall apply to all areas of special flood hazards within the city. Figure 7, Special Flood Hazard Map identifies flood-prone areas mapped by FEMA. The map may be periodically revised by the city to add or remove areas based on additional information. Areas of special flood hazard shall be determined by consideration of the following:

1) The areas of special flood hazard identified by the Federal Insurance and Mitigation Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City" and the most current adopted flood insurance rate maps (FIRM) . Such reports and maps are hereby adopted by reference and are on file at City Hall, North Bend, Washington; and

2) Those areas identified by the city based on review of base flood elevation and floodway data available from federal, state, county, or other valid sources when base flood elevation data has not been provided.

3) In the event of a conflict, the more restrictive provision shall apply.

Note: Per NBMC 14.20.580(C)(5), flood regulations for new residential construction apply to areas within the special flood hazard area (SFHA).

B. Performance standards – Flood hazard areas. The following standards apply to development proposals and alterations on sites within flood hazard areas:

1) A development proposal shall not increase the base flood elevation unless revisions to the FIRM are approved by FEMA in accordance with 44 CFR 70, and appropriate legal arrangements have been made and documents filed prior to issuance of a construction permit.

2) The following circumstances are presumed to produce no increase in base flood heights and shall not require special studies to establish this fact:

a. Reconstruction or remodeling of existing structures in the floodway where the structure's footprint is not increased;

b. Development of new residential structures outside the FEMA floodway on lots in existence before November 17, 1998;

c. Substantial improvements to existing residential structures in the floodplain but outside the FEMA floodway;

d. New development or substantial improvement in the area identified as "downtown commercial" per Figure 1-2 of the 2007 North Bend comprehensive plan, which are within the AO-1, AO-2, or AO-3 flood zone; and

e. Minor accessory structures exempt from building permits under the International Building Code.

3) The cumulative effect of any proposed development, where combined with all other existing and anticipated development on the site, shall not reduce the effective base flood storage volume of the floodplain. Except as exempted in subsection 2 of this subsection, grading or other activity that would reduce the effective storage volume shall be mitigated by creating compensatory storage on-site or off-site if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time; provided, however, that no increased upstream or downstream flood hazard shall be created by any fill authorized in the floodplain by this chapter or other applicable chapters. An engineering analysis is required to document no flood level rise.

4) If a lot has buildable site outside of the SFHA, all new structures shall be located there, when feasible. If the lot is fully in the floodplain, structures must be located to have the least impact on salmon.

5) If the proposed project will create new impervious surfaces so that not more than 10 percent of the portion of the lot in the Regulatory Floodplain is covered by impervious surface, the applicant shall demonstrate that there will be no net increase in the rate and volume of the stormwater surface runoff that leaves the site or that adverse impact is mitigated per the approved Habitat Mitigation Assessment.

6) When fill is proposed to achieve elevated construction, a critical area report is required demonstrating that the proposal will not increase the base flood elevation.

7) If grading or other activity will displace any effective flood storage volume, compensatory storage shall be created on-site or off-site, if legal arrangements can be made to assure that the effective compensatory storage volume will be preserved over time, in equivalent volume, at equivalent elevations to that being displaced. Compensatory storage areas must be hydraulically connected to the source of flooding. Alternatively, if feasible, the applicant may provide an increase in side channel habitat as mitigation for floodway alterations.

8) Construction of new residential or commercial or industrial structures is prohibited within the floodway. New construction in nonconforming developments shall meet the construction standards set forth in this chapter.

9) Reconstruction of existing structures within the floodway shall be subject to the requirements of WAC 173-158-170; provided, that reconstruction of existing residential structures between the floodway defined in WAC 173-158-030(8) and the floodway defined in this chapter need only meet the standards for new residential construction set forth in this chapter.

10) Approved alterations shall not block side channel habitats.

11) All construction elevated by pilings must be designed and certified by a professional structural engineer registered in the state of Washington and approved by the city building official.

12) Where the floodway of either Gardiner Creek or Ribary Creek is not identified by the applicant in special studies, the entire floodplain of the site shall be treated as the floodway.

13) An analysis of bioengineering and/or vegetation enhancements will be required when existing levees or dikes are proposed to be repaired or renovated as specified in King County's Guidelines for Bank Stabilization (1993, or as revised).

14) Construction materials for residential and nonresidential structures shall meet the following criteria:

    a. All new substantial improvement to buildings and structures shall be constructed with materials and utility equipment resistant to flood damage, using methods and products that minimize flood damage; and

    b. Electrical, mechanical, plumbing, and other service facilities shall be flood proofed to the flood protection elevation on all new, substantially improved buildings.

15) All new construction shall be anchored to prevent flotation, collapse, or lateral movement of the structure.

16) For all mobile/manufactured homes, all standards for flood hazard protection for residential construction shall apply. All mobile/manufactured homes must be anchored and shall be installed using methods and practices that minimize flood damage. For existing mobile/manufactured homes where the repair/reconstruction of the utilities and pad equals or exceeds 50 percent of the value of utilities and pad before the repair/reconstruction has commenced, all standards for flood hazard protection applicable for residential construction shall apply to the mobile/manufactured home.

17) If a project is worth more than 50 percent of the assessed value (MAI appraised value may be used at owner choice) of the original building it is considered a "substantial improvement." The building must then be elevated or otherwise brought up to current flood protection codes and other applicable city codes as required. To determine project value, the proposed project value shall be added to permitted additions or expansions to the building over the last 10 years. This provision will run with the property and not the property owner. Projects necessary to maintain the function of an existing building or structure such as electrical, mechanical, plumbing, roofing, siding, or windows shall be tracked for 180 days. Any outstanding permit for work on the building that has not received a final inspection or certificate of occupancy as required by the applicable construction code will be included in the calculation. This provision will run with the property owner and not the property.

18) Additions. Where expansion to an existing building or structure does not increase the building footprint more than 25 percent, up to a maximum size of 500 square feet, and shares a common wall (one full side) with the primary structure, the addition shall not be required to elevate, but must be flood resistant to a minimum of two feet above BFE. Additions will require full adherence to flood regulations if the sum of all improvements over the last 180 days as described in subsection 15 of this section and additions over the last 10 years exceeds 50 percent of the current assessed value, or exceeds the addition size threshold above. This provision will run with the property and not the property owner.

19) Accessory Structures. Minor accessory structures (less than 200 square feet) are exempt from International Code building permits and the city of North Bend floodplain permit. Examples of these structures may include: signs, trash enclosures, fences less than six feet in height, and storage sheds. The following standards shall apply to accessory structures in SFHA:

    a. Accessory structures shall not be used for human habitation.

    b. Accessory structures shall be designed to have low flood damage potential.

    c. Accessory structures shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters.

    d. Accessory structures shall be firmly anchored to prevent flotation that may result in damage to other structures.

    e. For new structures or substantial improvements, service facilities such as electrical and heating equipment shall be elevated or floodproofed.

    f. Floodway encroachment standards must be met.

20) Recreational Vehicles. Recreational vehicles placed on sites in the SFHA are required to either:

    a. Be on the site for fewer than 180 consecutive days; or

    b. Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or

    c. Meet the manufactured home elevation and anchoring requirements.

C. Allowed uses and activities – Flood hazard areas. The Shoreline Administrator may require the preparation of a critical area report for any of the uses and activities described below:

1) Floodways. Installations or structures that are floodway dependent may be located within the floodway; provided, that the development proposal receives approval from all other agencies with jurisdiction. Such installations or structures include, but are not limited to:

    a. Dams or diversions for water supply, flood control, hydroelectric production, irrigation, or fisheries enhancement (when consistent with NBMC 14.20.430, In-Stream Structures);

    b. Flood damage reduction facilities such as dikes, levees, and pumping stations when necessary to protect the public from an imminent hazard (when consistent with NBMC 14.20.330, Flood Hazard Reduction);

    c. Stream bank stabilization structures are allowed only if no feasible alternative exists for protecting structures, public roadways, and flood protection facilities or sole access routes. Bank stabilization projects shall be consistent with WDFW and NMFS guidelines, applicable sections of this chapter, NBMC 14.20.480, Shoreline Stabilization, and shall use bioengineering to the maximum extent possible;

d. Surface water conveyance facilities subject to the requirements of the development standards for streams and wetlands;

e. Boat launches and related recreation structures when consistent with NBMC 14.20.360, Boating Facilities;

f. Bridge piers and abutments when no reasonable alternative is available and when consistent with NBMC 14.20.400, Fill and/or NBMC 14.20.490, Transportation: Trails, Roads, and Parking;

g. Approved aquatic area or wetland restoration projects to improve natural functions including, but not limited to fisheries enhancement projects; and

h. Substantial improvements of existing structures, and minor accessory structures exempt from building permits under the International Building Code, only when in conformance with NBMC 14.20.580(B);

2) Subdivisions, short subdivisions, master site plans, contract rezones, site plan/design review; PRDs and binding site plans shall follow these requirements:

a. New buildable lots shall contain 5,000 square feet or more of buildable land outside the floodway;

b. Locate and construct all utilities and their facilities in a manner that minimizes flood damage;

c. Provide adequate drainage to reduce exposure to flood damage;

d. Base flood data and flood hazard notes shall be shown on the face of the recorded plat; this may include the floodwater depth, required flood elevations, and the boundary of the base flood and floodway as deemed appropriated by the city; and

e. Where base flood elevation data has not been provided or is not available from another authorized source, it shall be generated for subdivision proposals and other proposed developments that contain at least 50 lots or five acres (whichever is less).

f. The following note shall appear on the face of the recorded documents and shall be recorded on the title of records for all affected lots:

Note: Lots and structures located within flood hazard areas may be inaccessible to emergency vehicles during flood events. Residents and property owners should take appropriate advance precautions to provide access.

3) Utilities and on-site sewage facilities shall meet the following criteria:

a. All new and replacement utilities including sewage treatment facilities shall be floodproofed to the flood protection elevation;

b. New on-site sewage disposal systems shall be, to the extent possible, located outside the limits of the floodway and may be installed in the flood fringe if no feasible alternative site is available. On-site sewage disposal systems that are located within the flood hazard areas must be sited to avoid impairment of the system during flooding and to avoid contamination from the system during flooding;

c. Sewage and manure waste storage facilities shall be floodproofed to the flood protection elevation;

d. Buried utility transmission lines transporting hazardous substances (as defined by the Washington State Hazardous Waste Management Act in RCW 70.105.005) shall be buried a minimum of four feet beneath the maximum depth of scour of the base flood for the entire width of the floodway and shall achieve sufficient negative buoyancy so that any potential for flotation or upward migration is eliminated; and

e. Aboveground utility transmission lines, not including electrical transmission lines, shall only be allowed in the floodway for the transportation of nonhazardous materials, as defined by the State Department of Ecology, where a bridge or other structure is capable of transporting the line.

4) Critical facilities include, but are not limited to, schools, hospitals, police, fire and emergency response installations, nursing homes, wastewater treatment plants, potable water and sanitary sewer system components, and hazardous materials production. Construction of new critical facilities shall only be allowed within the floodplain when no reasonable alternative site is available. Critical facilities constructed within the floodplain shall have the lowest floor elevated to three or more feet above the level of the base flood elevation. Floodproofing and sealing measures must be taken to ensure toxic or hazardous substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the 100-year frequency flood shall be provided to all critical facilities to the extent possible.

5) New residential construction and substantial improvements within the special flood hazard area (SFHA) shall meet the following criteria:

a. The lowest floor, including basement, shall be elevated two feet or more above base flood elevation; and

b. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited. The area and rooms below the lowest floor shall be designated to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must meet or exceed the following minimum criteria:

i. A minimum of two openings shall be provided on opposite walls having a total new area of not less than one square inch for every square foot of enclosed area subject to flooding;

ii. The bottom of all openings shall be no higher than one foot above grade; and

iii. Openings may be equipped with screens, louvers, or other coverings or devices; provided, that they permit the unrestricted entry and exit of floodwaters.

6) New nonresidential construction and substantial improvements of any existing commercial, industrial, or other nonresidential structure that requires a building

permit shall either elevate the lowest floor, including the basement, a minimum of two feet in the SFHA or more above base flood elevation or floodproof the structure to the same elevation. If the structure is floodproofed, the following criteria are required:

a. The floodproofing must be certified by a professional civil or structural engineer registered in the state of Washington stating that the floodproofing methods are adequate to withstand the flood-depths, pressures, velocities, impacts, uplift forces, and other factors associated with the base flood. After construction, the engineer shall certify that the permitted work conforms to the approved plans and specifications;

b. Approved building permits for floodproofed nonresidential buildings shall contain a statement to notify applicants that flood insurance premiums will be based upon rates for structures that are one foot below the floodproofed level.

c. Prohibited Floodway Encroachments. Encroachments in the floodway that are prohibited include new construction of residential, commercial or industrial structures. Other development is prohibited unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.

d. Shallow flooding areas. Shallow flooding zones appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from one to three feet above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In these areas, the following provisions apply:

7) New construction and substantial improvements of residential structures within AO zones shall have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, two feet or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). Where appropriate, such structures shall be elevated above the crown of the nearest road, one foot or more above the depth number specified on the FIRM. Where hazardous velocities are noted on the FIRM, consideration shall be given to mitigating the effects of these velocities through proper construction techniques and methods.

8) New construction and substantial improvements of nonresidential structures that require a building permit within AO zones shall either:

a. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above the depth number specified on the FIRM (at least two feet if no depth number is specified). Where appropriate, such structure shall be elevated above the crown of the nearest road, one foot or more above the depth number specified on the FIRM; or

b. Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer or architect as defined under qualified professional. Where hazardous velocities were noted on the FIRM, consideration shall be given to mitigating the effects of these velocities through proper construction techniques and methods; or

c. Require adequate drainage pads around structures on slopes to guide flood-waters around and away from proposed structures.

D. Development permit.

1) A flood development permit shall be obtained before new construction, substantial improvement, or "development" begins within any area of special flood hazard established in NBMC 14.20.580(A), except for minor accessory structures which are exempted from building permits in the International Building Code as provided in NBMC 14.20.580(B). An applicant will need to obtain a floodplain permit in addition to other development permits when new construction or substantial improvements are proposed, and/or when proposed modifications will impact flood elevation. The city encourages property owners to use flood resistant materials and elevate new portions even when a flood permit does not enforce this activity. The permit shall be for all structures including mobile and manufactured homes or non-licensed recreational vehicles on-site for more than 180 days, as set forth in NBMC 14.20.580(B) and for all other development including fill and other activities, also as set forth in NBMC 14.20.580(C) and 14.20.580(E). Application for a development permit shall be made on forms furnished by the Shoreline Administrator and may include but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. These documents will be maintained by the city for inspection of all records pertaining to the provisions of these critical areas regulations. Specifically, the following information is required for critical areas review. The floodplain permit will require additional and more extensive information as identified on the application information sheet.

a. The base flood elevation (BFE) in relation to the lowest floor (including basement) of all structures located in the AE zone or within the ZO zone. Identify the highest adjacent natural grade next to the building prior to construction;

b. Proposed floodproofing elevation in relation to the BFE or highest adjacent natural grade next to the building prior to construction;

c. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in NBMC 14.20.580(C)(6);

d. A description of the extent to which a watercourse will be altered or relocated as a result of a proposed development;

e. The accuracy of said elevation as proposed and as built shall be certified by a licensed professional engineer and/or a professional land surveyor; and

f. All development permits for the site must be reviewed to ensure all necessary permits have been obtained from those federal, state, or local governmental agencies from which prior approval is required.

Adjacent communities and the Department of Ecology must be notified prior to any alteration or relocation of a watercourse, and evidence of such notification must be submitted to the Federal Insurance and Mitigation Administration.

2. A floodplain habitat assessment and mitigation plan shall be required unless the CED Director makes and documents a determination of No Adverse Effect on any species listed under the Endangered Species Act. If required, the habitat assessment and mitigation plan shall be prepared at the applicant's sole expense by a qualified consultant in accordance with the requirements of the Floodplain Habitat Assessment and Mitigation Draft Regional Guidance 2011 prepared by FEMA Region X, or any successor guidance document approved by FEMA for habitat assessment and mitigation. The city's actual costs of review of applicant's habitat assessment and mitigation plan shall be paid by the applicant per the adopted Taxes, Rates and Fee Schedule. Non-development activities that do not meet the definition of development are allowed in the floodplain and do not require a floodplain permit or habitat assessment and mitigation consideration. Exemptions under 14.05.085 that may require a floodplain permit do not require a habitat assessment or mitigation consideration.

E. Critical area report. The Shoreline Administrator may waive a critical area report when existing mapping and flood insurance study is determined to be adequate. When a critical area report is required the following shall be included:

1) A critical area report for flood hazard areas shall be prepared by an engineer or hydrogeologist, licensed in the state of Washington, with expertise analyzing geologic, hydrogeologic and surface and ground water flow systems, and who has experience preparing reports for the relevant type of hazard.

2) In addition to the requirements of NBMC 14.20.520(H), critical area reports required for flood hazard areas shall include the following information:

a. On the site map:

i. The dimensioned location of all proposed development in the floodplain;

ii. The location of the floodway where it has been delineated on the most recent flood insurance rate map (FIRM) or by special studies for Gardiner or Ribary Creeks; where basin plans have been completed and adopted. The location of the floodplain and floodways shall be based upon the hydrologic and hydraulic analysis; and

iii. Identification of all proposed structures and grading within the floodplain.

b. In the report:

i. Identify how the boundaries of the floodways and floodplain were determined; and

ii. Establish the elevation of the lowest floor of all new or substantially improved structures proposed in the existing floodplain, utilizing the North American Vertical Datum of 1988.

Article VI – Existing Uses, Structures and Lots

A. Purpose. The purpose of this chapter is to establish the legal status of nonconforming uses, structures and other site improvements in shoreline jurisdiction by creating provisions through which such uses, structures and other improvements may be established, maintained, altered.

B. Applicability

1) All nonconformances in shoreline jurisdiction shall be subject to the provisions of this article. For nonconformance of use, structures and lots within shoreline critical areas, Article V- Critical Areas, NBMC 14.20.510.M. applies. When there is a conflict between this Article and Article V as applicable to critical areas, the more restrictive standards shall apply.

2) The provisions of this chapter do not supersede or relieve a property owner from compliance with:

a. The requirements of the International Building and Fire Codes; or

b. The provisions of the SMP beyond the specific nonconformance addressed by this chapter.

3) A change in the required permit review process (e.g. Shoreline Substantial Development Permit versus a Shoreline Conditional Use Permit) shall not create a nonconformance.

4) Any nonconformance that is brought into conformance for any period of time shall forfeit status as nonconformance, except as specified in NBMC 13.30.

5) A nonconforming lot, use, or structure may be deemed legally nonconforming by providing documentation that the use in question occurred prior to the effective date of this SMP, from one of the following:

a. Local agency permit;

b. Orthophoto, aerial photo or planimetric mapping recognized as legitimate by the agency; or

c. Tax record.

14.20.590 Nonconforming Uses

A. If, at the effective date of the SMP and any amendment thereto, a lawful use of land exists that is made no longer permissible under the terms of this SMP or amendments thereto, such use may be continued as a nonconforming use so long as it remains otherwise lawful subject to the following conditions:

1) No nonconforming use shall be intensified, enlarged, increased or extended to occupy a greater area of land than was occupied on the effective date of the SMP or amendment that made the use no longer permissible. Provided that a nonconforming use may be enlarged, increased or extended in conformance with applicable bulk and dimensional standards of this SMP upon approval of a shoreline conditional use permit.

2) No nonconforming use shall be moved in whole or in part to any other portion of the lot which contains the nonconforming use.

3) If any nonconforming use of land ceases for any reason for a period of one year over a three-year period, any subsequent use of such land shall conform to the regulations specified by this SMP for the use environment in which such land is located.

4) A structure which is being or has been used for a nonconforming use may be used for a different nonconforming use only upon a finding that:

a. No reasonable alternative conforming use is practical; and

b. The proposed use will be at least as consistent with the policies and provisions of the act and the SMP and as compatible with the uses in the area as the preexisting use.

c. In addition such conditions may be attached to the permit as are deemed necessary to assure compliance with the above findings, the requirements of the master program and the Act and to assure that the use will not become a nuisance or a hazard.

14.20.600 Nonconforming Structures

A. If, at the effective date of the SMP or any amendment thereto, a lawful structure or other improvement exists which is made no longer permissible under the terms of this SMP or amendment thereto, such structure or other improvement may be continued as a nonconforming structure or other improvement so long as it remains otherwise lawful, subject to the following conditions:

1) No nonconforming structure or other improvement shall be altered or changed in a way which increases its nonconformity except as allowed in “2”.

2) Expansions of structures that are nonconforming with respect to a required shoreline buffer:

a. May not encroach any farther waterward into the required shoreline buffer.

b. Are limited to lateral extensions adding no more than 25 percent of the length of the original wall as it existed prior to SMP adoption, subject to

other applicable requirements of this SMP, including mitigation sequencing, and city development regulations.

c. Any lateral enlargement of the building footprint within the shoreline buffer shall not exceed 25 percent of the gross floor area of the structure prior to the expansion. Enlargements upland of the existing building footprint are not limited.

d. Applicants for such expansions in b. or c. above shall restore a portion of the shoreline buffer with riparian vegetation at a 1:1 area ratio to offset the adverse impact, such that the shoreline buffer will function at an equivalent or higher level than the existing conditions. When such expansions occur upland of an existing levee, the applicant's critical areas report may justify a smaller ratio provided that the study demonstrates no net loss of ecological functions.

e. Greater expansions or alterations of a nonconforming structure require a Shoreline Variance.

3) Nothing in this section will prohibit vertical expansion up to the height allowed in the applicable use environment, provided all other applicable requirements of city development regulations are met.

4) Upkeep, repairs and maintenance of a nonconforming structure or other improvement shall be permitted.

B. Residential structures and appurtenant structures that were legally established and are used for a conforming use, but that do not meet standards for the following shall be considered a conforming structure: setbacks, buffers, or yards; area; bulk; height; or density.

C. Redevelopment, expansion, change with the class of occupancy, or replacement of the residential structure shall be consistent with the master program, including requirements for no net loss of shoreline ecological functions.

D. For purposes of this section, "appurtenant structures" means garages, sheds, and other legally established structures. "Appurtenant structures" does not include bulkheads and other shoreline modifications or over-water structures.

14.20.610 Maintenance, Repair, Discontinuation or Reconstruction of Damaged Nonconforming Structures or Other Improvements

A. This section only applies to nonconformities to this SMP.

B. A legal nonconforming structure may be maintained, repaired, renovated or structurally altered provided such maintenance, repair or alteration does not increase its nonconformity.

C. All expansion, extension, maintenance or repair activities of nonconforming structures or improvements shall be consistent with all other provisions of this code, provided the cumulative cost of such maintenance or repair within any 180-day period shall not exceed

50 percent of the assessed valuation of such building, structure, or land (as applicable) at the time such maintenance is completed.

D. A nonconforming structure or other improvement destroyed by fire or acts of nature may be repaired or reconstructed to the same or smaller nonconformity that existed at the time the structure was destroyed; provided, that:

1) The repair or reconstruction does not increase the previous nonconformity;
2) The building permit application for repair or reconstruction is submitted within 12 months of the occurrence of damage;
3) The number of off-street parking stalls are not reduced; and
4) Landscaping fully complies with applicable city requirements.

E. Should such structure or other improvement be moved for any reason for any distance whatever, it shall thereafter conform to the regulations for the use environment in which it is located. Conformance shall be required when:

1) A change of use is proposed;
2) The use is terminated or discontinued for more than one year, or the structure(s) that houses the use is vacated for more than one year; or
3) The structure(s) or activity that occurs on the land in which the use is conducted is proposed for relocation.

Article VII – Administration and Enforcement

14.20.620 Roles and Responsibilities

A. Shoreline Administrator

1) The Community and Economic Development (CED) Director or his/her designee shall serve as the Shoreline Administrator, and in the case of a Shoreline Substantial Development Permit (SSDP) to grant or deny the permit. The administrator shall administer the shoreline permit and notification systems, and shall be responsible for coordinating the administration of shoreline regulations with zoning enforcement, building permits, and all other regulations regulating land use and development in the city.
2) The Shoreline Administrator shall be familiar with regulatory measures pertaining to shorelines and their use, and, within the limits of his or her authority, shall cooperate in the administration of these measures. Permits issued under the provisions of this shoreline regulation shall be coordinated with other land use and development regulatory measures of the city. The Shoreline Administrator shall establish procedures that advise all parties seeking building permits or other development authorization of the need to consider possible shoreline applications. It is the intent of the city, consistent with its regulatory obligations, to simplify and facilitate the processing of Shoreline Substantial Development Permits.

3) The Shoreline Administrator shall assure that proposed regulatory or administrative actions do not unconstitutionally infringe upon private property rights. Shoreline goals and policies should be pursued through the regulation of development of private property only to an extent that is consistent with all relevant constitutional and other legal limitations (where applicable, statutory limitations such as those contained in chapter 82.02 RCW and RCW 43.21C.060) on the regulation of private property.

4) The Shoreline Administrator shall apply NBMC 14.20.510, Administrative Provisions for shoreline critical areas.

B. Hearing Examiner

1) The Hearing Examiner shall have the authority to decide on appeals from administrative decisions issued by the Administrator of this SMP.

2) The Hearing Examiner may grant or deny Shoreline Variances and Shoreline Conditional Use Permits, following an open record hearing.

C. Planning Commission. The Planning Commission is vested with the responsibility to review the SMP as part of regular SMP updates required by RCW 90.58.080 as a major element of the city's planning and regulatory program, and make recommendations for amendments thereof to the City Council.

D. City Council. The City Council is vested with authority to:

1) Initiate an amendment to this SMP according to the procedures prescribed in WAC 173-26-100.

2) Adopt all amendments to this SMP, after consideration of the recommendation of the Planning Commission. Substantive amendments shall become effective immediately upon adoption by Ecology.

14.20.630 Interpretation

A. Under the administrative provisions, the Shoreline Administrator shall have authority to interpret this SMP when such interpretation is clearly consistent with the goals and policies of this SMP and the Act.

B. The city shall consult with Ecology if formal written interpretations are developed as a result of a lack of clear guidance in the Act, the SMP Guidelines, or this Master Program to ensure that any are consistent with the purpose and intent of Chapter 90.58 and 173-26 WAC.

14.20.640 Statutory Noticing Requirements

The city and applicants shall follow the noticing requirements of NBMC 20.03. At a minimum the city shall provide notice in accordance with WAC 173.27-110, and may provide for additional noticing requirements.

14.20.650 Application Requirements

A. A complete application for a Shoreline Substantial Development, Shoreline Conditional Use, or Shoreline Variance Permit shall contain, at a minimum, the information listed in WAC 173-27-180.

B. The Shoreline Administrator may vary or waive these requirements according to administrative application requirements on a case-by-case basis.

C. The Shoreline Administrator may require additional specific information depending on the nature of the proposal and the presence of sensitive ecological features or issues related to compliance with other city requirements, and the provisions of this SMP.

14.20.660 Exemptions from Shoreline Substantial Development Permits

A. An exemption from the Shoreline Substantial Development Permit process is not an exemption from compliance with the SMA or this SMP, or from any other regulatory requirements. All proposed uses, activities, or development occurring within shoreline jurisdiction must conform to the intent and requirements of Chapter 90.58 RCW, the SMA, and this SMP whether or not a permit or other form of authorization is required.

B. The city shall exempt from the Shoreline Substantial Development Permit requirement the shoreline developments listed in WAC 173-27-040 and RCW 90.58.030 (3)(e) (substantial development less than $5718.00), 90.58.140(9) (governor certification), 90.58.147 (improvements for fish and wildlife habitat or fish passage), 90.58.355 (hazardous substance remedial actions) and 90.58.515 (watershed restoration projects).

C. Letters of exemption shall be issued by the city when an exemption applies or when a letter of exemption is required by the provisions of WAC 173-27-050.

D. Interpretations of Exemptions

1) Exemptions shall be construed narrowly. Only those developments that meet the precise terms of one or more of the listed exemptions may be granted exemption from the Shoreline Substantial Development Permit process.

2) A development or use that is listed as a conditional use pursuant to this SMP or is an unlisted use, must obtain a Shoreline Conditional Use Permit even though the development or use does not require a Shoreline Substantial Development Permit. When a development or use is proposed that does not comply with the bulk, dimensional and performance standards of this SMP, such development or use can only be authorized by approval of a Shoreline Variance.

3) The burden of proof that a development or use is exempt from the permit process is on the applicant.

4) If any part of a proposed development is not eligible for exemption, then a Shoreline Substantial Development Permit is required for the entire proposed development project.

5) The city may attach conditions to the approval of exempted developments and/or uses as necessary to assure consistency of the project with the SMA and this SMP. Additionally, nothing shall interfere with each responsible local government's ability to require compliance with all other applicable laws and plans.

14.20.670 Shoreline Substantial Development Permits

A. A Shoreline Substantial Development Permit shall be required for all development of shorelines, unless the proposal is specifically exempted per NBMC 14.20.660. Shoreline Substantial Development permits shall be processed with a Type I administrative permit as set forth in NBMC 20.01.004.

B. A Shoreline Substantial Development Permit shall be granted only when the development proposed is consistent with:

1) The policies and procedures of the Act, RCW 90.58;

2) The applicable provisions of WAC 173-27; and

3) This SMP.

C. The city may attach conditions to the approval of permits as necessary to assure consistency of the project with the SMA and this SMP.

D. Nothing shall interfere with the city's ability to require compliance with all other applicable plans and laws.

14.20.680 Shoreline Conditional Use Permits

A. Uses specifically classified or set forth in this SMP as conditional uses shall be subject to review and condition by the Hearing Examiner and by Ecology. Applications for a Shoreline Conditional Use Permit shall be processed with a Type II permit as set forth in NBMC 20.01.004.

B. Other uses which are not classified or listed or set forth in this SMP may be authorized as conditional uses provided the applicant can demonstrate consistency with the requirements of this Section and the requirements for conditional uses contained in this SMP.

C. Uses which are specifically prohibited by this SMP may not be authorized as a conditional use.

D. Review Criteria for SCUP. Uses which are classified or set forth in the applicable master program as conditional uses may be authorized provided that the applicant demonstrates all of the following:

1) That the proposed use is consistent with the policies of RCW 90.58.020 and the master program;

2) That the proposed use will not interfere with the normal public use of public shorelines;

3) That 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 shoreline master program;

4) That the proposed use will cause no significant adverse effects to the shoreline environment in which it is to be located; and

5) That the public interest suffers no substantial detrimental effect.

E. In the granting of all conditional use permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example, if conditional use permits were granted for other developments in the area where similar circumstances exist, the total of the conditional uses shall also remain consistent with the policies of RCW 90.58.020 and shall not produce substantial adverse effects to the shoreline environment.

F. In authorizing a conditional use, special conditions may be attached to the permit by the city or Ecology to prevent undesirable effects of the proposed use and/or to assure consistency of the project with the SMA and this SMP.

G. Nothing shall interfere with the city's ability to require compliance with all other applicable plans and laws.

14.20.690 Shoreline Variance Permits

A. The purpose of a variance is to grant relief to specific bulk or dimensional requirements set forth in this SMP where there are extraordinary or unique circumstances relating to the property such that the strict implementation of this SMP would impose unnecessary hardships on the applicant or thwart the policies set forth in RCW 90.58.020. Variances from the use regulations of the SMP are prohibited. Applications for Shoreline Variance Permits shall be processed with a Type III procedure as set forth in NBMC 20.01.004.

B. Review Criteria

1) Variance permits 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 shall be shown and the public interest shall suffer no substantial detrimental effect.

2) Variance permits for development and/or uses that will be located landward of the OHWM, as defined in RCW 90.58.030(2)(b), and/or landward of any wetland as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant can demonstrate all of the following:

a. That the strict application of the bulk, dimensional or performance standards set forth in the SMP precludes, or significantly interferes with, reasonable use of the property;

b. That the hardship described in criterion a. of this subsection 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 SMP, and not, for example, from deed restrictions or the applicant's own actions;

c. That 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 SMP and will not cause adverse impacts on the shoreline environment;

d. That the variance will not constitute a grant of special privilege not enjoyed by the other properties in the area;

e. That the variance requested is the minimum necessary to afford relief; and

f. That the public interest will suffer no substantial detrimental effect.

C. Variance permits for development and/or uses that will be located waterward of the OHWM, as defined in RCW 90.58.030(2)(b), or within any wetland as defined in RCW 90.58.030(2)(h), may be authorized provided the applicant can demonstrate all of the following:

1) That the strict application of the bulk, dimensional or performance standards set forth in the applicable master program precludes all reasonable use of the property;

2) That the proposal is consistent with the criteria established under a-f above can be met; and

3) That the public rights of navigation and use of the shorelines will not be adversely affected.

D. In the granting of all variance permits, consideration shall be given to the cumulative impact of additional requests for like actions in the area. For example if variances were granted to other developments 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 cause substantial adverse effects to the shoreline environment.

14.20.700 Duration of Permits

The duration of permits shall be consistent with WAC 173-27-090.

14.20.710 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.

14.20.720 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 for Ecology's 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. 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 Ecology's final decision to those interested persons having requested notification from local government pursuant to WAC 173-27-130.

14.20.730 Appeals

A. Appeals of Shoreline Permit Decisions. City of North Bend decisions on shoreline permits may be appealed to the following 'bodies' in this sequence:

1) North Bend Hearings Examiner or in accordance with NBMC 20.06.
2) State Shorelines Hearings Board (SHB) in Tumwater.
3) SHB decisions may be appealed to superior court.
4) Superior court decisions may be appealed to the Court of Appeals.
5) Appeals Court decisions may be appealed to the Washington Supreme Court.
6) Appeals to the SHB and courts are governed by RCW 90.58.180, RCW 43.21B.001, RCW 34.05 Part V, and WAC 461.08.

B. Regarding administrative appeals of Shoreline Administrator interpretations, see NBMC 14.20.110 and NBMC 20.06.001.

C. All requests for review of any final permit decisions under chapter 90.58 RCW and chapter 173-27 WAC are governed by the procedures established in RCW 90.58.180 and chapter 461-08 WAC, the rules of practice and procedure of the shorelines hearings board.

14.20.740 Amendments to Permits

A. A permit revision is required whenever the applicant proposes substantive changes to the design, terms or conditions of a project from that which is approved in the permit. Changes are substantive if they materially alter the project in a manner that relates to its conformance to the terms and conditions of the permit, the SMP and/or the policies and provisions of chapter 90.58 RCW. Changes which are not substantive in effect do not require approval of a revision.

B. Revisions to permits shall be considered consistent with WAC 173-27-100.

14.20.750 Enforcement

A. The Act provides for a cooperative program between the city and the Department of Ecology to implement and enforce the provisions of the Act and this Master Program. This Section provides for a variety of means of enforcement, including civil and criminal penalties, orders to cease and desist, and orders to take corrective action, in accordance with WAC 173-27-270, 173-27-280, 173-27-290, 173-27-300 and NBMC 14.20.510.F. The enforcement means and penalties provided herein are not exclusive and may be taken or imposed in conjunction with, or in addition to, any other civil enforcement actions and civil penalties, injunctive or declaratory relief, criminal prosecution, actions to recover civil or criminal penalties, or any other action or sanction authorized by this Section, or any other provision of the North Bend Municipal Code and Land Use Code, or any other provision of state or federal law and regulation.

B. The Shoreline Administrator, with the assistance of the city attorney, shall have authority to commence and prosecute any enforcement action authorized by this section. In determining the appropriate enforcement actions to be commenced and prosecuted, the Administrator shall consider the following factors:

1) the nature of the violation;

2) the extent of damage or potential future risk to the shoreline environment and its ecological functions or to the public health and safety, caused by or resulting from, whether directly or indirectly, the alleged violation;

3) the existence of knowledge, intent, or malice on behalf of the violator;

4) the economic benefit or advantage that accrued to the violator(s) as a result of the violation; and

5) the estimated actions and costs of providing adequate mitigation, restoration, rehabilitation, or enhancement, to repair or minimize any substantial adverse impacts upon the shoreline environment and its ecological functions, or the public health and safety.

C. The Shoreline Administrator may commence and prosecute enforcement action jointly with the Department of Ecology. Pursuant to WAC Chapter 173-27, the Department of Ecology may initiate and prosecute enforcement action separate from the Shoreline Administrator.

14.20.760 Cumulative Effects of Shoreline Developments

A. The city will periodically evaluate the effectiveness of the Shoreline Master Program update at achieving no net loss of shoreline ecological functions with respect to shoreline permitting and exemptions in order to comply with WAC 173-26-191(2)(a)(iii)(D).

B. The Shoreline Administrator, will, to the extent feasible, coordinate with other city departments or restoration partners, as well as adjacent jurisdictions, to assess cumulative effects of shoreline development.